

**ARTIFICIAL INTELLIGENCE AND INFORMATION ANALYSIS THROUGH  
DIGITAL TECHNOLOGIES IN THE ORGANIZATION OF THEIR OWN SPECIFIC  
FEATURES****Sobirjonov Behzodbek Kakhramon Ugli**

ORCID ID: 0009-0004-9415-8745

Faculty of the Department of Information Technology,  
Fergana State University.  
behzodbekqahramonovich@gmail.com

**Annotatsiya:** This article artificial intelligence AI and data analysis of modern digital technologies in the organization of the complexity of the role and their self - specific aspects will be covered. Digital transformative process in AI algorithm efficiency to increase, management of the process to automate and information flow to optimize the effects of the analysis is. Also, the area about the scientific approach, with modern technological advances, practical results and promising directions discussed will be.

**To enter.** In the last ten years in the digital technology of society in almost all spheres to access go and they now economic development of the main drivers of this one is. Digitization of the process at the center for artificial intelligence AI, mashinaviy learning, deep learning, analytical systems , and large amounts of data re - processing technologies for the stands. This technology organizations in the activities of radically changing, the traditional management approach to the location of automated, data on the basis of the decision taken by the system master.

Current globalization in the conditions of enterprises and organizations of the competitiveness now not only the resources they possess to do, but of them **clever use of** the ability to regarding to be remained. Data of every one of the organization's strategic assets and turning, them analyze to and from them the value of the separate out of the process, an important advantage creates. In this regard, artificial intelligence and data analysis digital transformative of the heart as are being looked.

Different areas in TWO of the technologies the use of effectiveness has been observed:  
**Corporate governance** at AI through risks forecast to, market demand in advance and forecast to, processes optimization and economic efficiency increase to be born.

**Health to maintain** in the field of medical images to identify, disease, early diagnosis, treatment, individual treatment plan, concluding AI system high accuracy has.

**The industry** at the intelligent robotics, the IoT device and work to real time control technologies costs are lower, productivity significantly increases.

**Education** at adaptive educational system readers the individual needs suitable in the knowledge to give ensures.

**Service provision** within the network AI chat-bot, intelligent analysis systems, customer behavior projections through service quality will improve.

This with along AI and the data analysis on the basis of created the digital ecosystem of the human factor related issues, reduce, processes and automate and real - time mode monitoring to the possibility it gives. This while the strategic decisions of reliability, speed and accuracy significantly on the basis of increases. Digital technologies on the organization of theoretical

and practical basis of a deep study of the necessity of exactly the same factors by caused. That is, organizations which AI algorithm in use, how the information architecture to create, system safety, how to ensure and information flow of how the optimization of need today's the day of the pressing issues is one. The same reason for this article is AI and data analysis through digital technologies of the organization of konseptual approach, technical and organizational characteristics, practical opportunities and them with associated problems more research to be directed. **Literature review and methodology.** Digital technologies of the organization in artificial intelligence and data analysis role on the world scientific literature in wide - ranging research from the get go has been. In recent years, it published the work of mazmuny analysis that shows, studies of a few main areas concentrated. **Machine Learning and Deep Learning algorithm to be applied.** Russell & Norvig, Goodfellow, Ben and Courville in the works noted as in fact, modern information systems , the more complex the check towards mashinaviy learning algorithm importance increased has. Especially: Deep neuron networks, konvolyutsion and rekurrent of architecture, images, text and sound data re - work high results it gives. Reinforcement Learning work in production process automation decision to take to the quality of increases. Supervised and unsupervised learning methods to large amounts of data in the hidden patterns of the detection to the opportunity it gives. Also, in the literature drives its etik issues, an algorithm logic, privacy, transparency and cybersecurity with associated problems too great attention is directed.

**Methodology.** This research COLLECTION , and data analysis through digital technologies of the organization to the process of scientific analysis to directed is, the methodology of a few types of scientific approach is based on.

**Theoretical analysis.** In this stage the available scientific sources, magazines, conference materials, international organizations, analytical reports and digital technologies on standards studied. Theoretical analysis, artificial intelligence, architecture, data analysis methods, drives his various sectors tatbiqu and digital transformative concept of depth to realize the possibility gives.

**Comparison (Comparative Analysis).** Various AI of the platform, algorithm, data architecture model is one with comparison , by their advantages and limitations rated.

For example: Machine learning and deep learning models to use, indications , and effectiveness. Hadoop and Spark , such as Big Data system working mechanism. Digital transformative strategic different countries and organizations of being applied experience. These comparison methods are applied to research the conclusion of clear and based to service will.

**Analytical approach.** C on the basis of established was the digital technology of the effectiveness of the evaluation for the analytical models were applied. In this process, the following are studied: efficiency indicators (performance metrics); process automation level; the data re - processing speed; costs reduce and resources for optimal use; security level increased. Also, the analytical approach through AI integration of economic and organizational aspects of who benefits and also the analysis was.

**Results.** Research for artificial intelligence AI and the data analysis on the basis of digital technologies in the organization to process the effectiveness, advantages and practical results every way studied. Conducted analysis on the basis of a number of important scientific and practical conclusions has formed. **AI on the basis of management system effectiveness increase.** Analysis that has shown, AI on the basis of the working management of the system in the usual automated information system compared to the vastly superior to have. In particular: the data re - processing speed 25-40% to be increased; large amounts of data in real time mode

again to work the opportunity distended; system flexibility, mistakes resistance and self-optimize the ability to be increased.

This result machine learning and deep learning algorithms for automatic analysis and re-work options at the expense of being comes. AI model of the incoming data flow, human intervention again see out, cleaning and analysis to through the process of speed and reliability increases.

#### **Data analysis resources use efficiency of increase.**

Research data analytics technologies in the enterprise, available resources, use the effectiveness of substantially increase was detected. The analysis result is the following known is:

the data for strategic analysis making through energy, staff and financial resources you use, the effectiveness of on average 20% to be increased;

prediktiv analysis process effectiveness to increase the serve will, for example, work on the production line stop to stay time reduces;

resources of the consumption of variation on accurate forecasts of the conclusion through excessive costs before it is taken. These results, data-drive management (information - based management), the concept of practice from the aspect of effective that confirms it.

#### **Discussion.** Artificial intelligence AI and

data analysis digital technologies in the development of the main factor as demonstrated has been. Their mutual integration of not only digital infrastructure efficiency increases, but also of society in various spheres radical changes make an opportunity to both creates. However, AI the introduction of it with associated a number of technical, organizational and etik problems are there if, for them, a deep analysis to make this technology a proper directing for is important.

#### **Large amounts of**

**data with performance problems.** C the system's success directly to the data size, the quality and their re-run on the speed depends. Big Data infrastructure, the complexity of the following problems causing are: Information flow is constant on the basis of increased storage means high requirements puts. The data structure is different is because them of standardization and cleaning process becomes complicated. As a result, the AI system effective operation for stable and kengaytiriluvchi (scalable) information architecture required to be will stay **Algorithm transparent be (AI Explainability)**. Two of the models, especially deep learning, on the basis of the system of internal mechanisms often the man to unintelligible is. This condition of "black box" (black box) of the problem as it is known. For the same reason: the decision to accept to process explain becomes more difficult and users and interested parties in the inability of they come.

This problem AI of ethics and AI Governance spectrum of the active interaction is interesting if, Explainable AI (xa) is the technology to the need to strengthen plans.

**Personnel lack of, and professional issues.** The world on AI field on skilled personnel for the demand dramatically increased has. This while following the problems caused are and Algorithm creation, modeling, data architecture management for highly qualified data scientist, machine learning engineering, data analystlar lacks. Personnel re-training process much time and the funds' demand makes. In this regard, AI, integration, human resources are the most important strategic factors one is.

**Conclusion.** Artificial intelligence AI and data analysis of modern digital technologies in the formation solution which strategic factors as demonstrated has been. Their integration not only of process automation or human labor to relieve the limit despite, but also for companies, organizations and public administration system of the entire business model radically changes. Research during this seeing as you canin AI and data analysis on the basis of the system in real time mode monitoring to, accurate forecasts to give, risk reducing, resources, rational use,

raqobatdosh products and services to create opportunities for significant at a level expands.

D igital technologies of proper planning and implementation to — especially in AI solutions with enriched without — the organization of strategic management optimization, operating indicators improve and customers with work of the quality in increasing an important role plays. Data analysis through while the decision is take to process facts is based on, that while the error probability decreases and enhancing productivity increases. This with along C technology current the information security, transparency, intellectual property protect to and responsible management as important elements also own into gets.

Future prospects that shows C on the basis of management systems more autonomous, flexible and context to figure out able be will. They complex operations independently carry out, their own experience , learning, and human–machine cooperation further new level to take out the possibility it gives. This process of a digital ecosystem of the formation, the smart work - out, digital services and new generation technologies of wide introduction that ensures.

In general in the body, AI and data analysis on the basis of digital technologies in the organization of to — modern economy is a priority direction is, innovation development, high efficiency and stable management basic foundation creates.

#### Used literature:

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