

Measuring the Impact of Management Education on Business Performance and Employability

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Abstract

This study intends to assess the effects of management education on the performance of the organization and employability in the manufacturing and service companies in Uzbekistan. In view of the swift growth of the industrial sector in Uzbekistan, on one hand, and the evident disparity between the competencies acquired in the educational system and the real needs of the labor market, on the other hand, the relevance of this research can be stressed today more than ever before. The mixed (qualitative and quantitative) approach was applied in carrying out this research. First of all, semi-structured interviews with 14 managers and experts of the industries in Uzbekistan were conducted as part of the qualitative research and formed the basis for preparing a quantitative questionnaire. In turn, quantitative data collection was done via the questionnaire completed by 186 managers and experts engaged in the automotive, textile, food, and machinery industries in Uzbekistan during May-August 2025. From the above findings, it is evident that Management Education positively and significantly influences business performance ($\beta=0.652$, $p<0.001$) and accounts for 41.8% of the variability. Moreover, the positive and significant influence of this variable on employability ($\beta=0.594$, $p<0.001$) was established with an explanation rate of 34.7%. Positive and significant influence of business performance on employability ($\beta=0.537$, $p<0.001$) was another observation from this study. Mismatch between the content of education and industrial requirements was found to be the main barrier to Management Education effectiveness. Overall, the results suggest that Management Education as an investment leads to organizational productivity and workforce empowerment in Uzbekistan, but this objective can be achieved through the major reform of the content of courses and its compliance with the practical needs of economic organizations.

Keywords: Management Education, Business Performance, Employability, Uzbekistan

Introduction

Over the past two decades, management education has been viewed as one of the key elements of human capital development in organizations (Ghosh & Gupta, 2021). It has gradually become clear for economic enterprises across the world that the managerial competence of their employees as mentioned by Li et al., (2022) is a decisive factor of their existence and development. At the same time, in developing countries, there is a dual task. As on the one hand, Starkey & Tempest (2025) stated that it is necessary to train efficient managers capable of operating in an increasingly complicated business environment; on the other hand, the systems of education and universities in developing countries were not able to offer an appropriate response to the objective needs of the industry.

Uzbekistan has made significant progress in its industrialization efforts and foreign investment activities in recent years due to being one of the rapidly developing economies in Central Asia. However, one of the critical issues faced by the manufacturing and services companies in this country is the absence of knowledgeable human capital having knowledge of modern management. The preliminary research findings reveal that the majority of middle and senior-level managers in the Uzbekistan industries do not have any systematic Management Education, which adversely affects their decision-making abilities and organizational performance.

In this kind of environment, Thomas & Meijer noted Management Education is regarded as an investment in the individuals and the organization rather than a cost (Thomas & Meijer, 2022). Several studies done in developed nations have found out that focused investments in Management Education result in improvements in variables such as profitability, innovativeness, job satisfaction, and staff turnover rates (Brammer & Clark, 2020). Nevertheless, Sangster et al mentioned that these studies have mainly been done in the socio-economic environment of developed nations, and thus generalization of the results to other countries with other institutional frameworks and cultural backgrounds cannot be easily done (Sangster et al., 2020; Pinheiro & Ávila, 2025).

However, in the Republic of Uzbekistan, despite the

remarkable expansion of the industrial and service sectors during the last decade, there has been an absence of systematic and empirically grounded investigations that would analyze the influence of management education on the performance of businesses and the employability of the work force. The majority of the existing studies is either based on cases or observations, and few studies have tried to answer the basic question “Whether management education in this country actually improves business performance and enhances the employability of the work force?” empirically and quantitatively (Ng & Jan, 2021; Šofranacn & Mustur, 2025).

Considering this gap, the current research was aimed at evaluating the effects of management education on two essential factors, namely, business performance and employability in manufacturing and service firms operating in Uzbekistan. With the use of a mixed-methods (qualitative-quantitative) approach, the study tries to determine effective aspects and elements of management education and also assesses its influence on objective and subjective performance of organizations and employment opportunities for individuals. The results of this research can be useful for managers, policy makers, and educators in Uzbekistan and can be used for better policy formulation in the area of human capital development and increasing national productivity.

Review of Literature

In this part, a review of literature regarding the theory and research on the key factors of the study, management education, firm performance, and employability, is presented. The aim of conducting this review is to investigate the links between these factors and determine the gaps in the existing literature, particularly for developing nations like Uzbekistan. Each of the mentioned factors will be reviewed separately, and on the basis of the research conducted in the international and regional scientific literature, the conceptual framework will be constructed.

Concept and Dimensions of Management Education

Management education is defined as a series of organized activities that are organized and conducted with the goal of enhancing the level of knowledge, skills, and attitude of

managers at different levels of an organization (Singh & Blessinger, 2024). These trainings may include short courses, special training sessions, internships, coaching at work place, or even post graduate studies in management disciplines. The most important point highlighted by the literature on this subject is the difference between “management knowledge” and “management skills”, where the first term is concerned with theoretical aspects and the latter one is about applying this knowledge practically in organizational settings (Jeremie et al., 2024).

The success of Management Educations is influenced by many factors such as the design of course contents, teaching techniques, qualification of instructors, and support of senior management in the process of learning (Makrakis & Kostoulas-Makrakis, 2023). However, recently, owing to the development of information technologies, many new approaches such as management simulation, serious games, and online learning are being used in Management Educations. But in many developing countries, the conventional approach to teaching is still dominating in the field of Management Educations (Haleem et al., 2022).

As regards the case of Uzbekistan, the education system in management is mainly based on former Soviet model and despite the fact that numerous reforms in the higher education system have taken place in the last couple of decades in this country, there is still a profound mismatch between the curriculum in management studies at the universities and the requirements of industries. As a consequence, many economic organizations resort to conducting in-house courses or inviting outside consultants in order to make up for the lack of managers, but the efficiency of these actions has not often been scientifically estimated (Mahindru et al., 2023).

It has been established that the production and industrial sphere of Uzbekistan encounters the problem of shortage of skilled workforce and mismatch between the skills of university graduates and the needs of the labor market. In turn, the private sector takes part in management development programs much more rarely than the public one.

Business Performance

Organizational performance can be described as a multi-dimensional construct which shows the level of success of

an organization in achieving its objectives (Okumu et al., 2019; Haddoud et al., 2023). Organizational performance as mentioned by Singh & Blessinger (2024) is a concept in the management literature that has been assessed using financial and non-financial measures. Financial measures according to Sliwka et al., (2024) consist of profit, return on investment, sales growth, and market share, whereas non-financial measures consist of elements such as customer satisfaction, labor productivity, quality of product, and innovation process. In recent times, Motta & Galina showed the use of new methods like balanced scorecard and organizational excellence approach has also focused on the importance of giving due attention to the various dimensions of performance simultaneously (Motta & Galina, 2023).

The issue of whether the investment made in human resources development affects organizational performance is one of the basic questions in the area of management (Choi & Chang, 2020). Aman-Ullah et al., (2022) studied developed countries through research stated that Management Education will assist in making improvements in the financial and non-financial performance of the organization through improvements in decision-making quality, reduction in cost of operations, higher motivation and commitment of employees, and innovation.

However, it has been stated by D'Agostini Titton, (2019) that there is no linear relationship between training and performance and there are other influencing factors like organizational culture, structure of the industry, and the way training is conducted which have a crucial effect on the degree and nature of the relationship. In other words, Ekeh (2023) claimed that conducting training programs alone irrespective of the organizational context and the context of humans cannot ensure the improvement in performance.

Many manufacturing and service firms operating in Uzbekistan do not have well-developed and objective performance evaluation systems and usually, performance evaluations are based on their personal judgments and observations. Such a condition makes it difficult to identify the effects of Management Education on performance and many managers believe that it is hard to calculate the return on investment on training. Thus, it is very important to

conduct a research that can help in measuring the relationship between management education and performance through valid measurement tools.

Employability

Definition of employability according to Remedios includes the set of skills and personal traits, which allow a person in the labor market not only to obtain a job, but also to stay in it and advance his/her career (Remedios, 2012). The notion of employability encompasses much more than just having an educational degree; in particular, it stresses the importance of such elements as skills, flexibility, lifelong learning and networking. With all the rapid technological and economic changes in the modern world, Hickman et al noted that employability becomes one of the major issues of both workers and employers (Hickman et al., 2024).

The notion of employability is studied in Lee & Kim study, in terms of its interplay of individual factors, labor market and supportive policies. Among the individual aspects of employability, such factors as problem solving skills, critical thinking, computer literacy, teamwork skills and adaptability should be mentioned. At the same time, contextual factors like the structure of industry, labor laws and communication networks are also considered important for employability (Lee & Kim, 2023).

A lot of research work has proved that skills and Management Education can have a direct effect on making people more employable (Zhang et al., 2022; Ahmad, 2024). Skills training in particular in soft skills like leadership, effective communication, problem-solving, and critical thinking is essential in raising the competitiveness of the workforce in the labor market. On the other hand, with their workers empowered, Zhang & Wang (2022) confirmed that firms become more productive and create a ground for employee loyalty and low turnover rates.

In Uzbekistan, although the unemployment level among educated young people is relatively high, employers face difficulties recruiting skilled and employable workforce. This situation referred to as the “skills gap” occurs due to the gap between higher education and the real demand of the labor market. Management graduates, having good theoretical knowledge in spite of that, are unable to perform

managerial functions because they do not possess necessary practical skills. Thus, the role of in-service training and management courses becomes even more important.

Management Education and Business Performance

This connection between Management Education and business performance based on Alqahtani & Rajkhan has been considered one of the most popular themes of investigation in human resource management (Alqahtani & Rajkhan, 2020). Certain studies prove the significant and direct influence of this link and have proven the fact that organizations which conduct regular trainings for their management teams demonstrate better productivity and profitability than others. At the same time, Sliwka et al note the strong influence of intervention variables such as organizational culture, industry type, and training implementation quality on this relationship (Sliwka et al., 2024).

In developing countries, there are no longitudinal studies or systematic evaluations performed because of the lack of necessary data. Still, Halabieh et al showed that the studies carried out in various countries show positive impact of Management Education on performance of organizations in question (Halabieh et al., 2022). Despite the fact that these studies consider different situations, Chhabra et al noted that they are promising and indicate positive results of the training even in unfavorable economic conditions (Chhabra et al., 2021).

At the same time, researches note the importance of the fact that Management Education will be effective only with proper course design and proper alignment of the training with the needs of the organization (Archambault et al., 2022). The training, which is oriented only at the theoretical knowledge transfer without any attention to its implementation in practice, is unlikely to influence organizational performance. On the contrary, Kao et al stated that training programs, which are based on problem solving, case studies, and practical projects proved to be much more efficient (Kao et al., 2023).

Furthermore, according to the findings of Al-Husseini et al, the support of the senior management and the formation of the learning culture within the organization are very

important conditions for the transformation of gained knowledge into performance (Al-Husseini et al., 2021). Otherwise, the most efficient training can hardly result in organizational performance improvement. For that reason, the knowledge of the factors, which influence the efficiency of the education process, is crucial for developing efficient education policy.

Management Education and Employability

In the last ten years, Aman-Ullah et al proved that along with changes in employment and the rise of knowledge-based economy, the notion of employability itself has also been modified (Aman-Ullah et al., 2022). Nowadays, mentioned by Clarke et al., (2024) "specialized knowledge" does not suffice for career success any longer, whereas such skills as adaptability, ability to learn on one's own, team working skills and digital literacy are considered crucial for employability development. Management education, especially through case studies, practice-based projects and internship experience in industry can help develop all of these skills (Singh & Blessinger, 2024).

A systematic review of the studies in this area reveals that educational interventions that include practical experience have had the most significant effect on graduates' employability, while the intervention that was oriented only at employability skills development and career planning proved to be controversial (Bell & Bell, 2020; Kobylińska, 2022; Motta & Galina, 2023). That is, according to Sliwka et al., (2024) that the closer the education to the actual workplace environment, and the more chances it gives to use practical knowledge, the greater its effect on employability increase.

It has been found by Choi & Chang that graduates that received applied Management Education during or after studying process have significantly greater chances to get managerial positions or to advance their careers within the organization (Choi & Chang, 2020). Moreover, Clarke et al., (2024) showed people that constantly attend training courses not only succeed in their work process, but also become better at adapting to changes in the workplace should they switch from one organization to another. This particular aspect can be considered a strategic asset for companies based on Clarke, especially in competitive labor markets.

On the other hand, educational systems in developing countries like Uzbekistan do not tend to develop soft skills and practical competencies among students and employees. Business organizations, in turn, are unwilling to allocate resources for Management Education programs because of the limited availability of these resources. As a result, vicious circle emerges that includes the lack of proper job opportunities on one hand and the lack of good managers on the other. Researchers suggest that business education reform in Uzbekistan will require considerable changes to be introduced into curricula.

Research Gap in the Uzbek Context

Even though there exists substantial international research on the connection between management education and performance and employability of business, only a handful of investigations have been performed within the framework of Uzbekistan and the whole of Central Asia. The existing information about this topic in the country is rather limited to case reports or shallow observations, while very few researches have addressed the critical issue of whether management education in this country leads to firm performance and employability in quantitative and qualitative terms.

The lack of research on this topic has not only caused policymakers and managers confusion when distributing the educational resources, but also made planning of human resource development inefficient. According to the existing reports, the industry sector of Uzbekistan experiences the problem of lacking skilled manpower and skill mismatch between graduates and job requirements. In addition, the private sector's participation in management development activities is substantially lower compared to that of the public one, which shows underutilized potentials in this field.

With this consideration in mind, the current research aims at estimating the influence of management education on the performance of organizations and employability of individuals within manufacturing and service organizations operating in Uzbekistan. Following a mixed methodological approach, the current study tries to find the influential dimensions and elements of management education and assess its influence on performance and employability through both objective and subjective

measures. The results of this study will give practical insights to policy makers, managers and educational specialists in Uzbekistan.

Relationships between Research Variables and Research Hypotheses

From the review of the literature, it can be noticed that there is a close relationship between the principal variables in the present study, i.e., management education, business performance and employability. Not only does this knowledge help to understand the rationale behind the study but also helps to form testable hypotheses. In the following sections, each of the above relationships will be studied in detail and hypotheses will be formulated for each of the above relationships.

The relationship between management education and business performance

As a deliberate activity aimed at developing the knowledge, skills and attitudes of the managers, management education may have an influence on the performance of firms through different mechanisms (Walter & Block, 2016). The first mechanism as mentioned by Martin-Rojas et al is the ability of those managers, who possess management education of high enough quality, to analyze the competitive environment, spot the opportunities and threats and make decisions in a proper manner. In this case, enhanced abilities of managers are reflected in their improved decisions and fewer mistakes made by them which, in its turn, positively affects the performance of organizations in the financial and operational aspects (Martin-Rojas et al., 2019).

The second mechanism of the positive impact of management education on the performance of firms according to Ahmed et al involves communication skills, leadership qualities and team working skills that are developed through the training of managers. These skills are needed for interacting with different groups of people such as employees, consumers and other stakeholders. Better interaction on the one hand helps to motivate workers and increase their productivity, on the other hand, it creates prerequisites for innovations and improvements of processes within organizations (Ahmed et al., 2020).

Third, Management Education as noted by McGee &

Peterson enables managers to gain knowledge about new management practices and recent technologies. In the contemporary era, in which the pace of change in technology is very fast, managers not keeping themselves updated quickly get out of competition. Through continuous training, managers get to know about new techniques and methods and apply them in their organizations. This results in better performance of an organization through enhanced efficiency, lower costs, and better quality of products/services (McGee & Peterson, 2019).

But it has been noted by Miao et al that the effect of training on performance is not a linear and uniform one. Many variables such as quality of course design, qualifications of instructor, support from higher management, and organizational culture may influence the degree and direction of this relationship. That is, merely conducting training courses without creating an appropriate environment for its application will not help in achieving better performance. So, in this study, the impact of Management Education on performance will be determined while keeping in view these influencing variables (Miao et al., 2017).

The relationship between Management Education and employability

The capacity of individuals to obtain a good job, according to Zhang remain employed and progress in their careers, which constitutes employability, depends on the quantity and quality of training they get (Zhang, 2021). The management education can contribute to the increased employability of the individual through the acquisition of the so-called transferable skills, such as problem solving, critical thinking, communication skills, and leadership. Those are the skills as stated by Chen & Zhang which are very important in any business organization and enable the individual to adjust to various job conditions (Chen & Zhang, 2025).

At the same time, Yang et al showed management education implies getting acquainted with contemporary management techniques and approaches, which serve as a competitive advantage for those seeking jobs in today's labor market (Yang et al., 2023). For instance, knowing how to analyze data, organize projects or perform digital

marketing can provide an individual with more opportunities for obtaining well-paid jobs with significant responsibilities (Fang, 2023). Thus, Wang & Dong noted that the individuals who had an opportunity to receive proper management education always enjoy better positions in the labor market (Wang & Dong, 2024).

Education in management according to Xie also allows individuals to enhance their communication network. Many management courses, particularly at the postgraduate level, give students an opportunity to communicate with managers, entrepreneurs, and professionals in diverse sectors (Xie, 2020). This communication network mentioned by Hou et al may be vital to finding job openings, seeking advice and even building business contacts. In this sense, education in management not only enables one to develop the skills and knowledge of an individual, but also enhances his social capital (Hou et al., 2024).

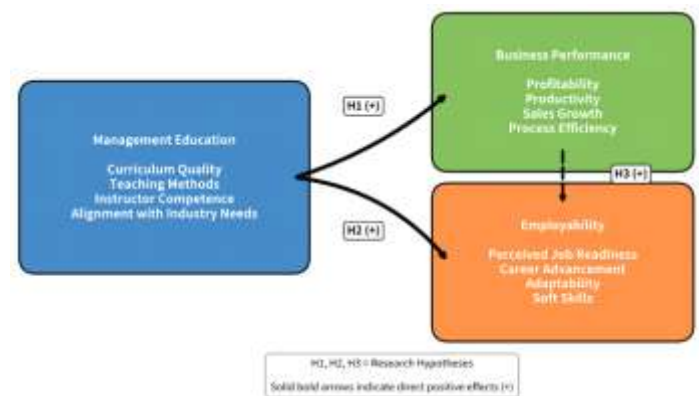
Nevertheless, when it comes to the case of Uzbekistan and other developing countries, there is a considerable mismatch between the skills offered in the educational system and the labor market requirements. Graduates of management programs, despite having a good amount of theoretical knowledge, are often insufficiently equipped with practical and soft skills needed in entering the workplace. Such a problem mentioned by Hu et al makes the need to consider the industry-oriented approach to the development of educational programs and the necessity of collaboration between universities and economic organizations increasingly clear (Hu et al., 2022). By evaluating the effects of education in management on the employability, this research intends to reveal which dimensions of education have the strongest influence on increasing the employability of the workforce in Uzbekistan.

Conceptual Model of the Research

The conceptual model for this research is described in terms of the information that was given in the literature review and the explanations of the interrelations between the variables as follows: As an independent variable, management education has two dependent variables, which are the business performance and employability. In other

words, it is hypothesized that management education has an effect on organizational performance and personal employability. This model makes it possible to assess simultaneously the intra-organizational and extra-organizational effects of management education. Management education is viewed in this model as a multidimensional construct that is composed of dimensions like the quality of the educational content, its delivery method, qualification of instructors, as well as congruency with the needs of industry. Performance of a business will be assessed through different metrics (both financial and non-financial), while employability will be measured on the basis of the skills that the person possesses and employment opportunities.

Figure 1. Research Model & Hypotheses



Research Hypotheses

On the basis of the proposed theoretical approach and conceptual model, the following hypotheses are stated for the empirical testing:

Hypothesis 1: Management Education has a positive and significant effect on business performance in Uzbek manufacturing and service enterprises.

Hypothesis 2: Management Education has a positive and significant effect on the employability of the workforce in Uzbek manufacturing and service enterprises.

Hypothesis 3: There is a positive and significant relationship between business performance and employability in the studied enterprises.

Hypotheses 1-3 explore, correspondingly, the relation between Management Education and each of the two dependent variables and the relation between the two

dependent variables. Testing of these hypotheses will be conducted through the analysis of the data obtained from the surveys of managers and experts of manufacturing and service firms in Uzbekistan.

Methodology

This current research has been conducted to evaluate the effect of management education on business efficiency and employability of manufacturing and service companies in Uzbekistan. The selection of the right method is very important to achieve the valid results and be able to generalize them. For this reason, in the following paragraphs, the research design, the population and statistical sample, and the methods used for data collection and analysis will be presented separately.

Research Design

This study is an applied study regarding its purpose and a descriptive-survey in regards to the method with the use of a mixed approach (qualitative-quantitative). Using a mixed approach allows to identify first the dimensions and components of management education in the Uzbek context through a qualitative method in-depth and contextually and then measure and test relationships between variables at the quantitative level through numerical data. Such an approach will be much more reliable, especially when conducting research in specific cultural and economic conditions.

The qualitative part of the research was conducted through the case study methodology with the purpose of identifying the patterns of managers' and experts' thinking in Uzbekistan's industries concerning the importance of management education. At this stage, the attempt was made to understand the effect of training on performance and employability by researching the lived experience of the participants. The results obtained at this stage were used as a basis for creating a quantitative instrument and constructing questions. The quantitative part of the research was also conducted through a survey method and distribution of questionnaires.

The period of time under consideration for this research is from May to August 2025. The period of time was chosen bearing in mind the work conditions of manufacturing and service organizations of Uzbekistan and the ability to reach

the managers and experts. In the course of the research, all the interviews and distribution and collection of questionnaires were conducted sequentially and systematically.

Population and Sample

In this study, there were two major sub-populations in the statistical population. These were: the first sub-population included senior managers, human resource managers, and supervisors of manufacturing and service departments in medium and large enterprises in Uzbekistan. They were the primary respondents for the quantitative research because of their direct involvement in designing and implementing the training programs as well as the awareness of the performance indicators of the organization. The other sub-population included the professors and researchers of the field of management and education from the Universities in Uzbekistan, and organizational consultants working in the industries of the country who participated in the qualitative research because of their expertise and experience in the field of management education.

The snowball approach was utilized in the process of purposeful sampling. The major selection criterion included having at least 10 years of work experience in the sphere of management, education, or consulting in the industries of Uzbekistan, as well as participation in training courses or evaluation of organizational performance. The interview procedure continued till the point of theoretical saturation of the collected data, which was achieved after 14 semi-structured interviews with the selected experts.

For the quantitative study stage, the number of participants was calculated according to the Cochran formula for unlimited populations with a margin of error of 5% and equaled 185. Nevertheless, in order to ensure that a sufficient number of complete and valid questionnaires would be received, 220 questionnaires were distributed, 186 of which were returned complete and valid. The response rate was 84.5% and can be considered acceptable for the survey design in the context of the industries of Uzbekistan. The sampling technique for the quantitative study stage was conducted via a stratified random sampling approach.

Data Collection and Analysis

The process of data gathering for this study was performed in two separate phases, qualitative and quantitative, using various instruments. In qualitative phase, semi-structured interviews were the primary instrument used. The questions for interviews were framed according to major themes of the research including experience of organizations in Management Education, impact of these trainings on business performance and employability, and challenges and barriers to the effectiveness of these trainings. The time duration for interviews varied from 45 to 65 minutes, and interviews were recorded and subsequently transcribed with the prior approval of the interviewees. Qualitative data analysis was done through thematic analysis and open, axial and selective coding.

In the quantitative phase, the main instrument for data gathering was a researcher-designed questionnaire. Questions of this questionnaire were formulated considering results of the qualitative phase and theoretical literature reviewed and arranged in five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree). The questionnaire was divided into three major parts including part one focused on measuring the status of management education (containing 8 items), part two focusing on measuring business performance (including 7 items), and finally part three measuring employability (containing 6 items).

Moreover, demographic items regarding gender, work experience, industry, and position in organizations were

asked at the beginning of the questionnaire. In order to check the content validity of the questionnaire, it was administered to 6 professors of management and 4 industrial managers; their feedbacks were incorporated into the questionnaire. For the reliability of the instrument, a preliminary study was conducted on a sample size of 30 individuals taken from a population like that of the main sample. Also, for each construct of the research, Cronbach's alpha coefficient was calculated. The values of Cronbach's alpha coefficient for the constructs of management education (0.86), business performance (0.83), and employability (0.81) were found higher than 0.7, which indicates the required reliability of the instrument. The quantitative data obtained through the survey were analyzed by SPSS software (version 27) using descriptive (mean, standard deviation) and inferential (Pearson correlation coefficient, multiple regression analysis) statistics.

Results

Here are the results of the data analysis collected from 186 managers and experts of manufacturing and service organizations in Uzbekistan. Data was gathered during May and August 2025. Firstly, the characteristics of the participants will be given, and after that, the descriptive statistics of the variables, their correlation coefficients, and the outcomes of hypotheses testing will be shown. Finally, the dimensions of Management Education and barriers to its success will be stated according to the perspective of respondents.

Table 1: Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage
Industry Sector	Automotive	54	29.0
	Textiles	43	23.1
	Food Processing	38	20.4
	Machinery	31	16.7
	Other	20	10.8
Work Experience	5–10 years	28	15.1
	11–15 years	62	33.3
	16–20 years	51	27.4
	More than 20 years	45	24.2

Characteristic	Category	Frequency	Percentage
Primary Role	Senior Management	48	25.8
	Supply Chain / Operations	57	30.6
	HR / Training	41	22.0
	R&D / Innovation	22	11.8
	Other	18	9.7
Gender	Male	134	72.0
	Female	52	28.0
Education Level	Bachelor	43	23.1
	Master	101	54.3
	PhD / Doctorate	29	15.6
	Other	13	7.0

Over half of the respondents (84.9%) have more than 10 years of work experience and 54.3% hold a master's degree. The automotive sector represents 29.0%, while the textile industry contributes 23.1% to the sample size.

Table 2: Descriptive Statistics of Key Constructs

Construct	Number of Items	Mean	Standard Deviation	Minimum	Maximum
Management Education	8	3.42	0.91	1.00	5.00
Business Performance	7	3.61	0.87	1.00	5.00
Employability	6	3.33	0.95	1.00	5.00

While the mean for business is 3.61, which is above the mean of the other two variables, employability has the lowest mean at 3.33, meaning a comparatively low perception by the respondents concerning their capacity in the labor market. In the standard deviations, the perspectives on Management Education and employability vary more from those on business.

Figure 2: Adoption Rate of Different Management Education Delivery Methods

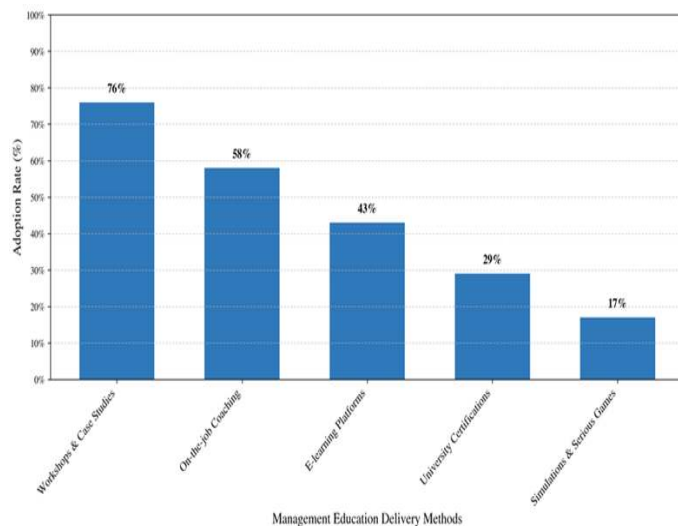


Figure 2 depicts the proportion of organizations that employ the different training methods. The traditional workshop approach (76%) and coaching on the job (58%) continue to be prevalent, whereas simulation (17%) and university certification (29%) do not receive as much attention.

Table 3: Pearson Correlation Matrix of Key Variables

Variable	1	2	3
1. Management Education	1		
2. Business Performance	0.652**	1	
3. Employability	0.594**	0.537**	1

** Correlation is significant at the 0.01 level (2-tailed).

All correlation coefficients have been found to be significant at 0.01 level. The highest degree of correlation is between management education and business performance (0.652) while the lowest is between business performance and employability (0.537). These results form the basic requirements to test the hypotheses.

Table 4: Regression Analysis – Impact of Management Education on Business Performance (H1)

Predictor	Unstandardized B	Std. Error	Standardized Beta (β)	t-value	p-value
(Constant)	1.124	0.218		5.156	0.000
Management Education	0.586	0.063	0.652	9.302	0.000

$R^2 = 0.425$, Adjusted $R^2 = 0.418$, $F(1, 184) = 86.52$, $p < 0.001$

There is significance in the regression model concerning the relationship between Management Education and business performance ($F(1,184)=86.52$, $p<0.001$). The Management Education variable accounts for 41.8% of the total variability in business performance (Adjusted

$R^2=0.418$). The standard beta (0.652) reveals a strong positive influence of the Management Education variable on business performance since the higher the Management Education is, the more business performance increases by 0.586 units.

Table 5: Regression Analysis – Impact of Management Education on Employability (H2)

Predictor	Unstandardized B	Std. Error	Standardized Beta (β)	t-value	p-value
(Constant)	1.348	0.245		5.502	0.000
Management Education	0.536	0.071	0.594	7.549	0.000

$R^2 = 0.353$, Adjusted $R^2 = 0.347$, $F(1, 184) = 57.02$, $p < 0.001$

Model predicting the effect of management education on employability is also significant ($F(1,184)=57.02$, $p<0.001$). This variable explains 34.7% of variation in employability (Adjusted $R^2=0.347$). Beta coefficient of 0.594 shows that the effect is positive and moderately high. Second hypothesis is proved but has a lower explanatory power than model predicting performance.

Figure 3: Perceived Improvement in Key Managerial Skills

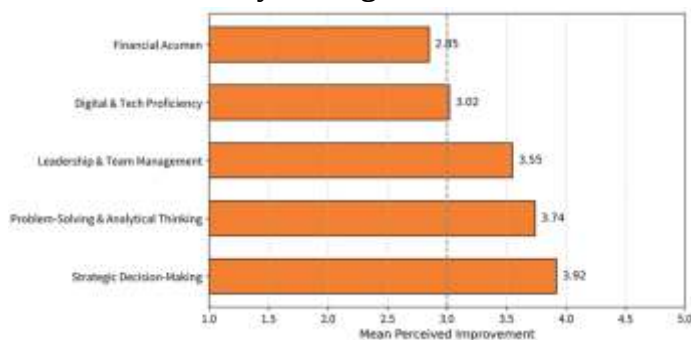


Figure 3 shows mean scores (1 to 5 rating scale) of improvements made in skills. Strategic Decision-making (3.92) and Problem-solving (3.74) had maximum improvements while Financial acumen (2.85) and Digital proficiency (3.02) had minimum.

Table 6: Relationship between Business Performance and Employability (H3)

Predictor	Unstandardized B	Std. Error	Standardized Beta (β)	t-value	p-value
(Constant)	1.487	0.256		5.809	0.000
Business Performance	0.512	0.069	0.537	7.420	0.000

$R^2 = 0.288$, Adjusted $R^2 = 0.283$, $F(1, 184) = 55.06$, $p < 0.001$

Performance is responsible for 28.3% of the variation of employability (Adjusted $R^2=0.283$), and a positive relation is indicated by the fact that its beta coefficient is equal to 0.537. Thus, the third hypothesis about the positive relationship between performance and employability is confirmed.

Figure 4: Major Barriers to Effective Management Education

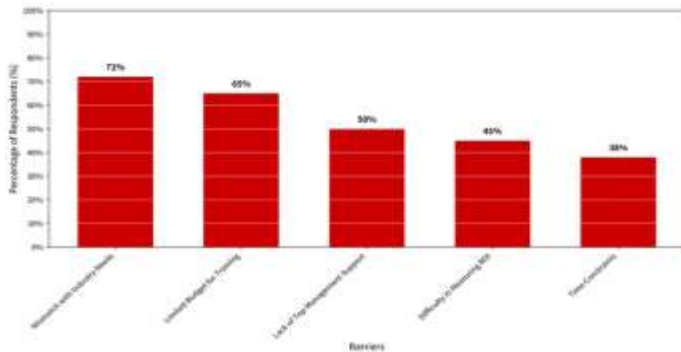


Figure 4 shows the proportion of people who identified each barrier. "Mismatch with Industry Requirements" is the most common barrier (72%), followed by "Insufficient Budget" (65%), and "No Support from Top Management" (50%).

Table 7: Perceived Effectiveness of Management Education Dimensions

Dimension	Mean	Standard Deviation	Rank
Curriculum Quality (relevance & practical orientation)	3.82	0.94	1
Instructor Competence (qualifications & industry experience)	3.65	0.98	2
Teaching Methods (interactive workshops, case studies)	3.41	1.02	3
Alignment with Industry Needs (applicability to real challenges)	3.05	1.08	4

Among all the dimensions, the respondents found “content quality” (3.82) to be the most effective while “industry relevance” (3.05) was the least effective. A large standard deviation (1.08) in case of the industry relevance dimension shows that opinions were widely scattered.

Discussion

The primary goal of the current research is to assess the influence of Management Education on the performance and employability in manufacturing and services businesses operating in Uzbekistan. According to the quantitative results obtained, it is possible to make the conclusion that there is a positive and statistically significant correlation between all the variables included in the study. According to the results provided by the correlation table (the correlation coefficient between Management Education and performance equals 0.652 and between Management Education and employability equals 0.594), one may state that the greater amount of quality Management Education managers and workers have received, the better their company performs and the more they themselves are able to sustain and improve their jobs. This result is in line with past studies undertaken in developing countries, for example Ahmed et al. (2020) have proved that entrepreneurship education programs strongly affect intentions to start businesses, and Okumu et

al. (2019) have shown that innovation positively impacts job creation in manufacturing companies in Africa. The results obtained are perfectly aligned with the theoretical framework of the paper, which focuses on the importance of investing into human capital development. According to the regression analysis, Management Education influences performance of organizations for 41.8% and employability of people for 34.7%.

The greater contribution of this variable in forecasting performance compared to employability shows that training for management at the organizational level has a much more direct influence on measurable outcomes like profit, productivity, and sales growth, although its influence on personal skills and competencies of individuals, even though significant, is less intense owing to such aspects as organizational culture and structure of labor market. This finding somehow were the same as the conclusions reached by Walter & Block (2016), who contended that the institutionality level greatly influences the effects of entrepreneurship education, and Sliwka et al. (2024), who maintained that transformational leadership behavior influences the translation of educational investments into learning outcomes within organizations. This difference in the coefficients of explanation demonstrates a delicate point – the effectiveness of individual-level training is dependent on some

complementary conditions, including job opportunity and organizational environment. Positive and statistically significant connection between business performance and employability ($\beta=0.537$, $p<0.001$) shows that the more successful businesses not only have a high level of performance but also give their employees more opportunities. Similar findings have been observed by McGee & Peterson (2019) who stated that entrepreneurial self-efficacy and orientation can influence venture performance significantly in the long run. The same findings in Miao et al. (2017) in their meta-analysis where they identified a significant positive relationship between entrepreneurial self-efficacy and performance. Bidirectional relationship in question means that the success of an organization is, first of all, the outcome of highly skilled labor force and, secondly, an instrument of professional development for employees. At the same time, the relatively low coefficient of explanation of this connection ($R^2=0.283$) suggests that such factors as labor market policies, communication channels, and economy also matter for employability.

By analyzing various dimensions of management education (see Table 7), it became clear that "content quality" was the most effective dimension and "conformity with industry needs" was the least effective one. These findings are clearly opposite to those presented in Figure 4, where the major barrier of management education in Uzbekistan was "lack of conformity of content with industry needs" (72%). Such opposition shows that despite the satisfaction of managers with the quality of course content, such content still fails to meet the actual and objective needs of the industry. To put it differently, the term "quality" in terms of the content refers more to the academic rather than practical sides of the courses. The difference between the academic curriculum and the applicability of the content in an industrial setting was discussed by Singh and Blessinger (2024) as the need for matching up the interests of students, industrial needs, and university courses in order to improve the employability of graduates. Self-reflection in enterprise education was mentioned by Clarke et al (2020). This is one of the major barriers of the education system in Uzbekistan.

The most popular training techniques among managers continue to be traditional ones, such as classroom training (76%) and on-the-job training (58%), in contrast with innovative techniques like management simulations (17%) and e-courses (43%). The low popularity of the latter, although partially related to infrastructural issues, is also due to the reluctance of organizations to introduce innovations and to stick to what works. The above described choice of traditional strategies over digital and experiential learning techniques can be supported by the conclusions reached by Haleem et al (2022) regarding the slow adaptation of digital technologies in education and Archambault et al. (2022) regarding the underutilization of online pedagogy frameworks. At the same time, the poorest development of financial skills ($M = 2.85$) and digital literacy ($M = 3.02$) suggests that training programs tend to pay more attention to soft and macro management skills rather than the technical ones specific for managers in the digital age. These results are consistent with the observations made by Remedios (2012) about the significance of soft skills for employability, as well as those of Ahmad (2024) regarding the increasing need for technological skills in recruitment and employment.

Conclusion

The current research project was conceptualized and conducted with the goal of assessing the effects of Management Education on the performance of businesses and employability of their employees in the context of manufacturing and service companies in Uzbekistan. The results of quantitative analysis unambiguously indicate the positive and statistically significant effect of Management Education on both organizational performance and individual employability. The received values of regression coefficients ($\beta=0.652$ for performance and $\beta=0.594$ for employability), as well as their statistical significance levels ($p<0.001$) constitute solid evidence in favor of all three research hypotheses put forward. Thus, Management Education is not only an expense for the organization, but also a strategically important investment with double payback.

Nevertheless, one can notice that the results of this research demonstrate the presence of serious structural and content-related obstacles in the effectiveness of Management

Education in Uzbekistan. “The mismatch of the educational content with the needs of the industry” is regarded as the main obstacle to the training process (72%). The average effectiveness of the dimension called “matching the needs of the industry” is the lowest one (3.05 out of 5). Thus, both results combined prove the following statement: the most important gap in the chain of management education in Uzbekistan is the link between the system of education and the industry sector. If the content of courses is not developed in accordance with the objective and current needs of the enterprises, then management education should not be able to reach its full effectiveness in terms of performance and employability improvement. In order to improve the situation, the results of this study recommend reviewing the content of Management Education programs actively involving economic enterprises and trade unions into the process.

Finally also, the development of contemporary approaches to education like simulation, blended learning, improvement of digital and financial literacy within educational programs is another step that must be taken. It should be noted that the introduction of systematic procedures for evaluating the ROI of educational investments and constant monitoring of the efficiency of courses will lead to improving the quality of management education in Uzbekistan. Further research may include longitudinal and comparative analysis of the effectiveness mechanisms of management education as well as contextual factors such as organization culture and company size.

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