



Research Article

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Increase of Consultants' Work Efficiency Using ICT at the Lithuanian Agricultural Advisory Service



Linas Stabingis*

Faculty of Bioeconomy Development, Vytautas Magnus University Agricultural Academy, Lithuania

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*Corresponding author: Linas Stabingis, Faculty of Bioeconomy Development, Vytautas Magnus University Agricultural Academy, Universiteto st. 10, Akademija, Kaunas r, Lithuania

Abstract

Information and communication technologies (ICT) allow increase of work efficiency of accounting data processing and business management. Traditional understanding of work efficiency most cases deals only with productivity of consultants, who are providing accounting data input, processing and preparation of reports for farmers. Less attention has been paid to changes of functional abilities of software, technical and communication equipment as well as behaviour of staff, providing consulting service. This article includes results of theoretical analysis of factors, influencing understanding of consultants work efficiency in face with higher needs and expectations of consumers. For empirical investigation there were used the data received during questioning of consultants working at the Lithuanian Agricultural Advisory Service who are providing processing of farmers' farms' accounting data, preparing various reports for tax office and other official institutions, providing analysis of financial situation of the farms and taking recommendations on improvement of farms management. As the results of made research shown changes that have occurred at the Lithuanian Agricultural Advisory Service over the last two decades due to modernisation of data processing software and modern ICT use.

Keywords: Consultants' Work Efficiency; Information and Communication Technologies; Lithuanian Agricultural Advisory Service

Introduction

Already in year 2006 Efendi, Mulig and Smith [1], summarising results of monographic investigation, revealed idea information technology plays a critical role in modern business, including accounting data processing. According Stabingis [2] the essential changes could be seen in business information processing from local to world wide networks use during the last years, including not only the technical data computing, but and communication platforms use inside and outside of institution. Research in ICT use for business traditionally focuses on data processing analysis, development of new and improvement of existing systems, leaving for further the investigation into users' behaviour in face with changes of technologies are used [3]. Reiter, Brunnström, De Moor, Larabi, et al. [4] revealed three main factors affecting success of ICT use for accounting data processing: the quality of the system as itself, the environment in which this system is functioning and the competences of users', who are using these technologies. According Kujala and Miron-Shatz [5] less attention researchers pay to the behaviour of specialists, including analysis

of their needs, motivations, expectations, and even moods, which, according author of this article plays very important role in effectiveness of functioning of these systems. The efficiency of the work of accounting specialists has not received serious attention in scientific publications of the last two decades. Scientific problem analysed in this article is the need for redefinition of the concept of work efficiency of accounting specialists in face of use of modern information and communication technologies and impact of these changes on behaviour of those specialists, who are working in role of advisors. The purpose of this research is to identify the factors, influencing advisors' work efficiency and to estimate their impact on clients' satisfaction and services spectrum expansion due to use of modern information and communication technologies at the Lithuanian Agriculture Advisory Service (LAAS).

Main tasks of investigation are:

- i. To analyse how the efficiency of consultants' work could be evaluated taking into consideration changes in needs and expectations of clients and use of modern ICT;

ii. To make analysis of changes that have occurred at the LAAS over the last two decades due to modern ICT use;

iii. To make estimation of impact of ICT use on satisfaction of clients and expansion of amount of services provided by the LAAS.

Table 1: Time, advisors in economics and finance working at the Lithuanian Agricultural Advisory Service are spending on implementation of their tasks during working week (source: on-line questioning conducted by the author of this article).

Description of the tasks advisors are responsible for	Average time advisors in economics and finance have been working in year 2019 by implementing tasks they are responsible for, in hours per week	Average change of time advisors in economics and finance allocated for their tasks implementation during last 5 years, in percent
Input data of transaction occurred in client farm or enterprise	22.47	-20.34
Preparation of financial accountability, tax reports and other kind documents	3.21	20.56
Preparation of statistical information for EU Farm Accountancy Data Network (FADN)	2.98	-67.6
Communication with clients on various issues, including checking transaction data, explaining reports or providing recommendations for improvement of farms or enterprises management	6.64	17.17
Development of advisors' professional qualification on legal and methodological regulation of accounting	3.7	32.14
Development of advisors' professional qualification in area of ICT use	1.9	31.58

Requirements for competences of consultants in economics and finance and impact of ICT use on efficiency of consulting work increase

Information and communication technologies (ICT) nowadays are used for solving different tasks. The economic and financial data processing is not an exception. ICT generate new and convenient possibilities for communication among various business and public sector institutions, including citizens. Unfortunately, as stated Taipaleenmäki and Ikäheimo [6] the rapid increase of influence ICT use effect on all aspects of processing of economical information, especially accounting data, has largely been ignored by scientists. The same it is possible to say and speaking about work efficiency of specialists in accounting and finance as well as consultants, providing services in this area. Seeking to understand the impacts, the modern ICT has on change of transactions' data processing and efficiency of work of specialists in accounting, it is necessary to analyse, how processes inside and outside economical units are influenced by using these technologies. According Stabingis [2], "information, generated by processing transactions' data, especially financial accountability, has very important role and allow shareholders to understand the financial situation of the economical unit in the past and to estimate the success of management. Practical experience show that accounting in nowadays has transformed from the system, which role is storage of the previous periods' data, to the system, which assist owners, managers and investors in decision-making process [7]. According Brazel and Dang [8] modern technology could reduce the time used for transactions' data processing, increase the quality and accessibility of summarised information. Discussing

an efficiency of work of advisors in accounting, it is necessary to deal not only technical and technological issues of information systems, which are used for accounting data processing, to follow legal and methodological requirements for preparation of various reports, but also wide range of competencies of advisors needed for successful dealing with clients [2]. On the base of analysis of scientific publications of Furtmueller, van Dick and Wilderom [9], Travica [10], Fu [11], Fu, Flood, Bosak, Morris and O'Regan [12], Bäcklander, Rosengren and Kaulio [13] and taking into considerations competences, which according to top managers of consulting company "CPA Practice advisor" [14,15] distinguish economic and financial advisors from others, allowed author of this article to formulate the advisable competences of advisors, which could allow them to act effectively:

- i. Ability to understand the business process, including ability to see "big picture", understand specifics of client' enterprise, legal regulation and so on;
- ii. Ability to make analysis as well as success in problem solving may be led only in case of use of multifaceted analysis;
- iii. Ability to use newest technologies, which are rapidly changing in both aspects – accounting data processing and communication with clients;
- iv. Knowledge of legal and methodical regulation affecting financial interests of clients';
- v. Skills in client service management, including maintenance of professional relationships, anticipation of clients' needs and avoiding lose of existing clients.

The results of publications' analysis allow pointing out that consultants in economics and finance have to do more than processing of accounting data and generation of reports. According Stabingis [2], consultants have to keep the leadership in their activity and to improve others competencies and abilities, which helps them and service company, they are representing, to be sure about greater opportunities in comparison with competitors.

Data and Methods

The data, necessary for this research, there were collected in May month of year 2020. The main sources of received data were: a) official publications on the institution's website and various other reports, b) on-line questioning of advisors in economics and finance, working at the LAAS and c) structural interviews with top managers from central bureau, responsible for organisation and control of advisors', working in district and municipal offices. An on-line questionnaire fulfilled fifty-six respondents from 202 advisors in economics and finance, working in district and municipal offices. Some respondents left some questions without answers. Ten respondents were working at LAAS less than five years and had consultants have not been able reliably assess changes in work efficiency over the required over 5 years period. Due to that, only answers from 38 questionnaires were used for investigation. Among those, whose responses were included, 28.9 percent advisors have been working at LAAS from five to ten years, 31.6 percent – from ten to fifteen years and 39.5 percent – over fifteen years. Advisors', working in district and municipal offices, there were asked to provide answers about time they spend by implementing tasks they are responsible for in year 2019 and about the change of time allocated for competing the same tasks compared to the period 5 years ago. Most attention was payed to time use for implementation of following tasks:

- i. Input data of transaction, occurred in client farm or enterprise;
- ii. Preparation of financial accountability, tax reports and other kind documents;
- iii. Preparation of statistical information for EU Farm Accountancy Data Network (FADN);
- iv. Communication with clients on various issues, including checking transaction data, explaining reports or providing recommendations for improvement of farms or enterprises management;
- v. Development of advisors' professional qualification on legal and methodological regulation of accounting;
- vi. Development of advisors' professional qualification in area of ICT use.

For processing of collected data, there were used methods of statistical analysis.

Results

The Lithuanian Agricultural Advisory Service (LAAS) was established in year 1993 and until now is developing a nationwide advisory system for producers of agricultural production – farmers' farms and agricultural enterprises. The central bureau of the LAAS headquarters is located in the Kėdainiai District. In addition to this, there are 46 district and municipal offices with more than 400 employees currently working in LAAS. They provide farmers and agricultural enterprises with complex services in processing accounting data, advising their clients in managing of finance, husbanding of animals, growing of cereals and forests and other actual areas (Description of the activities, 2020).

During the structural interview, the top managers from central bureau, responsible for organisation and control of advisors directly dealing with clients, reviled the services, which advisors, working in district and municipal offices, are conducting:

- i. Providing input of transaction's data or uploading from other information systems and processing of them using simple record or double record method;
- ii. Preparing the financial accountability, tax reports and other kind documents;
- iii. Preparing the statistical information for EU Farm Accountancy Data Network (FADN);
- iv. Supporting clients, who are using possibility of remote input and processing accounting data, – providing consultations on installation of necessary software, on solving problems accrued during data input and/or processing, checking the quality of financial accountability and other reports;
- v. Preparing and submitting to the State Tax Inspectorate the declaration on Income Tax of farmer as a physical person and members of his/her family;
- vi. Calculation of the wages and related taxes of employees, working at farmer's farm of agricultural enterprise (economical units).
- vii. Consulting clients on methodological issues of accounting data processing for economical units, who are making bookkeeping by themselves;
- viii. Representing, if necessary, clients' interests in controlling institutions – The State Tax Inspectorate, The State Social Insurance Fund and others institutions such as National Paying Agency, commercial banks, credit unions, suppliers and others;
- ix. Calculating and valuating economic and financial indicators of activities of agricultural units, including economic viability, explaining the significance of these indicators on the unit future results, providing recommendations for more efficient unit

management, comparing financial and economic indicators of the client's unit with the results of other units in the district and the state;

x. Providing detailed information on the support schemes and rules, the obligations that clients will have to fulfil after receiving support, preparing support applications and business plans;

xi. Performing administrative works of EU supported business projects – i.e. preparing documents for receiving the redundancy of applied measure, completing annual and final reports on projects implementation.

xii. The results of questioning of advisors in economics and finance, working at the LAAS, on time, spent for their tasks implementation during working week, presented in the table.

Commenting results of advisors' questioning, the top managers from central LAAS bureau additionally pointed out, that the number of clients has increased by an average of 10 to 30 percent over the past 5 years, but the number of consultants has increased by only about 10 percent. They noted that the average number of economical units served by one consultant only very roughly represents the volume of work performed by the advisor. Much more accurate indicator of the amount of advisors' work could be the number of transactions recorded, but this indicator, like the total number of economical units serviced by a single consultant, is commercial secret of the LAAS. Talking in general top managers of LAAS agreed, the constant increase of the area of arable land, number of breaded animals and other agricultural and not agricultural activities significantly increased the number of transactions have been registered per economical unit. However, the possibility to receive records of banking transactions in electronic form directly from commercial banking information systems and electronic invoices from some suppliers and buyers, significantly speeded up the work of advisors and allowed to avoid many data entry errors. Software that allows the automatic harvesting of 85% of the data necessary for preparation of spreadsheets for EU Farm Accountancy Data Network (FADN) directly from electronic accounting registers of agricultural units chosen as respondents of this network, significantly – i.e. by the 67.6 percentage points reduced the advisors' working time spent on implementation of this task. In addition, top managers pointed out that LAAS take full responsibility for security of the system, used for data collection and processing, and advisors take full responsibility for the quality of service they are providing. Taking into consideration requirements for personal data security and maintaining of the confidentiality of the stored data, the LAAS bookkeeping service covered by civil liability insurance.

Conclusions

Conceptually, measuring of work efficiency of consultants in accounting and finance is serious problem from both – theoretical and practical point of view. Nowadays it not sufficient calculation

of the time, spent for implementation of various tasks, or number of clients, to whom consultations were provided. It is important inclusion of such dimensions as quality of provided services, satisfaction of clients and positive impact of provided consultations or recommendations on success of economical units, who received these services. An advisors in economics and finance, working at Lithuanian Agricultural Advisory Service, are providing following services for farmers' farms and agricultural enterprises: input and processing of transactions data, preparing various financial reports and other documents for state and commercial institutions, preparing the statistical information for EU Farm Accountancy Data Network (FADN), supporting clients, who by themselves remotely process accounting data, consulting on methodological issues of bookkeeping, representing clients' interests in various institutions, calculating and valuating economic and financial indicators of activities in agricultural units, performing administrative works of EU supported business projects and some others. The increase of efficiency of advisors in economics and finance, working at Lithuanian Agricultural Advisory Service, have be seen from the decrease of share of routine work on transactions data input, from saved time for harvesting data for EU Farm Accountancy Data Network (FADN) and from increase of share of time, allocated for preparation of extra reports, communication with clients and development of professional qualification on legal and methodological regulation of accounting and ICT use.

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