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International Activities on the Digital Platform with Artificial Intelligence in Virtual Space

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Abstract:

Digital high-tech platforms provide comprehensive solutions for user interaction on a wide range of issues from various areas of activity. The use of digital high-tech platforms is open and controlled by users. They are beginning to have a major impact on global governance in many areas. Global technology platforms can serve regional integration structures and bring together regional and national development institutions. Building a global architecture of technology platforms will make international activity more stable and less crisis-prone. To do this, technology platforms at different levels of global governance must be compatible and interoperable under common rules of interstate agreements. Technological platforms for international action and management will allow the economic, environmental, climate and many other problems to be quickly solved and controlled by the world community.

1. Introduction

The global architecture of digital technology platforms has a single information virtual environment. Each digital technology platform brings consumers and suppliers together to meet requests for offers. Information processes on the platform are algorithmized and systematized based on criteria by smart artificial intelligence.

Information processes of technological platforms are formed and analyzed by ensembles of intelligent agents. The activities of the country's companies are digitized and a multilevel digital model of the state's companies is formed, detailed to international transactions.

Participants in a single information environment supported by technology digital platforms can conclude contracts that can be tracked. Digital tools significantly expand the management of processes, people, companies and international interactions in general.

2. Digital Platform Approach to International Activities

Digital platform forms of technological interaction and organization of international activities are becoming more widely used. The emergence of digital platform forms of technological interaction deepens the specialization of all participants. In the areas of management, the use of digital technology platforms is especially noticeable.

The extensive implementation of technology platforms allows you to optimize business processes; automate management to develop new approaches to international interaction; use and release resources effectively; control environmental production.

A variant of a flexible organization is a production virtual corporation. Virtual Digital Corporation reflects material production and real interaction. To maneuver its structure and resources, it uses digital copies of real (physical) resources. Modern digital technologies simulate international interaction in real time.

The qualitative factors of digital technology platforms are collective consciousness and a cooperative form of interaction. Modern tools allow you to transparently and correctly assess and take into account the contribution of each of the participants in the chain. All participants are participants in a smart contract of a single information environment. The virtual corporation registers the objective contribution of each participant. The remuneration is automatically distributed among them according to their contribution.

The digital technology platform has geographical convergence, has a geographically isolated association of virtual corporations of several industries, between which mutually functional synergies arise. For example, the BRICS technology platform is being formed for international industrial cooperation. The technology platform implements the idea of a multilateral market on an international scale, stimulating the development of competition and deepening specialization. The platform digital approach effectively expends material resources and human resources through strong artificial intelligence with optimal technological singularity, based on the experience of safe risks and the criteria of the benefit and preference of society and man [1,2,3]. Through an international technology platform, it is possible to contract international activities, carry out financial activities, take into account national, corporate and individual capabilities, accompany and service other activities.

The development of a digital high-tech platform for international activity requires additional scientific and technical developments in all areas of production, environmental and social activities in order to expand international cooperation.

Technological platforms of international cooperation enable the world community to cope effectively and quickly with emerging difficulties in all spheres of life. States, which account for 65 percent of all harmful emissions, will be able to reduce them and garbage dumps of food that grow every year using digital high-tech platforms.

International technological platform interaction is formed on coordination and regulation. Governments harmonize and jointly develop and technology platforms ensure compliance at the international level. Regulation of global interaction through technology platforms is appropriate based on international ISO standards [4].

All countries can take part in the creation of a digital high-tech platform for international activities. Leaders of different countries should direct digital high-tech platform digital activities to preserve the nature and life of future generations.

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3. Hybrid Synergistic Artificial Intelligence Based on Live Information

The intelligence of man and society is adequately reflected in the virtual format by television tools. Modern artificial intelligence systems allow you to realize creative and professional competencies based on live information in a real environment. The synergy of natural intelligence of a virtual format with artificial intelligence in a real environment allows you to form hybrid artificial intelligence that fully reflects natural intelligence in a real environment based on live information. Hybrid synergistic artificial intelligence is implemented on the basis of an ethical criterion and a standard of ethical intelligence, a criterion of rational benefit and a standard of cognitive adaptive intelligence, a criterion of risky situations and a standard of critical technological state [5,6]. The development of creative and professional competencies is carried out by intelligent agents in simulation mode in virtual format [7]. Intellectual agents are represented in the image of a person performing creative and professional acts. The virtual format allows you to observe the implementation of competencies by creative and professional acts with television tools and bring them to full implementation. In the real environment, intelligent agents appear to be digital twins in the form of human-like robots with intelligent artificial intelligence, adaptive behavior, cognitive thinking and technological singularity. Virtual tools control creative and professional processes based on live information, simulation data, and accumulated experience based on criteria and standards.

4. Building Virtual Living Environment Platform

4.1. Presentation of Information by Smart Ethical Communicative-Associative Cases

Live information is presented in a virtual professional environment by intelligent ethical communication-associative cases, both attributes and sets of entities, processes, relationships, and parameters, characteristics, methods, human digital twins, knowledge, skills, behavior, images and other objects of harmonious interaction of ensembles of intellectual agents. For example:

1.	Presentation of information on creative acts
2. Use case name	Smart ethical communicative-associative communications of ensembles of intellectual agents
3. Application domain	work and life
4. Deployment model	hybrid
5. Objective(s)	Harmonious and universal application of large ensembles of intellectual agents
6. Narrative	The standard case defines the properties, characteristics and attributes for harmonious self-organization of large ensembles, consisting of a set of functionally interfacing intellectual agents with competent images of smart hybrid competencies. They determine the state of stable equilibrium that arises from the correct distribution, combination, interaction of intelligent agents. To obtain the necessary result, competent images of intelligent agents with smart hybrid competencies are formed. The functions of interaction of intellectual agents of the ensemble are set. According to the law of gold cross-section, the critical value of intellectual agents is determined. Then the functional self-organization of the ensemble is carried out by achieving synergy in the functions of interaction of intellectual agents. Then the

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	ensemble adapts to a specific environment. As a result of harmonious functional self-organization, in accordance with the standard case, a target ensemble of intellectual agents is formed to obtain the necessary result.	
7. Stakeholders and stakeholder considerations	Highly technological producer and user. Legal and ethical aspects of interaction with society	
8. Data Characteristics	Simulations, logical models, real time, streams of professional images, smart, regulated attribute,	
9. Key performance indicators (KPIs)	AI management of professional cooperation process. Improve of synergy between agents.	
10. Features of use case	Task(s)	1 .Safe interaction of technocratic societies. 2 .Building high-tech synergies of technocratic societies.
	Level of automation	high automation
	Method(s)	Ethical language, behavioural and active communication and utility and preference criteria
	Platform	Supercomputer with Strong Artificial Distributed Intelligence.
	Topology	Distributed Modular Interconnect Topology.
11. Threats & vulnerabilities	Ethical aspects of interaction with society.	
12. Challenges and issues	Reputation, responsibility, security.	
13.Trustworthiness considerations	Security and ethical models of harmonious self-organization of large ensembles. A universal approach to the ethical and safe use of intellectual agent ensembles with language behavioral and active communications. Based on new data, confirm that the ensemble of intelligent agents performs trained professional process.	
14. Use of standards; standardization opportunities	Creative process management technology can itself predict the optimal timing of individual stages based on accumulated information about their labor intensity, choice of equipment loading route and competencies of intelligent agents.	
15. Relevant SDGs	Industry, Innovation, and Infrastructure	

4.2. Professional Images of Intelligent Agents

Professional images and behavioral actions of intellectual agents belong to a particular profession. They are the cognitive component of intellectual agents. The component composition of the professional image and behavioral action is defined by the attributes of living information of the real environment.

Attributes of living information of the real environment: objects, objects, materials, things, processes, phenomena and other aspects of the physical world have various properties, characteristics and characteristics. Properties are represented by qualitative attributes. Characteristics appear to be meaningful attributes. The qualitative attribute can be visual or sound. A significant attribute can be represented by a number, language sense, visual or sound image, mathematical or behavioral action, or algorithm. Significant qualitative attributes are big data of smart artificial intelligence, connected in time, space and subject area. The attributes of the fields of economics, industrial industries, technologies and professions help to build and train the ensembles of intelligent agents to manage, make decisions and make recommendations to specialists and managers based on an ethical standard.

4.3. Smart Hybrid Intelligent Agent Competencies

Intellectual agents have psychological, analytical, research, language, professional and behavioral hybrid competencies [8]. Psychological competencies are determined by psychological requirements, as functional states of the system that play a role in the functional organization of the system. The state of optimal operation of the system in a variable environment is achieved by adapting to it and functional determination of environmental needs.

The research competence of intellectual agency ensembles is aimed at mastering and obtaining new professional acts for working with various sources of various processes of the virtual environment, conducting experimental observations and finding the most rational solutions. Research competencies develop in the course of professional activity. The development of research competencies is carried out on the basis of key competencies. The key competencies are various universal tools and formalized methods such as comparison, analysis, systematization, generalization, classification, causation, etc. Key competencies allow, in collaboration with a specialist, to implement a new activity for which there is not yet a complete set of accumulated funds to build links with the environment.

Analytical competencies, through the analysis of live information, extend the requirements for specific professional processes to target processes. To do this, knowledge and data on targeted professional activities, skills in managing its data are used to evaluate the positive and negative aspects of the proposed actions. Analytical competencies include consistent analysis of data and emerging situations to see the cause and effect of their use on effective decision-making.

Analysis of data and identification of key and additional actions allows to build a chain of causes and consequences of targeted professional processes of complex situations. By conducting a comprehensive analysis of their data and, analyzing complex situations, they build targeted professional activities.

5. Conclusions

The smart hybrid competencies of large ensembles of intelligent agents of digital technology platforms can surpass the analytical, research, psychological, language, professional and behavioral abilities of human intelligence in some areas of activity. Their hybrid competencies allow them to fully interact with society in many areas of life. The analytical and research capabilities of intelligent agents and their ability of ensembles to process big data require the use of powerful supercomputers to solve the pressing problems of mankind. Then platform large ensembles of intellectual agents with smart hybrid competencies will gradually develop the professional abilities necessary to solve the emerging problems of society. Neurointerfaces will help professionals provide international platform activities through optical, wireless and mobile networks.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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