(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

REVAMP THE ACCOUNTING AND FINANCIAL REPORTING SYSTEM FOR THE DIGITAL ECONOMY

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ABSTRACT

The advancement of contemporary information systems and technology has brought about significant accounting methodologies and procedures changes. This article explores the development of accounting and financial reporting systems within the digital economy, highlighting the significant trends and factors influencing their evolution. These factors influence various facets of accounting, including content orientation, principles, methods, techniques, and characteristics of information products. Moreover, they impact internal organizational structures, the selection and integration of accounting techniques, the categorization and recognition of accounting entities, and the establishment of standards for classification and recognition. The research also identifies potential pathways for enhancing financial reporting and accounting systems, which serve as critical information sources in the universal economic landscape. Suggestions encompass leveraging blockchain technology and contactless identification for capturing and storing economic data, aggregated information, financial and non-financial reports, while also integrating reliability filters.

INTRODUCTION

Accounting risks are becoming less important as the primary source of economic data in the age of complete economic digitization. It risks becoming incorporated into multifunctional, technical electronic information settings, undermining the accounting profession [1]. In recent years, several concerns have surfaced regarding accounting's diminishing usefulness. These have been linked to the discipline's conservative and retroactive approach, particular techniques and structures, many limitations and rules, and the importance placed on processes rather than results. This has sparked basic research to update theoretical frameworks, concepts, and paradigms and reassess their contribution to constructing an information environment for controlling economic processes. On a practical level, efforts have focused on updating accounting practices to enhance the information's alignment with user needs [2].

(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

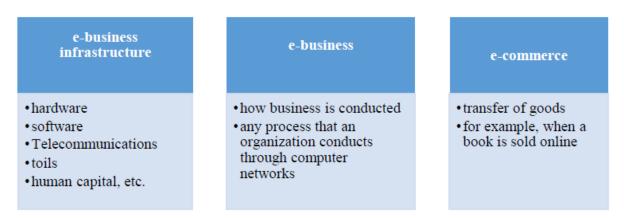


Fig.1. Digital's Economy Core Concept

PROBLEM STATEMENT

Given the pivotal moment in the evolution of accounting and its conceptual advancement, It is essential to consider the importance of aligning accounting and financial reporting methodologies with user needs. Further research in this domain is pressing, as numerous unresolved issues persist, subject to scientific discourse. This paper aims to elucidate the current status, features, and future potentials of accounting evolution in the digital economy, advocating for the emergence of a new digital accounting paradigm. Prominent contemporary accounting issues include the integration of contactless identification technology in accounting and asset management, the transition towards electronic financial statements, and the potential application of Blockchain technology. [3].

RESEARCH

Exploring the impact of technological innovations on accounting methods and procedures is essential for advancing and enhancing accounting practices. Key innovations include structured digital financial reporting using XBRL, which enables the global exchange of business information in a machine-readable format. Robotic Process Automation (RPA) streamlines task automation but may require assistance in adapting to change or complex decision-making. Collaborative efforts between major accounting firms and RPA companies aim to integrate RPA into accounting processes. Artificial intelligence (AI) has the potential to reduce costs and time for accountants and auditors through improvements in cloud computing and productivity. Although still in its early stages, blockchain technology holds promise for revolutionizing accounting and auditing by facilitating efficient asset and data transfer while enhancing confidentiality and accuracy. [8]

RESEARCH FINDINGS

The evolving information landscape within the economy necessitates continuous progress in accounting theory and practices. Various trends and factors have a significant impact on accounting evolution in the digital era (refer to Table 1), influencing methodologies, principles, content focus, and attributes of information outputs. They also affect internal organization,

(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

e-ISSN: 2231-6868, p-ISSN: 2454-468X

accounting method integration, accounting entity identification and organization, recognition criteria, and classification systems.

TABLE I. FACTORS SHAPING ACCOUNTING EVOLUTION IN THE DIGITAL ECONOMY

Factors of accounting development	Characteristics of factors
Technical and technological capabilities of the	powerful computer technology;
accounting process for the efficiency of the	 modern information systems and innovative technologies of information collection and
collection, volumes and quality of information	processing;
processing:	wide range of software products: specialized accounting programs, programs and services for
	remote banking, information systems;
	big data analysis;
	robotic process automation.
Accelerated development of electronic document	internal document flow:
flow:	administering tax payments;
	electronic financial reporting format.
Highlighting information as a factor in business	information is at the forefront of economic resources:
value:	 information and information service become the product of activity, commodity.
The emergence of new accounting objects:	virtualization of units of value (electronic money, cryptocurrencies);
	tokenized assets, equity and debt instruments, liabilities.
Expanding the field of activity reflection,	• human capital:
development of intangible and intellectual	customer base, business reputation, trademarks, brands, brands;
components of capital:	Innovative products, research and exploration results.
Focusing on non-financial target priorities:	corporate social responsibility;
	sustainability;
	energy-saving technologies.
Involvement in the accounting system of non-	buyers, suppliers, partners;
financial information:	state of the market, competition in the industry;
	economic sustainability, environmental security.
Application of alternative accounting methods:	actuarial calculations;
	types of value;
	assessment methods;
	analytical tools and the like.
Formation of a global information and	• network presence servers for information disclosure, online business promotion, online commerce,
telecommunication environment and related	business correspondence;
technologies and information security requirements:	search engines;
	Blockchain technology;
	technology and information platforms, cloud repositories;
	satellite, cellular and radio technologies;
	antivirus and content protection.
Development and application of alternative types of	• managerial;
accounting, formation of approaches to their	• strategic;
integration.	• social;
	• multi-purpose;
	• global etc.

These conditions pave the way for establishing an accounting framework that caters to user needs and integrates information regarding internal business processes and environmental contexts, encompassing financial and non-financial metrics. Such a framework should prioritize socio-humanitarian concerns and embrace alternative accounting methodologies, novel accounting subjects, and the outcomes of integrated accounting techniques in real time, leveraging the latest information technologies.

Let's delve deeper into a comprehensive exploration of promising avenues for enhancing accounting practices.

In the digital economy, a valuable asset lies in adopting non-contact information identification technologies, such as QR codes and scanning devices. QR codes offer a simple, convenient, and interactive means of disseminating and retrieving information. They can store vast amounts

(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

of encrypted data, which is swiftly accessible through scanning with modern digital devices. QR codes find versatile applications in transmitting various types of information, from reminders to product descriptions, boasting advantages such as their capacity to store extensive digital and textual content in multiple languages, compact size, rapid recognition speed, and durability against damage.

QR codes streamline inventory verification, including non-current assets, by encapsulating all pertinent data in inventory management processes. Upon scanning, these codes reveal comprehensive information from the asset's inventory record, facilitating objective assessment and updates. Implementing QR coding streamlines inventory committee tasks, expedites data collection, and enhances decision-making agility. Mobile based QR management of material enables real-time transaction recording, reducing supply errors, asset loss, and accounting discrepancies. However, efficient monitoring of assets utilizing QR codes and smartphones necessitates high-quality software and applications.

Asset management, facilitated by tracking based software and inventory based on QR-code tags, aids in preventing losses and damages to company equipment, expedites timely upgrades and reduces repair expenses. Moreover, it saves time compared to manual reconciliation, freeing up employees for other responsibilities. Despite requiring initial investments, this innovation is justified as it enhances accounting efficiency and organizational effectiveness.

In accountancy, a prominent appearance of the Fourth Industrial Revolution is adopting digital, electronic, or IT-oriented versions of monetary reports. This progression fosters the evolution of accounting alongside technology, reinforcing the significance of economic data and its transfer. Digital financial reporting, structured and computer-based, supplants traditional paper formats, facilitating the rapid generation, distribution, and analysis of commercial data. XBRL, a prevalent electronic reporting standard, streamlines automated data processing and ensures regulatory compliance, enhancing financial reporting efficiency.

Digital financial statements, intelligible to humans and machines, optimize information dissemination through electronic channels. This transformation liberates accounting professionals and users from routine tasks, allowing them to prioritize professional assessments and subjective aspects. Automation reduces labour costs, errors, and compliance risks, expediting financial statement preparation.

Recently, blockchain is revolutionary in accounting methodologies, offering decentralized, tamper-proof data storage. Stemming from the inception of Bitcoin, Blockchain's distributed ledger system securely records transactions, preventing data manipulation. Its applications extend beyond cryptocurrencies to various sectors, promising a comprehensive economic fact of database and bolstering reliability in financial reporting.

Despite initial scepticism, banks, governments, and leading enterprises recognize the significance of Blockchain and cryptocurrencies, aiming to comprehend their profits and regulate their development. However, the recent accountancy system must be more adequately

(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

e-ISSN: 2231-6868, p-ISSN: 2454-468X

equipped to fully incorporate these emerging phenomena, underscoring the necessity for further scientific advancements in accounting procedure.

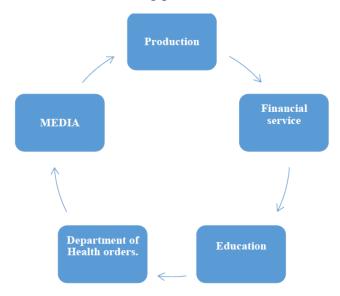


Fig.2. The transition to the economy through digitalization



Fig.3. Revise techniques for advancing accounting methodologies

CONCLUSION

Essentially, the informational and technological shifts catalysed by digitalization propel the advancement of accountancy, emphasizing the significance of evolving methodologies and improving organizational structures. These advancements signal the arrival of a new

(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

accounting paradigm, highlighting the need for continuous scientific progress and conceptual innovations in the field.

REFERENCES

- [1] A. Zhyvets, "Evolution of professional competencies of accountants of small enterprises in the digital economy of Ukraine" Baltic Journal of Economic Studies, Vol. 4, No. 5, 2018, pp. 87-93. DOI: 10.30525/2256-0742/2018-4-5-87-93.
- [2] KPMG "Digitalisation in accounting 2019. Study." URL: https://home.kpmg/de/en/home/insights/2019/08/digitalisierung-imrechnungswesen-

2019.html

- [3] C. Hoffman, "Accounting and auditing in the digital age." URL: http://xbrlsite.azurewebsites.net/2017/Library/AccountingAndAuditingInTheDigitalAge.pdf
- [4] C. A. Zhang, "Beyond robotics: how AI can help improve the audit process". URL: https://blog.aicpa.org/2018/08/beyond-robotics-howai-can-help-improve-theaudit-process.htm.
- [5] E. Tadros, "Deloitte, KPMG, Accenture fight to help clients use robotic process automation" Financial review. URL: https://www.afr.com/business/accounting/deloitte-kpmgaccenturefight-to-help-clients-use-robotic-process-automation-20160926-groupo.
- [6] CPA Australia podcast. Artificial intelligence and the future of accounting. URL: https://www.cpaaustralia.com.au/podcast/artificial-intelligence-and-the-future-of-accounting.
- [7] R. Half, "What impact will blockchain have on the future of accounting and auditing?" URL: https://www.roberthalf.co.uk/advice/industry-insights/what-impactwillblockchain-have-future-accounting-and-audit
- [8] H. Radivilova, and I. Spilnyk, "QR-coding in accounting and asset management of an enterprise: advantages and prospects of use". Proceedings of International Scientific and Practical Conference "Digital Economy: Trends and Perspectives", Ternopil, October 25, 2018, p. 319-320. URL: http://dspace.tneu.edu.ua/handle/316497/32851. (In Ukrainian)
- [9] I. Spilnyk, and M. Palyukh, "Digital format of financial reporting: essence, advantages and prospects". Proceedings of Scientific and Practical Conference "Digital Economy: Trends and Perspectives", Ternopil, October 25, 2018, p. 115-117. URL: http://dspace.tneu.edu.ua/handle/316497/32763 (In Ukrainian)
- [10] I. Spilnyk, and M. Palyukh, "Accounting in the digital economy conditions" The Institute of Accounting, Control and Analysis in the Globalization Circumstances. International scientific journal. Issue 1- 2, 2019, pp. 83-96. DOI: https://doi.org/10.35774/ibo2019.01.083
 39. (In Ukrainian)

(IJTBM) 2019, Vol. No.9, Issue No. III, Jul-Sep

- [11] S. Nakamoto "Bitcoin: a peer-to-peer electronic cash system". URL: https://bitcoin.org/bitcoin.pdf.
- [12] "Blockchain: a technical primer". Deloitte. February 6, 2018 URL: https://www2.deloitte.com/insights/us/en/topics/emergingtechnologies/ blockchain-technical-example.html.
- [13] KPMG report "Cryptoassets are now impossible to ignore but there are still challenges facing institualization". URL: https://www.theblockcrypto.com/2018/11/19/kpmg-reportcryptoassets- are-now-impossible-institutionalization.
- [14] R. Brukhanskyi, and I. Spilnyk "Cryptoassets in the system of accounting and reporting" The Problems of Economy, Issue 2, 2019, pp. 145-156. DOI:1032983/2222-0712-2019-2-145-156 (In Ukrainian).
- [15] R. Brukhanskyi, and I. Spilnyk, "Cryptographic objects in the accounting system", Proceedings of 9th International Conference IEEE Advanced Computer Information Technologies, ACIT'2019, June 2019, pp. 384-387. DOI: 10.1109/ACITT.2019.8780073.