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Gender Equality as a Driver for Economic Gains in the Technology Sector: A Qualitative Inquiry from South Africa

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Abstract

Gender equality is increasingly recognised not only as a human-rights imperative but also as a catalyst for economic growth, particularly within high-growth technology industries. This qualitative study examines how gender equality can serve as a driver of economic growth within South Africa's technology sector. Drawing on 12 semi-structured interviews with professionals in Gauteng's technology sector, the research investigates the experiences, perceptions, and organisational practices that shape gender dynamics. Anchored in the Neoclassical Growth Model, systems thinking, and frameworks of doing and undoing gender, the study identifies four interconnected themes. Findings show that gender inequality reduces labour-market efficiency, constrains innovation capacity, and undermines organisational competitiveness. While national legislation sets an enabling foundation, gaps in organisational culture, leadership attitudes, and accountability mechanisms limit transformative impact. The study proposes a Whole-of-Society Gender Equality Framework emphasising alignment between policy intent and workplace practice. It concludes that advancing gender equality in the technology sector can enhance productivity, strengthen talent pipelines, improve household welfare, and support national digital-economy goals. The research provides empirical insights into an under-explored African context and highlights the economic urgency of unlocking women's full participation in technology.

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1. Introduction and Background

Gender equality has become a central global development priority and an essential condition for economic progress. The United Nations' Sustainable Development Goal 5 (SDG 5) explicitly aims to "achieve gender equality and empower all women and girls," recognising women's participation as a prerequisite for inclusive growth (United Nations, n.d.). Yet, despite notable progress in education, healthcare, and representation in selected sectors, women remain significantly underrepresented in technology-related professions. This underrepresentation persists even as the technology sector has become a primary driver of modern economic expansion. The current study explores how gender equality can act as a driver for economic gains within South Africa's technology sector, contributing evidence to a discourse that remains underdeveloped in both the African and global contexts.

Technology-oriented industries such as information and communications technology (ICT), software engineering, and artificial intelligence (AI) are critical levers of national productivity and competitiveness (Hooks et al., 2022). However, the benefits of technological innovation are often distributed unevenly, reflecting entrenched gendered divisions of labour (Saifuddin et al., 2022). Women continue to occupy fewer technical and leadership roles, resulting in both social inequity and missed opportunities for economic optimisation. In South Africa, the challenge is particularly striking because the national economy relies heavily on the services sector—of which ICT forms a significant part—yet labour participation by women in technology remains low (Trade and Industrial Policy Strategies [TIPS], n.d.).

The unequal participation of women in the technology sector mirrors broader systemic inequities embedded in patriarchal structures, cultural expectations, and institutional biases (Hebl & King, 2019; Parmaxi et al., 2024). During the apartheid era, women—especially women of colour—were limited to "feminine" professions such as teaching, nursing, or clerical work, while access to technical education and managerial positions was largely denied. Although democratic South Africa has introduced progressive policies such as the Employment Equity Act (1998) and the broad-based black economic empowerment (B-BBEE) framework, structural legacies continue to hinder women's advancement in science, technology, engineering, and mathematics (STEM) fields (Oyenubi & Mosomi, 2024).

The research problem addressed in this paper stems from the limited understanding of how gender equality can serve not only as a moral or social imperative but also as an economic driver in the technology sector. While gender equality is well studied in contexts such as education (Schreiber & Zinn, 2023), healthcare (Greene & Patton, 2020), and the public service (Vyas-Doorgapersad & Bangani, 2020), the technology industry remains comparatively neglected. The question guiding this

research is therefore: How can gender equality be a driver for economic gains within the technology sector in South Africa?

This study is significant for several reasons. First, it integrates gender-equality theory with economic-growth models, positioning gender inclusion not simply as a human-rights concern but as a macro-economic growth factor. Second, it focuses on the technology sector, a domain where women's underrepresentation directly constrains innovation potential. Third, it contributes a qualitative perspective grounded in participants lived experiences—capturing how social norms, organisational policies, and personal motivations intersect to influence gender dynamics in technology workspaces.

South Africa's policy discourse frequently invokes gender empowerment as a principle of social justice. Yet relatively little empirical evidence links gender equality to measurable or perceived economic gains. This paper thus adds to the body of knowledge by analysing participant perspectives within a systems-thinking and contextual-psychology framework (Guthridge et al., 2022). The analysis highlights the interplay between macro-level policies, meso-level organisational practices, and micro-level experiences of individuals—illustrating that genuine transformation in gender equality requires coordinated action across all three levels.

The study was conducted in Gauteng, South Africa's economic powerhouse, which contributes about one-third of the country's GDP (Stats SA, n.d.). The province hosts a concentration of ICT, fintech, logistics, and telecommunications firms, making it an ideal context for exploring gender equality in technology professions. Semi-structured interviews were conducted with 12 participants (both men and women) employed in these sectors. Their reflections provide an interpretive lens on how gender equality—or its absence—affects productivity, innovation, and organisational performance.

1.2 Theoretical foundation

The study draws conceptually from the neoclassical growth model, which identifies labour, capital, and technology as the three drivers of economic growth (Corporate Finance Institute, n.d.). Women's participation in the labour market expands the available human-capital base, increasing productivity and innovation outputs. Yet, gender inequality reduces the effective labour supply, constraining potential economic growth (Ruiters & Charteris, 2020). Complementing this economic view, the framework of "doing and undoing gender" (Saifuddin et al., 2022) and a systems-thinking approach (Guthridge et al., 2022) help explain the cultural and behavioural mechanisms that shape women's experiences in male-dominated technological environments.

1.3 Research objectives

The objectives of the study were to explore how gender equality influences employment opportunities, leadership representation, and productivity within the technology sector. Identify how gender-mainstreaming initiatives within firms contribute to or inhibit economic gains. Examine how interventions at macro (policy), meso (industry), and micro (organisational/individual) levels can collectively drive gender equality and economic benefits. Understand the strategies—such as "doing" and "undoing" gender—that women employ to persist in technology careers. By addressing these objectives, the study contributes to debates on inclusive growth, organisational transformation, and gender-responsive economic development in South Africa and comparable emerging economies.

2. Literature Review

2.1 Gender equality as a global and economic imperative

Gender equality has evolved from a social-justice concern to a recognised economic necessity. The European Council (n.d.) defines gender equality as equal visibility, empowerment, and participation of both sexes in all spheres of life. This equality is fundamental to economic stability and sustainable development (Leal Filho et al., 2023). Global institutions such as the World Economic Forum (WEF) have demonstrated that countries closing the gender gap experience higher GDP growth rates and improved innovation outcomes. Nevertheless, progress has been uneven, and technological fields continue to exhibit persistent disparities (WEF Global Gender Gap Report, 2024).

In developing economies, where economic growth depends heavily on expanding human capital, excluding women from technology roles represents an economic inefficiency (Santos & Klasen, 2021). Gender parity in technological innovation correlates with higher national competitiveness and social cohesion. Yet, despite educational gains, women remain marginalised in high-growth digital occupations, reflecting enduring structural inequalities (Belingheri et al., 2021).

2.2 The gender gap in the technology sector

Globally, women occupy less than one-quarter of technology jobs (Women in Tech ZA, n.d.). Within South Africa, the numbers mirror this global imbalance, despite the country's progressive policy environment. Parmaxi et al. (2024) note that while female enrolment in STEM programmes has increased, their translation into technology employment remains limited due to factors such as workplace bias, lack of mentorship, and inadequate work-life-balance structures. Cultural norms and societal expectations further influence women's persistence in technology careers (Saifuddin et al., 2022).

The concept of "doing and undoing gender" provides an explanatory lens for understanding these dynamics. "Doing gender" refers to performing behaviours aligned with socially accepted femininity, while "undoing gender" involves resisting or transcending these expectations to fit into male-dominated environments (Saifuddin et al., 2022). Women in technology often oscillate between these modes, negotiating between authenticity and conformity. However, these adaptive behaviours can mask institutional shortcomings, placing the burden of change on individuals rather than systems.

Gender inequality also manifests in leadership representation. The WEF (2024) reports that women's presence in senior leadership within the technology, information, and media sectors remains among the lowest worldwide. Even when women reach managerial positions, they often encounter "glass-ceiling" and "sticky-floor" effects, constraining upward mobility (Bairoh, 2024). Conversely, industries such as healthcare and education—traditionally feminised sectors—exhibit higher representation of women in leadership, demonstrating how occupational segregation continues to define gendered patterns of employment.

2.3 Economic theories linking gender equality and growth

Economic literature supports a direct relationship between gender inclusion and macroeconomic performance. The neoclassical growth model posits that increases in labour supply and technological innovation drive economic output (Corporate Finance Institute, n.d.). When women are excluded from productive employment, economies operate below their potential capacity. Ruiters and Charteris (2020) emphasise that female labour-force participation enhances total factor productivity and stimulates innovation through diversity of thought.

Gender equality also contributes to economic resilience through its effects on household welfare. Azzollini et al. (2023) demonstrate that women's employment reduces household earnings inequality and stabilises consumption patterns. Santos and Klasen (2021) further argue that transferring economic resources to women in human-capital-intensive economies yields stronger long-term growth because it enhances education, healthcare, and intergenerational development outcomes. Thus, gender equality functions as both a social and economic multiplier.

2.4 Gender mainstreaming and organisational practice

Gender mainstreaming—the integration of gender perspectives into all organisational policies and processes—has been recognised as an effective mechanism for promoting equality (Verloo, 2005). The Organisation for Economic Co-operation and Development (OECD, 2023) propose a "whole-of-government" approach that embeds gender considerations in legislation, budgeting, and service

delivery. However, research suggests that while macro-level frameworks may exist, implementation often falters at meso (industry) and micro (organisational) levels (Vyas-Doorgapersad, 2018).

In technology firms, gender mainstreaming remains largely symbolic, frequently limited to diversity statements or corporate social-responsibility reports (Bloomberg Gender-Equality Index, 2022). True transformation requires aligning gender equity with performance metrics, innovation goals, and leadership pipelines. Middle managers play a pivotal role as "change intermediaries" bridging senior leadership mandates and operational realities (Kelan, 2022). Their capacity to influence workplace culture determines whether gender-mainstreaming efforts translate into tangible inclusion or remain rhetorical.

2.5 Cultural and psychological contexts: Systems thinking

Contextual psychology and systems thinking highlight that gender equality is shaped by interdependent levels of influence—individual, interpersonal, organisational, and societal (Guthridge et al., 2022). At the micro level, individual beliefs, motivations, and self-perceptions shape women's career choices. At the meso level, interpersonal interactions within workplaces influence belonging and advancement. At the macro level, cultural and policy environments establish enabling or constraining norms. Systems thinking emphasises feedback loops among these levels: societal norms shape organisational policies, which in turn influence individual behaviour, reproducing or transforming the system.

Applying this lens to gender equality in technology reveals that interventions must be holistic rather than isolated. For instance, policies promoting women's participation in ICT must coincide with societal shifts challenging patriarchal attitudes and organisational reforms addressing unconscious bias. Without such alignment, well-intentioned policies risk superficial compliance rather than substantive change.

2.6 Barriers and challenges to women's participation in technology

Empirical studies identify multiple barriers that limit women's entry and persistence in technology careers. These include explicit discrimination, implicit bias, sexual harassment, lack of mentorship, inadequate childcare support, and inflexible work environments (Parmaxi et al., 2024). Socio-cultural constraints—such as gender stereotyping in education—further discourage girls from pursuing technical subjects (Shava, 2021). Teachers' beliefs and parental expectations often reinforce perceptions that technology is a masculine domain.

Another barrier lies in the double-jeopardy effect, where women belonging to multiple marginalised groups (e.g., race and gender) face compounded disadvantages (Hebl & King, 2019; Derous & Pepermans, 2019). In South Africa, this intersectionality is intensified by the legacy of apartheid-era

segregation, which restricted both race and gender access to economic participation. Consequently, even highly educated women encounter difficulties securing technology jobs commensurate with their qualifications.

2.7 Gender pay gap and labour-market inequality

The gender wage gap remains a persistent structural inequity in South Africa's labour market. Studies show that women earn significantly less than men with comparable qualifications and experience (Mosomi, 2019; Casale et al., 2021; Oyenubi & Mosomi, 2024). Although the gap has narrowed since apartheid, inequality remains pronounced, particularly in high-skill, high-income sectors such as technology. The WEF (2024) estimates that it may take more than a century to close the global pay gap at current rates of progress. This imbalance not only undermines fairness but also limits aggregate demand and productivity gains that could result from equitable compensation.

2.8 Doing and undoing gender in organisations

Recent scholarship examines how gender is actively constructed and reconstructed within organisations. "Doing gender" involves reproducing traditional gender norms through everyday practices, whereas "undoing gender" entails challenging or re-negotiating those norms (Kelan, 2022; Saifuddin et al., 2022). Women in technology often engage in both, strategically navigating workplace cultures that valorise masculine behaviours. Kelan (2022) highlights that male middle managers can act as allies in "undoing gender" by normalising inclusive behaviours, such as participating in mentorship programmes for women or advocating for flexible work arrangements.

However, organisational change requires congruence between "saying" and "doing." Grzelec (2024) warns that many firms espouse equality rhetorically but fail to alter underlying structures of power. True undoing of gender demands systemic transformation—integrating equity goals into strategic planning, performance appraisal, and resource allocation.

2.9 Research gaps

The reviewed literature reveals three notable gaps. First, while global studies link gender equality to economic growth, few empirically examine this relationship within the technology sector in developing economies. Second, most studies emphasise quantitative indicators such as representation ratios or wage differences, overlooking the qualitative dimensions of lived experience. Third, there is limited research combining economic theory with social-psychological perspectives, particularly within an African context.

This study addresses these gaps through an interpretivist, qualitative approach that foregrounds the voices of professionals within South Africa's technology industry. By examining perceptions of how gender equality relates to productivity, innovation, and organisational performance, the study contributes both theoretically and practically to the discourse on inclusive economic development.

3. Methodology

3.1 Research design

This study adopted an exploratory qualitative design guided by an interpretivist philosophy. The purpose was to understand how participants in the technology sector perceive the relationship between gender equality and economic gains. Qualitative inquiry was chosen because it enables a nuanced understanding of socially constructed meanings and contextual realities (Myers, 2020; Saunders & Lewis, 2018). The interpretivist stance allowed the researchers to engage empathetically with participants' lived experiences and interpret how social norms, organisational structures, and policy frameworks influence perceptions of gender equality.

The research combined deductive and inductive reasoning. Deductive logic informed the formulation of propositions from existing literature—such as the inverse relationship between gender and employment opportunities and the influence of gender mainstreaming on economic performance. Inductive reasoning guided the thematic analysis of interview data, allowing patterns to emerge from participants' narratives (Yin, 2016).

3.2 Population and sampling

The population comprised men and women employed in technology-related industries in Gauteng Province, South Africa, including information technology, telecommunications, banking, logistics, and cybersecurity. Gauteng was selected because it is the country's economic hub, generating about one-third of national GDP (Stats SA, n.d.).

Purposive sampling was used to identify participants who met specific criteria: (a) currently employed in the technology sector; (b) at least three years of industry experience; and (c) willingness to discuss gender dynamics openly. Snowball sampling helped locate additional respondents through professional networks. Saturation was reached after 12 semi-structured interviews, when no new insights emerged (Guest et al., 2006).

3.3 Data collection

Data were gathered through online semi-structured interviews using Microsoft Teams between February and April 2024. Each session lasted 45–60 minutes. An interview guide was developed based on the four propositions drawn from literature: The relationship between gender and employment

opportunities in the technology sector. Gender-mainstreaming practices and their potential economic implications. The need for multi-level interventions (macro, meso, and micro). Strategies of "doing" and "undoing" gender that enable women's persistence in technology careers. Open-ended questions invited participants to describe experiences, challenges, and observations. Examples included: "How does your organisation promote gender equality?" and "In what ways has gender influenced your career growth?". All interviews were recorded—with consent—and transcribed verbatim. Ethical approval was obtained from the University of Pretoria's Gordon Institute of Business Science ethics committee. Participants signed informed-consent forms guaranteeing anonymity and the right to withdraw.

3.4 Data analysis

A thematic analysis was conducted following Braun and Clarke (2006). Transcripts were imported into Atlas.ti software, and six steps guided the process: Familiarisation with data through repeated reading. Generating initial codes reflecting recurring ideas. Searching for themes that grouped related codes. Reviewing themes for internal consistency. Defining and naming themes. Producing a thematic map showing relationships between categories. Credibility was strengthened by peer debriefing between the two authors, meticulous note-keeping, and verification of coding consistency. Reflexivity was maintained by acknowledging the researchers' positionality—particularly the female researcher's insider understanding of gender issues and the male co-author's academic distance.

3.5 Data quality and ethical considerations

Trustworthiness was ensured through credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility was achieved by triangulating participant accounts and maintaining transparency in analysis. Thick description enhances transferability. Dependability was supported by an audit trail of coding decisions, and confirmability was ensured through verbatim quotations and reflexive journaling. Ethical safeguards included confidentiality, voluntary participation, and secure storage of digital recordings. Participants are referred to as P1–P12 to protect identities.

4. Findings

Four major themes emerged from the data, aligning with the study's propositions: The inverse relationship between gender and employment opportunities. The partial success of gender-mainstreaming policies. The multi-level nature of gender equality drivers. The practice of doing and undoing gender in the technology workplace.

4.1 Gender and employment opportunities

Most participants affirmed that opportunities for women in technology remain limited despite policy commitments. Several respondents noted that recruitment often privileges men, particularly in technical or engineering-oriented roles.

"*When senior positions open, the default assumption is that the role suits a man—someone who can work long hours or travel at short notice*," (P3, female, IT consultant).

Participants linked this bias to deep-rooted stereotypes about competence and availability. Some women reported exclusion from informal professional networks, which constrained advancement. Others mentioned that token appointments occurred to satisfy diversity metrics rather than genuine empowerment. Nevertheless, some progress was visible in firms with explicit inclusion targets or female role models. Younger male participants showed greater acceptance of female leadership, suggesting a generational shift in attitudes.

4.2 Gender-mainstreaming efforts and policy gaps

All participants acknowledged that their organisations had policies referencing gender equality or diversity. However, implementation gaps were evident. Policies were described as "tick-box exercises," with limited accountability or budget allocation.

"*We have the right policies, but they live in documents, not in culture*," (P5, female, software developer).

Respondents highlighted that training on unconscious bias and mentorship programmes were sporadic or externally driven. Smaller firms lacked the human-resources capacity to operationalise gender-mainstreaming frameworks. Participants suggested that linking gender equality to performance indicators and procurement requirements could drive greater compliance.

4.3 Multi-level dynamics: Macro, meso, and micro

Participants viewed gender equality as a systemic issue requiring coordination across levels of society. At the macro level, national legislation such as the Employment Equity Act and Broad-Based BEE provided a foundation, but enforcement was inconsistent. At the meso level, industry associations had started promoting women-in-tech initiatives but faced limited funding. At the micro level, organisational culture and leadership attitudes remained decisive.

"*Policies at government level mean little if line managers don't believe in them*," (P8, male, telecoms manager).

Respondents emphasised that mentoring, flexible work options, and visible female role models were key micro-level interventions. They also pointed out that familial support strongly affected women's ability to persist in demanding technology roles—echoing literature on contextual psychology and systems thinking (Guthridge et al., 2022).

4.4 Doing and undoing gender

Participants described multiple ways of negotiating gender identities in the workplace. Female participants reported consciously modifying behaviour to be taken seriously—lowering voice tone, adopting assertive communication styles, or avoiding emotional expression.

"*You can't show vulnerability; they'll say you're too soft for tech*," (P2, female, systems analyst).

Conversely, "undoing gender" occurred when women defied stereotypes by excelling in technical projects or when male managers championed inclusive behaviours. Several men expressed that active allyship—such as supporting women's participation in technical discussions—helped normalise equality.

"*I used to assume women preferred HR roles. Now I see how bias limits innovation*," (P10, male, project lead).

Overall, the findings suggest that both individual agency and organisational commitment are necessary to undo entrenched gender norms.

5. Discussion

5.1 Interpreting gender inequality in technology employment

The results corroborate the inverse relationship between gender and employment opportunities, confirming Proposition 1. Despite policy progress, structural and cultural factors still privilege men in recruitment and advancement. This aligns with Bairoh (2024), who attributes the slow advancement of women in technology to masculine privilege and meritocratic rhetoric. The findings also resonate with the double-jeopardy hypothesis (Hebl & King, 2019), where women of colour face compounded exclusion.

From an economic perspective, these exclusions represent lost productivity and innovation potential. Excluding half the talent pool from high-growth industries constrains the labour-supply component of

the Neoclassical Growth Model (Corporate Finance Institute, n.d.). Hence, gender equality is not only a moral imperative but also a macro-economic strategy for enhancing output and competitiveness.

5.2 Evaluating gender-mainstreaming practices

Findings under Proposition 2 reveal that gender-mainstreaming efforts have partial and uneven effects. This mirrors Vyas-Doorgapersad's (2018) observation that macro-level commitments often fail at the organisational level. The disconnect between stated intentions and daily practices illustrates the challenge of translating policy into culture (Grzelec, 2024).

Participants proposed linking gender equality to organisational performance metrics, echoing OECD (2023) guidelines on embedding gender goals into governance frameworks. Firms that integrate diversity into innovation strategies—rather than treating it as corporate social responsibility—tend to derive stronger economic benefits (Bloomberg Gender-Equality Index, 2022).

5.3 The need for a multi-level framework

Proposition 3 emphasised that gender equality must be addressed concurrently at macro, meso, and micro levels. The data affirm this systems-thinking view (Guthridge et al., 2022). Policies alone cannot shift workplace cultures; they require reinforcement through industry collaboration and family-level support mechanisms. The macro level sets enabling legislation and fiscal incentives. The meso level—industry bodies, professional networks, and unions—facilitates knowledge sharing and benchmarking. The micro level—organisational culture and individual behaviour—translates policy into daily practice.

5.4 Doing and undoing gender as transformative strategy

Proposition 4 examined "doing and undoing gender." The findings reveal that women employ adaptive strategies to survive in masculine environments, while supportive men play crucial roles as change agents. This dual process corresponds with Kelan's (2022) conceptualisation of undoing gender through allyship. When male managers participate in women's networks or mentorship programmes, they help normalise gender diversity.

However, sustained transformation requires moving beyond individual adaptation to institutional redesign. Organisations must interrogate hidden assumptions that equate competence with masculinity. Leadership training should incorporate gender-sensitivity modules, and performance evaluations should reward inclusive management behaviour.

Undoing gender also involves challenging language, imagery, and metaphors that reinforce bias—for example, describing technical tasks as "hard" and administrative tasks as "soft." Such linguistic reforms, though subtle, signal cultural change.

5.5 Economic implications

The cumulative findings indicate that gender equality contributes to economic gains in several ways:

- Enhanced innovation: Diverse teams generate more creative problem-solving;
  Improved talent utilisation: Broader participation increases labour-market efficiency.;
- Stronger organisational reputation: Firms perceived as equitable attract high-calibre employees and investors; and
- Household welfare effects: Women's earnings strengthen household purchasing power and intergenerational human capital (Santos & Klasen, 2021).

Therefore, gender equality acts as a multi-level economic lever, linking individual empowerment with national development objectives. In South Africa's digital-transformation agenda, closing the gender gap in technology is essential for inclusive growth and competitiveness within the Fourth Industrial Revolution (4IR).

6. Conclusion

6.1 Summary of key insights

This study set out to explore whether and how gender equality can be a driver for economic gains in the technology sector. Through qualitative interviews with 12 professionals in Gauteng, it revealed that: Women continue to face structural and cultural barriers limiting their participation and advancement. Gender-mainstreaming policies exist but are weakly implemented, producing limited practical outcomes. Sustainable change requires alignment across macro-, meso-, and micro-levels of society. The dual practice of doing and undoing gender remains a lived reality for many women in technology, while allyship from men can accelerate transformation.

6.2 Theoretical and practical contributions

The study contributes to theory by integrating economic-growth models with contextual psychology and systems thinking. It demonstrates that gender equality is not peripheral but central to productivity and innovation in technology. Practically, it offers a whole-of-society gender equality framework, emphasising vertical alignment from policy to practice.

For businesses, the findings highlight the need to: Link gender-equality targets to measurable economic outcomes. Embed inclusivity in corporate strategy and performance management. Develop leadership pipelines that normalise women's presence in technical and executive roles.

6.3 Policy and societal implications

At the policy level, the government should strengthen the enforcement of existing gender-equity laws and incentivise firms that achieve measurable progress. Public–private partnerships could expand mentorship and reskilling programmes for women in technology. Education systems should address gender stereotyping early by promoting STEM participation among girls.

Culturally, there is a need to challenge patriarchal narratives that confine women to supportive roles. Media representation, community dialogues, and advocacy networks can help reshape societal perceptions of women in technology.

6.4 Limitations and future research

The study's qualitative scope and small sample limit generalisability. Participants were drawn from Gauteng only, and future studies could include other provinces or cross-country comparisons. Longitudinal research could assess whether firms that implement gender-inclusive practices realise

measurable productivity or profit gains. Quantitative modelling could further test the relationship between gender equality indices and economic-performance metrics within technology firms.

6.5 Concluding reflection

Gender equality is both a social justice imperative and an economic growth strategy. In South Africa's evolving digital economy, unlocking the full potential of women in technology is essential for national resilience and innovation. Achieving this goal requires moving beyond policy rhetoric toward cultural transformation—one that recognises gender equality as integral to sustainable economic prosperity.

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