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Civilizational Fork in our Time and Development Alternatives[1]

Abstract. The signs of a civilizational crisis are becoming increasingly evident and cannot be ignored. Humanity stands at a critical crossroads: either the crisis deepens, potentially leading to severe consequences and the collapse of civilization, or effective strategies are identified and implemented to transform these challenges into opportunities for progress. This article examines the role of technological progress in both exacerbating the crisis and creating the conditions necessary to overcome it. The modern technological revolution is reshaping knowledge-intensive material production, altering the nature of human activity and needs, and laying the groundwork for a transition to a non-economic mode of production and the fulfilment of human needs—noonomy. However, the neoliberal economic paradigm often conflicts with the socio-economic progress driven by recent technological advancements. Addressing this issue does not require dismantling the existing socio-economic system but rather its gradual and systematic transformation. The shift toward noonomy and noocommunity should be recognized as an objective historical trend, guiding the development of a strategic program. This transition will require the emergence—or nooevolution—of new value orientations, or noovalues, grounded in a noocriterial value framework. This framework, rooted in fundamental humanistic principles, will emphasize the development of individuals as bearers of knowledge and culture.

Keywords: noonomy, civilizational fork, development strategy, technological mode, neoliberalism, noovalues, nooevolution, economic rationality, non-economic society, knowledge

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ИССЛЕДОВАТЕЛЬСКАЯ СТАТЬЯ

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ЦИВИЛИЗАЦИОННАЯ РАЗВИЛКА НАШЕГО ВРЕМЕНИ И АЛЬТЕРНАТИВЫ РАЗВИТИЯ

Аннотация. По мере нарастания признаков цивилизационного кризиса становится ясно, что человечество переживает критический момент: либо кризисные процессы продолжат обостряться, что может привести к серьезным последствиям и краху цивилизации, либо мы определяем и внедряем эффективные стратегии для решения этих проблем, тем самым превращая их в возможности для дальнейшего развития. Чтобы решить эту проблему, необходимо изучение влияния технического прогресса как на усугубление кризиса, так и на создание предпосылок для его преодоления. Современная технологическая революция формирует знаниеемкое материальное производство, меняет содержание человеческой деятельности и потребности человека, создавая тем самым материальные условия для перехода к неэкономическому способу производства и удовлетворения потребностей человека – к ноономике. Однако неолиберальная экономическая парадигма часто вступает в противоречие с задачами социально-экономического прогресса, опирающегося на последние технологические достижения. Это противоречие можно разрешить не путем демонтажа существующей социально-экономической системы, но через ее постепенную и систематическую трансформацию. Переход к ноономике и нообществу следует признать объективной исторической тенденцией, которая определит характер соответствующей стратегической программы. Этот переход потребует развития (или "нооэволюции") новых ценностных ориентаций (или "нооценностей"), основанных на ноокритериальной системе ценностей. Эта структура будет основываться на фундаментальных гуманистических принципах, в которых на первый план выйдет развитие личности как носителя знаний и культуры.

Ключевые слова: ноономия, цивилизационная развилка, стратегия развития, технологический уклад, неолиберализм, нооценности, нооэволюция, экономическая рациональность, неэкономическое общество, знание

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Introduction

Modern civilization is entering a state of crisis. The signs of this crisis have gradually accumulated, leading to an adaptation of public consciousness to new realities, which has, in turn, dulled the collective sense of anxiety regarding the fate of civilization. However, with each technological advance, awareness has grown that the modern economic system's new productive forces have not only created opportunities but also introduced new threats and challenges.

For example, manufacturing many new goods, including those supporting the green economy, requires additional resources and generates new forms of environmental pollution. The use of renewable energy sources, such as solar power via photovoltaic cells, reduces carbon emissions but poses environmental risks due to the disposal of spent components containing hazardous substances. A similar issue arises with the transition from internal combustion engine vehicles to electric vehicles, as electricity generation for these cars often still depends on fossil fuels, and the use of lithium batteries presents a potential source of hazardous pollution. Wind farms, while providing clean energy, result in bird fatalities and create disposal challenges for decommissioned turbine units. Meanwhile, the production of digital assets like bitcoin through mining consumes vast amounts of electricity—comparable to the total energy consumption of countries like Greece or Australia.

The digital economy, with its capacity to collect and process vast amounts of data, has facilitated new methods of manipulating consumer and political behaviour. Both applied and theoretical research on "demand management"—essentially the artificial creation of needs—are rapidly expanding, with these concepts now being taught in universities. Election campaigns increasingly rely on big data analysis to understand and influence voter preferences, shaping political outcomes in ways that raise concerns about democratic integrity.

Advancements in biotechnology have introduced the possibility of direct interventions in human nature, carrying significant risks for personal identity and autonomy. Experiments with

implantable microchips, for example, could enable new forms of direct influence over an individual's behaviour and physiological processes. Concerns are also growing over human genome editing, as the long-term reliability and safety of these technologies remain uncertain despite existing bans. Meanwhile, gender modification, once strictly regulated with medical, age-related, and ethical barriers, has in some countries rapidly bypassed these restrictions within just a few years.

Finally, the destructive consequences of earlier technological advancements continue to persist. These include deforestation, declining biodiversity, various forms of environmental pollution (chemical, mechanical, electromagnetic, etc.), and the ongoing threat of weapons of mass destruction.

The problem is that the current socio-economic system, particularly in its neoliberal form, amplifies these threats. The relentless commercialization of all aspects of social life—turning them into profit-generating mechanisms—inevitably leads to a disregard for risks unless they directly affect financial outcomes. The negative consequences of this trajectory were anticipated by K. Marx, yet modern mainstream Western economic theory not only overlooks them but effectively endorses this trend. Human qualities and social phenomena are increasingly evaluated through the lens of economic gain. Education, health, skills, and even personal behaviour are classified as "human capital," valued primarily for their ability to generate profits for transnational corporations. Family bonds, friendships, and other social connections are reduced to "social capital," considered worthwhile only if they contribute to business success. Education, family life, law-abiding behaviour, artistic creativity, and other aspects of human existence are increasingly measured by their potential to generate economic returns—monetized as little more than a "tinkling coin."

As a result, the purpose of human life and needs is becoming increasingly distorted. In the relentless drive to expand markets, individuals are subjected to false and artificial desires. The proliferation of "simulacrum goods"—products designed not to fulfil real needs but to create illusions of satisfaction—leads to the waste of irreplaceable resources. The market has always catered to any demand backed by purchasing power, but modern neoliberal economics has taken this further. It now exploits human emotions, not just marketing goods but manipulating desires to sustain the illusion of fulfilment. The mass production of these illusionary goods has become a central goal of this economic model.

This phenomenon is particularly evident in social media, where curated images of success generate massive profits. In the broader consumer market, everyday products are imbued with exaggerated symbolic value, persuading buyers to pay far beyond actual production costs or utility. The practice of selling status symbols has existed for a long time, but it was once confined to a narrow market segment catering to an elite few. Today, manufacturers and advertisers sell not just products but emotions and experiences: a cake is marketed as the joy of sharing a special moment, a scarf as a tool for boosting one's mood. Consumers are encouraged to pay for these symbolic attributes, reinforcing the pressure to earn more to afford such experiences. The implicit message is clear—work harder to increase purchasing power, ensuring even more money flows into the hands of those profiting from these manufactured illusions.

But how many irreplaceable resources will be depleted to sustain this ever-expanding cycle of consumption? Can the planet withstand such an irrational—perhaps even insane—pursuit of consumer mirages? This is just one defining feature of the current neoliberal model, but there are many others.

Even within its own narrow economic framework, the neoliberal system faces mounting challenges: slowing economic growth, declining investment activity, increasing market volatility, and the waning effectiveness of traditional economic regulation tools. Financialisation has reversed the historical relationship between the real and financial sectors—whereas the financial sector once served real capital, real capital is now subordinated to the interests of financial capital. At the same time, financial markets have become highly volatile and increasingly disconnected from real-sector development, creating instability and distorting economic priorities. Instead of fostering production and long-term investment, real capital is now directed toward influencing financial market performance.

Against this backdrop, social inequality is deepening, and the divide between the core and periphery of the world economy is widening. These growing disparities fuel conflicts that threaten global economic stability. The traditional balance of power in the global economy has already shifted, as countries adhering to the neoliberal model struggle with stagnation. Yet, the dominant players in the neoliberal global order continue to cling to their positions without adequately considering the interests of other national economies. As economic competition alone proves insufficient to maintain their dominance, conflicts

escalate into trade wars, technological blockades, and other forms of economic confrontation. This intensification of global tensions increases the risk that economic disputes could spiral into large-scale military conflict.

Research Methods

To understand long-term economic and social impacts, production trends and their technological foundation must be viewed through the lens of political economy. This approach clarifies the evolution of economic relations and institutions. Given the deep interconnectedness of national economies, development must also be considered from a geopolitical perspective (Desai, 2013). Analysis of key technological trends is crucial to understanding the transformations shaping both economic systems and the global economy.

Scientific and technological progress has always propelled economic development, driven by continuous advancements in knowledge and innovation. Breakthroughs in equipment and technology depend on new knowledge, particularly in fundamental science. Modern high-tech production is increasingly knowledge-intensive, while material costs decline. For example, in smartphones, physical components account for only about 20 % of the total value, with embedded knowledge contributing most of the rest. The actual cost of raw materials comprises just 5-6 % of a final product's value. Additionally, new technologies enable multifunctional products, such as smartphones, which replace multiple devices that previously weighed tens or even hundreds of times more (Smil, 2013, pp. 127-128). While precise data on the share of knowledge in production costs is unavailable, estimates indicate a growing dominance of knowledge over material components (Bodrunov, Desai, Freeman, 2022, p. 35).

In the most developed countries, the shift from the fifth to the sixth technological paradigm is underway. Often called Technological Revolution 4.0, this transition features modular device design, a shift from subtractive to additive manufacturing, increased automation and robotization, and a faster pace of innovation. Rising robot density (robots per 10,000 employees) and the rapid expansion of the 3D printing market illustrate this transformation.

This transition also brings fundamental changes to the nature of labour in modern production. As knowledge-intensive industries rely increasingly on new scientific advancements, creativity plays a growing role in human labour. A significant portion of manufactured goods are intellectual products, leading to the rising intellectualization of work not only for those who create them but also for those who apply them in production.

Despite the shrinking share of industry and material production in the overall economy, they remain its technological backbone. Nearly all technological progress originates from the industrial sector, which continues to account for the majority of research and development (R&D) expenditures[1].

The industrial sector remains virtually the only sector that defines the technological face of the modern economy. All other industries are completely dependent on the production of machinery, equipment, appliances, transportation, informatics and telecommunications. Outside of this sector, perhaps only software is created (and even then only partially). Therefore, industry is actually the main driver of economic growth[2] (Naudé & Szirmai, 2012; Westkämper, 2014).

Thus, the explosive growth of the intellectual component of production will not lead to the replacement of material production by knowledge production. This is generally unfeasible because knowledge itself is not valuable in production unless it is materialized in new technologies and products. However, the increasing significance of knowledge has transformed the nature of industrial production, evolving into knowledge-intensive material production. Its progress now rests entirely on the search for and technological application of new knowledge.

Results

Scientific and technological advancements are shifting raw material processing to autonomous systems, while humans take on roles focused on goal-setting and oversight. As Professor Alan Freeman describes, these intellectual and creative functions cannot be mechanized (Freeman, 2015, p. 357). This shift elevates individuals from mere labour providers to active participants in new social

[1] Collins, M. (2015, Nov 22). Debunking the Post-Industrial Myth. *Industrial Week*. https://www.industryweek.com/the-economy/public-policy/article/22007271/debunking-the-postindustrial-myth (Date of access 29.08.2024); Business Europe. (2017, June). *Building a Strong and Modern European Industry*. *Views on a renewed EU industrial strategy.* https://www.businesseurope.eu/sites/buseur/files/media/reports_and_studies/building_a_strong_and_modern_european_industry_-_compressed_for_web_and_sending.pdf (Date of access 29.08.2024).

[2] McKinsey. (2012). *Manufacturing the future: the next era of global growth and Innovation*. McKinsey Global Institute Report. https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Operations/Our%20Insights/The%20future%20of%20manufacturing/MGI_%20Manufacturing_Full%20report_Nov%202012.pdf (Date of access 29.08.2024).

and economic relations. As a result, the changing nature of material production lays the groundwork for a new stage of societal development. We call this the New Industrial Society of the Second Generation (NIS.2), drawing from John Kenneth Galbraith's mid-20th-century concept of the New Industrial Society (Galbraith, 1967). Galbraith described a social system shaped by industrial development and the rise of a "technostructure" that transformed social structures.

In NIS.2, the expansion of knowledge-intensive production will increasingly free human time for self-development, education, and creativity. Even within shrinking labour activity, the role of creativity will become ever more apparent. This shift will drive changes in human needs, moving preferences away from material consumption and toward self-realization through creative pursuits. As a result, competition for resources will gradually fade, and economic criteria will become secondary.

Over time, as technological, economic, and social changes accumulate, NIS.2 will drive a shift from the current economic paradigm to noonomy—a system where production and the fulfilment of human needs operate beyond traditional economic constraints. This transition, known in philosophy as a shift from quantitative to qualitative social change, is called nootransition.

However, technological progress has yet to resolve many of the challenges burdening today's economic system. Humanity stands at a crossroads: one path risks deepening the civilizational crisis, amplifying technological risks, fuelling social conflicts, and leading to societal decline. The other offers an opportunity to harness knowledge-intensive production for a new trajectory of humanitarian development.

Unfortunately, the prevailing neoliberal paradigm of economic behaviour and policy in developed countries not only fails to address the civilizational crisis but actively contributes to its exacerbation.

Efforts to impose neoliberal dogmas globally underestimated national and cultural differences, as well as the commitment to protecting state interests. Newly industrialized countries, while leveraging certain benefits of globalization, did not simply adopt neoliberal standards or externally imposed economic models. Instead, they pursued distinct strategies. For example, neither South Korea nor China followed a liberal economic path, yet both overcame backwardness in a relatively short time and emerged as global leaders in economic and technological progress. Similarly, several Muslim countries reject Western financialisation models, adhering instead to Islamic banking principles, which prohibit interest and emphasize equity-based investments.

The crisis of neoliberalism has become evident to many nations that previously lacked the strength to resist its pressures. As a result, more countries are moving away from neoliberal doctrines and supporting a revision of the unipolar neoliberal order. This shift has begun in Russia as well, though its progress remains inconsistent.

Globalism, often used as a tool for imposing neoliberal frameworks, has led to growing recognition that a nation's unique social and cultural heritage is one of its most valuable resources. For large, culturally diverse countries, fostering mutual respect and enriching regional traditions can generate significant synergies. However, in order to achieve this, we need to reject the liberal model of "multiculturalism," which promotes cultural isolation rather than integration. In practice, this approach has led to the formation of closed national-cultural enclaves, heightening social tensions and increasing the risk of conflict.

Instead, strategic spatial planning is essential for fostering productive interregional cooperation. By setting and implementing shared national goals, countries can harness their diverse cultural wealth, ensuring that regional interactions contribute to broader development. Cultural heritage, in particular, can guide development paths that preserve both human nature and the natural environment.

Navigating this civilizational crossroads requires us to address major challenges. While humanity will eventually move toward a path shaped by objective material conditions, delaying this transition will only increase the costs of overcoming the crises caused by the dominant economic system.

For instance, attempts to combat environmental threats by reducing carbon footprints have yielded mixed results, often leading to new forms of pollution. Economic growth continues to drive resource consumption, accelerating environmental degradation. One example is deforestation: between 1990 and 2020, the world lost 178 million hectares of natural forest[1].

While official UN statistics indicate a decreasing rate of forest loss over the past 30 years, alternative studies suggest a contrary trend, highlighting an increase in deforestation.

[1] Food and Agriculture Organization of the United Nations (FAO). (2020). *Global Forest Resources Assessment 2020.* Main report. Rome, Italy: FAO. 165. https://openknowledge.fao.org/handle/20.500.14283/ca9825en (Date of access 29.08.2024).

Data from these studies show a dramatic rise in global net forest loss: 14.8 million hectares from 1990 to 2000, 25.3 million hectares from 2000 to 2010, and 35.5 million hectares from 2010 to 2019 (Estoque et al., 2022, p. 5).

Soil degradation and declining fertility continue to be pressing concerns. Since World War II, nearly one-third of all cropland has suffered degradation, with global soil erosion outpacing natural recovery by 23 billion tons annually (Montgomery, 2015, XVI).

The development of biotechnology presents risks of poorly regulated interference with nature. These risks are not only inherent to the technologies themselves but are further exacerbated by their application in profit-driven contexts, where concerns over unintended consequences are often side-lined. Similarly, advancements in information and communication technologies—including artificial intelligence and big data—have enabled increasingly sophisticated methods of behavioural manipulation, serving private economic and political interests. This expansion has also intensified the risk of pervasive digital control, extending beyond traditional state surveillance. French philosopher Gilles Deleuze, building on Michel Foucault's concept of the disciplinary society (Foucault, 1975; 2004), described modern society as a society of control (Deleuze, 1992). With the rise of advanced surveillance technologies, this concept has shifted from theory to an everyday reality of total control (Fasman, 2021).

These challenges do not stem from technological progress itself but from the ways technology is utilized in existing economic structures. Under capitalism, production is driven by economic competition and market expansion, with profit maximization as the guiding principle. This pursuit of economic "rationality" prioritizes increased production and aggressive marketing of any profitable goods—often inflating artificial needs to boost sales. As theorized by Baudrillard (1972; 1981), Jameson (1991), and Buzgalin & Kolganov (2012), this leads to the creation of simulacrum goods, designed to give consumers the illusion of fulfilling needs that have been imposed on them. The resulting push to collect consumer data enables more precise behavioural manipulation, further fuelling consumption.

This relentless drive for profit turns into an uncontrolled race for natural and human resources.

Financialisation was a response to capitalism's internal challenges. Capital seeking higher returns migrated from the real economy to financial markets, creating new investment opportunities. However, this shift led to two major consequences. First, it redirected resources away from the real economy, weakening industrial and productive sectors. Second, it reinforced the dominance of financial capital, allowing it to shape market conditions to its advantage. Over time, financial success became the primary benchmark for economic performance, enabling financial capital to exert increasing control over all sectors of the economy (Buzgalin & Kolganov, 2021, pp. 91–104).

The modern global financial market has increasingly been used as a tool for asserting economic and political hegemony, exacerbating contradictions between national economies and their alliances. The global economic divide is deepening between developed capitalist countries, primarily aligned with the United States and long serving as the core of the world economy (the "Global North"), and the "Global South." As globalization faces counterforces of deglobalization driven by efforts to protect national economic interests, it has become evident that the neoliberal globalization project has also harmed the very countries that once championed and benefited from it. A clear example is the impact of deindustrialization in developed economies. The United States, for instance, has become heavily dependent on Chinese industrial goods while striving to maintain its technological monopoly. To preserve its economic and military-political dominance, the U.S. actively impedes China's technological development. However, this effort faces resistance. The current global economic and political order, centred on securing hegemonic control, is being challenged by emerging alternative frameworks advocating equal and mutually beneficial cooperation. One manifestation of this shift is the growing interest of dozens of countries in joining the BRICS association.

At the same time, technological advancements have fostered positive economic trends. The increasing availability of goods, improved stability in meeting societal needs, and a shift among some individuals toward responsible consumption—driven by environmental awareness and recognition of the excesses of material accumulation—have led to new consumption patterns. For some, access to goods is now more important than ownership, reducing the emphasis on traditional property relations.

This trend has contributed to the expansion of the sharing economy, which has weakened conventional property structures by separating ownership from usage. In the long run, both the broader availability of goods and evolving consumption preferences could lead to the

fulfilment of needs without reliance on traditional property models.

Additionally, the modern economy exhibits a small but growing tendency to withdraw certain productive activities from the competitive market system. Some forms of volunteerism, such as crowdsourcing and crowdfunding—where individuals voluntarily contribute labour or financial resources without expecting remuneration (Brabham, 2013)—illustrate this shift.

These activities are sometimes referred to as "wikinomics," drawing from the principles underpinning Wikipedia. Longstanding forms of collective labour, such as cooperatives, also play a role. While these models remain embedded in prevailing economic structures, their motivations extend beyond economic rationality, incorporating broader social and cultural dimensions. Sociological surveys indicate that regardless of whether ideological or economic motives prevail among cooperative participants, "all participants in this sample reported a strong commitment to economic democracy and a desire for what they perceived to be a more just economic order" (DeBalsi, 2021, p. 38). Furthermore, experimental studies suggest that motivation for cooperative action is enhanced by genuine concern for the well-being of others, rather than self-interest alone (Acar-Burkay et al., 2021).

Modern technological development is driving the predominance of creative industries in the economic structure of the most advanced economic centres. However, the prevailing interpretation of creative industries and the creative class in economic literature is somewhat skewed. The focus tends to be on activities directly related to artistic creation, design, informatics, and media, while professional fields involving creative labour, such as medicine, research and development, and education, often remain overlooked.

In the industrial sector, which is vital for technological advancement, there is a noticeable trend of accelerating productivity growth. This has resulted in a relative decline in the sector's share of overall employment and its contribution to GDP.

These trends, all stemming from modern technological advances, highlight the changing nature of the global economy and give rise to a new leading technological mode (Lvov & Glazyev, 1985; Glazyev, 2016), or a technological paradigm, as termed by Carlotta Perez (Perez, 1983; Freeman & Perez, 1988).

Each new technological mode builds upon a set of core technologies from the previous mode. The interaction between technologies from different modes is characterized by their readiness to adopt new technological solutions, often referred to as "readiness" or "receptivity," as well as their potential for integration into existing technological frameworks, known as "penetration potential." This readiness-penetration interaction is further influenced by the knowledge capacity differences between these technologies (Bodrunov, 2018, pp. 153-162). Currently, the stage of technological development is marked by a high level of potential for such interaction, demonstrated by technologies capable of NBICS convergence (Roco & Bainbridge, 2003; Spohrer, 2004, p. 102).

Conclusion

According to the classical political economy approach, technological shifts inevitably reshape economic relations. More importantly, these shifts necessitate a transformation in the fundamental criteria guiding human activity.

The concept of noonomy has been developed to explain both the origins of these ongoing changes and their implications for a new civilizational paradigm. Resolving the contradictions of modern civilization requires moving away from economic rationality as the dominant criterion and embracing human reason as the guiding principle, marking a transition from economics to noonomy.

What underpins this conclusion?

As demonstrated, the intensification of societal contradictions is closely linked to the application of modern technologies within the constraints of economic rationality dictated by capitalism. Today, the "invisible hand of the market" is unmistakably leading toward the aggravation of socio-economic, geopolitical, environmental, and ethical issues. Addressing these challenges is not merely a matter of moral imperatives but requires an understanding of objective technological trends and the opportunities they present.

The increasing importance of knowledge-intensive production and creative engagement is transforming human interests and values. For individuals whose primary focus lies in creative functions, as material needs become increasingly met, the development of creative potential takes precedence (Bodrunov, 2022). As a result, the criteria for rational consumer behaviour are shifting—from the pursuit of ever-increasing material consumption to a more deliberate satisfaction of needs that support creativity. Goods cease to be an end in themselves and instead serve as a means for personal and intellectual development. The reasonableness of needs will thus be defined by the level of cultural development achieved.

Modern technology is already enabling a gradual departure from direct production, and this trend is expected to intensify. The technosphere, created by

humanity, is evolving into a relatively autonomous system, where direct human involvement in production is increasingly intellectual rather than manual. Consequently, traditional labour and participation in production relations are giving way to engagement in creative pursuits.

As economic rationality loses its dominance and reasonable needs are increasingly met—potentially through an autonomously functioning technosphere—the competition for goods and resources diminishes. This, in turn, erodes the economic foundations of social conflicts. As society progresses in this direction, opportunities for resolving developmental contradictions without exacerbating social tensions will expand.

The transition from economics to noonomy is not yet fully realized, but current trends indicate that such progress is underway.

To prevent a civilizational dead end, it is essential to establish clear benchmarks for societal development, treating them not merely as scientific projections but as guiding principles for action. The real trends signalling a shift from economics to noonomy should be recognized as strategic reference points for long-term development planning. Achieving this transition requires identifying the transformational processes that must be facilitated and the trends that should be actively supported through socio-economic policies.

Among these trends, the following can be highlighted:

— Reindustrialization of the Russian economy through cutting-edge technological advancements, ensuring continuous modernization across all sectors while securing scientific and technological sovereignty.

— A gradual shift away from economic rationality toward non-economic criteria, with full support for the advancement of education, science, and culture.

— The establishment of institutions for regulating socio-economic development, ensuring technological modernization, and prioritizing non-economic development criteria (including institutions for strategizing and strategic planning).

— The development of public institutions that promote socialization processes centred on fostering human creative abilities.

— The promotion of solidarism as an ideological foundation to support these transformations.

Advancing along these lines does not require full adherence to all aspects of noonomy. What is crucial is to reflect on a shared future and take deliberate steps toward its positive realization, gradually moving away from a path that leads to deepening civilizational crises.

The most urgent measures include:

— Reindustrialization grounded in the latest technological advancements.

— A substantial increase in R&D investment and education.

— Strengthening the integration between production, education, and science.

— Developing a strategic plan for necessary transformations and ensuring its implementation through appropriate planning institutions.

— Formulating a long-term development strategy guided by contemporary humanistic theories, including noonomy.

It should be noted that several countries are actively engaging in research on these issues and publishing relevant materials. In 2025, Italy will release a major series of monographs under the auspices of UN institutions, edited by the Sergei Witte Institute for New Industrial Development. This series will feature contributions from leading contemporary scholars, offering alternatives to the neoliberal perspective on global economic transformation and the future of civilization.

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