



Article

Specific Aspects of Automation of Long-Term Assets Accounting in The Digital Economy

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Abstract: In this article, we will discuss how robotic accounting of long-term assets can help make the effectiveness and transparency of enterprises in Uzbekistan's growing digital economy higher. Digital tools are being rolled out in sectors, but fixed asset accounting is still a semi-manual process, which is time-consuming, error-prone, and does not provide timely access to reliable data. The solution to the above is discussed in the research on practical ways to create a unified accounting system covering all assets in one database. It combines comparative analysis and abstraction and synthesis to create a model in which each fixed asset can be traced using QR-code technology. The findings demonstrated that automation enhances data accuracy, lowers accounting costs, and further reduces human error, based on a case study at Kashkadarya Technological Transport JSC. The managers, too, avail the opportunity to keep track of the assets and make quicker and more informed decisions. The study results confirm that automated accounting for tax purposes saves time and financial resources, while bringing accounting practices in compliance with international standards and improving the transparency of public finances. In summary, fixed asset accounting automation is not just an enhancement in technology, but a strategic move to strengthen financial control, enhance governance, and achieve industry leadership in the digital economy.

Keywords: fixed assets, automation, single database, accounting software database.

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1. Introduction

Today, as the economy in Uzbekistan is digitizing, automation of fixed asset accounting is one of the priority areas for increasing the competitiveness of enterprises, strengthening financial control, and effective resource management. Therefore, the introduction of new information systems and optimization of existing processes in this area is important for the long-term development of enterprises.

This work discusses the importance of automating fixed asset accounting in the digital economy, the existing problems and ways to overcome them, as well as practical recommendations for increasing the efficiency of the automation process. This, in turn, will serve to improve the accounting activities of enterprises based on modern technologies. Nowadays, digitalization processes have penetrated into every aspect of our lives and are being widely used. Today, we cannot imagine our lives without digitalization or automation. Direct digitalization of the economy not only saves people time and energy, but also directly serves to prevent fraud that may occur due to speed, transparency of information, and human intervention.

The following opinions about fixed assets were given by A.A.Karimov, J.Kurbanbayev, S.A.Jumanazarov: "Fixed assets in most cases constitute the main part of the assets of the enterprise and therefore are of great importance in showing its financial position in the

financial statements [1]. Fixed assets are recognized as assets if there is confidence that the enterprise will receive future economic benefits associated with the asset and the value of the asset can be accurately estimated" [2].

G.Q.Turayeva, B.E.Matrasulov, S.I.Matkuliyeva, A.A.Abduvohidov, A.B.Mukhametov in their works on fixed assets have the following definition, namely: "Fixed assets are grouped in accounting, in accordance with the requirements of statistical reporting, into production and non-production (for example, into non-production sectors: healthcare, housing, utilities, etc.) and also into functional groups: buildings, structures, working machinery and equipment, etc.)" [3].

According to paragraph 3a of the National Accounting Standard No. 5 "Fixed Assets", "fixed assets are tangible assets held by an enterprise for use in the long-term in the process of producing products, performing work or providing services in the conduct of economic activities, or for the implementation of administrative and socio-cultural functions" [4]. When accounting for fixed assets, the head of the enterprise has the right to set the minimum value of items for accounting as fixed assets in the reporting year at a lower amount than would be determined independently. Of course, the minimum value of fixed assets should be specified in the "Accounting Policy".

One of these scientists was KBUrazov, who in his works proposed the following classification of fixed assets: "Fixed assets include labor tools and equipment that constitute the material and technical base of enterprises" [5].

2. Materials and Methods

The methodology of this research is a theoretical and practical combination methodology for studying the automation of long-term asset accounting in the digital economy. The paper employs tools such as scientific abstraction, analysis, synthesis, analogy, induction and deduction to explore the role of automation systems in enhancing the precision and transparency of accounting operations [6]. At the first stage of the research, a review of national accounting standards, scientific works and regulatory documents on fixed assets and their digital management was performed. The theoretical foundation formed the basis in recognition of the major challenges that enterprises face in implementing automated accounting systems. The practical part of the research was carried out at Kashkadarya Technological Transport JSC, where a unified database was developed and implemented for the purpose of accounting for fixed assets [7]. Using QR-code technology, this database made it possible to monitor in real time the entire history of focused assets (initial value and depreciation, reconstruction, current condition, etc.). Using data and observation obtained from this system, the impact of automation on accounting precision, cost savings, and decision-making in real-time was analysed. The study was designed with a focus on making sure that its findings would be applicable to the realities of digitalisation process in Uzbekistan [8]. The theoretical and practical aspects allowed to gain insight into the issue of strengthening financial control and improving the efficiency of enterprises operating in the conditions of rapid digitization of the economy using automated accounting systems [9].

3. Results and Discussion

The accounting system which equipped with modern software and automating the accounting of fixed assets will help to bring the quality of enterprise activities to a new level in the process of digitalization of the economy of the Republic of Uzbekistan. At the same time, this will help in exercising transparency, openness and reliability in the management of enterprises.

Through this article, I'm aiming to study the benefits of automation, for the process of accounting for fixed assets, how to overcome current challenges, and the influence of automation on the enterprise economy [10]. On the basis of the research results, recommendations are formulated allowing for a more effective implementation of this process in the enterprises.

Based on the conditions of the digital economy, some works have been conducted in this research in order to make sure the proper maintenance of fixed assets accounting,

minimize its influence of human factor, provide transparency of information to its users [11].

In particular, this research comprehensive form made accounting records of each fixed asset existing on the balance of the Kashkadarya Technological Transport JSC were carried out based on one database.

This database provides the information listed in the table below for each major instrument type, see Table 1.

Table 1. Elements of a unified database for fixed assets accounting

No.	Information type	Description
1	Company name	The name of the enterprise and organization where the main tool is operated is given.
2	Main tool name	Full name of the fixed asset according to the contract or invoice, state registration number
3	Inventory number	Inventory number for fixed assets by enterprises and organizations
4	Date of commissioning	Date of commissioning of the fixed asset
5	Department name	Name of the department or workshop to which the main tool is attached or accepted for use
6	Expense type	Cost center where depreciation expenses accrued on fixed assets are incurred
7	Financially responsible person	Employee responsible for fixed assets FISH
8	Year of useful service	Useful life of the fixed asset
9	Account number	Fixed asset account number
10	Initial value	Initial recognition cost of a fixed asset
11	Depreciation account number	Account number where the depreciation amount accrued on the fixed asset is reflected
12	Accumulated depreciation amount	The total accumulated depreciation amount during the year of use of the fixed asset
13	Reconstruction date, amount	The date and amount of the reconstruction work carried out on the fixed asset are indicated.
14	Date and amount of revaluation	The date of valuation of the fixed asset and the revalued amount

Based on this database, a database in the form of a QR code was created about the MAN TGS 26400 6x4 BLS WW truck available at Kashkadarya Technological Transport JSC, which you can see in the image below, see Figure 1.

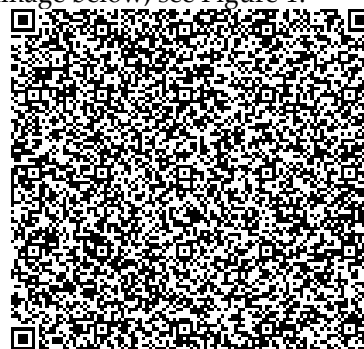


Figure 1. Information base in the form of a QR code about the MAN TGS 26400 6x4 BLS WW truck

In the modern economic environment, digital technologies and automated systems are leading to fundamental changes in the field of accounting [12]. In particular, the automation of fixed asset accounting not only increases the speed of data processing, but also serves to ensure the accuracy of calculations, reduce errors caused by the human factor, and create a reliable information base for making effective management decisions.

Fixed assets are among the most important tangible assets on the balance sheet. Their correct determination of value, calculation of depreciation, control of the level of obsolescence and timely write-off directly affect the financial statements of the enterprise, see Figure 2 [13]. Therefore, complete, accurate and timely information on these assets plays an important role in the overall management system of the enterprise.

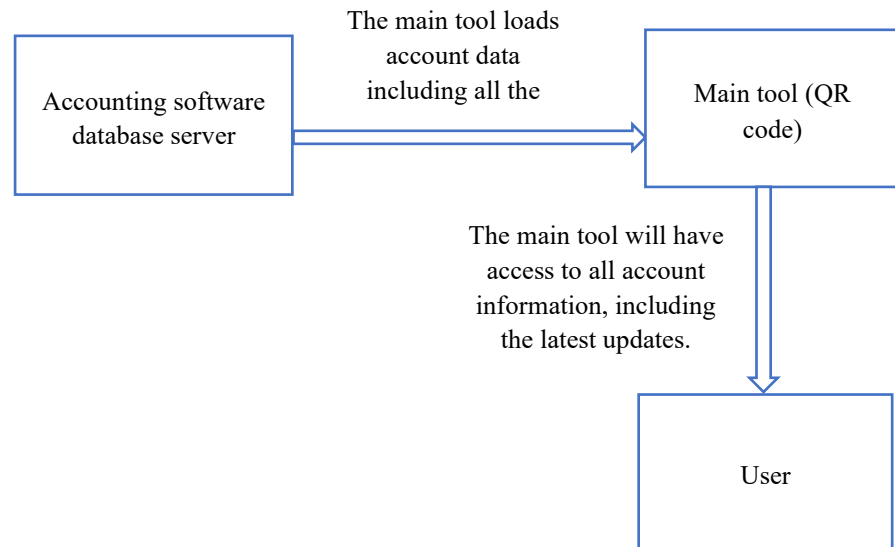


Figure 2. The process of automating basic vehicle accounting data

Maintaining fixed asset accounting through this process provides the following advantages:

1. ensures transparency of account information and provides reliable information to users;
2. a reduction in costs associated with accounting is achieved;
3. It will be able to save time while reducing the human factor.
4. enables effective management decisions regarding fixed asset accounting.

Introduction of automated accounting systems not only allows for real-time monitoring of the movement but also condition and efficiency of fixed assets [14]. It creates the basis for strengthening financial control, transparency of tax reporting and investment reliability. In particular, software that can automatically calculate depreciation, check how old assets are, and update their value helps make accounting work faster and more efficient [15].

4. Conclusion

Automation helps to standards the methodology with international standards with regard to maintaining financial records. It easier for making financial analysis and helps accountants to generate reports that are clear, simple, and visual for anyone to interpret. These systems are useful not only to managers inside the company but also to investors, banks, and tax authorities that depend on accurate information. Overall, automation of fixed asset accounting is more than a new way of doing things it is an intelligent move that significantly enhances the quality of financial data. It enables you to streamline work, utilize resources more effectively, and make your business more competitive. In this regard enterprises should pay special attention to the development and improvement of

an automated accounting systems, the development of which is inherent in the nature of the modern economic management

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