

## The contribution of the digital transformation of education to training personnel for the transition to financial reporting according to IFRS

Shakhlo T. Ergasheva

### **Abstract:**

This paper is devoted to the identification of the contribution of the digital transformation of education to training personnel for the transition to financial reporting according to IFRS. Based on the leading experience of the top 15 digital economies of the world in 2023, we compiled an econometric model, which disclosed the dependence of the accessibility of digital personnel in the economy on robots in education. The model also explained the influence of the accessibility of digital personnel on the effectiveness of financial practices, credit and investment attractiveness of the economy, and the flow of venture investments in the economy. The main author's conclusion is that the digital transformation of education makes a significant contribution to training personnel, thus supporting the transition to financial reporting according to IFRS. This conclusion was the basis for the newly developed approach to the management of the transition to financial reporting according to IFRS, in which management is performed not only in the business environment but also in the system of education, i.e., the university environment. Applied recommendations for the application of the author's approach in dynamically developing digital economies, including the Republic of Uzbekistan, are offered.

**Keywords:** digital transformation of education, training personnel, digital personnel, financial reporting, International Financial Reporting Standards (IFRS), Republic of Uzbekistan.

**For contacts:** Department "Financial Accounting", Tashkent State University of Economics, Tashkent, Republic of Uzbekistan, shahloer@gmail.com

### **INTRODUCTION**

Transition to the International Financial Reporting Standards (IFRS) is important for an increase in the investment attractiveness of business and economy (De Luca et al., 2024). The inflow of foreign investments strengthens the financial support for economic initiatives, which are implemented by businesses and the economic system on the whole. The attraction of foreign investments is very topical for the Republic of Uzbekistan, as a dynamically developing country (Ergasheva et al., 2023).

The need to receive foreign investments is explained by the fact that this allows the Republic of Uzbekistan to overcome the limited character of its financial resources, which is peculiar to all countries of the world, and enter a new level of financial support for innovative projects in the economy, including socially significant ones. The economy of the Republic of Uzbekistan is very progressive, but insufficient financial support restrains its innovative development, which is a widespread phenomenon in the world economic system.

By now, the Republic of Uzbekistan has achieved large results in the transition of financial reporting of business to IFRS. But not all Uzbek business structures, which are interested in this, made a transition to IFRS. The approach to the management of transition to financial reporting according to IFRS, which is applied in the Republic of Uzbekistan, involves the use of corporate management as the basis. The essence of this approach consists in the change in the organisation of financial management of business structures. As the practice shows, this approach does not allow Uzbek

business structures to make a mass transition to financial reporting according to IFRS, which points to the limitations of this approach (Tulakhodjaeva and Khodjaeva, 2021).

This determines the urgency of developing a new approach, which will ensure a larger effect and will fit a larger number of Uzbek business structures. Certain literature sources, including Akisik et al. (2020) and Golshan et al. (2023), present assumptions that the success of the transition to financial reporting according to IFRS largely depends on staffing. Troshani et al. (2019) and Wahyuni (2022) note that automatization of financial accounting and preparation of financial reporting allows simplifying and accelerating the transition to IFRS.

This allows supposing that a restraining factor on the path of transition of Uzbek business structures to IFRS could be insufficient provision of digital personnel. Training of digital personnel is performed in the system of education. In universities of the Republic of Uzbekistan, certain digital technologies are used, while Balić et al. (2024), Maltese (2024), Patrício and Ferreira (2024), Popkova (2023), Popkova and Sergi (2023), and Zarubina et al. (2024) state, based on the international experience, that training of digital personnel requires the active application of digital technologies in the educational process.

However, the existing publications are fragmented and narrowly focused, due to which the general contribution of the digital transformation of education to training personnel for the transition to financial reporting according to IFRS remains unknown. This is a literature gap. Based on the above-mentioned scientific literature, this paper offers a hypothesis that the digital transformation of education makes a significant contribution to training personnel, thus supporting the transition to financial reporting according to IFRS. The goal of this paper consists in identifying the contribution of the digital transformation of education to training personnel for the transition to financial reporting according to IFRS.

## **STATEMENT**

Since the digital economy of the Republic of Uzbekistan is at the intermediary stage of its formation and is not fully covered by statistical accounting yet, in this research we should dwell on the experience of the leading digital economies of the world. The empirical basis of this research is the statistics of IMD (2024) on the topic of digital competitiveness. The timeframe of the research is 2023. The sample includes the top 15 digital economies of the world in 2023, which are leaders in the IMD World Digital Competitiveness Ranking (2024).

To check the offered hypothesis, we used the method of regression analysis and modelled the dependence, first, of accessibility of digital personnel in the economy (DTS) on robots in education (RBE). Second, the dependence of the indicators of the financial system – effectiveness of financial practices (BFS), credit and investment attractiveness of the economy (CCR), and the flow of venture investments in the economy (VTC) – on DTS. The collected statistics were systematised in Table 1.

Table 1. The digital transformation of education, training personnel, and financial system of the top 15 digital economies of the world in 2023, positions 1-64

Country	Digital/ Technological skills	Robots in Education and R&D	Banking and financial services	Country credit rating	Venture capital
	DTS	RBE	BFS	CCR	VTC
USA	9	3	29	22	3
Netherlands	5	23	16	1	4
Singapore	12	30	6	1	10
Denmark	4	24	1	1	9
Switzerland	16	16	8	1	18
Republic of Korea	48	4	50	16	44
Sweden	10	20	10	1	6
Finland	2	25	2	12	8
Canada	18	9	17	10	12
UAE	19	41	26	16	7
Norway	20	26	20	1	17
Belgium	17	18	4	20	1
Australia	39	20	29	1	34
Ireland	27	27	25	23	14
Estonia	38	48	27	26	24

Source: Compiled by the author based on the materials

As a result of the regression analysis of data from Table 1, the following system of equations of linear regression was obtained:

$$\left\{ \begin{array}{l} \text{DTS}=18.1556+0.0349*\text{RBE}, \\ \text{BFS}=3.2849+0.7772*\text{DTS}, \\ \text{CCR}=5.4296+0.2484*\text{DTS}, \\ \text{VTC}=-0.4249+0.7654*\text{DTS}. \end{array} \right. \quad (1)$$

Model (1) means that with an increase in the level of robots in education by 1 position, the accessibility of digital personnel in the economy grows by 0.0349 positions. The model has also demonstrated that with an increase in accessibility of digital personnel in the economy by 1 position, the effectiveness of financial practices grows by 0.7772 positions, the credit and investment attractiveness of the economy grows by 0.2484 positions, and the flow of venture investments in the economy grows by 0.7654 positions. The results obtained proved the offered hypothesis.

Based on the compiled econometric model, we have established that due to isolated (“cleared” of other management practices) implementation of such promising management measure as maximisation of the level of robots in education (achievement of the 1<sup>st</sup> position in the world, +95.51% compared to the 2023 level) in the top 15 digital

economies of the world, there will be an increase in accessibility of digital personnel in the economy by 3.92%. In turn, this will ensure an increase in the effectiveness of financial practices by 3.21%, an increase in the credit and investment attractiveness of the economy by 1.82%, and an increase in the flow of venture investments in the economy by 4.04%.

## CONCLUSIONS

The results obtained allow for a conclusion that the digital transformation of education does make a significant contribution to training personnel, thus supporting the transition to financial reporting according to IFRS (the hypothesis posed was proven). This formed the scientific arguments in favour of the transition to the new approach to the management of the transition to financial reporting according to IFRS, in which management will be conducted not only in the business environment but also in the system of education, i.e., the university environment.

The considered leading experience of the top 15 digital economies of the world is useful for dynamically developing digital economies, including the Republic of Uzbekistan. The econometric model, which is based on this, showed that developed digital economies actively use the educational potential of support for the transition of business to IFRS. Though this potential is large, it has been largely exhausted in these countries.

Unlike them, this potential has not yet been spent in dynamically developing digital economies. Therefore, it is expedient to start a large-scale national programme of robotization of higher education to improve the practice of training digital personnel in support of the transition of the Uzbek business to financial reporting according to IFRS. Attention should be also paid to other digital technologies, which will be useful in higher education during digital personnel training.

This is artificial intelligence, technologies of virtual and alternate reality, the Internet of Things, machine vision, machine learning, etc. Even in the top 15 digital economies of the world, the above technologies are used in the system of higher education only to a small extent. These technologies are very promising, and their potential is far from being exhausted. The expansion of the use of these technologies by Uzbek universities will allow them to significantly increase the contribution of the digital transformation of education to digital personnel training for the transition to financial reporting according to IFRS and to accelerate this transition in the Republic of Uzbekistan.

## REFERENCES

1. Akisik, O., Gal, G., Mangaliso, M.P. (2020). IFRS, FDI, economic growth and human development: The experience of Anglophone and Francophone African countries. *Emerging Markets Review*, 45, 100725. DOI: 10.1016/j.ememar.2020.100725
2. Balić, N., Grubišić, A., Granić, A. (2024). Perceptions of Digital Learning and Teaching: The Case of a Croatian University Transition to an Emergency Digital Environment. *Technology, Knowledge and Learning*, 29(1), 453–481. DOI: 10.1007/s10758-023-09692-4

3. De Luca, F., Prather-Kinsey, J., Erdogan, S., Phan, H.-T.-P. (2024). Cross-border listed firms' IFRS-based financial reports: Are they comparable?. *Journal of Accounting and Public Policy*, 45, 107207. DOI: 10.1016/j.jaccpubpol.2024.107207
4. Ergasheva, S.T., Zinovyeva, I.S., Abdurashitov, A.A., Kopytina, Y.A., Makarova, T.V. (2023). ESG Investments in Support of the Development of the Green Economy in Russia and Central Asia. *Environmental Footprints and Eco-Design of Products and Processes*, 2023, Part F1766, 419–428. DOI: 10.1007/978-3-031-46525-3\_44
5. Golshan, N.M., Khurana, I.K., Silva, F.B.G. (2023). Financial transparency, labor productivity, and real wages: Evidence from mandatory IFRS adoption. *Journal of International Accounting Research*, 22(3), 31–61. DOI: 10.2308/JIAR-2022-044
6. IMD (2024). World Digital Competitiveness Ranking 2023. URL: [https://www.imd.org/wp-content/uploads/2023/12/Digital\\_2023.pdf](https://www.imd.org/wp-content/uploads/2023/12/Digital_2023.pdf) (data accessed: 03.05.2024).
7. Maltese, V. (2024). Addressing Digital Transformation in Universities: How to Effectively Govern, Trust and Value Institutional Data. *Journal of Telecommunications and the Digital Economy*, 12(1), 242–260. DOI: 10.18080/jtde.v12n1.808
8. Patrício, L.D., Ferreira, J.J. (2024). Strategically redefining university dynamics for the digital age: A qualitative approach. *Strategic Change*, 33(2), 95–106. DOI: 10.1002/jsc.2565
9. Popkova, E.G. (2023). Benefits of Distance Education for Overcoming Cultural Disparities, Opening Universities to Persons with Disabilities, and Ensuring Inclusive Higher Education. *Studies in Critical Social Sciences*, 254, 7-19. DOI: 10.1163/9789004540019\_003
10. Popkova, E.G., Sergi, B.S. (2023). Strategic academic leadership and high-tech economic growth. *Frontiers in Education*, 8, 1108527. DOI: 10.3389/feduc.2023.1108527
11. Troshani, I., Locke, J., Rowbottom, N. (2019). Transformation of accounting through digital standardisation: Tracing the construction of the IFRS Taxonomy. *Accounting, Auditing and Accountability Journal*, 32(1), 133–162. DOI: 10.1108/AAAJ-11-2016-2794
12. Tulakhodjaeva, M., Khodjaeva, M. (2021). Features of digitalization and ensuring transparency of accounting and audit in Uzbekistan. *ACM International Conference Proceeding Series*, 651–654. DOI: 10.1145/3508072.3508201
13. Wahyuni, E.T. (2022). Digital transformation and IFRS 17 accounting issues in takaful industry: The case of Indonesia. *Digital Transformation in Islamic Finance: A Critical and Analytical View*, 218–234. DOI: 10.4324/9781003262169-15
14. Zarubina, V., Zarubin, M., Yessenkulova, Z., Salimbayeva, R., Satbaeva, G. (2024). Digital transformation of the promotion of educational services of Kazakhstani universities. *Journal of Innovation and Entrepreneurship*, 13(1), 3. DOI: 10.1186/s13731-023-00355-3