9. Raniwala K. Centralized channel assignment and routing algorithms for multi-channel wireless mesh networks / K. Raniwala, K. Gopalan, T. Chiueh // Mobile Computing and Communications Review. – 2005. – Vol. 8 (2).

10. Chiueh T. Architecture and algorithms for an IEEE 802.11-based multi-channel wireless mesh network / Raniwala, T. Chiueh. – Proc. IEEE International Conference on Computer Communications, 2005.

11. Chiu H. S. J-car: An efficient joint channel assignment and routing protocol for ieee 802.11-based multi-channel multi-interface mobile ad hoc networks / H. S. Chiu, K. Yeung, K.-S. Lui // Wireless Communications, IEEE Transactions on. 2009. – Vol. 8 (4). – P. 1706–1715.

12. Multiradio multi-channel routing metrics in ieee 802.11s-based wireless mesh networks – and the winner is ... / S. Ghannay, S. Gammar, F. Filali, F. Kamoun // Communications and Networking. – 2009. – P. 1–8.

13. Routing metrics and protocols for wireless mesh networks / M. Campista, P. Esposito, I. Moraes, L. Costa, O. Duarte, D. Passos, C. de Albuquerque, D. Saade, M. Rubinstein // Network, IEEE. – 2008. – Vol. 22 (1). – P. 6–12.

14. Krohn M. Aspects of roadside backbone networks / Wireless Communication, Vehicular Technology, Information Theory and Aerospace Electronic Systems Technology, 2009. Wireless VITAE 2009. / M. Krohn, R. Daher, M. Arndt and D. Tavangarian. – 1st International Conference on, 2009. – P. 788–792.

15. IEEE Standard for Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements – Part 11 : Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications. IEEE Std 802.11TM-2007.

16. Gupta P. "The capacity of wireless networks" / P. Gupta and P. R. Kumar. – IEEE Transactions on information theory, 2000.

17. Padhye J. "Estimation of link interference in static multi-hop wireless networks" / J.Padhye, S.Agarwal, V.N.Padmanabhan, L.Qiu, A.Rao, and B.Zill – International Mobile Conference, 2005.

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ОПТИМІЗОВАНИЙ ВИБІР КАНАЛУ ДЛЯ МУЛЬТИ-РАДІО IEEE 802.11 МАГІСТРАЛЕЙ

Ця стаття представляє Простий Алгоритм Магістрального Розподілу каналів (ПАМРК). Він використовується для оптимізації розподілу каналів в IEEE 802.11 бездротових магістральних мережах. У роботі відзначено деякі особливості у призначенні каналів магістралей і на прикладі показано роботу ПАМРК. Проведені дослідження доводять, що алгоритм працює дуже швидко і правильно.

Ключові слова: IEEE 802.11 призначення каналів, бездротові магістралі, mesh-мережі, оптимізація мереж.

УДК 512.8

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GENERAL ASPECTS OF CORPORATION MANAGEMENT BASED ON INFORMATION SYSTEMS

The article discusses the problems in the integrated management of the contemporary business activities, and automatization of the activities in divided office-systems. The author gives the recommendations for the rational, management of the enterprise activities in the light of the modern information systems application.

Keywords: Information system, office-system, technological cycle, administrative management.

Nowadays a field that does not use computers is scarce to find. The state management bodies and political organization, private companies, industrial, economic, financial, transport, health care, etc. The complexity of the tasks, time limit of their implementation, and requirements for raising the results quali-

ty determines the necessity for automate processing and management of the data.

In order to ensure the work efficiency the management of any organization and firm should process timely and complete information on their own and neighboring sectors, partners and competitors' market requirements. Currently the fast data procession is vital for taking reasonable and optimal decisions.

This notion is especially edgy alongside the development of the information and computer technologies, on the basis of the advancements in the net industry and the Internet. The idea of "paperless information" and "programming without a programmer" is becoming more tangible. The software technologies in American firms Microsoft, Sun Microsystems, W3C, Adobe, Oracle, etc. have demonstrated infinite means of a human and computer compatibility.

The concept for the automate management system of the organization has become significantly important, and this is due to the extension of the small and medium size business sector on the one hand, and necessity to fit into the globalization-dictated frames of severe competition, on the other hand.

Technological cycles of business operations are accompanied by the respective information management mechanisms that need improvement, especially considering the problem of the unification of the documents and general paper work, new legislative acts, and Internet/intranet problems.

The Office System generally represents a physically divided office element, an integrated entity of a classical management model of the shared data banks and administration, accompanied by the latest information, modeling/programming, technical/technological, linguistic-interface, legal, and organizational and methodological software's.

Office Systems may stand for any organizational entity with the respective paper work and other activities related to the operation of the organization. This can be accounting, personnel department, planning and marketing department, etc. each department handles numerous sub-tasks which means receiving the data, its procession and transfer in a document format.

Administration means not only the decision-making. The other important element is the activity related to the documentation: office administration work on the notification, management units current and prospect conditions. Such automatization formed the concept of the electronic office where computer is responsible for processing, transfer, storing, and search of the data. The concept of the electronic office can be potentially beneficial since it allows noticeable staff reduction, better con-

nection between sub-divisions, and quicker response in the administrative activities.

The main activities of the middle management staff are processing and storing various texts, and extraction of documents. Therefore, the major component of the electronic office is the software systems such as: complex text editors and means for working with electronic tables, diagrammed, charts, graphs, and presentations.

The not so insignificant component of the administrative management is the control of the management of orders and their execution; therefore, the quick distribution of the information flow via the data distribution channels has become especially crucial in the enterprise and office activities. This includes using the electronic mailing, teleconferences, video conferences, and presentations.

Since the points of the information source are decentralized, all personal computers used in the organization shall be connected in the network to facilitate the data reception. It is the only solution that will enable avoiding continuous update of the personal data base by the staff.

The operating staff may face other problems in the management process. For instance, the amount of the information keeps increasing, the commands to perform get more complicate, time limit for data processing decreases, the number of archives increases, and the operating staff's work load increases.

Currently, the most reasonable mean for automatization of the working procedure is as follows: 'we should not attempt to program the staff's behavior for all possible situations, but instead we should create the general information environment in which they will be able to cooperate (i.e. address the task), and exchange messages.' The importance of documents processing software should be highlighted and the office activities should be respectively automated and improved.

Organization of the documents operation is the crucial part of the processes management and the management tasks reception, and it makes a significant impact on the speed and quality of the operation [1].

These integral parts are closely linked to the documents processing software. The first and most crucial thing for achieving the economical affect is the quality of the information, whose indicators are not only the quality but the speed, completion, and value.

The documents processing software number of the personnel the document processing software is gradually becoming edgy; however, this is prone to problems:

1. The manager completely lacks the comprehension of the ongoing matters in the company;

2. The divisions that do not have the information about each other's activities cannot implement their work in cooperation.

In such circumstances, the customer's service quality eventually decreases; as well as the work efficiency and lack of the resources (human, technical, communication).

Before realizing the importance of improving the document processing software, the organizations make lots of mistakes [2]. The decisive problem in such situations is the selection of the automatization method. The most common decision is the automatization of separate working places: secretary, manager, and accountant; however, the shortcoming of this approach is lack of exchange of the electronic information among the staff and subdivisions.

The automatization of the paper work and procedures requires application of the most recent advancements in information technologies, such as: data base management systems; search and text analysis systems; documents (handwritten and typed) continuous flow scanning and identification systems; client-server environment; Internet/intranet.

A huge need in the future for the software and service in automatization of the paper work is caused by a number of reasons:
1. All organizations and the bulk number of the physical persons work with documents;
2. Better paper work management in enterprises and organizations is a real pre-condition for the increase of the management that is an edgy economic problem;
3. Classification of the staff and those who are responsible for the paper work is insufficient and requires its level to be raised;
4. Extremely big demand in customers for the automotive paper work software, and their integration in the working places.

Various conditions characteristic to modern enterprises make it absolutely essential to manage it rationally; this requires introduction of already existing standard software into the information technologies, or creation of specific software that will be one of the fundamental pre-condition for the economic development of an enterprise.

References

1. Шония О. Информационные технологии и безопасность / О. Шония, Т. Шерозия. – Грузия : Технический Университет, 2008.
2. Donadze M. Dialogic system projection of electronic schemes / M. Donadze, Z. Surmanidze // Материалы II-й Международной научно-практической интернет-конференции «Сучасні тенденції розвитку математики та її прикладні аспекти-2013». – Донецк : ДонНУЕТ, 2013. – С. 67–69.

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ДЕЯКІ АСПЕКТИ УПРАВЛІННЯ ПІДПРИЄМСТВОМ

У статті досліджується проблема інтегрованого управління сучасними видами ділової діяльності і автоматизації дій в розподілених системах. Запропоновано рекомендації раціонального управління підприємством.

Ключові слова: інформаційні системи, офісні системи, технологічний цикл, адміністративний менеджмент.