

Diversity in GovTech: Who's Represented in Innovative Technology Supplied to Public Administration?

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Abstract. This study investigates the potential role of diversity in shaping innovation outcomes within the GovTech sector, an emerging domain where startups collaborate with public administrations to drive digital transformation. While GovTech is positioned as a vehicle for more agile, inclusive, and citizen-oriented public services, its effectiveness hinges on the extent to which it mirrors the populations it serves. Grounded in theories of diversity management and diffusion of innovation, this research explores how the demographic composition of GovTech founders compares to public administration employees, the broader startup ecosystem, and the general citizenry in Germany. The study employs a mixed-methods approach, combining 108 expert interviews with GovTech founders and comparative analysis using secondary data from national datasets. It focuses on three diversity dimensions: gender, migration background, and socioeconomic (labor vs. academic) background. The findings reveal substantial misalignments. Gov-Tech startups are heavily male-dominated (85.7% male founders), starkly contrasting with the higher female representation in public administration (58.6%) and the near gender parity in the citizenry. Migration background is also underrepresented among GovTech founders (22.7%) relative to citizens (28.6%), though aligned with general startup trends. GovTech shows relatively strong socio-economic inclusivity, with 62.8% of founders from labor backgrounds, exceeding both startup and citizen benchmarks. These demographic mismatches raise concerns about the representational legitimacy and inclusiveness of GovTech solutions, which may limit their relevance, adoption, and impact. Public administrations, while more gender-diverse, also exhibit gaps, particularly in migration and socio-economic representation, potentially compounding the disconnect between technology providers and end-users. The study proposes strategic responses, including inclusive procurement policies, support for diverse founders, and cross-sector alignment initiatives to strengthen equity in digital public services.

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1. Introduction

The intersection of diversity and digital innovation in the public sector has garnered significant attention, as public administrations strive to deliver equitable, citizen-centric services through technological transformation (Chandler, 1984; Nose, 2023). In this context, GovTech — an emerging technology market at the crossroads of government and technology — has emerged as a relevant supplier for public sector innovation (Bharosa, 2022; Niehaves and Klassen, 2024). Through partnerships between public administrations and startups, GovTech promises to overcome traditional bureaucratic constraints and foster solutions that are more inclusive and reflective of diverse citizen needs (Niehaves and Klassen, 2024).

Nevertheless, a new avenue to procure solutions, does not necessitate a higher degree of diversity. It has long been recognized that public administrations actions are biased through culture, socialization and bureaucratic structures (Battaglio et al., 2019). Such biases may foster prejudice, which can negatively affect how individuals evaluate and interact with others, potentially leading to unequal treatment or exclusion (Wyszynski, 2020). Research in the last few years depicts a similar trend in the results of technologies, specially those used as decision support systems in public organizations (Buolamwini, 2018; O'Connor and Liu, 2024). As such, both solutions and the organizational makeup of solution providers are becoming more central in shaping digital services for citizens (Bauer, 2025).

Despite the providers of GovTech solutions, GovTechs, being attributed high potential and a clear value proposition (Bharosa, 2022), a gap exists in research on how diversity within GovTech compares to other relevant groups, such as the broader startup ecosystem, public administration personnel, and the citizenry their solutions aim to serve. Without this understanding, it remains unclear whether GovTech can fulfill the promise of fostering equity and inclusion or rather simply replicates existing disparities (Bharosa, 2022). This study addresses such gap by posing the research questions:

RQ: How do diversity measure in GovTech boards compare to their clients and service recipients? Which effects on representation and bias does this entail?

To answer the question, we draw on the theoretical lenses of diversity management and diffusion of innovation theory (McNutt et al., 2016; Sabharwal et al., 2018). Diversity management highlights the organizational benefits of inclusive team compositions, while diffusion of innovation theory emphasizes the importance of alignment between stakeholders for successful technology adoption. Together, these perspectives provide a robust foundation for analyzing diversity's role in shaping GovTech's impact.

Previous research in diversity management and public sector innovation (vom Brocke et al., 2009, 2015) suggest three attributes of diversity as most pertinent for further investigation: 1. *gender*, 2. *migration backgrounds*, and 3. *working-class/labor backgrounds* (Chen, 2014; Gross-Gołacka et al., 2022; McGrandle, 2017). Thus, our research involves collecting and analyzing data on these diversity dimensions from GovTech startups, general startups, public administration employees, and citizens. The findings reveal notable alignments and misalignments. GovTech startups closely mirror the broader startup ecosystem but diverge significantly from the demographics of their public administration clients and citizen end-users. These discrepancies show opportunities for innovation and areas where improved representation could enhance trust, alignment, and inclusivity.

This study contributes to the emerging discourse on GovTech and public sector innovation by offering a data-driven assessment of diversity across relevant groups. By identifying gaps and proposing pathways for addressing them, we provide insights for policymakers, GovTech startups, and public administrations seeking to foster equity and inclusion in the digital age. Additionally, we outline future research directions to deepen understanding and extend the applicability of our findings, including the exploration of international contexts and the use of focus groups to further evaluate diversity's role in GovTech's evolution.

2. Conceptual and Theoretical Background

2.1. Diversity in the Public Sector

Public administrations serve as the extended arm of political institutions, tasked with representing and safeguarding the interests of citizens. This role becomes especially significant in the design and implementation of

digital infrastructure that provides critical governmental services to often under-served populations (Bharosa and Janowski, 2024; Desai and Manoharan, 2024). Inclusive and equitable infrastructures are essential to reduce the digital divide and ensure that all citizens, in particular those from marginalized communities, have access to critical digital public services (Denhardt and Denhardt, 2015). For this, representation plays a central role in safeguarding citizen interests by ensuring diverse perspectives are embedded in the development and governance of such systems (Chandler, 1984).

Diversity management has been widely shown to have a significant positive impact on the performance of teams and organizations, enhancing creativity, problem-solving, and decision-making quality (Bassett-Jones, 2005). However, research on diversity in general often times lacks carryover, as public institutions represent a specific case due to their highly structured and hierarchical nature (Choi and Rainey, 2010; Sabharwal et al., 2014). While these structures enable standardization and accountability, they also limit the adaptability needed to effectively integrate components of diversity into decision-making processes (Oppong, 2013). Furthermore, public administrations are increasingly expected to adhere to international frameworks, such as the *United Nations Global Compact on Diversity, Equity, and Inclusion* or the *Charta of Diversity*, which emphasize the importance of embedding these values into organizational practices and culture.

Despite aspirations, public administrations often struggle to realize diversity, equity, and inclusion goals not only externally through politically created policy, but also internally. Issues such as under representation of minority groups, limited avenues for inclusive participation, and the bureaucratic inertia inherent in many public institutions present persistent challenges (Sabharwal et al., 2018). These struggles can undermine their ability to act as representatives of diverse citizen interests, particularly in the context of rapidly evolving digital governance demands (McNutt et al., 2016). Addressing these challenges requires not only systemic reforms to improve representation within public institutions but also a commitment to incorporating diverse stakeholder input into the design and operation of digital public infrastructure, a process that becomes even more pressing in the face of an overaging populus of public servants and a lack of aspiring junior staff (Desai and Manoharan, 2024).

2.2. Diversity in Diffusion of Innovation

Diversity within public administrations is not only critical for equitable representation, but may also serve as a driver of innovation and success (Desai and Manoharan, 2024). The integration of diverse perspectives fosters creative problem solving (Bassett-Jones, 2005) and enables public institutions to design digital public infrastructures that are more inclusive and aligned with the needs of all citizens. This becomes even more relevant in times of growing biases visible through solutions deployed (O'Connor and Liu, 2024). The need for such diversity-driven approach is particularly relevant in the context of the diffusion of innovation, where the acceptance and adoption of new technologies are influenced by the alignment between stakeholders (Tseng et al., 2024).

Isomorphism, a concept from institutional theory, highlights the tendency of organizations to become similar over time, driven by normative, mimetic, and coercive pressures (DiMaggio and Powell, 1983). This similarity fosters positive business relationships by reducing uncertainty, increasing trust, and facilitating collaboration (Bartoli and Rouet, 2023; Bauer, 2025; Li and Chung, 2020). Previous research on GovTech has found indicators, that startups conform in their organizational makeup to better represent public administration officials wishes (Bauer, 2025). In theory, when public administrations share commonalities with the citizenry they serve and the technology providers they engage with, the likelihood of successful relationship development and innovation diffusion increases (Frumkin and Galaskiewicz, 2004; Lodge and Wegrich, 2005). For instance, public institutions that reflect the diversity of their citizens are better positioned to understand and address their unique needs, thereby enhancing the acceptance of new technologies and services.

The principle of similarity creating higher acceptance underscores the importance of diversity as a strategic asset in public administrations (Li and Chung, 2020). By mirroring the diversity of the populations they represent and fostering alignment with technology solution providers, public institutions can build stronger relationships and facilitate smoother innovation adoption. This alignment not only enhances trust but also ensures that digital public infrastructures are designed with inclusivity and accessibility in mind, addressing societal challenges such as the digital divide (Frumkin and Galaskiewicz, 2004).

The expectation, therefore, is that a higher degree of diversity mirroring between public administrations, cit-

izens, and technology solution providers will lead to a greater probability of successful diffusion of innovation. This dynamic exemplifies the interconnectedness of diversity, representation, and innovation, sketching around the need for public institutions to prioritize diversity as a core component of their digital transformation strategies.

2.3. Government Technology - GovTech

Government technology - or GovTech - has emerged as a promising trend to address the restrictions faced by public administrations in attaining technology-driven innovation (Bharosa, 2022). By creating partnerships between public and private actors, GovTech offers an alternative pathway for digital transformation, bypassing the challenges inherent in traditional public sector structures (Bharosa and Janowski, 2024; Niehaves and Klassen, 2024). Defined by the European Union as "technology-based cooperation[s] between public and private sector actors supporting public sector digital transformation", the concept is further refined to focus on startups and small- to medium-sized enterprises (SMEs) (of the European Union, 2024). These dynamic entities are seen as key players in driving future technology innovation diffusion within the public sector.

In the broader sense, GovTech represents the most recent wave of emerging technology markets, with an estimated market size exceeding 50 billion € in Europe alone (Fund, 2024; Selke et al., 2024). The sector is largely driven by small-scale entrepreneurs who provide innovative technology solutions without relying on the dominant influence of BigTech actors (Niehaves and Klassen, 2024). This independence not only fosters competition but also enhances the diversity of ideas and approaches available for public sector transformation (Kolain and Hillemann, 2022). Startups within the GovTech ecosystem are often deeply personal ventures, reflecting the values, creativity, and diversity of their founders (Isenberg, 2010). This founder-driven ethos imbues GovTech solutions with unique perspectives, further emphasizing the role of diversity in driving innovation (Bharosa, 2022; Nose, 2023).

According to Bharosa (2022), GovTech ventures promise higher levels of citizen centrism and deliver direct value to the recipients of public services. This citizen-centric focus underscores the importance of diversity within GovTech teams, as their composition directly influences the inclusivity and relevance of the solutions they develop (Isenberg, 2010; Nose, 2023). The diversity at the highest levels of these organizations can ensure that public services are designed to meet the varied needs of the populations they serve.

Striving for higher degrees of diversity within GovTech teams is essential to align with the broader goals of diversity management discussed earlier. This alignment may be necessary so that the solutions procured by public administrations not only reflect the values of inclusivity but are also developed by teams that embody those values. As GovTech continues to grow as a sector, the emphasis on diversity—both within the teams and the solutions they offer—will play a critical role in shaping its impact on public sector digital transformation and societal progress (Edquist and Zabala-Iturriagagoitia, 2012).

To summarize, this study exploratorily investigates how diversity within GovTech compares to public administrations and the citizenry, examining key dimensions such as gender, migration background, and socioeconomic status. The findings highlight significant disparities between these groups, emphasizing the critical role of representation in fostering equity and innovation in public sector digital transformation.

Building on the theoretical insights into diversity management and diffusion of innovation in the context of GovTech, the following section outlines the methodological approach of this study. We then report the findings, describing diversity metrics across the examined groups. In the discussion section, we comprehensively discuss the results, addressing implications for practice and policy. Finally, we outline limitations and propose directions for future research.

3. Data and Methods

To collect data on diversity attributes, previous research suggests three primary methods: 1) using publicly available data through social media outlets, e.g., LinkedIn (Hickey et al., 2022), 2) conducting surveys, e.g., Statista (2024) (Wise and Tschirhart, 2000), or 3) data collection through expert interviews, e.g., self-collected information available in this paper (Schultze and Avital, 2011).

For the current study, we collect data using a combination of survey and expert interview approaches. Data on diversity attributes among GovTech founders in Germany were collected as part of a larger qualitative study to examine GovTech success factors. We conducted interviews with 108 GovTech founders where we also gathered specific information on diversity attributes (i.e. distribution of gender, migration background and labor background in the composition of the founding teams) based on a questionnaire. From these 108 interviewees, we received 100 responses to the questions on diversity attributes of 238 GovTech-founders. To compare the data with the diversity structure of GovTech clients and services recipients (i.e., startups in general, public administration employees, and citizen demographics), we retrieved data from publicly available sources with a temporal variance of one to three years due to differing data availability. In particular, the data sets were sourced from Bertelsmann Stiftung (2024), Bundesinstitut für Bevölkerungsforschung (BiB) (2022), Bundesverband Deutsche Startups e.V. (2023), and Statista (2023, 2024) and Statista (2021).

For the following paper we use founders self-assessment for the named dimensions without further discussion or elaboration. In general an understanding of the three dimensions had emerged as:

Gender: A social and cultural construct that classifies individuals based on characteristics typically associated with masculinity and femininity, often aligning with but distinct from biological sex. In the study, we did not find any non-binary attributed founders.

Migration Background: Refers to individuals who are either immigrants themselves or have at least one parent born outside the country of residence, encompassing both first- and second-generation migrants.

Labor (or Academic) Background: Denotes an individual's parents employment history, occupational status, or socioeconomic position related to the labor market, often shaped by factors such as education, job type, and industry. Here we included only founders as labor background individuals, whose parents were both non-academic.

4. Results

Table 1 shows an descriptive overview of the distributions of diversity attributes across GovTech founders, startups in general, public administration employees, and citizen demographics. To statistically account for the overall discrepancies between the proportions of diversity attributes across the groups, we performed χ^2 -tests (see below). Note that, gender is attributed as binary, as information provided by GovTech founders and publicly available statistics only accounts for them. Migration is defined as per the European Unions understanding (European Migration Network, 2024).

Tab. 1 – Overview of the proportional distributions of diversity attributes across GovTech founders, startups, public administration employees, and citizen demographics. Key: m = male, f = female, nm = no migration background, mi = migration background, lb = labor background, and ab = academic background.

		Gender		Migration background		Labor background
GovTechs	m	85,7%	nm	77,3%	lb	62,8 %
	f	14,3%	mi	22,7%	ab	37,2%
Startups	m	79,0%	nm	70,0%	lb	54,5%
	f	21,0%	mi	21,0%	ab	45,5%
Public administration	m	41,4%	nm	92,0%	lb	./.
	f	58,6%	mi	8,0%	ab	./.
Citizens	m	50,7%	nm	71,4%	lb	72,2%
	f	49,3%	mi	28,6%	ab	27,8%

4.1. Gender Differences

Interview information and further data sourced from Bundesinstitut für Bevölkerungsforschung (BiB) (2022) and Statista (2024) were included in the analysis. The χ^2 -test revealed a highly significant difference in the proportion of males and females across GovTechs, startups, public administration and citizens ($\chi^2=60.19, p<0.001$) indicating that the distribution of gender differs significantly depending on the group.

In GovTech startups, 85.7% of founders identify as male, while only 14.3% identify as female, see Figure 1). This is slightly higher than the gender distribution in startups more broadly, where 79% of founders identify as male and 21% as female. In comparison, public administration employees demonstrate a starkly different distribution, with 41.4% identifying as male and 58.6% as female, aligning more closely with the near-equal gender distribution among the general citizen population (50.7% male, 49.3% female).

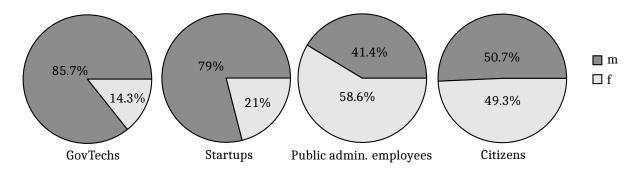


Fig. 1 – Distribution of founders' gender identification in Germany (dark=male, light=female).

The pronounced gender disparity in GovTech startups suggests potential barriers to female participation at the entrepreneurial level. This imbalance may limit the diversity of perspectives in GovTech solutions, potentially impacting their inclusivity and effectiveness. Public administrations, with a higher representation of women, could serve as a model or partner to promote more gender-equitable practices in the GovTech sector.

4.2. Migration Background

The analysis of the combined data from interviews and Bundesinstitut für Bevölkerungsforschung (BiB) (2022), Bundesverband Deutsche Startups e.V. (2023), and Statista (2023) showed a significant difference of the proportions of people having a migration background across the groups ($\chi^2=14.16, p<0.01$). This suggests that the migration distribution varies significantly across the categories.

In particular, the data indicate that 22.7% of GovTech founders have a migration background, closely mirroring the 21% found in the broader startup ecosystem. In stark contrast, only 8% of public administration employees report having a migration background, compared to 28.6% of the general citizen population, see Figure 2. This gap between public institutions and the citizenry they serve raises concerns about representation.

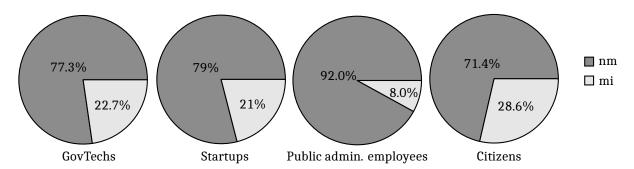


Fig. 2 – Distribution of founders' with migration background in Germany (dark=no migration, light=migration).

The relatively low presence of individuals with migration backgrounds in public administrations highlights a significant underrepresentation issue. This discrepancy could hinder the ability of public institutions to address the needs of diverse populations effectively. The alignment of GovTech startups with general startup migration demographics indicates a potential avenue for fostering innovation through more diverse team compositions, but might also hint at potential pitfalls for similarity-driven acceptance of solution procurement teams in public administrations.

4.3. Labor Background

For the labor background diversity attribute, the χ^2 -test showed a significant difference between the distributions ($\chi^2=6.75, p<0.05$) indicating that the proportions of individuals with labor backgrounds differ significantly across the groups. Note that we have excluded missing values of public administration employees. In addition to the data collected during our interviews, we retrieved data from Bertelsmann Stiftung (2024) and Statista (2021).

In particular, the data indicates that 62.8% of GovTech founders come from labor backgrounds, while 37.2% have academic backgrounds, see Figure 3. Startups overall show a slightly more balanced distribution, with 54.5% from labor backgrounds and 45.5% from academic ones. Unfortunately, no detailed data on the labor or academic backgrounds of public administration employees was available for comparison. Among the general citizenry, 72.2% have labor backgrounds, while 27.8% have academic backgrounds.

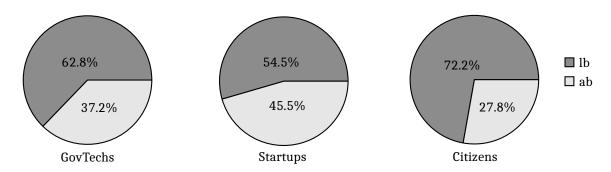


Fig. 3 – Distribution of founders' with labor background in Germany (dark=labor, light=academic).

The high proportion of GovTech founders with labor backgrounds underscores the accessibility of the GovTech sector for individuals outside traditional academic pathways. This inclusivity may foster practical, grounded solutions. However, the absence of equivalent data for public administration employees highlights a need for further research to assess how aligned public institutions are with the populations they serve.

4.4. Generalization of Findings

Our study show significant disparities in diversity across GovTech startups, public administration, and citizen demographics, depicting both opportunities and challenges in achieving equity and representation. They carry relevant implications for the GovTech sector and its potential to drive inclusive digital transformation (Bharosa, 2022).

Gender representation: The stark gender disparity in GovTech startups, with only 14.3% of founders identifying as female, contrasts sharply with the more balanced gender distribution in public administrations (58.6% female). This disparity limits the diversity of perspectives in GovTech leadership and, consequently, the inclusivity of the solutions developed. Given that GovTech ventures are deeply founder-driven, this underrepresentation likely influences the prioritization of user needs in GovTech solutions. Addressing gender diversity in the GovTech ecosystem may show to be an inhibitor to fostering more citizen-centric innovations that resonate with diverse end-users. Public administrations, with their comparatively higher representation of women, could serve as key partners in advocating for more gender-equitable practices in GovTech teams.

Migration backgrounds: The underrepresentation of individuals with migration backgrounds in public administrations (8%) compared to the general citizen population (28.6%) is another critical gap. In contrast, GovTech startups exhibit relatively higher diversity, with 22.7% of founders having migration backgrounds, aligning more closely with citizen demographics. This alignment positions GovTech as a promising avenue for amplifying diverse voices and addressing societal needs that may be overlooked in less representative public institutions.

Labor and academic backgrounds: The high representation of individuals from labor backgrounds among GovTech founders (62.8%) contrasts with broader societal trends, where labor-background representation in professional leadership roles is typically lower. This inclusivity in GovTech shows a potential avenue to serve

as a platform for practical and grounded innovation, often driven by founders' lived experiences. However, the lack of comparable data for public administration employees creates a blind spot in understanding the socio-economic alignment between public institutions and the populations they serve. As GovTech teams develop solutions for public sector challenges, their diverse socio-economic backgrounds may offer advantages in crafting solutions that address real-world needs effectively, but there is a need for additional data.

5. Discussion

The findings highlight a complex landscape of representation across GovTech startups, the broader startup ecosystem, public administration, and citizen demographics. These differences in representation reveal both challenges and opportunities for the GovTech sector in addressing diversity and fostering innovation (Bharosa, 2022; Niehaves and Klassen, 2024).

GovTech startups exhibit the closest resemblance to the broader startup ecosystem in terms of diversity metrics, such as gender, migration background, and socio-economic representation. This alignment underscores the entrepreneurial roots of GovTech as a sector driven by small-scale innovators who share the characteristics and challenges of startups in general (Isenberg, 2010). However, in some areas GovTech teams diverge significantly from public administration employees and the citizens they aim to serve (Bharosa, 2022). For example, public administrations display greater gender parity but are less representative of migration diversity, while GovTech founders exhibit high socio-economic diversity but lower gender and migration balance.

These discrepancies suggest that while GovTech startups are reflective of entrepreneurial norms, they fall short of mirroring the diversity of the populations their solutions target. Public administrations, on the other hand, are more aligned with societal expectations for inclusivity in certain areas, such as gender, but fail to address other critical aspects of representation, such as migration and socio-economic background diversity. This divergence raises questions about where representation matters most and how alignment can be improved across these groups.

The relevance of representation is arguably highest at the point of citizen interaction, where digital public infrastructure solutions directly impact the lives of diverse communities (Bharosa and Janowski, 2024; Frumkin and Galaskiewicz, 2004). GovTech startups, as providers of these solutions, must embody the diversity of their end-users to ensure their products are inclusive, accessible, and effective (Bharosa, 2022). Similarly, public administrations, as the procurers and implementers of GovTech solutions, must prioritize diversity to align their governance and oversight with the needs of the populations they represent.

The current alignment of GovTech startups with the broader startup ecosystem rather than with their client base (public administrations) or end-users (citizens) presents a misalignment that may limit the inclusivity and societal relevance of their solutions (Nose, 2023). Representation within GovTech teams is not only a matter of equity but also a critical factor in fostering trust, collaboration, and innovation. Diverse teams are better equipped to understand and address the multifaceted challenges faced by marginalized groups, enabling the development of more equitable digital public infrastructures (Bassett-Jones, 2005).

Several factors contribute to the observed disparities in representation. In GovTech startups, entrepreneurial norms and the reliance on founder-driven ventures often perpetuate existing patterns of underrepresentation, particularly in terms of gender and migration backgrounds, as these often are counter-elite indicators. These challenges are compounded by systemic barriers, such as limited access to capital and networks for underrepresented groups, which affect participation in the broader startup ecosystem (Isenberg, 2010).

Public administrations, while more structured and inclusive in certain areas, face their own constraints. Bureaucratic inertia, limited recruitment pipelines, and historical biases have contributed to a lack of diversity, particularly in migration and socio-economic backgrounds. These disparities are further exacerbated by the aging workforce and difficulties in attracting younger, more diverse talent (Niehaves, 2011).

To fully realize the potential of GovTech as a driver of public sector innovation, deliberate efforts are needed to address these disparities and align diversity metrics across GovTech teams, public administrations, and the citizens they serve. GovTech startups must prioritize diversity in their leadership and team composition, ensuring that their solutions reflect the needs of diverse communities. Public administrations, as procurers and

partners, play a role in incentivizing this shift by embedding diversity requirements into procurement processes and fostering partnerships with startups that embody inclusive values (Grandia and Meehan, 2017). Previous work indicates an already existing under-representation in female founded ventures in public procurement (Saunders, 2022). As such we see a general trend, that needs to be a addressed. A diversity centered may approach not only strengthens the societal relevance of digital public infrastructure solutions but also build trust and collaboration between public institutions, GovTech startups, and citizens.

6. Limitations and Outlook

The relevance of exploring diversity in GovTech and its alignment with public administration and citizen demographics cannot be overstated. As digital public infrastructures play an increasingly vital role in shaping societal outcomes, understanding how diversity impacts the design, procurement, and delivery of these solutions is essential for fostering inclusivity and equity (Bassett-Jones, 2005; Bharosa, 2022; Bharosa and Janowski, 2024). This study provides an initial overview on alignments and misalignments in representation within one national example, highlighting strengths and gaps within the GovTech sector, public administrations, and their potential interactions with the populations they serve.

Our findings reveal strong alignments between GovTech startups and the broader startup ecosystem, particularly regarding migration and socio-economic diversity (Isenberg, 2010; Niehaves and Klassen, 2024). However, GovTech diverges markedly from public administrations and citizens in terms of gender representation, while public administrations demonstrate notable underrepresentation of migration and socio-economic diversity compared to the citizenry. As such, we were able to exemplarily answer the first part of our research question. Nevertheless, our descriptive data - combined with previous literature - is insufficient to draw substantiated conclusions on the effects this might entail. We see a need for further qualitative research and sense making.

Another critical limitation of this study is the piecing together of data from differing sources. As no research has yet been conducted on our topic, we had to included data from different outlets as well as within a one and a half year timespan between publication. This limits quality and is intensified by the absence of detailed data on the labor and academic backgrounds of public administration employees. Without this information, it remains challenging to assess the socio-economic alignment of public institutions with the populations they represent. Future research must address this gap to provide a more comprehensive understanding of diversity dynamics in public sector organizations.

Additionally, the study's focus on a single country with strong public administrations limits its generalizability. An international comparison would offer valuable insights into how diverse governance contexts influence representation and innovation dynamics in GovTech. This is especially relevant, as both GovTech definitions are used politically motivated depending on the national contexts (Bharosa, 2022; Niehaves and Klassen, 2024), national metrics of migration and and academic versus labor, and public administrations culture differ greatly between national contexts. Such comparisons could reveal best practices and provide a broader foundation for understanding how diversity impacts digital public infrastructure globally.

Further data collection is essential to deepen our understanding of the factors driving discrepancies in representation across groups. Key areas for exploration include: 1) The reasons for observed discrepancies, particularly systemic barriers and organizational practices that hinder diversity. 2) The relative relevance of diversity dimensions, such as gender, migration background, and socio-economic status, from the perspectives of both public administrations and citizens. 3) Potential management practices that public institutions and GovTech startups can adopt to address diversity shortcomings and foster more inclusive ecosystems.

One promising approach for addressing these gaps is the use of focus groups that include representatives from all four groups—GovTechs, public administrations, citizens, and startups in geneal (Belanger et al., 2012; Conboy et al., 2012). These discussions could serve as a platform for evaluating the interplay between diversity, representation, and innovation, generating actionable insights and fostering collaborative problem-solving.

This study relies on descriptive statistics, providing an essential but limited foundation for understanding the complexities of diversity in GovTech. While these statistics offer valuable insights into the current state of representation, they do not capture the underlying dynamics or causal relationships that drive the observed pat-

terns. Future research may adopt mixed methods approaches, integrating qualitative and quantitative analyses to explore further topics relating diversity in GovTech.

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