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METHODOLOGICAL PRINCIPLES FOR THE COMPREHENSIVE ASSESSMENT OF MANAGERIAL COMPETENCE AMONG DEPARTMENT HEADS

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This article sets out the methodological foundations for a comprehensive assessment of the managerial competence of department heads. The relevance of this research stems from the need to develop a holistic system that enables the assessment of professional knowledge, managerial skills, behavioural traits and a manager's ability to fulfil their duties under time constraints, with incomplete information and limited resources. The aim of the article is to provide a theoretical justification for and to develop a comprehensive system for assessing the managerial competence of department heads. The methodological framework is based on the systemic and competence-based principles, as well as methods of analysis, synthesis, comparison, classification, generalisation, structural-functional modelling and formalisation.

Managerial competence is defined as a manager's integrated ability to apply professional knowledge, organisational skills, experience, communication skills and personal qualities whilst performing their duties. Six interrelated areas of assessment have been identified: information analysis, managerial decision-making, organisation of departmental work, professional communication, monitoring of task completion, professional reflection and self-development. For each area, criteria, behavioural indicators and methods of gathering information have been defined. A combination of testing, situational and group tasks, expert observation, multi-source '360-degree' assessment, self-assessment and structured discussion is justified.

It is proposed that the assessment for each domain be determined as the arithmetic mean of the scores for behavioural indicators, and the overall score as the weighted average of the assessments across the six domains. The weighting coefficients are established by an expert group, and the consistency of judgements is verified using Kendall's coefficient of concordance. A preliminary four-level scale has been developed, and the supplementation of the overall score with an individual managerial competence profile has been justified. Provision is made for the separate consideration of a low score in an area that is critical for a specific post.

The scientific novelty lies in the harmonisation of areas of managerial competence, criteria, behavioural indicators, and methods of information gathering and the procedure for calculating scores within a single system. The proposed system can be used during the professional training, selection, appraisal and further training of department heads. The weighting coefficients and level thresholds are provisional and require further expert and empirical validation.

Keywords: managerial competence, department head, managerial decisions, professional communication, professional reflection, managerial self-development, professional development.

МЕТОДИЧНІ ЗАСАДИ КОМПЛЕКСНОГО ОЦІНЮВАННЯ УПРАВЛІНСЬКОЇ КОМПЕТЕНТНОСТІ КЕРІВНИКІВ ПІДРОЗДІЛІВ

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У статті обґрунтовано методичні засади комплексного оцінювання управлінської компетентності керівників підрозділів. Актуальність дослідження зумовлена потребою у формуванні цілісної системи, яка забезпечує оцінювання професійних знань, управлінських умінь, поведінкових проявів і здатності керівника виконувати посадові обов'язки за обмеженого часу, неповної інформації та дефіциту ресурсів. Метою статті є теоретичне обґрунтування та розроблення комплексної системи оцінювання управлінської компетентності керівників підрозділів. Методологічну основу становлять системний і компетентнісний принципи, методи аналізу, синтезу, порівняння, класифікації, узагальнення, структурно-функціонального моделювання та формалізації.

Управлінську компетентність визначено як інтегровану здатність керівника застосовувати професійні знання, організаторські вміння, досвід, комунікативні здібності та особисті якості під час виконання посадових обов'язків. Виокремлено шість взаємопов'язаних сфер оцінювання: аналіз інформації, прийняття управлінських рішень, організацію роботи підрозділу, професійну комунікацію, контроль виконання завдань, професійну рефлексію та саморозвиток. Для кожної сфери визначено критерії, поведінкові показники та способи одержання інформації. Обґрунтовано поєднання тестування, ситуаційних і групових завдань, експертного спостереження, багатосуб'єктного оцінювання за методом «360 градусів», самооцінювання та структурованого обговорення.

Оцінку за кожною сферою запропоновано визначати як середнє арифметичне балів за поведінковими показниками, а інтегральне значення - як середнє зважене значення оцінок за шістьма сферами. Вагові коефіцієнти встановлюються експертною групою, а узгодженість суджень перевіряється за коефіцієнтом конкордації Кендалла. Розроблено попередню чотирирівневу шкалу та обґрунтовано доповнення інтегрального значення індивідуальним профілем управлінської компетентності. Передбачено окреме врахування низької оцінки за сферою, визначальною для конкретної посади.

Наукова новизна полягає в узгодженні сфер управлінської компетентності, критеріїв, поведінкових показників, методів одержання інформації та порядку розрахунку оцінок у межах єдиної системи. Запропонована система може використовуватися під час професійної підготовки, добору, атестації та підвищення кваліфікації керівників підрозділів. Вагові коефіцієнти й межі рівнів мають попередній характер і потребують подальшої експертної та емпіричної перевірки.

Ключові слова: управлінська компетентність, керівник підрозділу, управлінські рішення, професійна комунікація, професійна рефлексія, саморозвиток керівника, професійний розвиток.

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A GENERAL OVERVIEW OF THE PROBLEM AND ITS RELATIONSHIP TO KEY SCIENTIFIC OR PRACTICAL ISSUES

Modern organisational management places greater demands on the professional competence of department heads. They are expected to be able to process large volumes of information, make well-founded decisions in a timely manner, delegate authority, coordinate staff work, ensure professional communication and monitor the completion of assigned tasks. The spread of digital technologies, shorter decision-making times, limited resources and the increasing responsibilities of managers make it more difficult to fulfil their duties and heighten the importance of managerial competence.

Managerial competence is manifested in a manager's ability to combine professional knowledge, organisational skills, experience, communication skills and personal qualities whilst performing their duties. Its level cannot be determined solely by the amount of knowledge acquired, as a manager must be able to apply this knowledge in situations involving incomplete information, time constraints, changing priorities and the need to take responsibility for decisions made.

The assessment of managerial competence must be based on documented instances of professional behaviour. Testing knowledge provides an insight into theoretical preparation, but does not give a complete picture of a manager's ability to organise the work of a department, interact with staff, make decisions and exercise control. Self-assessment, expert judgements, situational tasks, observation and multi-ratter assessment characterise different aspects of professional competence and require coordinated use.

The validity of the assessment depends on how clearly the criteria, behavioural indicators, marking schemes and procedures for summarising the results are defined. Without standardised requirements, identical displays of professional behaviour may be assessed differently depending on the content of the task, the composition of the expert panel and the method of recording observations. The discrepancies between self-assessment, assessments by others and the performance of professionally oriented tasks also require separate consideration. To reach a well-founded conclusion, it is necessary to define the procedure for establishing weighting coefficients, interpreting the overall assessment and constructing an individual profile of managerial competence.

The research objective is to develop a system that establishes a link between a manager's job responsibilities, areas of managerial competence, criteria, behavioural indicators, and methods of gathering information and the procedure for the quantitative synthesis of assessments. Solving this task will make it possible to combine the overall assessment with information on the level of development of individual professional qualities and to take into account a low score in an area that is critical for a specific post.

The development of this system is important for the professional training, selection, appraisal and further training of department heads. Its use will make it possible to compare a manager's professional capabilities with their job responsibilities, identify areas requiring further development, and prepare individual recommendations.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

The issue of assessing managerial competence is addressed in works on human resource management, the professional development of managers, organisational psychology and vocational education. Managerial competence is associated with a manager's ability to analyse information, make informed decisions, organise staff work, maintain professional communication, exercise control and determine the direction of their own professional development.

The link between managerial competence and the digital transformation of organisations has been investigated in the work of G. Schiuma, F. Santarsiero, D. Carlucci and Y. Jarrar [1]. The researchers emphasise systems thinking, information management, staff coordination, professional communication and the responsible use of digital technologies. These findings provide grounds for considering digital skills as a cross-cutting component of managerial competence, linked to information analysis, decision-making, communication and control.

According to I. Bergmo-Prvulovic, G. Avby, S. Kjellström, A. Engström and M. Schmidt [2], a manager's professional development is shaped by the interplay of learning, the performance of job duties, assessment and

feedback. A systematic study of managerial behaviour makes it possible to identify professional qualities that require further development and to prepare individualised recommendations.

In a study by A. Meerits and K. Kivipõld [3], the competence of first-line managers is linked to professional knowledge, organisational skills, responsibility, people skills and the ability to make decisions under time pressure. D. Day, J. Fleenor, L. Atwater, R. Sturm and R. McKee [4] proposed a distinction between a manager's individual development and the development of leadership within a team. According to these researchers, individual development is characterised by the acquisition of knowledge, skills and personal qualities, whilst leadership development is associated with trust, coordination and shared responsibility amongst employees.

A separate area of research involves the assessment of competencies using professionally oriented tasks. According to the findings of V. Sturre, J. Anglim, K. von Treuer, T. Knight and A. Walker [5], standardised performance of these tasks makes it possible to determine the initial level of professional competence and to predict managers' future performance. A comparison of self-assessments with managers' assessments also revealed a gradual convergence of judgements as professional experience is gained.

The limitations of assessment centres are discussed by C. Dewberry and D. J. R. Jackson [6]. The authors note that the scores obtained depend on the content of the exercises, the composition of the expert panel and the method used to record participants' behaviour. A well-founded conclusion requires several tasks, consistent behavioural indicators, prior training of experts and the comparison of information from various sources.

A significant number of academic works are also devoted to situational tests. A review of the research conducted by S. Kepes, S. Keener, F. Lievens and M. McDaniel [7] confirmed that the quality of assessment depends on the relevance of the proposed situations to job tasks, the method of determining a valid response, and the scoring procedure. Situational tests make it possible to assess a manager's ability to analyse circumstances, compare possible solutions and anticipate their consequences.

Discrepancies between self-assessment and performance in scenario-based tasks were identified by K. Davis and co-authors [8]. According to the researchers, self-assessment reflects an individual's perception of their own professional capabilities; however, it does not always correspond to the assessment of their performance in professionally oriented tasks. Comparing self-assessment, expert judgements and evaluations of completed tasks provides a more comprehensive determination of the level of managerial competence.

Multi-source assessment of a manager's professional behaviour has been investigated by S. Emam and co-authors [9]. The model employed by the authors involves combining self-assessment with evaluations by employees and senior managers. Comparing judgements obtained from several sources makes it possible to identify discrepancies in the perception of a manager's professional behaviour and to determine areas for their further development.

Professional reflection plays a key role in comprehensive assessment. S. Decker and co-authors [10] view a structured discussion following the completion of a situational task as a means of reconstructing the sequence of decisions made, identifying the causes of errors and determining further training needs. A professional discussion makes it possible to assess a manager's ability to explain their own choices, accept feedback and revise previous decisions upon receiving new information.

A review of the academic literature indicates that each method provides information on specific manifestations of managerial competence. Testing characterises the level of professional knowledge; situational tasks demonstrate the ability to apply this knowledge to solve managerial problems; observation reflects professional behaviour; the '360-degree' method characterises how this behaviour is perceived by those involved in the working relationship; and self-assessment determines the manager's awareness of their own professional capabilities. The process of aligning areas of managerial competence with criteria, behavioural indicators, methods of data collection, weighting factors and the rules for calculating the overall assessment and forming an individual profile remains under-researched.

IDENTIFICATION OF PREVIOUSLY UNRESOLVED ASPECTS OF THE OVERALL PROBLEM, TO WHICH THIS ARTICLE IS DEDICATED

A review of academic literature has shown that a manager's managerial competence is assessed in terms of professional knowledge, organisational skills, leadership qualities, communication skills, and the ability to analyse information and make decisions. Some studies focus on situational tests, assessment centres, self-assessment, expert judgements, the '360-degree' method and professional reflection [5-10]. Each of these methods provides information on specific manifestations of professional behaviour; however, the sequence in which they are combined within a single procedure requires further justification.

The alignment of areas of managerial competence with a manager's job responsibilities, criteria, behavioural indicators and methods of assessment remains insufficiently explored. The procedure for using data obtained during testing, the completion of situational and group tasks, expert observation, self-assessment, multi-ratter assessment and structured discussions requires clarification. The absence of uniform rules complicates the comparison of expert judgements and the formation of a well-founded conclusion regarding a manager's professional readiness.

The quantitative summarisation of assessments across specific areas of managerial competence requires further scientific justification. Unresolved issues include the determination of weighting coefficients, the verification of consistency in expert judgements, the establishment of level thresholds, and the consideration of low scores in an

area critical to a specific post. The comprehensive assessment also needs to be supplemented by an individual profile that records information on the uneven development of a manager's professional qualities.

This article is devoted to the development of a comprehensive system for assessing the managerial competence of department heads, in which the areas of assessment, criteria, behavioural indicators, methods of information gathering, the procedure for calculating scores and the rules for their interpretation by level are harmonised. The proposed system combines an overall score with an individual profile and takes into account, separately, any low score in a key area. Its use is aimed at enhancing the validity of conclusions regarding a manager's professional readiness and identifying areas for their further development.

FORMULATING THE OBJECTIVES OF THE ARTICLE

The aim of this article is to provide a theoretical justification for and to develop a comprehensive system for assessing the managerial competence of department heads, which combines assessment areas, criteria, and behavioural indicators, methods of gathering information, a rating scale and the procedure for calculating an overall assessment.

Achieving this objective involves clarifying the content of a department head's managerial competence; identifying the areas in which it manifests itself in accordance with their job responsibilities; establishing links between criteria, behavioural indicators and assessment methods; justifying the procedure for combining data obtained through testing, situational and group tasks, expert observation, the '360-degree' method, self-assessment and structured discussion; defining the rules for calculating scores for individual areas and the overall score; and developing a rating scale and an individual profile of managerial competence.

The methodological framework developed is intended for use during the professional training, selection, appraisal and further professional development of department heads. Its application makes it possible to compare a manager's professional capabilities with job requirements, identify areas requiring further development, and prepare individual recommendations.

The methodological basis of the study is formed by the systemic and competence-based principles. Methods of analysis and synthesis were used to clarify the content of managerial competence and to determine the interrelationships between its areas. Comparison was used to contrast assessment methods and information obtained from various sources. Classification and generalisation made it possible to organise the criteria, behavioural indicators and levels of development of managerial competence. Structural-functional modelling was used to construct a comprehensive assessment matrix and determine the sequence of its implementation. Formalisation was applied when developing the procedure for calculating scores for individual areas, the overall score, weighting coefficients and level thresholds.

PRESENTATION OF THE MAIN CONTENT

A department head's managerial competence is characterised by their ability to apply professional knowledge, organisational skills, experience, communication skills and personal qualities whilst carrying out their duties. This competence is demonstrated through the ability to analyse information, make informed decisions, organise staff work, delegate authority, ensure professional communication, monitor the completion of tasks and take responsibility for decisions made.

Assessing managerial competence requires determining a manager's ability to carry out their duties within time constraints, with incomplete information, limited resources and heightened responsibility. Testing theoretical knowledge provides insight into a person's professional preparedness; however, the results are insufficient to draw conclusions regarding their ability to manage a department. A. Meerits and K. Kivipõld [3] link the competence of a first-line manager to professional knowledge, organisational skills, responsibility and the ability to work with people.

The areas of managerial competence have been identified in accordance with the content of a unit manager's job description and the sequence of the management process. A manager processes information, identifies problems, compares possible solutions, organises staff work, maintains professional communication, monitors task completion and evaluates the consequences of decisions taken.

On this basis, six interrelated areas of managerial competence have been identified:

1) analysis of information;
2) managerial decision-making;
3) organisation of the department's work;
4) professional communication;
5) monitoring of task completion;
6) professional reflection and self-development.

The first five areas reflect the main types of managerial work. The sixth area characterises a manager's ability to evaluate their own decisions, identify the causes of errors, accept feedback and set directions for further professional development.

Digital skills are not identified as a separate area, as they are utilised during information analysis, decision-making, communication, work organisation and monitoring. Within each area, it is advisable to include behavioural indicators related to the use of digital tools in accordance with the manager's job responsibilities.

The areas of assessment must meet three requirements. The first requirement relates to the manager's job

responsibilities. The second involves the ability to observe and measure professional behaviour. The third relates to the demarcation of areas to prevent the duplicate assessment of identical manifestations.

Each area is elaborated through criteria and behavioural indicators. A criterion defines a general aspect of the assessment, whilst a behavioural indicator characterises a specific manifestation of professional behaviour that can be recorded during the performance of a task, observation or structured discussion.

General characteristics such as ‘able to manage a team’ or ‘possesses leadership qualities’ are of limited use for assessment purposes. A well-founded conclusion requires the recording of specific manifestations of professional behaviour. These include identifying the problem, setting priorities, selecting a solution, allocating tasks, explaining the decision taken, organising the exchange of information, and monitoring deadlines and the quality of performance.

The academic literature distinguishes between a manager’s individual professional readiness and their ability to ensure the team works together effectively. D. Day, J. Fleenor, L. Atwater, R. Sturm and R. McKee [4] link a manager’s professional development to the acquisition of knowledge, skills and personal qualities. The authors view the development of leadership through the prism of trust, coordination and shared responsibility amongst staff. The assessment of managerial competence must take into account the quality of a manager’s individual decisions and their ability to organise the work of their subordinates (Table 1).

The proposed matrix distinguishes between the area of assessment, the criterion, behavioural indicators and methods of gathering information. The criterion sets out the general requirement for a manager’s professional conduct, whilst the indicators reflect specific manifestations that can be observed whilst carrying out a task. Each area is assessed using several methods, which makes it possible to compare data obtained under different conditions. The repetition of a single indicator across different areas should be limited, as this may result in the same professional quality being counted multiple times when calculating the overall assessment.

The first area is information analysis. Assessment within this area focuses on determining a manager’s ability to identify the nature of a management problem, distinguish verified information from assumptions, identify cause-and-effect relationships, and formulate possible solutions. Testing provides information on knowledge of the principles of analysis. A written case study enables the assessment of the ability to apply this knowledge when dealing with a professional situation. The participant analyses the initial data, identifies the problem, determines its causes and prepares a well-reasoned conclusion.

The second area relates to managerial decision-making. The assessment takes into account the timeliness of the decision, its alignment with the set objective, the comprehensiveness of the information used, available resources, timeframes and potential consequences. Situational tests and case studies help to assess the manager’s line of reasoning, their ability to compare possible solutions and to explain their own choice. A conclusion is drawn based on the content of the decision taken, its rationale and the specified implementation plan.

Table 1

Matrix for the comprehensive assessment of a department head’s managerial competence

Area of assessment	Criteria	Behavioural indicators	Methods of gathering information
Analysis of information	Comprehensiveness and soundness of analysis	identifies a management problem; distinguishes facts from assumptions; establishes cause-and-effect relationships; compares sources of information; develops possible solutions; uses digital tools for data processing	testing; written situational task; analysis of work-related information; expert assessment
Management decision-making	Soundness and timeliness of decisions	formulates the objective of the decision; compares possible options; takes into account available resources, deadlines and potential consequences; explains the choice; determines the procedure for implementation and monitoring	situational test; case study; individual task; structured discussion
Organisation of departmental work	Consistency in the allocation of tasks and responsibilities	sets tasks for staff; sets deadlines; allocates responsibilities in line with staff members’ professional capabilities; coordinates the execution of tasks; establishes procedures for information exchange	group task; business simulation; role-play; expert observation
Professional communication	Clarity, reasoned argument and mutual understanding	formulates messages clearly; provides justification; listens to the other party; asks clarifying questions; checks understanding of the task; provides feedback; uses digital communication tools	role-play; group task; oral presentation of a solution; multi-source ‘360-degree’ assessment
Monitoring the completion of tasks	Systematic and well-founded monitoring	identifies the scope, deadlines and monitoring indicators; selects sources of information; identifies deviations from the established plan; determines their causes; prepares corrective measures; uses digital tools for record-keeping and monitoring	analysis of plan implementation; situational task; expert observation; analysis of work-related documents
Professional reflection and self-development	Awareness of professional conduct	explains their own choices; assesses the consequences of the decision taken; acknowledges mistakes made; accepts feedback; identifies professional qualities requiring development; sets individual learning objectives	self-assessment; structured discussion; comparison of self-assessment with expert assessments; individual interview

Source: compiled by the authors.

The content of situational tasks must correspond to the job responsibilities of the head of the department. A professional scenario may involve failure to complete a task by the set deadline, conflicts between staff members,

insufficient resources, a change in priorities or the receipt of new information. The following aspects are subject to assessment: problem identification, comparison of possible solutions, task allocation, setting deadlines and the monitoring procedure.

It is advisable to compare self-assessment with the performance of situational tasks and expert evaluations. A manager's perception of their own professional capabilities may differ from their observed behaviour whilst carrying out tasks. Combining several sources of information reduces the dependence of the conclusion on the subjective perception of a participant or an individual expert.

The third area concerns the organisation of the unit's work. A manager must set tasks for staff, set deadlines, delegate authority in accordance with the professional capabilities of those carrying out the work, coordinate activities and establish procedures for the exchange of information. A group task, business simulation or role-play scenario makes it possible to assess the way tasks are set, the rationale behind the allocation of responsibilities, the coordination of work and the response to deviations from the plan.

The fourth area relates to professional communication. Assessment focuses on the clarity and reasoned nature of messages, the ability to listen to the other person, ask clarifying questions, check understanding of the tasks set, and provide feedback. Professional communication is demonstrated during group tasks, role-play scenarios, the delivery of briefings, and the presentation of decisions taken.

Further information is provided by multi-source assessment, which involves gathering judgements on a manager's professional conduct from several sources. These may include self-assessment, assessments by staff members, the immediate line manager and senior managers. The specific composition of respondents is determined according to the position, the structure of the department and the purpose of the assessment. Discrepancies between the assessments received require separate consideration. A significant difference between self-assessment and assessments by others may indicate that the manager has an inaccurate understanding of their own professional capabilities or that there are differences in the conditions under which their work is observed [9].

The fifth area concerns the monitoring of task completion. The manager determines the subject of the review, the deadlines, the sources of information, the monitoring indicators and the procedure for responding to any deviations identified. The assessment involves establishing the ability to link objectives, work plans, review criteria and corrective decisions. The participant may be asked to analyse the implementation of the plan, identify the causes of deviations and prepare proposals for future work.

The sixth area relates to professional reflection and self-development. Following the completion of a situational or group task, the manager explains their own choices, assesses the consequences of the decision taken, identifies any mistakes made and sets out directions for further professional development. Self-assessment is used as one of the methods for gathering information and is compared with the assessments of the completed tasks and the experts' conclusions.

A structured discussion is conducted based on pre-defined questions and draws on data recorded during the task. The discussion focuses on the soundness of the choice, the use of initial information, consideration of possible consequences, the organisation of staff work, and the ability to revise a previous decision upon receiving new information.

The comprehensiveness of the assessment is ensured by combining several sources of information. Testing assesses professional knowledge; situational tasks demonstrate the ability to apply this knowledge to solve management problems; observation provides insight into professional behaviour; the '360-degree' method reflects how this behaviour is perceived by those involved in the working relationship; and self-assessment reflects the manager's awareness of their own professional capabilities. Comparing the information obtained enhances the validity of the overall conclusion.

For each behavioural indicator, a single overall rating is formed on a four-point scale. This is determined on the basis of information obtained using the methods specified in the matrix for the relevant field. Ratings of performance in situational and group tasks, together with instances of professional behaviour recorded by experts, form the basis for assigning a score. Self-assessment and information obtained using the '360-degree' method is used to compare assessments, identify discrepancies and refine the conclusion. They do not replace the assessment of performance in professionally oriented tasks.

Not every behavioural indicator is assessed using all methods. To determine it, the methods of gathering information specified in the matrix for the relevant area are used. If a single indicator is assessed using several tasks or by several experts, the overall mark is calculated based on the arithmetic mean of the individual assessments. The procedure for combining data and the rules for awarding marks are established before the start of the procedure and are applied equally to all participants.

A four-point scale is recommended for the quantitative summarisation of assessments. One mark corresponds to a low level of managerial competence, two marks to an average level, three marks to a satisfactory level, and four marks to a high level. The assessment for each area is calculated as the arithmetic mean of the marks awarded for the behavioural indicators specified in the assessment matrix. The use of a single scale ensures the comparability of assessments obtained through different tasks and methods.

It is proposed that the assessment for the *i*-th area be determined using the formula:

$$x = \frac{\sum_{j=1}^{m_i} b_{ij}}{m_i},$$

where x_i - score for the *i*-th area of managerial competence;
b_{ij} - score for the *j*-th behavioural indicator within the *i*-th area;
m_i - the number of behavioural indicators within the *i*-th domain.

With the participation of several experts, the score for each behavioural indicator is determined as the arithmetic mean of the individual assessments. The score for the relevant area is then calculated. Significant discrepancies between assessments require a review of the professional behaviour observed. Experts must substantiate the scores awarded with information obtained during observation, the completion of situational tasks, interviews or structured discussions. Combining expert judgements with pre-defined behavioural indicators and standardised scoring rules enhances the consistency of the assessment [11; 12].

It is proposed that the comprehensive assessment of a manager's managerial competence be calculated as the weighted average of the scores across the established areas:

$$I_{УК} = \sum_{i=1}^{n} w_i x_i,$$

subject to the following conditions: $\sum_{i=1}^{n} w_i = 1,\ w_i \geq 0$,

where $I_{ук}$ - an overall assessment of a manager's managerial competence;
x_i - the score for the *i*-th area;
w_i - the weighting factor for the relevant area;
n - the number of assessment areas.

Weighting factors are determined taking into account the manager's job responsibilities, management level and the purpose of the assessment. It is advisable to include human resources specialists, line managers, representatives of the relevant professional field and competence assessment specialists in the expert group. The composition of the expert group is determined taking into account the diverse professional backgrounds of its members and the need to compare independent judgements.

Weights may be determined by individually ranking the areas, followed by standardisation of the resulting values. The use of expert ranking and Kendall's coefficient of concordance is common when developing indicator systems and setting their weights [11-13].

The determined weighting coefficients are applied equally to all participants in a single assessment procedure. They may be revised following changes to job responsibilities, management level or the purpose of the assessment. Weights and the rules for setting them must be approved before the assessment begins, ensuring that the established requirements are applied equally to all participants.

A comprehensive assessment requires a standardised interpretation, which ensures a consistent understanding of the resulting score. The development of a competency profile and the standardisation of the assessment procedure require the harmonisation of job requirements, behavioural indicators, methods of gathering information and rules for interpreting assessments [14; 15]. At the initial stage, the level boundaries are established by dividing the range from one to four marks evenly into four intervals. The proposed boundaries are provisional and are subject to refinement following the piloting of the system, an analysis of the distribution of scores, and their comparison with managers' performance of their job duties. The proposed scale for interpreting the level of managerial competence of a department head is presented in Table 2.

Table 2

Scale for assessing the level of managerial competence of a department head

Overall assessment score	***Level of managerial competence***	***Description of the level***
$1{,}00 \leq I_{ук} \leq 1{,}75$	Low	Professional knowledge is fragmented, and managerial skills are underdeveloped. The manager carries out tasks only after receiving further explanations and experiences difficulties when analysing information, making decisions, allocating tasks and exercising control. Independence is demonstrated only occasionally.
$1{,}75 < I_{ук} \leq 2{,}5$	Medium	The manager carries out standard managerial tasks according to established procedures. Difficulties arise when information is incomplete, time is limited or conditions change. Some decisions require clarification, whilst the organisation of work and monitoring require occasional assistance.
$2{,}5 < I_{ук} \leq 3{,}25$	Adequate	The manager independently analyses information, justifies decisions, organises the work of the unit, maintains professional communication and carries out monitoring. Occasional inaccuracies do not significantly affect the fulfilment of assigned tasks.
$3{,}25 < I_{ук} \leq 4{,}0$	High	The manager independently carries out complex managerial tasks, compares possible solutions, justifies their choices, anticipates consequences, allocates responsibilities rationally and makes timely adjustments to the workflow upon receiving new information.

Source: compiled by the authors.

The scale presented here prevents the arbitrary classification of a manager into a particular level and ensures a consistent interpretation of the overall assessment. The level boundaries are defined such that every possible value of the overall assessment falls within only one interval. The proposed boundaries are provisional and require refinement based on data from the system's pilot testing.

The overall level is determined by the comprehensive assessment and supplemented by an analysis of the scores across all areas. High scores in certain areas should not entirely offset a low score in an area that is of decisive importance for a specific post. The list of such areas is established prior to the start of the assessment in accordance with the manager's job responsibilities.

A 'sufficient' or 'high' overall rating is not awarded if the score in at least one key area does not exceed 1.75 points. In such cases, the final conclusion is formulated taking into account the low score in the key area, and the manager is provided with recommendations for further development in that area.

The overall assessment does not fully reflect the balance between individual professional qualities. Managers with the same overall score may have different scores for information analysis, decision-making, work organisation, professional communication, supervision, professional reflection and self-development. Alongside the overall score, it is advisable to create an individual profile of managerial competence.

The individual profile is presented as a set of scores across six areas. Using this profile makes it possible to identify areas where scores meet job requirements and those requiring further development. The profile is also useful for preparing individual recommendations, comparing assessments across different periods, and analysing changes following the completion of training or professional development.

The comprehensive assessment procedure comprises preparatory, main and final stages. Conducting these stages sequentially ensures consistency in requirements, comparability of assessments and documented verification of conclusions regarding the level of managerial competence.

During the preparatory stage, the purpose of the assessment, the category of managers, job responsibilities, areas of competence, criteria, behavioural indicators and methods of gathering information are defined. The expert panel prepares situational and group tasks, observation forms, questionnaires for '360-degree' assessment, and questions for interviews and structured discussions. Before the assessment begins, weighting factors, defining areas, scoring rules and the procedure for resolving discrepancies between expert assessments are also established.

The content of the tasks must correspond to the manager's job responsibilities and the professional situations characteristic of the work of the relevant department. The wording must be unambiguous, and the amount of input information must be sufficient to justify a decision. Before using a task, it is advisable to check it for clarity, compliance with the specified criteria and the ability to record the intended behavioural indicators. Expert evaluation of task content is widely used to confirm their alignment with the subject being assessed [11; 12].

The main stage involves the participant carrying out the specified tasks, observation of professional behaviour, recording of assessments, and documentation of the information on which expert judgements are based. The sequence of tasks and the conditions under which they are carried out must be the same for all participants in a single assessment procedure. Experts award marks independently of one another, using pre-approved criteria and behavioural descriptions.

Once the individual assessment is complete, the experts compare the scores they have awarded. Significant discrepancies are reviewed on the basis of the recorded instances of professional behaviour. Specific details from the observation form, the content of the participant's response, or the materials from the completed task may serve as grounds for revising a score. General judgements about a manager's personal qualities that are not supported by recorded facts are not taken into account.

At the final stage, scores are calculated for individual areas and an overall score is determined; the level of managerial competence is established; scores for key areas are verified; and an individual profile is drawn up. The expert panel prepares a report setting out the level of competence, scores by area, professional qualities with high and low scores, and recommendations for further development.

The report must contain sufficient information to explain the assessment received. It is advisable to include a list of the methods used, key observations, scores by area, the overall score, the established level and recommendations. Ratings obtained using the '360-degree' method is presented in aggregated form to preserve the confidentiality of respondents [9].

The reliability of the assessment depends on the training of the experts and their shared understanding of the established requirements. Before the procedure begins, a training session is held during which the criteria, behavioural indicators, level descriptions, rules for recording observations and the scoring procedure are reviewed. A trial assessment of one or more examples makes it possible to identify discrepancies in the interpretation of the scale and to refine the wording of the criteria.

It is advisable to check the consistency of expert assessments using an appropriate statistical measure. If the degree of consistency is low, experts undergo further training, behavioural descriptions are refined, and the content of the tasks is reviewed. Consistency checks must be carried out before the scores obtained are used for personnel or training decisions [11–13].

The proposed system can be used during the professional training, selection, appraisal and further training of department heads. Within the educational process, it makes it possible to determine the initial level of managerial

competence, compare assessments before and after the completion of training, and prepare individual recommendations. During the recruitment process, the information obtained can be used to match candidates' professional capabilities against job requirements. In the appraisal process, it is advisable to consider the assessments alongside information on the fulfilment of job duties.

The use of the system during professional development enables the identification of areas in which a manager has a sufficient level of competence and areas requiring further development. Re-assessment following the completion of training provides an opportunity to compare an individual's profile across different periods. This use of comprehensive assessment is consistent with the findings of studies [5; 8; 9], which combine professionally oriented tasks, self-assessment, expert evaluations and feedback.

A comprehensive assessment of managerial competence is based on the link between a manager's job responsibilities, criteria for professional conduct, several methods of gathering information, and a single rating scale. Combining the overall score with the individual profile makes it possible to draw a well-founded conclusion regarding a manager's professional readiness and to identify areas for their further development.

The scientific novelty of the proposed system lies in the alignment of the six areas of managerial competence with criteria, behavioural indicators, methods of data collection and the procedure for the quantitative synthesis of assessments. Another distinctive feature of the developed system is the combination of an overall assessment with an individual profile, and the establishment of a rule for taking into account a low score in a sphere that is critical for a specific post.

Self-assessment and the '360-degree' method reflect the perceptions of a manager's professional behaviour held by those involved in the employment relationship. Situational and group tasks make it possible to record methods of analysing information, decision-making, delegation of authority, professional communication and supervision. The combination of these methods reduces the reliance of the conclusion on a single source of information. The validity of this combination is confirmed by studies [5; 8], which identified discrepancies between self-assessment and the performance of professionally oriented tasks, as well as by works [7; 9] devoted to situational tests and multi-ratter assessment.

The proposed system is of a theoretical and methodological nature. Its use requires the prior definition of job requirements, the training of experts, and the verification of task content and the refinement of behavioural descriptions. The weighting coefficients and level boundaries are provisional and are subject to verification based on pilot test data.

The limitations of the study relate to the lack of empirical validation of the system on a representative sample of department heads. Further research should focus on expert validation of the criteria and behavioural indicators, determining the consistency of assessments, refining the weighting coefficients, verifying the level boundaries, and establishing the relationship between individual profiles and the performance of job duties.

CONCLUSIONS FROM THIS STUDY AND PROSPECTS FOR FURTHER RESEARCH IN THIS FIELD

The research carried out has made it possible to develop a theoretical and methodological framework for the comprehensive assessment of the managerial competence of department heads. Managerial competence is defined as a manager's integrated ability to apply professional knowledge, organisational skills, experience, communication skills and personal qualities whilst performing their duties.

The assessment framework is structured around six interrelated areas, which include information analysis, managerial decision-making, organisation of departmental work, professional communication, monitoring of task completion, professional reflection and self-development. Criteria, behavioural indicators and methods for gathering information have been defined for each area. The matrix developed establishes a link between a manager's job responsibilities, observable manifestations of professional behaviour and the methods used to assess them.

A combination of testing, situational and group tasks, expert observation, the '360-degree' method, self-assessment, individual interviews and structured discussions is justified. Each method provides information on specific manifestations of managerial competence. Their combined use makes it possible to compare assessments, identify discrepancies and reduce the reliance of the conclusion on a single source of information.

Quantitative summarisation involves determining the average score for behavioural indicators in each area and subsequently calculating an overall assessment, taking weighting coefficients into account. The weights are set by a panel of experts in accordance with the manager's job responsibilities, management level and the purpose of the assessment. The consistency of expert judgements is verified using Kendall's coefficient of concordance. The established weights are applied uniformly to all participants in a single assessment procedure.

A preliminary four-level scale is proposed for interpreting the overall assessment. The overall score is supplemented by an individual profile reflecting the assessments across all six areas. High scores in individual areas should not obscure a low score in an area that is critical to a specific post. The list of key areas is established prior to the start of the assessment, based on the manager's job responsibilities.

The scientific novelty lies in the harmonisation of areas of managerial competence, criteria, and behavioural indicators, methods of information gathering, the procedure for calculating scores and the rules for their level-based interpretation within a single system. The proposed system combines a comprehensive assessment with an individual

profile and provides for the separate consideration of a low score in a key area.

The practical significance of the study lies in the possibility of using the proposed system during the professional training, selection, appraisal and further training of department heads. The scores obtained can be used to compare a manager's professional capabilities with job requirements, to identify areas for training and to formulate individual recommendations.

The limitations of the study stem from the theoretical and methodological nature of the proposed system and the lack of empirical validation on a representative sample of department heads. The boundaries of the levels and the weighting coefficients are provisional and require refinement based on pilot testing data.

Further research should focus on expert validation of the criteria and behavioural indicators, determining the consistency of assessments, refining the weighting coefficients and level boundaries, verifying the link between individual profiles and the performance of job duties, and developing a digital system for data collection and processing.

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