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INFORMATION MANAGEMENT AS AN ELEMENT OF INCREASING THE EFFICIENCY OF THE AIRLINE CORPORATE ACTIVITY

The article examines the features of the introduction of information technology in the corporate governance system of the airline. The conceptual and categorical apparatus of management of corporate information activity of the airline is formalized. The vectors of development of the airline activity from the standpoint of introduction of information technologies in corporate management are determined. Practical recommendations for the introduction of a corporate information system as an element of improving the management of the airline.

Key words: airline, automated management, information management, corporate management, information system, management.

Problem statement and its connection with the most important scientific and practical tasks. Modern requirements for the functioning of the air transport industry of Ukraine require the formation of a fundamentally new socio-economic policy of companies aimed at ensuring sustainable development in the formation of the information society and the corresponding information economy. Today, the pace and direction of development of civil aviation largely determine the competitiveness of Ukraine's economy. According to world experience, in the conditions of intensification of competition in world markets the introduction of the latest corporate information technologies by domestic airlines, introduction of innovative approaches in the organization of own activity and interaction with clients, taking into account world tendencies in the activity acquires special value [1].

Introduction of the newest technologies and methods of management is a necessary condition of effective work of domestic airlines as an element of maintenance of competitiveness in the world markets of passenger air transportations. Due to the above reasons, corporate information systems for the management of medium and large airlines are a necessary tool to increase the efficiency and transparency of business processes and provide centralized support for management decisions at all levels and in all areas of the airline's business. Business process automation today is seen as the most effective management tool that minimizes costs and increases the profitability of the airline.

Referring to the experience of domestic airlines, it should be noted that the formation and development of a market management system in Ukraine requires fundamentally new approaches to business management of civil aviation, special attention in this process is the introduction of corporate information system as an element of corporate governance.

Analysis of recent research and publications. Problems of development of corporate information technologies were studied by such domestic scientists as G. Prokudin [2], L. Achkasova [3], R. Ilyenko [4], V. Evdokimov [5], Y. Kulaev [6], N. Orlova [7], L. Riznichenko [8], L. Rybalko [9] and others. The papers prove that information systems are powerful tools for creating more competitive and efficient corporations. Performing the functions of grouping,
Systematization, processing and analysis of data, they help to successfully implement the functions of corporate governance in the enterprise, and control the flow of information.

The interaction between information technology and corporations is very complex and is influenced by a large number of factors, including the structure of the organization, standard operating techniques, policies, culture, environment and management decisions. The development of corporate information systems today is due to the need for more detailed information about the market and consumers; collection and use of various information; the need for intensive mutual contact with the consumer, i.e., the establishment of internal communication; intensive development of information technologies. Therefore, the problem of implementing information technology and their role in modern corporate governance is quite relevant and requires further in-depth theoretical research.

However, despite the significant number of scientific developments in the direction of the formation of corporate information systems, directly the aspect of their implementation by civil aviation enterprises of Ukraine, no attention is paid, which actualizes the purpose of the study.

Relevance is the definition of previously unresolved parts of the overall problem. Referring to the above, it is proved that the requirements of the practice of civil aviation require improvement of corporate governance, which will ensure effective implementation of the airline's strategy, increasing its competitiveness through the introduction of modern economic system methods and tools for information processing and analysis.

Today, business process automation is becoming a way of survival for Ukrainian airlines. It is considered as a means of the most effective management, which minimizes costs and increases the profitability of the enterprise. Ukrainian airlines, as a rule, implement computer programs that allow you to automate the process of managing certain information flows: finance, accounting, marketing activities, customer relations.

However, the study revealed that the corporate information management system (CIS), as an element of management ideology that combines business strategy and advanced information technology is not adapted to the activities of domestic airlines and civil aviation in general. The gap between the demand for practice and the lack of theoretical and methodological justification for the mechanism of implementation of CIS by Ukrainian airlines highlights the problem and the need to solve it.

The purpose of the article is to theoretically substantiate aspects of the implementation of the corporate information system as an element of improving the management of the airline.

The objectives of the article are presented in the development of practical recommendations for the implementation of corporate information system in the activities of airlines of Ukraine, as an element of improving management ideology.

Presentation of the main research material. Achieving a high level of efficiency is possible through the development of information activities and the introduction of innovations in the use of information technology, which is possible only through in-depth and comprehensive analysis of aspects of the airline in the information economy, namely the study and analysis of leading Western airlines and introduction of new technologies, optimization of the organizational structure of the company.

A study of the business strategy of the world's leading airlines Qatar Airways, Singapore Airlines, ANA All Nippon Airways, Cathay Pacific, EVA Air, Deutsche Lufthansa revealed that corporate governance automation has provided airlines with a high level of competitiveness by responding quickly to market demands. Individual operations and corporate synergy, as information integration takes place at all branches of the management hierarchy [10].

Thus, the airline's corporate information system (CIS) is an information system that supports the automation of management functions at the airline and its representative offices in other regions or countries and provides information for management decisions. It implements a management ideology that combines the airline's business strategy and advanced information technology.
Automated management of the airline's activities in terms of foreign economic activity is an automated information activity aimed at ensuring the effectiveness of the airline's mission and objectives in passenger transportation, cargo and mail, both at check-in and outside, according to the network and aircraft schedule.

The scheme of the corporate information system of FEA management of the airline's activity is presented in fig. 1.

![Diagram](image)

**Fig. 1 Elements of effective management of the airline's activities using CIS**

[Source: developed by the author]

Effective management of the airline's activity with the help of the corporate information system allows to control the main directions of activity [6]:

- Internationa and national regulation of air transportation
- Effect of market environment factors (competition, pricing, demand, supply, etc.)
- Management of the airline's activities using a corporate information system

- Transport services market research. Estimation and forecasting of demand for
- Development, coordination, approval of tariffs and other prices for airline services

- Preparation, implementation and evaluation of promotional activities
- Participation in the development of quality parameters of transport services and control over the preservation of quality standards

- Preparation, signing and control of contracts (agreements) with other airlines, airports, clientele, etc.
- Regulation of aircraft scheduling parameters (carrying capacity, traffic frequency, ease of docking, etc.)

- Observance and control of application of normative - legal acts regulating air transportations
- Ensuring mutual settlements between airlines and settlement operations with airports, agents, etc.

- Carrying out commercial operations related to
- Ensuring competitive advantages in relevant market segments

- Aircraft affreightment (charter)
- Insurance

- Pretentious work with clients
- Information support of processes and subjects of the external environment

- Management and control over the effectiveness of commercial activities
– qualification not only of flight, engineering and technical personnel, but also of managerial staff (managers);
– condition of the aircraft park;
– pursue a flexible tariff policy taking into account seasonality and optimization of service class;
– exercise precise control over expenditures and revenues;
– implement automation of all production processes;
– inform and control the airline's offices in other regions and countries.

The corporate information system of airline management is a complex system, interdependent on many external and internal factors, impossible without a systematic approach, the main premise of which is that the system is considered as a whole, taking into account the relationships of its components.

The complexity of using a systematic approach to airline management using a corporate information system is the result of two circumstances: the first - limited formal description of many areas of operations, the second - the system is in a dynamic state under the constant influence of external and internal factors. The proposed concept takes into account the main criteria that characterize the economic efficiency of airlines in accordance with ICAO recommendations.

The system hierarchy of the organization of effective activity of the airline provides for the allocation of three levels of control and management decisions: flight - airline - airline, which is based on the primary reporting flight information for each flight. The methodical recommendations on adaptation of the system of calculations of the basic indicators of commercial activity to the requirements of ICAO are offered in the work.

The variety of factors that affect the efficiency of the airline's operating activities, the difficulty of taking into account the share of each of them on the formation of profitable and expenditure parts of flights, the impossibility of accurate assessment of certain factors in calculating individual items of income and expenses, modern computer technology.

In conditions of fierce competition, to improve the financial position of national airlines by ensuring effective management of the airline using CIS and reduce competition with foreign airlines operating in the Ukrainian market of international division of labor, it is necessary to recommend the use of cost and cost reduction mechanism to attracting passengers and customers and increasing profitability.

The use of CIS in the management of the airline, as an element of the overall management system, significantly affects the efficiency of its aviation activities, integrating the interaction of units and its relationships with suppliers, consumers and the competitive environment. needs a scientifically sound approach to its solution.

Airline management is a set of techniques, forms and methods of targeted influence on the airline in order to achieve specific goals [6].

When distinguishing between efficiency and effectiveness, it is easy to distinguish two types of effective management of the airline using CIS:
– effective leadership that ensures promising, innovative development and strategic success;
– effective leadership that allows you to temporarily achieve short-term goals.

The basis of effective management of the airline with the use of CIS is to determine the effectiveness of its activities. Performance appraisal is based on common methodological principles for determining performance.

As the basic general principles of management of activity of airline in practice, define the following [6]:
– in the process of assessing the effectiveness of operational management it is necessary to combine scientific and technological analysis with commercial, financial, economic, social to ensure a comprehensive approach to their implementation;
– when assessing the effectiveness of operating activities, the comparison of costs and results must be carried out taking into account changes in the value of money over time;
– uncertainty and risks must be taken into account in carrying out operating activities.

Thus, based on the above, it is proved that the successful operation of the airline's management system is largely determined by the effectiveness of its organizational support. The system of organizational support for managing the efficiency of the airline is an interconnected set of its internal structural services and departments that provide development and management decisions on certain issues of planning, formation, distribution and use of profits and are responsible for the results of these decisions.

It is determined that information management is the main activity of the airline, which is associated with the provision of air services for passenger transportation, development of routes and flights, choice of aircraft type, class of transportation, provides the bulk of revenue and is the main source of value. Therefore, CIS-based management is a priority for the management of domestic airlines.

**Conclusions.** Introduction of the newest technologies and methods of management is a necessary condition of effective work of domestic airlines as an element of maintenance of competitiveness in the world markets of passenger air transportations. Automation of corporate management of the airline, as evidenced by the practice of world leaders in air transportation, allows you to get significant financial and economic benefits and optimize resource potential.

The analysis of literature sources allowed to specify that the problem of formation of corporate information systems, directly the aspect of their implementation by the enterprises of civil aviation of Ukraine, is not paid attention.

It is determined that the airline's corporate information system (CIS) is an information system that supports the automation of management functions at the airline and its representative offices in other regions or countries and provides information for management decisions. It implements a management ideology that combines the airline's business strategy and advanced information technology. The elements of the corporate information system of airline activity management are substantiated, as well as the directions of activity, which it allows to control effectively.

It has been proven that automated corporate information management is the main activity of the airline, which is associated with the provision of air services for passenger transportation, development of routes and flights, choice of aircraft type, class of transportation, provides the bulk of revenue and is the main source of value. Therefore, CIS-based management is a priority for the management of domestic airlines.

**Prospects for further research in this area** are the specification of financial and economic methods for assessing the effectiveness of the implementation of corporate information system in the management of domestic airlines.

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ІНФОРМАЦІЙНИЙ МЕНЕДЖМЕНТ ЯК ЕЛЕМЕНТ ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ КОРПОРАТИВНОЇ ДІЯЛЬНОСТІ АВІАКОМПАНІЇ

У статі досліджено особливості впровадження інформаційних технологій в систему корпоративного управління авіакомпанії. Формалізовано поняттіно-категорійний апарат управління корпоративною інформаційною діяльністю авіакомпанії. Визначено вектори розвитку діяльності авіакомпанії з позиції впровадження інформаційних технологій в корпоративне управління. Запропоновано практичні рекомендації щодо впровадження корпоративної інформаційної системи як елементу вдосконалення управління діяльністю авіакомпанії.

Ключові слова: авіакомпанія, автоматизоване управління, інформаційний менеджмент, корпоративне управління, інформаційна система, управління.

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