Introduction of Digital Technologies to the Unified Centralized Dispatching Service

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Annotation: In this article, the methods of evaluating the effectiveness of the unified centralized dispatching service in the digital economy and advanced foreign experiences regarding its use are presented. It was noted that the focus on social innovation by improving the service of the unified centralized dispatching service to improve the lifestyle and welfare of the population has been effectively implemented in countries such as China, Japan, Malaysia, Qatar, Germany, Korea, Austria, India, Canada and the USA.

Key words and phrases: digital economy, central management, dispatch service, operational management activities.

INTRODUCTION. Centralization of services is based on the fact that it is aimed at compacting multi-level services and ensuring their multifunctionality. To date, the operation of the unified centralized dispatch service is widely used in foreign countries mainly in 4 areas: emergency situations, emergency announcements, communication operators, special care service.

In the context of the development of the digital economy, countries around the world are promoting issues such as health care, ensuring the integrity of border areas, guarding their borders, maintaining internal order, and social support and supply as aspects that should be covered by the digital economy. In this regard, countries such as China, Japan, Malaysia, Qatar, Germany, Korea, Austria, India, Canada, and the United States pay high attention to social innovation by improving the service of the world's only centralized dispatching service to improve the lifestyle and welfare of the population.

REVIEW OF LITERATURE (REVIEW OF METHODOLOGICAL MATERIALS).

The Indian economist divided the delivery of medical services into classifications, and listed them according to the market segment, type of service, forms of transport attached to it, and important management criteria[5]. According to him, the market of medical courier services promotes the transportation and logistic possibilities of medicines, medical tools and equipment, as well as medical samples. In this case, the main intermediary of the market is the dispatch service, not counting medical centers, pharmacies, security service centers.

By the year 2000, the description of emergency medical care was carried out in Germany, and the Italian economist B.Moschesso, experienced personnel in emergency medical care are divided into basic life support (BLS) and advanced life support (ALS) [4]. The dispatching service of communication companies has been improved through its digitization.

Taking into account the importance of studying the society's reaction to emergency situations and services aimed at ensuring the well-being of the population (medical, pharmaceutical, psychological support) due to the fact that the operation of the digital dispatch service is determined by the involvement of digital technologies in the field, the Austrian engineer-economist N. Strakovskii called the dispatch service directed to detailing. In it, the forms of detailing are in electronic written form, through TV shows and radio commentary, as well as by means of a live call. One of the biggest problems in the dispatching service of the "Dyuron" company, where the author worked, is that calls are put on hold. In this case, the dispatcher created a call to an idle operator due to the need to implement a call-to-action process. Thanks to this, "Dyuron" company managed to win the trust of many customers.

As a result, this company ordered communication companies for the production of digital operator tools[4].

Analysis of dispatcher work can be done using mathematical methods. U. Bakeev [7] used methods of queuing theory to analyze the operation of the energy dispatcher, then he used the study of logical diagrams of information processes to mathematically model the operation of the energy dispatcher in the distance of energy supply. The method allows to estimate the time characteristics of the process. It allows analysis of energy industry activity for elementary operators, which is its main advantage. Therefore, it seems appropriate to study the operative work of the energy dispatcher using this method, especially the operational work of the dispatcher in service requests.

ANALYSIS AND DISCUSSION OF RESULTS. Emergency response service is defined as an effective and coordinated integrated system for timely assistance, health care, and prevention of casualties in case of occupational injuries or losses of emergency workers[1]. The purpose of this service is to prevent casualties as a result of accidental emergency situations, as well as to improve the well-being of the population and eliminate means and situations that threaten the way of life. Its service can be divided into four main components: emergency medical assistance, public order service, referral to relevant specialists in an emergency (fire fighting, gas mains failure, power outages).

In the world experience, the emergency dispatch service was first widely used in 1957 in the United States at the suggestion of the National Fire Fighters Association in 1968. Calling 911 is digitized and operators are hired to answer each call. At the end of 1980, the first improved software packages were launched, which were named E911. It served as a model for the European Union in emergency management, and its number 112 was chosen. Digitization of emergency situations, provision of addressable services and formation of appeals started in the early 1990s.

Location-based service delivery, support, and digital monitoring of outcomes has become a universal experience for other industries and sectors. As a result of the improvement of its service through the description of linguistic requests, in the USA in 1996 there was an increase from 120 requests per day to 300 per day.

In the 1970s, the provision of emergency services evolved in the process of promoting the two-country model, the French-German and the Anglo-American models. The French-German model for emergency services is aimed at providing hospital stay and resuscitation procedures in emergency medical care, and it is intended to be used in ambulances, helicopters and ambulances. While their service is non-emergency, the dispatch service network is one. In this model, emergency medical care is considered as the main service[2].

In the Anglo-American model, emergency services include not only medical care, but also firefighting, security, and residential utility services aimed at improving the living conditions of residents. Its advantage is that this model works as a collective group, that is, it increases the ability of a person to extinguish the risks of loss [3].

Despite the fact that the comprehensive models of countries such as England, USA, France, and Germany are based on different approaches to service coverage, their goal of using emergency services is the same. Accordingly, for the purpose of alternative management of situations, by combining the above-mentioned models, it expands the possibility of forming different scenarios and operational strategies for different situations. As a result of the hybridization of these models, by 1995, telecommunications companies and insurance organizations began to offer emergency service centers, that is, single dispatch services.

Scenarios and strategies designed to prevent possible negative situations due to gas leaks in emergency situations can be covered by insurance or broadcast by telecommunications companies depending on the service sector.

In the USA, the company "DispatchHealth" was founded by M. Prater and K. Riddleberg in 2013, and their main service includes the use of a single centralized dispatch service. In this case, express ambulance and medical teams are known for conducting operative medical procedures and placing digital technologies in social networks and in the main hospitals in emergency medical care.

In 2020, the medical brigades that served the most customers during the Pandemic belong to this company, and initially their support consisted of online support and diagnosis. People who did not recognize remote medical examination in 2013 expressed confidence in using the services of this company. In doing so, the health care company managed each of its customers by installing devices on their wrists that display key health indicators in return for regular check-ups. They have also created a health monitoring service, which is called a centralized dispatch service. There are many advantages of this service, the first of which is that a medical representative calls the client and conducts a questionnaire or consultative interview to monitor his condition. Also, increasingly, according to the research of the dispatch service, the health of the customers is not only a medical examination, but also the events taking place in their lifestyle, which necessitated the involvement of security or order maintenance personnel, as well as representatives of emergency services. This situation led the company to establish cooperation with the country's defense and military infrastructure, as well as services aimed at improving emergency situations.

"G'G'G'G'G' company in the production of smart T-shirts, smart health watches, smart sports goods in Germany within the framework of the digital economy is not only influential with its creative products, but also based on the "hyper-communicative response" model of its unified centralized dispatch service aimed at ensuring the well-being of the population, air, water, land It is known for covering necessary processes such as identifying the digital address of the call, digitally connecting the referrals to the specialists when receiving calls from an identified individual. This company is considered to be a model company with a unique global experience, private activation of the dispatching service, its infrastructural activities mainly employing retired employees with high experience in emergency management (military, medical representatives, firefighters, etc.). The centralization of its dispatching service was the basis for the unification of representatives of other professions.

The Norwegian dispatching company "MPTD" serves to implement the dispatching service in everything. In particular, it is agreed to hire its own dispatchers as subcontractors for the purpose of receiving emergency situations, confectionery, food products and the like. An advantage of this is that the dispatcher is required to have at least 60% knowledge of the subject area or to be able to conduct marketing research. Developed a custom "dummy call" model and service to deliver needless assistance to multiple businesses. In order to call representatives of several sectors for immediate assistance, it is envisaged that one call will be made to the representatives of the relevant sector at the same time, and this process is compared to a conference call. All dispatchers who are aware will provide brigade assistance by giving an alarm.

In the development of the dispatching service, they take into account the plan of actions aimed mainly at health care, protection of the population from various unpleasant situations, as well as measures against emergency situations. This requires confidentiality, which is mainly implemented through confidential strategic plans and specialized scenarios that increase preparedness for various situations. In this place, in 2022, a medical courier service was created, this service is actually provided by specially prepared teams serving elite groups with special medical teams for a large fee. They have their own state-of-the-art medical technology, equipment, and medical care equipment, all of which are systematized within their flight deck. This feature was first established by Switzerland in 1988, and its model has been popularized by many heads of state. Today, the use of this service has been improved as a "medical courier service", and its service is carried out without segmentation of caste and social status of the population.

The unified dispatching service aimed at registering emergency situations and their liquidation was launched in 1994 under the "Safe City" system by calling the single number "112" among the CIS

countries. The concept of improving the safe city hardware software package was implemented in 2011 according to the decree of the President of Russia, and its standard was registered with the Russian national standard standard GOST R in 2016 under the number 22.7.01. This standard includes services such as security in emergency situations, single-duty dispatching service, and elimination of emergency situations in communal economy according to the legal normative acts of cities and regions [6].

Prevention of emergency situations and their elimination is carried out in cooperation with the state's unified dispatching service and its segments with daily and municipal management bodies. In order to improve dispatching service for single emergencies in the country of Russia, he focused on improving the areas that took the place of the service chain in its system. First, he technologically provided ambulances in polyclinics and medical institutions with a compact form of necessary equipment.

Then he applied chemical reagents in the service of firefighting machines by achieving cost-effectiveness and efficiency improvement, as well as digitalized electricity transmission networks, gas flow supply network, and population water supply network in order to eliminate the emergency situations that occur in the communal economy.

Calling the single 112 number is available in more than 12 languages, where an interpreter can receive calls via Skype video call, separate them with a description of their respective service, direct them and give a call signal.

The service for the deaf and dumb is taken into account in the video application, and their application makes up 4% of the total work service. ERA-Glonass emergency response system, mobile application has been developed for various emergency situations. In order to ensure the well-being of the population, it serves to obtain information about the current location of close relatives and people in a responsible relationship and to monitor their safety. In 2015, an SMS notification was sent to the mobile devices of emergency medical personnel in order to provide an operational response to emergency medical care, and it became an alternative strategic approach to the multi-step appeal and the time it takes. After all, it was observed that 2 out of every 3 appeals to the medical service were registered in Russia[7].

In 2019, monitoring of the medical aid service until it reaches the address referred to in the case of an appeal was established through SMS notification, which had a positive effect on increasing the efficiency of emergency management. Also, the number of callbacks for medical assistance was dramatically reduced by 30% [8].

Improvements in emergency situations and response in the US have been developing rapidly since 1990, and based on this, the NG911 integrated telecommunications system project was developed in 2022 and launched in early 2023 by Next Generation Advanced. Its service routine is carried along with IP, i.e. Secure Internet Protocol, and cloud networks, as well as routing to the nearest emergency call center.

CONCLUSION. Today, the role of telecommunications in the service of security is very important, and over the next 10 years, the use of advanced technologies such as the NG911 integrated telecommunications system will expand. All the technological capabilities of the NG911 integrated telecommunication system consist of advanced tools and technical instructions to ensure the well-being of the population. One such technology is "NEXIS Core", whose superiority and specialization is based on the integrated use of the opportunity of the telecommunication network in providing comprehensive human security.

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