Digital Transformation: How Management Consultancies Frame It?

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Abstract. Digital transformation is a process and outcome that comprises of an assemblage of actors, practices, and technologies, each possibly with diverse interpretations and expectations. Premised on the actor-network theory (ANT) methodological orientation of tracing and studying the actions and enactments of actors within a network of interrelations, this article is a cursory glance at the conceptualization of digital transformation by management consultants/ consultancies, who are significant but relatively unexplored actants within the ongoing digital technology transitions.

To study how management consultancies frame digital transformation, this work situates two distinct strands of scientific literature. Firstly, it makes an overview of the contemporary discussions on what constitutes digital transformation. Secondly, it explores the progressively increasing role that management consulting firms play in the realm of public and private organizations, which, in turn, deeply transform organizational and social ordering. From this vantage point, the paper empirically investigates the advisory prescriptions proposed by big consultancy firms in the field of digital transformation, based on qualitative document analysis of publications, reports and whitepapers brought out by some of the leading management consultancies.

Digital transformation is pervasive and disruptive in the domains of technology, economy, society, and politics. However, it appears that management consultancies, while providing guidance to both private and public organizations, have a constricted perspective on digital transformation, primarily viewing it as a form of business innovation. Thereby, they externalize some of the quite profound implications of digital transformation as illustrated in the case of predictive policing implemented in several smart cities.

Keywords: Digital Transformation, Digitization, Digitalization, Management Consultants, Management Consultancies, Global Professional Service Firms, Professional Services Networks, Smart Cities, Predictive Policing, Consultocracy, Adhocracy

1 Digital Transformation and Consultants

Digital Transformation is a multivalent phenomenon that encompasses several domains of knowledge, practices, locations, applications, usages, and translations. It involves the interconnectedness of different fields of knowledge, techniques, and approaches, creating networks of interrelations between organizations, groups of individuals, and entire societies (Ancillai et al., 2023; Hanelt et al., 2021; Kraus et al., 2021; Plekhanov et al., 2022; Verhoef et al., 2021; Vial, 2019). This opens up a variety of areas to examine the varying changes that fall under digital transformation.

This essay aims to understand one of the least explored areas within this discussion, which is on how management consultants, an influential set of actors in the field, formulate and possibly orchestrate digital transformation in certain specific ways. To comprehend the multivalent nature of digital transformation and how consultants play a significant role in digital transformation with far-reaching implications, at first we identify the case of smart cities, that exemplify the very nature and facets of digital transformation.

1.1 Smart City as Digital Transformation

A smart city is an urban system that employs technologically integrated innovative solutions, especially those based on the Internet of Things (IoT), artificial intelligence, big data, and cloud computing technologies to seamlessly connect different components and layers of a city (Kim, 2022; Kirimtat et al., 2020; Vial, 2019). From efficiently using existing urban infrastructure to providing new ‘smart’ services, smart cities across different countries or even between the regions of a country can be heterogenous, varying in their scope, structure, functions, and imaginaries (Albino et al., 2015; Shelton, 2017; Vial, 2019). A smart city utilizes sensors to collect data from various sources, possibly including citizens, devices, buildings, and infrastructures, to provide efficient management of resources and services, and to improve operations across different functional areas like transportation, utilities, security, education, healthcare, and so on. It is indeed “the epitome of digital ubiquity transforming our spaces, lives and ourselves through data, algorithms and smartphones” (Datta and Odendaal, 2019).

A smart city builds interoperable networks of interrelations of technologies and services that can integrate a diverse constellation of public, private, and administrative actors on a layered modular architecture (Yoo et al., 2010). A technical module, for instance, may consist of sensing, transmission, data management, and the application layers (Singh et al., 2022). To effectively implement the technical and functional aspects of smart cities, each of these layers utilize various expertise and technologies.

1.2 Role of Consultants in Smart Cities

External consultants play a crucial role in strategic planning, technology evaluation, project management, stakeholder engagement, data analytics, privacy and security, performance monitoring, knowledge transfer and so on in the context of a smart city. Expertise of the consultants is often used by smart cities to leverage technology and data to improve infrastructure, enhance services, drive sustainable growth etc. (Chakravarty et al., 2022). Consultants, due to the nature of their work, most often rely on a stack of existing tools and technologies to effectively meet their mandates (Bessant and Rush, 1995). Their work is layered, fragmented and self-contained to the specific operational parameters. For example, predictive policing is increasingly integrated into smart cities to manage with law and order situations (Tulumello and Iapaolo, 2022). A consultant may find an algorithmic tool, like *PredPol* (now rechristened as *Geolitica*), very effective for predictive policing (Huet, 2015). It can analyse various types of data, such as crime statistics, historical patterns, and demographic information, to identify potential crime hotspots and patterns. This information can then be used to allocate law enforcement resources effectively, anticipate criminal activity, and prevent crime within a city. A service like PredPol is an attractive proposition for law-and-order agencies, policy makers and administrators to deal with security challenges in an optimized resource allocation. In essence, by recommending the tool, the consultant does a very good job. Unsurprisingly, as usage reports suggest, it is widely adopted. The implication, however, as increasingly being evident, is that algorithms for predictive policing can be gravely biased. It can discriminate against specific sections of the population based on their colour, ethnic identity or economic status, and favour those who are privileged (Lash, 2021). Besides bias and discrimination, there are concerns related to privacy and transparency (Alikhademi et al., 2022). Furthermore, the effectiveness of these tools to prevent crime is rather questionable (Hunt et al., 2014; Meijer and Wessels, 2019; Tulumello and Iapaolo, 2022).

Thus, the implications of using a specific tool for predictive policing are prolonged and far-reaching for affected people, societies, and governance. However, the evaluation of the tool's implementation and effectiveness, as well as the assessment of the consultant who proposed it, are assumed to be short-term and immediate, based on internal functional logic. The fragmentation of the layered modules makes the immediate, functional enactments of the components obfuscate the overall effects and the emergent implications. Thus, many a time, despite performing presumably significant tasks, the job of a consultant may encompass only in fragments. For instance, the deliverables for the consultants sometimes only be the strategy or vision document, leaving the execution for

other agencies (Baraka, 2021) which may employ other consultants. It is this nature of the work of consultants and the ramifications of it lead to the questions on the broader framing digital transformation by these significant actors.

1.3 Digital Transformation and Management Consultants

While the consultants in the field of digital transformation are not just to management consultants or consultancies, they are the institutional actors who play a major role in formulating digital transformation both in public and private sectors. By looking into how the management consultancies conceptualize digital transformation, what we aim to problematize is on how these framings of digital transformation are ingrained with certain specific notions of envisioning, structuring, and governing of the technological infrastructure and systems, and thereby, the economic, social and political ordering. On a broader level, this may eventually help us to understand whether these enactments are a ‘disciplinary strategy’ (Vanolo, 2014). While situated in this broad purview, however, the focus of this work is limited and specific. Oriented from the Actor-Network Theory (ANT) approach to follow the actors, this paper empirically investigates the thematic and advisory recommendations put forth by major consultancy firms in the field of digital transformation. The study conducted qualitative document analysis of published reports, dossiers, and whitepapers from leading management consultancies, namely the "Big Three" consulting firms (McKinsey & Co, Bain & Co, and Boston Consulting Group), and the "Big Four" accounting firms (Deloitte, Ernst & Young, KPMG, and PwC). It also considers publications from Accenture and SAP, both of whom are very active in the field of digital transformation. By analysing the documents, the study exploratively investigates the broadly shared framing of digital transformation by these firms that can possibly foreground future empirical studies to explore discourses and practices.

The structure of this article is as follows: firstly, it explores the definitions of three distinct terms widely used in academic and business literature to describe ongoing digital changes—digitization, digitalization, and digital transformation. The subsequent section provides an overview of academic contributions that examine management consultancies and management consultants. Following this, the article delves into the conceptual framing of digital transformation as proposed by management consultancies. The final section analyzes the implications of management consultancies' framing, concluding with a generalization and limitations.

2 Digitization, Digitalization and Digital Transformation

To better understand how management consultancies conceptualize and frame digital transformation, it is crucial to clarify how the definitions of digitization, digitalization, and digital transformation are used in this work. This is particularly important due to the inconsistent and unclear usage of these terms among practitioners and analysts (Vial, 2019).

2.1 Digitization

Digitization is the process of converting analogue information into a digital form, represented by binary code (zeros and ones), to enable computers to store, manipulate, and transmit information, and thereby, transforming material and static things to digital, interactive, and potentially to customizable formats. In practical terms, it is rather straightforward as converting a physical paper document into a scanned digital copy or transforming a sound recording into digital bytes. It also encompasses transitioning processes from manual to digital, as Gobble (2018) notes, for instance, replacing hand-filled forms with online versions that go directly to a database. It is more of digitizing documentation processes rather than developing value-added activities beyond its immediate purview (Gobble, 2018; Li et al., 2016; Verhoef et al., 2021; Yoo et al., 2010). Digitization of information enables a transformation in products, shifting them from being material and static to becoming interactive and customizable, allowing them to create value in a non-centralized manner (Schmidt et al., 2016).

Digitization is often seen as a prerequisite for digital transformation. Verhoef et al. (2021) conceptualize digitization as the first phase of digital transformation where the ‘material process of converting analogue streams of information into digital bits’ (Brennen and Kreiss, 2016) takes place, subsequently leading to digitalization and digital transformation.

2.2 Digitalization

While digitization is used rather uniformly, the range of meanings for the term digitalization varies rather significantly across academic and business literature. In business and management studies, digitalization refers to the process of adopting digital technologies and incorporating them into various aspects of an organization's operations, products, or services. According to this understanding, digitalization primarily focuses on digitization that enable the storage, processing, and transmission of data electronically together with the implementation of digital tools, and the utilization of data for improved efficiency and accessibility. Digitalization is about transitioning towards a digital-centric business approach and developing innovative business frameworks, value creation and

consumption patterns that blur the boundaries between the digital and physical realms (Piepponen et al., 2022). In essence, it is about leveraging technology to streamline operations and enhance existing processes, utilizing digital technologies to transform a business and create fresh avenues for generating revenue and value.

2.3 Digital Transformation

In most business and management studies, digital transformation is understood as a broader organizational change that goes beyond the adoption of digital technologies (Fernandez-Vidal et al., 2022). It is often referred to as a strategic shift in mindset, culture, and business processes to leverage the full potential of digital technologies in achieving business objectives and creating new value. Digital transformation encompasses multiple dimensions, such as organizational and cultural change, process reengineering, innovation, and the development of new business models. Most often it means the integration of digital technologies across the entire value chain and across different functions and departments within an organization. It entails a comprehensive and holistic approach to utilizing digital technologies, including digitalization as one of its components (Piepponen et al., 2022). Digital transformation literature also emphazises the need for a strategic vision, strong leadership and cross-functional collaboration, extending its focus beyond technology to the transformation of people, processes, and organizational structures to create a digitally mature and adaptive organization (Hanelt et al., 2021; Verhoef et al., 2021).

Recent reviews from business and management indicate that it is more appropriate to view digitization, digitalization and digital transformation as sequential phases (Piepponen et al., 2022; Verhoef et al., 2021). The first phase, digitization, denotes the shift from analogue to digital information. Digitalization, which is the second phase, encompasses the adoption and integration of digital technologies into existing business and organizational process, including automating processes, retraining personnel etc. Both these phases are technology driven and often implemented as projects. The third phase, digital transformation represents a broader organizational change brought about by digital technologies, ultimately resulting in new or revised business models, processes, and customer experiences. Digital transformation is not project or technology driven but refers to strategy driven changes leading to transformation of organizations. While social dimension of digital transformation is identified as an area of analyzis, business studies overwhelmingly emphazis on technological and organizational aspects (Reis and Melão, 2023).

All these three terms – digitization, digitalization and digital transformation – do not have such nuanced difference in social science literature, and are often used interchangeably. Digitalization, the most used term, focusses on the social and organizational reordering due to the proliferation of new actors, institutional arrangements, opportunities and vulnerabilities. While most business and management literature is overwhelmingly optimistic about digital transformation, social science literature finds it Janus-faced (Shriwise, 2022) by looking into the potential and the pitfalls of ongoing digitally mediated changes. For instance, a great deal of studies looks at how digital technologies facilitate formation of new classes, different kinds of social inclusion and exclusion that is proliferated on the basis of social measurement, differentiation, and hierarchy (Burrell and Fourcade, 2021; Fourcade, 2021). A number of studies look into how digitalization is influencing structural changes through its impacts on productivity, employment, sectoral linkages, trade, labour, nature of work and the ways the state handle labour, how existing work gets disrupted – leading to specific effects in employment, working conditions, politics and economy (Fussey and Roth, 2020; Larsson and Teigland, 2020; Matthess and Kunkel, 2020). Mengay (2020), for instance, argues that digitalization has two very different effects on work. On the one hand, it leads to a re-Taylorization of work, de-qualification and a loss of workers autonomy. On the other hand, digitalization of work leads to new forms of indirect control and algorithmic control that can be used to manage and instrumentalize the supposed autonomy of workers to actually enable an unequal and exploitative labour process.

3 Management Consultancies / Consultants

Management consulting, mostly known as ‘management engineering’ prior to the Second World War (McKenna, 1995), is generally defined as a short-term advisory service rendered by external experts, aimed at assisting executives in enhancing the management, operations, and overall economic performance of an organization. Consultants stand out as external, temporary professionals who bring specialized experience and expertise that is not readily accessible within the client organization, best representing what is termed as adhocracy. They are highly valued for their guidance in enhancing organizational performance and educating clients in addressing future challenges, for which they are compensated (Srinivasan, 2014).

3.1 The Evolution of Management Consulting

While most scholars associate the origin of management consulting with the emergence of scientific management in the early 1900s (Kipping, 1999), McKenna (1995) argues that the origins of management consulting can be traced back to the 1890s, with the growth of large industrial organizations in the United States creating a demand for professional firms of engineers, accountants, and lawyers. Several firms like Arthur D. Little, Stone & Webster and Price Waterhouse offered independent corporate counsel to assist executives in managing the complexity of their businesses. Consulting engineers provided technical knowledge to manufacturing companies, while accounting firms conducted external audits and provided financial controls for growing corporations. This development marked a shift towards seeking specialized expertise on a consulting basis rather than employing full-time staff members. Following a period of gradual and sluggish expansion until the 1920s, these firms witnessed a notable upswing in both their reputation and accomplishments during the 1930s. The professional recognition of consulting underwent a significant transformation, for instance, in 1929 with the establishment of Association for Consulting Management Engineers (ACME), which accredited consulting organizations. Furthermore, the implementation of New Deal banking and securities regulations in the mid-1930s played a pivotal role in driving the growth of the management consulting industry (McKenna, 1995). Management engineers drew upon the practices of accountants, engineers, and lawyers to provide comprehensive studies of organizations, strategies, and operations at the executive level. The significant transformation in this emerging quasi-profession that occurred during the 1930s, predominantly influenced by political developments, according to McKenna, constitute the origins of modern management consulting. Consultants' foray to the public services majorly happened during the second world war as the US Federal Government enlisted their services to improve civilian production, restructure the military, and manage the rapid expansion of the Federal Administration (Kipping, 2021). For instance, Cresap, McCormick & Paget were hired by the Hoover Commission in 1949 to reorganize the Executive Branch. Consultants acted as intermediaries between public and private bureaucracies, facilitating the exchange of ideas and accelerating the process of organizational innovation and dissemination (McKenna, 2012, 1995). During this phase, pioneer consulting entrepreneurs began to play a vital role in the industry as well. They identified and addressed significant contradictions between existing practices and cultural norms, drawing expertise from diverse fields to propose solutions. These entrepreneurs emphasized the social benefits of their solutions and established the uniqueness of their organizations by defining social codes. Additionally, they built relationships with influential figures outside the consulting field to legitimize their problem-solving models. These institutional actions have shaped the industry, resulting in a landscape where firms are increasingly similar yet possess distinct positioning (David et al., 2013).

3.2 Management Consulting at Present

Called also as global professional service firms or professional services networks, management consultancies play a pivotal role in today's capitalist landscape. It has shown a tremendous growth in recent years. While the value of global consulting market was estimated to be of 160 billion USD in 2019, the worldwide revenues of the Big Four accounting/ audit firms itself exceeded 200 billion USD in 2022 (Statista, 2022). They contribute to the creation and spread of new business practices, linking firms, industries, and countries, and integrating them into a global framework. According to Bühlmann (2023), these firms produce ‘a new corporate nobility’. Operating in nearly all countries, these leading firms provide guidance to the most influential multinational corporations on matters such as management strategies, legal affairs, mergers and acquisitions, and tax planning. Despite its significance, there are not many studies on management consultancies or on consultants until recently except in sociology of professions or organizational studies (Kipping and Kirkpatrick, 2013; Muzio et al., 2011). Management consulting industry has been largely overlooked in academic research due to several reasons as Srinivasan (2014) points out. The highly fragmented nature of the industry encompassing a diverse range of firms, the lack of formal regulation and professional bodies, the varying size, specialization, and scope, and the complex and intangible nature of their services hinders extensive research and measurement.

Consulting as a professional area is diverse. Management consultancies specialize in providing strategic and operational advice to organizations with diverse expertise, while there are consultancies focusing on specific domains such as IT, finance, human resources, marketing, sales, legal, health, education, employment, security, and environmental issues. It can be divided also on the basis of who their clients are; the size of clients (small, medium, large, multinational), sectors (private, public, international organizations) and so on. Furthermore, there are individual consultants working independently and offering personalized expertise, while consulting firms have teams of consultants with diverse skills and resources to handle larger projects.

Though the origins of the role of the consulting industry in the public sector can be traced back to the nineteenth-century United States (Kipping, 2021), there is a noted proliferation of consulting services in the public sector of late. Public institutions increasingly rely on consultancies to acquire policy knowledge, assess stakeholder dynamics, and evaluate governance systems (Eckl and Hanrieder, 2023; Seabrooke and Sending, 2022). Consultants provide them advisory services, keep them stay abreast with governance trends, offer technical and programming expertise, and perform evaluations (Seabrooke and Sending, 2020). They can be instrumental in reforming the public services (Begley and Sheard, 2019; Beveridge, 2012), developing global benchmarks (Broome, 2022) or incorporating gender equality in to organizations (Blanchard, 2022; Olivius and Rönnblom, 2019).

In this essay, we are concerned with a significant subsection of the consulting industry, the management consultancies, offering their services to both the public and private sectors, in digital transformation. It is important that we identify some of the notable characteristics of consulting industry that are relevant to our subsequent analyzis.

3.3 Characteristics of Management Consulting

In one of the early articles on the consulting industry, Turner (1982) outlines eight primary objectives of consulting profession: furnishing information to clients, resolving their issues, conducting diagnostic assessments that may involve redefining the problem, offering recommendations based on the diagnosis, assisting with the implementation of suggested solutions, fostering consensus and commitment towards corrective action, facilitating client learning by teaching them how to address similar problems in the future, and ultimately achieving long-term improvements in organizational effectiveness. In their extensive literature review, Canato and Giangreco (2011) find that management consultants fulfil multiple roles, namely serving as information sources, standard setters, knowledge brokers, and knowledge integrators. In pursuing innovation, they are the source of legitimation and locus of experience; they play a crucial role in bridging the 'managerial gap' by facilitating the absorption and assimilation of new technological inputs necessary for a successful transfer (Bessant and Rush, 1995).

Fincham et al., (2013) outline three fundamental characteristics of management consulting. Firstly, consultants help in diagnosing and/ or addressing management challenges. Secondly, consultants operate externally to the specific problem at hand and do not bear responsibility for implementation. And lastly, the support provided is temporary in nature.

The 'digital turn' in the 1990s carved out a clear future specialization for management consultancies to use information technology based organisational information systems to solve organisational problems that eventually led IT consultants as important success factors of the digital transformation projects (Bensberg et al., 2019; Bloomfield and Best, 1992; Bloomfield and Danieli, 1995). New technology based firms and the emergence of new industries (Shearman and Burrell, 1988) opened up not only the market of management consultancies but made them undergo significant changes themselves. In the digital era, the traditional face-to-face nature of management consulting, which heavily relied on personal connections, appeared to be at risk due to the rise of digital transformation and technological advancements, further compounded by the pandemic (Mamedova et al., 2022). They adapted to the changed context by embracing digitalization in varying degrees (Crișan and Marincean, 2023; Fleming, 2022).

The role of consultants in shaping public policy, especially but not just in developing countries, reveals the politicized nature of expertise, potentially undermining ideas of neutrality and legitimacy (Bock, 2014; Ylönen and Kuusela, 2019). As in the case of UK (Begley and Sheard, 2019; Raco, 2018), in general, the coevolution of the liberal reforms and the increasing influence of private sector consultants is evident. Austerity measures have prompted local authorities to adopt a more entrepreneurial approach, seeking to boost development and maximize planning gain returns. Consequently, these reforms are generating new market prospects for a burgeoning consultancy sector and gradually leading to the privatization of the planning system.

3.4 Management Consulting and the New Public Management

With the emergence of the New Public Management (NPM) in the 1980s, policymakers started to actively engage management consultants from the private sector to facilitate the reform of their bureaucracies (Saint-Martin, 1998; Seabrooke and Sending, 2022). The trend of outsourcing short-term, expert-based knowledge production is progressively supplanting the long-term efforts of civil servants and even politicians, with consultants exerting power often in an opaque and undemocratic manner. Termed as “consultocracy” (Hood and Jackson, 1991; Ylönen and Kuusela, 2019), it reduces the planning capacity of public agencies (Kirkpatrick et al., 2023). While examining the role of planning consultants in shaping public policy agendas, (Linovski, 2019) finds that private-sector consultants face competing pressures of an entrepreneurial fee-for-service business model that further complicates the already ambiguous consultant-client relationship (Werr and Styhre, 2002). In their study on consultants role in international organizations, Eckl and Hanrieder (2023) point out that consultants serve as more than just agents of managerialism; they also curate various perspectives, including their own, within reform packages, advocate for specific content, and employ practices that diminish accountability to stakeholders. While consultants actively promote their managerial concepts, seek to expand the reach of their business model and prioritize client satisfaction, their privileged access can inadvertently disempower others. Furthermore, consultants being expert knowledge workers exert varying degrees of control over both the methods and goals of service delivery (Kipping and Kirkpatrick, 2013).

Based on a comprehensive multisectoral case study conducted in Finland, Ylönen and Kuusela (2019) propose a fourfold typology to illustrate the impact of consultocracy on public administration. They point out that the growing dependence on consultants leads to the monopolization and privatization of public knowledge, resulting in dependencies, erosion of tacit knowledge, weakened accountability, and an increased emphasis on instrumental rationality.

To sum up, in order to study the framing of digital transformation by management consultants, we need to consider the basic adhoc nature of consultancy as pursued by external professionals who provide specialized expertise and project-based, problem-centred advisory services to organizations. They furnish information, resolve issues, and offer recommendations based on technocratic imaginaries and diagnostic assessments. They assist with implementation, foster consensus, and serve as sources of information, standard setters, knowledge brokers, and integrators, particularly in innovation where they bring legitimacy and expertise. However, their external position and short-term focus limit their legitimacy, accountability and responsibility for implementation.

Furthermore, the growing reliance on consultants raises concerns about the monopolization and privatization of knowledge. Dependencies on external expertise can erode tacit knowledge within organizations and weaken accountability mechanisms. This trend is further exacerbated by neoliberalism, privatization, and managerial optimization, which emphasize instrumental rationality over holistic organizational or societal considerations. The politicized nature of expertise within consulting also raises questions about the socio-economic ordering by consultancy practices, as they evaluate governance systems without addressing accountability or legitimacy concerns.

4 Digital Transformation According to Management Consultancies

As pointed out earlier, digital transformation has emerged as a significant area of work for all major consulting firms. In this section, we identify the overall themes and framing of digital transformation as put forth by several reports, white papers and dossiers from McKinsey, Bain & Co, BCG, Deloitte, E&Y, KPMG, PwC, Accenture, and SAP. While there are overlapping themes and focal areas, each firm brings its own unique understanding, specialization, and emphasis to the concept.

Overall, they characterize digital transformation as using digital technologies to integrate and optimize all aspects of a business by enabling innovation, creating new business models, and improving operational efficiency. This involves applying digital capabilities to adapt and reimagine their processes, products, and assets to enhance efficiency, customer value, risk management, and monetization opportunities.

Across the firms, there are several overlapping themes and focal areas: all acknowledge the importance of developing a clear *digital strategy and vision* aligned with business objectives. McKinsey, PwC, BCG, Deloitte, E&Y, and Bain & Company emphasize the need for a holistic digital strategy that incorporates customer-centricity, innovation, and long-term goals. They stress the importance of understanding market disruptions and identifying digital opportunities for growth. Accenture and SAP take a step further by

focusing on *Intelligent Enterprise*, where digital technologies are integrated to drive innovation, agility, and real-time decision-making.

Customer-centricity is a shared theme across all the consulting firms' reports recognizing the significance of delivering exceptional customer experiences with the help of digital technologies, data analytics, and personalization to enhance customer engagement, loyalty, and satisfaction. While the emphasis on customer-centricity is consistent, they employ different approaches to achieve it.

The strategic value of *data and analytics* is commonly recognized by all the firms. They stress the importance of investing in data management, analytics capabilities, and data-driven decision-making. The firms explore the potential of advanced analytics techniques, such as AI, machine learning, and predictive modelling, in unlocking the value of data.

Agility is a common theme. They advocate for the adoption of agile methodologies, fostering cross-functional collaboration, and creating a culture of experimentation and learning. This enables organizations to respond quickly to market changes, iterate on digital initiatives, and drive innovation.

Technology adoption and integration is central to digital transformation across all reports. The role of technologies such as cloud computing, AI, IoT, machine learning and automation are especially prevalent across the reports. They highlight the need to assess the relevance of these technologies, integrate them into operations, and build robust technology architectures.

Talent and skills development, especially acquiring and developing of digital skills by personnel are emphazised mostly across the reports. They highlight the need to attract top digital talent, upskill existing employees, and foster a culture of continuous learning and innovation. The firms device varying approaches to talent and skills development, including reskilling programs, collaboration with educational institutions, and partnerships with external experts.

The documents identify *change management and strong leadership* as critical factors for successful digital transformation. They highlight the need for effective communication, employee engagement, and cultural shifts to create a digital-first mindset.

The reports broadly recognize the social implications of digital transformation by mentioning the importance of creating an inclusive digital economy that benefits all, addressing the digital divide and inequalities, considering ethical considerations in the use of digital technologies, promoting citizen engagement and participation, and striving for environmental sustainability. Some reports address the impact of digital transformation on the workforce, advocate for reskilling and upskilling programs, and emphasize the need for ethical frameworks and responsible digital practices. They also

acknowledge the role of the public sector in driving digital transformation and advocate for effective governance and policy frameworks. There is an overall recognition that digital transformation is shaping the society and driving social change though there are rarely any emphasis beyond the parameters of business innovation and market operation.

5 Implications of Management Consultants' framing of Digital Transformation

As observed in the previous section, management consultancies mostly emphasis on business innovation and perceive digital transformation as a comprehensive endeavour that involves the integration of digital technologies and organizational adjustments. This approach places significant attention on strategic planning, innovation in business models, and the creation of enhanced customer experiences through new processes. Their primary focus is on disrupting the market environment by formulating digital strategies and visions, prioritizing customer-centricity, implementing agile methodologies, incorporating new technologies, fostering talent and skill development, and successfully managing change and leadership within organizations. This study identifies the following specific notable aspects in the framing of digital transformation:

5.1 The Neoliberal Managerial Logic of Digital Transformation

The way in which management consultancies orient digital transformation is embedded in the neoliberal managerial logic though they barely acknowledge it. This may have or result in partial and biased understanding about rights, freedom, security, work, market, consumption, spatial arrangements and so on. In the context of public sector interventions, for instance, this orientation essentializes the market logic without giving room to explore or engage with other possibilities particularly because privatization of public services and resources are ingrained in this framing of digital transformation.

Furthermore, the understanding of society is by and large restricted to as consumers who are the target of market, who are also seen as the recipients or the beneficiaries of the transitions. Issues like inclusion, digital divide and differential access are addressed from the same angle. The impact of digital transformation on the work and workforce focuses on reskilling and upskilling programs. The sections on ethics and responsible digital practices most often do not provide guidelines or frameworks to implement. The visions of future rarely foresee citizens' participation.

5.2 Digital Transformation as Universalizing Project

There is a globalizing, universalizing outlook that underly the framing of digital transformation where infrastructures, processes, and imaginaries can be drawn from a universal palette of skills, technologies and expertise without taking into account of the contextual specificities. This has far-reaching consequences with regard to who and what are included and excluded in digital transformation. It is also about who bears the cost and responsibilities of these profound changes. What is being implemented within uniformly structured business organizations are being transmitted to complex and diverse societies, cities and states that can lead to disastrous consequences (Kempeneer and Heylen, 2023).

The technocratic and managerial framing of digital transformation does not include the space for fundamental questions that may directly or indirectly connected to the wide-ranging changes it brings forth regarding equality, justice, identities, democratic participation or structural inequalities. These are absent from the pragmatic solutions that are envisioned in most of these publications.

5.3 Digital Transformation as a Technocratic Process

Thirdly, there is a great deal of techno-centrism and technological optimism in the framing of digital transformation as perceived by management consultancies. Adoption of new technologies and integrating them to the operational processes constitute the backbone of all articulations on digital transformation. Technologies are seen as value-neutral tools that could be embedded in the modular systems that results in digital transformation. The only technological vulnerability that comes out prominently in this framing is digital security.

This framing also gives a lot of importance to quantification in the assessment of digital transformation. Combined with the immediacy of fragmented, flexible, adaptable form of work, the mechanisms of quantification can play a crucial role in externalizing what is beyond the immediate measures of quantified project evaluation. By its very adhoc nature, the emphasis of the prescriptions and modes of analysis follow an internal logic which makes this framing inward-looking and self-contained.

6 Conclusion

If we contextualize the implications observed from the documents in the case of smart cities mentioned earlier in this essay, one could argue that digital transformation, as envisioned by management consultancies, underlies forms of governance ingrained with a particular way of social and political ordering. As Vanolo (2014) suggests, the emergence of novel concepts for envisioning, structuring, and governing urban environments introduces both innovative approaches to managing urban systems and a distinct ethical framework that categorizes cities as either 'desirable' or 'undesirable.' Consequently, the discourse surrounding smart cities holds the potential to exert considerable influence on shaping compliant individuals and establishing political authority. This enables the smart city narrative to function as a potent instrument for generating obedient citizens and bolstering political legitimacy. It is especially so, as Sepehr and Felt, (2023) finds in the case of the smart city in Vienna where there is a notable absence of citizen involvement in shaping these future visions. From this angle, when we analyse the ‘political nature of patterns’ (Kaufmann et al., 2019), prediction that happens in predictive policing, as Hong (2023) argues, is not a technological tool for predicting future outcomes, but ‘a social model for extracting and concentrating discretionary power’.

This study limits itself to the framing of digital transformation by management consultancies as articulated in their published works. Of course, it is empirically important to see whether the consultations are anchored or restricted as per these definitions to see whether these reports act only as framing devices to attract clients or more meanings attached to them as in approach papers. Furthermore, concrete empirical evidence is required to understand the situated process of enactment of the framing of digital transformation. It is also important to see how these framings are embedded and leading to the structural changes that states and organizations undergo.

This paper is not mean to run against digital transformation or the role of management consultants who taking part in digital transformation. As a multivalent process and achievement, digital transformation or the role of management consultants cannot, and should not be confined into certain boxes. This is an attempt that can help us to situate the process of digital transformation in its contexts and open the black-box to develop more comprehensive ways of understanding the deep-seated changes that we undergo. It is certainly important to broaden the realm of digital transformation by incorporating the wider social, technological, political and economic questions into the framing so that it is inclusive, sustainable and meaning for people, societies and environments at large.

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