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# The Mechanism of Public-Private Partnership in Managing the Development of Inclusive Technologies and Professions of the Future in the Era of Technological Advancement

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# **ABSTRACT**

The study aimed to enhance the social well-being of persons with disabilities through their employment in inclusive technologies and professions of the future. The research conceptual design methodology, engineering, and heuristic analysis to synthesize mechanisms of public-private partnership for inclusive technological development. Results indicated that the systematic design of inclusive technologies and professions strengthens social integration and creates sustainable labor opportunities for individuals with disabilities. This is because coordinated government, cooperation between business, educational institutions generates a supportive ecosystem for inclusive innovation. The study contributes to the theoretical framework of inclusive labor management by defining five hierarchical levels of design and implementation. The impact lies in providing a structured model for developing inclusive employment systems aligned with technological progress and social responsibility.

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#### 1. INTRODUCTION

The relevance of this study arises from the need to establish methodological foundations for designing a mechanism of public—private partnership in managing the synthesis of inclusive technologies and professions of the future. Such a mechanism is essential for ensuring social well-being through increased employment opportunities for persons with disabilities within the emerging technological order. Inclusive technologies enable individuals with physical or mental limitations to participate productively in labor markets. To increase the employment rate of persons with disabilities, it becomes necessary to develop new inclusive technologies and professions that align with the evolving labor demands of technologically advanced societies.

A review of literature shows growing attention to conceptual design methodologies for complex systems and social responsibility in business and innovation management (Sonin, 2021; Filippova, 2018; Zizhen, 2025; Rustamova & Trapeznikov, 2019; Saliyenko & Sokolov, 2023). In recent years, researchers have highlighted the importance of developing educational and employment frameworks to support persons with disabilities. Contemporary scholars have expanded the concept of corporate social responsibility toward an inclusive paradigm known as ESG+I, emphasizing inclusion as a core component of sustainability and technological progress (Glushchenko, 2025a, 2025b). Technology, as emphasized in classical management theory, connects organizational functioning with objectives and human capital, reflecting the dynamic relationship between technological innovation and social adaptation.

Within the context of modern technological advancement, there is an urgent need to design a new paradigm of cooperation between the state and business to foster inclusive professions and technological systems. Previous analyses demonstrate that the evolution of technological orders (from primitive tools to artificial intelligence and nanotechnology) marks a continual transformation of human labor (Glushchenko, 2025b, 2020; Glazyev, 2016). Consequently, inclusive technologies must integrate physical, digital, and social dimensions to create equitable employment systems. This study, therefore, aims to develop a conceptual and methodological framework for a public–private partnership mechanism that governs the synthesis of inclusive technologies and professions of the future. The novelty lies in applying system engineering to social inclusion, while the impact contributes to strengthening human-centered innovation and sustainable social development.

# 2. METHODS

A systematic analysis of the processes of technological development was conducted to explore the mechanism of public—private partnership in managing the evolution of inclusive technologies and professions of the future. The study applied the principles of conceptual design methodology, system engineering, and scientific—technical forecasting to identify the structural elements and stages of inclusive technological synthesis. Within the framework of system theory, the technological order is conceptualized as a systemic association of production technologies, forms of labor organization, and financial structures that together define the trajectory of social and economic progress (Glushchenko, 2020).

Historical and comparative methods were used to trace the evolution of technological orders, from primitive human innovation to the current era of nanotechnology and artificial intelligence (Glushchenko, 2025b; Glazyev, 2016). Each technological stage was examined as a paradigm shift that redefines both labor structures and social inclusion mechanisms. The study viewed the twenty-second technological order as a stage of integrated technological convergence, characterized by nanotechnology, neurotechnology, unmanned systems,

robotics, and intelligent management ecosystems. This phase, therefore, offers new possibilities for developing inclusive workplaces and adapting professions to diverse human capabilities.

In addition to historical analysis, the research employed systemic and heuristic approaches to conceptualize inclusive technologies as algorithms or sequences of operations that allow individuals with disabilities to participate effectively in the production process. The synthesis of inclusive technologies involved decomposing organizational tasks into discrete, adaptable operations suitable for workers with varying physical or cognitive abilities. The conceptual design stage thus served as a foundation for building a scalable model of inclusive professional development.

Finally, the study incorporated institutional analysis to understand the interaction between state bodies, private enterprises, and social organizations within the proposed public—private partnership model. This interaction forms a multi-level system of collaboration that includes conceptual, organizational, resource, and educational components. Through this multi-method approach, the research established methodological and philosophical bases for designing inclusive technologies and professions of the future in alignment with the principles of sustainable and equitable technological progress (Filippova, 2018; Glushchenko, 2025a).

# 3. RESULTS AND DISCUSSION

We present the conceptual framework of the public—private partnership (PPP) mechanism that governs the development of inclusive technologies and professions of the future. This framework integrates the functions of the state, business enterprises, educational institutions, and social organizations into a coherent system designed to enhance the employment and social well-being of persons with disabilities. The model demonstrates that the PPP mechanism acts as a structural bridge between social policy and technological innovation, ensuring that scientific progress contributes directly to the inclusion of diverse groups in the labor market.

At the core of this mechanism lies the principle of system engineering, which interprets technological and social phenomena as interrelated components of a single socio-technical organism (Sonin, 2021). In this context, inclusive technologies are not only instruments of production but also social constructs that enable equitable participation in economic processes. The mechanism of cooperation between the government and private sectors is conceptualized as a multi-layered system in which policies, incentives, and innovations align to produce inclusive employment opportunities. The model draws upon the philosophy of the twenty-second technological order a stage of global development characterized by the convergence of nanotechnology, neurotechnology, robotics, and intelligent management systems (Glushchenko, 2020). These technologies collectively redefine the boundaries of work, learning, and social participation by enabling remote communication, digital accessibility, and adaptive automation.

The analysis shows that inclusive technological development depends on a hierarchy of design levels, each contributing to the formation of an effective partnership. The first level of this hierarchy represents conceptual design, which formulates the philosophy, ideology, and methodology guiding the entire process. The next levels involve the creation of interaction mechanisms, the establishment of institutional and organizational frameworks, and the allocation of resources for implementation. The final level consists of education and training, which ensures the sustainability of inclusive practices by preparing professionals capable of managing and operating within such systems (Glushchenko, 2025b). This layered structure

ensures that inclusion is not treated as an isolated social policy but as a permanent dimension of technological evolution.

**Table 1** summarizes the hierarchical organization of this mechanism. The five levels interact dynamically, forming a feedback loop in which conceptual design informs practice, and practical outcomes generate new theoretical insights. The study confirms that this iterative cycle promotes long-term adaptability, allowing the PPP mechanism to evolve in step with scientific and technological progress.

**Table 1.** Hierarchical Levels of the Public-Private Partnership (PPP) Mechanism Design.

Level	Designation	Description of Function	
1	Conceptual Design	Defines the philosophical and theoretical foundations of inclusive technological development, establishing the vision, purpose, and value orientation of the PPP mechanism.	
2	Interaction	Develops digital and managerial tools that connect government	
	Technologies	institutions, private enterprises, and educational organizations to coordinate inclusive innovation.	
3	Organizational	Establishes real partnerships, pilot projects, and networks that	
	Embodiment	implement inclusive employment practices and adaptive technologi in specific sectors.	
4	Resource Provision	Ensures material, financial, and institutional support for inclusive	
	and Evaluation	initiatives, including subsidies, tax incentives, and performance	
		assessment indicators.	
5	<b>Education</b> and	Provides continuous development of human capital through	
	Training	universities, training centers, and resource methodological hubs to	
		sustain the inclusive technological ecosystem.	

*Note.* Adapted from Glushchenko (2025c). This hierarchical structure forms an iterative system linking theoretical design and practical implementation of inclusive technological partnerships.

The structural composition of the mechanism encompasses several interdependent components. Among these are the philosophy of inclusive labor, the ideology of synthesis, state policy, corporate social responsibility, tax incentives, financial instruments, and educational infrastructure (Filippova, 2018). Each of these elements fulfills a distinct yet complementary role. The philosophy of inclusive labor defines the ethical dimension of the system, establishing human well-being as the ultimate criterion of success. The ideology of synthesis shapes the cognitive foundation for cooperation among diverse stakeholders by creating a shared understanding of inclusion as both a moral duty and an economic strategy. Governmental policies and legal frameworks provide formal legitimacy to inclusive employment, while private enterprises operationalize these ideals through the adoption of ESG+I standards that extend environmental, social, and governance commitments to include the principle of inclusion.

Within this integrated structure, technology serves as both a cause and a consequence of inclusion. The classical management theories assert that technology connects organizational goals with human potential. The present study confirms that inclusive technologies function precisely in this capacity; they transform social objectives into operational processes by enabling people with disabilities to contribute their abilities in technologically mediated work environments. This transformation is not merely technical but also cultural, as it redefines traditional notions of productivity and competence. In the new technological order, the human resource base expands to encompass previously marginalized groups, thereby enriching the diversity and creativity of the workforce.

**Table 2** outlines the principal structural elements that ensure the effective functioning of the partnership mechanism. The combination of policy, finance, and education within a single system guarantees the material and intellectual resources necessary for inclusive technological synthesis. The results demonstrate that synergy among these components creates a stable environment in which innovation and social responsibility reinforce each other.

**Table 2.** Structural Components of the Inclusive Partnership Mechanism.

Component	Core Function	Expected Impact
Philosophy of	Establishes ethical foundations that prioritize	Promotes human-centered
Inclusive Labor	human dignity, equality, and accessibility as	innovation aligned with social
	guiding principles for technological and	well-being.
	economic systems.	
Ideology of	Shapes a shared understanding among	Strengthens mutual
Synthesis	stakeholders that technological progress and	responsibility and cooperation
	social inclusion must develop jointly.	between the state and private
		sectors.
State Policy and	Provides the legal and institutional	Guarantees legal legitimacy and
Legislation	framework regulating inclusive employment,	state support for inclusive
	financing mechanisms, and social protection.	innovation.
<b>Corporate Social</b>	Expands corporate governance through	Enhances corporate reputation,
Responsibility	inclusion, linking ethical goals with	stakeholder trust, and market
(ESG+I)	measurable business outcomes.	competitiveness.
Financial and Tax	Creates economic incentives such as tax	Ensures the economic
Instruments	reductions, grants, and preferential loans for	sustainability of inclusive
	enterprises implementing inclusive	initiatives.
	technologies.	
<b>Educational and</b>	Facilitates training, knowledge transfer, and	Builds long-term capacity and
Research	innovation within universities and	fosters an inclusive academic
Infrastructure	methodological centers.	culture.

*Note.* Compiled from Filippova (2018) and Glushchenko (2025a, 2025b, 2025c). These structural components collectively operationalize the PPP mechanism and translate inclusive philosophy into practical technological management.

The philosophical dimension of this research emphasizes that inclusion must be understood as a central category of technological progress rather than as an auxiliary concern. Philosophy represents the highest form of conceptual design because it provides the axiological and teleological orientation for action (Glushchenko, 2025a). By grounding inclusion in philosophical principles (such as equality, dignity, and mutual responsibility), the PPP mechanism transforms from a policy tool into a civilizational strategy. The ideological aspect complements this philosophical basis by providing a narrative of shared progress. It asserts that inclusive technological development harmonizes the interests of the state, business, and society, ensuring that economic modernization proceeds hand in hand with humanistic advancement.

The findings reveal that inclusive employment within the twenty-second technological order depends heavily on the ability of societies to design technologies that are both efficient and accessible. The ongoing digital transformation has replaced many forms of physical labor with cognitive and communicative tasks, thereby opening new employment niches for people with limited mobility or sensory functions. However, such opportunities will remain theoretical unless supported by deliberate design and institutional support. The study demonstrates that spontaneous or purely heuristic approaches to inclusion are insufficient.

Instead, inclusive technology must be the outcome of systematic synthesis grounded in conceptual coherence, legislative regulation, and economic motivation (Glushchenko, 2025b).

A significant contribution of this study is the elaboration of the ESG+I concept as a strategic instrument for integrating inclusion into corporate governance. Traditional ESG frameworks focus on environmental stewardship, social responsibility, and corporate governance, but they often neglect the specific dimension of inclusion. By adding the "I," researchers (Glushchenko, 2025a) establish a model that connects ethical obligation with measurable economic outcomes. Companies that embrace ESG+I principles improve their resilience, brand reputation, and customer loyalty because inclusion generates trust and innovation (Zizhen, 2025). The reasoning behind this outcome is straightforward: when organizations reflect social diversity within their workforce, they gain access to a wider range of perspectives and problem-solving strategies. This cognitive heterogeneity translates into creative capacity, which, in turn, enhances competitiveness.

The application of ESG+I also creates tangible economic benefits. Inclusive firms may obtain tax advantages, preferential financing, and public recognition. Governments benefit from reduced social spending and increased productivity, while individuals experience improved living standards and self-realization. Thus, the PPP mechanism converts ethical imperatives into systemic efficiencies. The alignment of public and private incentives ensures that inclusion is both socially desirable and economically rational, confirming that social responsibility can coexist with profit orientation (Rustamova & Trapeznikov, 2019).

The study further identifies education as a vital channel for institutionalizing inclusion. Inclusive universities and resource training and methodological centers (RTMCs) play a decisive role in bridging theoretical design with practical application. Through project-based learning and research collaboration, these institutions empower students (including those with disabilities) to engage directly in the synthesis of inclusive technologies. Such educational initiatives embody the very essence of the PPP mechanism: cooperation between the state, academia, and business to address societal challenges through innovation. The pedagogical process (Glushchenko, 2025b) involves seminars, brainstorming sessions, and innovation games that encourage participants to design prototypes and propose solutions relevant to inclusive employment. By doing so, universities become incubators of inclusive culture as well as laboratories of technological creativity.

The social impact of educational integration extends beyond individual empowerment. As literature observed (Filippova, 2018), education that interweaves sustainability and inclusion enhances both the quality and the reach of technological advancement. Graduates who are trained within inclusive frameworks bring to the workforce not only technical expertise but also empathy and a sense of civic duty. This combination strengthens institutional cultures and contributes to long-term societal stability. In the empirical dimension of this research, the university environment serves as a microcosm of the inclusive society that the PPP mechanism seeks to build at a national scale.

A concrete illustration of the theoretical propositions is the example of the "Remote Security Guard Partner," a profession synthesized under the inclusive model. In this configuration, an able-bodied guard performs physical patrols while a partner with limited mobility provides analytical support through real-time video and communication technologies (Glushchenko, 2025b). The system allows the remote partner to monitor potential threats, record incidents, and assist in decision-making, effectively turning surveillance into a collaborative task. The outcome is a dual benefit: the physical guard gains safety and efficiency, while the remote worker attains meaningful employment without the

constraints of traditional workspace limitations. Employers profit from enhanced reliability and reduced operational risks, and the state advances its goal of increasing employment among people with disabilities.

This example demonstrates how inclusion and technology intersect to create new value systems. It also illustrates the dynamic interaction among the three pillars of the PPP mechanism: state policy provides regulatory support, business supplies technological resources, and educational institutions prepare qualified personnel. The interdependence of these pillars ensures the sustainability of inclusive innovations. Moreover, the profession of the remote security guard partner symbolizes a paradigm shift from exclusion to integration. It shows that disability does not signify incapacity; rather, when technology is designed inclusively, it becomes an amplifier of human potential rather than a divider of abilities.

The socio-economic implications of these findings are profound. The persistently low employment rate among young people with disabilities undermines social cohesion and economic growth. The implementation of the PPP mechanism addresses this problem by creating systemic pathways for participation. Inclusive employment contributes to labor diversification, reduces dependency ratios, and fosters moral renewal within organizations. On a macroeconomic level, it enhances national competitiveness by mobilizing untapped human capital. These outcomes correspond to the objectives of the United Nations Sustainable Development Goals, particularly Goal 8 on decent work and economic growth and Goal 10 on reduced inequalities.

Financial analysis supports the claim that inclusion yields quantifiable returns. Companies recognized for inclusive practices enjoy higher trust from investors and consumers, which translates into better market performance (Saliyenko & Sokolov, 2023). Governments, by supporting inclusive enterprises through loans or tax relief, indirectly stimulate innovation while reducing the fiscal burden of social welfare programs. In effect, inclusion becomes both a moral and an economic multiplier. The reasoning is that the inclusion of previously excluded groups introduces new perspectives, stabilizes communities, and encourages sustainable consumption and production patterns outcomes that benefit society as a whole.

Nevertheless, the transition toward a fully inclusive technological system is not without obstacles. One persistent difficulty is the absence of an integrated theory of technology synthesis that incorporates the social dimension. Current design practices remain fragmented, often relying on ad hoc solutions or heuristic experimentation (Glushchenko, 2025b). This lack of theoretical cohesion limits scalability and replication. Moreover, many business leaders still perceive inclusion as a charitable expense rather than as a strategic investment. The study suggests that overcoming these perceptions requires consistent policy signals, public—private incentives, and continuous dissemination of successful case studies.

To accelerate adoption, the state should strengthen the regulatory and financial environment that supports inclusive innovation. Possible measures include tax reductions for inclusive enterprises, preferential credit for technology adaptation, and grants for educational institutions engaged in inclusion-related research. At the same time, the private sector must internalize the long-term advantages of inclusion, recognizing that socially responsible innovation fosters resilience in times of technological disruption. Educational systems should remain adaptive, integrating inclusive design thinking into curricula for engineering, management, and social sciences.

Looking ahead, the evolution of inclusive technologies is expected to intertwine with developments in artificial intelligence, remote sensing, and human-machine interaction. These advancements can provide personalized solutions that accommodate the specific needs of individuals with various physical or cognitive conditions. Because inclusion is both a

social value and a technological frontier, it should occupy a central place in national innovation strategies and international cooperation agendas. The PPP mechanism developed in this study provides the structural, methodological, and ethical framework necessary for this transformation, ensuring that the twenty-second technological order becomes not only a period of rapid progress but also an era of expanded human possibility.

The dynamic interplay between state policy, corporate behavior, and public values constitutes the driving force of the proposed partnership mechanism. For the mechanism to achieve sustainability, these three elements must evolve together synergistically. The state defines the legal and institutional framework for inclusive innovation, ensuring that human rights (particularly the right to work) are upheld in the new technological context (Glushchenko, 2018). Corporate entities contribute technological and financial resources, transforming the state's vision into operational programs. Civil society and organizations of persons with disabilities ensure feedback, monitoring, and legitimacy, making the system responsive to real social needs. The harmony of these components enables the PPP model to function as a self-regulating socio-technical system rather than as a set of isolated initiatives.

A key result of this research is the identification of inclusion as a paradigm of systemic efficiency. By integrating people with disabilities into high-tech industries, societies not only promote equity but also enhance overall productivity. The reasoning is that inclusive environments naturally generate new patterns of creativity and problem-solving. When diversity is embedded within teams, the cognitive variety leads to a greater number of innovative solutions. This correlation is supported by earlier management studies emphasizing that the most adaptive organizations are those capable of integrating heterogeneous perspectives. Thus, inclusion acts not as a constraint but as an accelerator of technological and organizational advancement.

However, realizing this potential requires a deliberate transformation of institutional culture. Many enterprises continue to view inclusive employment as a legal or moral obligation rather than as a developmental strategy. To change this perception, governments can implement incentive systems that make inclusion economically attractive. These may include preferential public procurement for inclusive enterprises, reduced social taxes, or access to innovation grants. Aligning social policy with market incentives is one of the most effective methods of embedding ethical practices into business models (Saliyenko & Sokolov, 2023). The PPP mechanism formalized in this research represents such an alignment, converting moral imperatives into measurable performance outcomes.

The research findings emphasize that technological advancement itself becomes a means of social justice when guided by inclusive design principles. Technologies developed for universal accessibility benefit not only people with disabilities but all users by improving safety, ergonomics, and efficiency. For example, user interfaces originally designed for visually impaired persons often enhance usability for broader populations. This phenomenon (known as the "curb-cut effect") demonstrates that inclusion generates positive externalities for society at large (Filippova, 2018). Therefore, public–private partnerships oriented toward inclusive technology represent both ethical and pragmatic innovations. They create a virtuous cycle in which moral responsibility stimulates technological progress, and technological progress, in turn, reinforces moral responsibility.

The application of the ESG+I paradigm in this context deserves special attention. The inclusion component transforms ESG from a compliance-oriented model into a creative developmental tool (Glushchenko, 2025a). When inclusion is institutionalized as part of corporate governance, it becomes a criterion for innovation funding, investor trust, and market competitiveness. Companies that successfully implement ESG+I practices serve as

social prototypes for the broader economy. Their achievements demonstrate that it is possible to reconcile profit motives with public welfare. The ESG+I framework also helps translate complex social goals into quantitative indicators that can be evaluated alongside traditional financial metrics. For instance, the number of inclusive jobs created, the proportion of employees with disabilities in decision-making positions, and the accessibility level of products and workplaces become measurable benchmarks for assessing corporate performance.

Within this expanded view, inclusion ceases to be a niche activity and becomes a mainstream component of industrial modernization. The twenty-second technological order, with its emphasis on automation and digital networks, is ideally suited to support this transition. Remote work platforms, assistive robotics, and Al-driven analytics can drastically reduce the physical barriers that once limited employment for people with disabilities. Yet these technological opportunities require governance mechanisms that ensure equitable access and protection against exploitation. The PPP model provides such governance by balancing private initiative with public oversight. It fosters an environment in which businesses compete to innovate inclusively, while the state guarantees that ethical and legal standards are maintained.

The educational and research dimensions of the mechanism play a decisive role in perpetuating this balance. Inclusive universities act as both knowledge centers and mediators between science, industry, and government. They generate new theories of inclusion while simultaneously training specialists who can implement them in practice. Through research collaborations and innovation labs, these institutions experiment with models of work organization that later inform national policy. This feedback loop ensures that inclusive technologies remain adaptive to changing social realities. In the literature (Glushchenko, 2025b), the university is conceptualized as the seedbed of the inclusive technological order, a space where social imagination meets engineering precision.

Empirical observation supports this argument. Inclusive student scientific societies, which combine students with and without disabilities, demonstrate that diversity enhances collective intelligence and social cohesion. These groups engage in creative exercises such as "innovation games," where participants co-design solutions for real-world inclusion challenges. The process cultivates empathy, systems thinking, and entrepreneurial initiative. Graduates from such programs frequently carry these values into their professional careers, gradually transforming the culture of the organizations they join. Education that internalizes inclusion produces not only competent engineers but also ethically conscious citizens (Filippova, 2018). This pedagogical philosophy ensures that inclusive development remains self-replicating across generations.

The social consequences of expanding inclusive employment are multi-dimensional. Economically, it alleviates labor shortages and contributes to workforce diversification. Psychologically, it enhances self-esteem and life satisfaction among people with disabilities, reducing dependency and social alienation (Rustamova & Trapeznikov, 2019). Politically, it strengthens the legitimacy of institutions by demonstrating that the state protects the interests of all citizens. The moral effect may be even more significant: inclusion humanizes technological civilization by reasserting the value of solidarity over individualism. The new technological order, if guided by inclusive principles, can thus become a model of humane progress rather than a source of inequality.

Nevertheless, the study also recognizes that inclusion cannot be achieved solely through moral persuasion. It requires systematic integration into economic planning and technological design. Without concrete implementation tools, inclusive policies risk remaining declarative.

For this reason, the PPP mechanism emphasizes methodological rigor through system engineering and conceptual design. Each component (philosophy, policy, finance, and education) is interlinked through feedback mechanisms that enable monitoring and correction. This structural coherence ensures that inclusive innovation is not left to chance but proceeds according to a scientifically grounded framework.

The mechanism also addresses the issue of motivation. In a liberal market economy, private enterprises are primarily driven by profit maximization. Inclusive innovation often demands initial investment and organizational adaptation, which may discourage participation. The state's role, therefore, is to realign market incentives so that inclusion becomes profitable. Preferential taxation, subsidies for assistive technology, and social procurement programs are examples of such instruments. The reasoning is that by internalizing social costs within corporate benefits, governments can mobilize private capital toward inclusive goals without undermining market principles.

The emergence of digital ecosystems further facilitates this realignment. Technologies such as blockchain, artificial intelligence, and big data analytics can increase transparency and accountability within the PPP model. Smart contracts may ensure that public funds allocated for inclusive projects are used efficiently, while AI systems can monitor compliance with accessibility standards. The integration of digital governance into the PPP mechanism exemplifies how the twenty-second technological order provides both the challenge and the solution for inclusion. The same technologies that risk creating new inequalities can also serve to eliminate old ones if managed ethically.

In examining the broader implications of this model, it becomes evident that inclusion represents not only a national priority but also an international one. Globalization has interconnected economies to such an extent that social instability in one region can reverberate worldwide. Consequently, fostering inclusion within national frameworks contributes to global stability. The PPP mechanism developed in this research could be adapted by other countries seeking to align social justice with technological modernization. Its principles resonate with international initiatives such as the United Nations Global Compact, which advocates for corporate social responsibility as a pathway to sustainable development (Filippova, 2018; Zizhen, 2025).

The comparative analysis of different countries reveals that those embracing inclusive strategies tend to achieve higher indices of innovation and human development. For example, corporate sectors that integrate persons with disabilities into their digital economy projects often experience lower staff turnover and higher customer satisfaction (Saliyenko & Sokolov, 2023). These findings support the assertion that inclusion is a measurable determinant of national competitiveness. In this sense, the PPP mechanism does not simply serve humanitarian aims; it is a strategic tool for achieving long-term economic resilience.

Moreover, inclusion fosters social trust, a resource that economists increasingly recognize as fundamental to sustainable growth. Societies characterized by mutual respect and cooperation are better equipped to navigate technological transitions. The mechanism of partnership (Glushchenko, 2025b) institutionalizes this trust through legally and morally binding relationships between public and private sectors. Trust, once embedded in organizational structures, reduces transaction costs, accelerates innovation, and mitigates conflict. It becomes a form of social capital that underpins the entire system.

In conclusion to this extended discussion, the results affirm that inclusion, when embedded within the philosophy and structure of the twenty-second technological order, is not a passive adaptation to moral norms but an active force of scientific and social evolution. The PPP mechanism conceptualized in this study demonstrates how coordinated action between the

state, business, and civil society can transform the conditions of work and redefine the meaning of progress. Inclusive technologies, professions, and institutions together constitute a new paradigm of development, one that measures success not merely by economic output but by the enhancement of human potential. Because technology reflects the values of those who design it, the future of innovation depends on whether inclusivity is embraced as a guiding principle. The reasoning is clear: societies that invest in inclusion invest in their own sustainability, stability, and humanity.

#### 4. CONCLUSION

This study concludes that the development of inclusive technologies and professions of the future depends on a scientifically grounded mechanism of public—private partnership. The findings confirm that inclusion, when embedded within the philosophy of the twenty-second technological order, becomes both a driver and a product of technological progress. The proposed mechanism integrates state policy, corporate social responsibility, educational innovation, and social participation into a single system that advances human-centered modernization. Through conceptual design and system engineering approaches, the study identified five hierarchical levels of mechanism development, demonstrating how theoretical, institutional, and practical components interact dynamically to promote inclusive employment.

The synthesis of inclusive technologies is not merely a social policy but a strategic innovation process that enhances national competitiveness and social cohesion. Because inclusive development harmonizes technological efficiency with moral responsibility, it ensures that modernization contributes to sustainable human welfare rather than exclusion. The reasoning behind this conclusion lies in the mutual reinforcement of ethics and economics; when inclusion becomes profitable, it also becomes inevitable. The impact of this work extends to policy-making, higher education, and business management, providing a framework for designing equitable and resilient societies. In essence, inclusion represents the moral architecture of the new technological age, ensuring that progress serves all of humanity.

# 5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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