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ORIGINAL RESEARCH PROJECTS
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Aligning Education with Labour Market Needs: Identifying Key Competencies for the Graduates of Economic Fields

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Abstract
The aim of this article is to identify the extent to which the competencies of economics graduates align with the demands and realities of the contemporary labour market. The research was divided into three areas of study. The first involved an analysis of job ad-

vertisements in the Lubelskie Voivodeship in Poland, it aimed to identify the demand for positions in specific industries. The second area focused on surveying employers from the Lubelskie Voivodeship in Poland in order to identify the competencies required of job candidates. The third area examined the competencies of graduates from the Faculty of Economics at Maria Curie-Skłodowska University in Lublin, Poland. In our research the following methods were applied: (i) machine learning methods to analyze job advertisements (120,817 ads from 2015 to 2023), (ii) an online survey (CAWI, 107 employers), and (iii) in-depth individual interviews (16 interviews). An analysis of the research results revealed the existence of competency gaps, mainly in the area of basic professional knowledge related to the particular job on offer and also work experience, which may impact the competitiveness of graduates in the labour market. The study also identified the particular competencies desired by employers, including the basic professional knowledge related to their job offers, decision-making skills, and problem-solving abilities. The research findings may contribute to improving the curriculum offered by economics courses.

Keywords: labour market, educational programmes, graduate competencies, job advertisements, competency gaps.

Introduction

The contemporary labour market is extremely dynamic. According to the authors of the report Labour Market of the Future: Factors Shaping the Labour Market by 2030 (PwC, 2018), the key factors currently influencing the labour market include the following:

1. rapid advancements in technological innovations;
2. demographic changes: population size, distribution, and age;
3. rapid urbanization;
4. shifting power dynamics between developed and developing countries;
5. resource shortages and climate change.

Furthermore, a report based on research conducted by Pearson in collaboration with the Nesta Foundation and Oxford Martin School (Bakhshi et al., 2017) indicated that by 2030, as many as 90% of the professions that we know today will become obsolete, with 20% disappearing entirely due to full automation. Researchers also claim that in the current labour market, only

10% of people are working in professions where demand is expected to grow. However, we can also expect the emergence of entirely new and unexpected professions.

The processes of digitization, automation, and the development of communication networks are placing increasing pressure on workers across almost all sectors of the modern economy. Until recently, it was assumed that the expansion of artificial intelligence would primarily displace jobs dominated by repetitive, routine tasks (Ford, 2016). However, the success of large language models (e.g., GPT-4) and graphic models (Midjourney) has significantly heightened the risk of automation for many other professions, such as translators, graphic designers, teachers, and software engineers. It is extremely difficult to predict which jobs will disappear from the labour market in the near or distant future. Even more challenging is trying to predict which skills, competencies, and professions will be in demand in the future (Dwivedi et al., 2021).

Technological progress means that skills that were valued for decades may become obsolete within just a few years (Gartner, 2019). The number of competencies required to perform adequately in a single profession increases by about 10% each year. In addition, Gartner estimates that more than 30% of the skills needed just three years ago will soon become redundant (Gartner, 2019).

The dynamic and large-scale changes taking place in the modern labour market pose a significant challenge to those responsible for designing educational courses at all levels. Adapting to these changes requires educational institutions to adopt a flexible approach and continuously monitor trends and labour market needs. Additionally, students and employees must be prepared for continuous development, adaptation, and lifelong learning to meet the dynamically changing demands of the labour market (Pocztowski et al., 2021).

This article presents the results of research conducted as part of the Excellence in University Teaching project, it was implemented by Maria Curie-Skłodowska University in Lublin, Poland, under the Operational Programme Knowledge Education Development, Priority Axis III: Higher

Education for the Economy and Development, Measure 3.4: Management in Higher Education Institutions, co-financed by the European Union through the European Social Fund. The primary objective of the research was to assess the degree to which the competencies of graduates from the Faculty of Economics at UMCS align with the demands of the contemporary labour market.

The study sought to answer the following questions:

1. To what extent does the education offered at the Faculty of Economics at UMCS meet the needs and expectations of employers?
2. Which skills and competencies acquired by graduates meet the current demand in the labour market?

This research was initiated to assess the extent to which the competencies of the Faculty of Economics graduates are aligned with the realities of the modern labour market. As employer expectations and requirements for potential employees evolve, there is a need to evaluate how well higher education institutions are responding to labour market demands. The results of the study allowed for the identification of competency gaps among Faculty of Economics graduates, these may affect their employability and competitiveness in the labour market. Furthermore, the research facilitated a better understanding of employer expectations of potential candidates and the identification of desired competencies within the context of their operations. The practical aim of the research presented here was to improve the effectiveness of the education process at the Faculty of Economics by enhancing curricula and aligning the educational material provided with the needs of various stakeholders (employers, graduates, and students). In doing so, the described research aligns with the concept of universities complying with certain social responsibilities, whereby today's higher education institutions should diagnose the needs of stakeholders and implement the corrective actions which they signal.

Research methodology

The study was divided into three main research areas aimed at improving educational processes and aligning teaching activities with the needs of stakeholders, i.e. students, graduates, and employers. The first research area involved an analysis of job advertisements in the Lubelskie Voivodeship, with a particular focus on offers targeted at the graduates of economics-related courses at the Faculty of Economics (FE). The second research area focused on studying employers in order to identify the desired competencies of job candidates. This phase included both a quantitative analysis, conducted through an online survey, and qualitative research in the form of in-depth individual interviews. The third research area examined the competencies of FE graduates.

The study was based on the analysis of job advertisements posted on pracuj.pl from 2015 to 2023.[1] The choice of this particular platform was due to its popularity and the large number of advertisements available during the studied period. For the purposes of conducting the research presented here, a content analysis of the advertisements was initiated.

The main objective of the employer survey was to identify the extent to which the competencies of FE graduates align with the requirements and realities of the contemporary labour market. Due to the nature of the research questions, the research team undertook two different research endeavours. The first was a quantitative study conducted using an online survey (CAWI) from February to May 2023. The research tool was a custom-designed questionnaire containing 15 questions, these were based on the competencies from the Bologna Process (González & Wagenaar, 2005) and also the competencies related to the fields of study at FE UMCS. This tool allowed for the identification of both the currently represented and the desired levels of selected competencies among employed students and graduates, as well as a means to detect the existence of competency gaps. The survey covered 107 employers from the Lubelskie Voivodeship.

[1] The year 2023 included data only for January and February.

The second endeavour was a qualitative study conducted in the form of individual in-depth interviews (IDIs). This approach provided more detailed responses, and allowed for the development of a deeper understanding of the more subtle and complex aspects of employer expectations. The qualitative research was conducted from April to May 2023. The interviews provided insights into the individual opinions and experiences of the surveyed employers, without the tool suggesting any particular responses. A research script with 12 questions was used, and the sample selection was chosen with a specific purpose in mind. The participants included 16 representatives from the Lublin business and institutional community, they all met the relevant recruitment criteria, such as employing students or graduates from FE UMCS.

The final study focused on the competencies of the FE graduates and their career trajectories. Its main objective was to identify and assess the alignment of the competencies of the FE graduates with the requirements and realities of the contemporary labour market. A CAWI questionnaire was used, it was based on IPMA matrix concepts and the measurement of the quality gap in education. The IPMA matrix (Importance – Performance Matrix), which was developed by Martilla and James in 1977 (Martilla et al., 1977), was applied to the method of evaluating the usefulness of acquired competencies. This simple graphical method presents the relationship between the perceived importance of the attributes of a given variable and the level of performance (execution evaluation). The IPMA matrix may serve as a standalone evaluation tool or complement other analytical methods, including gap analyses (Haverila et al., 2023). The rating scale consisted of five levels (1–5), where 1 indicated "completely unimportant" or "very low rating", and 5 indicated "very important" or "very high rating". The analysis used two scales: one to measure the importance of the evaluation criteria and the other to measure the level of the acquired competencies. The graphical interpretation of the IPMA matrix is presented in Figure 1.

The factors were evaluated in four quadrants:

1. Quadrant 1: "Maintain" – factors with a high degree of importance and a high performance rating, these are the main sources of satisfaction and need to be maintained at a high level.

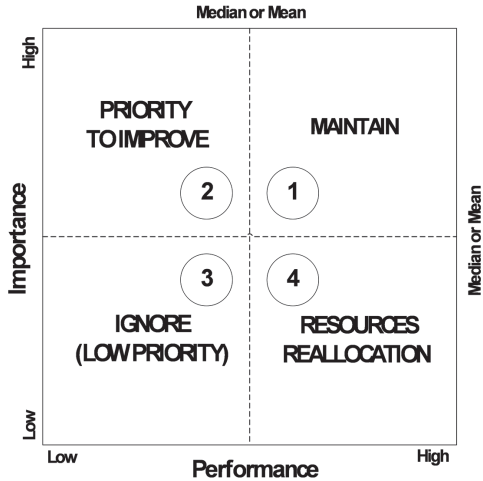

Figure 1. The Concept of IPMA Matrix Interpretation

Source: Own research.

2. Quadrant 2: "Priority to Improve" – factors with a high degree of importance but a low performance rating, these require immediate improvement, for example, through resource reallocation.
3. Quadrant 3: "Ignore" – factors with a low degree of importance and a low performance rating, these do not meet expectations but do not require immediate action, only monitoring.
4. Quadrant 4: "Resource Reallocation" – factors with a low degree of importance and a high performance rating, these are of little significance to stakeholders, but the organization provides them at an excessively high level, they can potentially lead to excessive costs and a lack of performance in other areas.

The study was conducted using a CAWI questionnaire, with 299 graduates of the Faculty of Economics at UMCS from the last five years participating, this figure represents 32.5% of those who initially participated in the survey. The questionnaire also included demographic questions as well as questions regarding their life situation and current employment. General and field-specific competencies were then assessed, a list of 30 general competencies and

5 field-specific competencies related to the field of study at the Faculty of Economics were used. The construction of the questionnaire in terms of general competencies was based on the "Tuning – Educational Structures in Europe" project, this project identified the competencies of graduates across various fields of study. For the purpose of the presented study, a set of competencies specific to economics graduates was used.

It is important to emphasize that the applied research method was based on the self-assessment of competencies by graduates, therefore it is inherently subject to the risk of subjectivity. It follows that the results obtained through the use of this method may differ from those that could be achieved using other, more objective evaluation tools.

Table 1. General Competencies Assessed by Respondents

No.	General Competencies	Competency Group
1.	Ability to analyze and synthesize	Instrumental Competencies
2.	Organizational and planning skills	
3.	Basic general knowledge	
4.	Basic professional knowledge related to the job	
5.	Communication skills in Polish, both spoken and written	
6.	Knowledge of at least one foreign language	
7.	Basic IT skills	
8.	Ability to search for and analyze information from various sources	
9.	Problem-solving skills	
10.	Decision-making skills	
11.	Critical thinking and self-criticism	Interpersonal Competencies
12.	Ability to work in a team	
13.	Interpersonal skills (stress management, relationship building, etc.)	
14.	Ability to work in an interdisciplinary team	
15.	Communication skills with experts from other fields	
16.	Appreciation of diversity and multiculturalism	
17.	Ability to work in an international environment	
18.	Adherence to professional ethics	

Table 1 (continued)

No.	General Competencies	Competency Group
19.	Ability to apply knowledge in practice	Systemic Competencies
20.	Research (e.g., market research, R&D) and analysis skills	
21.	Learning skills	
22.	Ability to adapt to new situations	
23.	Ability to create new concepts (creativity)	
24.	Leadership abilities	
25.	Understanding of cultures and customs of other countries	
26.	Ability to work independently	
27.	Project preparation and management	
28.	Initiative and entrepreneurship	
29	Attention to the quality of tasks performed	
30	Success orientation	

Source: *Tuning – Educational Structures in Europe. The Contribution of Universities to the Bologna Process* (https://www.mimuw.edu.pl/~ben/krk/plyta/Cz%C4%99%C5%9B%C4%87%20IV%20-%20Program%20Tuning_materia%C5%82y%20pomocnicze/1.%20Tuning_Harmonizacja%20struktur%20ksztalcenia%20w%20Europie.pdf).

Results

Job advertisement analysis

The study analysed 120,817 job advertisements posted by employers on the pracuj.pl portal for the Lubelskie Voivodeship from January 2015 to February 2023. The number of job offers between 2016 and 2019 remained stable at approximately 10,000 annually. However, starting in 2020, a significant increase was observed, reaching nearly 29,000 offers in 2022 (Table 2).

The study also analysed the frequency of job openings for specific positions in the Lubelskie Voivodeship (Table 3). By analysing 120,817 job advertisements posted on the pracuj.pl portal between January 2015 and February 2023, it was found that sales representatives were the most sought-after employees (5,550 job offers). The second most frequently advertised position was customer advisor (2,983 offers). Other positions related to sales followed,

Table 2. Number of Job Offers by Year

Year	Number of Job Offers	% Change Compared to Previous Year
2015	9 123	
2016	10 234	12%
2017	10 659	4%
2018	10 871	2%
2019	10 672	-2%
2020	12 065	13%
2021	23 594	96%
2022	28 574	21%
2023*	5 025	

* The year 2023 included data only for January and February.

Source: Own research.

including medical representative, salesperson, sales specialist, regional sales manager, technical and sales advisor, and business client advisor. There was also a high demand for Key Account Managers and Java Developers. Other positions had fewer than 500 offers during the study period.

Table 3. Number of Job Offers for Specific Positions in the Lubelskie Voivodeship

Job Title	Number of Job Offers
Sales Representative	5 550
Customer Advisor	2 983
Medical Representative	1 003
Salesperson	955
Sales Specialist	778
Assistant Store Manager	750
Key Account Manager	590
Regional Sales Manager	569
Regional Sales Representative	545
Technical and Sales Advisor	540
Business Client Advisor	501
Java Developer	501

Source: Own research.

The study analysed which industries had the highest demand for employees in the Lubelskie Voivodeship (Table 4). The industry offering the most employment opportunities in the Lubelskie Voivodeship was professional services, with 36,015 job offers throughout the entire period and an average annual growth rate of 15%. The second most in-demand sector was finance/banking/insurance, with 18,087 offers and an average annual growth rate of 16%. The third most represented industry was engineering/technical/production, with 17,411 offers and an annual growth rate of 17%. During the studied period job seekers in the Lubelskie Voivodeship could also find employment in the programming industry, which had 16,562 job offers. It is noteworthy that business analysis and accounting had more than five thousand job offers, while employees from other industries were in lower demand.

Table 4. Number of Job Offers in Specific Industries in the Lubelskie Voivodeship

Industry	Number of Job Offers
Professional Services	36 015
Finance/Banking/Insurance	18 087
Engineering/Technical/Production	17 411
Programming	16 562
Pharmacy/Medicine	9 038
IT/Telecommunications	8 100
Retail Chains	8 002
Architecture	7 905
Food/Alcohol/Tobacco	7 262
Other	7 176
System Administration	6 505
Energy/Environment	6 316
Business Analysis	5 927
Accounting	5 192

Source: Own research.

Qualitative and quantitative research on employers

In order to accumulate the opinions of employers, a quantitative study was conducted. The assessment was based on a list of specific competencies aligned with the TUNING classification. Based on the obtained results, it was possible to identify the competencies that employers believe students/graduates of the Faculty of Economics at UMCS currently possess at the highest level, as well as the level desired by these employers. The analyses also made it possible to identify the extent of the competency gap in this area.

Table 5 presents the selected competencies that are most desired by employers, the relevant information is shown along with an evaluation of the level of these competencies held by students and graduates of the Faculty of Economics at UMCS. Additionally, the competencies that stood out in terms of the size of the competency gap were also included. It is worth noting that the results regarding the competency gaps are very low for all competencies, there are just two exceptions: basic professional knowledge related to the job and work experience, in both cases the gaps were significant.

Table 5. Competencies of Employed Students and Graduates as Assessed by Employers (Average Values, Rated on a Scale of 1–5)

General Competencies	Desired Level	Current Level	Competency Gap
Attention to the quality of tasks performed	4.82	4.61	-0.21
Adherence to professional ethics	4.76	4.75	-0.01
Basic professional knowledge related to the job	4.69	3.68	-1.01
Communication skills in Polish (spoken and written)	4.66	4.72	0.06
Ability to apply knowledge in practice	4.64	4.33	-0.31
Ability to work independently	4.63	4.40	-0.23
Ability to adapt to new situations	4.55	4.36	-0.19
Basic IT skills	4.52	4.52	0.00
Problem-solving skills	4.52	4.28	-0.24

Table 5 (continued)

General Competencies	Desired Level	Current Level	Competency Gap
Interpersonal skills (stress management, relationship building, etc.)	4.52	4.39	-0.13
Ability to analyze and synthesize	4.50	4.27	-0.23
Ability to search for and analyze information from various sources	4.50	4.30	-0.20
Work experience	4.17	3.06	-1.11

Source: Own research.

The second endeavour in gathering the opinions of employers was a qualitative study conducted through in-depth individual interviews. Employers were asked to evaluate the competencies of students and graduates of the Faculty of Economics at UMCS. According to employers, interpersonal competencies, in a broadly defined sense, are of key importance. These include conflict resolution, teamwork, communication, negotiation, argumentation, and openness. Language skills were also deemed to be essential, with English being considered a standard, but there was also a noted need for knowledge of an additional language (German, French, Italian, Spanish, Chinese, Dutch, and the Scandinavian languages). From the perspective of their operations, respondents highlighted the importance of analytical competencies such as data interpretation, drawing conclusions from data, data analysis, and analytical thinking. They also emphasized the need for specific domain knowledge related to the field or the specific job position. Additionally, respondents referenced to cognitive competencies (quick learning, logical thinking, creativity, flexibility) and organizational competencies (time management, the ability to work under pressure, planning, being organized). It is noteworthy that these competencies emerged from open-ended questions, without prompting specific responses. The frequency of mentions for each competency type is presented in Table 6.

The respondents also identified areas perceived as competency gaps in students/graduates relative to the requirements of specific job positions. A summary of their responses is presented in Table 7. Employers most frequently pointed to deficiencies in communication skills, soft skills, self-presentation

Table 6. Frequency of Employers' Mentions of Key Competencies in Individual Interviews

Type of Competency	Number of Mentions	Example Respondent Comments
Interpersonal Competencies	12	"We place a great emphasis on interpersonal skills, empathy, and anti-discrimination themes. We want to recruit people who can communicate, are open to building relationships, and know how to do it. Soft skills are very important to us" (K15).
Domain-specific Knowledge Related to the Job	5	"The most important competencies are those related to the job we're hiring for" (M16).
Language Competencies	9	"A very important area for us is foreign language proficiency" (K4).
Analytical Competencies	6	"Now we are really looking for people who can navigate the field of research, which is crucial for us" (K15).
Organizational Competencies	3	"Project management, teamwork, conflict management, and so on are important" (M16).
Cognitive Competencies	4	"We know how available various tools and systems are, so our employees must learn quickly to use them efficiently" (K10).

Note: The identifiers in parentheses after the quotes are respondent identifiers.
Source: Own research.

abilities, and analytical thinking. Additionally, respondents highlighted significant areas for improvement in the attitudes of students/graduates, noting a lack of curiosity, creativity, self-awareness, confidence, and responsibility in those hired.

Table 7. Competency Gaps Identified by Employers in In-Depth Interviews

Competency Gaps	Number of Mentions
Communication deficiencies	6
Lack of soft skills	6
Lack of analytical thinking skills	4
Lack of proficiency in English	3

Table 7 (continued)

Competency Gaps	Number of Mentions
Lack of engagement in work	3
Lack of creativity	3
Lack of curiosity	3
Lack of self-presentation skills	3
Lack of confidence	2
Lack of responsibility	2
Lack of self-awareness	2
Lack of flexibility	1
Lack of Excel skills	1
Lack of independence	1
Lack of readiness to take on challenges	1
Lack of contract drafting skills	1
Lack of knowledge about tenders	1
Lack of initiative	1
Lack of motivation	1
Lack of stress resistance	1
Lack of mathematical skills	1

Source: Own research.

It is important to note that there is a significant correlation between the results obtained from the quantitative and qualitative studies. The competencies that employers rated as most desirable in the online survey largely overlap with the areas identified for potential development in the in-depth interviews.

Competencies of graduates study

The IPMA matrix (Figure 2 and Table 8) illustrates the competency gaps for the evaluated fields of study at the Faculty of Economics, as identified through the study. In order to facilitate the implementation of analyses and enhance clarity, individual competencies have been grouped and marked with corre-

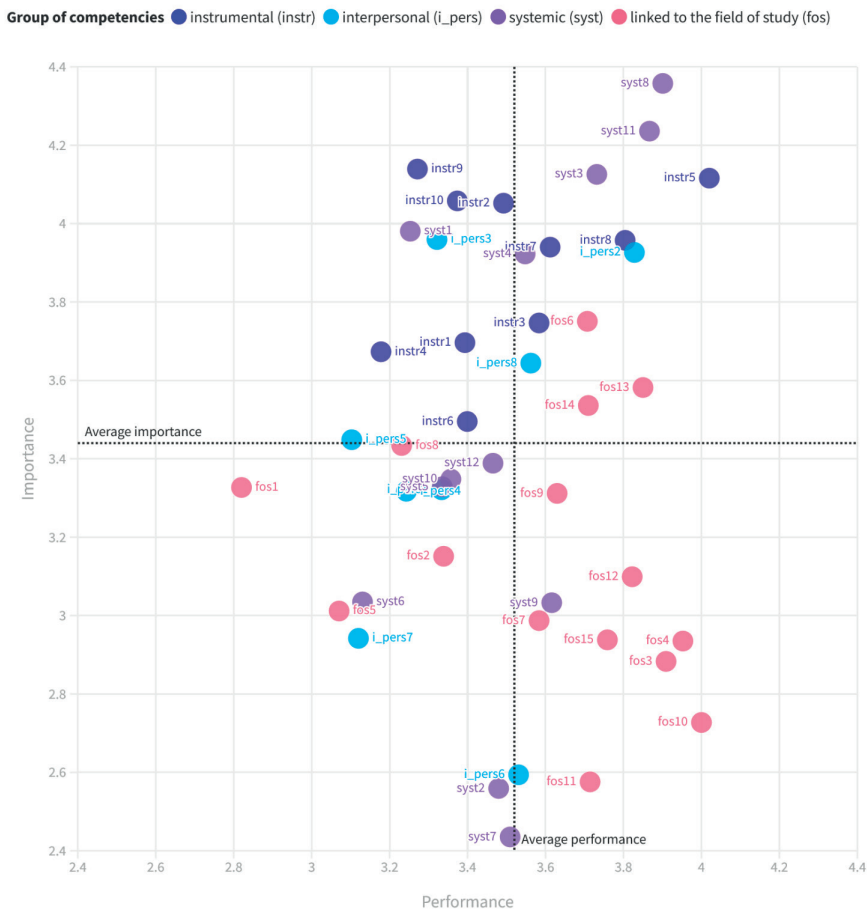

Figure 2. IPMA Matrix for Graduates by Competency Groups (Average Values, Rated on a Scale of 1–5)

Source: Own research.

sponding colours. In the first quadrant of the matrix which is labelled "Maintain", there are competencies with both high importance and high performance ratings, they are for the most part related to systemic competencies, there are also a few from other competency groups. In the second quadrant, labelled "Priority for Improvement", the importance of the particular competencies is

high but the performance rating is low, instrumental competencies dominate and require priority improvement. Meanwhile, in the third quadrant, labelled "Ignore" (low importance and low performance), and the fourth quadrant, labelled "Resource Reallocation" (low importance but high performance), field-specific competencies dominate, with a limited number of interpersonal competencies present.

Table 8. Competency Abbreviations used in Figure 2

Competences	Shortcut
capacity for analysis and synthesis	instr1
capacity for organisation and planning	instr2
basic general knowledge	instr3
grounding in basic knowledge of the profession	instr4
oral/written communication in own native language	instr5
knowledge of a second languge	instr6
elementary computing skills	instr7
ability to retrieve/analyze information from different sources	instr8
problem solving	instr9
decision-making	instr10
critical and self-critical abilities	i_pers1
teamwork	i_pers2
interpersonal skills	i_pers3
ability to work in an interdisciplinary team	i_pers4
ability do communicate with experts in other fields	i_pers5
appreciation of diversity and multiculturality	i_pers6
ability to work in a international context	i_pers7
ethical commitment	i_pers8
capacity for applying knowledge in practice	syst1
research skills	syst2
capacity to learn	syst3
capacity to adapt to new situations	syst4

Table 8 (continued)

Competences	Shortcut
capacity for generating new ideas (creativity)	syst5
leadership	syst6
understanding of cultures and customs of the other countires	syst7
ability to work autonomously	syst8
project design and management	syst9
initiative nad enterpreneurial spirit	syst10
concern for quality	syst11
will to succeed	syst12
professional experience	fos1
change management	fos1
management knowledge	fos1
HR knowledge	fos1
law knowledge	fos1
finance knowledge	fos1
marketing knowledge	fos1
thinking & acting globally	fos1
data presentation knowledge	fos1
statistical methods knowledge	fos10
optimization of business decisions knowledge	fos11
logistics knowledge	fos12
accountancy knowledge	fos13
economic processes knowledge	fos14
economic structures & institutions knowledge	fos15

Source: Own research.

Discussion and conclusions

Analysis of job advertisements

Based on an analysis of job advertisements from the pracuj.pl portal for the Lubelskie Voivodeship in Poland from 2015 to 2023, several important conclusions may be drawn concerning the labour market situation in this region. The number of job offers steadily increased, reaching the significant level of nearly 29,000 in 2022. This growth may be the result of both the dynamic development of the labour market in the Lubelskie Voivodeship and also increases in the use of the pracuj.pl portal as a recruitment tool by employers.

From the data regarding the most in-demand positions across different industries, several conclusions may be drawn. In the *Lubelskie* Voivodeship, professional services, finance, banking, and insurance are attractive sectors due to the high number of job offers. Individuals considering a field of study may find favourable employment prospects by choosing specializations related to these areas. In addition, the growth rate of job offers may indicate dynamically developing sectors in the labour market. Choosing studies related to these industries could increase the chances of an individual finding employment in the *Lubelskie* Voivodeship. However, it is important to continuously adapt the content of educational programmes to the technological changes occurring in the financial sector. Unfortunately, predicting future trends in employee competencies is a highly complex process, this makes it difficult to precisely plan the educational and career paths of university graduates. Nevertheless, regular monitoring of the labour market, analysing demand for specific skills, and adapting educational courses to changing economic conditions can significantly improve the chances of career success.

An analysis of the study results showed that the dominant position offered by employers in the *Lubelskie* Voivodeship is that of sales representative (Table 3). These results confirm the importance of sales skills and the ability to establish effective relationships with customers, these are important factors to consider when planning a career. Additionally, employers are frequently

looking for specialists at various levels – junior, mid, and senior – requiring different levels of experience and skills, thereby offering opportunities for professional development and advancement within these groups of positions.

The results of the job advertisement analysis provide valuable insights into the labour market, employers' needs, and employment prospects for graduates. This information offers a detailed understanding of current labour market trends and facilitates informed decisions regarding education and career planning. This study is a significant contribution to labour market analysis and holds potential for application in planning educational courses, career orientation, and career counselling for students and graduates.

Competencies as perceived by employers

The results of the employer survey indicate a high assessment level of the competencies possessed by students and graduates of the Faculty of Economics at UMCS. Soft skills, particularly those related to behaviour in individual and teamwork (Butryn & Sobińska, 2019), were key in assessing both the current and desired levels of competencies. Respondents particularly emphasized communication skills, ethical behaviour, and attitudes toward work, and personal development. In most of the competencies studied, the identified competency gaps were very small, with the exceptions being basic professional knowledge related to job and work experience. It is worth noting, however, that not all graduates and students work in industries directly related to their field of study, which may explain the large competency gap in part at least. Previous research has shown that the positive impact of work experience on job performance in a new organization is not unequivocal. On the one hand, employers cite the need for experience as one of the key criteria in candidate selection and point to a lack of experience as the most common reason for candidates not meeting job requirements (Górniak et al., 2022). On the other hand, hiring candidates with specific experience does not always directly translate into a higher level of efficiency in a new job (Van Iddekinge et al., 2019). Furthermore, a lack of experience is sometimes valued by employers,

as it brings real benefits such as the absence of bad habits from previous workplaces, a greater openness to learning and a tendency to follow instructions, as well as a higher level of flexibility and adaptability when it comes to changing working conditions (Humburg & van der Velden, 2015; Kulkarni et al., 2015).

The study aligns with the growing trend in Polish universities to engage with employer feedback during the planning stage of students' educational paths (Kopielska, 2020; Menderak, 2019; Rocki & Werner, 2021). It represents an invaluable source of knowledge and recommendations for the effective development of curricula that consider the needs of future employers when shaping graduate profiles in academic courses.

Competencies of graduates study

The results of the analysis of the competency levels possessed by students and graduates of the Faculty of Economics indicate the need to strengthen instrumental competencies. Of particular importance are those related to basic professional knowledge regarding the work performed, decision-making skills, and problem-solving abilities. It is recommended to closely examine these areas in order to optimize the use of resources and focus on priority fields requiring further development.

All of the study programmes analysed show similar trends, thereby indicating the need to strengthen instrumental, systemic, and interpersonal competencies. The key take away is the need to focus on basic professional knowledge related to specific jobs, decision-making abilities, and problem-solving skills. These areas of competency are critical, both from the perspective of excellence and usefulness indicators. Their development will enable graduates to function more effectively in the labour market and make better use of the knowledge they have acquired, as confirmed by the study participants.

An analysis of the study results highlights the need to focus on priority areas of competencies by reallocating resources. Allocating more resources to strengthening instrumental competencies will allow the university to better prepare graduates for labour market demands. Initially, it is recommended to

deepen basic professional knowledge through additional educational modules or specialized courses. Subsequently, decision-making and problem-solving skills can be developed through the use of case studies, business simulations, or practical projects. Additionally, strengthening systemic competencies such as analysis, synthesis, and the application of knowledge in practice – e.g., by introducing courses that develop analytical and practical skills – should prove to be beneficial. Developing interpersonal competencies, though less critical, is also important, and it would be worthwhile to consider organizing classes concerning presentation techniques, negotiation, effective team communication, stress management, and relationship-building.

The study's findings are consistent with previous analyses conducted by Baran (2020). It was based on 950 job advertisements, Baran found that nearly every second employer prioritizes work experience as the primary recruitment criterion. Similarly, frequent requirements in job offers included proficiency in MS Office and fluency in English. Moreover, Baran's (2020) findings align with observations that the key competencies identified by employers primarily focus on three main areas: soft skills, language skills, and work experience. These studies also highlight the growing importance of formal education and additional skills as recruitment criteria in the employee selection process.

The results suggest that strategies for introducing new fields of study may be less effective than focusing on systematically modifying the content of existing courses. Regardless of the discipline, it is worth incorporating courses that develop analytical and practical skills, as well as interpersonal competencies. The latter seems especially important in the context of society's increasing reliance on technology, which may lead to isolation and loneliness among future workers (Herz, 2022).

A lifelong learning strategy may be an effective way to equip students with the competencies desired in the labour market. Improving and updating professional skills allows employees to flexibly adapt to changing market demands and acquire new competencies that align with both technological and organizational changes. For universities, this presents an opportunity to expand their educational offerings by introducing programmes and courses

tailored to the real needs of the labour market. Moreover, lifelong learning fosters closer collaboration between academia, business, and local government. In the long term, such an approach to education may serve to contribute to better preparing graduates for their workplace careers and increasing their chances of finding suitable employment.

Summary

The presented study forms a significant part of a broader research project aimed at improving the alignment of education at the Faculty of Economics at UMCS with the needs of its stakeholders, including students, graduates, and employers. The study included an analysis of job advertisements, which allowed for the identification of key professional competencies being sought in the current labour market.

Simultaneously, a survey analysis was conducted in which graduates and employers assessed the competency levels which graduates acquired during their studies at the Faculty of Economics at UMCS. This analysis revealed the existence of competency gaps between the expected competencies of graduates and their actual skills. The existing discrepancies underscore the need to take action to improve the quality of education at the analyzed faculty. The most important recommendation is to strengthen instrumental competencies, including focusing on basic professional knowledge related to the work performed, decision-making skills, problem-solving abilities, and global (interdisciplinary) thinking and action. Reallocating resources from areas focused on field-specific competencies to those requiring further development will allow for a more effective use of resources. Implementing certain recommendations and improvements to the study programmes at the Faculty of Economics at UMCS will help to better meet the needs of the labour market and more effectively develop competent and competitive graduates.

It is important to note that the presented study has some limitations, such as the non-random selection of the research area, the focus on only one voivodeship, the potential subjectivity of graduate self-assessments, and the

small sample size. This prevents the generalization of the obtained results to the entire population. However, the research methodology developed within the project could be applied on a larger scale and may be useful for other universities wishing to conduct an analysis of graduates' competencies. The methodology derived from the presented analyses facilitates the identification of competency gaps, which may vary depending on the specific characteristics of individual universities and their educational offerings. The implementation of the findings of the study by other educational institutions could contribute to better aligning curricula with the rapidly changing needs of the labour market and the expectations of stakeholders.

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