УДК 378.147:005.95-051]:[005.92:004.63] DOI: 10.24144/2524-0609.2023.53.143-146

Udovychenko Olha

Candidate of Pedagogical Sciences, Associate Professor
Department of Computer Science
A.S.Makarenko Sumy State Pedagogical University, Sumy, Ukraine
udovich_olga@fizmatsspu.sumy.ua
http://orcid.org/0000-0002-3401-3251

Udovychenko Ihor

PhD Student of the Department of Computer Science A.S.Makarenko Sumy State Pedagogical University, Sumy, Ukraine ihor.udovychenko@gmail.com http://orcid.org/0009-0005-0591-6872

Semenikhina Olena

Doctor of Pedagogical Sciences, Professor
Department of Computer Science
A.S.Makarenko Sumy State Pedagogical University, Sumy, Ukraine
e.semenikhina@fizmatsspu.sumy.ua
http://orcid.org/0000-0002-3896-8151

RESULTS OF TRAINING FUTURE MANAGERS FOR THE USE OF ELECTRONIC DOCUMENT MANAGEMENT IN THE DIMENSIONS OF KNOWLEDGE AND SKILLS

Abstract. The article discusses the problem of training future managers to use electronic document management in knowledge and skills dimensions. Research methods: analysis of the regulatory framework to substantiate, the possibility of implementing electronic document management in ukraine; content analysis of internet sources to identify approaches to implementing electronic document management; comparative content analysis of arguments determines the results of training future managers for using electronic document management in the dimensions of knowledge and skills. When implementing electronic document management, the following knowledge and skills are essential for management specialists: knowledge of electronic registration of documents and the ability to carry it out, knowledge of document identification and the ability to identify copies of different formats; understanding of the functioning of the system of parallel execution of operations and the ability to perform similar functions using specialized installed software, as well as using cloud services; knowledge of the peculiarities of the movement of the document in the administration system, understanding of the responsibilities of the responsible person; ability to create/execute a document (task) at each moment of «life» of the document (process); knowledge of databases, features of their structure and management; ability to work with databases, perform effective searches, update data, make reports, avoid duplication; knowledge of methods of searching for documents in the database, the ability to use digital tools to search for documents by various attributes; understanding of hierarchy in the administration system, features of subordination of papers and access to them, knowledge of information security rules, ability to operate with documents with different statuses and attributes, ability to control the movement of documents.

Key words: managers, training of managers, specialists in management and administration, electronic document management, knowledge and skills of future managers, use of electronic document management.

Introduction. In public administration, there are flows of important information circulating. These flows directly relate to implementing managerial influences in the internal management circuit. Others reflect the relationship between state structures and the interests and needs of society and citizens. This process is complex. It operates with a wide variety of information that comes to government agencies, and their employees use it to manage members of society, influence certain strata of society, and impact the community as a whole. The information support system provides communication support to the authorities in all spheres of its public activity, collecting and covering various kinds of multi-purpose, statistical, analytical, and reference information. The development of the digital space in Ukraine takes place despite the challenges Ukrainian statehood is facing. In 2002, there was an initiative for the development of electronic Ukraine. It focused on creating an effective mechanism for communication interaction between authorities at all possible levels. This mechanism provided for the reduction of the weight of paper and the introduction of electronic document management. At the same time, ordinary citizens often face communication problems in a digital state, requiring

advanced training from both citizens for digital document management in general and management specialists in particular.

The article aim: to characterize the results of training future managers to use electronic document management in the dimensions of knowledge and skills. Research methods: analysis of regulatory framework to substantiate the possibility of implementing electronic document management in Ukraine; content analysis of internet sources to identify approaches to implementing electronic document management; comparative content analysis of arguments to determine the results of training future managers for using electronic document management in the dimensions of knowledge and skills.

Results and discussion. The regulatory framework for the introduction of electronic document management in Ukraine is based on several legislative acts and regulations, including:

 Civil Code of Ukraine: In particular, articles relating to the conclusion of contracts and the exchange of information are important for electronic document management;

 Law of Ukraine «On Electronic Document and Electronic Document Management» – defines the basic principles and rules for the use of electronic documents in various fields of activity;

- Law of Ukraine «On Electronic Digital Signature»
 establishes the legal status of an electronic digital signature (EDS) and the requirements for its use;
- Law of Ukraine «On Information» regulates
 access to information, including electronic information;
 Resolution of the Cabinet of Ministers of
- Resolution of the Cabinet of Ministers of Ukraine «On Approval of the Regulation on Document Management in Authorities and Administration» – establishes the rules for the organization of document circulation in state bodies;
- Law of Ukraine «On Personal Data Protection»
 regulates the protection of personal data during their processing in electronic format;
- Law of Ukraine «On Electronic Digital Signatures»
 regulates the use of electronic digital signatures to confirm the authenticity and integrity of electronic documents;
- Law of Ukraine «On the Fundamentals of the Digital Economy» – contains provisions that contribute to the development of electronic document management and digital transformation in various sectors of the economy;
- Order of the Ministry of Justice of Ukraine «On Approval of the Procedure for the Exchange of Official Documents in the Form of Electronic Documents between State Authorities and Local Self-Government Bodies» regulates the procedure for exchanging official documents in electronic format between authorities.

This regulatory framework creates a legal foundation for introducing of electronic document management in Ukraine. It regulates issues related to the legality and security of electronic documents and procedures.

Studies [2; 3; 4; 5; 10] revealed several facts related to the argumentation of the need for purposeful training of managers for electronic document management. In particular, information support of leadership is understood as a set of organizational, legal, and technical means, tools, and methods for the implementation of communication links between elements in the process of management and functioning of the management system through the optimal organization of databases and information arrays of knowledge [8].

The research [7] summarizes the results of scientific research in management and self-government. It is noted that the contribution to the study of the leading principles of public administration and local self-government was made scholars O.Batanov, V.Kravchenko, Y.Molodozhen, P.Vorona, et al. The theoretical, methodological, and practical foundations of the system of self-government in general and its instruments, in particular (N.Ruda, S.Sakhanenko et al.) have been developed. The authors note the role and weight of executive and representative local self-government bodies (Y.Baltsiy, O.Chernetska, O.Lazor, O.Sushynskyi et al), mechanisms of relations between local self-government entities (E.Serhienko, M.Voronov et al.), regulatory and legal support (Y.Deli, V.Marushchak et al.).

The primary condition for establishing the effective interaction mechanisms between public authorities and society is the informatization of all processes carried out in the daily activities of public authorities. One of the ways to achieve this goal is the introduction of electronic document management systems in public administration [6]. Electronic document management is a single mechanism for working with documents submitted electronically, implementing the concept of «paperless record keeping». In parallel with this term, the term «electronic signature» is used – this is an analog of a handwritten signature, which is a means of

protecting information that provides the ability to control the integrity and confirm the authenticity of electronic documents.

Scholars [1] substantiate the role of digitalization for society and the local community. Other researchers emphasize that the main tasks of digitalization «as the basis for improving the organizational and legal support for managing the development of the social sphere ... is: the creation of a system of legal regulation of digitalization based on a flexible approach to each aspect of the social sphere through the use of public assets based on digital technologies; creation of an infrastructure for data transmission, processing, and storage, mainly taking into account domestic developments; ensuring information security based on domestic developments during the transmission, processing, and storage of data, which guarantees the protection of the interests of the individual; creation of cross-cutting social programs based on the functioning of digital technologies» [9]. That leads to the conclusion of the importance and inevitability of the digitalization of management decisions and the introduction and widespread use of electronic document management in Ukraine, which actualizes the appropriate digital training of managers and the clarification of the knowledge and skills they need.

In general, workflow and document management in state institutions is one of the elements of a complex organizational structure that interacts with other management processes to achieve the global goal of ensuring state authorities' information and analytical activities. The effective functioning of the electronic document management system is based on a rational management structure, the definition of activities and tasks needed to be performed to achieve goals, mutual dependence, mutual subordination of employees. It is assumed that this will ensure:

- Increased productivity: Electronic document management allows you to process documents quickly and efficiently, which helps to increase staff productivity.
 The workflow becomes more streamlined and efficient;
- Cost reduction: Switching to electronic document management allows you to reduce the cost of paper, printing, and physical storage of documents. This can save a lot of money for the organization;
- Convenience and accessibility: Electronic documents are easy to find, edit, and share, making them more convenient for administrative staff. Documents are accessible from anywhere with internet access;
- Storage and archiving: Electronic document management allows you to automate the processes of storing and archiving documents, which makes them more reliable and accessible for audit and analysis needs;
- Reduction of errors: Electronic document management allows you to implement automatic checks and controls, which reduces the likelihood of human errors in document processing;
- Environmental benefits: Reducing the use of paper and printing resources contributes to the preservation of the environment;
- Ensuring data security: Electronic document management allows you to establish a high level of data and document protection, reducing the risk of losing sensitive information.

Training administrative staff on electronic document management can increase efficiency, reduce costs, and improve document processing security within an organization.

Basic principles of electronic document management as well as arguments in favor of the introduction of electronic document management and the regulatory framework adopted at the state level, make it possible to characterize the range of knowledge and skills of future managers related to the ability to support the electronic document management of a particular institution at a professional level:

- knowledge of electronic registration of documents and the ability to carry it out, knowledge of document identification and the ability to identify documents of different formats;
- knowledge of the functioning of the system of parallel execution of operations and the ability to perform parallel operations using specialized installed software, as well as using cloud services;
- knowledge of the peculiarities of the movement of the document in the administration system, knowledge of the responsibilities of the responsible person; ability to create/execute a document (task) at each moment of the "life" of the document (process);
- knowledge of databases, features of their structure and management; ability to work with databases, perform effective searches, update data, make reports, avoid duplication;
- knowledge of methods of searching for documents in the database, the ability to use digital tools to search for documents by various attributes;
- knowledge of hierarchy in the administration system, features of document subordination and access to them, knowledge of information security rules, ability to operate with documents with different statuses and attributes, and ability to control the movement of documents.

If we assume that a management specialist acquires such knowledge and skills, then we can talk about the positive and negative aspects of the professional activity of managers in the context of the problem of document management.

The electronic document management system has its drawbacks. As a rule, they are detected when implementing electronic document management systems. If the administration implements an electronic document management system, it will cause «stress» among employees without proper staff training. Additional negativity can be brought by the fact that the administration may incur costs for purchasing programs and systems document flow, as well as for

their implementation and subsequent maintenance. The main problem in the performance of the electronic document management system is the modernization of the technical infrastructure, including the purchase of the necessary equipment (uninterruptible power supplies, servers, etc.) and software. The problem is retraining specialists or training to work with the electronic document management system outside the educational institution. As a rule, users receive basic knowledge of working in the electronic document management system in groups formed depending on their role.

When Conclusions. implementing document management, the following is essential for management specialists: knowledge of electronic registration of documents and the ability to carry it out, knowledge of document identification, and the ability to identify records of different formats; understanding of the functioning of the system of parallel execution of operations and the ability to perform similar functions using specialized installed software, as well as using cloud services; knowledge of the peculiarities of the movement of the document in the administration system, understanding of the responsibilities of the responsible person; ability to create/execute a document (task) at each «life» moment of the document (process); knowledge of databases, features of their structure, and management; ability to work with databases, perform effective searches, update data, make reports, and avoid duplication; knowledge of database search methods and the ability to use digital tools to search for documents by various attributes; understanding of hierarchy in the administration system, features of subordination of papers and access to them, knowledge of information security rules, ability to operate with documents with different statuses and attributes, and ability to control the movement of documents. The process of implementing electronic document management, regardless of the field of activity of the institution, the number of its staff, and territorial affiliation, is a complex multi-stage process, which necessarily involves the appropriate training of specialists in management and administration. Forming the listed above knowledge and skills contribute to a more effective functioning of the administrative apparatus of any institution.

Список використаної літератури

- Omelyanenko V., Kudrina O., Semenikhina O., Zihunov V., Danilova O., Liskovetska T. Conceptual aspects of modern innovation policy. European Journal of Sustainable Development. 2020. Volume 9 (2). P.238–249.
- 2. Гребешков О.В. Інформаційне забезпечення діяльності підприємства: інформаційні джерела та джерела їх задоволення. Вісник Хмельницького національного університету. 2009. №6., Т.З. С.205–208.
- 3. Гриненко А. Соціальна політика: навч.-метод. посібник для самост. вивчення дисципліни / Київ. нац. економ. ун-т. Київ: КНЕУ, 2003. 309 с.
- 4. Денисенко М.П., Колос І.В. Інформаційне забезпечення ефективного управління підприємством. *Економіка та держава*. 2006. №7. С.19–24.
- Концепція реформування місцевого самоврядування й територіальної організації : розпорядження Кабінету Міністрів України від 01.04.2014 р. № 333-р. Офіційний вісник України. 2014. № 30. С.831.
- 6. Лазор О.Д. Інституціоналізація публічної самоврядної влади в Україні : монографія. Львів : ЛРІДУ НАДУ, 2009. 440 с.
- 7. Ларіна Р.Р, Владзимирський А.В, Балуєва О.В. Державний механізм забезпечення інформатизації системи охорони здоров'я: монографія / за заг. ред. В. Дорофієнко. Донецьк: ТОВ «Цифровая типография», 2008. 252 с.
- 8. Петренко С.М. Інформаційне забезпечення внутрішнього контролю господарських систем: монографія. Донецьк: ДонНУЕТ, 2007. 290 с.
- 9. Семеніхіна О.В., Харченко І.І., Шишенко І.В. Цифровізація як основа вдосконалення організаційно-правового забезпечення управління розвитком соціальної сфери на рівні територіальної громади. *Публічне управління і адміністрування в Україні*. 2021, Вип. 26. С.62–66.
- 10. Управління розвитком міста: навчальний посібник / В.Вакуленко та ін. Київ : Вид-во НАДУ, 2007. 389с.

Конфлікт інтересів. Автори підтверджують відсутність фінансових, особистих чи інших інтересів, що можуть розглядатися як потенційний конфлікт інтересів щодо публікації цієї статті.

Фінансування. Робота виконана за відсутності фінансової підтримки з боку будь-яких організацій.

Доступність даних. Це теоретичне дослідження не передбачає використання додаткових наборів даних.

Використання штучного інтелекту. Інструменти штучного інтелекту не використовувались при написанні цієї роботи.

References

- 1. Omelyanenko, V., Kudrina, O., Semenikhina, O., Zihunov, V., Danilova, O. & Liskovetska, T. (2020). Conceptual aspects of modern innovation policy. European Journal of Sustainable Development, 9 (2), 238-249.
- 2. Hrebeshkov, O.V. (2009). Informatsiyne zabezpechennya diyalnosti pidpryyemstva: informatsiyni dzherela ta dzherela yikh zadovolennya [Information support of enterprise activities]. Visnyk Khmelnytskoho Natsionalnoho Universytetu, 6(3), 205–208.
- Hrynenko, A. (2003). Sotsialna polityka [Social policy]. KNEU. (in Ukrainian).
 Denysenko, M.P. & Kolos I.V. (2006). Informatsijne zabezpechennia efektyvnoho upravlinnia pidpryiemstvom [Information provision of effective enterprise management]. Ekonomika ta derzhava, 7, 19–24. (in Ukrainian).
 Kontseptsiia reformuvannia mistsevoho samovriaduvannia y terytorialnoi orhanizatsii: rozporiadzhennia Kabinetu Ministriv
- Ukrainy № 333-r. (01.04.2014). [The Concept of Reforming Local Self-Government and Territorial Organization: Order of the
- Cabinet of Ministers of Ukraine] *Ofitsiinyi visnyk Ukrainy, 30* (in Ukrainian).

 6. Lazor, O.D. (2009). *Instytutsionalizatsiia publichnoi samovriadnoi vlady v Ukraini* [Institutionalization of public self-governing power in Ukraine]. LRIDU NADU (in Ukrainian).

 7. Larina, R.R., Vladzymyrskyi, A.V. & Baluieva, O..V. (2008). Derzhavnyi mekhanizm zabezpechennia informatyzatsii systemy
- okhorony zdorovia State mechanism for informatization of health care system. TOV "Tsyfrovaia ty-pohrafyia" (in Ukrainian).
- 8. Petrenko, S.M. (2007). Informatsiine zabezpechennia vnutrishnoho kontroliu hospodarskykh system [Information support of internal control of economic systems]. DonNUET. (in Ukrainian).
 9. Semenikhina, O.V., Kharchenko, I.I. & Shyshenko, I.V. (2021). Tsyfrovizatsiia yak osnova vdoskonalennia orhanizatsiino-
- pravovoho zabezpechennia upravlinnia rozvytkom sotsialnoi sfery na rivni terytorialnoi hromady [Digitalization as a basis for improving organizational and legal support for managing the development of the social sphere at the level of territorial community]. *Publichne upravlinnia i administruvannia v Ukraini*, 26, 62–66.

 10. Vakulenko, V. (Eds.). (2007). *Upravlinnia rozvytkom mista* [Management of city development]. NADU (in Ukrainian).

Статус статті: Отримано: 07.09.2023 Прийнято: 12.10.2023 Опубліковано: 26.10.2023

Удовиченко Ольга Миколаївна

кандидат педагогічних наук, доцент кафедра інформатики Сумський державний педагогічний університет імені А.С.Макаренка м. Суми, Україна

Удовиченко Ігор Миколайович

аспірант кафедра інформатики Сумський державний педагогічний університет імені А.С.Макаренка м. Суми, Ўкраїна

Семеніхіна Олена Володимирівна

доктор педагогічних наук, професор кафедра інформатики Сумський державний педагогічний університет імені А.С.Макаренка м. Суми, Україна

РЕЗУЛЬТАТИ ПІДГОТОВКИ МАЙБУТНІХ УПРАВЛІНЦІВ ДО ВИКОРИСТАННЯ ЕЛЕКТРОННОГО ДОКУМЕНТООБІГУ У ВИМІРАХ ЗНАНЬ ТА УМІНЬ

Анотація. Розглянуто проблему підготовки майбутніх управлінців до використання електронного документообігу у вимірах знань та умінь. Узагальнено проблеми розвитку адміністрування та цифровізації роботи адміністративних одиниць. Обгрунтовано, що при впровадженні електронного документообігу для фахівців сфери управління важливими є такі знання та уміння: знання про електронну реєстрацію документів та вміння це здійснювати, знання про ідентифікацію документа та вміння ідентифікувати документи різних форматів; знання про функціонування системи паралельного виконання операцій та уміння паралельного виконання операцій з використанням спеціалізованого встановленого програмного забезпечення, а також з використанням хмарних сервісів; знання про особливості руху документа в системі адміністрування, знання обов'язків відповідальної особи; уміння створити/виконати документ (завдання) в кожен момент «життя» документа (процесу); знання баз даних, особливостей їх будови та управління; уміння працювати з базами даних, здійснювати ефективний пошук, оновлювати дані, робити звіти, уникати дублювання; знання методів пошуку документів у базі, уміння використовувати цифрові інструменти для пошуку документів за різними атрибутами; знання ієрархії в системі адміністрування, особливостей підпорядкованості документів і доступу до них, знання правил інформаційної безпеки, уміння оперувати документами з різними статусами і атрибутами, уміння контролювати рух документів.

Ключові слова: управлінці, підготовка управлінців, фахівці з управління та адміністрування, електронний документообіг, знання та вміння майбутніх управлінців, використання електронного документообігу.