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STATE REGULATION OF AGRICULTURE IN KAZAKHSTAN UNDER GLOBAL CLIMATE CHANGE

Abstract

The success of project team formations highlights the importance of human capital competencies. The human risk exists in all stages of project implementation. To solve this problem, personnel assessment and development are crucial in the formation of project teams. A methodology of this process includes three assessment directions for personal, professional, managerial, and interpersonal competencies. This study highlights the importance of competency map, gap analysis, and formation of individual development trajectories for project teams by and employee performance. The automated and objective personnel assessment enables a rapid response to any underperformance by employees. From this point of view, this study highlights the necessity of machine learning and artificial intelligence (AI) applications for assessing human capital competencies. It provides the efficient allocation of human resources and the assigned tasks of project team members. Furthermore, this study analyzes the results of the BCG (2020) report on global skills by reflecting the main challenges for project teams. Because of this analysis, this paper proposes the Future Skills Architect for project team members. Additionally, a competency map, gap analysis, and formation of individual development trajectories support to selection of the proper assessment tools for the project management environment in Kazakhstan.

Keywords: human capital, competencies, project teams, personnel assessment, personnel development, competency map, Future Skills Architect.

Introduction

Nowadays, some projects fail despite detailed planning and strong efforts, but many of them survive in terms of high and unexpected pressure and shocks. Mostly, the success belongs to an effective project team with professional specialists. However, creating such a team requires precise assessment and selection of skilled professionals with suitable personal characteristics for teamwork to achieve organizational goals. There are plenty of international studies on job recruitment. However, recently Alharbi proposed a framework of principles for finding employees suitable for job requirements. This study estimates the strengths and weaknesses of Alharbi's approach for the formation of effective project teams [1].

The purpose of the study is to highlight the need for substantial models and methods adaptation, including Alharbi's approach for personal assessment and development in the formation of effective project teams. This competency mapping includes:

- Personal Competencies.
- Job-Related Competencies.
- Interpersonal Competencies.

- Management Competencies.
- Knowledge level Competencies.
- Technical Competencies.

Effective project teams play a crucial role in implementing infrastructural, technological, and production projects successfully. Today a lack of knowledge and experience in creating effective project teams leads to the failure of projects at different levels and stages in Kazakhstan. One example is Enbek.kz, which shows lack competencies by matching required and actual skills. Even some global projects shut down due to unskilled project teams. It is important to enhance the theoretical framework for creating effective project teams.

To achieve the goal of the study, it is necessary to solve the following problems:

- to adapt substantial models and methods, including Alharbi's approach for personal assessment and development for building an effective project team;
- machine learning and AI open new doors for development everywhere, which can also be used for job competency assessment and employee performance prediction.

Required and available competencies always lead to a "skills gap" as a distance between them that is not always of concern to project management. It is necessary to develop a "skills gap" method for the project environment of Kazakhstan. As mentioned earlier, it is important to predict the performance of employees by assessing their real competencies of employees.

According to Alsobaey and Al-Alawi, Ranker's machine learning algorithm can predict employee performance. This model allows an accurate forecast of the possible outcomes of team members' actions by their project roles. The processes of simulation decrease the risk of underperformance [2].

As highlighted in the journal Project Leadership and Society, the personal characteristics of employees and their cognitive distinctions form team dynamics for success [3]. In addition, the human capital competency assessment model shows the personality characteristics to understand how to allocate and use them for creating effective project teams. Today, project teams operate in different circumstances, conditions, and environments with high uncertainty. Particularly, personal characteristics of team members have a crucial influence on project success.

The main attributes, like extroversion, conscientiousness, empathy, curiosity, and openness to experience, are very important for teamwork. Besides, this study focuses on the importance of mutual trust and psychological safety in terms of cognitive diversity for forming effective project teams.

According to BCG, over 1.3 billion people worldwide suffer a deficit or excess of competencies. Their loss of potential out of the box led to a "hidden tax" on the economy at an approximate rate of 6% of GDP per year.

The gap between required and available competencies reduces the productivity of teams. To visualize and monitor this situation, this study applies graph algorithms to create and assess a competency model for a project team.

Materials and methods

The main approach applied by Alharbi uses a Likert scale from 1 to 5 to assess personal, technical, job, interpersonal, cognitive, and managerial competencies. The proposed competency matrix consists of matching job requirements and candidate competencies for forming an efficient project team. This match allows for identifying existing gaps to show the development potential. For this reason, self and expert assessments also help to collect preliminary data. This study analyzes an advanced classification model, the RanKer algorithm, to use for KPI, experience, and performance measures assessments. Some historical or current data can be used for performance predictions.

As the main research method, this study applies the case study method for personal assessment and development by analyzing the experience of the Digital Government Support Center in Astana city. Data collection included interviews of 10 candidates on several scales, such as the Big Five Personality Traits, as well as assessments of perceptions of team cohesion, conflict, and trust. Also, to enhance the questionnaire of the interview, this methodology includes the BCG seven key as an assessment criterion:

1. Insufficient preparation for future (not yet existing) roles.
2. Lack of continuous learning systems.

3. Low motivation for self-development.
4. Limited access to career opportunities.
5. Ineffective redistribution of personnel.
6. Insufficient involvement of social groups.
7. Changing values of Generation Z [4].

According to Brownie et al., teamwork, communication, conflict resolution, and role understanding are the main competencies [5]. Choi et al. offer to use of graph construction methods. It helps to visualize and reveal gap areas for training and recruitment [6].

All these suggestions are taken into account for the interview process. As a result, it was possible to compare the success criteria of team performance with the competency model for project team members.

Results

Today business environment is rapidly changing due to digitalization and innovations. It is becoming increasingly important to examine the success of projects by researchers and practitioners [7]. The impact of human capital competencies on project success is under focus of current studies [8]. Most studies highlight the leadership skills in terms of the administrative functions of project managers as a key factor for project success [9]. Any project involves as stakeholders a project owner and team members. Team members should contribute their best to meet the expectations of project owners. However, the changing environment of technologies and innovations highlights the importance of human capital competencies.

This study examines how human capital competencies influence project success. Therefore, the assessment of the level of human competencies should be changed properly due to changes. In addition, exploring the existing models of assessing the level of human capital competencies and their conceptual development is the main tasks of this study.

The theory of competence is the foundation of understanding individual and organizational skills, knowledge, and abilities to increase organizational performance [10]. From a management viewpoint, competence is defined as the individual's ability to effectively perform specific functions with a set of knowledge, behavior, skills, and experience.

Traditionally, competences might be in three types, such as core competencies that remain the main organizational advantage in competition, functional competencies that involve some unique knowledge and skills, and behavioral competencies related to personal characteristics and communication skills.

Most recently, Irianti I et al. [11] offer fifteen competencies in three groups based on the Leadership Development Questionnaire. The three groups are Emotional competence (EQ), managerial competence (MQ), and intellectual competence (IQ).

From management of view competence enable employees to implement functions effectively and efficiently, that means to do right things in a correct way. Depending on management levels competences divided into technical, behavioral and strategic types.

Nowadays, it is essential to apply competency-based management that highlights the importance of competencies for organizational success. One of the recent trends is the continuous development of knowledge and skills due to unstoppable changes. Managers apply performance and self-assessments, 360-degree feedback for competency measurement. As shown by many studies, a strong competencies framework sustains high employee and organizational performance, job satisfaction, and growth for overall success. In addition, the strong competencies develop agility and innovation applications of organizations.

Project success depends on the key competencies of team members. Many studies highlight seven competencies as technical, leadership, communication, interpersonal, organizational, analytical, and adaptability.

Project managers apply scheduling tools like Gantt charts, Microsoft Project, Asana, and others as technical skills. Risk management is a very important part of technical skills. Most failures take place due to a lack of effective risk management. Risk mitigation is essential for all stages of project implementation.

Team leadership and decision-making are the main attributes of Leadership skills. Verbal and written communication, active listening, conflict resolution, negotiation skills, time and resource management, problem solving, performance assessment, agility, and continuous development are the main competencies for team managers.

Effective allocation of human capital based on competencies applies some key models:

1. Spencer&Spencer's Competency Model that focuses on superior performance by motives, traits, self-concept, knowledge, and skills based on behavioral-event interviews [12].

2. Boyatzis's Model of Effective Job Performance defines individual job demands and organizational environment by a link of personal competencies with organizational needs [13, 14].

3. The SHRM Competency Model (Society for Human Resource Management) includes nine competencies, like relationship management, consultation, critical evaluation, global cultural effectiveness, leadership navigation [15].

4. Lominger Competency Model (now part of Korn Ferry) has three categories, like leadership, interpersonal, and personal characteristics, with 67 competencies that are broadly used for leadership development and succession planning.

5.The Universal Competency Framework (UCF) by SHL is broadly used by recruitment and assessment centers for performance indicators applying hierarchical core competencies.

6. ECD's Key Competencies Framework applies interactively tools like technology and language, heterogeneous social interaction, and autonomous action [16].

According to Ahmed et al, a digital competency-based human capital competency (HCC) model shows the positive influence of digital competency on HCC [17].

To sum up, it will be scientifically significant to analyze how digital competence adds influence to project success in combination with all team members' competencies.

Project success shows the satisfaction of stakeholders with the successful project completion on time, within the scope of the budget, and with the required quality standards.

Recent studies highlight the importance of team competencies for project success [18].

According to Nguyen et al., 4 COMs comfort, commitment, competence, and communication are success factors [19]. The first componenof t comfort shows reducing anxiety and building trust among team members by implementing a project smoothly. Commitment is creating a competent project team that makes quick and accurate decisions. Competence is staying for clear objectives and scope to perform effectively. Lastly, communication means effective data collection that leads to mutual understanding.

As a result, this study introduced a competency map based on adapted model for Personal assessment and development by analyzing the experience of Digital Government Support Center in Astana city. The main competencies of team members are defined according to the competency model.

Overall, the application of the competency model allows for to find of weaknesses of candidates during interviews. It helps to increase the accuracy of personnel selection to fill gaps for project needs. The managerial and interpersonal skills of candidates are also the main competencies for the selection process. It needs some support and training for all candidates after obtaining a job. Project team members are hired through an open competition for each project separately. Successful candidates are hired for the project, but there is also a "reserve" of candidates who are hired for the project if one of the participants refuses for any reason.

The selection begins with the publication of an announcement on social networks and professional platforms. Applications are pre-screened based on resumes, after which the most suitable candidates are invited for an interview. The following parameters play a key role in decision-making:

- evaluates the competency profile of candidates (managerial, technical, communication);
- analyzes experience in implementing similar projects;
- takes into account motivation and willingness to work in conditions of uncertainty and urgency;
- determines the candidate's suitability for the tasks of a specific project and the team culture.

During interviews, the Digital Government Support Center in Astana city is hiring employees by paying attention to the following characteristics of candidates: work experience (implementation of projects in this area or similar, or in general), length of service in this organization, education (level, country, university prestige, etc.), experience with software products and tools, soft skills.

Table 1 – Gap analysis with proposed solutions

The key parameters of hiring	Characteristics of candidates	Further actions to eliminate some Gaps
Managerial, technical, communication	Education (level, country, university prestige, etc.) Soft skills	Extra training and consultation
Experience in implementing similar projects	Work experience	Mentoring
Motivation and willingness to work	Length of service in the previous organization	Career growth opportunities, salary and social packages
Candidate's suitability for the tasks of a specific project and the team culture	Experience with software products and tools	Self-study programs
Note: Compiled from source [7].		

According to table 1, to implement projects effectively, it is possible to provide further actions to eliminate some Gaps.

The final formation of the project team occurs by taking into account the competency matrix, the needs of a specific project, as well as the balance of roles: from analysts and coordinators to managers and experts. The current Competency Matrix includes the following parameters:

1. Know the methodology and basis of project/program management.
2. The procedure for implementing, supporting the implementation, monitoring projects/programs/portfolios, and building the project architecture of government agencies.
3. Methods and types of project planning and management, such as Gantt chart, Kanban board, Agile, Scrum.
4. The procedure for drafting project documents.
5. Ethics of business communication, negotiations.
6. Theory and practice of working in a project team.
7. Methods of applying information systems in project management.
8. Advanced domestic and foreign experience in the field of project management.
9. Project planning, preparation of project documentation.
10. Coordination of the work of project offices on managing quality, risks, cost, deadlines, content, and communications of the project.
11. Breaking down processes and activities into separate tasks.
12. Estimating labor costs for the implementation of individual tasks.
13. Estimating the deadlines for completing the assigned tasks.
14. Identifying quality and deadline risks.
15. Reading and understanding graphs and Gantt charts.
16. Creating network schedules, including using specialized software.
17. Working in Microsoft Project, Microsoft Visio, ECM, Oracle Primavera, ISPU, mastering tools for creating presentation materials, text documents, spreadsheets, Gantt project management systems.
18. Business ethics, interpersonal communication, and negotiations.
19. Systematization, accounting, and documentation using information technology, reporting, and analysis.

A committee, including the CEO and his deputy, by voting, gives the final assessments. The main criteria that are taken into account are:

1. Ability to work in a team.
2. Willingness to cooperate, the ability to listen to others, share knowledge, and make joint decisions are assessed.
3. In practice, this is tested through cases or examples from past projects where a person worked in a cross-functional group.
4. Communication skills.
5. The ability to clearly express thoughts, listen, conduct a dialogue, and negotiate is assessed.

6. This is especially important when interacting with project stakeholders.
7. Attention to detail.
8. The candidate must be able to work with documentation, meet deadlines, and quality standards.
9. Charisma.

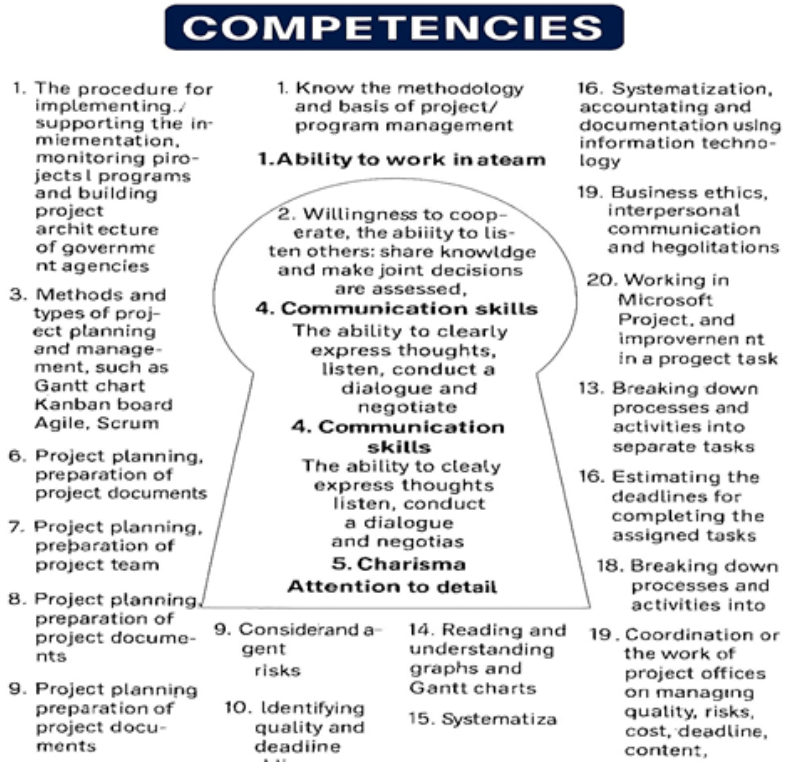

Figure 1 – The augmented Competency Model based on Digital Government Support Center in Astana as Future Skills Architect

Note: Compiled from source [7].

The further development the Competency Model based on Digital Government Support Center in Astana in figure 1, for future consideration RanKer model provides an opportunity to employee performance. The computerized selection allows avoiding subjectivity by efficient decision-making.

On the other hand, BCG proposes capabilities (competencies), motivation and access (access to training and development). The type of project within the industry, the cultural and task diversity of team members, and assessment goals are the main driving factors of competency development. It is also important to form the key competences, the graphical illustration of matching desired and actual competences. Finally, coverage analysis reveals and eliminates the gaps through training.

In addition, digital questionnaires, Likert scales, and open formats enhance the selection process of candidates for business teams. The next parameters are vital according to BCG's suggestions for the assessment model for selecting candidates:

1. Personal development chart and self-assessment.
2. Mutual feedback on completion of project stages.
3. Soft skills and interpersonal competencies development.
4. Reflective feedback and support by team leaders based on assessment results.

The influence of personal characteristics on team effectiveness parameters has a positive and a negative impact. According to table 2, the results of the influence and examples of application are different.

As mentioned earlier, it is necessary to assess the personality characteristics like extroversion, integrity, openness to experience, neuroticism, and high risk of destructive conflict.

Table 2 – The influence of personal characteristics on team effectiveness parameters

Personality characteristics	Influence	Result	Example of application
Extroversion	Communication, coordination	Promotes initiative	Team leadership
Integrity	Discipline, meeting deadlines	Reduces conflict	Concurrent Planning
Openness to experience	Innovativeness, adaptation	Key for Agile Teams	New fields to discover
Neuroticism	Decreased stress tolerance	Increases the risk of destructive conflict	Trainings for conflict tolerance
High risk of destructive conflict	Increased engagement	Strengthens collective responsibility	New approaches for development
Note: Compiled from source [3].			

According to BCG model competencies assessment in project teams includes three directions such as capabilities, motivation and access (table 3). The Likert Scale is applicable to assess capabilities and reveal the gap of skills. Survey helps to assess the motivation of a candidate. Access shows development programs for leadership and growth opportunities.

Table 3 – Model for assessing competencies in project teams (according to BCG)

Direction	Competence	Formulation for evaluation	Evaluation Metrics
Capabilities	Teamwork Communication Role and Responsibility Conflict resolution	Scale 1 (never) – 5 (always)	Further needed skills development by trainings
Motivation	Willingness to work Interest for growth	Individual values	Motivation and Commitment Survey
Access	Willingness to learn	Development opportunities	Availability of L&D programs
Note: Compiled from source [3].			

Assessment of the employees' performance is important for all stages of project implementation, including its completion. It influences achieving project goals and stakeholder satisfaction. The results of the assessment help to inform new improvements. The quality of employees' work is assessed throughout the project, as well as upon its completion, since this is critically important for achieving project goals, customer satisfaction, and improving the team's efficiency in the future. It is necessary for the formation of effective project teams.

Monitoring of task completion according to established deadlines and stages should be regularly conducted as stage control. Feedback from the project manager and other team members allows for prompt adjustment of behavior and quality of execution. The assessment of the result's compliance with the customer's requirements and the project plan is important as well. The following assessment parameters are important during project implementation: adherence to deadlines; completeness and accuracy of task completion; level of involvement and initiative; customer satisfaction with the result.

According to figure 1 the importance of competences are distinctive by industries. The level of personal competences can be underestimated. As mentioned by model Alharbi communication and emotional intelligence are becoming very demanded.

Particularly, the experience of the Digital Government Support Center in Astana city shows that the analysis and assessment of the project results and employee performance upon completion of the project is important. There is a clear regulatory system based on job descriptions, regulations of the Center, and conditions specified in the employment contract. The assessment affects the possibility

of repeated participation in new projects. In case of positive results, the Center recommends the employees for more complex or priority projects, as well as for the role of a mentor.

Figure 2 – The importance of competences by industries

Note: Compiled from source [18].

In the event of serious violations or failure to fulfill duties, the Center undertakes disciplinary measures, including comments and refusal to participate in the future, and in some cases, termination of the contract.

Discussion

The competency assessment model based on Alharbi approach allows to form effective project teams by combining project needs and employee characteristics. The usage of RanKer algorithm in projects provides predictive models by mitigating human risks to ensure objectivity and sustainable development.

According to Alharbi's approach, the success of projects depends on not just professional but also personal characteristics. Mutual understanding, trust, and psychological safety of team members can create a healthy competitive environment for innovations and development. This study highlights the importance of employee competencies for project management. Brownie et al. support the importance of competency assessment for team performance [5]. The BCG report highlights the importance of motivation for development that sustains the uniqueness of projects through creativity and innovation. In particular, the usage of graph analysis for competency assessment shows the potential areas for development to increase productivity and overall performance.

According to CIPD the hiring one specialist takes 44 days with an approximate cost $4,700. It is costly and takes a long time. As mentioned by Business Research Insights the size of global recruitment reached $757 billion in 2024 and forecasted to increase up to $2.29 trillion by 2033. This increase dictates to use Artificial Intelligence (AI) and algorithmic models for recruitment process over the world.

Since 2018, in the case of Kazakhstan, the digital platform Enbek.kz has been working as an electronic labor exchange under the supervision of the Center for Human Resource Development by providing citizens the direct access to vacancies and resumes of candidates who are looking for

a job. This Enbek.KZ platform with database of vacancies and resumes also provides information about competencies needed in industrial and regional structure, skill categories, graduate profiles, and employer requirements. The analysis of this database allows for reflecting current needs for competencies, skills gap, and possible algorithmic recommendations for the recruitment process.

As mentioned by Enbek.kz, the problem in Kazakhstan is that about 40% of employees are working outside of their specialty, and 50% of graduates are not able to find a job in their specialty studied for up to 21 months. However, the competences of graduates do not meet the requirements of 70% of employers. Such a problem exists in Kazakhstan. In addition, Enbek.kz confirms the need to create a digital competency assessment model that leads to solving these problems. Cross-functional and interdisciplinary project teams based on a digital competency assessment model are innovative and competitive.

According to Software Oasis, AI tools can reduce cost and hiring time by up to 18%. However, the further potential is even higher by automated processes of hiring employees. The database from Enbek.kz requires domestic models of competencies assessment that helps to form effective project teams.

The table 4 includes problems from different sources including global and domestic labor organizations. Mismatch of skills, productivity losses, cost of hiring, and employment of graduates of TVET, work outside the specialty, reducing hiring time with AI are the main problems related to competence assessment over the world.

Table 4 – Problems and indicators of competence mismatch with possible solutions

Source	Problem	Indicator	Proposed solutions
OECD (2021)	Mismatch of skills	40% of workers in OECD countries	Trainings
BCG (2020)	Productivity losses	6% of global productivity	Motivation
SHRM (2022)	Cost of hiring	$4,700 per employee	AI support
CIPD (2017)	Hiring costs	£6,000 (top) / £2,000 (rest)	AI support
ETF (2022)	Employment of graduates of TVET	50% find work in 21 months	To meet requirements of employers
Enbek.kz	Work outside the specialty	40% of Kazakhstan workers	Employer interest in hiring
Software Oasis (2024)	Reducing hiring time with AI	−18% of hiring time	AI adaptation
Note: Compiled from source [20].			

The existing problems in Kazakhstan are that 50% of graduates cannot find work within 21 months, and work outside their specialty. Meeting the requirements of employers can be achieved through the collaborative work of employers and education organizations. For instance, the skills development of students can be enhanced by workshops and training that can be implemented as extra classes with practical applications. For that, the close relationship of educational organizations with employers should be studied to determine the expected competencies from graduates. Employers' interest in hiring will be increased by the evidence of graduates' skills and motivation to work.

The global labor market is changing rapidly. Digitalization and robotics lead to downsizing the size of the labor market. The World Bank stated this trend in the report "Changing nature of work" in 2019. It requires a qualified workforce with high competencies. The human capital development is relevant for Kazakhstan as well. Some companies try to create their corporate universities. For example, the International Financial Center in Astana has a Bureau of Continuous Professional Development. The replacement by robotics cannot change interpersonal communication, emotional intelligence, team motivation, and other human characteristics and competencies.

Kazakhstan updates index of human capital annually. The place of Kazakhstan by this indicator is 31 out of 157. As mentioned by employers not only a lack of technical training but also low level social-behavioral skills are remaining as the main problems of labor market in Kazakhstan.

To solve this problem, state regulation and the private sector are trying to reform the educational system. Higher education organizations have taken academic independence to form study programs according to labor market needs. As a measure, President of Kazakhstan Qasym-Zhomart Tokayev stated about strengthening "180 advanced colleges and 20 universities" in the coming three years, that educational programs should meet the needs of the culture economy, and Industry 4.0.

The private sector is supporting the development of the educational system by forming its training centers. For example, ERG is going to create an educational center for training employees and teachers. Polymetal Company formed its educational "Center for Mining Information Technologies". BI Group Company has formed its corporate university since 2012, with more than 15000 listeners. This university offers special programs to develop the personal competencies of employees and engineering technical staff. To develop the qualifications of workers through international certifications, the Bureau of Continuous Professional Development (BCPD), under the International Financial Center in Astana, assists. The purpose of the Bureau is to improve financial and investment literacy by providing professional events.

In conclusion, many steps have been undertaken to solve a problem related to a lack of technical and social-behavioral skills of graduates and workforce as mentioned by employers in Kazakhstan.

In this context of these problems, this study proposes the following recommendations:

- the educational programs should consider a STEM approach at universities to develop technical skills;
- AI and machine learning applications for project implementation;
- develop personal skills of graduates through workshops and professional training;
- develop social-behavioral skills by conducting studies, business games, and marketing solutions at universities and colleges.

Conclusion

The success of projects depends on not just professional but also personal characteristics, as mentioned by Alharbi's approach. Mutual understanding, trust, and psychological safety of team members can lead to form effective project teams. This study proposes a competency model including personal characteristics as well. As mentioned by Enbek.kz, the problem in Kazakhstan is about 40% of employees are working not than their specialty, and 50% of graduates cannot find a job in their specialty studied for up to 21 months.

The main problem is that the competences of graduates do not meet the requirements of 70% of employers. Enbek.kz confirms the need to create a digital competency assessment model that leads to solving these problems. Cross-functional and interdisciplinary project teams based on a digital competency assessment model are innovative and competitive.

As one of the solutions, this study proposes an advanced classification model, RanKer algorithm, to use for KPI, experience, and performance measures assessments. Some historical or current data can be used for performance predictions. It is also important to form the key competences, the graphical illustration of matching desired and actual competences. Finally, coverage analysis reveals and eliminates the gaps through training. In addition, digital questionnaires, Likert scales, and open formats enhance the selection process of candidates for business teams.

A lack of technical and social-behavioral skills of graduates and the workforce leads to many steps undertaken by the public and private sectors in Kazakhstan. In this context of these problems, this study proposes the following recommendations:

- The educational programs should consider a STEM approach at universities.
- AI and machine learning applications for the project.
- Develop personal skills of graduates through workshops and professional training.
- Develop social-behavioral skills through case studies, business games, and marketing solutions at universities and colleges.

These undertaken measures lead to enhancing the core competences for forming effective project teams in all sectors of the economy in Kazakhstan.

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ЖАҺАНДЫҚ КЛИМАТТЫҢ ӨЗГЕРУІ ЖАҒДАЙЫНДА ҚАЗАҚСТАННЫҢ АУЫЛ ШАРУАШЫЛЫҒЫН МЕМЛЕКЕТТІК РЕТТЕУ

Аңдатпа

Жоба командасын құрудың жетістігі адами капиталдың құзыреттіліктерінің маңыздылығын көрсетеді. Адамдық тәуекел жобаны жүзеге асырудың барлық кезеңдерінде бар. Бұл мәселені шешу үшін жобалық командаларды құруда персоналды бағалау және дамыту өте маңызды. Бұл процестің әдістемесі тұлғалық, кәсіби, басқарушылық және тұлғааралық құзыреттіліктерді бағалаудың үш бағытын қамтиды. Бұл зерттеу құзыреттілік картасын құруға, кемшіліктерді талдауға және қызметкерлердің өнімділігін болжау арқылы жоба командалары үшін жеке даму траекторияларын қалыптастыруға бағытталған. Персоналды автоматтандырылған және объективті бағалау қызметкерлердің кез келген нашар жұмысына тез жауап беруге мүмкіндік береді. Осы тұрғыдан алғанда, бұл зерттеу адам капиталының құзыреттілігін бағалау үшін машиналық оқыту мен жасанды интеллект (AI) қосымшасының қажеттілігін көрсетеді. Ол адам ресурстарын тиімді бөлуді және жоба тобы мүшелерінің тапсырмаларын қамтамасыз етеді. Бұдан басқа, бұл зерттеу жоба командалары үшін негізгі қиындықтарды көрсету арқылы жаһандық дағдылар туралы BCG (2020) есебінің нәтижелерін талдайды. Осы талдаудың арқасында бұл құжат жоба тобының мүшелеріне Болашақ дағдылар сәулетшісін ұсынады. Сонымен қатар, құзыреттілік картасын құру, кемшіліктерді талдау және жеке даму траекториясын қалыптастыру Қазақстандағы жобаларды басқару ортасы үшін дұрыс бағалау құралдарын таңдауға қолдау көрсетеді.

Тірек сөздер: адами капитал, құзыреттер, жоба командалары, персоналды бағалау, персоналды дамыту, құзыреттілік картасы, болашақ шеберлік сәулетшісі.

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ГОСУДАРСТВЕННОЕ РЕГУЛИРОВАНИЕ СЕЛЬСКОГО ХОЗЯЙСТВА КАЗАХСТАНА В УСЛОВИЯХ ГЛОБАЛЬНОГО ИЗМЕНЕНИЯ КЛИМАТА

Аннотация

Успешность формирования проектных команд подчеркивает важность компетенций человеческого капитала. Человеческий риск существует на всех этапах реализации проекта. Для решения этой проблемы

оценка и развитие персонала имеют решающее значение при формировании проектных команд. Методология этого процесса включает три направления оценки: личностные, профессиональные, управленческие и межличностные компетенции. Данное исследование сосредоточено на построении карты компетенций, анализе пробелов и формировании индивидуальных траекторий развития проектных команд путем прогнозирования эффективности работы сотрудников. Автоматизированная и объективная оценка персонала позволяет быстро реагировать на любые проявления неэффективной работы сотрудников. С этой точки зрения данное исследование подчеркивает необходимость применения машинного обучения и искусственного интеллекта (ИИ) для оценки компетенций человеческого капитала. Это обеспечивает эффективное распределение человеческих ресурсов и поставленных задач членам проектной команды. Кроме того, в данном исследовании анализируются результаты отчета BCG (2020) о глобальных навыках, отражая основные проблемы проектных команд. В связи с этим в данной статье предлагается архитектор навыков будущего для членов проектной команды. Кроме того, построение карты компетенций, анализ пробелов и формирование индивидуальных траекторий развития помогают выбрать правильные инструменты оценки для среды управления проектами в Казахстане.

Ключевые слова: человеческий капитал, компетенции, проектные команды, оценка персонала, развитие персонала, карта компетенций, архитектор будущих навыков.

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