

FROM THE PAST TO THE FUTURE: A FUTURISTIC APPROACH TO MANAGEMENT

Paweł NOWODZIŃSKI

Politechnika Częstochowska, Wydział Zarządzania, Częstochowa; pawel.nowodzinski@pcz.pl,
ORCID: 0000-0001-8706-9219

Purpose: The primary aim of this paper is to illustrate the long-term evolution of management principles and practices, starting from the early seventeenth century and extending into a speculative future scenario in the twenty-fifth century. By contrasting a historically grounded analysis with a far-reaching futurist perspective, the paper seeks to highlight how shifting contexts social, technological, and economic transform the very foundations of how organizations and societies are managed.

Design/methodology/approach: This study adopts a methodological framework consist of: historical analysis and futurological approach. By contrasting historical practices with these speculative projections, it provides a comparative lens through which to reflect on the continuity and dynamism of management concepts over an 800-year span.

Findings: The research reveals that historically, management practices were primarily shaped by hierarchical, preindustrial structures, with limited specialization. In a far-future perspective, management appears more decentralized, network-based, and driven by advanced technologies, social norms, and the role of leadership.

Research limitations/implications: The futurist projections are speculative and not readily verifiable in a traditional empirical sense. The historical analysis relies on interpretative secondary sources and focuses on illustrative rather than exhaustive examples.

Practical implications: Although set in a distant future, the paper's explorations prompt practitioners and policymakers to anticipate technological disruptions, foster ethical and cultural awareness and adopt scenario-based strategies.

Originality/value: The paper's contribution lies in bridging early modern European management practices and speculative futuristic models. This dual perspective underscores how the fundamental drivers of management resource coordination, leadership, cultural values remain pivotal across time, while their expressions shift dramatically with changing technological, economic, and societal landscapes. The research is particularly valuable to academics exploring the interplay between history, strategy, and future studies, as well as practitioners who benefit from long-range thinking.

Keywords: management evolution, historical analysis, futurology, artificial intelligence.

Category of the paper: conceptual paper / research paper.

1. Introduction

Let us travel back approximately four centuries, to around the year 1625. This was the first half of the seventeenth century, a time of great transformation and conflict in Europe, characterized by the emergence of modern states, the colonial expansion of Europeans into other continents, and an era of both religious and political wars within Europe itself (Pietschmann, 2002, pp. 59-119). Let us examine this period on both a global and a European scale, with particular attention to the Polish lands. In those days, the world was still pre-industrial, based on manual labor, craftsmanship, and small manufactories. Mechanization and mass production were still far off. Nevertheless, various parts of Europe were experiencing technical innovations and inventions, especially in the fields of optics, cartography, maritime navigation, military technology, and mathematical calculations (Ulmer, 2017, pp. 39-46). A new, rational, experimental, and empirical scientific approach was also emerging one that would, over the next centuries, bring about a genuine industrial revolution and a technological leap forward (Kleszcz, 2022, pp. 129-153).

We now shift our perspective to about four hundred years in the past to the first half of the seventeenth century and attempt to view management from a historical standpoint, from a futurist viewpoint, and through the lens of contemporary management theory. The aim is to understand how work, resources, and people were organized at the time and to explore how concepts of authority, power, and planning took shape. Concurrently, we will analyze the social, economic, cultural, and technological context within which these management practices developed.

Next, we will look into the distant future specifically the year 2425 from the perspective of a futurist who, drawing on current knowledge and trends, attempts to envisage a fully formed world, and also from the viewpoint of a future historian reflecting on centuries-long processes from afar. The following vision is, of course, speculative, hypothetical, and based on extrapolation and contemplation of long-term social, economic, technological, and political trends. From the vantage point of 2424, the world is incomparably more complex and, in a sense, simpler at the same time technology and automation have done extensive work behind the scenes, freeing humanity from many of the old burdens. Europe has become an advanced eco-cultural federation of diversity, Poland is a region rich in cultural heritage, and industry has been transformed into an intelligent, integrated system of material production and recycling. Challenges that once dealt solely with manufacturing and meeting basic needs have given way to struggles over meaning, identity, and values in a post-scarcity world. What we used to call “industry” has turned into an invisible, fluid process of manipulating matter, powered by energy and information, controlled by algorithms, and fully integrated into the planet’s life cycle and that of its inhabitants.

2. The World, Europe and Poland in the 17th. Historical Context

During this era, global power structures were shaped by Europe's maritime powers. Spain and Portugal still held extensive colonies in the Americas, Africa, and Asia. Although Spain was gradually entering a period of decline, it remained an economic powerhouse, relying on precious metals from the New World. Portugal, in a personal union with Spain since 1580, maintained its trade routes to India and the Far East.

At the same time, the Netherlands was experiencing its "Golden Age", steadily solidifying control of trade routes and engaging in the spice trade while also waging an eighty-year fight for independence from Spain (Miścicki, 2014, pp. 23-34). Under the rule of the Stuart dynasty, England expanded its fleet and colonies in North America by 1620 the ship *Mayflower* had reached New England's shores, and in subsequent years English settlements developed along the eastern coast of the American continent (Grzebyk, 2018, pp. 59-68). Meanwhile, in France, Louis XIII and the increasingly influential Cardinal Richelieu gradually consolidated power, laying the groundwork for the French absolutism that would flourish in the second half of the century under Louis XIV (Skwara, 2013, pp. 339-347). In the Far East, powerful states such as the Ming Empire in China and the Mughal Empire in India were at their zenith or nearing a period of crisis, but still constituted significant centers of global civilization and economic strength (Mencel, 2020, pp. 97-118). The Ottoman Empire continued to hold vast territories in Asia Minor, the Middle East, the Balkans, and North Africa, though initial signs of a slowdown in its territorial expansion were emerging (Kołodziejczyk, 1987, pp. 375-394).

Poland and Lithuania had been in a real union for more than half a century, forming the Polish-Lithuanian Commonwealth one of the largest states in Europe at the time. The throne was occupied by Sigismund III Vasa, a monarch with dynastic ambitions who aimed to strengthen his family's position and claim the Swedish throne, which had led to wars with Sweden in previous decades. Although the country's greatest prosperity and stability, known as the "Golden Age", spanned the turn of the sixteenth and seventeenth centuries, it was beginning to feel the effects of ongoing conflicts with its neighbors. In 1624, the Commonwealth found itself between wars and tensions: still shadowed by conflicts with Sweden in Livonia and along the Baltic (the Polish-Swedish War of 1621-1629 ran somewhat concurrently), facing Tatar incursions from the southeast, and contending with strained relations with the Ottoman Empire. Despite these challenges, the Commonwealth still maintained a relative internal order based on noble democracy, local sejmiks, and the national parliament. The spirit of the nobility's freedom its renowned *złota wolność* remained vibrant, although it would later contribute to the weakening of central authority. Cultural life in the Commonwealth thrived: the Cracow Academy (Jagiellonian University) was still a significant center of scholarly thought, Gdańsk was a lively port and hub of Baltic trade, and the Commonwealth's territories were distinguished by ethnic and religious diversity.

At that time, Polish Baroque culture was just maturing, influenced by Italian, Western European, and also Eastern currents, brought in part by ties with Turkey and the Orient (Hroch, Petrafi, 1964, pp. 1-21).

In sum, four centuries ago, we find ourselves in a restless Europe, torn by religious and political wars, in a world where vast colonial empires set the parameters for the global economy while new centers of maritime and commercial power emerged. In the Polish-Lithuanian Commonwealth, Sigismund III Vasa reigned over a state that was still strong and prestigious but beginning to grapple with early signs of impending difficulties. It was a time of contrasts: the rise of trade, colonization, culture, and the sciences, yet also bloody conflicts that would, over the next few decades, define the shape of the new Europe. By the mid-seventeenth century, the world had yet to enter the era of industrialization as we understand it today. The predominant economic model remained pre-industrial production took place mainly in small workshops, manufactories, and smithies, with the majority of the population still engaged in agriculture. Nevertheless, the first stirrings of change were already visible, and in some sectors, technology and science were making significant progress, laying the foundations for future revolutions.

3. Industrial and Economic Situation

In both Europe and the Polish-Lithuanian Commonwealth at that time, the kind of industry familiar from the nineteenth century had not yet emerged. Workshops, small manufactories, and the guild system still predominated. The production of textiles, metalwork, ceramics, brewing, and milling was organized along craft lines, strictly regulated by guild corporations. In certain parts of Europe particularly in the Netherlands, northern Italy, and England more complex forms of production organization were starting to develop. These included larger workshops and early precursors to manufactories, where attempts were made to divide work among employees in order to boost productivity.

The growth of mining and metalworking of iron, copper, and silver ores, as well as salt mining, played a major role in the economy of many states. In the Polish-Lithuanian Commonwealth, the salt mines of Bochnia and Wieliczka were particularly significant, along with several ironworking centers powered by charcoal from nearby forests and traditional bloomery furnaces. In Central Europe, as well as in parts of Germany and Bohemia, ore extraction and metallurgy continued to advance, driven by the gradual improvement of existing technologies although the true industrial revolution was still far off (Jezierski, Leszczyńska, 2010, pp. 48-52).

International and maritime trade became an important “economic sector”. The Dutch, Portuguese, and English developed substantial merchant fleets, which in turn generated demand for ships shipbuilding thus became one of the more sophisticated branches of the era’s

“industry”. Yet it remained a craft-based endeavor, reliant on skilled shipwrights and traditional techniques.

4. The World, Europe and Poland in the 25th Century: Global Social and Economic Structures

Over the course of 400 years, beginning in 2025, humanity underwent a period of dramatic transformation. Artificial intelligence, nanotechnology, genetic engineering, and far-reaching climate and ecological modifications changed both living conditions and social structures, as well as the global political balance of power. Although still requiring massive resources, space travel became part of larger exploration and colonization programs within the Solar System: representatives of different nations and cultures are scattered across Mars, the Moon, and various orbital stations. Meanwhile, Earth experienced a prolonged period of adaptation to climate change through global geoengineering initiatives that integrate the biosphere with advanced systems for controlling the flow of energy and resources.

The centuries-long rise in the importance of artificial intelligence and automation has meant that, by the year 2424, economies are largely based on intelligent systems for resource management, goods production, and service delivery. Industry, understood in the traditional sense (factories, assembly lines), is a thing of the past. Production takes place in automated, autonomous environments so-called “fabricators”. AI systems and robots enable a smooth and flexible response to demand, minimizing waste and losses.

High levels of automation and production efficiency have led to what is referred to as a post-scarcity economy: many material goods are readily accessible, and “work” in its traditional sense employment necessary for survival is greatly reduced. Societies are experimenting with various forms of social participation, where basic living needs are guaranteed by resource distribution systems. This gives rise to new social and psychological challenges: how to provide a sense of purpose for people no longer engaged in traditional forms of work? Culture, art, science, creative endeavors, and personal development become the pillars of new social activity.

The global political structure has changed national divisions still exist, yet they hold a different significance. Large-scale federations and alliances are dominated by shared AI-based decision-making platforms that account for ecological, social, and economic balances. Former superpowers have evolved into networks of collaboration built around the exchange of information, knowledge, and innovation. Cultural and linguistic differences remain, but they are fluid: real-time universal translation, along with the flow of ideas and ideals, has made national or regional identities more symbolic and cultural than political or economic in nature.

In Europe once, some four centuries earlier, a stage for political, migration, and climate crises has, by the 25th century, evolved into a “megafederation” of regions. The former European Union went through numerous reorganizations, ultimately resulting in a structure resembling a constellation of autonomous regions and city-states. These are interconnected by a dense network of high-speed transportation (hyperflights, vacuum tubes, gravitational vehicles) and energy-exchange systems. Europe has become a largely sustainable human ecosystem, where the natural environment has been extensively restored through ecological engineering: reforested areas, reclaimed rivers, and clean air and water are the product of centuries of work to remedy damages inflicted before and during the climate crises of the 21st to 23rd centuries. Populations are more mobile and cosmopolitan; Europe is a mosaic of diverse cultures, collectively benefiting from universal communication tools. For the people of 2425, the concept of nation-states as they existed in 2025 is merely a historical curiosity understood as one stage in humanity’s political evolution rather than a fundamental element of identity.

The former Polish state, like other European countries, now functions primarily as a cultural region with certain traditions, a distinct language (though natural languages are instantly translated through neural interfaces), characteristic architecture, and a unique lifestyle, rather than as a sovereign political entity equipped with its own army or currency. Polish society continues to preserve its history and language, nurturing a centuries-old literary, musical, political, and social heritage, yet it does so within a broader European and planetary community. Polish cities stand out for their particular aesthetic, blending historical building traditions with ultra-modern infrastructure. Kraków, Warsaw, Gdańsk, Wrocław, and Poznań serve more as hubs of knowledge, art, and innovation, connected to the rest of Europe via high-speed transport and information routes. Agriculture is either entirely synthetic or carried out in highly efficient external “bio-factories,” while forests and natural areas are maintained as a form of protected heritage, managed through precise ecological analysis.

While such a vision might appear overly optimistic and the drawn landscape too rosy it is crucial to bear in mind the hardships humanity has overcome along the way. These include numerous climate crises, pandemics, and conflicts over new forms of resources and information. By the 25th century, societies have become much more attuned to the complexity of the systems in which they exist. Considerable effort has been invested in maintaining a balance between individual freedom and collective stability, as well as between technological progress and the preservation of humanity itself. A central question has become: What is the essence of human nature in a world where neither physical survival nor material abundance poses a significant challenge? Cultural values, as well as spiritual, artistic, and intellectual development, have assumed key importance in human life.

Gone are the days of smoke-belching factories and massive production plants in their traditional sense. On-demand manufacturing reigns. Industry has transformed into a network of intelligent production units positioned near consumers or crucial resources. These units can produce highly complex goods from tools and infrastructure components to advanced implants

and living modules by manipulating materials at the molecular and atomic levels (nanotechnology).

Smart materials and sustainable cycles predominate. Most raw materials are derived from molecular recycling. Matter moves in closed loops, drastically reducing the need to extract traditional resources. Any product can be reverted to its base state and reshaped into a new form at any time. Industry is fully powered by renewable energy, harnessed and stored with exceptional efficiency. A global AI-managed energy network balances supply and demand, optimizing the use of solar, fusion, geothermal, and even atmospheric or tidal forces.

5. The Fall of Superpower Dominance: Evolution over Continuity

At the beginning of the 21st century, both Russia and China displayed models of governance that were authoritarian or quasi-totalitarian in nature, marked by tight social control, limited pluralism, and the dominance of state apparatuses over the public sphere. How might these countries look four centuries from now?

A span of four centuries is longer than the period separating our own time from the early modern era, and no political structure remains unchanged for that long. Under the combined pressures of internal dissent, climate, economic, and social transformations, and rapid technological development, Russia and China like many other former states would likely pass through a series of stages: reforms, crises, fragmentation, and reorganization. Russia would experience successive waves of territorial disintegration and reconsolidation. In the context of global climate shifts, Siberia became a strategically significant region (for example, due to its arable land, natural resources, and energy potential), attracting the attention of global networks. These changes could lead to liberalization or the emergence of new governance models centered on local autonomies, supported by artificial intelligence and global platforms. Over time, a move away from centralized, repressive power toward more networked forms of political organization seems probable albeit accompanied by dramatic upheavals and tensions.

In contrast, by the 21st century, China already combined an authoritarian government with a dynamic, technology-driven economy. Over subsequent centuries, this model evolved into something far more complex: an administrative-technocratic state harnessed AI to manage society, while simultaneously minimizing internal conflicts. Yet, with the ongoing globalization of information, the growing importance of culture and individual expression, and the integration into a global system of knowledge exchange, even the most closed and regulated structures eventually faced the need to adapt. Over hundreds of years, there may have been dozens of “digital revolts,” shifts in values, and a gradual dismantling of the totalitarian character of the state.

In the span of four centuries, even the most entrenched political regimes underwent profound change. The world envisioned here in the 25th century presupposes sweeping social, technological, and systemic transformations on a global scale. This does not imply that the path to that stage was smooth or conflict-free. Totalitarian regimes struggled to maintain long-term control in a technological environment that enabled hidden forms of communication, education, and self-determination for individuals and groups. In a future world where information and innovations circulate with astonishing ease, even the most advanced surveillance systems would be vulnerable to internal erosion. While China and Russia might still deploy digital authoritarianism in the 21st and 22nd centuries, the increasing complexity of systems, the symbiosis of humans and AI, and the cosmopolitan nature of intellectual and scientific elites in subsequent centuries would undermine both the rationale and feasibility of upholding a totalitarian political monoculture.

By the year 2425, any former states that once maintained control through totalitarian methods exist only as historical examples of transitional epochs. Today's nation-states are seen as once-distinct organisms that gradually merged into a global and interplanetary network of interdependencies.

Global decision-makers, in the face of the need for universal coordination to combat climate catastrophe and to manage the environment and energy on a planetary scale, were ultimately compelled to develop governance forms in which the old authoritarian models became ineffective and contrary to the common interest. The pressure exerted by global public opinion (potentially in the form of collective consciousness supported by neural networks and AI), and the real possibility for individuals and small communities to influence decisions at a planetary level, gradually destabilized and dissolved oppressive regimes.

Naturally, both Russia and China possess rich cultural, scientific, and artistic heritages that remain valuable in the future. Their languages, literature, philosophy, and achievements in science and the arts will endure as part of humanity's global legacy. Future societies, even if they no longer recognize Russia and China as totalitarian states, will study those historical periods to understand the evolution of governance forms, power-society relationships, and the long-term process of human and informational emancipation from the control of certain entities over others.

In conclusion, the concept of a "totalitarian state" appears anachronistic. The world has passed through numerous phases in which authoritarian systems not only in China and Russia but also in many other regions collapsed, underwent reforms, or evolved into alternative forms of organization. Global networks of collaboration, AI support, the disappearance of traditional national borders, and the dominance of knowledge, culture, and sustainable planetary management have rendered the totalitarian model unsustainable in the long run. New forms of order, grounded in transparency, distributed power, and global coordination, have taken the place of former empires of fear and control.

6. Management: A Historical Context

At the In the seventeenth century, there was no formal concept of “management” in the modern, academic sense. No textbooks, university departments of management, or organizational theories existed. All decision-making depended on authority, tradition, experience, and social hierarchies (Wojtaszek, 2014, pp. 347-356).

At the state level, “management” primarily involved the exercise of monarchical power, supported by the aristocracy, administrative bureaucracy, and the Church. Monarchs and princes did not manage in the contemporary sense; instead, they wielded power, determining policy, law, and economic affairs according to personal judgment, tradition, or immediate needs. In towns and smaller communities, the role of manager was often fulfilled by guild leaders (in the guild system), heads of merchant families, or owners of craft workshops. Production management was straightforward: a master would assign tasks to journeymen and apprentices, check quality, monitor deadlines, and handle customer payments. No standardized procedures or quality control in the industrial sense existed, nor were modern motivational methods employed.

We can identify several characteristic features:

1. Hierarchy. Relationships were rigidly hierarchical, based on social status. Decisions were made at the top and carried out by those below.
2. Absence of specialized management functions. A ruler, military leader, merchant, or guild master would simultaneously oversee people, production, finance, and resources. No clear separation existed between managerial, marketing, or financial roles.
3. Lack of formal analytical tools. Decisions were made largely on the basis of experience, instinct, and tradition rather than data, analysis, and strategy in today’s sense.
4. Patronage and clientelism. Many managerial relationships were rooted in personal ties, protection, patronage, and social dependence rather than substantive competencies or transparent rules.

Viewed through the lens of four centuries of development, seventeenth-century management can be seen as an embryonic form of what later blossomed during the eras of industrialization and capitalism. Those spontaneous methods rooted in lineage, social status, and the monarch’s authority would be rationalized over subsequent centuries.

The structures of that era contained the seeds of future organizational models. When the Industrial Revolution arrived in the 18th and 19th centuries, it created the need for a systematic approach to production management, division of labor, and standardized processes. This gave rise to modern management theories (Taylor, Fayol) only in the 20th century. The “management” methods in use at the time were not efficient by today’s standards and could not meet the complex challenges of mass production or global supply chains. Nevertheless,

the simplicity and personal character of those relationships stand in stark contrast to the coming era of formalized and professionalized management.

A contemporary researcher of management would regard 17th-century organizational systems as prototypes without formalized principles, models, or theories. Many core concepts of modern management strategic planning, controlling, employee motivation, internal communication, and organizational culture simply did not exist as distinct categories. From the viewpoint of current management science, the practices of that period were characterized by:

1. Minimal organizational scale. Activities occurred in small groups, workshops, and modest manufactories. Managing large institutions (such as a state) involved political power rather than organizational oversight.
2. Lack of cost and efficiency awareness. Resource management took place without precise cost calculations, performance metrics, or process-improvement methods.
3. Weak standardization of processes. No guidelines, job instructions, or quality procedures existed. Each master or merchant employed their own methods.
4. Authority rather than modern leadership. Power was based on social status (estate, birth, wealth) and religious or traditional sanction, rather than managerial skills, charisma, vision, or today's coaching-style approach.
5. A heavily stratified society with limited social mobility. Such stratification shaped managerial relationships: peasant, townsman, nobleman, and clergyman all had roles assigned from birth.
6. Primary reliance on agriculture and small-scale craft production without mechanization. Management was thus direct and personal, obviating the need for extensive organizational structures.
7. Culture and religion legitimized hierarchies and power relations. Managing "souls", influencing morale, or mobilizing people to work often took place via ethical, religious, or customary norms.
8. No tools for long-distance communication (other than letters and couriers), no information systems, and no methodical data gathering, so management remained local and intuitive.

Management at that time bore little resemblance to the academic discipline we know today. It was more a matter of authority and tradition, without formal methods, metrics, or strategic planning. Organizations were small, hierarchies were rigid, and decisions were made based on custom, intuition, and social bonds. From a historical perspective, we can see this as a natural pre-industrial phase. From a futurist or contemporary management science standpoint, one could say it was the starting point for the processes of rationalizing and structuring organizational thought, which eventually led to the development of management theory, the rise of corporations, and an entire body of knowledge and practice focused on efficiency, innovation, and strategy.

7. Management: Historical and Futuristic Context

Let us move to the early 25th century and outline what management might look like when taking into account the evolution of societies, economies, technologies, and shifting values and organizational forms. This analysis is multidimensional, merging global, European, and Polish perspectives. While the vision is speculative, it is grounded in the extrapolation of current trends, as well as inferences drawn from technological, social, and economic developments.

By the year 2425, the world has become a network of intelligent systems in which the primary driver of management is information: the flow of ideas, data, knowledge, and values. Nation-states in the form known in the 21st century no longer exist as key power nodes; instead, they have been transformed into hubs within a planetary network that manages resources, infrastructure, and knowledge. A post-industrial, post-scarcity economy supported by advanced artificial intelligence, nanotechnology, and genetic engineering provides access to goods and services without the necessity of large-scale physical labor. The defining characteristics of this complex environment are as follows:

1. Knowledge and information management as the foundation of all activity.

Decision-making no longer relies on hierarchical orders but on real-time flows of information. Artificial intelligence (AI) acts as an analyst, consultant, and moderator, using environmental, social, and economic data to recommend optimal courses of action. Management is largely holistic and adaptive: systems continuously “learn” the dynamics of their environment and social behavior, adjusting policies and strategies accordingly.

2. Holarchic and networked organizational structures.

Hierarchies have been replaced by network models, holarchies, and decentralized collaboration structures. Management is carried out through exchange platforms, where every entity from individuals to local communities to global consortia can participate, make proposals, and co-create decisions (Kozłak, Żabińska, 2011, pp. 271-279). Decentralization, however, goes hand in hand with advanced coordination, enabled by AI and intelligent protocols. Conflicts of interest are resolved through simulated scenarios and cognitively assisted negotiations (so-called “mind augmentation”).

3. Sustainable resource and environmental management.

Ecology and the well-being of the planetary system are central values. Managing energy, water, and biological resources takes place in circular and regenerative models. All participants in the management system recognize that resource allocation must continually be balanced. Environmental standards are not so much imposed as negotiated and enforced by intelligent systems that monitor ecosystem parameters.

4. Managing cultural diversity and social values.

The society of the future is global, mobile, and culturally intermingled, yet also highly individualized. Social management centers on moderating a diversity of needs, values, and aspirations. Virtual decision-making forums emerge, where various groups ethnic, ideological, aesthetic negotiate common goals. “Meaning management” and “perception management” become key: designing communication interfaces that enable comprehension and collaboration free from conflict. Here, AI serves as a mediator and translator of values.

Within Europe, a multilayered network of regions, city-clusters, and thematic communities has taken shape. Traditional states have evolved into regional hubs that maintain a degree of historical and cultural identity; however, political and economic authority is dispersed. Management involves the dynamic orchestration of transregional projects:

Infrastructure and transport. Automated and autonomous transport systems are coordinated by intelligent traffic management systems to minimize energy consumption and environmental impact.

Culture and education. European educational networks, representing continuous “lifelong learning” in virtual-physical environments, are overseen by global knowledge platforms. There are no ministries of education rather, there are councils of “knowledge meritocracy”, groups of experts, and AI that jointly establish standards and curricula, later personalizing them for individual users.

Politics becomes a process of continuous negotiation over values and resource allocation, conducted on deliberative platforms. Management in Europe is about building consensus based on data, simulations, and ethical principles, rather than on cyclic democratic elections or the actions of specific lobbying groups.

Poland, as a European region, is no longer fully sovereign in the old sense. Rather, it is a cultural and historical community that retains a distinct identity language, certain architectural and artistic patterns, as well as historical memory. Managing this region focuses on integrating local communities. Poland has become a mosaic of local clusters urban-regions, creative communities, research, and cultural centers. Their governance is about facilitating cooperation and knowledge exchange. Local communities jointly decide on infrastructure, public space design, and cultural policy, while AI systems help reconcile differing needs into a harmonious model of social life. Management of historical heritage (archives, museums, digital reconstructions of old cities) is integrated with new technologies. Historical education aligns with social-technological development programs, and local policies aim to combine traditional values of hospitality, cooperation, and solidarity with a modern ethic of planetary responsibility.

Management concentrates on harmonizing diverse social interests, individual needs, and global values. In a society without classic scarcity of goods, management focuses on quality of life, personal growth, social harmony, and environmental integrity. By contrast, the economy

is a system of flows and exchanges of information, energy, and materials in closed loops. Management's task is to maintain resource balance and to reconcile technological innovation with ecosystem stability.

Social structures are multilayered and fluid. Management involves designing interfaces that enable collaboration among groups with different values and lifestyles. This is an ongoing process of forming networks of interdependencies, wherein each participant can influence processes without being dominated by authoritarian structures.

From a cultural and ethical standpoint, management also involves concern for moral frameworks governing the use of technology AI must serve the common good. Ethical codes emerge to regulate artificial intelligence and decision-making processes. The culture of management is one of dialogue and co-creation.

Management in the future is far more complex, yet paradoxically simpler in its operational dimension, thanks to AI support. It is no longer hierarchical, based on control over people and resources, but rather networked, grounded in collaboration, knowledge, and information. On a global scale, management takes the form of an intelligent ecosystem; in Europe, it manifests as a grand laboratory of consensus and cultural synergy; in Poland, it becomes a careful balancing of tradition and identity with the global logic of cooperation. Management here serves a purpose that extends beyond mere economic efficiency it is a tool to sustain balance, beauty, human dignity, and the integrity of the planet's environment.

8. Conclusion

The analysis indicates that seventeenth-century management focused on traditional ways of organizing work and resources, closely tied to politics, the military, and local power structures. By contrast, the futuristic perspective of the 25th century envisions a post-scarcity world in which automation and intelligent matter-processing systems play a pivotal role, and production once a heavy burden on people largely recedes into the background. Priorities have shifted: ethical, cultural, and identity-related issues gain significance, while traditional forms of labor oversight lose ground.

Ultimately, the article's comparison of 17th-century practices with possible future scenarios captures the continuity of management processes and their enduring foundations the need for planning, organization, and authority while also accounting for dynamic historical, cultural, and technological factors. The authors emphasize that reflecting on the centuries-long development of management enables the design of organizational solutions more effectively suited to the demands of both the modern era and the world to come. Such a distant even "exaggerated" perspective serves several essential cognitive and didactic purposes in the field of management studies. First, it heightens our awareness of how management concepts and

tools evolve over time. By spanning both the 17th-century world and a speculative 25th-century scenario, we see that the fundamentals of management work organization, power structures, and the relationship with technology are historically contingent. This underscores that the methods used today are not “natural” or “eternal”, but rather conventions arising from particular social, economic, and technological conditions.

Next, this approach stimulates creative thinking and scenario-based strategies. Employing a far-reaching timeline liberates us from contemporary institutional and technological constraints. Although such a futuristic vision is largely unverifiable, it moves us beyond linear thinking and enables a multi-stage view of change. By embracing this broader horizon, managers, researchers, and students of management can craft innovative strategic concepts that factor in “improbable” influences often overlooked in near-term planning.

A long-range perspective also helps us recognize the importance of non-technical factors cultural, ethical, and philosophical in shaping management. Management does not evolve solely in tandem with emerging technological tools such as artificial intelligence, but also in response to shifting societal values and norms. This leads us to ask how culture, religion, or the concept of community might affect future organizations, revealing the complex interplay between the technical and the human.

Finally, contemplating a post-scarcity world and high-level automation encourages the development of axiological sensitivity. In such an environment, managers move beyond resource coordination to become guardians of meaning and values. Over the long run, ethics, trust, and responsibility toward both individuals and the environment can become as pivotal as, or even more crucial than, short-term economic objectives. Ultimately, this distant temporal lens underscores that management is a dynamic process tied to broader civilizational contexts. It also promotes flexible, interdisciplinary thinking attributes indispensable in both present-day and future organizations.

References

1. Grzebyk, T. (2018). Angielska kolonizacja wschodniego wybrzeża Ameryki Północnej w latach 1585-1620. *Acta Universitatis Lodzensis. Folia Historica*, No. 100, pp. 59-68.
2. Hroch, M., Petrafi, J. (1964). Europejska gospodarka i polityka XVI i XVII wieku: kryzys czy regres? *Przegląd Historyczny*, Vol. 55, No. 1, pp. 1-21.
3. Jezierski, A., Leszczyńska, C. (2010). *Historia gospodarcza Polski*. Warszawa: Key Text.
4. Kleszcz, R. (2022). Polskie dwudziestowieczne dyskusje dotyczące racjonalności. *Roczniki Filozoficzne*, Vol. 70, No. 2, pp. 129-153.
5. Kołodziejczyk, D. (1987). Imperium Osmańskie w XVI wieku - kilka uwag o potencjale demograficznym i gospodarczym. *Przegląd Historyczny*, No. 78, pp. 375-394.

6. Koźlak, J., Żabińska, M. (2011). Koncepcja holonicznego systemu do zarządzania łańcuchami dostaw. *Automatyka. Akademia Górniczo-Hutnicza im. Stanisława Staszica w Krakowie*, No. 15, pp. 271-279.
7. Mencil, M. (2020). Uwarunkowania polityczne i gospodarcze w Azji Wschodniej pod wpływem reżimu europejskiego w XVI-XVII wieku. *Studia Gdańskie. Wizje i rzeczywistość*, No. XVI, pp. 97-118.
8. Miścicki, W. (2014). Najemnicy w armiach XVII stulecia i ich rola w procesach kształtowania narodów Europy. *Wielogłos*, No. 20, pp. 23-34.
9. Pietschmann, H. (2002). Historia atlantycka: pomiędzy historią Europy a historią świata. *Polski Przegląd Dyplomatyczny*, Vol. 10, No. 6, pp. 59-119.
10. Skwara, A., (2013), Przemiany kulturowe we Francji okresu Oświecenia. *Pedagogika. Studia i Rozprawy*, No. 22, pp. 339-347.
11. Ulmer, A. (2017). Elektryczność w cywilizacjach starożytnych? *Maszyny Elektryczne: zeszyty problemowe*, Vol. 4, No. 116, pp. 39-46.
12. Wojtaszek, H. (2014). Od historii metod zarządzania do sprawnego funkcjonowania organizacji, *Zeszyty Naukowe Wyższej Szkoły Humanitas Zarządzanie*, Vol. 15, No. 1, pp. 347-356.