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Rethinking HR Strategies and Public Employee Roles

Edited by GIOVANNI VALOTTI

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Italy's financial assets total €5.3 trillion, offering significant potential for economic transformation. Overcoming the debt narrative and effectively utilizing these resources for real development represents a significant challenge. Financial literacy, structural investments, consistent fiscal policy, and new financial products are key areas of focus to bridge the gap between savings mobilization and the real economy, paving the way for a future of growth and sustainability not only for Italy, but for the EU as a whole.

PODCAST

Stefano Caselli

Economia & Management n.1, 2024
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SANDRO CASTALDO

Trusted Sustainability

To create value in the pursuit of sustainability, it is imperative that companies demonstrate a clear alignment between their stated values and the actions they take to implement them. Trust is central to business strategy and consumer relationships and represents a significant source of economic value. The rapidly evolving market landscape underscores the limitations of traditional management tools in adapting to a future where customers are not only buyers, but also co-creators of value with the company. The future challenge therefore lies in the emerging frontiers of trust management that are redefining traditional management paradigms.

SUSTAINABILITY//VALUE CREATION//TRIPLE BOTTOM LINE//TRUST MANAGEMENT//CUSTOMER ADVOCACY

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In recent years, sustainability has become a growing strategic priority for companies. This is the result of increased community and institutional attention to issues related not only to environmental sustainability, but also to diversity, inclusion, and a growing focus on fair and equitable treatment of employees and suppliers within the supply chain.

According to the stakeholder view, a company should not only prioritize the economic interests and expectations of its internal stakeholders (primarily shareholders), but also strive to satisfy a broader range of stakeholders – such as employees, suppliers, customers, lenders, society, local communities, trade unions, non-governmental organizations, etc. –, who are directly or indirectly affected by its operations. Within this framework, the triple bottom line model has gained prominence, highlighting that achieving satisfactory performance across the three dimensions of sustainability – environmental, social and economic – is critical to creating business value and ensuring sustainable development. In operational terms, this means supplementing traditional economic, equity, and financial accounting with additional indicators that are consolidated in specialized reports to provide a comprehensive view of business performance.

Several studies have examined the impact of sustainability policies on consumer behavior, generally concluding that companies perceived as socially responsible tend to inspire higher levels of trust in their products and services. Commitment to social issues and the implementation of supporting initiatives have a positive impact on both the environment, by fostering a climate of trust, and customer relationships, by cultivating trust-building behaviors. However, there is sometimes considerable skepticism about corporate sustainability practices, which may be seen as driven solely by profit motives or as mere reputation-building strategies. Therefore, it is critical to maintain consistency between corporate values and actual initiatives when pursuing sustainability. This consistency helps prevent a potentially damaging rebound effect that could undermine consumer trust.

Trust's ability to create value for both the customer and the company is what makes it so important to business strategy. Strengthening customer loyalty through trust produces several benefits, including increased purchase frequency, activation of positive word-of-mouth about the company and its offerings, customer willingness to purchase higher quality and value goods (*trading up*), and a propensity to purchase other goods and/or services offered by the company (*cross-buying*), thereby increasing the average purchase of loyal customers. In addition, trust reduces price sensitivity, lowers costs associated with sales and customer service activities, and increases the willingness of customers to share information (*knowledge sharing*), enabling the company to design offerings that better meet demand needs. These benefits help increase the overall value generated by the company through improved efficiencies and expanded revenue streams. As a result, trust increases customer equity, which is the value created by an individual customer throughout their relationship with the company. Increased revenues, reduced costs, and the extension of the time horizon over which these effects occur are the elements underlying the economic value created by trust.

Trust is a fundamental resource for any business, but it is particularly important in contexts where consumers lack all the information necessary to make rational purchasing decisions. In these circumstances, trust is essential because it helps reduce the uncertainty and complexity of purchasing decisions by acting as a "surrogate" for information. In this way, trust represents a form of "cognitive synthesis," a kind of shortcut used at the individual level to simplify the increasingly complex decision-making processes involved in choosing goods and services, especially when they are based on strong sustainability promises.

Given the relevance of trust and its impact on economic value, one of the key questions facing managers is: **What are the determinants of trust and how can we foster it?** According to the literature, trust depends on several factors, including: past experiences with the company and the degree of satisfaction derived from those experiences; the capabilities and perceived competencies of the company to operate in accordance with customer expectations; the way the company pursues its goals without resorting to opportunistic conduct; the frequency of interactions and, above all, communication between the company and the customer, which facilitates a smooth and transparent relationship; and the perceived integrity of the company and the values associated with its brand.

In situations characterized by high interpersonal engagement, these factors are significantly influenced by the behavior and personal qualities of the people involved – for example, the honesty and empathy of salespeople. In order to gain the trust of the customer, the company must enhance the perception of past satisfaction, showcase its specific skills and competencies, demonstrate non-opportunistic motivations, ensure transparency in communication, and uphold integrity in its behavior and corporate values. The future challenge lies in the emerging frontiers of trust management, which are redefining traditional management paradigms. The growing number of customer advocacy initiatives, in which the company aligns itself with the interests of the customer and acts as its “defender,” are examples of how market relationships are rapidly evolving. This shift underscores the inadequacy of traditional management tools in a future where the customer is not only a buyer, but also a co-creator of value alongside the company.

Trust is the hallmark of all market relationships. Identifying the causes and effects of trust helps determine the best way to build relationships on a solid foundation. This is why trust management is now considered essential to the circular economy. Fostering genuine trust – not the trust that hides opportunistic behavior – means building long-term relationships based on transparency, honesty, competence, personal values, fairness, integrity, and mutual satisfaction. This is undoubtedly an ambitious goal, but one that has positive implications both for the environment – by fostering a climate of trust that is more conducive to transparent trade – and for the individual parties involved in the relationship. Trust is a key resource for businesses, consumers, markets and society, and as such should be consciously cultivated by all those who can contribute to its enhancement. Public institutions, governments, private organizations, companies, citizens, customers and suppliers all have an ethical responsibility to build an economy and society based on trust.

The right kind of trust, however, is not just a matter of words, but of consistent actions and behaviors over time. Companies must earn trust through tangible actions, redefining their relationship with customers in innovative ways and moving beyond traditional customer-supplier patterns to assume the role of “customer advocate.” This means not just complying with regulations and meeting baseline expectations but exceeding them. Compliance and customer satisfaction are necessary, but not sufficient, to achieve true and deep trust. A company becomes trustworthy only when it demonstrates a genuine concern for the welfare of others, for the environmental impact of its activities, and for the implicit needs of the community by promoting solidarity. A company that delivers on its promises in relation to specific tasks is considered trustworthy. However, "maximum trust" is only achieved when the customer perceives that the company is genuinely identifying with his or her interests.

The philosophy of ethics has coined a very evocative term to interpret this stage of trust: *super-erogation*.[1] This term is generally used to refer to actions that go beyond simply doing one's duty. In the corporate context, it may be time to move beyond traditional paradigms and embrace super-erogation – upholding value-based trust as a necessary means to reconstruct a new economic "morality" and a new way of interpreting business strategies and relationships with all stakeholders.

This issue of Economics & Management explores some of the topics mentioned above, including sustainability and building trust. The Focus edited by Giovanni Valotti on the *transformation of human resources in public administration* sheds light on a little-studied but key issue for increasing trust in government and the competitiveness of local systems. Francesco Ciampi's article on *credit rating modeling* offers practical guidance for financial institutions to improve their assessment of the trustworthiness of their customers, both actual and potential, based on their strategic and managerial choices. Maurizio Dallocchio and colleagues' article on *microfinance* demonstrates the stability and low risk of investing in these instruments, which not only allow portfolio diversification but also provide valuable resources to underserved markets by financing sustainable local initiatives. Emanuele Acconciamessa's paper on *inclusive brand activism* explores how companies can leverage their brand equity to promote positive social change by integrating activism into corporate strategy. Francesco Grillo's essay on the *Internet of Beings* examines the radical transformation of healthcare systems and the pharmaceutical business brought about by the convergence of big data, artificial intelligence, and life sciences, opening up new avenues of development. Stefania Borghini and colleagues' study on *Generation Z's urban mobility* preferences in the context of the developing accessible and sustainable cities provides many insights for companies to offer customized solutions and educational initiatives to gain the trust of young consumers, the future target audience for many companies.

1 Tencati, A., Misani, N., Castaldo, S. (2020). "A Qualified Account of Supererogation: Toward a Better Conceptualization of Corporate Social Responsibility." *Business Ethics Quarterly*, 30(2), 250-272.

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GIOVANNI VALOTTI

A FORWARD-LOOKING VISION
RETHINKING HR STRATEGIES AND PUBLIC EMPLOYEE ROLES

Adapting to evolving work dynamics is critical to effectively managing transformational change. In this context, reactive approaches risk becoming a source of crisis and missed opportunities. Driving change in the public sector therefore requires investing in a forward-looking strategic vision, implementing strategies to reinvigorate the role of public servants, and guiding organizations towards resilience in the face of accelerating change.

PUBLIC ADMINISTRATION//PERSONNEL MANAGEMENT//PERSONNEL POLICY//HR STRATEGY//HR MANAGERS

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People are an organization's most adaptable asset, embodying a diverse set of skills, roles, expectations, and motivations that evolve over time. The organization can choose to be a passive bystander to this change, or it can play an active role by facilitating and managing change: in the former case, organizations that are slow to respond to contextual demands risk being unprepared for crises and missing many opportunities. Conversely, administrations that invest time and resources in developing a forward-looking vision, as in the second case, are ideally positioned to drive essential change.

The strong roots in the past and the focus on the present that characterize human resource policies in public administrations can lead to a lack of foresight about the future. It's the ability to look ahead – which is precisely what distinguishes more advanced public administrations from situations where backwardness prevails – that enables organizations to prepare for the future in the present. This is particularly critical in times of great discontinuity (such as the last decade) and will be even more so in the years to come.

Indeed, a framework of significant, accelerating change is emerging on the horizon. On the one hand, technological evolution is dramatically reshaping access to information, work methods, services, and the skills required at all levels within administrations. This makes it unrealistic for individual entities to concentrate all necessary skills internally, necessitating increasing interconnectedness between organizations. On the other hand, demographic dynamics and the rapid rise in life expectancy are driving an expansion and transformation of citizens' needs, combined with a general expectation of superior quality typical of mature socio-economic systems. From another perspective, these dynamics pose entirely new challenges within administrations, as these organizations are historically populated by employees with a high average age, who are now getting older. This means that administrations will be called upon to manage significant generational gaps between operators raised in traditional contexts and newcomers.

Strategic objectives focused on lowering the average age and seniority of public sector employees could prove instrumental in driving forward this transformative process, thereby facilitating the influx of younger individuals who possess new skills and cost less in terms of remuneration.

Given this context, is it conceivable that the traditional public servant will persist as a professional role amidst this whirlwind of change, maintaining its original form as we have come to know it through its evolution to the present day? Undoubtedly, certain noble traits of the old school bureaucrat will continue to be important in the future: impartiality, autonomous judgment, meticulous adherence to standards, and a profound ethical compass with institutional allegiance as the true north. However, it is hard to envision the persistence of the rigidity and constraints of an employment system born in bygone eras and tailored for outdated activities.

Moreover, the loosening of traditional constraints is not enough. It must be coupled with the implementation of a forward-thinking people strategy, a modern and effective personnel management system, a shared transformational design and a full commitment to nurturing and empowering individuals, particularly among top and middle managers. Indeed, to foster innovation, it is essential to recognize the need to optimize every available opportunity to design pathways for both organizational and personal growth and enhancement. It is through this approach, rather than through grand reform designs alone, that we can elevate and revitalize public employees, transforming them from conventional bureaucrats into dedicated professionals committed to serving the public interest.

Within this framework, the articles that follow aim to meaningfully advance the innovation of HR strategies in the public sector by adopting an evidence-based approach. This methodology entails the systematic collection of primary data from a survey sample consisting of nearly 300 public organizations[1]. The goal is to gain a thorough understanding of the current state of affairs and develop consistent proposals for changing people management practices within the Italian public sector. Specifically, the following contributions delve into the characteristics of HR functions and managers, who are responsible for effectively designing and implementing HR management tools. Also addressed are the main challenges of people management systems that cover the entire employee life cycle, ranging from strategic workforce planning to the recruitment and selection of prospective candidates, and ultimately the retention of current civil servants.

1 The authors acknowledge ASMEL (Italian Association for Subsidiarity and Local Government Modernization) for its support in data collection among medium-small municipalities.

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A STRATEGIC IMPERATIVE
THE ROLE OF HR MANAGEMENT IN ITALIAN PSOs

Human resource management in the public sector plays a critical role in organizational effectiveness and value creation. Despite calls for more strategic human resource management, public sector organizations often prioritize administrative functions over strategic contributions. This article examines the state of HRM in the Italian public sector, focusing on staff allocation, activities, integration with organizational strategy, and managerial priorities. Findings suggest a need for greater strategic focus, improved integration, and proactive approaches to address evolving workforce dynamics and organizational needs.

HUMAN RESOURCE MANAGEMENT (HRM)//PUBLIC ADMINISTRATION//PERSONNEL POLICIES//STRATEGIC INTEGRATION//HR MANAGER

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Nowadays, the role of human resource management in the public sector is widely acknowledged as critical for effectiveness and value generation in this context. In OECD countries, the share of GDP devoted to salaries of state employees ranges from 5.1% in Japan to 14.9% in Norway, while in Italy it is 9.7% (OECD, 2023). Public sector personnel accounted for as much as 29.2% of the workforce in Norway in 2021, compared to 14.5% in Italy (OECD, 2023).

Unlike human resource management in firms or non-profit organizations, public sector organizations (PSOs) have to deal with the dyadic nature of public personnel policies. On the one hand, they must abide by rules, standards and strategies arbitrarily defined at the national level; on the other hand, they must craft their personnel strategies as strategically autonomous organizations. The persistent calls for more strategic human resource management in the public sector testify to the fact that the first element of the dyad has prevailed in practice, leaving HR managers to perform a primarily administrative function, with no room for autonomy in setting priorities and contributing to organizational strategy as full-fledged actors.

The Italian public sector has indeed been a striking example in this regard. For many years, most Italian PSOs defined their personnel needs through static staffing plans that associated each organizational unit with a specific amount and quality of personnel. Only in 2017 did a new policy introduce a three-year plan for staffing needs, allowing organizations to define their needs more easily and rapidly, disregarding historical allocations. Yet public administrations still lack a medium- and long-term view when planning their human resources policies.

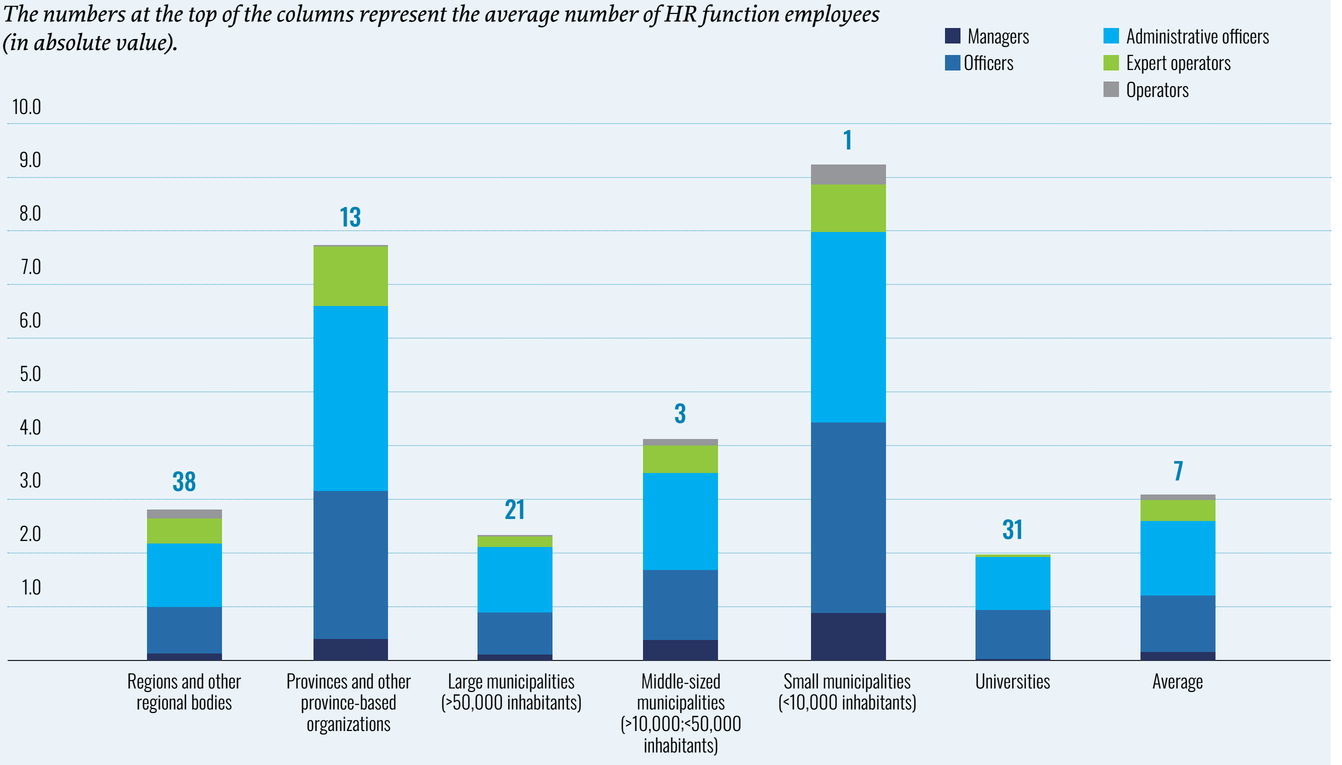
In this article we will discuss the perspectives of the HRM function in Italian PSOs. First, we will highlight the average number of employees devoted to HR offices and how they spend their time. Second, we will underscore the degree of integration between HRM and the rest of the organization. We will then investigate the priorities of HR managers, also in terms of their background and experience, and finally discuss the implications for management.

HRM STAFF AND THEIR ACTIVITIES

We begin by quantifying the share of personnel dedicated to the HRM function in PSOs. In the sample we analyzed, on average, 3.1 employees per hundred are devoted to HRM. However, this value varies considerably across different types of institutions. Smaller municipalities (with less than 10,000 inhabitants) and provinces have relatively

FIGURE 1. HRM EMPLOYEES PER 100 EMPLOYEES BY TYPE OF EMPLOYEE AND ORGANIZATION

The numbers at the top of the columns represent the average number of HR function employees (in absolute value).



larger HR offices, while such functions are smallest in larger municipalities (with over 50,000 residents), regions and universities. It is interesting to note that, on average, around 16% of personnel serve in blue-collar occupations (formerly known in Italy as "A" and "B" categories); these jobs do not require a high school diploma. Most personnel (around 45%) belong to the category of administrative officers, who are normally high school graduates. The reliance on personnel with no or low qualifications suggests that HR offices in Italian public administrations deal mostly with the standardized activities that these employees can carry out.

These data reflect a situation that is unsatisfactory, according to most managers: only 11% of them define HR as fairly or fully adequate. The worst results emerge in small municipalities and provinces, which show high employment levels in relative terms but have very few employees in absolute terms.

On a brighter note, in the year prior to the survey, only 11% of managers saw a reduction in their HRM staff, while a quarter benefitted from an increase. In any case, we should interpret these data in light of changes in public personnel national policies, which have shifted from a cost-cutting trend to a more expansive one.

As we noted earlier, the quantity and quality of HR staff might reflect repetitive activities with a low added value. In our questionnaire, an average of 40.1% of HRM time is dedicated to personnel administration, which includes dealing with salaries and legal matters pertaining to staff, for instance, issues regarding contracts, leave, and other employee rights. Another 20.5% of time is spent on recruitment and selection, and a further 12.2% on union relations and negotiations.

FIGURE 2. ADEQUACY OF HRM STAFFING LEVELS

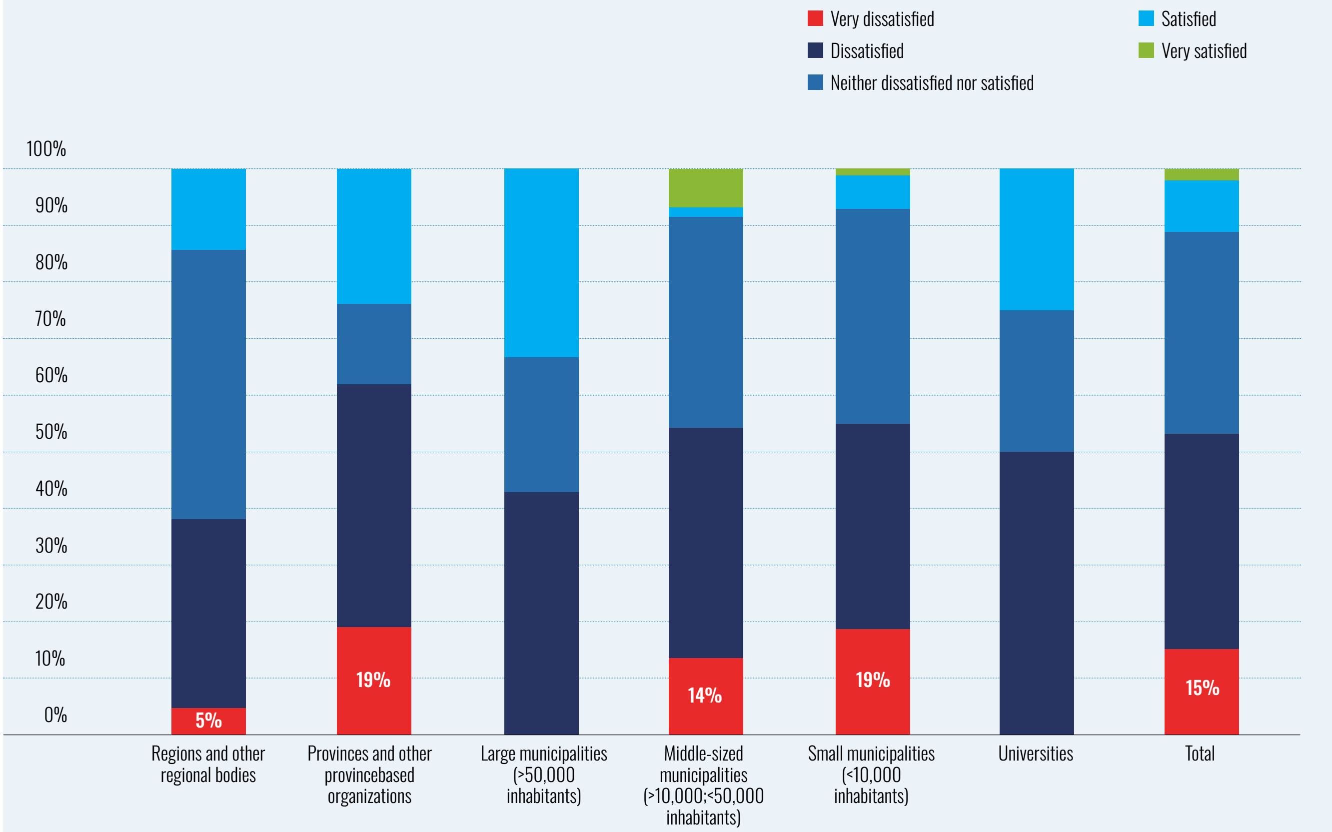
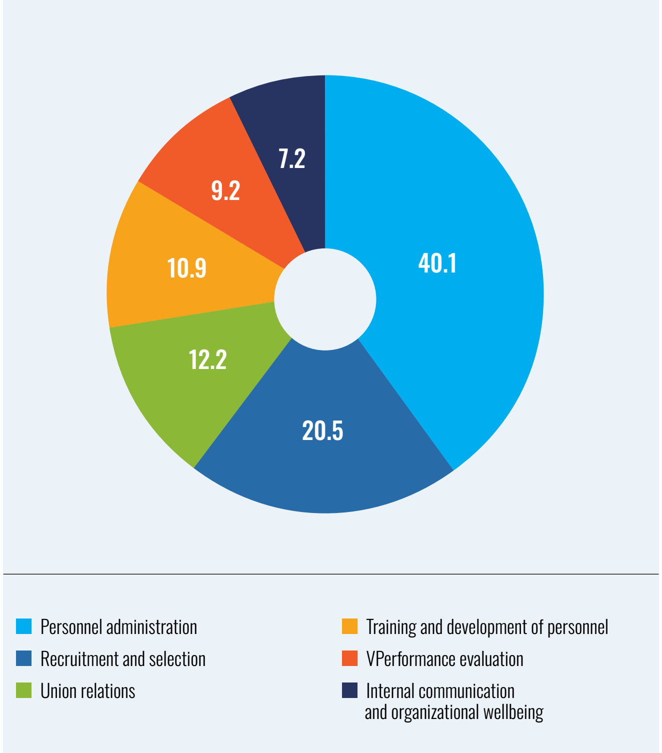


FIGURE 3. AVERAGE TIME DEDICATED TO HRM ACTIVITIES IN 2023

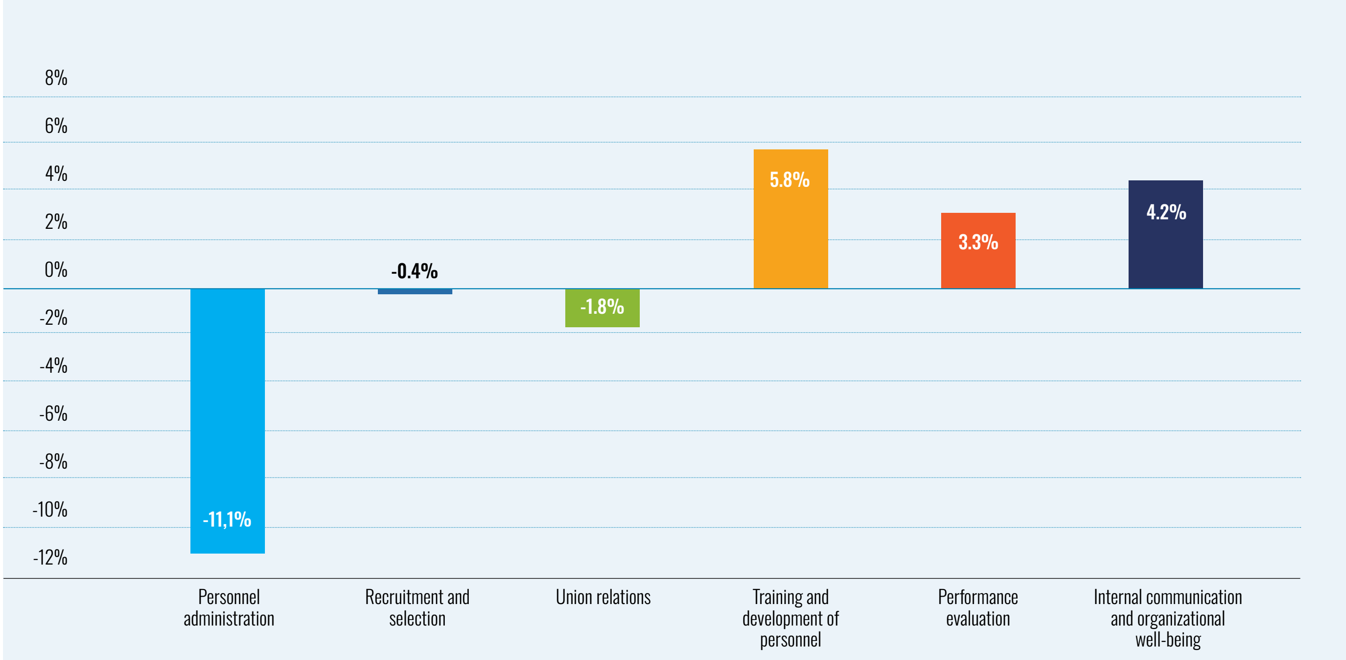


Critical aspects such as training and development, performance evaluation, internal communication, and organizational well-being account for just over a quarter of total working time.

When comparing the actual values with what HR managers would like to do, we can see a remarkable decrease in the time they would allot to personnel administration (-11 percentage points) and union relations (-1.8), while they say they dedicate the right amount of time on recruiting activities. HR should focus more on staff training and development (+5.8), internal communication and organizational well-being (+4.1), and performance evaluation (+3.2).

We now seek to compare the actual and desired values of 2023 with the results of a similar questionnaire from 2019. What we see is a positive trend. In 2019, on average, 52% of their time was spent on administrative matters, while HR managers were aiming for 41%; in 2023, on average, 40.1% of their time was spent this way, but they aimed for an even lower 29%. This apparent pattern is reassuring as it shows an orientation

FIGURE 4. DIFFERENCE IN TIME DEDICATED TO HRM ACTIVITIES COMPARING REALITY AND HR MANAGERS' DESIRES IN 2023



towards a less administrative HR function. If we look to recruitment and selection, in 2019 reality was in line with what HR managers wanted (17% of their actual time versus 18% deemed desirable). By 2023, however, the desired time value rose. This finding is consistent with substantial evidence of a tighter labor market and new preferences and needs that employers should address when looking for prospective employees. This shift might be evidence of a rather reactive evolution, as found in prior literature (Jacobson & Sowa, 2016).

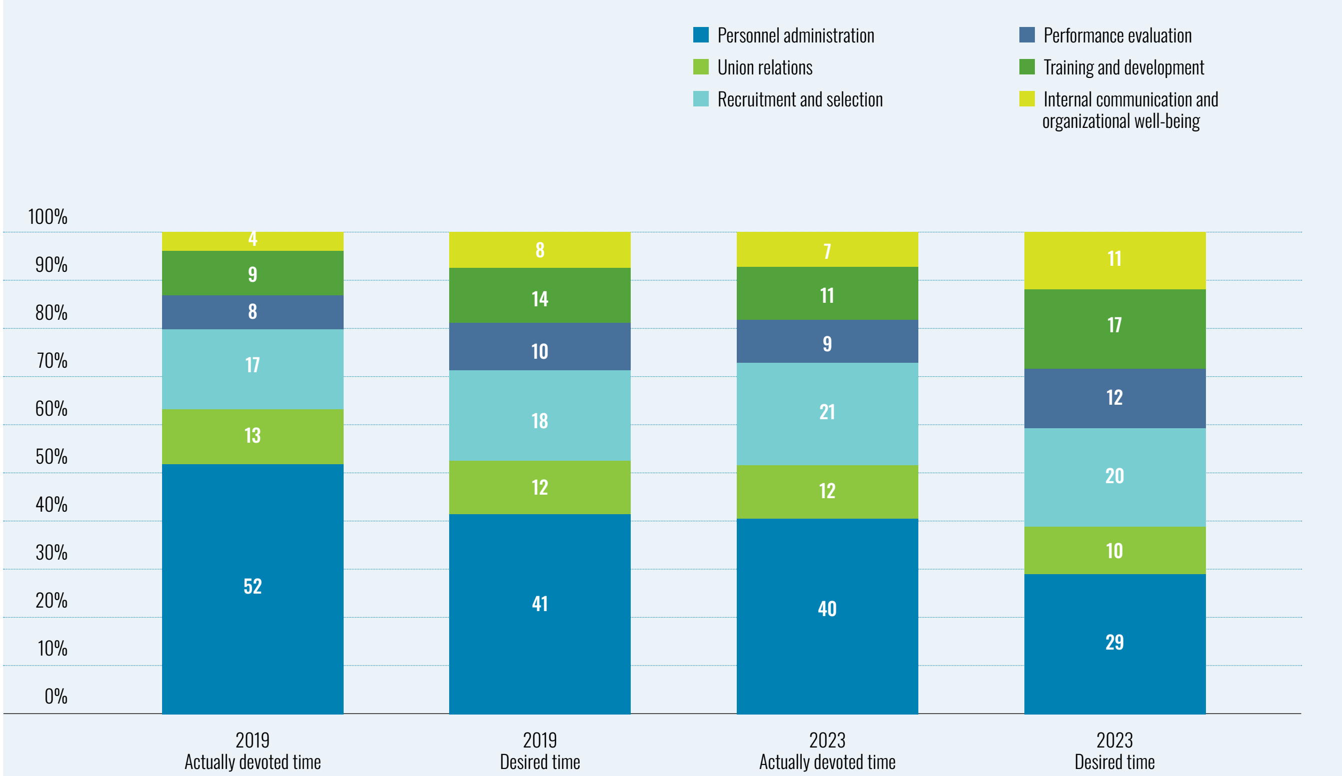
To summarize, HRM personnel is only a tiny fraction of the total staff in public administrations, and managers believe they need more staff to respond to current challenges. Furthermore, administrative tasks still account for a relative majority of the activities performed in 2023, even if PSOs started a transition towards a more strategic orientation.

INTEGRATING THE HRM FUNCTION

After describing and discussing the composition of HR personnel in Italian public administrations and the time dedicated to different activities, we want to investigate the relationship between the HR function and other organizational units.

We analyzed a set of strategic activities, namely those described in the previous section, that require some form of collaboration with other organizational departments. HR managers rate the involvement of other managers as 4 or 5 on a Likert scale in a minority of cases. The most integrated activity is the definition of employee needs, with slightly more than 40% of respondents selecting higher value answers. On the other hand, when looking at internal communication and organizational wellbeing, only 15% of HR managers believe that the involvement of other managers can be rated as high as 4 or 5.

FIGURE 5. AVERAGE TIME DEDICATED TO HRM ACTIVITIES COMPARING REALITY AND HR MANAGERS' DESIRES IN 2019 AND 2023



Yet, when asked more generally about HRM relationships and the support provided to the rest of the organization, HR managers are less dire in their descriptions. For instance, 54% believe that HR supports other managers in exercising their own HR responsibilities (4 or 5 on the Likert scale), and 47% state that HR makes an effort to cooperate with other managers. Nonetheless, such a weak integration between HR managers and strategy is also reflected in the fact that only 36% agree that the top management takes HR information into account when defining the organization's strategic focus. Overall, these data show that there is room for greater integration between HRM and other organizational units.

HRM PRIORITIES

After delving into the current status of HRM, our research focused on its future prospects. When asked about their priorities for HRM within their organizations, HR managers cited personnel costs as the most pressing issue (50% of respondents identified it as one of their top three priorities).

Since 2009, the Italian public administration has been targeted with cost-cutting measures and strict hiring limits. Yet just before the Covid-19 pandemic, these policies were relaxed or completely suspended. The resulting upsurge in new hires, coupled with the subsequent economic troubles of Italian public administrations (e.g., inflation, and even more critical, high energy costs), might have stretched available resources. The second and third most relevant themes are retaining and motivating personnel, together with requalifying and improving professions and competencies within the organization (both at 27%). These are followed by the need to increase organizational flexibility (22%), facilitate organizational innovations (18%), and boost personnel productivity (17%). Few HR managers mention attracting talent or developing new competencies as their priority. Notably, the least chosen alternatives are related to personnel turnover and managing risk. Regarding the former, it is worth pointing out that the Italian public administration has sustained a historic rate of retirements in recent years (R*agioneria Generale dello Stato*, 2021).

The questionnaire also asked what changes

FIGURE 6. EVALUATION OF THE INVOLVEMENT OF OTHER MANAGERS IN HR ACTIVITIES

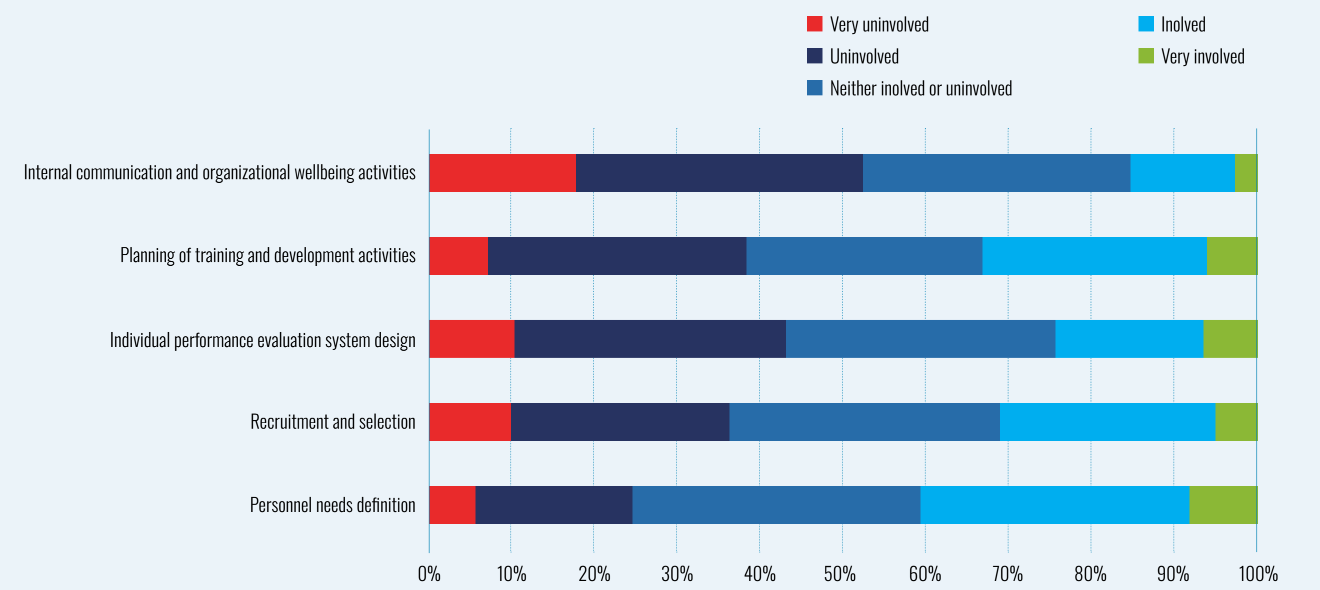


FIGURE 7. PRIORITIES FOR HR MANAGERS

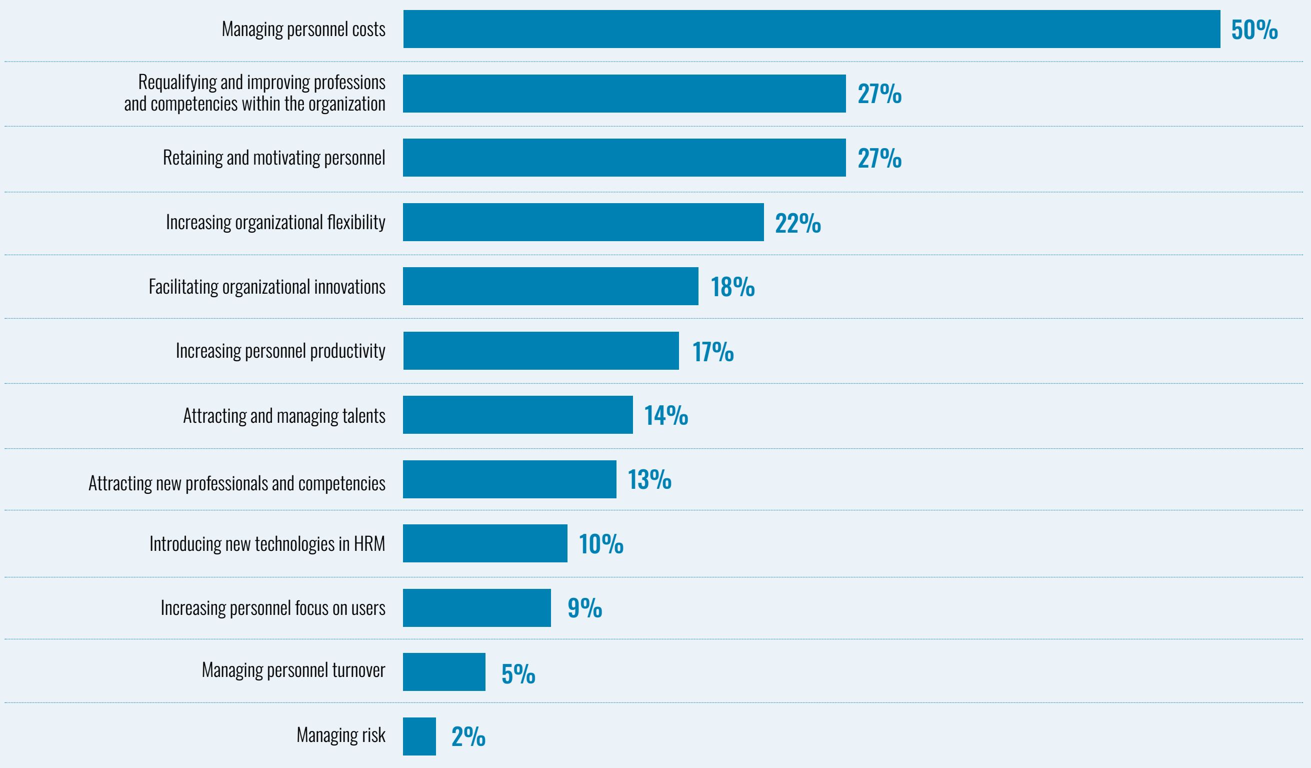
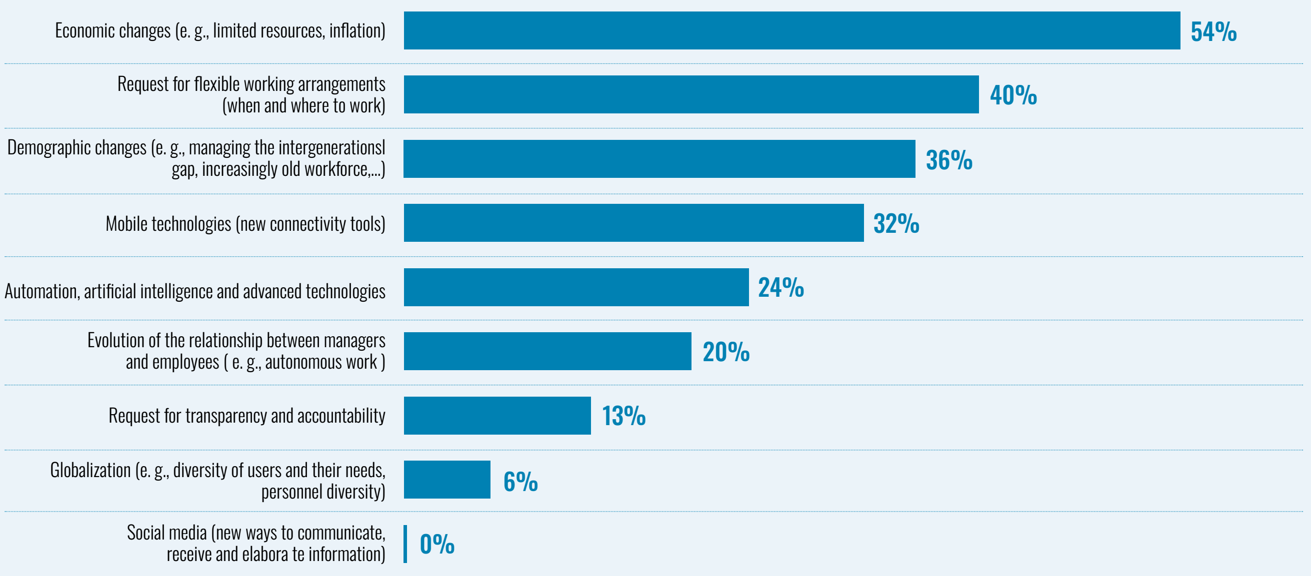


FIGURE 8. CHANGES THAT WILL AFFECT HRM



are likely to affect HRM practices. Unsurprisingly, given the high priority of cost management, most respondents (54%) identified economic changes. The need for greater flexibility (40%) comes, highlights the diverging priorities *vis-à-vis* trends that are likely to affect HR. In other words, while HR managers recognize that flexible work arrangements are here to stay and that HR practices must accommodate them, this does not seem to be a priority. Similarly, the aging workforce and other demographic trends do not seem to be a primary concern for Italian public administrations, even though their impact must be considered.

In this case, larger bodies, such as populous municipalities and regions, identify demographic, economic, and flexibility trends as having the greatest impact on the way they operate. In comparison, bodies of different sizes, such as small and medium-sized municipalities, also rank new technologies higher as a relevant trend.

Cost management and economic factors still represent a top concern for HR managers, and HRM is indeed more and more interested in finding solutions to these issues. HR managers are keen to come up with practices that can upgrade workforce capability to produce value while keeping costs low. This is further evidence of HRM transitioning towards more strategic approaches.

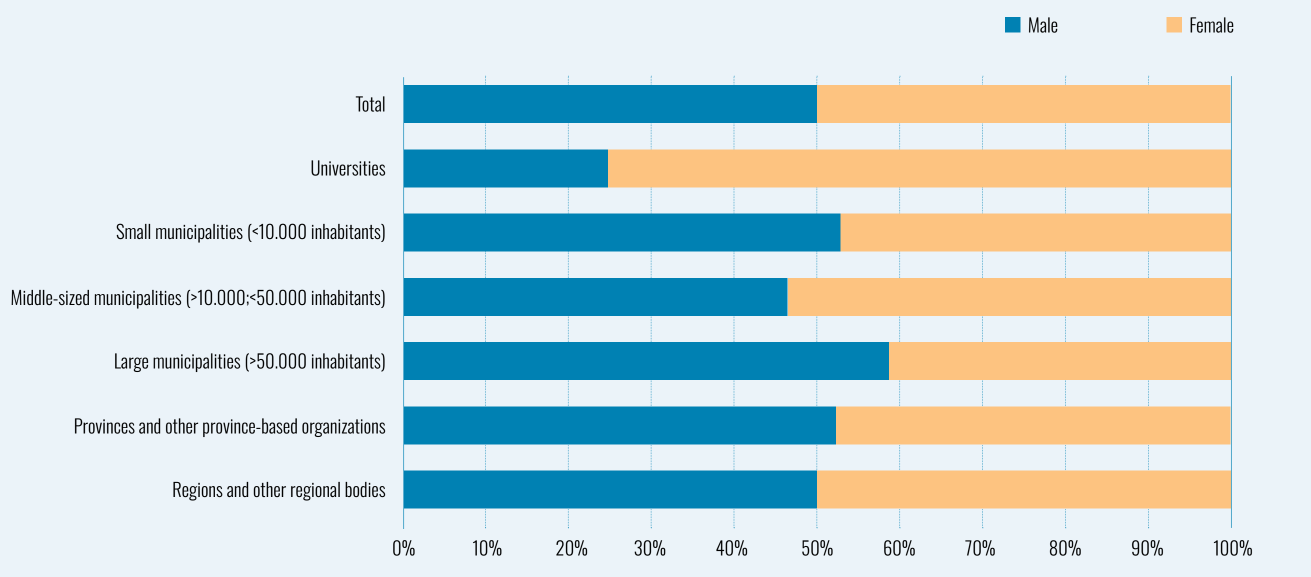
THE TYPICAL HR MANAGER

The last part of the research focuses on the HR managers themselves, attempting to portray the prototype of the HR manager in Italian public administrations. Firstly, a slight majority (of one observation in our sample) is female. This finding should be interpreted in comparison to the Italian public sector management, which is still predominantly male, despite the fact that most public sector employees are women.

On average, in terms of education, HR managers have at least a university degree. This is no surprise, given that an undergraduate degree is now a prerequisite for becoming a public sector manager. Nonetheless, smaller and more peripherical bodies, such as small and medium-sized municipalities, have a larger share of high school and university graduates. In contrast, larger organizations have a higher proportion of managers with a post-graduate education or PhDs.

Among those with a bachelor's degree, 51.3%

FIGURE 9. MANAGERS BY GENDER AND TYPE OF ORGANISATION



of managers have a legal background, while 33% studied economics and management, and 8% political science. The Italian public sector is one of the biggest employers of law graduates, as reflected in our data, which is consistent across different types of organizations.

Another crucial aspect in defining HR managers is their experience. In this regard, we observe several interesting facts. First, two-thirds of HR managers have a decade or more of experience in the public sector, which is not surprising given Italy's career-based system. Yet, notably, they have developed their expertise in their current organization, an indication of low mobility rates in the public sector. Indeed, at least some of the managers have gained most or all of their HR experience in one organization. These data describe HR managers who learn by doing, as their background is not necessarily related to HR studies; in other words, they have been trained directly on the job. In addition, 16.3% have less than one year of HRM experience.

Finally, the questionnaire asked whether these managers had experience outside the public sector. On average, 38% had worked in the private sector, but only 12% had held HR positions in this context. The larger the organization, the more likely it was to have a manager with specific HR experience.

In summary, HR managers are more likely to be women than other managers, and about one in four has some post-graduate education. They have developed their expertise in the public sector and generally in a small number of organizations, while HRM expertise is not very common. A minority of managers have experience in the private sector.

CONCLUSIONS

In this article, we discussed the perspectives of the HRM function in Italian PSOs. First, we framed the average number of employees devoted to HR offices and how they spend their time. Second, we investigated the degree of integration between HRM and the rest of the organization. Finally, we highlighted the priorities of HR managers and their

FIGURE 10. HR MANAGERS BY EDUCATION LEVEL AND TYPE OF ORGANISATION

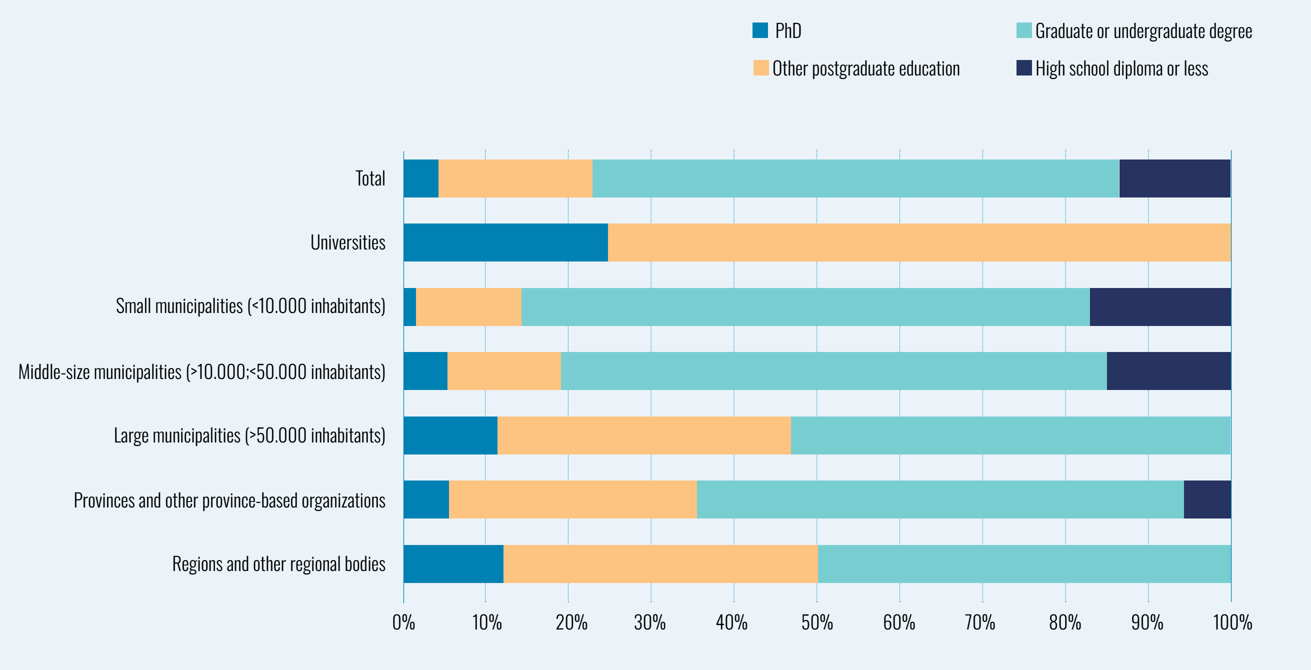


FIGURE 11. EXPERIENCE OF HR MANAGERS BY TYPE AND NUMBER OF YEARS

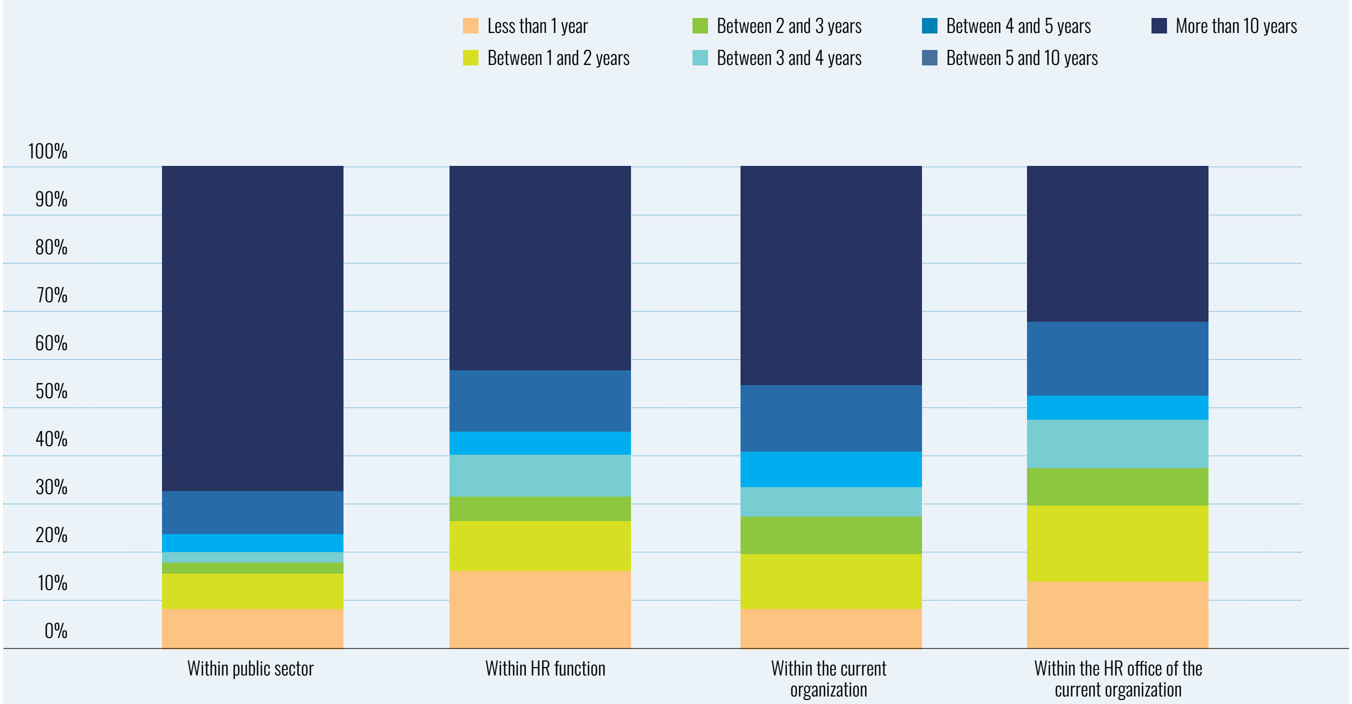
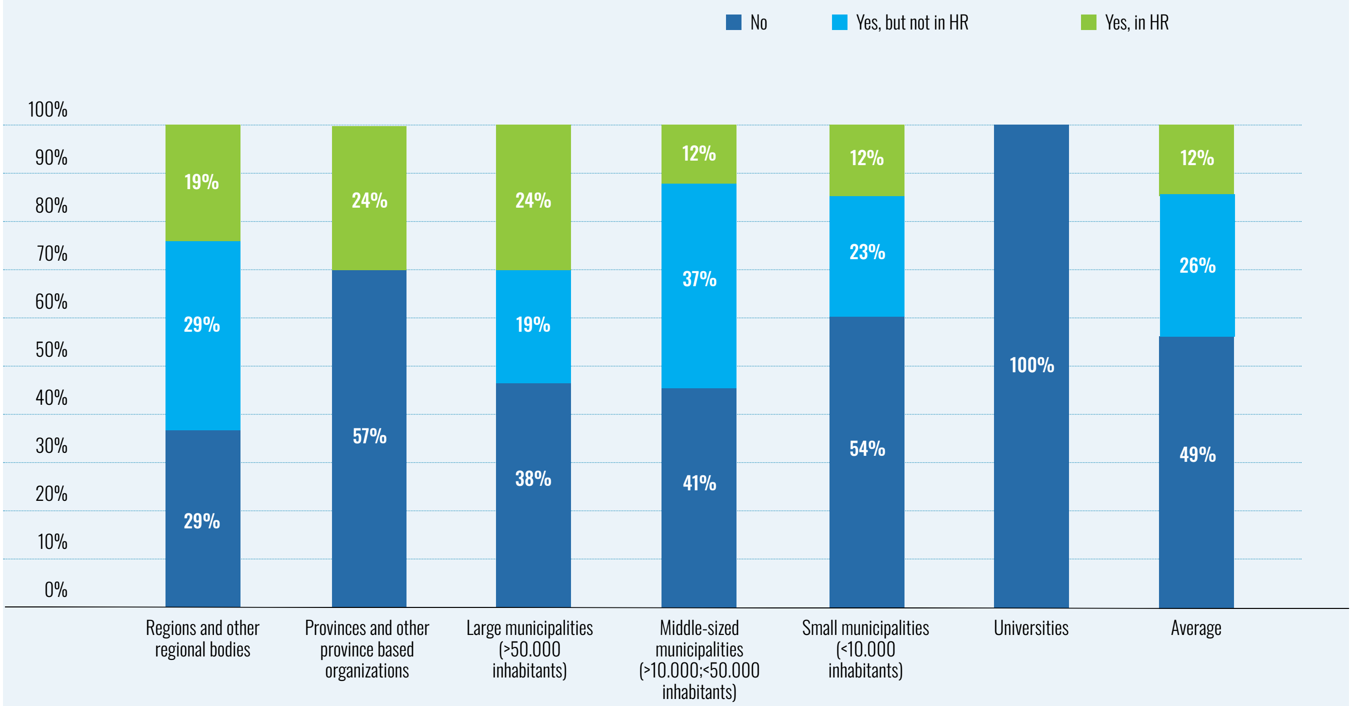


FIGURE 12. EXPERIENCE OF HR MANAGERS IN THE PRIVATE SECTOR BY TYPE AND TYPE OF ORGANISATION



background and experience.

Italian PSOs have responded to hiring freezes and other cost-cutting policies by reducing the number of employees with high and low qualifications, while maintaining the level of the middle category, represented mostly by high school graduates (Buongiorno Sottoriva & Cinelli, 2022). Such a policy might allow PSOs to keep pace with existing volumes of activity. Nonetheless, a relative reduction in the number of highly qualified officers with university degrees may diminish the capacity to deal with changing priorities and new organizational needs. When this capacity is lacking, HR offices do not have the appropriate resources to rapidly change their practices. Instead, they are obliged to retain large numbers of mid-level personnel to guarantee the existing services, creating a vicious cycle of missed opportunities for innovation and overall under-qualification of HRM employees.

We suggest at least two different factors that might worsen this cycle. First, Italian public policies in some sectors, such as healthcare, already introduced hiring limits and cost-containment measures. Therefore, the opportunity window that opened with the National Recovery and Resilience Plan investments might close rapidly, without major changes in HR units. Furthermore, in times of cost-cutting, HR managers might again opt for a higher headcount, by exploiting the payment differentials between high school graduates and university graduates, rather than having fewer employees with higher qualifications. Secondly, a tighter labor market and subsequent higher turnover might make it harder to generate competencies and the capacity to improve HRM practices.

Thanks to the HR managers in our study, we also map out a path toward more effective HRM. On the one hand, PSOs should invest time, resources, and organizational focus in initiatives that foster human capital development and individual wellbeing. HR managers identify requalification as a priority, and they acknowledge the difficulties with internal communication and wellbeing of personnel. On the other hand, HR practices should be innovated to be more productive, also by introducing new technologies. This is not just a business-minded need: changing practices will reduce the amount of time dedicated to repetitive and administrative tasks, contributing to increasing motivation, sense-making and wellbeing among employees.

This process can and must build on the (positive) changes generated in part by Covid-19, such as greater work flexibility. However, these changes cannot be effectively carried out without adequate involvement of the other departments of the organization. Consequently, integration should be a top priority for HR managers: vertically, since the overall strategy should also be the result of HR perspectives; horizontally, since other managers share part of the responsibility for managing human resources in their offices. Literature has shown that integration might entail unintended negative consequences (Bennett et al., 1998), therefore this process should be managed and driven consciously.

We have indeed come back to our point of departure. We need a more strategic HR function, and public sector managers should have a clear idea of their needs, design a process to realize their goals and allow for adequate resources to sustain change. To quote Sowa (2020, p. 335): “It can be hard to be strategic when you are starving for resources. [...] HR decisions are often made based on stress and scarcity versus strategy and foresight. Saving money through not filling open positions has cascading effects across a government unit. [...] Good HRM requires the capacity to plan, to do actual performance reviews, to examine current practices, and to create new practices. But this doesn’t work without well-trained HR managers who have the time and the ability to actually manage people (vs. just checking the appropriate boxes). Scholars and practitioners of public HRM have advocated for and demonstrated the centrality of what we do for government performance. We need to continue to amplify this truth and look for all opportunities to keep reinforcing the message that HRM is the best kind of management."

Larger organizations already have highly qualified HR management that is more experienced. Smaller organizations must find tools and spaces to cooperate, for instance, by jointly exercising their HR responsibilities, to attract more qualified HR managers and employees, and to generate and exploit economies of scale, reducing the stress on organizational structures to maintain the current volume of activities.

TABLE 1. SUMMARY OF MAIN FINDINGS

HRM personnel and its activities	HRM integration within organizations	HRM priorities and transformation trends	HR manager profile
• On average, 3.1 employees per hundred are assigned to HRM. However, this value widely varies across different types of institutions. These data are unsatisfactory for most managers, and only 11% see HR as fairly or fully adequate.	• Data show room to maneuver to achieve a higher degree of integration between HRM and other organizational units.	• While cost management and economic factors still represent top concerns for HR managers, HRM is increasingly interested in solutions to these issues. HR managers want to come up with practices that can boost workforce capability to produce value while keeping costs low.	• HR managers are more likely to be women than other managers, and around one out of four has some post-graduate education.
• Relatively speaking, administrative tasks still account for most of the activities performed in 2023 (40,1%), even if PAs started to transition toward a more strategic orientation. Another 20.5% of the time is earmarked for recruitment and selection processes, and a further 12.2% spent in union relations and negotiations.	• The most integrated activity pertains to defining staffing needs, where higher-value answers are chosen by slightly more than 40% of respondents. On the other hand, only 15% of HR managers believe that the involvement of other managers can be rated high in terms of internal communication and organizational wellbeing as well as training.	• Most respondents (54%) identify economic changes as a top priority, followed by greater flexibility (40%): While HR managers do recognize that flexible working arrangements are "here to stay" and HR practices must accommodate them, this doesn't seem to be the critical priority, given the widespread, unprecedented flexibility experienced during the pandemic.	• They gained their expertise in the public sector and generally in a few organizations, while HRM expertise is less common. Private sector experience still characterizes a minority of managers.

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BRIDGING THE SKILLS GAP
HOW NEW COMPETENCIES DRIVE INNOVATION

Public sector organizations face dynamic challenges driven by societal shifts and an aging workforce. Responding effectively requires strategic workforce planning to ensure the right competencies for evolving needs. Analysis shows that workforce plans predominantly prioritize traditional roles over emerging professional profiles characterized by new skill sets, such as digital and data management. External stakeholders advocate for strategic hires in the public sector, including data managers, relationship managers, project managers, digital experts, and strategic HR leaders. Bridging the skills gap is imperative for future public sector effectiveness and stakeholder satisfaction.

PUBLIC ADMINISTRATION//WORKFORCE PLANNING//TALENT MANAGEMENT//PUBLIC SECTOR REFORMS//SKILL-MIX OPTIMIZATION

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Public organizations are required to address rapidly changing social demands, voiced by diverse stakeholders with ever-evolving expectations for high-quality services. The effectiveness of the response of these entities hinges on having the right human capital to fulfill their mission and satisfy societal needs. Therefore, government organizations should take strategic decisions concerning the size and competencies of public workforce by proactively anticipating future needs (Huerta Melchor, 2013).

This urgency is heightened by the aging public workforce, coupled with limited opportunities to increase compensation and staffing levels. Approximately 16.5% of the personnel in the Italian public sector is 60 or older and will reach retirement age within the next five years. This factor becomes even more critical in Italian local governments where one in five employees is over 60 years old, particularly in Southern Italy (Giacomelli and Vidè, 2023). The upcoming retirement of a significant number of public employees represents both a window of opportunity and a critical challenge for public administrations. On the one hand, ensuring the seamless transfer of skills and experience from current employees is imperative for maintaining administrative continuity. On the other hand, there is the potential to innovate professional roles within the public sector, considering the impact of various mega-trends, such as digitalization and public-private partnerships, on the future of public works. To seize this opportunity, public administrations need to develop a forward-looking workforce plan: How many employees will be necessary? And, most importantly, what specific skills and professions will be required? There is no optimal size or composition for the public service workforce, as it varies based on strategic and policy decisions regarding the public organization's role in service delivery. For example, opting to outsource certain services could result in reduced staffing requirements, but with increased skills in regulatory, procurement and project management functions.

Answering these questions means moving workforce planning to a strategic level, marking the first, critical step in the human resource management lifecycle. Public sector organizations should anticipate the future and think strategically about the right mix of people and skills necessary to achieve the mission and address evolving societal needs. The final goal of strategic workforce planning is to have the "right number of people with the right skills in the right place at the right time to deliver short and long-term organizational objectives" (Huerta Melchor, 2013, p.7).

This article aims to reveal the current status of strategic workforce planning in the Italian public sector by examining the maturity of the plans and processes adopted to identify staffing needs (Section 2), analyzing the skills that public organizations plan to hire in the coming years (Section 3), outlining the professional profiles and competencies that public organizations should recruit (Section 4), and exploring strategies to address the misalignment between existing and desired practices (Section 5).

CURRENT WORKFORCE PLANNING SYSTEMS

In the Italian public sector, workforce planning is regulated by a national reform introduced in 2017, which requires each public organization to prepare a three-years workforce plan, annually updated. This plan is expected to include an overview of the existing workforce and any necessary adjustments in line with organizational needs and strategic directions. In the plan, public institutions must specify the number of employees needed to meet the organization's operational needs and the strategic goals, considering the projected turnover and public finance constraints. Additionally, this information should be complemented by a definition of qualitative staffing needs, encompassing specific occupations, expertise, and skills essential for effective performance.

Four years later, in 2021, another national reform mandated the incorporation of the Staffing Plan within the Integrated Activity and Organization Plan (PIAO in Italian), which aims to consolidate all strategic planning documents issued by each public institution into a single outlet. This initiative seeks to align human capital decisions with public value objectives and the performance goals of each organizational structure. In essence, decisions regarding the quantification and qualification of employees to hire should be linked to the actions required for the organization to fulfill its mission.

The recent National Collective Labor Agreements (CCNL in Italian) have introduced a new personnel classification system. However, individual public entities are granted discretion to code the specific professional profiles of current and future employees, based on a standard methodology recommended by the Ministry of Public Administration.

Nonetheless, this decentralized approach poses some implementation challenges, since public organizations exhibit varying degrees of maturity in terms of strategic workforce planning systems. Particularly, significant differences are observed concerning: (i) the quality of the planning tools available to the individual organizations, (ii) the level of involvement of public managers in the workforce planning process, and (iii) the degree of integration with the overall organizational strategy.

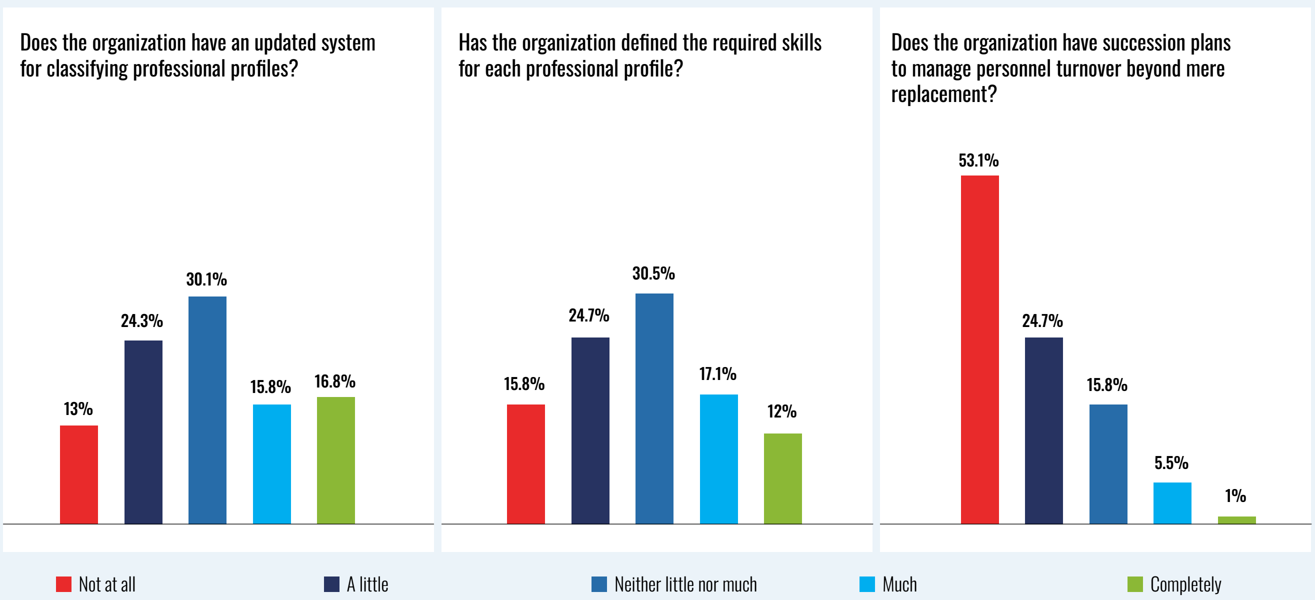
Regarding the quality of planning tools, within a sample of nearly 300 Public Administrations, only one-third of HR managers (32.6%) say they have revised the professional profile classification system. An even smaller percentage of entities (29.1%) has taken the additional step of outlining the skills required for each professional profile. A notable observation highlights the extremely low proportion of public HR managers (6.5%) who believe that their organization actively implements succession plans to strategically manage staff turnover (Figure 1).

In addition to technically sound tools, good workforce planning requires the active engagement and accountability of public managers. In other words, determining staffing needs should not be delegated to HR offices alone, but should instead rely on mutual exchanges between executives (who are in a position to observe the emerging trends in their respective areas of expertise) and HR managers (who are responsible for translating the strategic vision into required occupations and skills). However, in the Italian public sector, in more than half of the public organizations surveyed (59.6%) HR managers express the belief that as far as planning staffing needs, their function does not call on the executives from other organizational units at all, or to any significant extent.

Ultimately, workforce planning should be aligned with the overarching strategy of each government organization to avoid replicating the pre-existing skill mix and to promote the recruitment of new mission-critical occupations. However, in the Italian public sector, only one in

FIGURE 1. QUALITY OF WORKFORCE PLANNING TOOLS

N = 292 organizations



four hiring managers (26.1%) recognizes a link between the determination of staffing needs and the organization's strategic vision for the future. Consequently, only a minority of organizations have redistributed human resources between organizational sectors and professional profiles (20.5% and 15.8%, respectively) (Figure 2).

In summary, the results of our research, conducted on a sample of nearly 300 Italian public administrations, suggest that in most cases, current workforce planning systems have failed to deliver the expected outcomes due to inadequate tools, limited involvement of line managers, and partial integration with the organization's strategic vision.

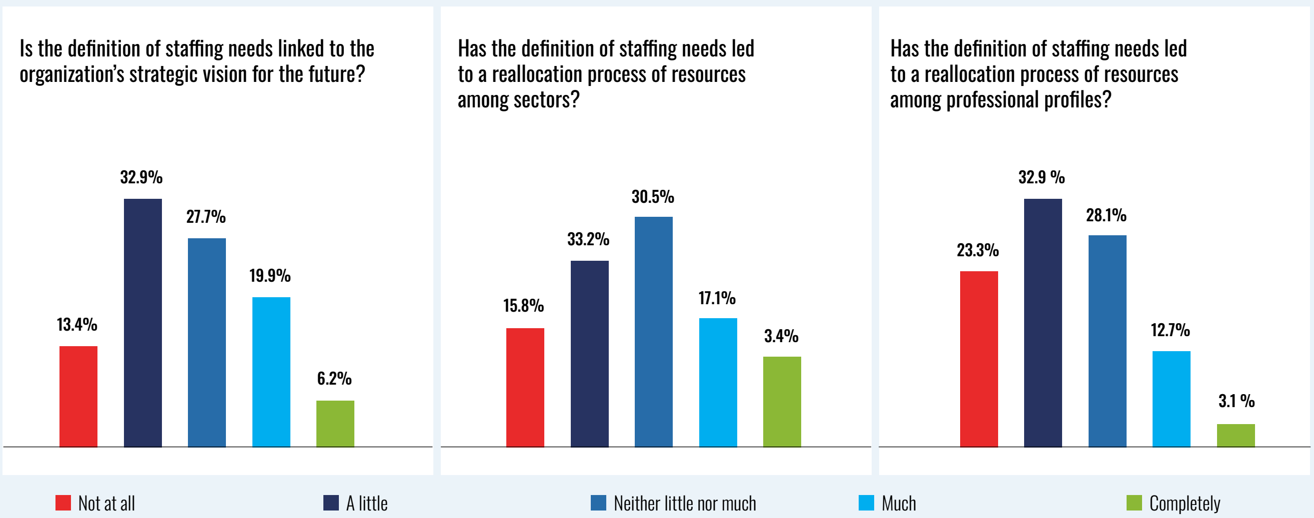
SKILLS THAT PUBLIC ORGANIZATIONS ARE PLANNING TO HIRE

While it is true that public HR managers do not perceive their organization's workforce planning systems as advanced, the Staffing Plan section of the PIAO includes specific information on the professional profiles that public institutions intend to recruit in the coming years. Therefore, by reading these documents, it is possible to identify the professions that each administration plans to hire and to draw general insights. Yet, a comparative analysis of these documents is hindered by the differences in the personnel classification systems and nomenclature adopted by each public organization. Additionally, the lack of a standardized grid contributes to the variability of the information entered by different administrations: each organization uses very different levels of detail to present data related to current employees, anticipated retirements, and planned hires.

Despite these limitations, an analysis of documents from 50 Italian local governments[1] provides suggestive insights that, while interesting, may not be particularly encouraging (Figure 3). Public organizations are currently planning to hire individuals for traditional roles that have historically characterized the performance of public service functions: administrative and technical profiles together account for 50% of planned hires for the 2023-2025 triennium,

FIGURE 2. DEGREE OF INTEGRATION OF WORKFORCE PLANNING WITH THE ORGANIZATIONAL STRATEGY

N = 292 organizations



1 All regions, all municipalities with more than 300,000 inhabitants, a sample of medium-sized (150,000-200,000 inhabitants) and small (less than 150,000 inhabitants) municipalities.

with another 11% of anticipated hires related to accounting profiles.

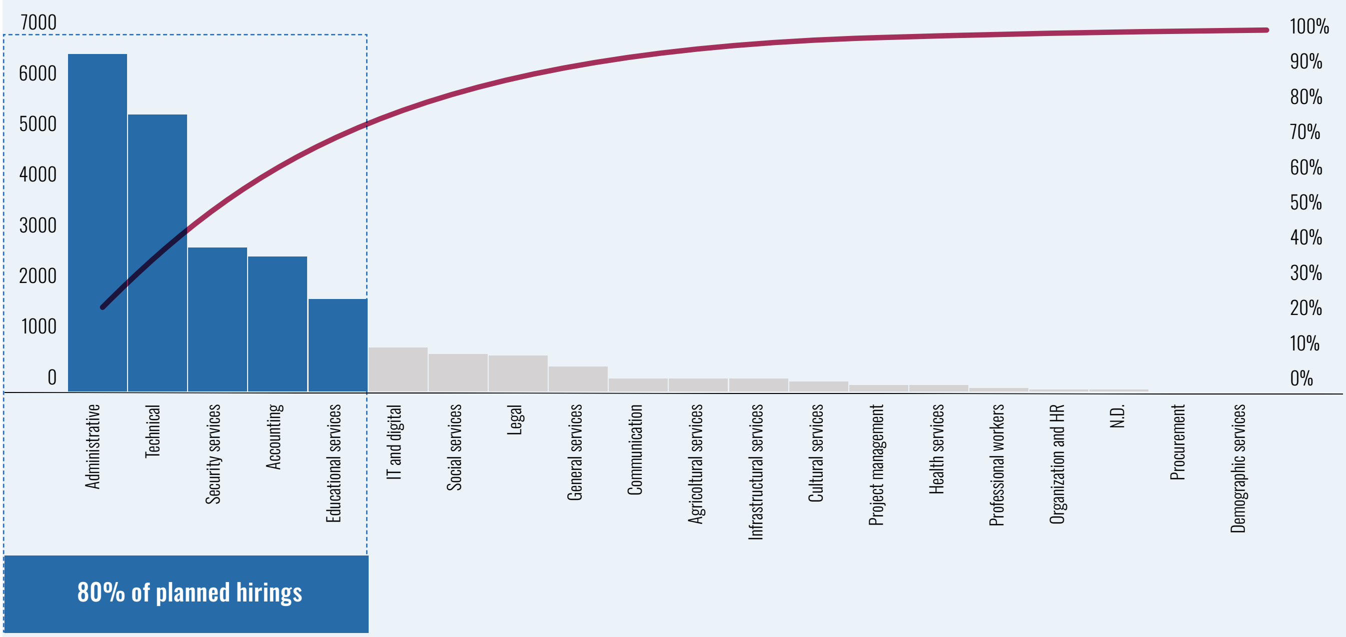
Another significant part of the hiring is aimed at professionals in essential public services (particularly in education and security), where significant staff shortages have accumulated in recent years. Precisely, 12% of the upcoming hires will be local police officers, security guards, or surveillance instructors, while 8% will be teachers and education professionals.

Therefore, 80% of the planned hires between 2023 and 2025 essentially reflect the current mix of occupations and skills within the public sector (administrative, technical, and accounting experts, education and security professionals). New professional roles will be recruited only marginally. For instance, IT and digital specialists account for 3.8% of total recruitment, while project management and European funds management specialists account for just 0.7%.

In order to provide a more comprehensive insight into personnel flows and to take into account the projected retirements in the triennium 2023-2025, an analysis of a sub-sample of ten public organizations reveals no significant variations in personnel composition between the end of 2022 and the end of 2025 (Figure 4). In fact, the variations are less than one percentage point for all the professional profiles, with administrative staff remaining the most represented (up from 23.9% of the workforce in 2022 to 24.3% in 2025).

If these plans were implemented at the end of 2025 (just one year before the end of the National Recovery and Resilience Plan, PNRR in Italian), the reforms aimed at requalifying the Italian civil service may not be successful in changing the mix of occupations and skills in the public sector and may continue to hinder the economic and social growth of the country. This emphasizes the need to identify the mission-critical occupations on which recruitment processes should focus, and to support public organizations in implementing effective strategic workforce plans.

FIGURE 3. PLANNED HIRES IN TERMS OF PROFESSIONAL PROFILES (2023-2025) N = 42 ORGANIZATIONS



SKILLS THAT PUBLIC ORGANIZATIONS SHOULD HAVE

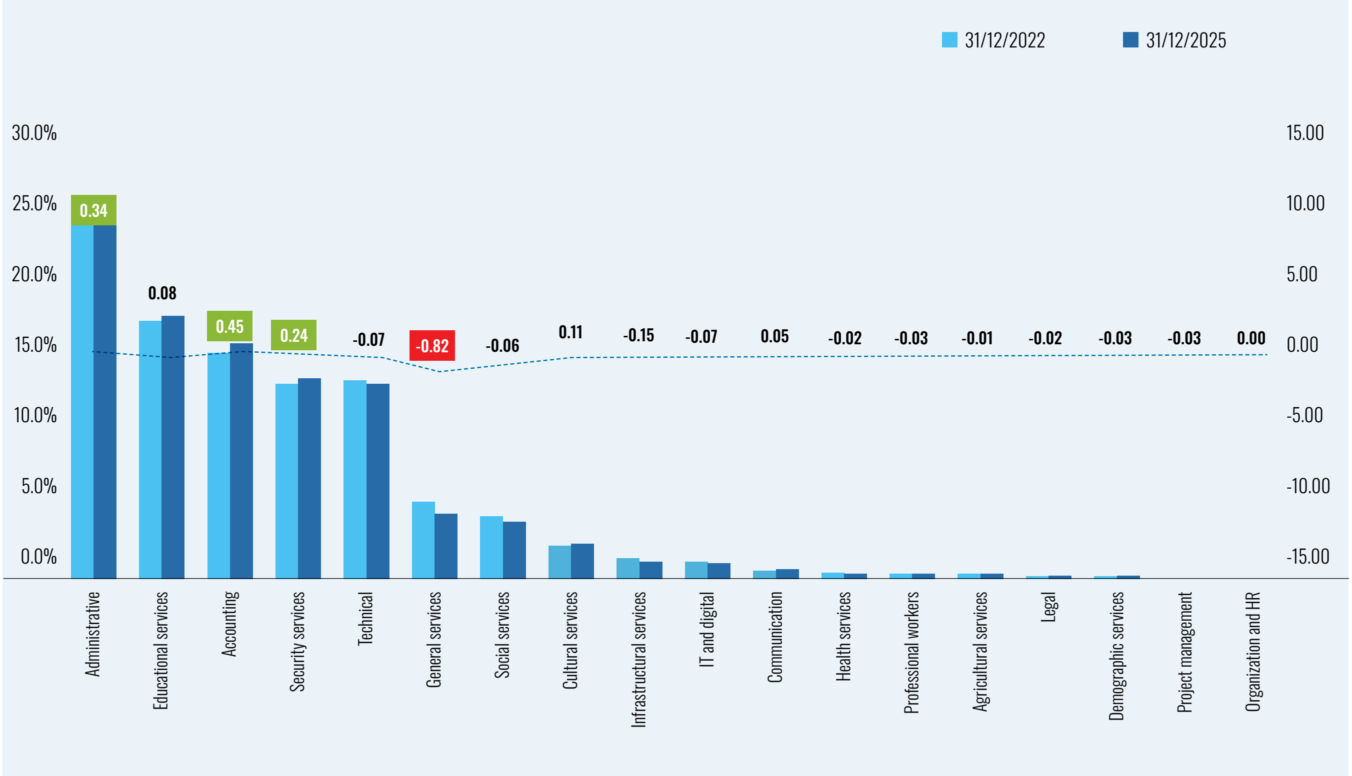
Italian public organizations appear to be preparing to replace senior staff with individuals with professional profiles similar to those currently in the workforce. There is a need to develop strategic thinking about adapting their skill mix in response to the evolving roles they play in service delivery, as well as the impact of digitalization on work processes and individuals. Nonetheless, external stakeholders are advocating for a significant change of pace from their public sector counterparts. In a focus group with representatives from about ten private companies, the desired professional skills and competencies of public employees who work with these private sector players were explored. This discussion led to the proposal of five mission-critical occupations that should be the focus of strategic workforce planning for public sector organizations (Figure 5).

First, public institutions should employ data managers, specialized professionals tasked with collecting, processing, analyzing, and disseminating accurate and reliable data. They should provide policymakers and public managers with timely, high-quality information to support strategic decision-making. This role is important for formulating evidence-based policy and management, and for optimizing the efficient and effective use of data to improve public service delivery.

Second, public organizations should appoint relationship managers who would be responsible for understanding stakeholder needs in order to deliver tailored services. Their role would be critical in establishing collaboration platforms, proactively mitigating potential conflicts, and conducting ongoing assessments of relationships to ensure satisfaction and alignment with organizational goals. Essentially, they would be integral to cultivating robust and mutually beneficial

FIGURE 4. SKILL-MIX CHANGE (2022-2025)

N = 10 ORGANIZATIONS



relationships between public sector organizations and their external stakeholders. Relationship managers would also contribute to strategic planning by providing insights into stakeholder expectations and societal trends, thereby facilitating the formulation of effective policies and service delivery strategies.

Public sector organizations also need project managers to strategize, implement, monitor, and report on projects to ensure successful outcomes. These professionals may take on a cross-functional role, integrating different organizational silos. Their objectives include optimizing the use of public resources, improving accountability, identifying and mitigating potential risks, ensuring timely project delivery, and aligning individual projects with overarching organizational goals.

Along with project managers, the private sector emphasizes the need for digital experts who could leverage technology to improve government services, meet the evolving needs of stakeholders, and foster citizen engagement. They would drive digital transformation initiatives aimed at adopting new technologies (e.g., cloud computing, artificial intelligence, digital platforms) to modernize both internal operations and public service delivery, including designing user-friendly interfaces and ensuring accessibility to a diverse audience.

Finally, public administrations should develop strategic HR management skills to effectively manage, develop, and align people with the organization's strategic direction. The HR function should go beyond the mere administration of legal and monetary aspects of human resource management, avoiding the perception of HR management tools as mere legal obligations. HR managers should increasingly engage in innovative practices for strategic alignment, talent management, and employee development.

In conclusion, from the perspective of the private sector, public institutions should focus their strategic workforce planning on recruiting

FIGURE 5. MISSION-CRITICAL OCCUPATIONS FOR THE PUBLIC SECTOR

new professional profiles (data, relationship, project, digital, and strategic HR managers) that are currently underrepresented in the public sector. Nevertheless, public administrations continue to plan the recruitment of traditional profiles, specifically in administrative and technical roles, thereby increasing the risk of mismatch with the expectations and needs of stakeholders.

HOW TO BRIDGE THE SKILLS GAP

In order to make human resource planning in Italian public administrations more strategic, we highlight four areas of intervention: vision, ways of planning needs, required competencies, and scope of public service core expertise.

First, adopting a vision-based approach means not only anticipating the future state of public services but also integrating this foresight into intermediate decision-making. In this regard, a more solid link between strategic planning and workforce planning could ensure a proper alignment with organizational objectives. Also, recognizing the strategic role of HR managers becomes paramount in guiding these processes effectively. By enhancing their role, organizations can ensure that human capital initiatives are not only reactive but also proactive, fostering long-term success.

Second, rethinking the operational approach to defining personnel needs becomes imperative for sustainable workforce planning. This entails reconsidering the temporal horizon (which is currently constrained to a three-year maximum) to align it with medium to long-term forecasting. To achieve this, organizations should actively engage with the business world and other external stakeholders. Leveraging structured forms of interaction can address a more nuanced understanding of the needs. Furthermore, establishing a common taxonomy for professional profiles and standard formats for defining staffing requirements would be beneficial in creating a shared lexicon for public-service skills, enabling the comparison of planning strategies across different administrations, and providing support to those that have not yet developed advanced practices.

Third, a comprehensive intervention should involve revising professional profiles and their competencies. Focusing on novel profiles expected to play a critical role in the future becomes a strategic imperative. Upskilling and reskilling initiatives should also be introduced to ensure that public employees are equipped with what they need to perform their evolving roles. Targeted training programs would facilitate the definition of new core profiles, aligning the workforce with emerging needs. The introduction of employer branding policies could further enhance the organization's ability to attract and retain critical profiles. In parallel, the adoption of competence certification tools (such as the "core competences passport" model) could help standardize competences, ensuring a unified and proficient workforce.

Last, finding the right balance between insourcing and outsourcing is a fundamental decision: public organizations should retain direct oversight of key functions and core services, while progressively outsourcing non-essential activities. However, if persistently unable to attract the right expertise, the public sector should create the conditions to leverage the skills of the private or non-profit sector, while retaining a crucial role in defining service quality standards and monitoring their achievement. This "make or buy" rationale extends to human capital planning: public organizations need to judiciously determine those activities that they are able to carry out directly, and the corresponding profiles, as well as those that can be more effectively sourced from the market. This process involves exploring and governing contractual alternatives as viable solutions to direct hiring. In a broader context, it means promoting an extended interpretation of "public service," intended as the collective of actors who possess the appropriate skills to meet stakeholders' needs, whether the public administration acts directly as service provider or as service regulator and overseer.

TABLE 1. SUMMARY OF MAIN FINDINGS

Current workforce planning systems	Skills that public organizations plan to hire	Skills that public organizations should hire
• One-third of local authorities have revised their professional classification system (32.6%) and outlined the skills required for each professional profile (29.1%). • 6.5% of local authorities implement succession plans for strategic staff turnover. • In 60% of sampled local authorities the HR function does not involve executives from other organizational units in planning staffing needs. • One in four HR managers (26.1%) recognizes a link between the staffing needs and the organization's strategic vision. • The reallocation of human resources among organizational sectors and professional profiles has taken place in a minority of entities (respectively, 20.5% and 15.8%)	• 80% of the planned hires between 2023 and 2025 mirror the current mix of occupations (administrative, technicians, experts in accounting, educational and security professionals). • Planned hirings of innovative professional profiles remain marginal (IT specialists represent the 3.8% of total recruitments and experts in project and European funds management 0.7%). • Accounting for projected employment cessations, there are no significant variations in personnel composition between 2022 and 2025 (less than one percentage point for all the professional profiles). • Administrative staff remains the most represented professional profile (increasing from 23.9% of the workforce in 2022 to 24.3% in 2025).	• From the perspective of private companies, local authorities should direct their strategic workforce planning toward recruiting five mission-critical occupations: data managers, relationship managers, project managers, digital managers, and strategic HR managers, which are currently lacking in the public sector. • Public organizations should focus their recruitment and development processes on soft skills and leadership skills. • Public administrations persist in planning to recruit traditional profiles, augmenting the risk of a mismatch with the evolving stakeholders' expectations and needs.

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WAR FOR TALENT OR TRAWL FISHING? BALANCING HR NEEDS AND QUALITY IN PSOs

Since the 1990s, Italy has significantly reduced its public sector workforce, reversing the growth trend of the 1980s. Recently, as hiring has resumed, the public sector faces two major challenges, a logistical challenge driven by a surge in applications, coupled with a loss of recruitment expertise. Italian public sector organizations need to balance short-term recruitment needs with the necessity for long-term quality hiring, which requires strategic innovations in the recruitment cycle. This study assesses how public administrations are adopting these innovations, using a recruitment value cycle model to analyze recent survey data.

NEW PUBLIC MANAGEMENT//PUBLIC SECTOR//RECRUITMENT CHALLENGES//HIRING POLICIES//RECRUITMENT INNOVATIONS

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The trend of reducing the number of public sector employees, which has characterized all OECD countries since the reforms of the 1970s and 1980s, is particularly notable in Italy. Here, the slimming down process began in the early 1990s, in contrast to the 15% growth in the 1980s. The reasons for this contraction have been investigated by scholars of public administration reforms (Pollit & Bouckaert, 2004; Ongaro & Valotti, 2008) and are generally attributed to the New Public Management paradigm, based on a downsized role for the state in the economy. In Italy, this aligns with the efforts to curb public spending to control debt and adhere to EU constraints, leading to a stringent turnover blocking policy since 2011. Hence, Italy experienced both a reduction in spending on salaries as a percentage of GDP (from 10.43% in 2008 to 9.78% in 2018) and an absolute reduction, cutting approximately 2 billion euro from public employment expenditure.

Two major consequences emerged when hiring began reopening in the public sector. The first is a logistical challenge for recruiting administrations, exacerbated by the snowball effect of applications to participate in public competitions for these positions from 2018 to the early stages of the National Recovery and Resilience Plan (PNRR in Italian) rollout. The second is the loss of know-how in terms of recruitment. The combination of these phenomena has, in some cases, slowed down or even blocked entities' hiring capabilities, despite the fact that constraints have been lifted. The new recruitment season thus reveals a widespread feeling that public administrations are not equipped with adequate tools to meet the new recruitment challenges. The PNRR-led public administration reform, in fact, has been marked by two almost opposing needs: to improve the recruiting function to fully seize the opportunity to renew up to a quarter of the staff, and to ease restrictions and simplify procedures to make the entire recruitment cycle more agile and efficient. Measures adopted to meet the first need include a shift in selection procedures, achieved through the introduction of new assessment methodologies over traditional knowledge-based public competitions; increased visibility of employment opportunities through a national platform; and greater collaboration between administrations at the territorial level. On the other hand, contradictory measures related to the need to make the recruitment cycle more agile include the possibility of reducing or simplifying the number of tests in order to speed up selection procedures.

Amidst these contradictions, the approaches to implementation at the level of individual administrations can be quite diverse. There is a risk that the short-term focus (making a quick selection) may prevail over the long-term focus (making the right selection). Therefore, this study investigates how administrations are adopting innovations aimed at enhancing the qualification of personnel. To achieve this, the next section introduces the recruitment value cycle model, which forms the basis for presenting the survey results in the third section. Finally, we offer a concluding discussion of our findings.

RECRUITMENT VALUE CYCLE

The first phase of the recruitment value cycle involves the development of a recruitment strategy aimed at identifying the ideal pool of candidates, where they are, and how they can be reached. Indeed, any selection procedure is preceded by a choice regarding the strategy to adopt to meet staffing needs: drawing from internal resources within the organization (through promotions or rotations); external to the organization but within the public system (through mobility among PSOs); external to the public sector (through public competitions). This phase is fundamental for the success of the entire process, which is often, in practice, focused on the more operational aspects. When defining the strategy, local PSOs also have the chance to engage in collaborative recruitment procedures (DL 80/2021), allowing for cost reduction, time efficiency, and elimination of duplications, while also enhancing the selection process through greater specialization. The value of this phase is manifested in an enhanced ability to respond to the organization's skills needs by utilizing all available levers.

The subsequent phase focuses on designing the specific procedure. In concrete terms, this means drafting the competition announcement, which is the place where all the choices in terms of selection criteria and methods are defined and published. In fact, specifying certain elements in the announcement ensures clarity and transparency in the organization's expectations, allowing for targeted candidate selection. These elements include the contractual framework, required skills, and pre-selection and selection tests. For instance, the choice of a particular pre-selection test, focusing either on specialized skills or motivational profiles, has a significant impact on the candidate pool. This translates into offering more opportunities either to those already possessing specific skills, at the expense of cross-cutting skills, or to those who demonstrate greater motivation, at the expense of required skills. Therefore, during this phase, it's crucial to recognize and manage potential trade-offs that arise; the value of this phase lies in the ability to combine effective tests that are well-aligned with the sought-after competencies.

Communicating recruitment opportunities, the third phase of the cycle, focuses on advertising specific positions and vacancies through a variety of channels. These include both mandatory platforms (such as the InPA recruitment portal and the institutional website of the organization, as defined by Presidential Decree 82/2023) and less traditional ones, including social media and other online portals. In addition, this phase concentrates on the tools available to the organization to reach and attract candidates, depending on the target. Examples include internal job postings and university initiatives to reach a diverse audience (current employees or recent graduates) based on the organization's needs. The value of any communication initiative is expressed not only in the number of people it attracts, but also in facilitating better self-selection of potential candidates.

This is followed by the management of the testing procedure. This refers to executing the decisions defined in the previous phases, including collecting and reviewing applications, conducting and evaluating tests, and finally selecting the ideal candidate. The value of this phase lies primarily in its efficiency, as well as in the proper adherence to formal rules to avoid later litigation.

Next is onboarding, or bringing the new employee into the organization, a crucial phase for ensuring alignment and retention of new hires and guaranteeing effective and advantageous integration for the organization. This phase includes orientation, role-specific training, and familiarization with the corporate culture through active employee engagement and monitoring during the first weeks of employment.

Finally, the recruitment evaluation is the last phase of the cycle. The aim here is to assess the

FIGURE 1. THE RECRUITMENT VALUE CYCLE

quality and effectiveness of the entire process and identify areas for improvement, useful in refining future strategy and consequently informing the new cycle. In detail, monitoring key indicators, either in combination or associated with structured feedback, reveals valuable insights into the different phases of the recruitment cycle. For example, tracking the number of candidates who take the tests, how many of them pass, and how many of them ultimately accept the job offer is useful in assessing the success of the selection processes.

While each of these phases adds value to the recruitment process, it's the first three that provide the opportunity to qualify the search for the right person. In fact, strategic decisions and actions are more likely to be made in the planning, design, and communication phases than in the execution and onboarding phases. Evaluation can also serve to provide useful feedback on these initial stages.

DATA ANALYSIS

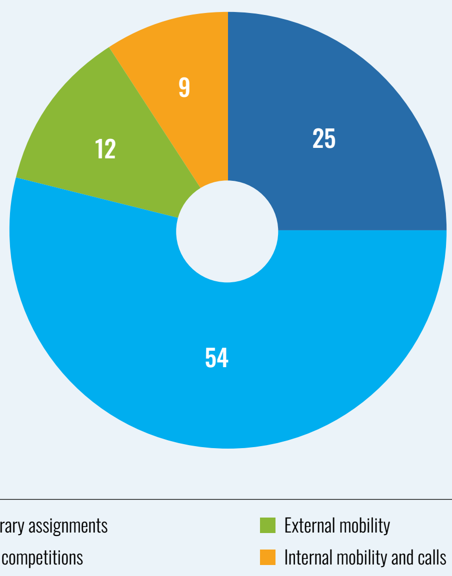
In light of the trends we have illustrated and the proposed recruitment value cycle, this section aims to examine the current state of the recruitment and selection process in the context of the Italian public sector. For this purpose, we analyze four of the six phases of the cycle (planning, design, communication, and evaluation, for the reasons described above) based on data from a survey we conducted on a sample of approximately 300 Italian public administrations, including local authorities (regions, provinces, and municipalities of various sizes), universities, and territorial agencies.

Starting with the recruitment strategy, the data we collected allow us to observe the prevailing methods of responding to skills needs, including the possibility for territorial entities to conduct aggregate competitions, for the reasons mentioned earlier. The methods we found include internal mobility and postings, external mobility, public competitions, and temporary assignments. Our analysis reveals that, regardless of the type of entity, external access through public competitions is the preferred method, covering 54% of vacancies (Figure 2). The widespread use of this method can be justified by the fact that, whereas in the past entities had to go through voluntary mobility procedures before launching open competitions and recruiting new staff, such restrictions have now been relaxed.

Regarding aggregated competitive exams among territorial PSOs, despite the potential advantages highlighted earlier, especially for small municipalities, our data show that this procedure is rarely adopted. Specifically, two-thirds (66%) of small municipalities declare that they have never conducted aggregated competitive exams, regardless of the benefits that could arise (Figure 3).

Concerning designing the individual competitions, our data analysis examines the elements specified in the announcements by public entities and the selection criteria adopted. Regarding the former, the information usually concerns conventional considerations such as contractual classification (93%), description of the desired profile (88%), and an outline of the competitive exams (86%) (Figure 4). Instead, contrary to innovative directions, over a quarter (27%) of respondents say they don't

FIGURE 2. POSITIONS FILLED THROUGH VARIOUS MODALITIES (SCALED TO 100 VACANT POSITIONS)



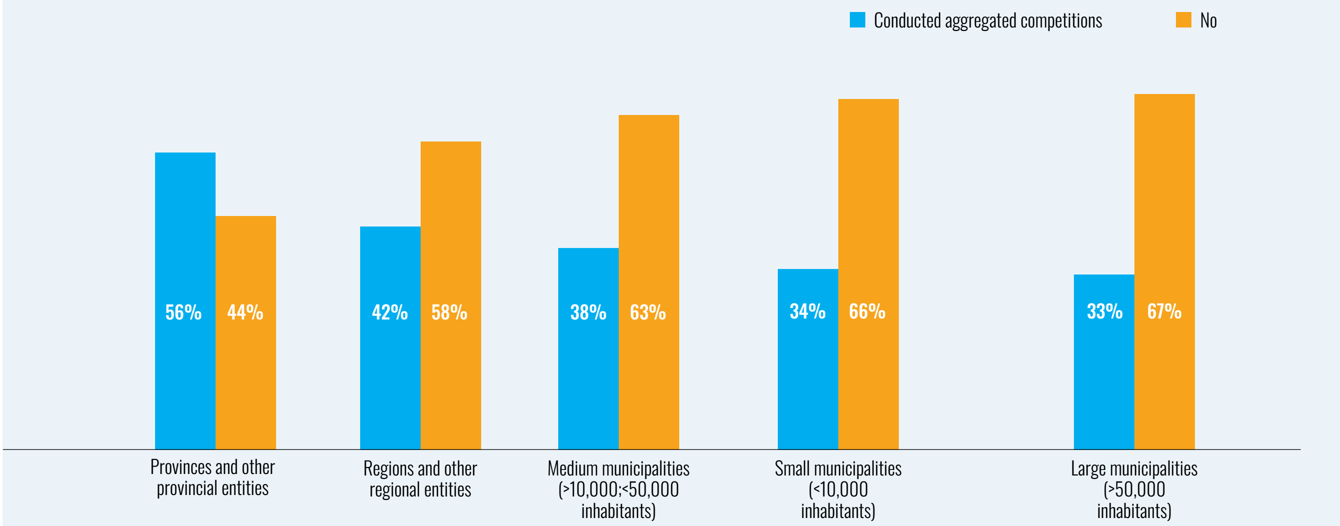
include profile requirements in terms of competencies in the competition announcements. Examining competencies in detail, we observe that not all types of PSOs behave the same way. A possible trend emerges, indicating that more structured PSOs, i.e., those of larger size and better organization, tend to detail competencies more explicitly.

In the context of pre-selection and selection tests, we compared our data with the results of a study conducted in 2019, including the same questions examined below, with responses from approximately 150 PSOs. Measured against 2019 data, we observe an overall expansion in the range of tools used, with greater use of innovative tools. Regarding pre-selection tests, used by more than half of the responding PSOs (56%), we found a significant increase in some non-traditional types, such as the motivational profile test (32% of the sample). While this evolution seems to reflect the guidelines provided in the legislative revision processes of recent years, there still remains a marked emphasis on technical-specialized skills (97% of the sample in 2023 vs. 63% in 2019). This poses the risk of excluding candidates from the pre-selection phase who have great potential but have fewer specialized skills (which could be more easily developed in the future). Therefore, there is a need to carefully weigh the trade-offs resulting from the choice of competitive exams.

Regarding selection tests (Figure 5), the trend continues to diversify types and adopt more innovative tools, such as practical tests (39% of the sample in 2023 vs. 25% in 2019) and web-based simulations (17% in 2023 vs. 4% in 2019), or simulations (20% in 2023 vs. 8% in 2019) and group tests (constant at 8%), for both written and oral tests. Despite this diversification, traditional tests such as essays (75%) and oral exams (94%) are still the most widely used. Another aspect that emerges is the tendency to differentiate selection tests based on the professional profile (54% of the sample) rather than in relation to the category (34.4%). This raises the potential risk of greater similarity, for example, between competitive exams for technical officials and technical directors compared to those for administrative and technical directors.

Moving to the third phase of the cycle, data analysis highlights a predominant reliance on mandatory institutional channels, such as the institutional website of the PSO (used by 84% of the sample) and the InPA portal (68%), while more innovative channels such as social media are underutilized (15%) (Figure 6). We note that this trend could significantly impact the visibility and attractiveness of competitions, as relying exclusively on mandatory channels could prevent entities

FIGURE 3. PERCENTAGE OF AGGREGATE FORM COMPETITIONS CONDUCTED BY EACH TYPE OF LOCAL ENTITY



from reaching a wider and more diversified range of candidates. In contrast, promoting competitions through non-conventional channels like social media could more easily reach certain categories, especially young individuals.

Our analysis of the tools used in the communication phase highlights limited adoption of active recruitment strategies. In fact, about half of the sample (48%) don't have an internal job posting tool to cover vacant positions, and 54% of responding entities don't use digital tools, such as social media or online communications, to promote the organization and attract candidates. Furthermore, less than half of the sample (38%) engage in on-campus initiatives at universities, indicating a lack of active effort to engage potential candidates. Finally, a minority of the sample (37%) employ professionals with skills in candidate research and profiling through social media. While there is some improvement compared to 2019 in adopting tools such as internal job postings (52% in 2023 vs. 19% in 2019) and the use of social media (46% in 2023 vs. 12% in 2019), external communication and talent acquisition continue to pose a challenge for public entities.

In the context of recruitment evaluation, we examined aspects related to the number of candidates and the dropout rate of candidates who were selected. Regarding the former, a critical indicator is the number of participants in the tests, and those who pass and accept the job offer. Despite the number of candidates in some cases exceeding the need to be filled, a significant problem emerges, with over 75% of responding PSOs reporting a candidate dropout rate that is higher than expected. Furthermore, even among those who participate in the tests, three-quarters of the sample emphasize that a significant percentage of candidates do not pass. Finally, in half of the sample, the number of selected candidates who rejected the job offer was higher than expected.

Another significant parameter for assessing the success of the recruitment value cycle is the dropout rate within six months of hiring. We observe that, overall, this circumstance is not very relevant for executives (2.8%), while it stands at 5.8% for officials and 8% for non-managerial staff (Figure 7). In addition, a more detailed analysis broken down by different categories highlights that in large municipalities, the percentage of non-managerial staff turnover is more than double the average (17.5%). This data could be attributed to the high cost of living in large cities: since the salary is the same as other types of municipalities, this could influence the attractiveness of the job.

FIGURE 4. ELEMENTS SPECIFIED IN THE ANNOUNCEMENTS BY PUBLIC ENTITIES (% BASED ON THE TOTAL RESPONDING ENTITIES)

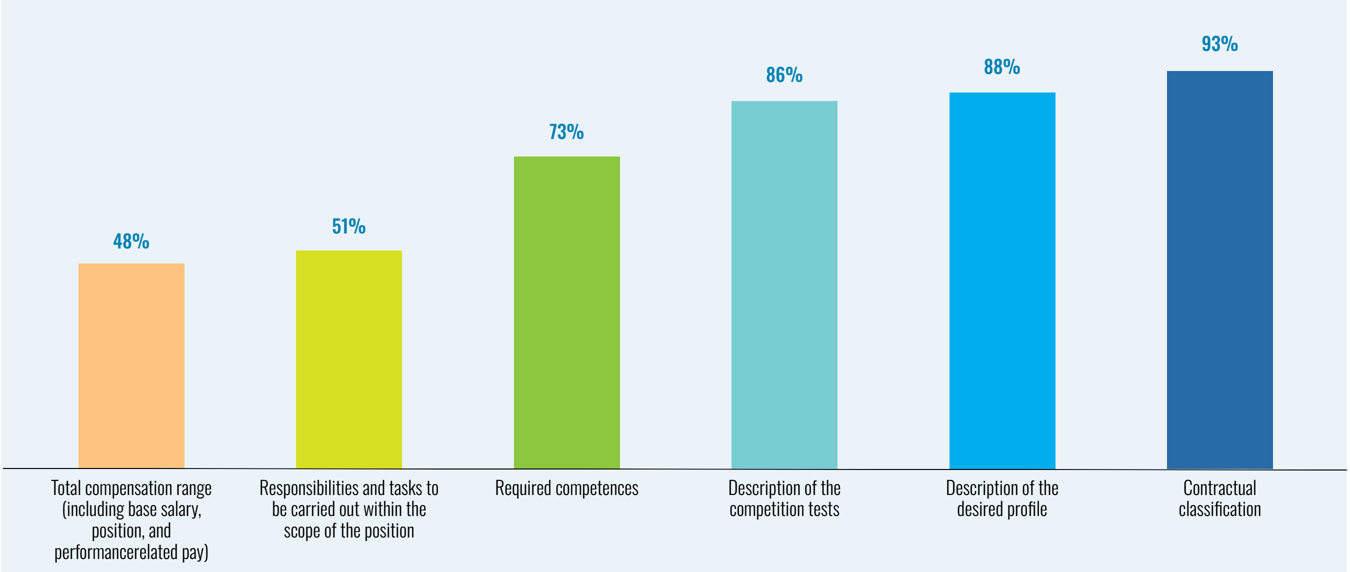


FIGURE 5. TYPES OF WRITTEN AND ORAL TESTS ADOPTED BY RESPONDING ENTITIES (COMPARISON BETWEEN 2019 AND 2023)

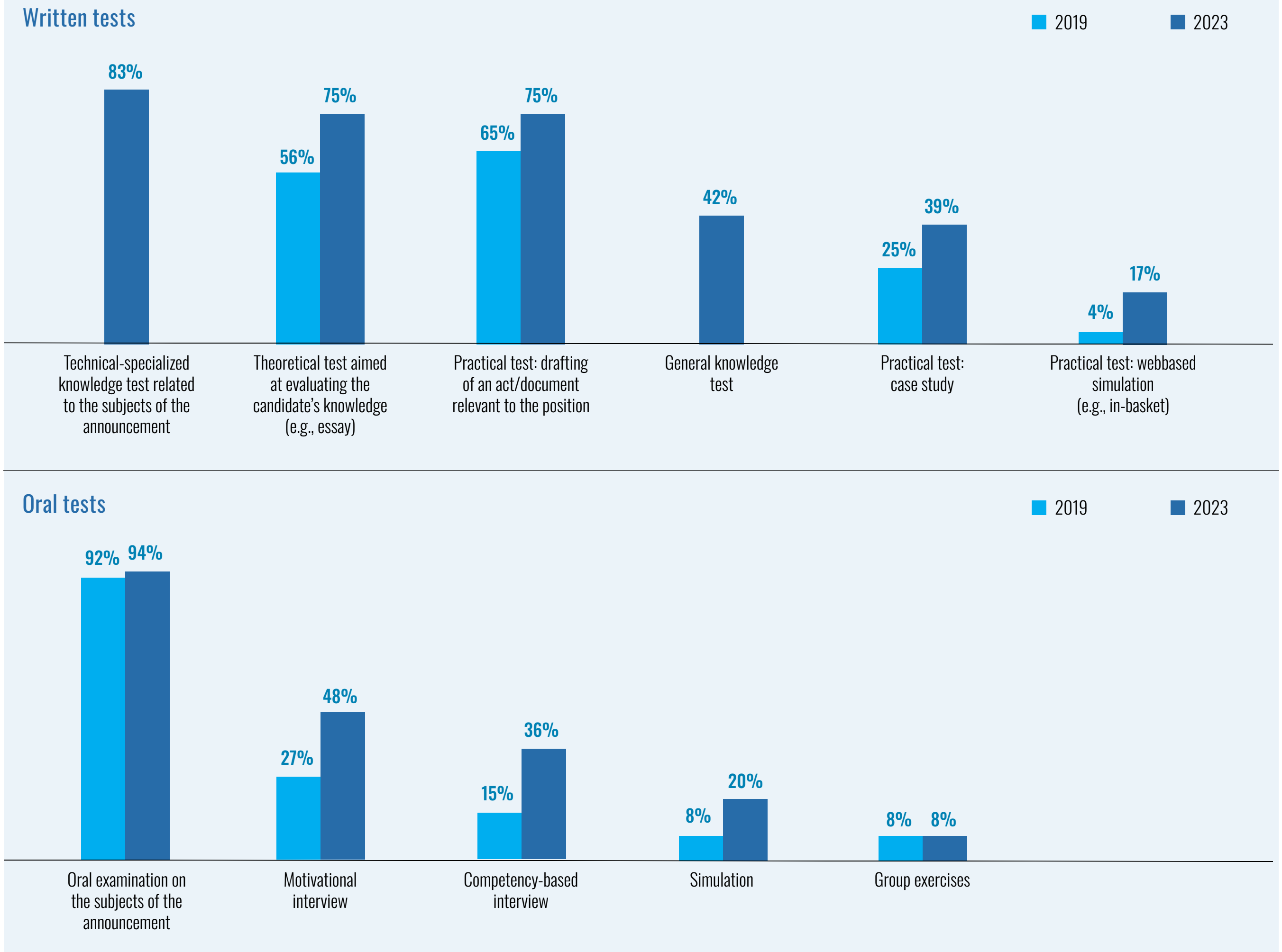
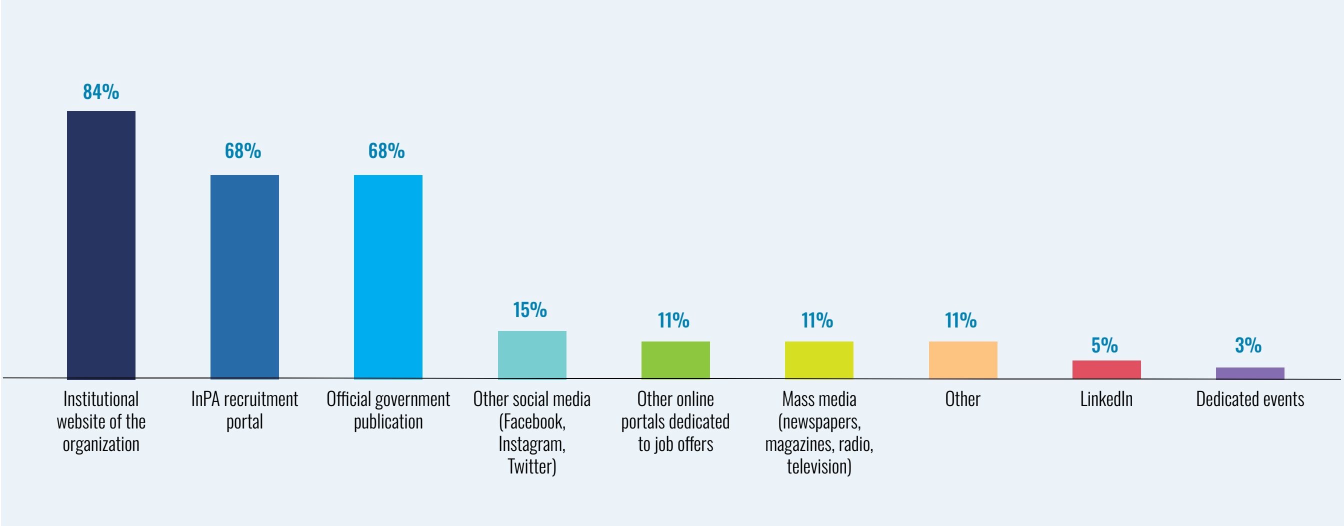


FIGURE 6. CHANNELS USED TO PROMOTE VACANT POSITIONS (% BASED ON THE TOTAL RESPONDING ENTITIES)



DISCUSSION

The proposed analytical model allows us to break down the selection process into successive phases, each capable of generating value (if well managed). Specifically, the first three phases are where the challenge of qualifying the skills to be acquired plays out; therefore, the value from these phases is produced over time. Conversely, effective management of the selection process tends to generate more readily recognizable value in the short term, characterized mainly by cost and time containment, as well as the reduction of risk of litigation (since any irregularities in managing this phase can invalidate the entire procedure).

The data we analyzed suggest, first and foremost, that PSOs predominantly focus on creating short-term value: emphasis on formal, mandatory aspects in the design and communication of job announcements tend to prevail over the willingness to innovate and seize opportunities offered by the latest reforms. The limited focus on long-term value creation appears to be a characteristic element of the current status of recruitment in the Italian public sector.

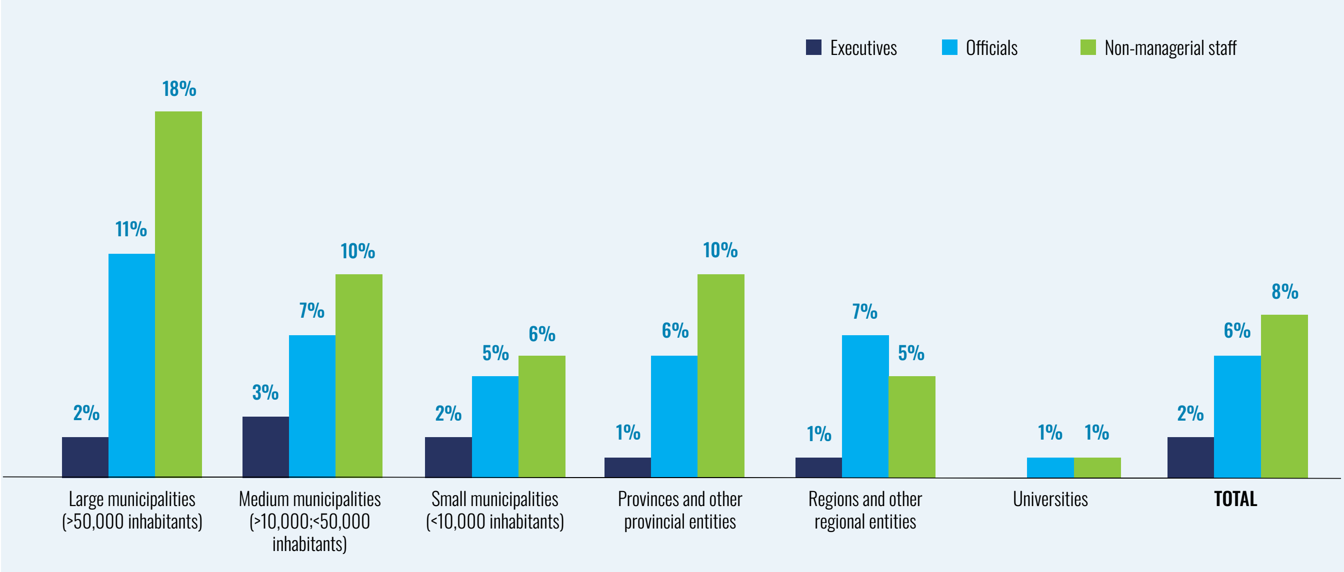
Secondly, the evidence shows that the ability to innovate is not evenly distributed among similar types or administrative levels of PSOs: the variable most closely associated with a greater focus on creating long-term value is size. Larger PSOs are also more structured in terms of internal skills to qualify the entire process.

Therefore, one limiting factor in adopting tools aimed at qualifying human resource acquisition seems to be a narrow conception of value creation (reducing costs, time, and litigation risk instead of ensuring the most qualified skills for the future). On the other hand, an enabling factor is the size of the organization and, consequently, the greater likelihood that the recruitment function is specialized and professionalized. In summary, these analyses suggest that the ability to seize value creation opportunities is linked to the ability to oversee the recruitment function effectively.

CONCLUSIONS

In light of the recent wave of hirings and recent reforms, this analysis has examined the critical phases of the recruitment value cycle in the context of the Italian public sector. Our research reveals a diversified landscape regarding the progress of public administrations in qualifying their personnel. While on the one hand, within the broader context

FIGURE 7. DROPOUT RATE WITHIN SIX MONTHS OF HIRING, DIFFERENTIATED FOR EXECUTIVES, OFFICIALS, AND NON-MANAGERIAL STAFF



of the PNRR, the PA reform introduces innovations aimed at qualifying the recruiting function and simplifying procedures, on the other hand, PSOs struggle to adopt innovative tools, compromising their chances of selecting the ideal candidate.

Our results indicate that PSOs primarily prioritize short-term value creation, with a strong emphasis on formal, mandatory aspects when designing and communicating selection procedures. This tendency overshadows the inclination to innovate and capitalize on opportunities presented by recent reforms. The limited attention to long-term value creation seems to be a defining feature of recruitment practices in the Italian public sector. Furthermore, our evidence highlights an uneven distribution of innovation capabilities among PSOs, with organizational size emerging as a key factor. Larger PSOs not only show a greater emphasis on long-term value creation but also have more structured internal skills to qualify the entire recruitment process.

In conclusion, although the renewal of the selection process appears to be progressing slowly, there is a widespread willingness to expand the range of tools used by public administrations to attract the ideal candidate and address the challenges of the present.

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TABLE 1. SUMMARY OF MAIN FINDINGS

Defining recruitment strategy	Designing the competition procedure	Communicating recruitment opportunities	Valutazione del reclutamento
• 54% of vacant positions are filled through open state exams.	• Main elements explicitly specified in the announcement (out of the total respondents): Contractual framework (93%), description of the desired profile (88%), description of the competition tests (86%). More than a quarter of respondents (27%) do not specify the required skills.	• Most used channels for promotion (out of the total respondents): Institutional website of the organization (84%), InPA portal (68%), Gazzetta Ufficiale (official government publication) (68%), Social media (15%).	• Over 75% of responding PSOs report a candidate drop out rate higher than expectations; three-quarters of the sample highlight a significant percentage of candidates who do not pass the competition; in half of the sample, the number of selected candidates who reject the job offer is higher than expected.
• Two-thirds (66%) of local authorities have never conducted aggregate exams.	• Greater use of innovative types for both pre-selection and selection tests compared to 2019. For example, including the motivational profile test (32%), web-based simulations (17% vs. 4%), and simulations for the oral exam (20% vs. 8%). There is continued emphasis on traditional tests such as general knowledge essays (75%) and oral examinations on the subjects specified in the announcement (94%).	• Promotional tools: 54% of entities do not have an internal job posting tool; 62% of entities do not employ active recruitment strategies such as on-campus initiatives at universities.	• Dropout rate within six months of hiring: 2.8% for executives, 5.8% for officials, and 8% for nonmanagerial staff. In large municipalities, the percentage of non-managerial staff turnover is more than double the average (17.5%).

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NEXT GENERATION PERFORMANCE APPRAISALS BALANCING ADMINISTRATIVE AND DEVELOPMENT GOALS

Individual performance measurement and appraisal systems (PAS) have traditionally oscillated between an administrative and a developmental orientation. These two approaches are influenced by organizational trends, hiring policies, economic trends, and contextual developments. In Italy, where PAS have traditionally been characterized by a predominantly administrative orientation, recent guidelines promote a developmental approach in an effort to address the lack of know-how in the public sector. However, studies reveal a persistent gap between these aspirations and actual practice, highlighting the need for better alignment between assessment outcomes and training opportunities.

PERFORMANCE APPRAISAL SYSTEMS (PAS)//PUBLIC SECTOR REFORMS//STAFF TRAINING//HIRING POLICY//SKILL GAP

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Traditionally, performance appraisal systems (PAS) have teetered between an ostensibly "administrative" purpose, using comparisons between individuals to make important decisions with organizational implications (awarding bonuses, assigning tasks, or green-lighting promotions and salary increases), and a "developmental" approach, based on identifying employees' strengths, weaknesses and needs by creating tailored training to foster their personal and professional growth.

In the private sector, these shifts have mirrored the evolution of organizational models, pitting hierarchical against flat organizations, or middle management against management with predominantly direct reports. Hiring policies have also played a role (favoring external hires over internal talent development), as have economic trends like austerity measures or tax policies. Contextual changes, such as shifts in the values guiding employer choices or the adoption of new cultural approaches like agile methodologies, have further influenced the landscape. Over the years, this mix has resulted in PASs leaning more towards one model or the other, prompting a cyclical need to swing in the opposite direction to address challenges that a single approach can't handle alone. For example, while administrative systems might cultivate a more competitive environment, they could fall short in supporting personal growth, potentially sparking conflicts between supervisors and employees. Conversely, developmental systems may overlook the need for accountability, which is crucial in supporting managerial decisions that are perceived as fair.

In the public sector, at least until recently, there has been a distinct administrative tilt in PASs. Since their introduction in the early 1980s, these systems have primarily focused on distributing economic rewards. This focus crystallized in Italy in 2009 with the so-called "Brunetta Reform" (D.Lgs. n. 150/2009) which made performance appraisal a prerequisite for merit-based reward distribution. In 2017, the "Madia Reform" (D.Lgs. n. 74/2017) as it's known, further integrated this approach by linking performance appraisal to employees' career development opportunities along both horizontal and vertical paths. Just two years later, Guideline No. 5 from the Department of Public Administration underscored the importance of using a PAS as a tool to pinpoint employees' skills gaps and define their training needs. However, it is with the National Recovery and Resilience Plan (known by the Italian acronym PNRR), Legislative Decree No. 80 of 9 June 2021, and the two latest directives from the Italian Ministry for the Civil Service (2023a, 2023b) that the developmental aspect explicitly emerges. This coexists with the more traditional administrative purposes, further fortified by national legislation and labor negotiations.

In essence, the imperative to strengthen the PAS for decisions regarding rewards, career trajectories, and wage differentials runs parallel to the need to link performance appraisal results to training opportunities, addressing employees' technical, soft, and relational skill gaps. New guidelines have shifted the focus towards developmental objectives, demanding the creation of a PAS capable of making meritocratic decisions while concurrently devising and managing training programs aimed at enhancing human capital in the public sector. In the sections we propose a summary of the new guidelines and present the results of two studies on Italian PASs, from the complementary perspectives of both HR managers and employees; the last paragraph highlights some key elements to encourage further considerations on the topic.

NEXT GENERATION PAS

As mentioned earlier, a set of new guidelines, outlined in the Ministry for the Civil Service Directive and unveiled on November 28, 2023, has brought a new perspective to the area of performance appraisal within the public administration. Such appraisals have traditionally been regarded as a bureaucratic hurdle and a source of frustration and unfairness rather than a practical tool for effective management. It's worth noting that these new guidelines are aimed primarily at managers, although their impact on employees is evident in various sections. Here's a concise overview of the key changes:

- Shifting from the traditional hierarchical evaluations to a 360° assessment, involving not only supervisors, but also colleagues, peers, and external stakeholders;
- Introducing calibration mechanisms for collective assessment, aiming not only to "standardize" evaluations but also to incorporate diverse perspectives;
- Encouraging differentiation in evaluations and recognizing a limited number of outstanding performances (up to 20%) by establishing new types of rewards;

- Introducing structured, periodic face-to-face feedback in the full performance appraisal cycle (e.g., quarterly performance interviews) and opportunities for self-assessment;
- Identifying managers' skill profiles and experiences, and assessing their potential to recognize areas for improvement;
- Fostering managers' ability to exercise effective leadership by linking it to performance assessment;
- Holding managers accountable for fostering personal growth and development for both themselves and their team members, consistent with assigned goals;
- Implementing individual training plans for managers and staff;
- Mandating a minimum of 24 hours of training;
- Identifying priority training areas for managers, including employees' performance assessment.

It's important to note the emphasis on training in the new guidelines, which explicitly address the need to certify skills through assessments of incoming and outgoing employees, introduce both general and specific training goals, set targets for employees engaging in upskilling and reskilling, and measure the impact of training activities.

The attempt to transition from administrative to developmental systems is clear, but is it achievable? Italy's past PASs have often fallen short of expected results. Unfortunately, traditional systems have tended to yield overly uniform evaluations geared toward maximum scores. Most attempts to introduce more selectivity or differentiate reward schemes have been met with challenges. So, can we strike a balance between administrative and developmental goals by incorporating 360-degree assessment, greater selectivity, and differentiation, alongside periodic feedback and individualized training plans? Is it possible to find a middle ground in the Italian public sector that meets all these needs? Perhaps, before addressing these questions, it's useful to analyze data related to performance appraisal and training systems in Italian public organizations.

DEVELOPMENTAL PURPOSES IN ITALIAN PERFORMANCE APPRAISAL SYSTEMS

Here, we present the findings from two studies: the first focuses on a 2023 survey concerning the HR function[1], while the second delves into research conducted on behalf of the Department of Public Administration during 2019/2020 (Presidenza del Consiglio dei Ministri, 2019). The older study comprises three main phases: mapping out the Italian PASs by defining their key structural features; identifying employee perceptions of the systems, including considerations of fairness and motivation; and outlining employee preferences by envisioning potential development paths for the PAS[2].

As the 2019/2020 research reveals, 100% of the surveyed administrations state that the primary goal of a PAS is to assign rewards, with 72% claiming a developmental purpose as well. However, only 28% acknowledge a connection between training and performance evaluation, and a mere 12% implement individual development plans. These results mirror the findings of the 2023 study, revealing that the link between training activities and the PAS remains weak: a significant 64% of HR managers affirm that training activities are not aligned with evaluation results, and 53% disagree on the potential of these systems to identify skill gaps among those evaluated (Table 1). Negative perceptions aside, it's the low percentage of positive ones that highlight a starkly polarized judgment.

Furthermore, regarding the use of individual development plans, there's a distinct stance among PAs: 67% of the ones we surveyed declare that they do not resort to such plans, and only 5% define

1 The research involved HR managers of 297 public organizations, including local authorities, universities, and agencies.

2 The research focused on a sample of 60 public organizations, including local and central governments, Chambers of Commerce, agencies, etc., and about 1700 employees from nine of the previously identified public entities.

them based on performance evaluation results (Table 2).

The intended developmental purpose outlined in official documents appears to be more of a hopeful aspiration than a tangible trend. Indeed, in the 2019/2020 survey, when employees were asked whether they found a PAS helpful in identifying their strengths and weaknesses, the average ratings on a scale from 1 to 5 were 2.65 and 2.63, respectively (Table 3). Moreover, when queried about the effectiveness of measures intended to address skills gaps after the evaluation processes, the average judgment (1.98) and the distribution of responses (with 69% expressing negative opinions) were even more pronounced.

The 2023 research provides further insights into this issue. When asked whether public organizations provide training activities for employees' upskilling or reskilling, the responses reflected ample room for improvement (Table 4). Only 12% offer upskilling initiatives, and a mere 9% provide reskilling programs. One might argue that such initiatives are unnecessary but considering the resolutions of the PNRR and the ongoing organizational and technological changes, such a justification seems less convincing.

When shifting our focus to training targeted areas, the discrepancy with the aspirations of the new guidelines becomes strikingly apparent. Regulatory updates still take the lead, followed by technical skills and safety.

Looking at additional recommendations listed in the guidelines, it becomes clear that there is a substantial gap to bridge: currently, only 17% of administrations state they conduct one or more face-to-face feedback sessions, and a mere 16% incorporate calibration into their practices (Table 5).

These responses align with what employees indicated in the 2019/2020 study regarding their awareness of their own performance. Interestingly, a significant 63% of those surveyed don't feel adequately informed about how their performance

TABLE 1. DEVELOPMENTAL PURPOSES IN ITALIAN PAS

QUESTION	−		+
Training activities are based on the results of individual performance assessments.	64%	31%	4%
Current individual performance assessment allows for measuring employees' skills gaps.	53%	39%	7%

TABLE 2. USE OF INDIVIDUAL DEVELOPMENTAL PLANS IN ITALIAN PASs

QUESTION	−		+
Individual development plans are based on performance assessment results.	67%	27%	5%

TABLE 3. EMPLOYEES' STRENGTHS AND WEAKNESSES AND SKILLS GAPS IN ITALIAN PASs

QUESTION	−		+
I believe that the performance evaluation system is useful for identifying my strengths.	47%	23%	31%
I believe that the performance evaluation system is useful for identifying my weaknesses/areas for improvement.	47%	24%	29%
Following the evaluation process, effective mechanisms are activated to address skills gaps.	69%	21%	10%

TABLE 4. EMPLOYEES' UP-SKILLING AND RE-SKILLING IN ITALIAN PAS

QUESTION	−		+
The organization provides up-skilling activities for its employees.	54%	34%	12%
The organization provides re-skilling activities for its employees.	60%	30%	9%

is progressing, while only 17% claim to be well-informed (Table 6). It's noteworthy that, at the time of the survey, in terms of evaluation methods, 100% relied on hierarchical assessment, 30% on self-assessment, 15% on external evaluation, 3.3% on bottom-up evaluation, and 1.7% on 360° evaluation. This underscores the fact that the opinions expressed in the surveys are not tied to particularly intricate or sophisticated methodologies; nearly all organizations lean on traditional evaluation tools, focusing on the role of the hierarchical superior as the main process owner.

Additionally, the respondents themselves offer a straightforward assessment of the feedback quality they receive: only 21% consider it constructive and timely (Table 7). Once again, the trend leans considerably toward negative evaluations, with the average responses falling below the neutral range (2.29 and 2.36).

Again, employees' responses in 2020 can be explained by what 50% of HR professionals assert today: evaluators are not actively participating in training initiatives related to the evaluation process. On the flip side, only 12% of organizations plan for such involvement in these types of courses.

Taking a broader view, regarding information systems connected to performance assessment and training, there's substantial room for improvement: HR professionals report that employee performances are tracked in 34% of cases, while in 35% of organizations they aren't (Table 8). The situation worsens when it comes to training. Only 15% claim to have a formalized system for tracking acquired skills. This suggests that the 34% positive response to the previous question is likely not due to the presence of personnel files but rather to an automated evaluation system that serves as a repository for previous assessments. However, it lacks integration, in a more holistic sense, with employee development.

Lastly, delving into the extent to which organizations have tools to systematically assess the effectiveness of training programs, our findings are not very encouraging: a mere 7% of HR professionals claim to possess such tools, while a significant 61% do not (Table 9).

TABLE 5. FEEDBACK AND CALIBRATION IN ITALIAN PASs

QUESTION	−		+
The performance evaluation system mandates one or more face-to-face feedback sessions during the year.	56%	27%	17%
Discussion/meetings are held to calibrate evaluation criteria (ex-ante) and rates (ex-post).	48%	36%	16%

TABLE 6. EMPLOYEES' AWARENESS OF THEIR PERFORMANCES IN ITALIAN PASS

QUESTION	−		+
My assessor keeps me informed about how my performance is progressing.	63%	20%	17%

TABLE 7. FEEDBACK QUALITY IN ITALIAN PASs

QUESTION	−		+
My assessor provides constructive feedback on my job performance.	58%	22%	21%
My assessor provides timely feedback on my job performance.	55%	24%	21%

TABLE 8. USE OF INFORMATION SYSTEMS LINKED TO PERFORMANCE ASSESSMENT AND TRAINING IN ITALIAN PASs

QUESTION	−		+
The organization has a tool that tracks the evolution over time of employees' performance (e.g., personnel files).	35%	31%	34%
The organization has a formalized system to track employees' acquired skills and training activities.	55%	30%	15%

CONCLUDING REMARKS

Striving to reshape the PAS for enhanced development and training initiatives is a commendable and urgent goal. However, certain reflections are inevitable. Opting for a radical transformation rather than a more gradual approach is understandable, particularly in light of the recent waves of reforms. From this stance, several key considerations warrant further exploration:

- It's imperative to move away from administrative-focused PASs, since thus far, such systems have yielded inconsistent results. Initially, PASs emphasized rewarding performance. But by now, they are required to do not only that, but to shape career opportunities and acknowledge outstanding training as well. Moreover, these systems should also delineate skills profiles, and address skill gaps. This is a multifaceted set of demands that a single, rigid, annual, and standardized model cannot meet, especially given the recent surge in hiring policies affecting public organizations.
- The new guidelines advocate for a clearer connection between organizational and individual performance that goes beyond mere theory. It involves determining how much the organizational dimension influences decisions and evaluations related to individual performance. This extends to third-party evaluations, whether of services (organizational performance) or employees (individual performance). The Directive seems to favor the former, changing the natural focus of 360° assessment from individual to organizational performance.
- The 360° assessment represents a revolutionary change that brings with its organizational costs and practical challenges. While undoubtedly beneficial, its purpose, whether administrative or developmental, needs explicit clarification, because vagueness about its objectives might foster a climate of distrust and skepticism.
- The formalization of periodic face-to-face feedback can only be effectively achieved by redefining the roles of managers/supervisors, who are often overwhelmed by technical tasks and less familiar with such managerial tools. Additionally, developmental plans must be established based on specific organizational settings (e.g. number of employees). It's not just about training or self-training; leveraging employees' knowledge and subsequent organizational benefits is possible with internal job rotations and external career mobility.
- Including individualized development plans in the Integrated Activity and Organization Plan (PIAO in Italian) and using predefined training objectives risks reducing these efforts to routine compliance, deviating from a genuine assessment of training needs and thoughtful training choices. While reporting objectives are clear, they should not undermine such a significant opportunity.
- Training managers are responsible for enrollment on the platform, while supervisors are responsible for individual assessments, implementation of individual plans, and promotion of training. But what about employees? There is a sense that they have limited involvement in the decision-making processes that directly affect them. The

TABLE 9. SYSTEMATIC ASSESSMENT OF TRAINING PROGRAMS EFFECTIVENESS IN ITALIAN PASS

QUESTION	−	○	+
The organization has a tool to systematically assess the effectiveness of training programs.	61%	32%	7%

somewhat outdated notion that employees simply submit to decisions dictated by directives, training plans, and mandatory training needs to be refreshed. It may be time to focus on the role of public employees, empowering and activating them (including in job rotation processes) to encourage their active involvement in their personal development.

The starting point, from what we've observed, is quite challenging, but that also implies there's ample room for improvement. Evaluation and training are interconnected and mutually beneficial HR levers, often neglected and depleted. The new guidelines aim to change the game, offering a fresh perspective. However, they are ambitious and present substantial challenges which, to be overcome, require organizations to put specific enabling conditions in place. The ball is now in the court of public organizations, which are tasked with deciding how to bring these proposals to life.

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TABLE 10. SUMMARY OF MAIN FINDINGS

Developmental purposes	Feedback and calibration	Integration with training activities	Integration with information systems
• In 53% of cases PASs do not allow assessors to identify skill gaps. • 67% of administrations do not use individual development plans. • In 47% of cases, PASs are not useful for identifying employees' strengths and weaknesses. • In 69% of cases, PASs are not effective in addressing employees' skills gaps.	• Only 17% of administrations report conducting one or more face-to-face feedback sessions. • Only 21% of administrations consider feedback constructive and timely. • In 63% of cases, employees don't feel adequately informed about how their performance is progressing. • Only 16% of administrations incorporate calibration into their assessment practices.	• 64% of administrations affirm that training activities are not aligned with evaluation results. • Only 12% of administrations provide upskilling activities for their employees. • Only 9% of administrations provide reskilling activities for their employees. • Regulatory updates are primary training targeted areas.	• In 34% of cases, administrations have a tool to track the evolution over time of employees' performance. • In 15% of cases, administrations have a formalized system to track employees' acquired skills and training activities.

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DANIELE DOTTO

THE EUROPEAN COMMISSION'S COMPACT

BRINGING INNOVATION TO EU PUBLIC ADMINISTRATIONS

The ComPAct, a comprehensive initiative by the European Commission to modernize and enhance cooperation between Member States' public administrations, proposes 25 actions under three pillars – the public administration skills agenda, capacity for Europe's digital decade, and capacity to lead the green transition – to support administrative modernization, capacity building and effective use of EU funds. This initiative responds to challenges such as technological change, demographic shifts and climate adaptation, and promotes seamless public service delivery and sustainable practices across the EU.

COMPACT//PA PRACTICE MODERNIZATION//DIGITAL TRANSFORMATION//GREEN TRANSITION//PUBLIC SECTOR REFORMS

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The communication "Enhancing the European Administrative Space," also known as "ComPAct,"[1] was adopted by the European Commission on October 25, 2023. It is innovative in that, for the first time, the Commission proposes a comprehensive set of actions in support of administrative modernization and cooperation in and between Member States at all levels (national, regional and local). The aim is to learn, improve, and make effective use of European funds, such as those provided by the Cohesion Policy and the Recovery and Resilience Facility (RRF).

The ComPAct crowns the natural evolution of an itinerary that began about twenty years ago, defining a "twofold paradigmatic shift [that]

1 Commission Public Administration Act.

occurred in the governance of the European Union (EU) as regards the reform of public administration in the Member States and across the European administrative system (...)" (Ongaro, 2024). It follows on seamlessly from the Staff Working Document (European Commission, 2021), the first structured paper on Public Administration and Governance (PAG) that identified five critical challenges for public administrations in the EU: rapid technological change; demographic changes and skills shortages; increasing complexity of policy issues; green transition and climate adaptation; and multiplying needs to be covered by public finances. The document also outlined ways to support public administrations.

Following the adoption of the SWD, the Commission set up its first Expert Group on PAG (2021) to provide a platform for "dialogue between the European Commission and representatives of the Member States" on the subject. In accordance with its mandate, the Group accompanied the Commission's deliberations on the ComPAct. The ComPAct is all the more relevant as it responds to calls from Member States, the European Parliament, the Committee of the Regions and regional and local authorities to promote cooperation and capacity building. It also addresses citizens' expectations for better and faster public administration and for greater cooperation among national administrations at EU level, as expressed in a recent Eurobarometer survey (2023). In the logical and chronological progression from SWD to Expert Group to ComPAct, the Commission, Member States and other stakeholders have had ample time and opportunity to exchange views on key issues, means of addressing them, and mutual expectations.

National PAs play an increasingly important role in the daily lives of citizens and businesses and the public sector is key to implementing many policy priorities, ranging from competitiveness and cohesion to the transition to a green, digital economy and respect for the rule of law. Beyond its socio-political importance, the public sector is also a major economic actor, representing 51.5% of European GDP, generating an annual public procurement market of 670 billion euros, and employing around 21% of the EU workforce. At the same time, national administrations are under increasing pressure to manage crises and unprecedented change, such as the twin transitions to digital and green. These organizations face staff shortages, difficulties in attracting and retaining talent, and a lack of expertise in complex policy areas.

With the ComPAct, the Commission proposes 25 actions to provide a framework within which the Commission itself and Member States can operate and/or request technical assistance. These actions are grouped under three pillars: the public administration skills agenda, the capacity for Europe's digital decade, and the capacity to lead the green transition. Each pillar includes tools, methodologies and peer support, and provides for the exchange of experience and best practices.

The first pillar, linked to the objectives of the European Year of Skills, encompasses most of the actions of the ComPAct and proposes a Public Administration Skills Agenda to support Member States in up-skilling and re-skilling civil servants. The first recommendation is to transform the Public Administration Cooperation Exchange project (PACE) – launched in 2023 to facilitate the exchange of civil servants among countries – into a permanent program and to develop a passport of core competencies, including leadership and digital skills. The second recommendation, *on cooperation for training and capacity building*, proposes three main actions: the creation of a Network of Centers of Excellence to provide thematic training for civil servants across the EU; the establishment of an EU Public Administration Leadership Program focused on senior managers in Member States' public administrations; and the creation of a public administration section on the already existing EU Academy platform with dedicated training courses and programs.

The third recommendation, *cooperation for administrative capacity at regional and local level*, proposes to increase the opportunities for regional and local entities to access the technical assistance provided by the Commission, to organize an annual Local Public Administration Day in the context of the European Week of Regions and Cities, and to conduct more in-depth research on the limitations and opportunities of the administrative capacity of regional and local administrations. Such research would include targeted studies and surveys to inform, *inter alia*, future editions of the Cohesion Report.

Finally, to *reinforce the human resource management tools in public administration*, a Passport of Core Competences applicable to jobs and roles in public administration, including leadership skills, is envisaged. Other initiatives include supporting Member States in modernizing their HR policies; updating and extending the Quality of Public Administration Toolbox to guide the modernization of PAs; developing methodologies for relevant PA indicators; conducting EU-wide studies on relevant issues such as the attractiveness of public administration, the impact of demographic changes, and the future of jobs in public administration; and finally, promoting a wide range of data and information on a Public Administration Portal capturing the status and performance of public administrations across the EU.

The second pillar of the ComPAct focuses on the Digital Decade guidelines to advance the target of 100% online access to key public services, which includes facilitating data management and digitizing administrative processes. To achieve this pillar, organizations must first and foremost work towards a future-proof digital public administration. The Commission will support PAs to implement digital and data-related legislation and increase their readiness to integrate AI technologies into their operations in a safe and trustworthy way, with a view to supervising AI technologies and designing and implementing

public policies. The Commission will also promote the sustainable and effective use of emerging technologies by PAs. The second block of activities under this the pillar will develop frameworks, guidelines, and tools for digital transformation. Specifically, this involves expediting the delivery of fully accessible online administrative services by using the Single Digital Gateway; developing tools for enhanced interoperability and seamless service delivery; publishing an overview of funding opportunities and synergies for the digital transformation of public administrations; and supporting the federation of cloud capabilities across PAs to foster their technological base and improve their delivery of public services.

The third pillar of the ComPAct, Capacity to Lead the Green Transition, focuses on encouraging Member States to implement the EU's common green agenda. This includes tools and methods for tracking carbon footprints, green budgeting and green procurement. The first objective of this pillar is to advance the implementation of the green transition. Support will be provided to update Member States' national Climate Adaptation Strategies and Plans, focusing on the implementation of the "do no significant harm" principle, including the adoption of climate proofing and other environmental guidelines. Member States will be encouraged to develop capacity to promote climate risk assessment and prevention tools and methods, and to plan, design and implement ecosystem restoration measures and nature-based solutions. The Environmental Implementation Review is recommended to identify the root causes of ineffective implementation of environmental legislation and policies by Member States with a view to designing measures to improve environmental governance.

The second objective of the pillar is to ensure that administrations "walk the talk" and take responsibility for their own greening. This will be achieved by working together to develop further guidance on the use of the EU's Eco-Management and Audit Scheme (EMAS), to step up the reduction of the environmental footprint of organizations and to help them adopt the scheme. Secondly, the Commission will promote the use of methodologies to assess the carbon footprint of organizations and facilitate the exchange of good practice on ecological transition. Lastly, it will open up access to technical assistance and guidance on decarbonizing and improving the overall sustainability of buildings and efficient heating in PAs, particularly at the local level. Last but not least, the ComPAct can also guide the EU enlargement countries in building stronger PAs and in linking the external and internal dimensions of the communication file, notably by proposing standards for public administrations inspired by the SIGMA principles for PA, developed jointly with the Commission and used in the accession process and in the dialogue with neighboring countries.

Through the ComPAct, the Commission is putting in place a "Europe that Supports." In particular, beyond setting objectives and proposing legislation and funds, the Commission is helping Member States to identify the means and develop the administrative capacity to achieve shared EU objectives.

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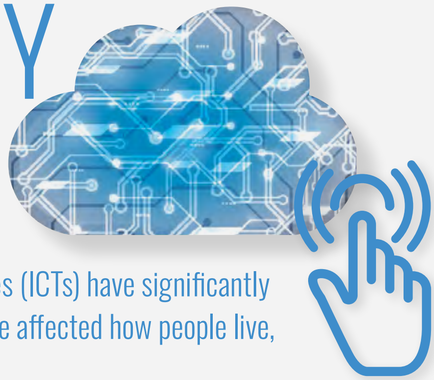
DIGITAL SUSTAINABILITY IN EUROPE



In recent years, digitalization and the use of information and communication technologies (ICTs) have significantly transformed the connectivity of individuals, societies, and countries. These changes have affected how people live, work, access goods and services, and engage with the external environment.

The research team, including Andrea Ciacci (Bocconi University, Milan), Enrico Ivaldi (IULM University, Milan), Lara Penco (University of Genoa), and Ginevra Testa (University of Genoa) has developed a project to measure digital sustainability across Europe. This research aims to investigate the effects of digital transformation on the economic and social spheres of European countries.

The development of strong digital systems has become a critical component of a country's development plan. At the same time, the issue of sustainable development – ensuring that the wealth generated meets the basic needs of the current population without compromising the ability of future generations to meet their own needs – has become increasingly urgent.

The convergence of digitalization and sustainability has given rise to the digital sustainability paradigm, which involves the responsible deployment of digital technologies to achieve sustainable development goals, encompassing both economic and social dimensions. The economic and social digitalization indices reflect the decision of the most digitally advanced countries to adopt *ad hoc* development strategies at the national level. These countries show a strong link between the economic and social dimensions, the result of coherent digital development strategies that stimulate cross-dimensional development cycles. In particular, the Netherlands ranks among the top European countries in terms of the level of digitalization of the economy and society, while Romania and Bulgaria rank at the bottom.

DIGITAL ECONOMY INDEX SCORES

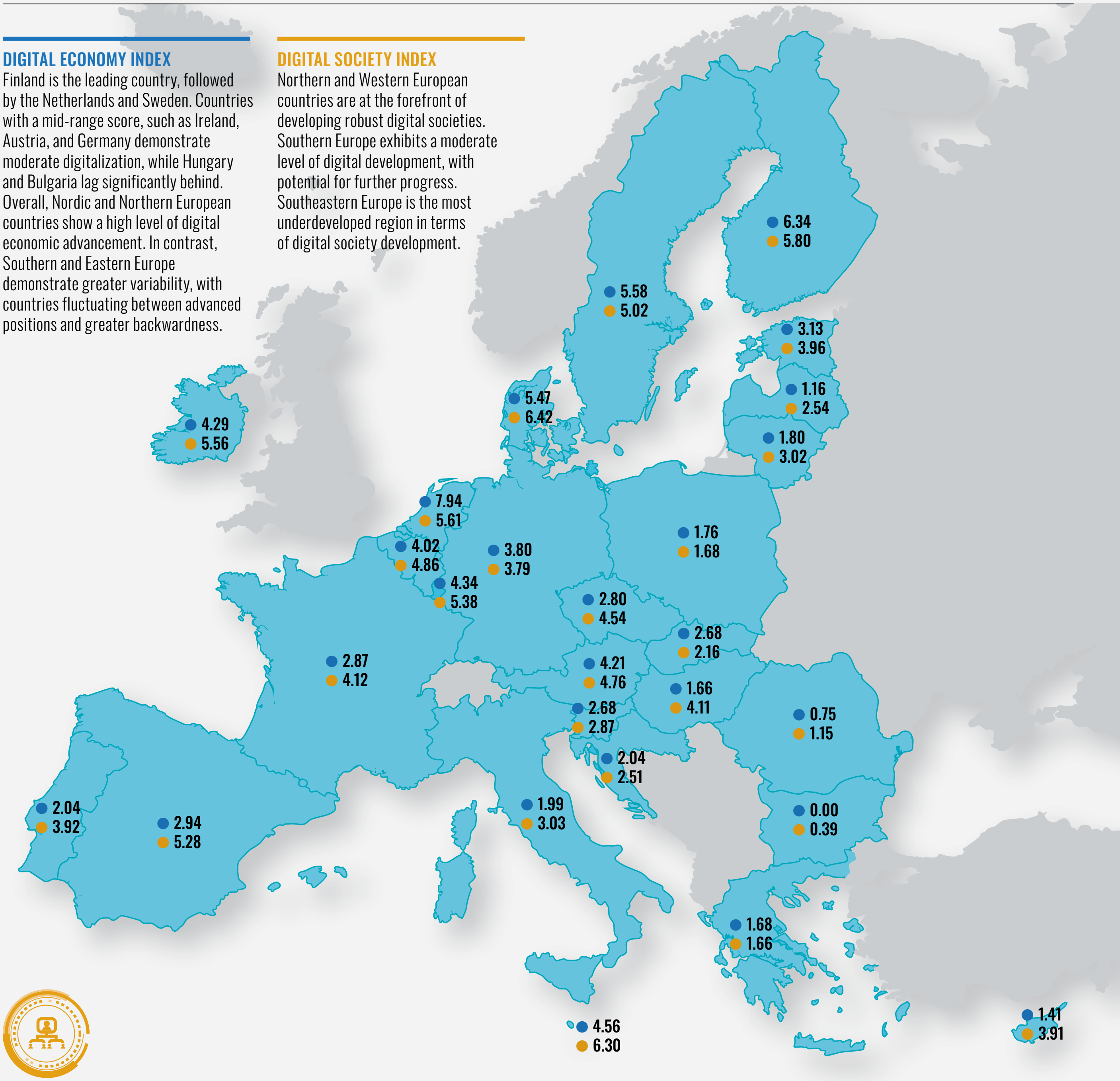
Finland	6.34	Austria	4.21	Slovenia	2.68	Greece	1.68
Netherlands	5.61	Belgium	4.02	Slovakia	2.68	Hungary	1.66
Sweden	5.58	Germany	3.80	Croatia	2.04	Cyprus	1.41
Denmark	5.47	Estonia	3.13	Portugal	2.04	Latvia	1.16
Malta	4.56	Spain	2.94	Italy	1.99	Romania	0.75
Luxembourg	4.34	France	2.87	Lithuania	1.80	Bulgaria	0.00
Ireland	4.29	Czechia	2.80	Poland	1.76		

DIGITAL ECONOMY INDEX

Finland is the leading country, followed by the Netherlands and Sweden. Countries with a mid-range score, such as Ireland, Austria, and Germany demonstrate moderate digitalization, while Hungary and Bulgaria lag significantly behind. Overall, Nordic and Northern European countries show a high level of digital economic advancement. In contrast, Southern and Eastern Europe demonstrate greater variability, with countries fluctuating between advanced positions and greater backwardness.

DIGITAL SOCIETY INDEX

Northern and Western European countries are at the forefront of developing robust digital societies. Southern Europe exhibits a moderate level of digital development, with potential for further progress. Southeastern Europe is the most underdeveloped region in terms of digital society development.



DIGITAL SOCIETY INDEX SCORES

Netherlands	7.94	Sweden	5.02	Portugal	3.92	Croatia	2.51
Denmark	6.42	Belgium	4.86	Cyprus	3.91	Slovakia	2.16
Malta	6.30	Austria	4.76	Germany	3.79	Poland	1.68
Finland	5.80	Czechia	4.54	Italy	3.03	Greece	1.66
Ireland	5.56	France	4.12	Lithuania	3.02	Romania	1.15
Luxembourg	5.38	Hungary	4.11	Slovenia	2.87	Bulgaria	0.39
Spain	5.28	Estonia	3.96	Latvia	2.54		

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Embracing Expert Approaches in Modern Credit Rating Modeling

Over the last thirty years, supervisory regulations have pushed banking institutions to adopt credit rating models that are based almost exclusively on quantitative and retrospective predictive variables, such as financial ratios and explanatory indicators of past performance in the bank-firm relationship. However, the "new normal" of uncertainty requires that these models evolve towards expert approaches, capable of capturing the onset of business weaknesses before they manifest at the economic and financial level. This means incorporating new, more forward-looking variables that are essentially qualitative in nature, reflecting the inherent strategic and managerial characteristics of the company.

CREDIT RATING//CREDIT SCORING//DEFAULT PREDICTION MODELLING//FORWARD-LOOKING APPROACHES//EXPERT MODELS

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A bank's ability to create value for its stakeholders depends on its proficiency in accurately assessing the reliability of its current and potential clients. This assessment is conducted through rating models, which make it possible to measure customers' probability of default and the risk level of the investment projects for which they seek financing. Such models are essential tools for deciding whether to grant credit and for determining the appropriate interest rate to apply.

Over the last thirty years, banking supervisory regulations issued by the Basel Committee and the European Central Bank, along with the regulatory and moral suasion activities carried out by the national supervisory authorities (in our case primarily by the Bank of Italy), have significantly influenced credit institutions to adopt rating models focused on automatic processes based on predictive variables that are almost exclusively quantitative and retrospective. These are mainly financial ratios (e.g., Altman et al., 2020) and explanatory indicators of the past performance of the relationship between the company and the bank (variables of past payment behavior; e.g., Back, 2005). However, a large body of empirical evidence shows that these models perform poorly, especially for forecasting horizons longer than one year (e.g., Du Jardin and Séverin, 2011), and not infrequently lead the bank to behave procyclically, either rationing/denying credit to companies with sound and resilient business models or lending to companies with sound financial structures but weak competitive strategies and/or managerial capabilities and thus not resilient in the medium term (e.g., Ciampi, 2015).

The reason for this poor performance is that these models take a retrospective (backward-looking) approach, while the reliability of the client company concerns the future. In fact, by the time financial statement data is processed, on average nearly twelve months have passed since the corresponding business events took place. By

FIGURE 1 TRADITIONAL RATING MODELS: FOCUS ON QUANTITATIVE, BACKWARD-LOOKING PREDICTIVE VARIABLES

Financial Ratios	Prior Payment Behavior Variables
Financial Debt/Turnover	Total bank revocable credit granted
Short-Term Financial Debt/Gross Working Capital	Total bank revocable credit used
Financial Debt/Total Assets	Total overdrawn bank revocable credit
Financial Debt/Equity	Total bank revocable credit used/Total bank revocable credit granted
Financial Debt/Total Debt	Total overdrawn bank revocable credit/Total bank revocable credit granted
Bank Debt/Total Assets	Overdraft days on bank revocable credit granted
Bank Debt/Turnover	Usage rate of advance subject to collection
Bank Debt/Equity	Usage rate of advance invoicing
Bank Debt/Total Debt	Total non-performing bank revocable credit
Bank Debt/Net Financial Position	Total non-performing bank revocable credit/Total bank revocable credit granted
Equity/Total Debt	Total bank irrevocable credit granted
Trade working capital/Net Financial Position	Total bank irrevocable credit used
Financial Debt/EBITDA	Total past due bank irrevocable credit
Total Debt/EBITDA	Total bank irrevocable credit used/Total bank irrevocable credit granted
Equity/Fixed assets	Total past due bank irrevocable credit/Total bank irrevocable credit granted
Net Financial Position/Turnover	Past due days on bank irrevocable credit granted
Current Ratio	Total non-performing bank irrevocable credit
Quick Ratio	Total non-performing bank irrevocable credit/Total bank irrevocable credit granted
Profit/Equity	Total overdue or overdraft bank credit
EBIT/Net Capital Invested	Total overdue or overdraft bank credit/Turnover
EBITDA/Turnover	Total overdue or overdraft bank credit/EBITDA
EBIT/Turnover	Total overdue or overdraft bank credit/Total bank credit granted
Financial Charges/ EBITDA	Total overdue or overdraft bank credit/Total bank credit used
Added Value/Turnover	Total overdue or overdraft bank credit/Net Financial Position
Financial Charges/Turnover	Number of overdrafts/payment delays exceeding 60 days in the last 6 months
Added Value/Number of Employees	Number of overdrafts/payment delays exceeding 60 days in the last 12 months
Turnover/Number of Employees	Number of overdrafts/payment delays exceeding 120 days in the last 6 months
Turnover/ Net Capital Invested	Number of overdrafts/payment delays exceeding 120 days in the last 12 months

the time the company's payment history indicates difficulty in meeting obligations, the process of financial deterioration is often well underway, making the crisis difficult to reverse.

THE SME CREDIT CHALLENGE

Numerous converging empirical studies have shown that credit assessment metrics based predominantly on quantitative and backward-looking variables have significant limitations, particularly when applied to small or medium-sized enterprises (SMEs). The information contained in the financial statements of SMEs is typically less comprehensive and reliable than that found in similar documents prepared by larger companies. This is partly due to the tendency of entrepreneurs running small companies to delay reporting negative economic results to postpone the negative impact on the credit rating.

Furthermore, in SMEs, ownership and management often coincide, resulting in limited delegation of decision-making.

Additionally, due to the simple organizational structure of SMEs, changes in organization and strategy often occur suddenly and are difficult to predict based on past behavior. Moreover, the behavior and performance of SMEs are more influenced by external events and actors than is the case for large companies.

For instance, the economic performance of a SME in a given financial year may be significantly affected by a major customer exercising contractual power to reduce selling prices, or by the need to increase salaries for key employees to retain them, or by having to pay a higher price to a non-substitutable supplier (Ciampi et al., 2021).

These considerations are particularly important in the Italian context. The small size of companies remains a characteristic feature of the Italian economic system: businesses with fewer than ten employees represent 95% of the total. What's more, the average size of manufacturing companies in Italy is just ten employees, six fewer than in France and about a quarter of the size of German manufacturers.

CREDIT RATINGS IN THE NEW NORMAL OF UNCERTAINTY

Over the past fifteen years, the expectations and development prospects of companies and markets have been repeatedly tested by a series of recessionary shocks that have impacted the global economy: the bursting of the US housing bubble leading to the financial crisis of 2008, the sovereign debt crisis of 2010, the COVID-19 pandemic in 2020, and the conflicts that erupted in 2023 (such as the Russian invasion of Ukraine, the Red Sea crisis, and the Israeli-Palestinian conflict). These unexpected and unpredictable events have had systemic and global implications. Managers, entrepreneurs and policymakers have had to acknowledge a "new normal" characterized by instability, sudden shocks, and the asynchronous and overlapping diffusion of the effects of these shocks across different industrial and geographical areas.

The high levels of turbulence characterizing current competitive contexts have led to an exponential increase in business scenario uncertainty and the frequency and speed of corporate crises. This situation has generated a surge in the demand for financial resources. Companies need funds to overcome liquidity shortages caused by crises and to cover the costs of business restructuring and expansion projects necessary to adapt to the new economic, social and geopolitical realities. In the coming years, the support of the banking system will be fundamental in providing adequate financing to companies with viable industrial plans, ensuring their financial needs are met in line with expected cash flows once these projects are fully operational.

The new normal of uncertainty represents a formidable driver for the evolution of rating systems towards forward-looking approaches (e.g., Duarte et al., 2018). First, the greater unpredictability and variability of scenarios reduce the signaling value of variables related to past results and behavior. Second, the relative importance of industrial restructuring and turnaround projects is increasing. These projects, by nature, represent prospects of discontinuity from the past and must, therefore, be evaluated with a focus almost exclusively on the future. Third, the success of financial and industrial restructuring plans depends to a significant extent on the timeliness of their implementation. An excellent turnaround project carried out when a company's deterioration is already advanced has much less chance of success than a barely satisfactory project implemented before the crisis has manifested financially.

A financial crisis typically marks the end of a process of progressive deterioration in a company's equilibrium. In the first phase, anomalies appear only at a managerial (i.e., non-financial) level, such as the loss of key managers or customers, or reduced product competitiveness (weak signals of corporate deterioration). In the second phase, economic-financial anomalies also become apparent; the imbalance becomes evident at the accounting level (deteriorating financial ratios) and/or in payment behavior (difficulty fulfilling financial commitments). The effectiveness of new rating model development processes will depend on their ability to detect weak managerial signals in the first phase, which often lasts for a significant time (even one to two years). Today these signals are almost never intercepted by traditional rating models.

EXPERT RATING MODELS TO CREATE VALUE

Over the last three decades, Italian banks have bolstered their economic performance by reducing operating costs, notably through staff reductions and branch closures. However, these strategies face natural limits due to the need to maintain contact with the local context and the impossibility of reducing costs below the minimum physiological threshold necessary to guarantee acceptable service levels. Although the banks' interest margins (the difference between interest applied to loans and interest paid to depositors) have significantly grown over the last two years due to rising central bank interest rates, this margin is expected to decrease in the next six months as the European Central Bank (ECB) halts its rate hikes and a gradual reduction is anticipated. In the years to come, maintaining adequate profitability for banks will depend above all on better loan management, particularly improving their ability to assess customer and business project ratings.

Also leveraging the formidable predictive potential of big data, new digital technologies, and artificial intelligence, banks must invest in developing "expert" rating models, capable of capturing the onset of corporate imbalances before they become apparent at the accounting level and irreversibly impact a customer's economic and financial stability.

To this end, innovative rating models must measure, incorporate, and weigh new variables that are primarily qualitative, reflecting the inherent strategic and managerial characteristics of the firm (on which, ultimately, the resilience and ability to create value for the client company depend). These new variables include the efficacy of industrial plans, the skills and reliability of the management team, the solidity and sustainability of the competitive advantage, the quality of production and marketing policies, the adequacy of the organizational structure, the coherence between organizational structure and competitive strategy, the capability to innovate, and the ability to establish long-term relationships with strategic stakeholders (e.g., Ciampi et al., 2021). These variables are far more predictive than traditional accounting parameters and prior payment behavior, yet they are also more difficult to measure and evaluate. This requires a significant evolution in the bank's ability to analyze, interpret, and evaluate competitive strategies and business models, competitive dynamics, and the quality of managers and industrial plans – essentially, a shift towards relationship banking. In our opinion, this evolution must involve revaluing the role of the bank branch manager as the person who directly and consistently manages relationships with firms, entrepreneurs, and managers. This should lead to a renewed emphasis on the traditional role of the "bank branch director."

The latest guidelines from the European Banking Authority (EBA) on loan origination and monitoring

(European Banking Authority, 2020), ratified in Italy in mid-2021, confirm the need for evolving rating models. These guidelines clearly indicate that banks must adopt forward-looking credit rating approaches, placing greater importance on forecasts of future performance rather than solely on past economic and financial results and collateral, which should be considered only as a secondary source of reimbursement. Additionally, these guidelines stress the necessity of adequately weighing the credibility of these forecasts through sensitivity analyses capable of revealing the resilience of client companies in adverse prospective scenarios. The EBA also advises banks to give greater weight to qualitative variables such as the sustainability of the business model and competitive advantage, the adequacy of the organizational structure, the skill level of the management team, the quality of the business plan, contractual power over customers and suppliers, the presence of adequate succession plans for management, the stability of the ownership structure, and the quality of R&D investments.

To effectively implement this evolution, banks must make a leap in quality at both a managerial and organizational level. First of all, they need to overcome the separation between managing problematic loans versus performing loans. A substantial portion of banking loans are in an intermediate area, requiring personalized and flexible management and a diverse range of approaches, tools, and skills (financial, industrial, legal, and relational). Second, banks must develop new capabilities to detect and interpret the managerial (i.e., non-financial) symptoms of corporate crisis (weak signs of deterioration), before they manifest at an economic and financial level. The aim here is to allow companies to roll out necessary financial and industrial remedial measures before reaching the point of no return in corporate deterioration. Lastly, banks must evolve their overall credit culture. Such a change is not easy to achieve in a short time frame, as it requires comprehensive staff training programs, as well as new incentives to enhance the use of expert approaches in granting and monitoring credit.

ADVANCED RATING SYSTEMS TO COMBAT THE THREAT OF WEB GIANTS

A further driver for the evolution of rating models is the significant and concrete competitive threat that banks will face in the coming years from web giants (e.g., Gambacorta et al., 2022). In 2016, Alibaba founded Mybank in China, where banking regulation is much less stringent than in Europe and America. Mybank became the first bank in the world capable of operating exclusively via the cloud. By leveraging automatic credit management systems that apply artificial intelligence to big data, Mybank has virtually eliminated loan processing and disbursement times, completing the process in less than three minutes from application to disbursement. Similarly, e-commerce giants Mercado Libre and Rakuten have been operating in the banking sector in Argentina and Japan for several years. What's more, in 2011, Amazon launched Amazon Lending, an experimental loan service offering up to $750,000 to a selected group of small and medium-sized firms with an Amazon seller account. Currently, Amazon provides over $5 billion loans annually through this service in the US, Great Britain, Japan, Canada, India, France, and Italy. By the end of 2018, Facebook had obtained a banking license in Ireland, and Amazon in Luxembourg.

These web giants are gaining substantial experience in the banking sector and are working on designing entry solutions that comply with the stringent requirements of European and American banking supervisory regulations. Once they complete this phase and begin operating on a large scale with their digital banks, the effects on the competitive dynamics of the banking sector could be profound.

Internet giants will in fact be able to exploit significant synergies between the traditional platform activities and their new digital banking operations. For example, they could channel payments from sales made on their web platforms and use these payments as collateral or as a direct source of loan reimbursement. They might also offer banking services at particularly competitive costs (or even free of charge) to acquire valuable new information about their customers (income levels, investments, planned projects, spending behavior, etc.) thereby generating further value creation opportunities in their traditional platform management activities. Moreover, these new competitors can leverage the wealth of data and information from activities on their platforms (transaction volumes and value, competitiveness of commercial offers, past reliability, etc.) to implement highly effective, AI-based algorithms for measuring their customers credit ratings.

No traditional player, regardless of its size and structure, will be able to match the information collection and processing capacity of the major internet players today. To avoid entering a competitive arena where failure is almost certain, traditional banks must refocus their business on segments of banking services with higher added value, particularly those grounded in relationship

FIGURE 2 EXPERT RATING MODELS: FOCUS ON QUALITATIVE, FORWARD-LOOKING PREDICTIVE VARIABLES

Variables related to Competitive Strategy
Competitive advantage drivers
Competitive advantage strength
Competitive advantage sustainability
Business model consistency
Customer turnover
Customer satisfaction by customer/product/market segment
Market power
Strategic supplier turnover
Degree of satisfaction of strategic suppliers
Reliability of industrial plan
Economic and financial projections
Reliability of assumptions underlying the industrial plan
Contractual power of customers
Contractual power of suppliers
Product innovation capability
Process innovation capability

Variables related to Management
Strategic management skills
Leadership skills
Ability to delegate
Financial skills
Marketing skills
Technological skills
R&D skills
Administrative skills
HR skills
Management team reliability
Quality of management succession plans
Presence of independent managers
Turnover of management team members
Management team size

Variables related to the management of specific functional areas
Quality of marketing policies
Quality of production policies
Quality of supply policies
Quality of R&D policies
Quality of human resource management policies
Quality of management control system

Variables related to Organizational Structure and Human Resources
Adequacy of organizational structure
Consistency between organizational structure and competitive strategy
Quality of the organizational climate
Level of competence of employees who work in different management areas
Average salary of employees who work in different management areas
Degree of satisfaction of employees who work in different management areas
Employee turnover

Variables related to Ownership Structure
Financial capacity of company owners
Stability of ownership structure
Managerial culture of company owners
Degree of ownership concentration
Degree of company owners' cohesion
Degree of overlap between ownership and management

Variables related to Corporate Governance
Board size
Skill level of board members
Complementarity of board member skills
COE duality
Presence of independent directors
Turnover rate of board members
CEO turnover
Remuneration policies for board members
Remuneration policies for management team members

banking rather than transactional banking. In this the competitive advantage will continue to depend on the capability to collect, interpret, and update soft, qualitative information on companies and projects that require financing. This capability can only be sustained through community presence and direct, ongoing customer relationship management – capabilities that large digital players currently lack and will struggle to develop in the future.

To achieve this, credit institutions must redefine their business model by gradually reducing the scope of service areas with lower added value and divesting activities that are not aligned with the core competencies of traditional banks, such as real estate brokerage services. The development of expert rating systems aligns with this strategy. These systems must effectively weigh quantitative and retrospective variables, although competing with web giants in managing these variables will become increasingly challenging. More importantly, however, they must effectively manage qualitative variables related to strategy, management and organization projected into the future, such as the reliability of industrial plans and the sustainability of competitive advantage. Traditional banks, deeply rooted in the community and immersed in stable relationships with local businesses, possess the ability to grasp, measure, and weigh these variables with a level of detail, depth, and immediacy that no internet giant can match.

INCORPORATING ESG VARIABLES

Today, society's demands for sustainability significantly influence the business models and competitive strategies of companies. These demands have led national and supranational policymakers to establish increasingly complex systems of rules and obligations, aiming to compel companies to adopt sustainable practices. For instance, European legislation on Extended Producer Responsibility progressively regulates manufacturing companies' responsibilities in managing various phases of their product life cycles, emphasizing end-of-life management, recycling, and waste and scrap reuse.

More relevant is the effect that these social and environmental sustainability issues are having on how companies develop their business strategies. The trade-off between economic value creation and sustainability is evolving into a mutually supportive relationship. To create value, companies must establish solid and enduring relationships with customers, based on high levels of reputation and credibility. Today, a company's environmental and social sustainability, along with that of its products, are prerequisites for initiating and maintaining trust-based relationships with consumers, especially younger ones. Recent research by the Boston Consulting Group (2022) highlighted that when faced with two products of equal price, four out of five consumers prefer to purchase the one characterized by high levels of social and environmental sustainability, with particular attention to aspects relating to climate change, food safety, CO_2 emissions, and consumption of scarce resources. Additionally, research conducted by Deloitte (2022) showed that both Millennials (individuals born between 1980 and 1996) and Generation Z (born between 1997 and 2012) closely consider environmental and social issues and demonstrate a relatively higher propensity to purchase products distinguished by high levels of sustainability.

To create value, companies must also excel in selecting and retaining talented human resources and fostering stable, solid relationships with strategic suppliers. A plethora of empirical evidence (e.g., McKinsey & Company, 2021) illustrates that environmental and social sustainability rank at the top among the main criteria individuals consider when choosing their workplace. What's more, the vast majority of employees consider their employer's commitment to environmental issues and, even more so, to social aspects such as gender inclusion, diversity appreciation, and work-life balance, as fundamental elements for nurturing long-lasting, fulfilling working relationship.

The medium-term resilience of a company depends on its ability to generate value for customers, cultivate strong relationships with employees and suppliers, and uphold and defend its reputation and credibility towards financial operators. All these stakeholders measure "value" with regard to environmental and social criteria, in addition to economic factors. Consequently, today, a company's resilience is closely linked to its ability to construct business models and development strategies grounded in the relevant drivers of sustainability, and to establish environmental and social sustainability objectives that extend beyond simple regulatory compliance.

Therefore, to endure adequacy in terms of predictive effectiveness and forecasting horizon, the new rating models must also possess expertise in reading, weighing, and interpreting the dual materiality of the relevant ESG variables (e.g., Badayi et al. 2020). This entails understanding both the impact of these variables on the competitive positioning, development prospects, and performance of the client company (Financial Materiality), and the impact of the client company's ESG policies on society and the environment (Impact Materiality).

MANAGERIAL IMPACT FACTOR

- Rating models used by banks today are predominantly based on quantitative and retrospective predictive variables, such as balance sheet ratios and explanatory indicators of past performance of the bank-firm relationship.
- Various empirical studies have shown that such models perform poorly, especially when forecasting beyond a one-year horizon and when analyzing SMEs.
- The high level of uncertainty in today's competitive environment is driving the evolution of rating models towards forward-looking approaches that are capable of intercepting, assessing, and weighing weak signals of deteriorating business balance processes before they manifest themselves economically and financially.
- New rating models will have to measure, incorporate and weigh new variables of a qualitative nature, inherent in the strategic and managerial character of the business system.
- The company's resilience and ability to create value ultimately depend on these qualitative variables.

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Microfinance a New Sustainable Asset Class on the Horizon?

Despite the global economic challenges of recent years, microfinance investments have outperformed primary market benchmarks in terms of their risk-return profile. Through a detailed comparison with various financial benchmarks and investment portfolios, this article underscores the stability and low-risk nature of microfinance investments, highlighting their significant advantages for portfolio diversification and their fundamental role in providing resources to underserved markets and promoting climate change adaptation.

MICROFINANCE//SUSTAINABLE FINANCE//GREEN ECONOMY//MICROFINANCE FUND INDEX (MFI)//FINANCIAL INCLUSIVITY

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The dual objective of microfinance – expanding financial services to marginalized communities while generating sustainable returns for investors – creates a unique intersection between social impact and financial resilience (Mustafa et al., 2018). Furthermore, numerous studies (Banna et al., 2022; Dowl, 2018) position microfinance as a pioneering element in the fintech industry (Ashta and Hermann, 2021; Kim, 2023), highlighting its significant influence on the capacity of economically disadvantaged countries to adapt their economies to climate change and promote the swift development of sustainable policies. Recognizing this substantial impact, it becomes imperative to demonstrate that microfinance also offers a favorable return-to-risk profile for investors, given the limited research on the topic (Postelnicu and Hermes, 2019). The aim is to attract increased investment and expedite the transition toward a greener economy.

This paper is dedicated to analyzing the performance metrics of the Microfinance Fund Index relative to traditional financial benchmarks, explaining its response to adverse market conditions and its implications for portfolio diversification and risk mitigation strategies. This study delves into the strategic merits of integrating microfinance investments into comprehensive financial portfolios through a detailed examination of the index's return profiles, volatility patterns, and correlation coefficients with predominant market indices. We posit that microfinance directed at business projects inherently bears lower risk than similar initiatives aimed at satisfying basic needs of individuals. This is primarily due to the former's utilization of initial capital investments, thereby offering collateralized backing, which enhances the potential for partial recovery of the initial outlay in default scenarios.

This research broadens the academic discourse on microfinance as a distinct asset class. It contributes in a meaningful way to the ongoing dialogue on sustainable, responsible investment practices which also have a concrete impact on climate change (Hammin et al., 2008), underscoring microfinance's pivotal role in fostering financial inclusivity and economic resilience.

THEORY

Microfinance, generally acknowledged as a critical factor in poverty alleviation, has evolved into an essential instrument in the fight against other global challenges as well (Postelnicu and Hermes, 2019). The Nobel Peace Prize conferred on Muhammad Yunus and the Grameen Bank by the Nobel Committee in 2006 emphasized microfinance's growing importance in battling poverty. Similarly, the same Nobel Prize awarded to Al Gore the following year drew attention to the urgent need to address the unprecedented global challenge of climate change. This recognition reflects the profound impact of microfinance and climate change science, giving rise to broad social movements. Over the past three decades, a link between these two disciplines has emerged, as microfinance has transitioned from addressing poverty to becoming a vital element in combating climate change (Banna et al., 2022).

The delivery of financial services – including loans, savings accounts, and insurance – empowers the poor to engage in productive activities, build assets, stabilize consumption, and mitigate risks. Microfinance institutions, by formalizing and modernizing financial transactions and services, bridge the gaps left by traditional banks and state-run development programs, fostering economic growth and sustainability in impoverished communities (Dowl, 2018). As climate change poses a threat to poverty reduction and overall development, microfinance emerges as a crucial asset class that can contribute significantly to mitigating the impact of climate change on vulnerable populations (Hammin et al., 2008).

However, despite its rising importance, the risk-return profile for microfinance is still unclear (Postelnicu and Hermes, 2019); therefore, further studies are needed (Daher and Le Saout, 2017). In this context, portfolio diversification theory, a cornerstone of modern investment strategy, advocates for allocating investments across various asset classes to mitigate risk and enhance potential returns. According to this theory, by holding a diverse mix of assets that do not perfectly correlate, investors can reduce the overall risk of their investment portfolios, as the underperformance of certain assets can be offset by the stable or superior performance of others within the portfolio.

Microfinance investments, characterized by their focus on low-income clients and skewed towards developing countries, offer a diversification benefit theoretically grounded in a low correlation with traditional financial markets (Malikov et al., 2020; Zamore et al., 2019). Given the unique market dynamics and the socio-economic impact of microfinance, these investments may provide stability and risk reduction benefits to diversified portfolios. Unlike conventional financial sectors that are heavily influenced by macroeconomic indicators and market sentiment, the performance of microfinance institutions (MFIs) is more closely tied to local economic activities and the repayment capacities of micro-entrepreneurs and low-income borrowers. These factors are less susceptible to global financial market fluctuations, providing a buffer against systemic risks (Ahlin et al., 2011).

THE STUDY

Given the limited number of studies on the subject (Daher and Le Saout, 2017), we formulated the following research question:

> *What is the volatility and correlation of microfinance fund investments with traditional market indices?*

This analysis will allow us to verify whether a microfinance fund investment can contribute to a sustainable portfolio diversification and stability during periods of economic uncertainty.

Data and Empirical Methodology

For this study, we conducted a performance and risk assessment to elucidate the characteristics of the *Microfinance Fund Index* in comparison to primary market benchmarks (Daher and Le Saout, 2017), including:

- The 3-month Euribor (*Euribor 3M*): tThe reference rate for euro-denominated short-term lending.
- The JPM Hedged USD GBI Global (*JPM Hedged USD GBI Global*): A fixed-income index that assesses the performance of government debt securities in emerging markets, adjusted for currency fluctuations against the US dollar to mitigate the impact of currency volatility.
- S&P 500 (*S&P 500 Index*): Represents the performance of 500 large companies listed on stock exchanges in the United States.
- The MSCI Emerging Markets Banks Industry Price Index (*MSCI Emerging Markets Banks*): Captures large and mid-cap representation across 24 emerging markets countries. All securities in the index are classified in the financial sector as per the Global Industry Classification Standard.
- The MSCI Emerging Markets Price Index (*MSCI Emerging Markets*): A benchmark that tracks the performance of large and mid-cap companies in 27 emerging market countries, providing a broad measure of market trends in these regions.
- MSCI World Banks Industry Group Price Index (*MSCI World Banks*): Gauges the performance of publicly traded banks in developed markets, adopting a market capitalization-based weighting methodology to capture trends in the banking industry across 23 developed countries.

We employed several risk-return indicators to analyze each benchmark and the Microfinance Fund Index alongside an artificially constructed portfolio. In particular, we measured performance using the total return indicator (R), calculated for the period from 2020 to 2022, according to the formula:

$$R_i = \frac{P_{t;\,i}}{P_{z;\,i}} - 1$$

Where:
- P is the price index observed on the most available date t or z;
- z is the first day of the reference period.
- t is the last day of the reference period.
- i is the indicator subject to analysis.

We selected a period based on data availability for the Microfinance Fund Index spanning from 2020 to 2022, with returns also calculated for individual years (2020, 2021, and 2022).

Based on Refinitiv and company data, we utilized the standard deviation of monthly returns (σ_i) for risk assessment. We calculated the Sharpe ratio (S) to evaluate risk-adjusted performance, reflecting the excess return per unit of risk over the risk-free rate

(10-year Treasury notes). This metric indicates the efficiency of investment decisions relative to the risk incurred (Daher and Le Saout, 2017):

$$S_i = \frac{R_i - \textit{Risk free rate}}{\sigma_i}$$

We replicated our analysis to check whether the results we observed at the index level also hold at the constituent level, paying particular attention to MFIs that primarily focus on financing corporations. Since corporate clients are often backed by entrepreneurship projects, such clients are typically defined as less risky than microfinance provided to individuals (Schulte & Winkler, 2019).

Our analysis at the corporate level evaluates the following funds: BlueOrchard Microfinance, IV Invest in Vision, Triodos Microfinance, ResponsAbility Micro and SME Finance Fund EUR-II, ResponsAbility Micro and SME Finance Debt Fund, Luxembourg Microfinance and Development Fund, and EMF Microfinance Fund.

RESULTS

Despite facing an environment riddled with challenges such as the global pandemic, geopolitical tensions from the Ukraine-Russia conflict, and pervasive inflationary pressures, the Microfinance Fund Index managed to secure a steady stream of positive returns. It achieved an average annual return of 1.44% and a cumulative return of approximately 4.73% over the three-year span, distinguishing itself as a resilient investment option that consistently delivered positive outcomes even during severe market downturns. This performance is particularly notable given the volatility and uncertainty that characterized the period under review. Moreover, the fund exhibited an exceptionally low level of volatility, with a standard deviation near zero (0.06%), indicating minimal price fluctuations and a high degree of stability compared to the other benchmarks. This stability positions the Microfinance Fund Index as an attractive investment, particularly for those seeking to minimize risk and achieve predictable

FIGURE 1 COMPARISON BETWEEN MARKET BENCHMARKS AND THE MICROFINANCE FUND INDEX

Indicators	Period	EURIBOR 3M	JPM Hedged USD GBI Global	S&P 500 Index	MSCI Emerging Markets Banks	MSCI Emerging Markets	MSCI World Banks	Microfinance fund Index
Return	Average Return 20-22	-0.21%	-9.10%	9.67%	-2.20%	-3.71%	2.22%	1.44%
	Total Return	-1.81%	-26.25%	24.48%	-10.31%	-14.20%	-1.88%	4.73%
Volatility	Daily Volatility 2022	94.05%	0.97%	1.33%	0.89%	1.27%	1.13%	0.06%
	Daily Volatility 20-22	67.12%	0.94%	1.58%	1.08%	1.25%	1.75%	0.06%
Correlation	EURIBOR 3M	1.00						
	JPM Hedged USD GBI Global	0.03	1.00					
	S&P 500 Index	-0.03	0.56	1.00				
	MSCI Emerging Markets Banks	-0.03	0.34	0.44	1.00			
	MSCI Emerging Markets	0.01	0.44	0.36	0.71	1.00		
	MSCI World Banks	-0.01	0.49	0.73	0.64	0.50	1.00	
	Microfinance fund Index	-0.01	0.08	0.08	0.09	0.10	0.10	1.00
Sharpe Ratio	Sharpe Ratio 20-22	-0.01	-2.07	0.80	-0.86	-0.94	-0.23	0.27
	VaR	-0.01%	-1.35%	-2.29%	-1.65%	-1.90%	-2.37%	0.00%

returns. Additionally, the index's low correlation with all the market indices considered in the study underscores its value as a diversification tool. By exhibiting movements not correlated to traditional market indices, the Microfinance Fund Index offers potential hedging benefits against market volatility, thereby reducing overall portfolio risk and enhancing returns through diversification (Figure 1). These findings highlight the Microfinance Fund Index's unique position as a resilient, stable, diversifying asset class amid a period marked by significant economic and geopolitical disruptions.

In evaluating the diversification merits of incorporating microfinance investments into mixed-asset portfolios, we also conducted an empirical analysis by back-testing various portfolio configurations. Initial portfolio models commenced with equal allocations across cash (EURIBOR 3M), equities (S&P500 Index), bonds (JPM Hedged USD GBI Global Index), and emerging markets (MSCI Emerging Markets Price Index), each constituting 25% of the portfolio. Sequential adjustments were made by enhancing the Microfinance Fund Index allocation in increments of 5%, reaching up to 20%.

The empirical evidence (Figure 2) highlights the dual advantage of microfinance investments in elevating portfolio returns and diminishing risk. Despite an overarching context of negative returns, primarily attributed to unfavorable market conditions during 2020-2022, microfinance investments demonstrated a mitigatory effect on financial losses. This finding is consistent with the Symbiotics 2014 report on the Symbiotics Microfinance Index (SMX), which showed that MFIs contribute to stable, low-volatility returns with minimal correlation to conventional financial markets over the 2003-2013 period.

A further investigation delves into the constituents of the Microfinance Fund Index, with a particular emphasis on MFIs predominantly engaged in corporate microfinance[1]. Results show a positive correlation with emerging markets – a factor contributing to diversification benefits when investing in such regions compared to conventional

FIGURE 2 RISK AND RETURN PERSPECTIVE OF PORTFOLIOS WITH GRADUALLY INCREASING WEIGHT OF THE MICROFINANCE FUND INDEX

Indice	Port. 0% Microfund	Port. 5% Microfund	Port. 10% Microfund	Port. 15% Microfund	Port. 20% Microfund
Return 2020	9.25%	8.89%	8.53%	8.16%	7.78%
Return 2021	3.86%	3.78%	3.71%	3.63%	3.55%
Return 2022	-14.90%	-14.13%	-13.36%	-12.58%	-11.80%
Average Return	-0.60%	-0.49%	-0.38%	-0.27%	-0.16%
Total Return	-3.48%	-3.00%	-2.52%	-2.05%	-1.59%
Daily Volatility 2020	1.06%	1.00%	0.95%	0.90%	0.85%
Daily Volatility 2021	0.40%	0.38%	0.36%	0.34%	0.32%
Daily Volatility 2022	0.64%	0.61%	0.58%	0.54%	0.51%
Daily Volatility 20-22	0.75%	0.71%	0.68%	0.64%	0.60%
Sharpe Ratio 2020	0.50	0.50	0.50	0.51	0.51
Sharpe Ratio 2021	0.38	0.38	0.39	0.40	0.41
Sharpe Ratio 2022	-1.76	-1.77	-1.78	-1.80	-1.81
Sharpe Ratio 20-22	-0.67	-0.66	-0.65	-0.64	-0.63
VaR	-1.01%	-0.96%	-0.91%	-0.86%	-0.81%

1 The analysis in this section encompasses: 1) BlueOrchard Microfinance, 2) IV Invest in Vision, 3) Triodos Microfinance, 4) ResponsAbility Micro and SME Finance Fund EUR-II, 5) ResponsAbility Micro and SME Finance Debt Fund, 6) Luxembourg Microfinance and Development Fund, 7) EMF Microfinance Fund.

FIGURE 3 COMPARISON BETWEEN PORTFOLIOS WITH DIFFERENT PERCENTAGES OF THE MICROFINANCE FUND INDEX

Indicators	Portfolio 0% Microfund	Portfolio 5% Microfund	Portfolio 10% Microfund	Portfolio 15% Microfund	Portfolio 20% Microfund
Return 2020	9.25%	8.89%	8.53%	8.16%	7.78%
Return 2021	3.86%	3.78%	3.71%	3.63%	3.55%
Return 2022	-14.90%	-14.13%	-13.36%	-12.58%	-11.80%
Average Return	-0.60%	-0.49%	-0.38%	-0.27%	-0.16%
Total Return	-3.48%	-3.00%	-2.52%	-2.05%	-1.59%
Daily Volatility 2020	1.06%	1.00%	0.95%	0.90%	0.85%
Daily Volatility 2021	0.40%	0.38%	0.36%	0.34%	0.32%
Daily Volatility 2022	0.64%	0.61%	0.58%	0.54%	0.51%
Daily Volatility 20-22	0.75%	0.71%	0.68%	0.64%	0.60%
Sharpe Ratio 2020	0.50	0.50	0.50	0.51	0.51
Sharpe Ratio 2021	0.38	0.38	0.39	0.40	0.41
Sharpe Ratio 2022	-1.76	-1.77	-1.78	-1.80	-1.81
Sharpe Ratio 20-22	-0.67	-0.66	-0.65	-0.64	-0.63
VaR	-1.01%	-0.96%	-0.91%	-0.86%	-0.81%

FIGURE 4 ANALYSIS OF THE MICROFINANCE FUND INDEX'S CONSTITUENCIES

Indicators	Period	BlueOrchard Mircofinance	IV Invest in Vision	Triodos Microfinance	responsAbility Micro and SME Finance Fund EUR-II	responsAbility Micro and SME Finance Fund	Luxembourg Microfinance Development Fund	EMF Microfinance Fund
Return	Average Return 20-22	1.16%	0.45%	2.66%	-0.41%	0.75%	4.44%	2.39%
	Total Return 20-22	3.53%	1.36%	7.79%	-1.44%	2.26%	13.32%	7.32%
Volatility	Monthly Volatility 2022	0.09%	0.24%	1.48%	0.59%	0.28%	9.35%	0.14%
	Monthly Volatility 20-22	0.12%	0.66%	1.27%	0.65%	0.51%	6.93%	0.20%
Correlation	EURIBOR 3M	0.01	-0.16	-0.20	-0.20	-0.17	0.13	-0.34
	JPM Hedged USD GBI Global	0.56	-0.03	0.17	0.06	-0.12	-0.32	0.07
	S&P 500 Index	0.25	-0.31	0.35	-0.01	-0.30	-0.43	0.07
	MSCI Emerging Markets Banks	0.53	-0.13	0.51	0.05	-0.10	-0.25	0.39
	MSCI Emerging Markets	0.54	-0.09	0.00	0.03	-0.12	-0.27	0.18
	MSCI World Banks	0.52	-0.18	0.34	0.20	-0.07	-0.32	0.37
Sharpe Ratio	Sharpe Ratio 20-22	-2.31	-1.36	0.76	-2.62	-1.25	0.37	4.12
	VaR	-0.03%	-1.18%	-0.99%	-0.77%	-0.71%	-8.41%	-0.19%

indices (Figure 4).

The construction of a subsequent portfolio involves modifying the mix of its components to meet certain financial goals, including creating a balanced portfolio, maximizing returns, minimizing risk (as measured by standard deviation), and improving the Sharpe Ratio. This strategy indicates that adopting a balanced approach can lead to higher returns while effectively controlling volatility and correlation among investments, as demonstrated in Figure 5.

ROBUSTNESS CHECKS

A supplementary Monte Carlo simulation was conducted to validate the robustness of the portfolio optimized for the Sharpe Ratio, a widely recognized measure for assessing risk-adjusted performance. In this case, the Sharpe Ratio justifies the focus on this particular portfolio. By allowing investors to maximize the balance between risk and return, an efficient portfolio is achieved that delivers higher returns for a given level of risk. The simulation assumed a normal distribution of returns, providing insights into the portfolio's performance under various scenarios.

- Short-Term Performance Analysis: The first scenario analyzed the probability of negative returns, utilizing mean and variance values from 2020 to 2022. The simulation suggested a 77% probability of positive returns for the portfolio, indicating a favorable short-term outlook (Figure 6).
- Long-Term Performance Analysis: An extended analysis was performed for the second scenario, using data from 2016 to 2022 to assess the portfolio's performance over a longer horizon. The results showed a 99% probability of positive returns, suggesting consistent long-term gains under the given assumptions (Figure 7).
- Stress test: lThe final scenario replicated the assumptions of the second scenario but incorporated a stress test by tripling the mean and variance values. The outcomes showed a 99% likelihood of positive returns, aligning with the results of the previous scenario and highlighting the portfolio's resilience even under extreme conditions (Figure 8).

FIGURE 5 RISK AND RETURN PERSPECTIVE ON A NEWLY HYPOTHETICAL FULLY MICROFINANCE-ORIENTED PORTFOLIO WITH DIFFERENT STRATEGIC OBJECTIVES

Indicators	Period		Equal Portfolio	Sharpe Portfolio	Returns Portfolio	Variance Portfolio
Return	Average Return	20-22	1.68%	2.06%	2.15%	1.18%
	Total Return	20-22	5.06%	6.22%	6.49%	3.55%
Volatility	Monthly Volatility 2022		1.16%	1.38%	1.72%	0.13%
	Monthly Volatility 20-22		1.04%	1.20%	1.46%	0.30%
	EURIBOR 3M		0.03	0.04	0.06	-0.26
Correlation	JPM Hedged USD GBI Global		-0.27	-0.27	-0.28	0.05
	S&P 500 Index		-0.38	-0.37	-0.38	-0.06
	MSCI Emerging Markets Banks		-0.14	-0.13	-0.15	0.23
	MSCI Emerging Markets		-0.26	-0.26	-0.26	-0.03
	MSCI World Banks		-0.23	-0.23	-0.25	0.18
Sharpe Ratio	Sharpe Ratio 20-22		0.17	0.42	0.40	-0.88
	VaR		-1.36%	-1.55%	-1.90%	-0.23%

FIGURE 6 MONTE CARLO SIMULATION (MEAN AND VARIANCE OF THE PERIOD 2020-2022)

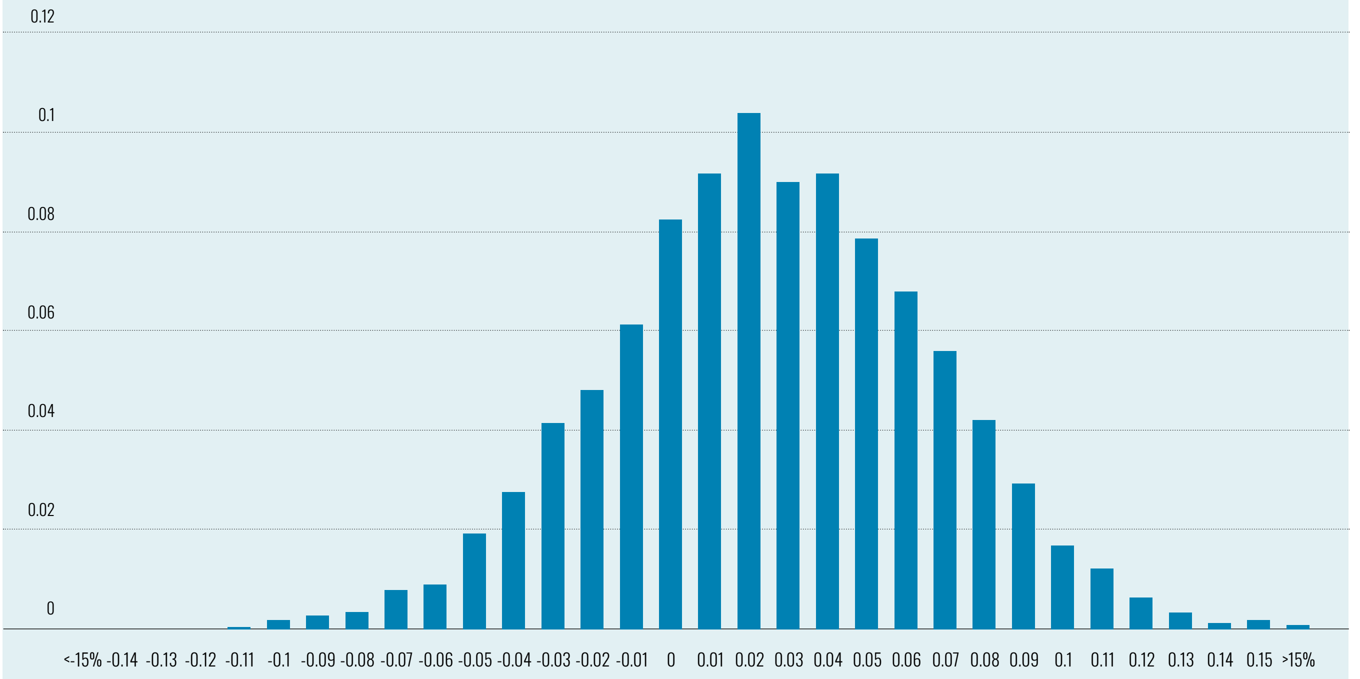
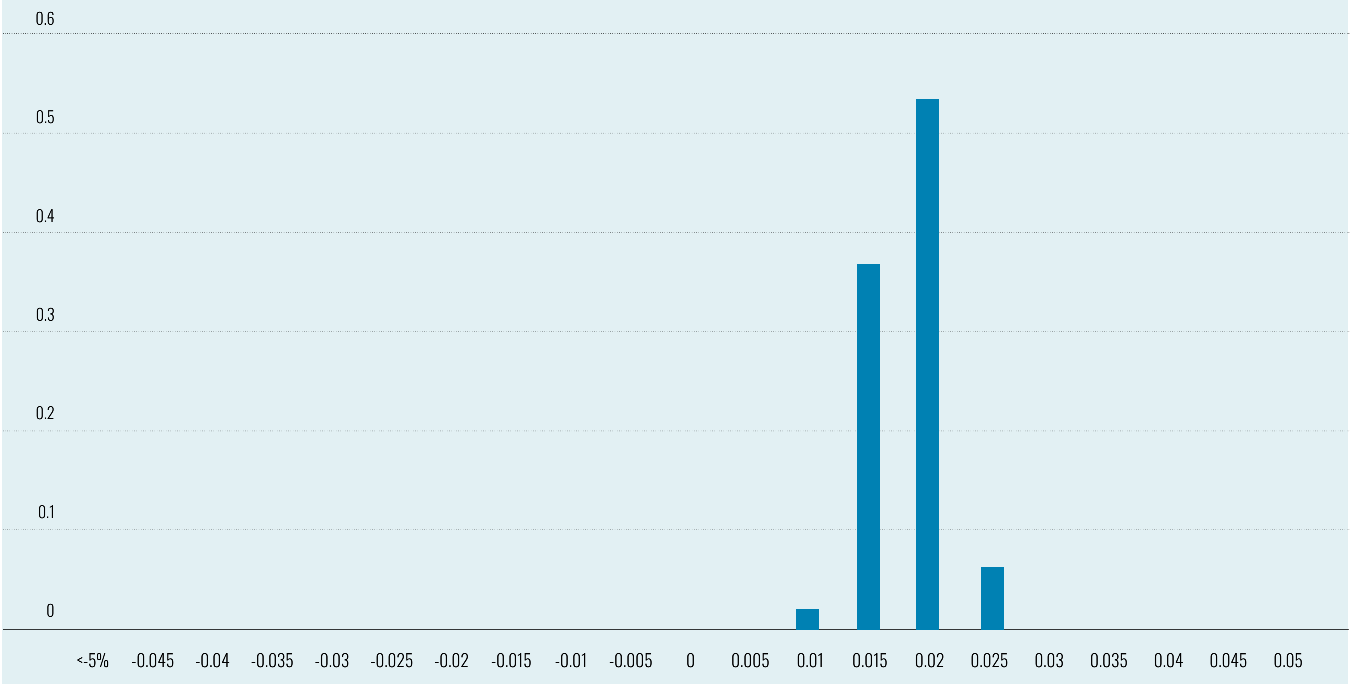


FIGURE 7 MONTE CARLO SIMULATION (MEAN AND VARIANCE OF THE PERIOD 2016-2022)



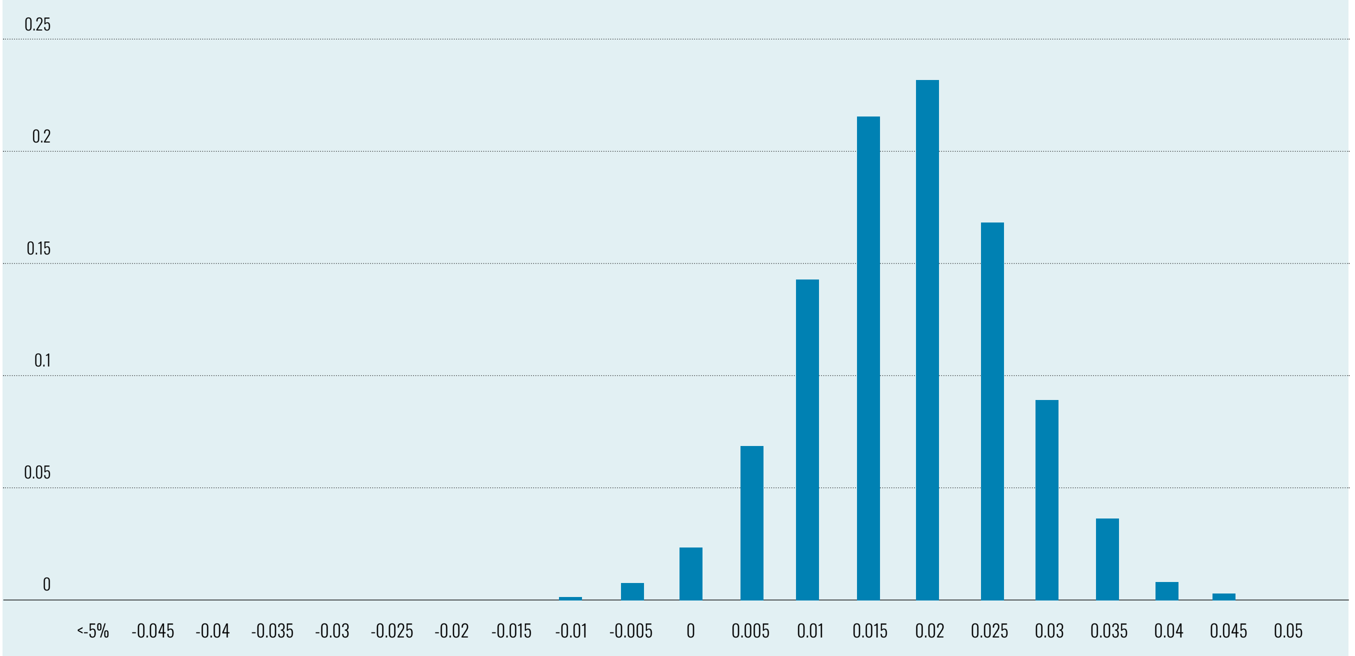
These findings underscore the portfolio's potential to deliver positive returns, particularly in the long run, reinforcing the value of optimizing for the Sharpe Ratio in portfolio design.

DISCUSSION

Our comprehensive comparative analysis extends beyond recognizing microfinance's vital role in poverty alleviation and climate change mitigation to delve into the financial performance of the Microfinance Fund Index. Our findings not only reinforce the sustainability impact of microfinance but also shed light on its financial resilience and stability. Remarkably, amidst unprecedented adversities such as the COVID-19 pandemic, the Ukraine-Russia conflict, and inflationary pressures, the Microfinance Fund Index exhibited impressive performance. The average annual return of 1.44% and a cumulative return of approximately 4.73% underscore its robustness as an investment avenue. More significantly, this performance was marked by stability and minimal volatility, contrasting with the turbulence experienced in mainstream markets during the same period.

The theoretical ramifications of this study are manifold, unveiling the complex interplay in the realm of microfinance. Our research reveals that microfinance investments, as represented by the Microfinance Fund Index, emerge as a robust, stable, and diversifying asset class, as previously noted by Dahler and Le Saout (2017). Moreover, our investigation corroborates the fact that microfinance investments exhibit enhanced risk-return profiles, particularly when such financing focuses on corporate microfinance within the Microfinance Fund Index. By integrating microfinance vehicles into a globally diversified portfolio, investors not only align with Sustainable Development Goals (SDGs) by directing funds towards MFIs that support underserved communities but also secure their financial interests during volatile times. This research highlights the dual benefits of microfinance: it catalyzes positive social change while offering tangible financial returns.

FIGURE 8 MONTE CARLO SIMULATION (MEAN AND TRIPLE VARIANCE OF THE PERIOD 2016-2022)



CONCLUSION

Our research delves into the Microfinance Fund Index, revealing its commendable performance as a robust, stable, and diversifying asset class. The positive returns and low correlation observed during the challenging period of 2020-2022 underscore the financial viability of microfinance investments, offering investors a reliable option amidst global economic uncertainties.

Moreover, this paper depicts microfinance as a transformative force that not only addresses environmental vulnerabilities and facilitates sustainable development but also represents an efficient asset class that should attract more investments.

However, future research could extend the period of analysis in the coming years, as microfinance, despite its transformative potential, may face challenges in achieving widespread impact.

MANAGERIAL IMPACT FACTOR

- **Financial resilience and stability**: The Microfinance Fund Index has shown positive and stable performance over the period 2020-22, demonstrating the resilience of microfinance investments even during periods of global economic volatility.
- **Favorable risk-return profile**: Microfinance investments have a better risk-return profile than traditional markets, making them an attractive choice for investors seeking financial stability and soundness.
- **Portfolio diversification**: By including microfinance in global investment portfolios, greater diversification can be achieved, reducing overall volatility, and improving returns in times of economic uncertainty.
- **Alignment with the Sustainable Development Goals (SDGs)**: Investing in microfinance allows investors to contribute to the SDGs by directing funds to disadvantaged communities and promoting sustainable development.
- **Growth potential and future challenges**: Despite the potential of microfinance, the sector may face difficulties in scaling up its impact. Future research and analysis could help to better understand the long-term dynamics and facilitate more widespread investment in the sector.

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EMANUELE
ACCONCIAMESSA

Inclusive Brand Activism Driving Social Change Beyond Woke Washing

In an age of uncertainty, the role of brands is expanding. An increasingly informed end market is demanding proactive positions from brands on social issues, propelling them toward a major evolution: inclusive brand activism. This article explores how companies can leverage brand assets to promote positive social change by integrating activism into their strategy. A brand's ability to resonate with all individuals, to represent diverse perspectives, and to take a clear stand in support of a more equitable society strengthens its positioning, amplifies trust, loyalty, and word-of-mouth, ultimately impacting revenue growth through consistency while avoiding woke washing.

BRANDING//BRAND ACTIVISM//DIVERSITY, EQUITY & INCLUSION (DE&I)//BRAND PURPOSE//WOKE WASHING

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In today's economic and social environment, characterized by phenomena ranging from globalization to digitization, intensifying conflicts, and post-pandemic behavior, the role of companies extends far beyond offering products or services. Consumers now expect businesses to take social responsibility by actively promoting change and adopting clear ethical positions. This phenomenon, known as brand activism, underscores a noteworthy evolution in how companies interact with their stakeholders, shifting their focus from profit to social challenges (Kotler and Sarkar, 2021). Brand activism describes a company's commitment to using its voice and its resources to promote and accelerate social change through an approach that values diversity and inclusion. Hence the name inclusive brand activism. This type of activism transcends traditional Corporate Social Responsibility (CSR) initiatives, integrating the social mission into the brand strategy and identity. All this emerges against a backdrop of growing public expectations for companies to act not only as profit generators, but also as positive forces for society. As early as 2002, Hoeffler and Keller highlighted how consumers expect brands to take a stand on social, political, and environmental issues.

The overused acronyms CSR and ESG, from the perspective of consumers, translate into brand activism: the ability of brands to align statements and actions, support progress and justice, and return to authentic values by engaging all stakeholders. Inclusion is a way for a brand to be an "activist," signaling customer advocacy which, in turn, builds trust.

To fully understand inclusive brand activism, it's essential to explore some of the fundamental management and marketing theories that provide the framework for these practices, clarifying the drivers behind branding choices. We can cite three theories that form the foundational platform for inclusive brand activism:

- **Corporate Social Responsibility** (Porter and Kramer, 2006): This theory frames CSR not only as a business ethic but also as an essential component that can generate significant competitive advantage. Within this framework, brands can achieve economic success in ways that promote social welfare.
- **Brand Identity** (Aaker, 1991): It is crucial for a brand to clearly reflect its core values through all its actions. Brand identity serves as a powerful means of differentiation, enabling a stronger emotional connection with the target audience. A brand that engages in social activism and demonstrates consistency between its stated values and actions strengthens its perceived authenticity among consumers.
- **Stakeholder Theory** (Freeman, 1984): According to this theory, brands should consider the interests of all stakeholders (e.g., customers, employees, local communities, government agencies), not just shareholders. An inclusive company active in DE&I (Diversity, Equity, and Inclusion) that practices brand activism is an organization that recognizes and responds to the expectations of a broad spectrum of stakeholders, seeking to balance and harmonize different interests and needs.

Key components of inclusive brand activism include:

- **Authenticity**: Genuine commitment to social causes, consistent with brand values.
- **Consistency**: Integrated initiatives sustained over time, not limited to periodic advertising campaigns.
- **Transparency**: Open and honest communication about actions taken and progress made.
- **Representation**: Ensuring that all voices are heard, represented, and valued in brand decisions and actions, both at the B2B and B2C levels.

In a situation of high uncertainty, the end market desperately needs to trust, so much so that we today we often speak of extreme trust (Peppers and Rogers, 2012). Consumers today have an unprecedented ability to understand the transparency and truthfulness of messages sent by a brand. To win their trust, an advertising message or a statement of intent is no longer enough; actions are needed that can position a brand as a true corporate citizen (Moon, Crane, and Matten, 2005).

The growing demand for transparency and authenticity has prompted brands to integrate activism organically into their corporate strategies. More and more, companies see brand activism as an opportunity (and no longer a risk) to build a deeper, more meaningful connection with consumers, positively influencing brand perception and, consequently, market performance. The successful companies of the 21st century are those that effectively marry economic and social goals, creating value for both shareholders and society (Kotler and Keller, 2016). At a time when a brand's ability to promote inclusion unites ethics and business, as demonstrated by the Diversity Brand Index 2024, brands need to have a dual vision: a strategic one to look far into the future and an operational one to work in the short term and reach their goals.

The market is demanding more and more from leading brands, showing a greater inclination to support those that not only offer high quality products or services but are also actively engaged in solving global social problems.

Data from the Diversity Brand Index 2024 substantiate this trend, highlighting that inclusion is a cultural path that often starts from indifference and gradually evolves into social engagement and activism. In fact, 73% of the Italian population (falling into the Engaged, Involved, Aware, Tribal and Unaware clusters) prefer or have a strong preference for inclusive brands. The segmentation of the Italian population shows that there are only two segments that are averse or indifferent to diversity:

- **Indifferent (12.8%, up 0.7% over the previous year):** (Disinterested in diversity issues, not very concerned either both social or environmental sustainability. These are people who are extremely individualistic, but with a high level of contact with the LGBTQ+ community;
- **Angry 2.0 (13.9%, down 4.8% over the previous year):** Low levels of engagement, contact, and familiarity with all dimensions of diversity, with some degree of hostility. They hold a very stereotypical view of diversity.

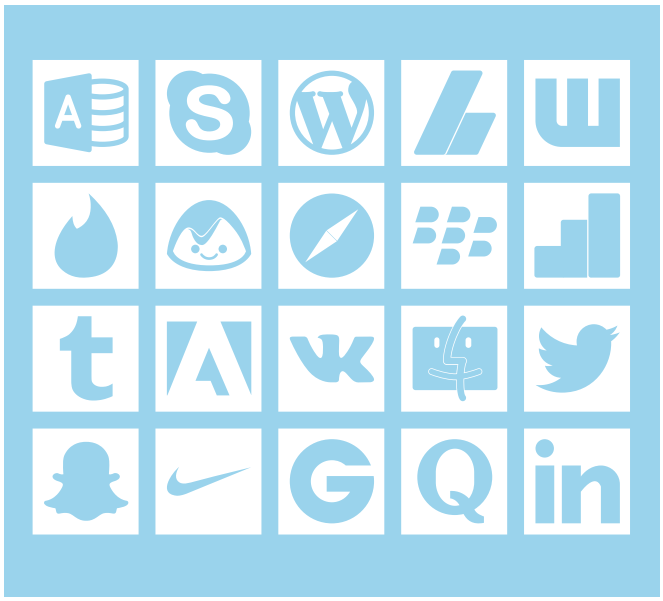
A generally positive sensitivity to diversity is evident. This, combined with the growing ability of the end market to analyze, evaluate, and judge brands in terms of inclusion, is embodied in top-of-mind (TOM) awareness regarding brands perceived as truly inclusive.

The Diversity Brand Index 2024 highlights how the number of brands that manage to stand out on these issues is declining: the survey sample cited significantly fewer brands than in 2023 (295 versus 356 in 2023, a 17% decrease). To achieve top-of-mind and love brand status regarding inclusion, brands need to make a difference in people's daily lives.

This requires understanding, sharing, and expressing the company's purpose – the essential core of the company, the deepest reason for its existence – which is often not clearly communicated internally or externally. The purpose serves as a bridge that connects brand strength with market expectations and needs, going beyond business objectives and investing in values.

However, adopting effective, inclusive brand activism calls for more than just public statements or temporary marketing campaigns. It demands a genuine and ongoing commitment, reflected in every aspect of business operation. Courageous brands, those that fully embrace their purpose and commit in the long term, are often the ones that succeed in making a difference, gaining not only market support but also tangible improvements in their communities.

So inclusive brand activism isn't just a theory but a practice that many companies are adopting with impressive results. And international best practices are certainly emblematic in charting the path for new behavioral patterns for brands globally.



NIKE: “BELIEVE IN SOMETHING. EVEN IF IT MEANS SACRIFICING EVERYTHING”

This slogan is associated with one of the most well-known cases of brand activism, involving former NFL quarterback Colin Kaepernick. The campaign was launched in 2018 and has become one of the most talked-about, influential advertising initiatives related to sports and social justice in recent years. Developed to commemorate the 30th anniversary of Nike’s famous “Just Do It” slogan, the campaign featured Kaepernick, who is known for initiating the protest movement during the national anthem to draw attention to racial injustice and police brutality in the United States. The slogan reflects Kaepernick’s personal sacrifice, as he lost his NFL career because of his protest actions. The message aims to inspire individuals to stand up for their beliefs, even at great personal cost. Choosing Kaepernick as the face of the campaign sparked widespread public debate. On one hand, it was lauded as a bold endorsement of civil rights and an example of moral courage. On the other hand, it drew criticism and boycotts from those who viewed his protest as inappropriate or disrespectful. Despite the controversy, the campaign had a significant positive impact on Nike’s sales, with a substantial increase in stock value and online sales shortly after the advertisement was launched. This highlights how a campaign, even a divisive one, can strengthen market confidence in a brand.

PATAGONIA: SUPPORTING LOCAL COMMUNITIES

Patagonia is widely recognized for its commitment to environmental sustainability and activism. It has taken bold customer advocacy stances, such as the “Don’t Buy This Jacket” campaign focused on reducing overconsumption during Black Friday. Additionally, Patagonia acknowledges the importance of working closely with indigenous and local communities, especially in areas where the company operates and has an environmental impact. This collaboration is vital to ensure that conservation and sustainability projects are mutually beneficial and culturally respectful. The company participates in projects that directly involve local communities in implementing environmental sustainability practices. For example, Patagonia has partnered with indigenous communities to protect vulnerable ecosystems and promote sustainable farming practices that support both the environment and local economies. The brand is also committed to preserving the culture and traditions of indigenous communities, offering support in passing on their cultural heritage, which often includes unique knowledge about sustainable natural resource management. In parallel, Patagonia is committed to supporting local communities through educational and training programs that enable people to develop new skills useful for improving their quality of life and managing resources more effectively. These training programs range from sustainable agricultural practices and natural resource management to the commercial dimension, helping communities to market their products ethically and sustainably.

BEN & JERRY'S: COMMITMENT TO SOCIAL JUSTICE

Ben & Jerry's is an emblematic example of how a company can integrate a commitment to social justice into its corporate mission. Since its inception, Ben & Jerry's has taken a proactive approach to various social causes, using its business as a platform for change. The brand has taken strong stances against systemic racism and social injustice, actively supporting the Black Lives Matter movement. It has launched dedicated ice cream flavors such as "Justice ReMix'd" to raise awareness and funds for organizations working for criminal justice reform and against racial discrimination. Additionally, it has published statements and educational resources to raise awareness of racial justice among consumers. Ben & Jerry's works on inclusion from a holistic perspective:

- *LGBTQ+ Rights: Ben & Jerry's has long been a staunch supporter of LGBTQ+ rights, promoting marriage equality and civil rights through various initiatives. For example, it renamed its popular flavor "Chubby Hubby" to "Hubby Hubby" to celebrate the legalization of same-sex marriage in Vermont.*
- *Voting Rights: The company has launched campaigns to promote the right to vote and to fight laws that restrict access to the ballot box, partnering with organizations working to protect and expand the right to vote, especially in underrepresented communities.*
- *Immigrant and Refugee Rights: Ben & Jerry's has taken clear positions in favor of immigrant and refugee rights, launching special flavors such as "Home Sweet Honeycomb" in the UK to support the integration of refugees and their inclusion in society.*

International companies are implementing notable examples at the national level, too:

- **IKEA Italy**: In 2023, on the occasion of World Refugee Day, IKEA Italy launched a communication campaign titled "And what do you see?" on its social channels and in its stores. The campaign focused on the power of words, contrasting negative terms often associated with refugees with positive terms to offer a new perspective and stimulate public reflection on the issue.
- **TIM**: With its "Equality Can't Wait" initiative, TIM is committed to accelerating social change and creating a more equitable and safer world for all. In 2023, TIM-owned stores became "Purple Stops" in partnership with DonneXStrada[1]. In stores displaying the "purple dot," customers can find staff who are sensitized and trained against violence and for women's street safety.
- **Netflix**: In October 2023, Netflix held an accessible screening of the first episode of the miniseries "All the Light We Cannot See" at the Maxxi Museum in Rome. The screening was made accessible to people with sensory disabilities (blind or deaf, visually impaired, or hard of hearing) thanks to audio description and subtitles for deaf individuals in Italian. The event was fully accessible to invitees with disabilities, including all phases such as invitation, reception, itinerary, communications, and catering service designed to meet various needs.

These experiences demonstrate how authenticity and consistency with corporate values are pivotal in strengthening the bond with consumers by making the brand purpose concrete, which is certainly a driver of differentiation. Although this purpose need not necessarily have a social value, when it does, the relationship between the brand and its customers

1 Italian non-profit association for street safety and against gender violence.

becomes profoundly value-based. Indeed, brands with a strong inclusive purpose generate a deep emotional bond, which in turn activates more brand ambassadors.

Inclusive brand activism is not just a statement of intent but a corporate strategy with concrete impacts on both business performance as well as very fabric of society. In discussing inclusive brand activism in for-profit companies, it's useful to highlight the former. Consistent with the theses of Du, Bhattacharya, and Sen (2010), the Diversity Brand Index 2024 presents clear and timely data on this topic. By comparing two hypothetical companies that are generally similar (one that invests in Diversity, Equity & Inclusion (DE&I) and one perceived as non-inclusive), we can see how the gap in revenue growth between the two can exceed 23.36% in favor of the inclusive company. This revenue driver comes from clear choices in both purchase behavior and word-of-mouth: 7 out of 10 people recommend inclusive brands, 9 out of 10 people speak poorly about non-inclusive brands, and 6 out of 10 people speak poorly about brands considered "neutral." The Net Promoter Score (NPS) for inclusive brands reaches +73.6% (up from the Diversity Brand Index 2023), while the NPS for non-inclusive brands stands at -87.5% (down further from the previous year). This data reinforces the critical attitude toward non-inclusive brands, while inclusive brands continue to capitalize on positive sentiment with an extremely high NPS that also drives revenue growth.

In addition to economic benefits, when brand activism on inclusion is genuine and concrete, it leads to meaningful social change that affects various aspects of society. Indeed, the social impacts of such activism can be vast and transformative, with the most significant being:

- **Outreach and education**: Brands have a powerful platform to raise awareness about social issues. Leveraging their visibility, they can inform and educate the public on issues such as racial justice, gender equality, and LGBTQ+ rights. Well-designed campaigns can prompt the public to think, discuss, and act on these issues.
- **Promoting legislative and policy change**: Brands that are influential from the perspective of the collective imagination can advocate for legislative and policy changes by supporting specific campaigns. This can help accelerate the adoption of policies that might otherwise take longer to implement.
- **Direct support to vulnerable communities**: Many activist brands work directly with vulnerable communities, supporting programs or initiatives that enhance people's quality of life. This support can take various forms, including donations to organizations working directly on the ground, infrastructure development, or training programs.
- **Improving access and equity**: Socially responsible brands can help improve access and equity in various sectors, such as education, health, and employment. Companies can utilize their resources to remove barriers to access and promote inclusion, ensuring that more people, regardless of background, can benefit from opportunities and services.
- **Strengthening social capital**: lA brand's activism can strengthen its social capital, which refers to networks of relationships between people, essential for an equitable and inclusive society. Companies that promote inclusive initiatives and support diversity can help build trust and solidarity among diverse groups, fostering understanding and cooperation.
- **Creation of role models based on social responsibility**: Finally, when companies actively engage in social issues, they can serve as benchmark for other brands, stimulating a virtuous circle of social responsibility at the B2C level. Courage inspires courage. This can lead to a wider adoption of ethical and responsible practices, creating a broader impact on society.

Despite the potential benefits, inclusive brand activism is not without its challenges. Chief among them is the risk of "woke washing" (Lyon, and Maxwell, 2011), or the use of social activism as a marketing tool without substantive commitment to the causes in question. Specifically, "woke" is a slang term derived from African-American Vernacular English and indicating an awareness of social and racial issues. So "woke washing" refers to a brand engaging in marketing practices that attempt to appear knowledgeable, progressive, or aligned with certain social causes, but without genuine commitment or substantive actions to support those causes (Ahmad, Guzman, and Al-Emran, 2023). That makes woke washing a form of opportunism that exploits activism for commercial purposes, often eliciting criticism and negative reactions from consumers and stakeholders, both internal and external. This practice can severely damage a brand's reputation if consumers perceive a gap between the talk and the walk. Authenticity is crucial: brands must ensure that their initiatives are sincere and well-integrated into overall operations to avoid public backlash (Seele, and Gatti, 2017). Woke washing typically takes the form of emotional manipulation, and inconsistency between message and action (as is often the case, for example, with large brand advertising campaigns during Pride Month that superficially support the LGBTQ+ community, but without internal and/or substantive commitment to inclusion).

CONCLUSION

Diversity is a broad concept and encompasses "a commitment to recognizing and appreciating the variety of characteristics that make people unique in an atmosphere that embraces and celebrates individual and collective achievement. Indeed, this term describes individual and group differences, including but not limited to age, nationality, ethnicity, gender, sexual orientation, gender identity and expression, physical abilities, socioeconomic status, cultural, political, religious, and other affiliations, education, professional experiences, lifestyles, and physical appearance" (Diversity Brand Index, 2018). The breadth of this concept is manifested through the eight forms of diversity recognized in the literature (gender, age and generation, disability, LGBTQ+, ethnicity, religion, socioeconomic status, and physical appearance), underscoring its relevance that no marketer can ignore.

All forms of diversity are underrepresented in varying contexts and at various times in our society. Marketing and brand management can ensure that all individuals feel represented by adopting a brand activism approach that is manifested in diverse forms. However, specialized skills are required to follow this path.

The pervasive nature of management dictates the need to address the issue both internally within companies and externally, targeting the end market of consumers. For a brand to be truly "activist," it should support breaking down bias at all levels (internal and external, B2B and B2C), through Marketing & Communication, Local Engagement, B2C Education, User Experience, and Supplier Diversity (the latter still underutilized due to limited awareness). Yet without initiatives designed specifically for the end market, there's a risk that consumer perceptions won't be impacted. Finally, transparency, authenticity, community engagement, reporting, and accountability are crucial assets to avoid the "woke washing" trap.

MANAGERIAL IMPACT FACTOR

- **Witnessing the emergence of a new brand operating paradigm**: Examining the landscape of brand activism today, we are clearly witnessing a growing movement that's reshaping global expectations of brands, based on the 4Cs of inclusive brand activism (consistency, coherence, concreteness, and continuity).

- **Ensuring the sustainability of brand activism**: Companies will need to authentically integrate social values into their vision and operations. This entails not only responding current pressures but also anticipating future needs of communities and society by maintaining ongoing, visible engagement. Sustainability in activism will require continually evaluating and adapting strategies to remain relevant and effective.

- **The role of technology and evolving consumer preferencesi**: With the rise in the use of digital and social media platforms, companies have the opportunity to reach and engage the end market in increasingly direct and personalized ways. However, this also calls for greater transparency and accountability, as companies' actions are scrutinized more than ever by the public.

- **More collaborations between companies, associations/ nonprofit organizations, and governments to address complex social issues**: These partnerships can amplify activism efforts and lead to more innovative and scalable solutions. Companies seeking to maximize their impact will benefit from sharing resources, knowledge, and networks.

- **Need for ethical and cultural reflection on pathways to activism**: This includes respecting cultural diversity and being sensitive to local norms, avoiding imposing values that may not be universal, and favoring a glocal approach. Understanding and respecting cultural differences will be crucial for the global success of an activist brand.

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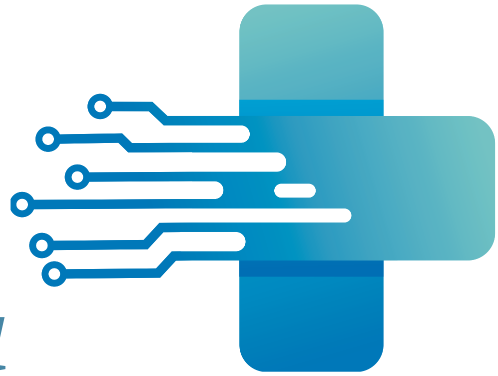

Internet of Beings AI and Hyper Data Revolutionize Healthcare

This article explores the potential for the next great breakthrough in the history of the Internet: the interconnection of living bodies through increasingly powerful, rapidly shrinking sensors, forming a seamless information system. The convergence of big data, artificial intelligence, and health and life sciences presents both significant opportunities and risks. Managers in healthcare systems and pharmaceutical industries are poised to enter a transformative period that will fundamentally reshape their business landscapes.

HEALTHCARE//BIG DATA//ARTIFICIAL INTELLIGENCE/INTERNET OF BEINGS//PERSONALIZED MEDICINE

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The use of telemedicine dates back to at least as early as the inception of the Internet (Hjelm, 2017). In the same year that Vincent Cerf and Robert Kahn proposed using the Internet Protocol for internal Pentagon communication, astronauts donned spacesuits equipped to continuously monitor their vital signs, sending data back to Houston and streaming it live to a global audience during the Moon landing. But despite decades of optimistic predictions about how digital tools could revolutionize healthcare and disease prevention, these expectations have largely gone unmet.

Paradoxically, the healthcare and drug discovery sectors heavily utilize technology but lack effective integration of information and communication technologies (ICT). Hospitals and pharmaceutical laboratories employ cutting-edge (albeit costly) machines that often fail to communicate with one another (Carinci et al., 2015). What's more, it's surprising that despite extensive discourse on "electronic health records," many patients still find themselves carrying physical copies of their medical tests from one specialist to another (Mitchell & Kan, 2019). This inefficiency appreciably undermines the effectiveness of healthcare systems (Baumol, 2012),[1] making them not only more expensive but also less inclusive, contradicting the principles of universal coverage. However, this situation may be on the brink of change, thanks to three key factors.

Firstly, when the COVID-19 virus abruptly stopped the world in its tracks, it led to an unprecedented integration of digital technologies into our daily lives (Abi Younes et al., 2020; Patel et al., 2021). While some may have anticipated a complete transformation of public services such as healthcare or education, which were at the forefront of the emergency, the experiment shattered numerous cognitive biases that might have otherwise hindered feasible technological advancements.

Secondly, substantial investments from global digital platforms in healthcare have emerged as a strategic response to the obsolescence of a model where the Internet primarily revolves around social networks and entertainment (Vision & Value, 2022; Matwyshyn, 2019), with a productivity impact significantly lower than previous industrializations (Solow, 1987). Some argue that this trend aligns with the development of a new digital infrastructure known as the "metaverse" (Clegg, 2022). Replicating lives in a virtual environment, however, contradicts the notion of the Internet "entering" the human body,[2] an approach with far greater potential gains than envisioned by companies like Meta, but also more radical risks.

The third and most impactful development is the rise of what many call (albeit somewhat imprecisely) "artificial intelligence"[3]. The rapid advancement of software capable of imitating human cognitive processes and languages, while processing enormous amounts of information in real time, is set to fill an important gap (Kumar et al., 2021). For decades, the unstoppable growth in the volume of data stored in our information systems has been constrained by the system's ability to process that information. Now, large language models can lift this constraint, and quantum computers[4] (DiVincenzo, 2000) will make the processing power exponential.

These three forces are about to produce a convergence between biology and computer science (The Economist, 2020), and between healthcare and "intelligent" robots, providing unprecedented possibilities[5] but also risks that will dwarf current concerns about cybersecurity or privacy

1 The Nobel Prize winner studied two sectors where productivity had been particularly stagnant: education and healthcare. Baumol found that these public services share a similarity with classical music concerts: a robot cannot replace a violinist. Mastery of an instrument requires what we term as "talent," which extends beyond mere "competence" and appears to be not easily replicable, even by artificial intelligence. The inherent difficulty in automating a concert of violins gradually renders such concerts comparatively more expensive over time compared to, for instance, automating an accounting system. Baumol applied this concept to doctors and teachers, as well as to the percentage of GDP that advanced societies allocate to education and healthcare, a figure that has consistently risen. These two sectors are significant enough to account for the sluggish productivity growth observed across entire economies.

2 This implies two totally different routes toward artificial intelligence: one involving robots becoming human-like (as in Blade Runner), and the other involving humans being enhanced by digital devices (as in Iron Man).

3 By artificial intelligence, what we mean is actually a technological evolution that's much broader than the chatbots which gained popularity since November 2022. If we agree with the definition provided by the OECD and the EU, AI is "a machine-based system that, for explicit or implicit objectives, infers from the input it receives how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments." As such, AI has been operating for decades in search engines, product rankings on e-commerce platforms, and even social media friend suggestions.

4 Quantum computers are likely to be the technical complement to the vast computing power that large language models will require. However, they still need to overcome several challenges before they can be used for practical, large-scale purposes.

5 We'll refer, for instance, to the possibility that chips implanted in our bodies may directly correct the signals that neurons send to the rest of the body when malfunctions occur within our remarkable internal information system linking all our organs.

(Altynpara, 2022).

This technological evolution coincides with a dramatic political and social problem that still fails to capture headlines: healthcare systems, considered pillars of the welfare state in Europe and powerful forces of social cohesion everywhere, are crumbling. For decades, the best indicator of social progress has been the rise of life expectancy worldwide. Yet, in 2023, this parameter in the US is the shortest it's been since the start of the century.[6] In addition, most European countries have yet to recover their pre-pandemic levels, and even in developing countries, life expectancy is not increasing at the same rate as in the 20th century.

This situation is economically and politically unsustainable, creating space for a giant leap towards digitalization.

THE PARADIGM OF INTERNET BEINGS

One way to understand the unfolding evolution of technologies is through the progressive sophistication of the so-called "sensors," which are becoming much more than digital objects meant to merely "sense" bodies.

The first sensors were integrated into hospital equipment (such as ECG machines), but they became part of commercial electronics with wearables for athletes. Currently, the market leaders in wearables are the behemoths of the Internet: Apple with its Smartwatch (which includes tracking functions, as well as emailing, calling, and messaging); Samsung with its Galaxy watch; and Google with its Fitbit, acquired in 2019 (Baumol, 2012).Yet wearables are merely a precursor to what sensors can do (The Economist, 2022).

The next three waves of innovation will involve sensors that will become implantable,[7] to help relieve suffering caused by chronic diseases (as is already the case with the pacemaker, which controls and manages the pulsation of failing hearts); ingestible[8] (De la Paz et al., 2022), needing only water to swallow;[9] and ultimately capable of being self-driven to reach parts of the body needing surveillance, or to patrol – like micro digital guardians – entire segments of the body.

The breakthrough may come, however, from an evolution of the objects that can enter bodies: they will not necessarily be made of silicon but could be made of organic materials like biopolymers and proteins (Wang et al., 2013). This is the focus of an entire field of materials science, the subject of study for a century and a half, and the research area for which the Nobel Prize in Chemistry in 2000 was awarded to Alan Heeger, Alan MacDiarmid, and Hideki Shirakawa, based on the conductive properties of polymers. Moreover, organic solar cells are already being used as second-generation solar panels (to recharge smartphones and even soldiers' backpacks), and polymers can reproduce the functions of skin, nose, and even eyes (Lu et al., 2023). Organic or hybrid sensors may more easily be hosted by living beings and even "move" into tracts of our bodies, being attracted by certain organs to be monitored, to position themselves where they need to be.

Parallel to the evolution of the routes through which sensors will enter human bodies, we are also about to witness an equally fantastic evolution in their functions. Today, wearables are mostly used to monitor health parameters or sports performance, and to inform those who share their data. Some of these wearables are already

6 A contributing factor may be the increase in overdose deaths, which rose from about 20,000 in 2000 to over 100,000 in 2023. This is makes it one of the leading causes of death for people aged between 19 and 40, yet it still represents a small fraction of the nearly 3.5 million deaths per year in the US.

7 The companies Medtronic from the US and China Medical Technologies provide interesting cases.

8 These will be mostly confined to the gastrointestinal tract. However, it's theoretically possible that even smaller microscopic chips could travel into the larger blood vessels or be inhaled into the airways of respiratory systems.

9 As we can see in the vision of San Jose-based Rani Therapeutics: the firm is revolutionizing the delivery of biological treatments, which previously required painful injections, by incapsulating them into swallowable pills.

connected in real time to systems used by hospitals and physicians, enabling them to make emergency calls and potentially save millions of people from avoidable deaths, from heart attack, for instance. In the future, wearables will have the autonomous capacity to intervene in medical emergencies by injecting life-saving cardiac aspirin when necessary, as an example.[10]

Sensors initially designed for leisure are evolving into medical devices too, as demonstrated by Apple with its watch. However, this evolution may also occur in reverse: a digital device intended to address a health issue may transition into a consumer product. This is exemplified by hearing devices transforming from traditional hearing aids into more versatile tools capable of filtering out background noise, or streaming podcasts, or translating foreign languages. For companies like SONOVA, the market leader in hearing aids, this presents both opportunities and challenges.[11]

Even painful and potentially lethal treatments such as chemotherapy will change profoundly. In the future, anticancer substances will be released gradually from a device with basic monitoring capabilities, only in the right quantity and when there is no danger to the patient's life, eliminating the need for hospital visits. This approach will also help those affected by specific allergies, who would greatly benefit from a precise and timely dose of antihistamine, corticosteroids, or, in more severe cases, life-saving epinephrine. Similar sensors will also go a long way to ensure that treatment protocols routines are followed by the elderly or infirm, as is currently done with implanted dispensers of insulin.

One of the holy grails of the future is bio-engineering. This is the ability to directly heal the cells responsible for processes that can kill us or improve our lives (Hayflick, 1965). In the realm of the Internet of Beings, biology will resemble physics, with nervous systems potentially able to trigger the chemical reactions that stimulate new cell growth.

Actual progress in hospitals might move more slowly than the advancements in technology suggest, for three reasons. First, there's the issue of legacy. It's difficult for state-financed, highly unionized healthcare systems to embrace innovation that may endanger jobs. The strikes currently disrupting Britain's National Health Service are a powerful reminder of this. Yet, the competition from countries that must satisfy ever-increasing and evolving needs with far fewer resources might pressure even the most established systems to accept change.

Second, further technological development is still needed before the grander visions of bio-engineering can be realized. Chips still require refinement to ensure that communication does not pose risks to the body (and before they can be approved by regulators like the FDA); they also currently lack the capability to be charged remotely[12] or operate without batteries.[13]

Third, the so-called digital divide prevents vast segments of the population from accessing technologies. This is particularly true for the elderly,[14] who would benefit most from digital access to health services without the need to physically visit a hospital. However, data shows that age is the primary factor (Vision & Value, 2021) limiting people's ability to access technology. The success of the great bioengineering "mutation" will depend on tech companies developing interfaces and languages that are user-friendly for older

10 This seems to be the next development for AliveCor, whose devices are technically capable of detecting abnormal heart rhythms and delivering an electrical shock to restore normal rhythm in the event of cardiac arrest.

11 They may once again find themselves facing a competitor with very deep pockets and a huge advantage in data: Apple with its rapidly evolving AirPods.

12 Qualcomm is rapidly advancing on both fronts.

13 As evidenced by the research at the UCSD Center of Wearable Sensors.

14 It's interesting to consider cases like Proteus Digital Health, which anticipated rapid adoption among the elderly that ultimately did not materialize.

people. Seniors represents an opportunity for startups[15] and for entire countries committed to a digital transition that leaves no one behind (as stated by Ursula Von Der Leyen, President of the EU Commission).

PHARMA AT A STRATEGIC CROSSROADS

The way we monitor and manage our health is poised for a dramatic transformation, and even more radical will be the changes in how drugs are discovered. A vast trove of data will be analyzed by artificially intelligent systems to identify patterns, enabling the programming of RNA- and DNA-based treatments. The infinite combinations of genetic codes, health histories, and daily variables such as temperature changes, diets, and medication will allow us to understand how organisms react with unprecedented granularity. This will generate a large number of "statistically significant inferences" (as termed by mathematicians), indicating events likely to repeat, which will guide the hypotheses that the data themselves test. All this will vastly reduce the time and cost associated with traditional drug trials. Traditionally, drug trials have relied on ad hoc experiments on volunteers, sometimes even involving terminal patients, potentially disrupting their everyday lives.

Yet if a sufficient number of people consent to long-term monitoring, research might not necessitate any changes to daily routines. Data collected day by day from of hundreds of millions of people could make medical research cheaper, faster and safer, fundamentally altering its nature. We are approaching an era where there could be as many drugs as there are individuals, with treatments constantly tailored to individual conditions (accounting for factors such as age and seasonal changes) and dosages adjusted daily as needed. Instead of relying solely on multibillion-dollar laboratories, we will transform billions of bodies into laboratories, advancing research while people continue with their normal lives.

This paradigm shift has already prompted the largest pharmaceutical companies (such as Pfizer, Sanofi, and Roche) to partner with dedicated startups[16] or big tech companies. For instance, Novartis is collaborating with Alphabet to develop smart contact lenses that monitor blood sugar levels, aiming to enhance patient longevity. However, this partnership trend poses an existential threat to one of the most stable and profitable industries of modern capitalism (Miller et al., 2022).[17]

An entire business model built on patents[18] will face radical challenges from three converging disruptions. First, if medical research utilizes vast quantities of data unique to millions of individuals, legally belonging to each person (as per EU regulation, which is becoming the global norm), it will be increasingly difficult to consider the research results as a patentable intellectual property (Andanda, 2019).

The second disruption revolves around artificial intelligence, which can identify new products (or incremental improvements on existing ones) through virtual trial and error, similar to the

15 Sometimes, however, innovation emerges from incumbents seeking new competitive advantages. A case in point is Bank of Baroda, which in 2022 launched Bob World Gold, a mobile banking platform dedicated to seniors. Banks stand to gain a significant advantage by serving the elderly remotely, as they have been among the last segments who still primarily do their banking at expensive brick-and-mortar branches.

16 K Health serves as an example: the startup specializes in developing artificial intelligence tools to analyze vast amounts of data. Initially focused on generating more personalized treatments, it is now shifting its attention to research.

17 In 2019, the ten largest pharmaceutical companies generated revenues of $431 billion and a net income of $98 billion. This resulted in a rather extraordinary return on sales of 23%, which surpasses even that of one of the ten largest global digital platforms. In 2018, their ROS was 18.8%, and by 2020, it had risen to 19.8%.

18 In fact, patents are hardly a characteristic unique to the pharmaceutical industry. According to IFI Claims Patent Services, Johnson & Johnson was the highest-ranking pharma (56th position) in a classification of patent holders dominated by Asian companies (nine out of the top ten) with Samsung at number one. However, patents play a rather unique role in the pharmaceutical industry, as they are associated with entire products that are technically more irreproducible. In other industries, such as hardware and software, patents protect specific features and can be more easily bypassed (and, indeed, more frequently become the subject of litigation).

technique used by large language models. Should a robot be recognized as the inventor? Should the reward for such an innovation go to the software programmer or the owner of the data (Bonadio et al., 2021)?

Thirdly, personalization will render obsolete the idea of generating revenue by selling non-reproducible products in large quantities over many years. As personalization becomes more and more granular, there will likely be fewer blockbusters, transforming pharmaceutical companies into service providers with frequent upgrades to their solutions. Genetic (DNA- or RNA-based) vaccines already offer a platform that can be reprogrammed for new variants or specific individuals (Holman, 2015).

The future of medical research may even resemble open-source platforms – a much more sophisticated version of Wikipedia – where knowledge advances significantly thanks to the voluntary, free contributions of many. In a world where information originates from and is processed within our bodies, maintaining ownership of these data will become legally challenging.[19]

The competition will extend beyond pharma versus tech, to open source (as seen with androids) versus "walled gardens" (as seen at Apple). This battle, with potentially immense rewards, will profoundly reshape corporate culture and industries beyond pharmaceuticals and biotech. While the pandemic years were record-breaking for sales and returns on sales for some of the big pharma companies,[20] this period may also mark the beginning of the end for the industry as we know it. New, more efficient data-based approaches may replace these players, delivering vastly superior products to billions of potential patients.

> This period may mark the beginning of the end for the industry as we know it.

CONCLUSIONS

The Internet of Beings may indeed be the next big thing in the history of the Internet revolution and may even represent the third phase of Internet evolution. The first, known as the Internet of Computers, linked all digital devices into a seamless, global information system called the World Wide Web, which is currently undergoing further transformations. The second phase, the so-called Internet of Things, involves integrating physical objects – ranging from the engine of a Tesla to the light bulbs in remotely controlled homes – into such a network. The third is where brains and machines, living bodies (not only humans, but also other species), and computers will be connected through sensors that are becoming more invasive, intelligent, and capable of performing ever more sophisticated functions (Economist, 2022).

This article explores some of the implications of the new paradigm, including its significant risks and opportunities, as well as the reasons why the transformation may be delayed by resistance from those who defend the *status quo*. For hospitals and firms, the challenge will be to strike a balance: not moving too quickly, which may cannibalize their existing activities, nor too slowly, which could result in obsolescence. This scenario represents a biological mutation and is a clear example of how managers will need to develop entirely new capabilities to contend with disruptive changes.

19 One caveat to consider is the creativity of intellectual property (IP) lawyers: we cannot exclude the possibility that existing frameworks for patent protection will evolve alongside technologies.

20 Not for all pharmaceutical companies benefited from the pandemic. Interestingly, AstraZeneca sold its vaccine at cost and yet experienced a number of public relation disasters.

MANAGERIAL IMPACT FACTOR

- **Digital transformation:** Hospitals will need to evolve and adopt digital technologies to become more specialized entities in a world where patients increasingly access services remotely.
- **Personalized medicine:** The pharmaceutical industry will see a significant reduction in drug development costs using big data, enabling the development of personalized medicine and challenging the sustainability of a patent-based business model.
- **New strategic challenges:** The boundaries between different industries will blur as big data drives personalization, particularly in sectors such as insurance, creating new strategic challenges.
- **Biological transformation:** It will become increasingly clear that companies are not just about business, but also about making complex decisions with social and ethical implications. Overall, the "Internet of beings" will reveal the true extent of the digital revolution, which is not just an industrial change, but a biological transformation.
- **The new role of management:** This change shift will compel managers to reinvent their role, moving from administrators of stable systems to navigators of organizations in uncertain environments.

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BORGHINI · CIRRINCIONE
COLM · GAUR · MEDICI
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At the Wheel with Gen Z Charting the Roadmap for Future Urban Mobility

This article explores current and future urban mobility preferences and behaviors of Gen Z in the context of developing smart, sustainable cities. Using a mixed-methods approach, the study identifies four clusters of Gen Z urban movers and their mobility preferences, providing insights for urban mobility companies and highlighting challenges, opportunities, and the need for tailored solutions and educational initiatives for young urban consumers.

URBAN MOBILITY//FUTURE MOBILITY//GENERATION Z//SUSTAINABILITY//MIXED METHODS

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The UN's 2030 Agenda emphasizes the pivotal role of mobility in the Sustainable Development Goal 11 (SDG 11), focusing on safe, affordable, accessible, and sustainable transportation (United Nations, 2023). In parallel, the European Green Deal aims to achieve climate neutrality by 2050, highlighting sustainable and smart mobility initiatives and investments in clean technologies (European Commission, 2023). These urgent calls emphasize the necessary global commitment to sustainable mobility.

Generational change is considered one of the key factors in the evolution of society. Gen Z is now entering adulthood and already accounts for more than 40% of consumers in some countries. Consequently, these young people play an essential role in the market, and that includes mobility (Wawer et al., 2022). As the United Nations estimates that 70% of the world's population will live in urban areas by 2050 (United Nations, 2023), a better understanding of Gen Z, who will make up the majority of urban dwellers, becomes paramount. As a consequence, this article focuses on the following research questions:

- **What are the values of Gen Z – and more specifically, what are their value drivers in the area of urban mobility?**
- **What are the differences within Gen Z?**
- **What are their current and future preferences for different mobility solutions?**

The answers to these research questions are based on the findings of the 2023-24 Research Program conducted by the Mobius Lab of SDA Bocconi School of Management, focusing on the future of urban mobility for Gen Z. The study takes a new perspective based on a practice-based view (Schatzki, 1996; Schau et al., 2009; Akaka et al., 2022), which emphasizes the importance of practices, repeated activities, and behaviors in understanding how individuals engage with the world. Such a view is useful for understanding current and future consumption patterns because it shifts the focus from seeing consumption solely as individual choices or preferences to recognizing it as embedded in broader social practices, such as routines and habits, implicit behaviors, and social contexts. Examining Gen Z's consumption patterns, and especially their relationship to urban mobility, through the lens of a practice-based view is beneficial precisely because it allows us to explore the practices that shape how young people interact with mobility in their everyday lives (now and in the future). Such an approach looks at the underlying values of behavior to explain for today and predict for tomorrow how Gen Zers will make their mobility choices.

This study adopts a mix of different methodological approaches to fully understand the phenomenon: i.e., exploratory methods based on primary data collection (42 in-depth interviews, 2 focus groups, and observations); secondary data analyses, including text and image analysis on Instagram and TikTok (128,447 Instagram and TikTok captions and 40,414 Instagram images excluding ads); and an extensive quantitative survey with 8,137 respondents from six European countries (Italy, Germany, France, the UK, the Netherlands, and Spain).

Ultimately, the study aims to (i) identify the Gen Z value drivers that inform young consumers' current and future mobility preferences; (ii) investigate what types of urban mobility movers exist (i.e., which clusters); and (iii) understand how these value drivers are associated with different mobility modes.

GEN Z'S VALUES REVEAL THE DRIVERS OF THEIR MOBILITY CHOICES

Gen Z, the first generation to come of age in the 21st century, is typically referred to as the cohort of "digital natives" (Addor, 2011), "the Internet Generation" (Lanier, 2017), "Generation Me" (Bennett et al., 2012), or "Mobile Mavens" (Ozkan and Solmaz, 2015). These individuals, born between 1996 and 2010 (McKinsey & Company, 2023), represent the first generation that may live into the 22nd century (Aggarwal et al., 2022); they have grown up in a dynamic and turbulent environment that contributes significantly to shaping their identity. This explains the relevance of childhood and places of origin for Gen Z. The research shows that young consumers are anchored in routines and habits that are "inherited" and learned from parents and teachers (from Generation X) in terms of how they perceive spaces, places, and make consumption choices. The implications of this imprinting are profound and extend to the context of urban mobility. In fact, both qualitative and quantitative data show that familiarity and repetition are crucial factors in shaping attitudes toward mobility modes and perceptions of the urban landscape. Young people find comfort in repeated routes and familiar modes of transportation, as the following quote from an in-depth interview illustrates:

> "It's reassuring to always have the same route and means to go to work. You know how much time you have to sleep, or read..."
> (F, 23, Romania)

Overall (and with strong priming from their families of origin), Gen Z individuals appreciate values such as simplicity (e.g., options that are easy to use and immediately available), stability (e.g., options that allow them to feel safe and secure while allowing for work-life balance), sociality (e.g., options that facilitate interactions and connections with relevant others), and sustainability (e.g., options that are environmentally friendly – even if individual behavior cannot always live up to this ideal). These values (most of which emerged from the exploratory qualitative study) also impact the underlying motivations that guide Gen Z's preferences and choice of mobility modes. In fact, when asked what characterizes the ideal mobility mode (regardless of the specific mode), Gen Z respondents indicate a clear yet nuanced set of priorities. Differences in responses between Gen Z students and workers are highlighted because this distinction allows us to capture the evolution of preferences as young individuals grow up and transition through their life cycle. Accordingly, Figure 1 shows the performance relevance scores[1] for each mobility mode (i.e., transportation mode) for Gen Z students and workers.

Four key findings emerge from our analysis. First, Gen Z has clear priorities when it comes to choosing among mobility modes, with functionality and risk avoidance being the most important. Immediate availability, cost-effectiveness, and cost predictability are also paramount for functionality, while feeling safe from aggression and traffic-related risks both carry significant weight for risk avoidance. These preferences suggest that Gen Z is seeking a mix of efficiency (especially in terms of time and cost) and physical-psychological safety when choosing mobility solutions. From this standpoint, a mode of transportation that can provide door-to-door pickup and drop-off not only increases convenience, but also augments the overall perception of safety, especially for students.

Second, economic considerations also play a crucial role: young consumers place a high value on cost-effectiveness, cost predictability, and paying only for actual use.

This attention to reducing cost uncertainty suggests that mobility providers should offer transparent pricing models such as flat rates (e.g., subscriptions) or pay-as-you-go options, both of which allow users in different ways to control the actual cost of the chosen mobility mode.

Third, the experiential aspect of mobility also contributes to Gen Z decision-making. Ease of use, comfort, acceptable levels of crowding, and the possibility to engage in other activities while on the move are all deemed important. This finding highlights the need for mobility providers to enhance not only functional and economic aspects, but also the overall travel experience when marketing mobility solutions.

Fourth and finally, the study reveals differences between Gen Z workers and students. This can be inferred from the smoother intensity decay of workers' scores from one performance to another (in the graph) compared to students, meaning that workers consider many performances important and need to consider them simultaneously, making their decisions regarding mobility modes more difficult. Indeed, the first four performances are all perceived as a top priority for Gen Z workers

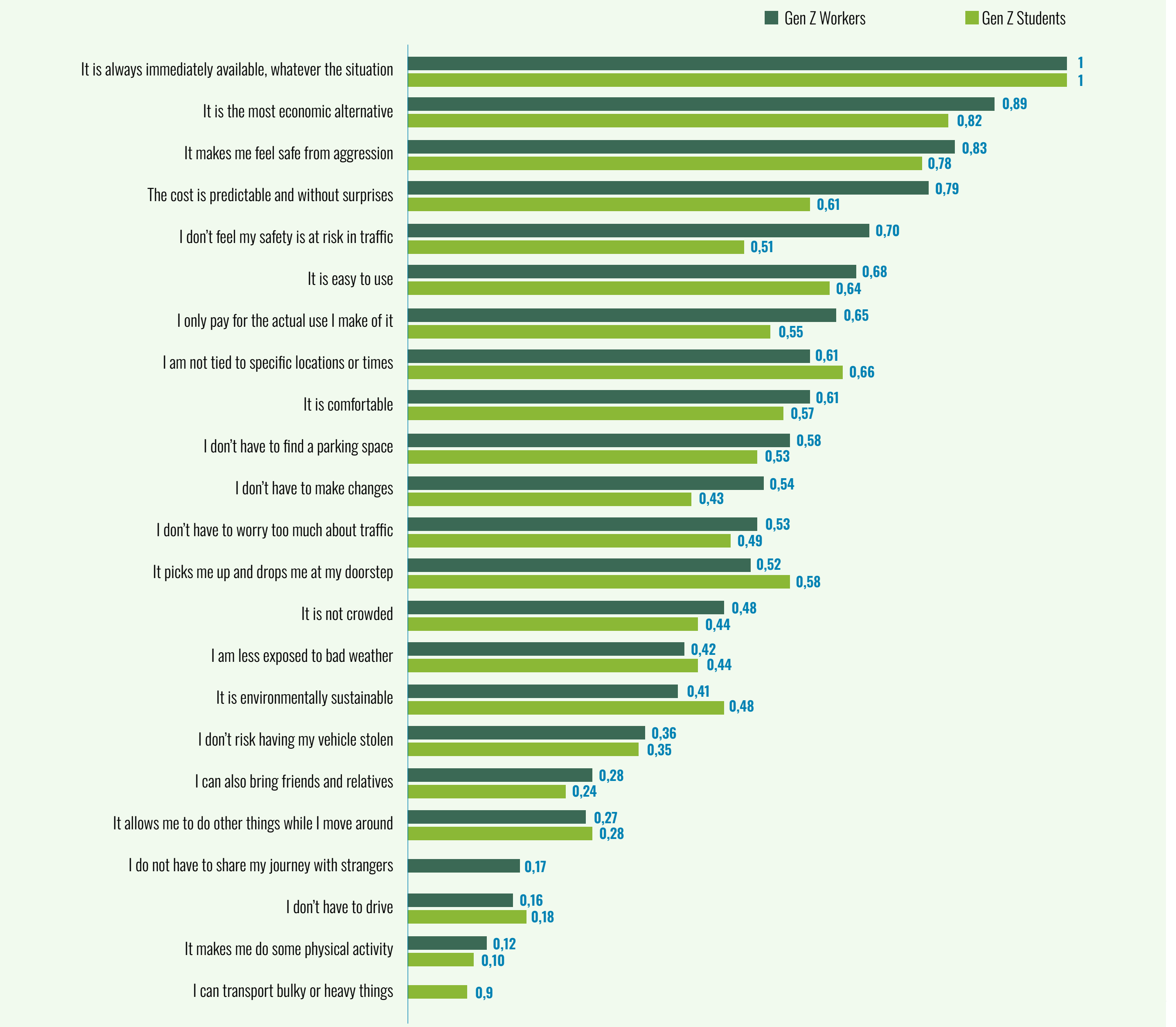
1 Relevance scores are calculated with the MaxDiff methodology. That is, in the survey, each respondent was given sets of four randomly assigned performances out of a panel of 23 (the ones listed in Figure 1). For each set, the respondents had to select the most and least important performance. The overall difference (i.e., for all respondents) - how many times a performance was rated as most important minus how many times as least important - provides the relevance score. Results are then standardized to allow comparisons: the most important performance is assigned a value of 1, while the least important a value of 0.

(with scores ranging from 1 to 0.79), while there is a steeper decline for Gen Z students (from 1 to 0.61). This suggests that intercepting Gen Z individuals as they enter the workforce presents a strategic opportunity for mobility companies to adapt and simplify their offerings, recognizing the changing habits and preferences of this transitional phase of young people's lives. Milestones (e.g., entering the workforce) also emerge as relevant factors for younger, upcoming generations.

FOUR CLUSTERS OF GEN Z URBAN MOVERS

The priorities identified in the European multi-country survey suggest that Gen Z is far from homogeneous, which is in line with observations by Wawer and colleagues. As these authors note: "The idea of generational stratification [...], as every generalization, creates a very simplified model of reality that does not address the heterogeneity of Gen Z members" (Wawer et al., 2022, p. 9). In fact,

FIGURE 1 PERFORMANCE RELEVANCE SCORES OF MOBILITY MODES FOR GEN Z (STUDENTS VS. WORKERS)

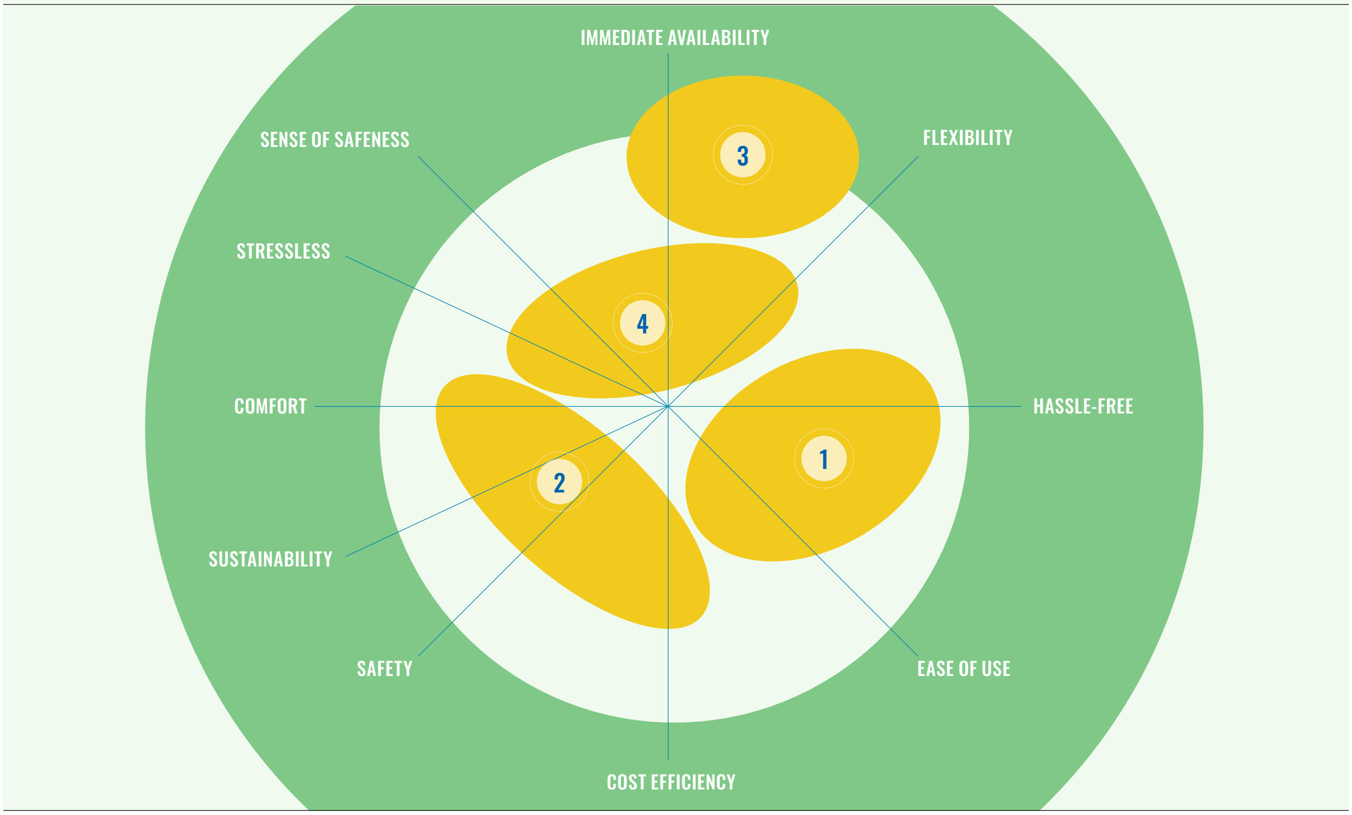


differences between Gen Z students and workers are not the only ones we find. The relevance scores of the expected performances show that not only are decision-making processes nuanced, but preferences are also unevenly distributed. In that respect, our analysis unveils four clusters of preferences that guide Gen Z's choices of urban mobility modes.[2] These clusters are visually depicted in Figure 2; the different labels represent aggregations of the performance priorities identified in Figure 1:

- Stress-free (I can do other things while I move around; I don't have to drive).
- Feeling safe (I get picked up and dropped off at my doorstep; I don't risk having my vehicle stolen; it makes me feel safe from aggression; I don't have to share my journey with strangers).
- Flexibility (I can bring friends and family; I can transport bulky or heavy items).
- Immediate availability (it's always immediately available, whatever the situation; I don't have to make changes; I'm not tied to specific places or times).
- Cost-effectiveness (it's the most economical alternative; I only pay for what I use; costs are predictable, no surprises).
- Comfort (it's not crowded; it's comfortable; I'm less exposed to bad weather).
- Sustainability (I'm getting some exercise; it's environmentally sustainable).
- Hassle-free (I don't have to find a parking space; I don't have to worry too much about traffic).
- Ease of use.
- Safety (I don't feel that my safety is at risk in traffic).

Cluster 1 (28%): This Gen Z group's primary objective is to minimize inconvenience when navigating the city. They are willing to sacrifice

FIGURE 2 THE FOUR CLUSTERS OF GEN Z URBAN MOVERS



2 The clusters were identified using the k-means criterion based on the priorities outlined in Figure 1.

comfort to reduce the need to park and navigate city traffic. Ease of use is a significant driver for them to reduce hassle. Economic considerations are also paramount; these individuals are concerned about transportation costs and are interested in low-cost solutions. Environmental costs are not considered: they prioritize flexibility over sustainability. Cluster 1, which includes more workers, women, and households with children, uses a variety of transportation modes, including public transport, and sharing and pooling solutions. They are heavy users of apps for multiple mobility services.

Cluster 2 (16%): This Gen Z group prioritizes comfort as a key factor when choosing transportation modes. They prefer less crowded, weather-protected modes and prioritize comfort over navigating traffic or finding parking. Ease of use, sustainability, cost efficiency, and safety in traffic are highly valued. This cluster primarily uses public transport, with a focus on comfort. They use cars less frequently, do not often ride bicycles or motorcycles, and avoid sharing services.

Cluster 3 (28%): This Gen Z group values immediate availability and accepts the trade-off with cost efficiency. Composed primarily of men, workers, and parents, this cluster uses multiple modes of transportation, with a preference for individual options such as cars, taxis, scooters, bicycles, and motorcycles. They use public transport less frequently.

Cluster 4 (28%): This Gen Z group consists of individuals who prioritize a sense of safety when choosing an urban mobility mode. They are concerned about aggression, theft, and proximity to unfamiliar people. They also prefer modes that allow them to engage in other activities while in transit, and they want instant availability. They'll sacrifice sustainability in favor of flexibility. With more women and students and fewer people with children, Cluster 4 relies heavily on public transport and uses micro-mobility modes sparingly; they prefer walking. They also use apps for mobility services.

The analysis of Gen Z urban movers reveals a diverse set of mobility preferences, challenging the notion of generational homogeneity. By identifying four distinct clusters, we shed light on the multifaceted decision-making processes that guide urban mobility choices.

From those who prioritize convenience and minimize inconvenience to those who emphasize safety and comfort, our findings reveal the need for tailored approaches in designing future urban transportation solutions.

GEN Z'S URBAN MOBILITY MODES PREFERENCES

Values and choice drivers influence Gen Z's urban mobility preferences (see Figure 3)[3] and help us understand why these young people prefer certain modes over others.

We can observe that Gen Z students predominantly use either public transport or they walk, while workers rely more on individual mobility modes (e.g., car, taxi/Uber, bicycle). This phenomenon is a consequence of a daily schedule that becomes more rigid as young people enter the workforce, making their commuting choices less flexible. When workers must adhere to strict timetables, they have fewer opportunities to avoid peak traffic periods. Consequently, workers tend to diversify the range of mobility modes they use to increase flexibility in response to the need to accommodate the rigidity of their daily schedules, as illustrated by the following quote from our in-depth interviews:

> "When you start working, you can't afford to lose time anymore...Time is a scarce resource, and you don't want to waste it." (F, 24, Italian)

3 The graph displays the average score of responses regarding the frequency of usage for each mode of transportation, measured on an anchored Likert scale ranging from "Almost never" = 1 to "Very often" = 5. The scores are adjusted for the availability of the transportation mode in question in the respondent's city.

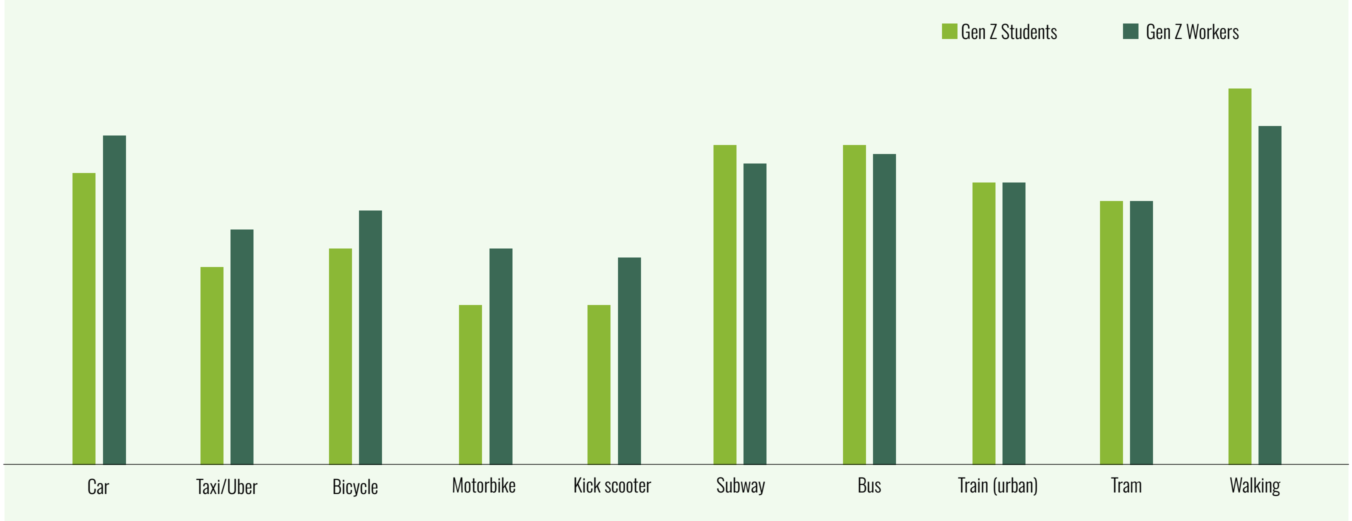
By running regressions on mobility modes according to different priorities, we measured the statistical correlation between usage and priorities.[4]

Walking emerges as the preferred mobility mode for Gen Z overall. Its appeal lies in its freedom, flexibility, utility in terms of physical exercise and detoxing, and the opportunity to enjoy the cityscape or socialize with friends. When experiencing a city as a tourist, this preference is even more pronounced: 84% of respondents said they would walk even very long distances. When it comes to daily mobility, Gen Z students also prefer going on foot, especially in situations where they can establish habits, such as during commuting and repeated journeys. Indeed, they typically walk between 15 and 30 minutes. However, it is not always possible to maintain this healthy habit when entering the workforce, so Gen Z is increasing its use of other mobility modes. This suggests that mobility companies should try to intercept Gen Z individuals as they transition from students to workers: in this window, young consumers are establishing new habits, and mobility providers have the opportunity to be chosen as "new" travel companions.

Public transport stands out as the first choice for Gen Z, especially in city centers where the network is efficient and widespread. This preference is rooted in the economic, environmentally sustainable, convenient, and stress-free experience offered, as well as the ability to make productive use of travel time. Subways, and especially buses, are widely used because of their fast and extensive connections. Buses are perceived to be cost-efficient, reduce traffic stress, provide a good level of safety, and are easy to use. Subway use, on the other hand, is a balancing act, as Gen Zers weigh cost-efficiency against a sense of insecurity. The interviews also reveal an appreciation for trams (especially vintage trams), where available, as they provide a romantic view of the city from an aesthetically-pleasing means of transport.

Due to concerns about accidents safety, cost efficiency, the stress of driving in traffic and parking, cars are perceived quite negatively by Gen Z. Nonetheless, they still hold significance in certain cases. For example, Gen Zers highly value the psychological sense of security that cars provide. Additionally, while daily car use is lower, these vehicles are still essential for weekend

FIGURE 3 USE OF MOBILITY MODES BY GEN Z STUDENTS AND WORKERS

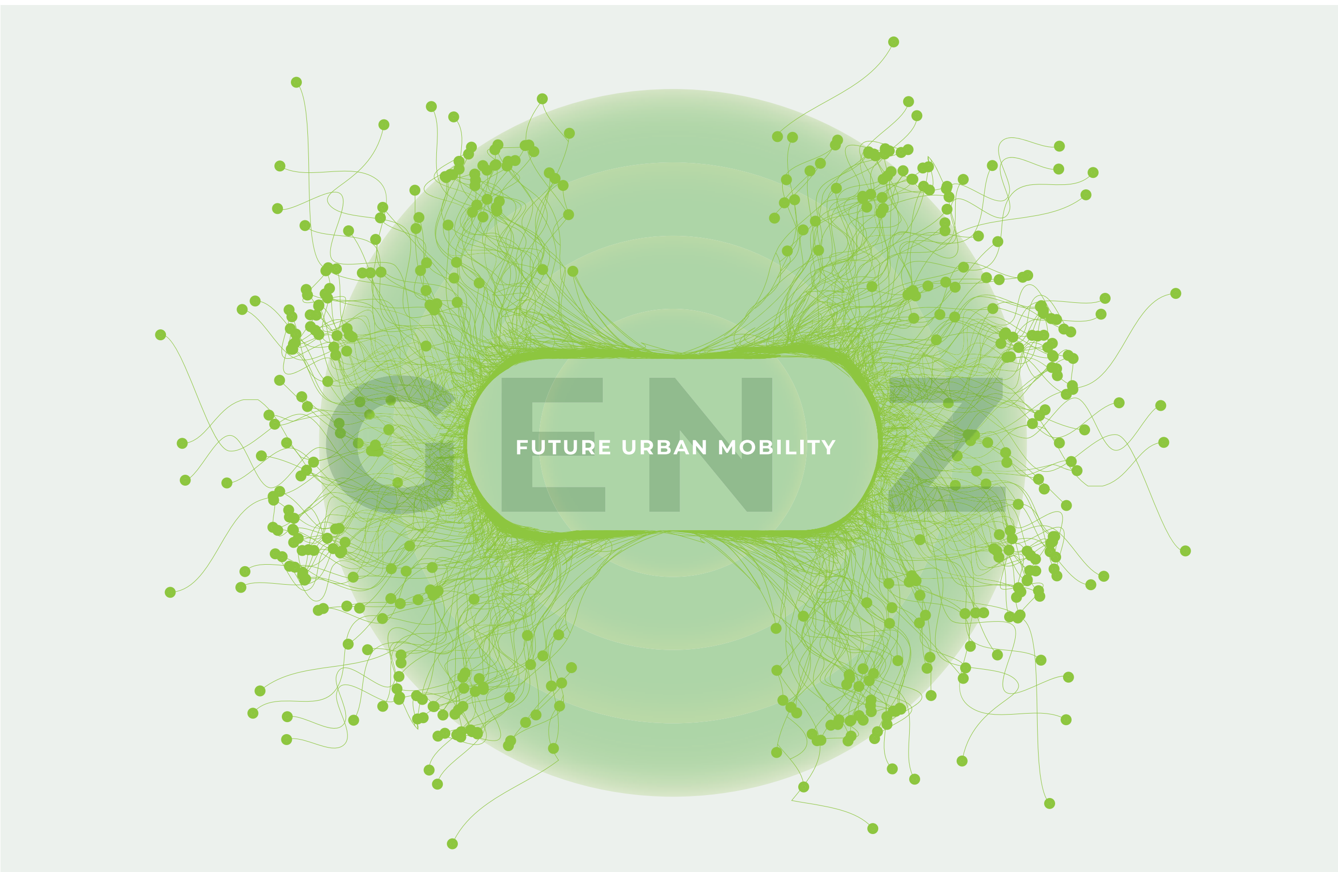


4 This analysis was run by using a linear regression model that considers only priorities as independent variables. The relationships are weak, as numerous other variables impact observed behaviors in complex contexts such as urban mobility, but statistically significant. Therefore, these regressions provide clues about transportation perceptions, at least by noting the sign of the correlation.

getaways to destinations not well served by public transport, such as the countryside, lakes, or other cities. Looking ahead, especially in the context of potential future family considerations, cars are seen as indispensable vehicles. In fact, 53.9% of Gen Z workers use a car often or very often during the week for commuting and repeated trips around town, compared to 36.4% of Gen Z students. This finding suggests that young consumers will continue to rely on cars as they enter the workforce and start families.

Taxis, ride-hailing, and shared mobility are considered useful options for tourism and occasional travel – such as for nights out, emergencies, transport strikes, or when time is critical. Taxis and ride-hailing are also positively correlated with a sense of safety and security, as they reduce the stress of driving in traffic. Conversely, they are perceived as expensive and potentially not readily available when needed. It is worth noting that 57.7% of Gen Zers surveyed said they never use car sharing, highlighting that young people are not yet reliant on this mode of mobility. The tendency to experiment with car sharing seems to increase as Gen Zers enter the workforce. Moreover, once they tried it, 15.7% of Gen Z students and 30.8% of Gen Z workers said they became regular users of car sharing. This suggests that usage-based solutions may be a viable option when people need a car. In addition, the preferred typology of car sharing service is station-based rather than free-floating. Importantly, this preference is particularly pronounced among actual users of these services, indicating a genuine preference and not only a mere perception. This would indicate that even though Gen Zers value flexibility overall, they prefer rules and fixed patterns when approaching an unfamiliar mobility mode. This information can be useful for municipalities and mobility providers in terms of designing offerings.

Indeed, Gen Z also seems to prefer station-



based services for shared micro-mobility (bicycles and kick scooters). Overall, these young people seem to consider and use micro-mobility options (both owned and shared) as a “second-best” choice for short or occasional trips. Micro-mobility is unsuitable for work purposes and adverse weather conditions but serves as a viable alternative for late-night trips when roads are less congested. Specifically, the use of bicycles is perceived positively by Gen Z in terms of flexibility and sustainability, but negatively in terms of safety. Bike sharing has additional negatives: high cost, difficulty of use, and the fact that it may not be readily available. Nonetheless, bicycles seem to be appreciated for repeated leisure outings and tourism purposes.

The use of kick scooters is associated with flexibility, sustainability, and the ability to alleviate traffic stress thanks to their maneuverability. Conversely, such scooters are associated with high costs, the perception of being difficult to use and generally dangerous. In the case of shared kick scooters, the lack of comfort and the risk of poor availability are added to the equation. As a result, they are mainly used at night when the streets are empty or when alternative public transport options are limited; otherwise, they are mostly seen as a form of entertainment. As another micro-mobility option, motorcycles are associated with flexibility and are less affected by traffic congestion; they are also positively linked to sustainability but considered expensive.

With respect to the different sharing brands on the market, Gen Zers seem to see them as interchangeable when it comes to choosing a micro-mobility mode. What really makes a difference is the ease of use of the app. Once they opt for a brand, Gen Z users exhibit loyalty (although it may be passive, based on habit) and perceive any potential switching costs as prohibitive. Moreover, the various micro-mobility offers are seen through a unique lens by Gen Z, with no distinctions between traditional and electric options. However, given the often-challenging conditions in European cities (narrow streets and bike lanes, cobblestones, etc.), there are safety concerns regarding micro-mobility that affect all brands, as highlighted in the following quote from one of the focus groups:

> “I have biked a few times in the city center, but it was not a very nice experience, especially in the center. Plus, the fact that when you go to areas like the ring road, there is not always a bike lane, so you are always a bit in the middle of the road with all the traffic. Also in other cities, it’s a bit of a risk.” (F, 23, San Marino)

In essence, Gen Z exhibits clear preferences when it comes to urban mobility. Each mode offers a mix of advantages and disadvantages, showing that there does not appear to be a dominant mobility mode in the current context.
While Gen Zers have a clear idea of mobility priorities and value drivers, they use different means of transport depending on specific contextual needs. For this reason, understanding Gen Z’s habits, mobility choices, and preferences is key for mobility providers.

CONCLUSIONS

The focus of this article was on how Gen Zers experience urban mobility and cityscapes, considering their priorities, preferences, and the modes of transportation they use, while identifying potential differences between Gen Z students and workers, with and without children, today and in the future.

Our analyses revealed the existence of a multifaceted, dynamic set of priorities that influence urban mobility choices and preferences. Young consumers carefully assess and compare the performance of various transportation modes and select them according to a different set of priorities, with immediate availability being the most critical consideration, followed by economic efficiency, uncertainty reduction, safety, and travel comfort. These priorities differ between students and workers, with the latter ranking multiple factors at similar levels, given the greater complexity of their mobility decisions.

The research also allowed us to identify four clusters, i.e., four distinct mobility preference profiles within Gen Z, ranging from people who prioritize convenience and ease of use to those who emphasize safety, flexibility, and comfort.

In examining how these priorities shape Gen Z's choices, it is worth noting that students express a clear preference for walking and public transportation, while workers tend to favor individual modes of transportation (i.e., services like car sharing and electric scooters) due to their flexibility. When it comes to mobility sharing services, Gen Z prefers station-based options due to their increased safety and reliability compared to free-floating options.

While Gen Z shows interest in the sustainability and practicality of micro-mobility options such as bicycles and scooters, concerns about safety and availability seem to prevail so far.

MANAGERIAL IMPACT FACTOR

- **Tailored mobility solutions**: develop and offer transportation options that address different consumer segments and their specific preferences.
- **Communicating efficiency and reliability**: prioritize clear communication about the efficiency and reliability of transportation solutions and address any information gaps through market education.
- **Competitive differentiation**: focus on providing safe, comfortable, easy-to-use, and customizable transportation options to differentiate from competitors.
- **Reducing uncertainty**: implement strategies to reduce uncertainty about availability, travel time, and final price of transportation services.
- **Understanding usage patterns**: analyze and leverage mode usage patterns based on consumer priorities to help Gen Z effectively manage their transportation trade-offs and integrate urban mobility into the broader smart city ecosystem for future quality of life improvements.

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