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The Reinventing of public administration in the new hybrid world

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Abstract
The turbulent environment pushes public administration to its limits, resulting in revolutionary changes. When the pandemic hit the world in early 2020, public administration was faced not only with complex problems, but also tumultuous challenges marked by the emergence of unpredictable events. In the new hybrid world, public administration has evolved into a distinct model that enables organizations to use new and emerging technologies. By redefining the characteristics of speed, ethics, and fusion, this article aims to contribute to the discussion of how a hybrid approach to public administration may contribute to ongoing debates.

Keywords
New hybrid world, interactive citizen, borderless collaboration, transformational
strategic, broad accessability

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Introduction

In the 21st century, public administration, as a process, has been revolutionized. It is no longer a mere bureaucracy but has transformed into a unique system of decision-making that empowers organizations to use new and emerging technologies to reach their goals and objectives, not just for the present but also for the future. The advent of public administration transformation in this century has been primarily due to three factors. First, more and more technologically advanced countries have developed unprecedented levels of resourcefulness in the past years. Second, huge populations have overwhelmed these understaffed services. The third factor is the establishment of new managerial policies, such as a reduction in workloads through outsourcing. The problem is that when public administrations are compared with other organizations, they are often found to be inefficient, bypassing the state's natural tendency to hierarchize itself. The void created by public administrations is filled by commercial organizations that can do their tasks more efficiently and better than the bureaucracy. The very concept of the public has been challenged because of this restructuring.

However, when the COVID-19 pandemic hit the world in early 2020, public administration was confronted not only with complex problems but also with tumultuous challenges marked by the development of inconsistent, unpredictable, and uncertain events (Ansell et al., 2021). At the same time, the volatility of the COVID-19 pandemic required the government to have a better problem-solving capacity. There is a limit to what bureaucracy can do to create a society based on public administration that balances economic advancement and social problem resolution. However, with the acceleration of technological and scientific revolutions, the cross-sectional sector of knowledge and information is not difficult to achieve.

A turbulent environment necessitates strong leadership to handle collaboration and public innovation. The pandemic also proved that leadership is an essential key to combating the bad impact on the social economy (Al Saidi et al., 2020). This is seen in how South Korea and Singapore have successfully controlled their outbreaks with some evolving strategies (Sazzad et al., 2021). In response to the ongoing pandemic, global governments have employed a multitude of strategies to curb its spread. These measures have ranged from implementing full or partial lockdowns at different intervals, temporarily prohibiting both domestic and international air and sea commutes, shutting down schools, to imposing restrictions on public gatherings. This unprecedented health crisis has pushed public administrative capacities to their extremes. It has also exhausted the traditional toolkit of foresight, safeguarding, and resilience strategies, resulting in an abrupt pause of societal functions and economic activities.

During the pandemic, most outdoor physical activities were discontinued. Countries affected by the pandemic tried to adapt to the situation by supplementing the real world with digitalization (De et al., 2020). According to ITU Telecom World data, individual internet use has increased dramatically since the early 2000s (see: Figure 1). Moreover, as shown in Figure 2, Europe and America have the highest percentage of internet users, with 87% and 81% of the total population, respectively.
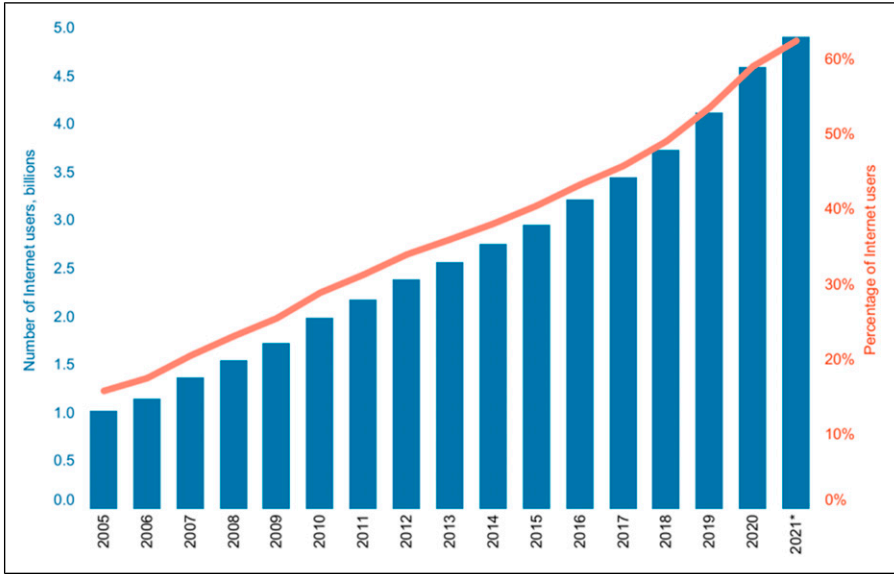
Figure 1. Individuals using the internet. Source: ITU Telecom World (2021).
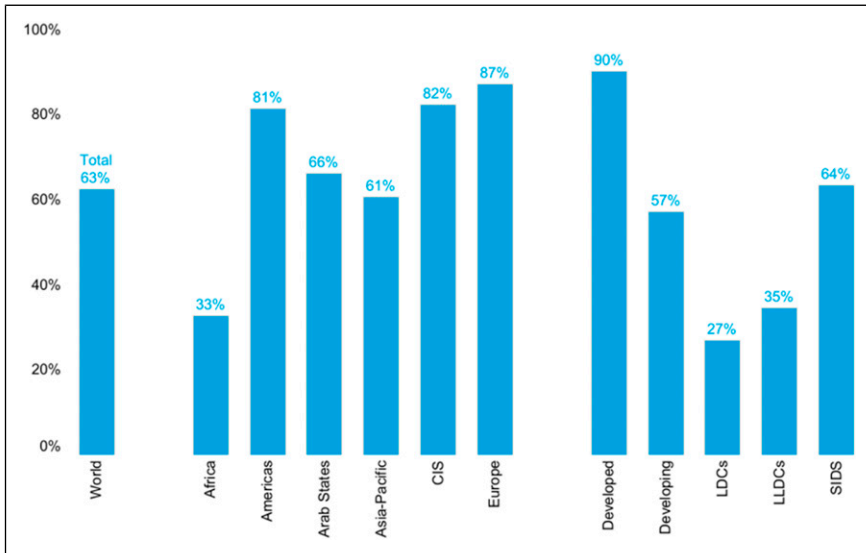

Figure 2. Percentage of individuals using the internet. Source: ITU Telecom World (2021).

The policies adopted by leaders to deal with the effects of the pandemic include enforcing social restrictions, upgrading from face-to-face learning to an online learning method, online service transactions, and others. The pandemic also brought about the need for entrepreneurial exploration and the development of robust governance strategies that facilitate and support adaptive and flexible adjustment as the world was transitioning into a new hybrid era. The new hybrid world is a world that arises through the merging of the physical world with the digital world—a process by which digital processes, digital tools, and an abundance of information increasingly influence social existence, leading to digital transformation (Ossewaarde, 2019). However, in public administration, some researchers refer to this new hybrid reality as a neo- Weberian state (Minogue, 1998; Nolan, 2001; Pollitt and Bouckaert, 2004), while others refer to it more broadly as the renaissance of the bureaucracy model. In this new hybrid world, bureaucracy has established a new system not only by integrating responsibilities but also by learning from best practices and challenges in numerous countries. The new hybrid world of; bureaucracy teaches about transformation, namely how bureaucracies modify their ways of thinking, working, and interacting.

This article aims to contribute to the discussion of what some authors refer to as 'post-bureaucracy' (Olsen, 2006), while others refer to it as the 'neo-Weberian state' (Pollitt and Bouckaert, 2004), while still others refer to it as the 'new public service' (R. B. Denhardt and Denhardt, 2003), 'public value management' (Stoker, 2006), or 'new public governance (S. P. Osborne, 2006, 2010). The purpose of this study is to examine how a hybrid approach to public administration may contribute to ongoing debates. Additionally, this research demonstrates how public organizations use technology to satisfy public demands in the digital era. The hybrid approach to public administration is quantified by the extent to which public organizations can solve public problems through the use or development of existing technologies. Innovation in policy development (agenda and formulation) and implementation (implementation and assessment) can also be evident in the community's and stakeholders' responses to these policies (Hemachandra et al., 2021; Wukich, 2020). Thus, the hybrid approach to public administration demonstrates efficiency and effectiveness in serving public requirements (as previously proposed in the new public management approach), by incorporating approaches from other sectors to assist in successfully addressing public demands (Bozeman and Moulton, 2011; Emery and Giauque, 2014; Moulton, 2009).

This article argues that the new hybrid world is a turning point for public administration to redefine by focusing on the characteristic of speed, ethics and fusion. This article progresses in the following manner. We begin by charting the evolution of public administration from bureaucratic paradigms to new forms of governance. We then contextualize the concept of the new hybrid world by examining it from a variety of academic and public administration perspectives. Finally, we discuss the need for redefining public administration and leadership.

The development of public administration

Since the 19th century, the development of public administration has come a long way. This periodization was also written in detail by Henry, who divided the development of

public administration into six paradigms, ranging from the politics-administration dichotomy to good governance (Henry, 2015). Any consideration of public administration begin with the development of political science (Guy, 2003). However, because political science has always been at the center of the most comprehensive consideration of philosophical norms and thought, and philosophical norms and thought are now so important in public administration, public administration has always been more or less considered political science (Frederickson, 1976). In 1887, Woodrow Wilson wrote an article entitled "The Study of Administration" considered a reformist work (Stover, 1995), and made several points stating that "implementing a constitution is more difficult than making a constitution" (Henry, 2015). He emphasized the importance of administrative knowledge in the implementation of complex public relations and that national goals can only be achieved through effective administrative means (Dimock, 1937). This is the beginning of the development of the science of public administration, often referred to as the old public administration or classical public administration.

The classical model of public administration is based on many conventions, including the strict separation of the political-administrative dichotomy (Goodnow, 2003), the anonymity of public services, and political neutrality (Bourgon, 2007). This idea was also supported by Leonard D. White (Introduction to the Study of Public Administration), who wrote in 1926 that politics must be separated from the administration so that the field can develop into pure science, which will ensure the realization of efficient government (Henry, 2015). An important explanation of this theory is reflected in the provision of public services, namely respecting the rule of law, keeping promises to serve the public interest, and expecting civil servants to demonstrate integrity, honesty, and fairness in serving public trust (Bourgon, 2007). However, this classical management theory barely reveals the internal operations of finance and information in public sector organizations, let alone personnel management systems or even public concerns as users (Gray and Jenkins, 1995).

The limitations of the old public administration theory surrounding rigid government management were later criticized as inflexible in that era (Bourgon, 2007). NPM emerged after the breakthrough of Hood (1991, 1995; Funck and Karlsson, 2020), which refers to the reorganization of public sector institutions to include accounting, management, and reporting methods. Public sector approach. The commercial sector (Dunleavy and Hood, 1994; Hood, 1995). It is well-known that Hood implements his strategy through seven interrelated doctrinal elements: the advocacy for professional management; the establishment of transparent standards and performance indicators; a heightened focus on output control; a transition towards individual unit analysis within the public sector; a movement towards enhanced competition within the public domain; the adoption of management practices typically associated with the private sector; and the enforcement of accountability (Funck and Karlsson, 2020). The implementation of the NPM coincided with the changing role of private-sector managers. Some believe that in order for managers to meet the performance measurement standards for which they are accountable, they must be liberated from the routine and oversight of various administrative systems (such as procurement and personnel) (Kaboolian, 1998; Peters, 1987; Thompson, 1997). This is also emphasized by Bourgon (2007) who identified three important issues

for implementing NPM in public services, namely, citizen-centered services, the value of taxpayers' capital, and responsive public service personnel. However, in the process of its development, NPM no longer applies to administrative science methods. This criticism of NPM is summarized by Mongkol (2011) who believes that giving public managers the authority to administer programs through NPM may result in concentrated decision-making among them (Kaboolian, 1998; Maor, 1999; Khademian, 1998). Later, Armstrong & Pollit (1998) argued that the majority of public service and administration sectors are distinguished from the private sector by distinct political, ethical, constitutional, and social characteristics. Increased transparency makes it easier to identify unethical or corrupt behavior, and a greater emphasis on measurable performance can impose a behavior standard (Hughes, 2003).

The next development in public administration is the New Public Service (NPS) approach. According to Ingraham and Rosenbloom (1998), public administration should be geared toward consolidating rights, representation, participation, and decentralization in the future so that public services become legitimate state administration. Denhart and Denhart's NPS has become an extensively evaluated scientific development since 2000. The concept of NPS refers to a set of ideas about the role of public administration in a government system that places citizens at the center (R. B. Denhardt and Denhardt, 2000). Several key points from this approach outline the main roles of public servants who must work to fulfill the public interest collectively (the result of dialog about shared values) and collaboratively. Service officers must pay attention not only to the market but also to the constitutional laws, as well as encourage and accommodate the participation and contribution of all parties to fulfill the interests of citizens (J. V. Denhardt and Denhardt, 2015; R. B. Denhardt and Denhardt, 2000, 2001, 2003).

Redefining public administration

Besides the necessity for public sector innovation, it is believed that a decline in public trust has resulted in a shift in the approach to public administration (Kettl, 2019). The public sector continues to investigate new systems and methods for increasing public trust in its institutions; these systems are then adopted, which occasionally result in a paradigm shift in public administration (Cheema and Rondinelli, 2007; Shields et al., 2018; Soetanto et al., 2020). The erosion in public confidence is expressly utilized by policymakers to justify improving public administration and expanding opportunities for collaboration and communication between public entities and nongovernmental groups and other external players (Schmidthuber et al., 2021). Organizational transparency in the areas of information and participation can help build trust in a government system, which is why organizational transparency is also a factor to consider when developing a public administration approach (Bertot et al., 2014; Jetzek, 2016; Sarker et al., 2020). In the contemporary digitalization, the transparency of public organizations is also vital since the public has easy access to all information via various forms of media, which makes them more critical of numerous issues, including public ones (A. Giest, 2017; Majumdar, 2017; Mauro et al., 2016).

Specifically, public administration in a new hybrid world is not entirely novel or distinct from the past. In addition, the redefinition of public administration necessitates an examination of what must be retained from the prior method. It has been said previously that public administration in the new hybrid world has become a subject of controversy—whether it leans toward NPS, new public governance, or neo-Weberian states. Instead of proposing an entirely novel idea, we point out what needs to be highlighted or prioritized in various ways and offer alternatives suited to the reality we face today (see Table 1).

Apart from facilitating public access to all types of information, digitalization can also assist public organizations in meeting their internal and external needs (A. Giest, 2017). Along with the development of digitalization, a hybrid approach to public administration has begun to emerge, merging digital aspects with pre-existing approaches to public administration (Emery and Giauque, 2014; Marchand and Brunet, 2019; Mauro et al., 2016; T. Papadopoulos et al., 2020; Szmigiel-Rawska et al., 2018). The components of the NPM approach that emphasize efficiency in public administration appear to be aided in "realization" in the digitalization (Abdou, 2021). Openness and collaboration with diverse sectors have also been easier in the modern period because of the proliferation of numerous information sources. Even more recently, the public sector has been able to evaluate policies by analyzing public responses to past initiatives on social media (Bellström et al., 2016; Majumdar, 2017; Wukich, 2020). The success and creativity of every modern public organization may be seen through a hybrid approach to public administration, which enables public organizations to use and develop numerous

**Table 1.** The characteristic of public administration.

	Neo Weberian state	New public government (NPG)	New public service (NPS)	The hybrid of public administration
Value	Citizenship	Citizen and customer	Serve citizens, not customers	Interactive citizen
Public service	Improving the efficiency of public administration	Leads in to digitalization elements in public service	Serve rather than steer Value people, not just productivity	Broad accessibility
Organisation	The professionalisation of the civil service	Horizontal linkages across actors and institutions	Recognize that accountability Isn't simple	Borderless collaboration
Leadership	Legitimacy of power	Values based leadership Shared leadership Servants, not owners	—	Strategic and transformational

platforms available in the digitalization (Emery and Giauque, 2014; Hyland-Wood et al., 2021). Hybrid settings, on the other hand, might result in the greatest or the worst outcomes, as they take values, principles, and norms of action from many, sometimes contradictory, worlds, which are likely to influence and legitimize their behavior (Emery and Giauque, 2014).

The concept of new hybrid world

Figure 3 The term new hybrid world began to be addressed in the literature when published a review of Stjepan G. Metrovc's Postemotional Society. Williams emphasized that the new hybrid reality has emerged as a result of modernity's diametrically opposed tendencies toward order and disorder. Alleyne (2005) followed up his study with an article titled "The United Nations' Celebrity Diplomacy," in which he mentioned Henry Kissinger as one of the most well-known international political leaders who realized that the revolution in global telecommunications had produced a new hybrid world in which politics and popular culture coexisted.

The book titled The Hybrid Universe of Public Administration in the 21st Century by Emery and Giauque (2014) was the first to examine the term "new hybrid world" in the field of public administration. Emery and Giauque emphasize the incomplete nature of this new hybrid world. A new hybrid world provides alternative political and administrative realities by analyzing the hybridity that characterizes the present public
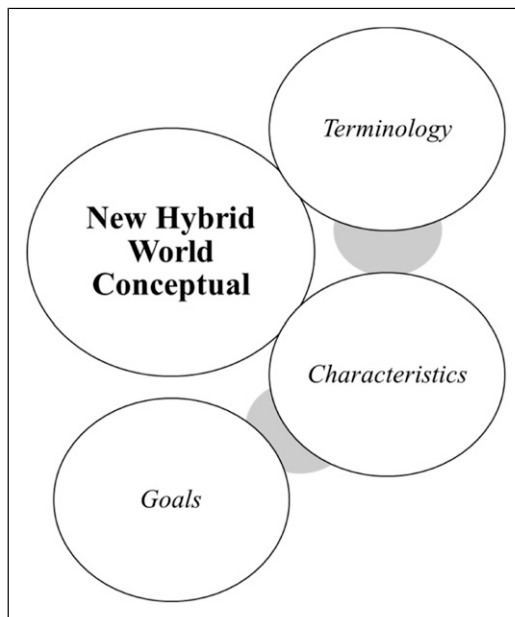
Figure 3. The new hybrid world in the context of public administration.

environment. This new hybrid world of public administration is also consistent with the emergence of the post-NPM era (Marchand and Brunet, 2019). Public administration is then accelerated in the new hybrid world by the availability of new technologies, which enable people to overcome their weaknesses and imperfections caused by illnesses and accidents. These new technologies help simplify our lives by providing us with ever-increasing opportunities to benefit from this new hybrid world. They do; however, introduce certain threats and dilemmas (Bałdys and Piątek, 2017). This process is how a new hybrid world emerges, one in which experience is formed through the fusion of the physical and digital worlds (Ossewaarde, 2019). The modern world is undergoing structural changes as a result of the emergence of cyberspace, which is becoming increasingly populated by human activities. Virtual environments employ novel mechanisms, modes, and principles of operation, which distinguish them from physical spaces and underscore the importance of redefining public administration. Much can be learned from this pandemic to consider a future hybrid setting. The pandemic has created a new hybrid world in which numerous organizations must now adapt and find new ways to work (Ford et al., 2021). In a hybrid setting, they are able to avoid the challenges of their work environment by switching to a different environment that offers advantages for that particular circumstance (Thorstensson, 2020).

Other works of research emphasize that in this new hybrid world, home and the work environment are no longer neatly segregated (Shumar and Madison, 2013). Although nature is rapidly depleting at all spatiotemporal scales in the new hybrid world, nature must learn to adapt to avoid escalating human influences (Castree, 2019). Braithwaite (2013) noted that the new hybrid world necessitates attention to democratically controlled steering capacities and responsible regulatory structures capable of correcting the most harmful errors. According to Goodnight (2016), mass media tactics are essential to restore the image of the new hybrid environment.

The terminology

The terminology of the new hybrid world is derived from certain conditions and developments like modernity. Modern organizations are becoming more complicated, with global ramifications for the public, private, and nonprofit sectors (Farazmand, 2002). Public organizations are growing more complicated and hybrid as they attempt to address several and sometimes contradictory concepts, considerations, needs, structures, and cultural components at the same time. A new hybrid world is one in which people's digital and physical lives are entwined and in which they have access to a new dimension of their environment (Jacquemin et al., 2010). This, as is well known, leads to digital transformation. Lindgren and Melin (2017) define digital transformation as the process by which digital processes, digital tools, and an abundance of information increasingly influence social existence. Consequently, a new hybrid world is formed. It includes digital and physical lives, which define how the environment works. It also means that social interaction is no longer neatly segregated in the hybrid environment.

Public administration in the new hybrid world

As previously stated, public administration in a hybrid world is defined as an era of public administration that promotes public service innovation using technology in the digitalization era, also known as the industrial revolution 4.0 (Emery and Giauque, 2014). In a hybrid environment, public administration encourages collaboration between public organizations and other organizations/agencies in both the public and private spheres (Hemachandra et al., 2021; Abdou, 2021). Unlike earlier approaches to public administration, the new hybrid world approach emphasizes creativity and collaboration in solving public needs rather than focusing on the organizational backdrop (public/private). Furthermore, the capacity and ability of public institutions to use technology in addressing public needs are considered an important step in fulfilling public needs (Hyland-Wood et al., 2021). Nonetheless, in a hybrid society, public administration faces the significant issue of potential conflicts of interest due to the engagement of numerous parties in the process of addressing community needs, resulting in a bias between the public and private sectors (Bozeman and Moulton, 2011; Emery and Giauque, 2014).

To avoid the previously described issues, the public sector's application of technology in the hybrid world must consider numerous factors (Hyland-Wood et al., 2021). First, public administration in a hybrid environment must determine who the stakeholders are and the extent to which each participant contributes to the process of addressing public needs. Second, it must also determine the degree to which public organizations can leverage and improve existing technologies to address societal demands. Finally, public institutions must be capable of analyzing and forecasting technical changes to incorporate them into a strategy that minimizes the likelihood of conflict in their area (Emery and Giauque, 2014). In a hybrid world, difficulties frequently arise as a result of public institutions' inability to comprehend the use of technology and forecast its development (Abdou, 2021; Bozeman and Moulton, 2011). The rapid advancement of technology is not accompanied by a robust legal framework for its usage, resulting in a slew of issues, ranging from conflicts of interest to budget fraud (G. A. Papadopoulos et al., 2018; Wukich, 2020).

## The goal of public administration in the new hybrid world

A new hybrid world offers alternative political and administrative realities. Being more realistic about transactional services, it offers a conceptual framework for incorporating online best practices into hybrid and remote learning environments. And in an organization, it creates and guides networks of deliberation. It plays a conciliating, mediating, or even an adjudicating role. It also contributes to the formation of a holistic organization and governance through a new working method. Depends on an appropriate organizational structure—the development of IT and intelligent systems/data mining.

In political science, researchers such as Bond (2017) argued that Actor-Network Theory orients sociology toward confronting the new hybrid world while also providing significant opportunities to explore and examine the challenges and tensions that arise in the ecology of higher education's everyday world. With the advancement of new

technology, which enables people to overcome their flaws and shortcomings, the new hybrid world offers increased potential for resolving social problems (Bałdys and Piątek, 2017; Sergeev and Kukushkina, 2018). When pandemics strike, the need for a future hybrid setting becomes apparent. Numerous businesses require modification and develop a new way of working that is beneficial during such situations (Ford et al., 2021; Hemm, 2021; Thorstensson, 2020). The pandemic also contributed to the new hybrid reality of education by developing a conceptual framework for incorporating online best practices into hybrid and remote learning environments (Taylor, 2021).

Characteristics of public administration in new hybrid world

Figure 4 Public organizations have been forced to act without jeopardizing the democratic foundation and legality of their actions. This unavoidable circumstance has raised some fundamental concerns about the logic or values that underpin their legitimacy. Because they borrow values, principles, and rules of action from various universes that may be incompatible, hybrid environments have the potential to influence and legitimize their behavior. This section identifies the various characteristics that public organizations should have in this new hybrid world.
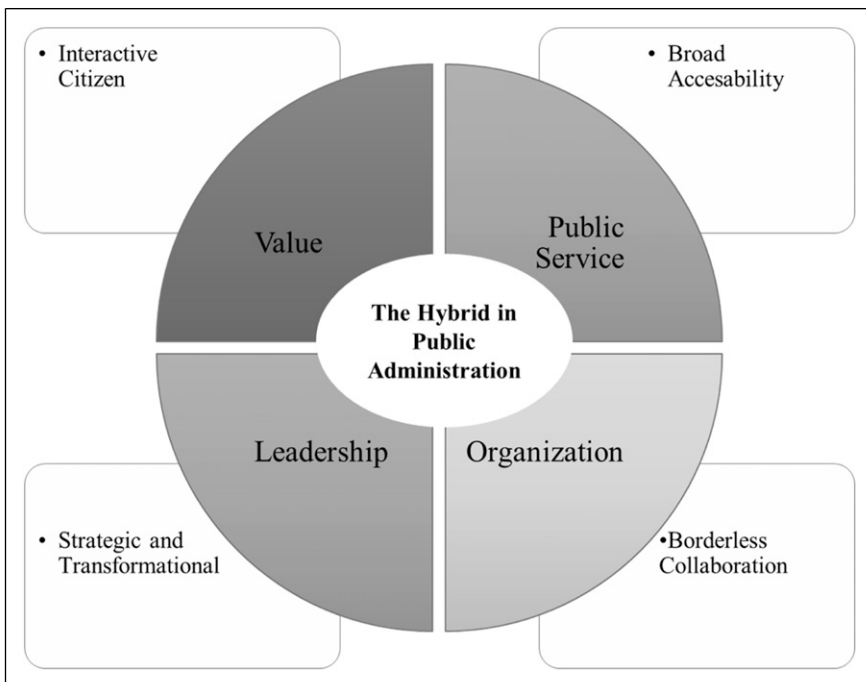
Figure 4. The characteristics of the hybrid of public administration.

The value. The value brought by neo-Weberian includes NPS and NPG. Obviously, these are important, but we need to take it one step further in terms of interactive citizenship. The interactive approach was theoretically attached to the government (interactive governance) by prioritizing problem-solving through interactions initiated by the government. This helped create societal opportunities by applying the formulation process and the principles resulting from these interactions (S. P. Osborne, 2010). According to Osborne, theoretically, the government's interactive approach strives to integrate the perspectives of various government players with their respective interests and powers. The interactive approach thus prioritizes the participation of various actors in establishing solid relationships in a country, with the intention of boosting revenues for each participant (Mazur et al., 2018).

Further, the interactive citizen model can represent public values from the standpoint of the target administration as both citizen and controller. As citizens, the target administration demonstrates an understanding of the community's requirements, how problems arise, and what is required to address these issues (Chen et al., 2020; Rietbergen-McCraken, 2010; Schmidthuber et al., 2021). On the other hand, as the controller, the public can provide input on/review all government acts and policies (J. V. Denhardt and Denhardt, 2015; Rietbergen-McCraken, 2010). It also adapts what has occurred in the business sector, where the government and third parties must make policies or innovate in response to the evolution of public demands. The same is done in the business sector but with a focus on market requirements (Bode, 2019; Elliott, 2020; Ringeling, 2015). The interactive citizen becomes a new value that can be cultivated by highlighting the role of administrative objectives in addressing public requirements.

Public service. The previously applied principles of public service must, of course, be maintained. However, in the digital age, accessibility is once again a primary concern. This may seem obvious, but accessibility encompasses not only how public services are delivered but also how individuals can obtain the finest available public services, tailored to their needs, without exerting undue effort. Utilizing the transformative potential of contemporary IT and digital storage, digitization in public services becomes an endeavor to tackle these difficulties (Chakrabarty and Chand, 2012). Various nations are now utilizing technological advancements in the delivery of public services, ranging from the collection of demographic statistics to the provision of national health insurance (A. Giest, 2017; Höchtl et al., 2016; Putrijanti, 2018; Saip et al., 2018).

The characteristics of digitization in public services have already begun to be duly recognized in the NPM approach, where specialists in the public sector identify the usage of various digital aspects (including electronic service delivery and e-government) (J. V. Denhardt and Denhardt, 2015; Funck and Karlsson, 2020; S. P. Osborne, 2010). However, the NPM method does not provide a clear explanation of how digitization might genuinely improve government performance and public services (Dunleavy et al., 2006; S. P. Osborne, 2010). Further, Osborne underlined that governance and digitization in the NPM approach lack a clear definition and significant contribution to the study of public administration at the time. Nonetheless, in the era of digitization in public services, NPM has

begun to establish its identity by demonstrating the role and contribution of the digital system in addressing public requirements (Höchtl et al., 2016; Hyland-Wood et al., 2021).

Digitalization is currently seen as one of the most important contributors to facilitating community access to government-provided public services (S. Giest, 2017a; Hyland-Wood et al., 2021). To evaluate the efficacy of public services in a certain region, the government's understanding of digital technology becomes crucial (S. Giest, 2017b; Hyland-Wood et al., 2021). Currently, governments in several nations are utilizing technology to identify public needs in various areas and to deliver public services to address these requirements (Bertot et al., 2014; Höchtl et al., 2016; Kusumasari et al., 2019; Siuly and Zhang, 2016; Szmigiel-Rawska et al., 2018). It is understood that the use of technology in public services provides convenience for both sides (providers and service recipients). Beyond the public sector, innovative technological developments are changing citizens' expectations of governments' ability to provide high-value digital services (Mergel et al., 2019). As a result, knowing and employing technology as a public servant is critical because the government must provide citizens with broad and easy access to public services.

Organization.   Organizational structure is one of the most important aspects to consider for public administration in the new hybrid world. Neo-Weberian organizational structures highlight the professionalization of many public service operations. This pertains to the modernization of various public sector assets, such as equipment and the service system. Neo-Weberian remains distinct from the organizational side. As a result, e-government and e-services are on the rise (Kudłacz, 2017). The administrative staff is no longer made up of officials but of professionals who perform high-quality operations in their respective areas of responsibility. Meanwhile, the emphasis on administrative practice in contemporary public governance is shifting from hierarchical administration to a greater reliance on horizontal, hybridized, and associational forms of governance (S. P. Osborne, 2010). Mutual interdependence is defined as the primary justification for such collaborative or cooperative relationships, analogous to the underlying concept of "governance," which is closely associated with collaboration. Public-private partnerships are a prevalent form of joint endeavor. However, collaborative relationships between enterprises and nongovernmental groups can be observed in numerous areas (S. P. Osborne, 2010). New public administration results in an organizational setting that is more open than that of neo-Weberian. In organizational arrangements, tight separation of authorities and open cooperation cannot be separated. In the new hybrid world, organizational arrangements do not favor one technique over another. This occurred after the pandemic, an enormous catastrophe faced by the entire planet. In a stable administration, continued autonomous development of government resources can be pursued to meet the needs of citizens. However, the government cannot refute this principle and avoid private engagement during a crisis. Rapidly responding to the pandemic and other potential emergencies necessitates partnership and cross-sector collaboration that brings together disparate professional competencies and resources in coordinated, and possibly even creative (Bentzen and Torfing, 2022).

Due to the need for addressing specific and common objectives; integrating knowledge, skills, and experiences; and exchanging resources (data, services, information, and/or expertise) to complete specific tasks, organizations have paid close attention to collaborative activities. To overcome the hurdles posed by the disadvantages of collaboration, interested players must first establish mutual trust and communicate effectively (Haguouche and Jarir, 2018). While partnership with the private sector is inevitable, public officials must maintain their responsibility to the public. This is the greatest achievement of the organizational frameworks of the New Public Service, where public personnel must consider statutory and constitutional law, community values, political norms, professional standards, and public interests in addition to the market (J. V. Denhardt and Denhardt, 2015). Officials are neither impartial specialists nor business proprietors. They act as facilitators, reformers, interest brokers, public relations professionals, crisis managers, analysts, advocates, and most importantly, moral leaders and protectors of the public interest.

Consequently, in the new hybrid world, borderless cooperation is not synonymous with rule less open collaboration. Due to the adaptability of organizational structures in conditional public administration, it is feasible to respond quickly to crises through multi-stakeholder collaboration while retaining public accountability and transparency. Page et al. (2021) explains that interorganizational structures and resources, as well as political relations among stakeholders and an understanding of technological and technical issues, are important forms of knowledge that collaborators can use or develop to maximize results when solving public problems. Political and technological knowledge can interact dynamically, generating the opportunity for creative solutions to public policy issues.

Leadership. Leadership is the "lead" component responsible for implementing the other three. Good leadership must ensure cooperation when conditions are normal; transformational and strategic leadership is key in handling conflict in times of crisis. Leadership in the public sector is one component of the approach to public administration in the new hybrid era. Effective leadership establishes a healthy corporate culture, boosts motivation, clarifies plans and objectives, and guides the organization toward increased productivity and performance (Ingraham and Getha-Taylor, 2004). The debates over leadership in the public sector have lasted a long time and have involved a variety of professionals and researchers (Orazi et al., 2013). The broad adoption of public management changes in Europe and the United States (S. P. Osborne, 2010) (D. Osborne and Gaebler, 1993; Pollitt and Bouckaert, 2003) and the general shift away from managerialism toward "leaderism" (O'reilly & Reed, 2010) have been attributed to focus.

Leadership is critical to the success of public organizations in satisfying public needs. Indeed, attention to leadership style is a priority not just in the public sector but also in the private sector. Even so, there are some subtle distinctions between public and private-sector leadership styles. One of the most notable is the bureaucratic administrative model, which places elected and appointed officials, as well as senior career bureaucrats, at the top of many public companies (Ingraham and Getha-Taylor, 2004). Further, public sector leadership must evaluate how to improve the performance of public organizations that appear more rigid with varied constraints, implying that a flexible and effective

management system must be considered technically by public sector leaders (Fatemi and Behmanesh, 2012; Lugo-Gil et al., 2019; Szmigiel-Rawska et al., 2018). A straightforward leadership style is typically visible in the growth of an organization or in the ways used by leaders to approach members of the company to create a goal to meet diverse public demands (Megheirkouni, 2016).

However, several characteristics of public sector organizations (such as complex planning processes, increased complexity, and the distinctive values of public sector leaders) inspired experts to speculate on the possibility of the emergence of a "new" style of leadership (Orazi et al., 2013). Van Wart (2003 in Orazi et al., 2013) laid out four major tenets for examining public sector leadership. To begin, public administration must define leadership and determine if it exists in the public sector for its own sake or in accordance with private sector aims, which is applied to the public sector. Second, the public sector's emphasis on leadership positions must be evaluated, regardless of whether the leader is "born" or "manufactured." The third is the question of the most appropriate leadership style for public sector leadership, whether it is possible to adapt a previously created leadership style or whether it is essential to develop a new leadership style specifically for the public sector. Fourth, the impact of research on public sector leadership should be defined, whether it benefits organizations or dilutes the focus of public administration studies, which should be on satisfying public needs.

Indeed, studies on public sector leadership are sparsely established. At the very least, only Orazi's research directly addresses Van Wart's core questions. Additionally, previous research on public sector leadership frequently incorporates established leadership styles. Numerous leadership styles and perspectives have been applied to the public sector, ranging from heroic, charismatic, solitary and team-oriented leadership to entrepreneurial leadership (Ingraham and Getha-Taylor, 2004). According to Ingraham and Getha-Taylor, numerous pieces of research have demonstrated that entrepreneurial leadership behavior fosters innovation and increases the effectiveness of the public sector at all levels. Entrepreneurial leadership behavior places a premium on leaders who are motivated to "make a difference" and who operate with zeal and optimism (Fatemi and Behmanesh, 2012; Orazi et al., 2013). Entrepreneurial leaders are frequently obliged to establish their own methods for resolving challenges and identifying opportunities for innovation in the development of public organizations (Ingraham and Getha-Taylor, 2004).

To address issues in a fast-changing environment, research on public sector leadership frequently incorporates strategies created previously for the private sector. This reaffirms the assertion that leadership studies in the public sector are insufficiently developed or do not stand alone (Orazi et al., 2013). The challenge for a public sector leader is enormous, as the demand for public services continues to grow swiftly and dynamically, necessitating the adaptation of leadership from many sectors, such as business (Araujo et al., 2021; Mihai and Crețu, 2019). Furthermore, the modern digitalization necessitates the preparation of solutions to complex, unpredictable, and interdependent problems by a public sector leader (Lugo-Gil et al., 2019; McMullin and Raggo, 2020). The digitalization, also known as the industrial revolution 4.0, requires the presence of a leader who is not just charismatic (1.0), directive (2.0), and relational (3.0) but also responsive to the times and technology's difficulties (Kelly, 2019; Raharja et al., 2019).

As a result of the rapid development and complexity of technology, organizations face unexpected challenges today. Among these obstacles are demographic and social changes, shifting global economic power, rapid urbanization, climate change, depletion of natural resources, and technological advancements (Mihai and Crețu, 2019). Therefore the challenge for public leaders in this age is as much about framing thus problems as it is about solving them (Andrews, 2019). At least two factors contribute to the rapid pace of change in the digitalization: the availability of the Internet and other digital developments such as artificial intelligence (Dekhtiar et al., 2018; Mauro et al., 2016; Mihai and Crețu, 2019). With these advancements, the digitalization's leadership strategy has evolved into one that places a premium on understanding future leadership (Kelly, 2019). Leaders are viewed as persons who should consider not just their rank, power, and authority but also their ability to generate new ideas.

According to the leadership paradigm, leaders are persons who think quickly and rationally and are team-oriented, cross-hierarchical, and cooperative (Raharja et al., 2019). Furthermore, this approach advances a view of digital leadership that places a premium on innovation, where initiatives serve as an effective means of enhancing collaborative leadership. Through open collaboration and collaborative networks, innovation, ideas, and sound decision-making can be developed (Raharja et al., 2019).

In the digitalization, public sector executives are evaluated on their ability to think creatively when confronted with unanticipated difficulties and the innovations they propose to address public demands (Bozeman and Moulton, 2011; Cortellazzo et al., 2019; Moulton, 2009). Numerous studies have also examined leaders' behavior in responding to issues that arise within their society via social media, their attitudes, their advocacy for public voices, their responses to innovations, and their approach to problem-solving (Mihai and Crețu, 2019; Santoso, 2020; Szmigiel-Rawska et al., 2018). In the current digital age, it is the aforementioned factors that must be considered by a leader: how they innovate to satisfy public demands, how they connect with people in the digital age, and the conveniences they provide in solving public concerns (Bode, 2019; Ringeling, 2015). Leaders in digitalization must consider several of these factors to maximize their performance, including instructing members of public organizations to incorporate technology use and addressing public needs. A leader's success in digitalization is determined by their ability to leverage technology to meet the needs of a highly dynamic society.

Conclusion

The current model of public administration is a blending of the previous paradigm's styles. In recent decades, public organizations have evolved to adapt the dynamics of such a society to the global economic and political environment. Public administration also faces various conflicting ideas with various structures and elements, which causes it to become more complex. When a new model is adopted, the old model adapts to various previous mechanisms, principles, cultures, and practices. Since its inception until the present, public administration has discovered new models that continue to emerge and

then new developments accumulate. Public administration strives to keep up with trends in the overall development of the environment.

The purpose of this research is to conceptualize the form of public administration in the hybrid era and to identify what characteristics public administration should have. The main argument developed in this research is that public administration is currently confronted with a new hybrid world, which is a turning point for public administration to redefine itself by focusing on the characteristics of ethical speed and fusion, and thus, we feel the need to illustrate its many facets. In this case, public administration in the hybrid world has not changed much from the past because it continues to form new layers to respond to various dynamics of the public and their environment. In the hybrid era of public administration, we believe it is necessary to combine digital aspects with pre-existing public administration approaches. Because of the proliferation of various sources of information, openness and cooperation with various sectors are also easier in this modern era.

The hybrid approach to public administration, which allows public organizations to use and develop multiple platforms available in the digital age, can be seen as the key to the success and creativity of any modern public organization. Hybrid arrangements, on the other hand, may produce the best or worst results because they draw value, principles, and action norms from multiple, sometimes contradictory worlds that influence and legitimize their behavior. Another distinguishing feature is that public administration in a hybrid world is defined as an era of public administration that prioritizes public service innovation through the use of technology in the digitalization era, also known as the industrial revolution 4.0, and which emphasizes creativity and collaboration.

Finally, we identify four key characteristics of public administration in the new hybrid era: value, public service, leadership, and organization. In this case, the government's interactive approach seeks to integrate various government actors' perspectives with their respective interests and powers. Thus, the interactive approach prioritizes the involvement of various actors in forging strong relationships within a country, with the goal of increasing income for each participant. Digitalization is currently regarded as one of the most important contributors to facilitating public access to government-provided public services. The use of technology in public services is thought to benefit both parties (providers and service recipients). To provide greater access to public services, the government's understanding of technology and ability to use it becomes an important factor to consider. Organizations have paid special attention to collaborative activities because integrating knowledge, skills, and experience as well as exchanging resources (data, services, information, and/or expertise) are required to complete certain tasks. Finally, the digitalization leadership strategy has evolved into one that places a premium on understanding future leadership. Leaders are viewed as individuals who must consider not only their position, power, and authority but also their ability to generate new ideas.

Declaration of conflicting interests

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