Univerzitet u Beogradu
Poljoprivredni fakultet
Institut za poljoprivrednu tehniku
Naučni časopis
POLJOPRIVREDNA TEHNIKA
Godina L
Broj 4, 2025.
Strane: 39 – 43

University of Belgrade
Faculty of Agriculture
Institute of Agricultural Engineering
Scientific Journal
AGRICULTURAL ENGINEERING
Year L
No.4, 2025.
pp. 39 - 43

Original Scientific paper
Originalni naučni rad
DOI: 10.5937/POLJTEH2504039P

APPLICATION OF IT SYSTEMS IN AUDIT JOBS RELATED WITH EXPLOITATION OF AGRICULTURAL MECHANIZATION'S IN REPUBLIC OF SERBIA

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Abstract: In this study, the authors have shown that there is a strong influence between applications of IT systems within the framework of performing regular tasks of auditing agricultural machinery. We have found that there is a significant difference in the evaluation of the system that respects and applies the IT system and that provides support in the work of the company in the field of auditing agricultural machinery. This is of great importance in terms of making major management decisions in the regular business of the company. In addition, we found that on the basis of the most frequently used tractor IMT- 533, it is possible to predict the other analyzed factors within the acceptance of the use of IT support in the regular business of legal entities, because there is a pronounced significance ($F=69.779$, $p<0.0005$).

Key words: *IT system, audit, agricultural mechanization.*

INTRODUCTION

Real functioning of companies, especially in agriculture, leads to the fact that it is possible to show that there is a strong influence between the functioning of several management factors in the work of the same, for example, the possible application of IT systems within the framework of performing regular audits of agricultural machinery [1-5].

Making valid management decisions in the business of agricultural enterprises means essentially innovating the application of technical and technological factors that will contribute to successful business in the future [6-11].

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The formation of control and audit in the work of top management reporting is possible if technical support is established because the risks of reporting are reduced [11-16].

Realistic audit reporting with technical support for such work, primarily by auditors and controlling, leads to business forecasting in the future activities of an agricultural enterprise, which is the permanent target state of all management bodies [17-20].

MATERIALS AND METHODS

To conduct this study, the authors surveyed 205 top managers, 142 of whom worked in entities that had implemented an IT system to support the acquisition of quality audit certificates, and 63 top managers in companies that did not include an IT system that reviews the audit opinion.

The subject of observation was medium-sized agricultural enterprises in the Republic of Serbia. The research was conducted in the period from 01.03. to 31.03. 2025.

The analysis included three types of tractors that are regularly used in business, then the type of combine harvester and the use of small agricultural machinery in the audit reports of medium-sized agricultural enterprises.

They then performed statistical processing using IBM SPSS (Statistical Package of Social Science) version 25 software, to include a higher level of confidence using the t-test, and finally, the impact of IT in the audits was re-evaluated based on the constant represented by the IMT-533 tractor in relation to the other observed factors of agricultural mechanization. A significance level of 0.05 was used as the threshold value.

Table 1. Presentation of the form of IT influence on the audit of agricultural machinery

	Implemented exemplary IT systems (N=142)	Audit without using IT system (N=63)	t	p
	Ave rage value			
Tractor type IMT 539	6.70 ± 0.38	3.71 ± 0.39	61.650	<0.0005*
Tractor type IMT 577	7.61 ± 0.42	6.72 ± 0.29	13.620	<0.0005*
Tractor type Zetor 6341	6.22 ± 0.41	9.43 ± 0.44	44.568	<0.0005*
Combine harvester	7.06 ± 0.87	8.42 ± 0.43	15.790	<0.0005*
Small agricultural machinery	5.59 ± 0.43	8.43 ± 0.53	34.843	<0.0005*
Total	6.73 ± 0.28	7.33 ± 0.27	13.480	<0.0005*

Business forecasting in the following period for the surveyed companies was done in the form of systematized results in Table 2, where the assessment based on one factor (Tractor type IMT-533) is presented for all other factors in the following business period.

Table 2. Forecasting on the basis of an IT system based on the use of the basic tractor IMT- 539 in audit work related to management

	Beta	t	p
Constant	-	17.109	<0.0005*
Tractor type IMT-577	-0.603	-12.283	<0.0005*
Tractor type Zetor 6341	0.403	8.883	<0.0005*
Combine harvester	0.133	2.803	0.005*
Small agricultural machinery	-0.23	-0.519	0.604

The presentation of the results obtained in this study clearly shows that there is a difference in relation to the application of the IT support system in the work of audit work in agriculture, and that for all analyzed factors (Table 1).

However, we can point out that for the first two analyzed factors, i.e. tractors with less power, there are higher values in the case of applying the IT system, while for all other factors, as well as the overall evaluation, those values are lower than in the case of not using IT in the audit of the business of running and managing agricultural machinery (Table 2).

Prediction of the action of the application of the IT system in future periods based on the constant of the small tractor IMT-533 in relation to the other analyzed factors is possible and the obtained results are significant ($F=69.779$, $p<0.0005$),

CONCLUSION

The authors of this paper clearly indicated the existence of the following conclusions.

First, to see the existence of differences in the case of the application of IT systems in the audit operations of agricultural mechanization in relation to those entities that do not operate in accordance with those principles.

Another thing is that with smaller tractors in use, the existence of higher values can be seen in the case of applied IT factors influencing the revision of agricultural mechanization, while for all others, a drop in such values would be felt in favor of those entities that do not apply the benefits of the IT system in business.

Predicting the application of IT in the revision of agricultural machinery based on the small and basic tractor IMT-533 is possible and significant because we obtained values ($F=69.779$, $p<0.0005$),

Thus, this research fulfilled the expectations of the author, and in the future it is possible to extend the same to other forms of property use in agriculture, as well as to other countries, especially countries surrounding Serbia.

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PRIMENA IT SISTEMA U REVIZIJSKIM POSLOVIMA POVEZANIM SA EKSPLOATACIJOM POLJOPRIVREDNE MEHANIZACIJE U REPUBICI SRBIJI

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Abstract: U ovoj studiji Autori su pokazali da postoji snažan uticaj između primene IT sistema u okviru obavljanja redovnih poslova revizije poljoprivredne mehanizacije.

Autori su ustanovili da postoji značajna razlika u vrednovanju sistema koji uvažava i primenjuje IT sistem i koji daje podršku u radu preduzeća u oblasti revizije poljoprivredne mehanizacije. To je od velike važnosti u smislu donošenja krupnih upravljačkih odluka u redovnom poslovanju preduzeća.

Pored toga, Autori su ustanovili da se na osnovu često korišćenog traktora IMT-533, može se izvršiti predviđanje ostalih analiziranih faktora u okviru korišćenja podrške IT u redovnom poslovanju pravnih lica, jer postoji izražena važnosti ($F=69.779$, $p<0.0005$),

Key words: *IT sistem, revizija, poljoprivredna mehanizacija.*

Prijavljen:
***Submitted*: 31.07.2025.**
Ispravljen:
***Revised*: 29.10.2025.**
Prihvaćen:
***Accepted*:17.11.2025.**