



## Methods for automating production processes and systems (on the example of the joint stock company Uzbekiston pochтasi)

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### ABSTRACT

The article focuses on the development of an automated system of processing and delivery of postal items by the Uzbek Post. Proposals and recommendations for the introduction of self-service automated complexes for the delivery of mail to the address have also been developed. The author scientifically substantiated his views on the seissues by analyzing the services of foreign postal enterprises in resolving various conflicts. The Republic of Uzbekistan includes postal facilities and postal routes that are continuously interconnected in the postal service, receiving, processing and delivery of periodicals. The postal service employs thousands of correspondents, remittances, parcels, and newspapers and magazines to millions of subscribers.

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## Ишлаб чиқариш жараёнлари ва тизимларини автоматлаштириш усуллари (“Ўзбекистон почтаси” АЖ мисолида)

### АННОТАЦИЯ

#### **Калит сўзлар:**

жараёнларни  
автоматлаштириш,  
автоматлаштирилган  
ахборот тизими,  
почта тармоқларини  
автоматлаштириш.

Мақола “Ўзбекистон почтаси” АЖ почта жўнатмаларини қайта ишлаш ва етказиб беришнинг автоматлаштирилган тизимини ишлаб чиқишга бағишланган. Шунингдек, почта манзилига етказиб бериш бўйича автоматлаштирилган ўз-ўзига хизмат кўрсатиш тизимларини жорий этиш бўйича таклиф ва тавсиялар ишлаб чиқилган. Муаллиф чет эл почта корхоналарининг турли можароларни ҳал қилиш бўйича

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хизматларини таҳлил қилиб, бу масалалар бўйича ўз қарашларини илмий асослаб берган. Ўзбекистон Республикаси почта хизмати даврий нашрларни қабул қилиш, қайта ишлаш ва етказиб беришда бир-бирига доимий уланган почта ва почта йўналишларини ўз ичига олади. Почта хизмати минглаб муҳбирларни иш билан таъминлайди, миллионлаб абонентларга пул ўтказмалари, посылкалар, газета ва журналларни тақдим этади.

## Методы автоматизации производственных процессов и систем (на примере АО «Узбекистон почтаси»)

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### АННОТАЦИЯ

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#### **Ключевые слова:**

автоматизация процессов, автоматизированная информационная система, автоматизация почтовых сетей.

Статья посвящена разработке автоматизированной системы обработки и доставки почтовых отправок АО «Узбекистон почтаси». Также разработаны предложения и рекомендации по внедрению автоматизированных комплексов самообслуживания по доставке почты по адресу. Автор научно обосновал свои взгляды на эти вопросы, проанализировав услуги зарубежных почтовых предприятий по разрешению различных конфликтов. Республика Узбекистан включает в себя почтовые отделения и почтовые маршруты, которые постоянно связаны между собой в почтовой службе, приеме, обработке и доставке периодических изданий. В почтовой службе работают тысячи корреспондентов, осуществляются денежные переводы, посылки, газеты и журналы миллионам подписчиков.

If we analyze the postal services of developed countries today, their activities are fully automated. In particular, users have free access to postal services, have the necessary technological equipment to provide postal services, and their activities are fully automated. Through the introduction of new information and communication technologies by the Uzbek Post, jobs will be automated and they will be connected to the corporate network of the Uzbek Post. This will speed up the service delivery process. This will improve the quality of services provided to the population. Automated workplaces should operate not only in urban and district centers, but also in rural post offices. Only then would the speed and quality of Uzbek postal services increase [1].

In the conditions of the modern information society, when the value of the transmitted information largely depends on the speed of its transmission, traditional means of communication, such as mail and telegraph, give way to faster and cheaper methods of delivering messages - mobile and 1P telephony, e-mail, other similar programs and applications and faxing. Nevertheless, the traditional postal service, telegraph and telephone do not give up their conquered positions, keep pace with the times, develop, offer new services to the population. Changes in the level of communication characterize, first of all, the development of technical progress, the society itself, the state [2]. Particular attention is paid to expanding the system of automated services based on today's requirements.

Analytical review of the current state and trends in the automation of processes in postal systems. It is shown that the analysis of the tasks and ways of improving and developing the SPS determines the need for the formation of the corresponding foundations of the theory, methodology and methods for solving problems of analysis, planning, parametric and structural optimization, synthesis and control of the SPS. It is noted that the adequacy of the results obtained is determined by the choice of models that should be based on the real nature of the processes occurring in the SPS. In this regard, it is necessary to be based on promising ATP and assess their future as the development of automated mail processing systems [3].

Currently, a number of works are being carried out in the regions to establish automated services. However, today the Uzbek Post has not developed a single automated system of services. Therefore, President Shavkat Mirziyoyev held a meeting on October 5, 2020 to reform the national postal system, noting that ensuring the stability of the postal system through specialization in the delivery of letters, parcels and goods, banking, finance and public services is an import antissue [4].

Over the past four years, the volume of press distribution by the joint-stock company “Uzbekistan Pochtasi” has decreased by 3 times, and its share in total press distribution is 13%. It was stressed at the meeting that officials should develop a press distribution system to support print publications, and launch an online subscription service for periodicals. The resolution of the head of state “On measures to radically improve the system of postal services” stipulates that from January 1, 2022, the procedure for licensing postal services in the territory of the Republic of Uzbekistan will be introduced. From December 1, 2020, the development of modern services, including “Hybrid mail” and courier services, banking, insurance and other services will be launched at all postal facilities in the country; By the end of 2021, the creation of a “National Online Trading Platform” that will allow “online” sales and delivery of products of local producers to customers, as well as the possibility of exporting goods to them; Introduction of self-service automated complexes (post offices) designed to receive postal items addressed to customers by the end of 2022; By the end of 2023 in order to create conditions for local producers to trade through e-commerce, gradually ensure the establishment of “Fulfillment Centers” in Tashkent, the Republic of Karakalpakstan and the regions. The postal services of each country also collided with the negative trends in the development of postal services [5].

While many efforts have been directed at solving their own problems, the organization missed the pervasive e-commerce boom and international delivery of parcels. Rapidly growing demand, inherited inefficient logistics and lack of automatic sorting facilities in Moscow only exacerbated the situation. The main two problems were manual sorting in airport postal terminals (the automation process began only in autumn 2012) [6]. In order to improve the quality of postal services, many countries have developed and implemented a single automated system of logistics centers using modern technologies to improve the logistics system through mechanization and technical equipment of sorting centers and nodes, as well as planning and optimization of transportation and delivery processes.

In the digital economy, the most important thing is to create a single information space, with the help of which all automated management systems of an organization, enterprise, region, and the country as a whole will allow prompt and timely exchange of

information, reduce dependence on the human factor, allow monitoring the operation of all objects (equipment, workplaces, service departments, etc.) [7]. The paper-based method of processing information used in postal services is inefficient, especially when there is a need to process large flows of information, on the other hand, postal services are composed of enterprises and new methods and tools of effective centralized management are required. The use of automated information systems is one such tool.

In conclusion, in many countries, automated mobile services are highly valued as the most profitable and fast growing type of service for national operators. One of the main tasks is the mechanization and automation of technological processes associated with the processing of mail and its transportation. In Uzbekistan, postal services must meet the needs of customers today, improve the quality of postal services and increase the competitiveness of traditional postal services by raising tariffs, increase revenue and introduce and develop new automated services for the development of traditional unprofitable postal services. By automating the processing of postal items in Uzbekistan, it will speed up and improve the quality of services provided.

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