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Mediatization of National AI Strategies:

The Sociotechnics of Egypt's AI Policy

Mennatullah Hendawy
Nurudeen Olalere

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Abstract

This article examines how national artificial intelligence (AI) strategies operate as mediatized sociotechnical artefacts by tracing the evolution of Egypt's National AI Strategy between its first phase (2017–2021) and its updated version (2025–2030). While mediatization research has shown how media logics reshape politics, governance and everyday life, their role in structuring national AI policy remains underexplored, particularly in the Global South. Drawing on mediatization theory, the article asks how shifting media and public discourses around AI ethics, risk and opportunity are reflected in, and co-produced by, Egypt's AI strategies.

Empirically, the study uses qualitative document and thematic analysis of the two strategy versions, related policy reports and official communications. The analysis focuses on how the strategies frame AI's purposes, position citizens, articulate ethics and governance, and reference broader imaginaries of national progress and competitiveness.

The findings show a marked shift from a technology-centric to a societal-centric policy paradigm. The 2017–2021 strategy frames AI primarily as a lever for economic growth, regional competitiveness and infrastructure, with ethics and inclusion invoked largely at a rhetorical level and citizens positioned as passive beneficiaries. By contrast, the 2025–2030 strategy embeds concerns about accountability, digital power asymmetries, public engagement, urban development, heritage conservation and Arabic-language foundational models, repositioning citizens as stakeholders and moving from imitative adoption toward aspirations of technological sovereignty. Across both phases, the strategies function as communicative instruments that respond to and amplify evolving global and national media narratives on AI.

Conceptually, the article advances an understanding of “mediatized AI governance” and demonstrates how national AI strategies in Egypt mediate the relationship between technological development, state authority and societal expectations, with implications for AI policy-making in the wider Arab region.

Introduction

Existing literature offers valuable insights into the interplay between technology and society. Hepp's mediatization theory provides a framework for understanding how media are increasingly intertwined with various social processes and institutions (Hepp, 2013). Scholars have applied this framework to analyze the impact of digital technologies on different aspects of social life, including political communication (Chadwick, 2017), journalism (Mellado, 2015), and everyday interactions (Papacharissi, Z. 2014). The theoretical foundations of mediatization have been further developed to understand the complex interplay

between media, culture and society (Hepp et al., 2015) Furthermore, research has begun to explore the ethical and societal implications of AI, highlighting concerns about bias, privacy, and accountability (Mittelstadt et al., 2016), with some scholars examining the socio-technological dimensions of AI through media sociology perspectives (Mühlhoff, 2020).

However, the specific connection between national AI strategies and mediatization remains underexplored. While some studies address the impact of AI on specific media sectors, there is a lack of comprehensive research investigating how national-level AI strategies contribute to broader societal mediatization processes. This gap is acknowledged by scholars who call for further research on the societal implications of AI governance and policy (Cath, 2020; Taddeo & Floridi, 2018), with recent systematic reviews highlighting the need for comprehensive AI governance frameworks (Batool et al., 2025). Previous work on AI urbanism shows how governance documents are themselves socio-technical co-productions [Hendawy, Elbehairy, & Circles, 2021]. Specifically, there is a need to understand how national AI strategies shape the development, deployment, and adoption of AI technologies, and how these processes influence mediatization across different societal domains.

Therefore, this study aims to contribute to the literature by examining the evolution of national AI strategies from a mediatization lens. The central research question is: This study will address this question by analyzing the case of Egypt's national AI Strategies.

National artificial intelligence strategies (NAS) have become a central focus for governments and international organizations as they seek to navigate the growing impact of AI technologies. Radu (2021) highlights that an increasing number of countries are publishing national AI strategies, reflecting a growing governmental commitment to AI governance and in particular, these documents are beginning to embed a broader set of societal concerns around ethics, public-private roles and institutional change. (Yourell, McAlister, Beatty, & Huberty, 2025) were among the early authors to discuss the transformative potential of AI, emphasizing its implications for economic productivity and labor markets. More recent studies, such as those by (Falck, Röhe, & Strobel, 2024), have begun to explore the ethical dimensions of AI, focusing on how AI systems could exacerbate inequality and affect social justice, prompting governments to revise their strategies to address these issues (Cave & Dignum, 2019). Additionally, sociological research has called for greater attention to AI policymaking processes and their equity implications (Law & McCall, 2024). As AI moves beyond its technical origins, the evolving national strategies increasingly respond to societal expectations regarding transparency, fairness, and accountability.

National AI strategies have been pivotal in framing the public and governmental approach to AI. Early national AI strategies, such as those published by China and the United States, focused largely on the economic potential of AI, positioning it as a driver of competitiveness in global markets. These strategies were highly market-driven and emphasized innovation, investment, and infrastructure development (Agazu & Kero, 2024).

We notice that these strategies often reflect shifts in both governmental priorities and societal concerns over time. The experience of developing countries in formulating AI strategies has revealed particular challenges and approaches distinct from developed nations (Demaidi, 2025). Over time, the scope of these strategies has broadened. Governments have incorporated ethical frameworks, human rights considerations, and regulatory measures, signaling a shift in response to growing societal concerns about AI's impact on privacy, labor markets, and democratic governance. Digital governance initiatives have created both opportunities and challenges for democratic participation (Luna-Reyes, 2017). This marks a notable shift from earlier technology-centric approaches, emphasizing the importance of aligning AI systems with fundamental rights, ethical principles, and robust regulatory oversight to address societal interests such as equality, democracy, and the rule of law (Nathalie A. Smuha (2021)). AI governance has started to integrate elements of societal oversight and regulation, aiming to address concerns about data security and mitigate the potential for AI systems to amplify societal inequalities and harm broader societal interests such as equality, democracy, and the rule of law (Nathalie A. Smuha 2021) The tension between artificial intelligence and collective intelligence

approaches has become increasingly relevant to understanding how national strategies position human agency in relation to AI systems (Halpin, 2025).

While the literature on national AI strategies has grown, there remain significant gaps in our understanding of how these strategies evolve in direct response to changing societal attitudes. (Radu, 2021) There is a need for longitudinal and comparative case studies to examine how AI policies evolve over time and how shifts in these strategies influence technological advances and broader societal responses to AI (Guenduez, Fuchs, & Demircioglu, 2025, p. 20).

This research adopts a qualitative methodology, examining Egypt's national AI strategies over a span of several years. The study will involve two primary methods: document analysis and interviews with policymakers and AI experts. By using these methods, the study aims to map the shift in Egypt's national AI strategies and draw connections between changing policies and sociotechnical concerns.

The findings from this study have several broader implications for both AI policy and societal engagement with AI. First, this study will contribute to understanding how national AI strategies respond to evolving societal concerns about AI governance and ethics. Second, the study will contribute to our understanding of the broader societal dynamics at play in the governance of AI, particularly in relation to how public discourse shapes and is shaped by national strategies (Ouchchy et al., 2020). Finally, the study will add to the theoretical understanding of AI governance, offering insights into the interplay between technological development and social response.

The findings of this study will have wider implications for understanding the societal impact of AI as well as its technical development. This research will provide valuable insights for policymakers, industry leaders, and civil society organizations seeking to navigate the complex challenges and opportunities presented by AI (Köbis & Mossink, 2021). Furthermore, this study will contribute to broader debates about the future of media, communication, and democracy in an increasingly AI-driven world.

Method

To analyze Egypt's National AI Strategy, we adopted a qualitative document analysis approach, drawing on both primary and secondary sources to gain a comprehensive understanding of how the strategy is framed and communicated. The primary sources were the original government documents, including Egypt's National AI Strategy itself, related policy reports, and official statements from ministries. While the secondary sources are the academic and analytical materials used to interpret those documents, such as journal articles, research on mediatization theory, and policy analyses discussing AI governance. We began by reviewing several publicly available versions of Egypt's National AI Strategy found online. These documents served as the foundation for the analysis, providing insight into how the government presents its national vision for artificial intelligence to both domestic and international audiences. We then conducted a detailed document analysis of these versions, comparing their contents with related government publications, policy reports, and official statements issued by relevant institutions. This helped establish the broader policy context and revealed how the AI strategy fits within Egypt's larger digital transformation and innovation agenda.

During this stage, we paid close attention to the structure, language, and framing of each document. We examined how key issues such as ethics, social inclusion, economic growth, and technological sovereignty were discussed, and whether they reflected a consistent narrative across the different versions and policy documents. We also reviewed how the strategy articulated the role of AI in Egypt's development, identifying the extent to which it emphasized innovation, competitiveness, and international collaboration versus issues of regulation, accountability, and social responsibility.

After compiling and organizing the materials, we performed a thematic content analysis guided by the principles of mediatization theory. This theoretical framework, developed by Andreas Hepp and

others, provided a lens for understanding how media and communication logics shape the development and representation of national policies. Using this approach, we explored how Egypt's AI strategy constructs and communicates its relationship between technology, governance, and society. We specifically focused on themes such as governance, public engagement, ethics, national image building, and the sociotechnical framing of AI.

Through this analysis, we aimed to uncover the underlying narratives and discursive patterns embedded in the strategy. For instance, how AI is positioned as both a technological tool and a symbol of modernization and national progress. We examined how the documents mediated the relationship between political vision and technological promise, and how they sought to balance the pursuit of innovation with ethical and societal concerns. We also assessed how the strategy portrays Egypt's role within the global AI landscape, considering whether the language used reinforces national pride, international competitiveness, or dependence on external expertise and partnerships.

In addition to document analysis, we consulted academic databases to identify scholarly discussions that intersect with mediatization theory and national AI policy discourse. We reviewed peer-reviewed papers and theoretical works that discuss how governments use AI strategies as communicative tools to shape public perception, influence policy legitimacy, and construct national identity. This step allowed me to situate the Egyptian case within broader global conversations on the mediatization of technology governance.

Overall, my method combined documentary research, thematic analysis, and theoretical interpretation, providing a multidimensional view of Egypt's National AI Strategy. By examining not only what the policy says but also how it communicates and frames its vision, this approach enables a deeper understanding of the sociotechnical and communicative dimensions underpinning Egypt's AI policy narrative.

The case of Egypt's national AI Strategies is selected due to [Justification for case selection, e.g., its pioneering role in AI development, its specific approach to AI governance, its unique socio-cultural context]. Data collection will involve in-depth interviews with key stakeholders involved in the development and implementation of the national AI strategy, including policymakers, researchers, industry representatives, and civil society actors. This method allows for rich insights into the perspectives and experiences of those directly involved in shaping the AI landscape (Pant, Hoda, Tantithamthavorn, & Turhan, 2025). The interviews will be analyzed using thematic analysis to identify key themes and patterns related to the influence of national AI strategies on mediatization (Dralega, 2023b)

Theoretical Framework: The Mediatization Theory and the Evolution of National AI Strategies

Mediatization theory, developed by Iris Korthagen, provides a framework for understanding how communication processes and digital technologies reshape social institutions—including those governing cities and built environments. Iris (2015) describes mediatization as the diffusion of media logic into decision systems such as planning, governance, and design (Iris Korthagen, 2015). In this context, urban and architectural decision-making increasingly relies on digital visualization, simulation, and AI-assisted modeling tools that mediatize the very act of planning (Lundby, 2014). Kitchin further illustrates how urban planners and architects become “visualizers” within mediatized governance, where AI-based modeling and visualization tools influence how spatial decisions are communicated and justified (Kitchin, 2021).

In the context of national AI strategies, mediatization theory offers a lens through which to explore how media narratives, coverage, and discourse around AI influence the framing, development, and

evolution of national policies (Sloane & Wüllhorst, 2025) . It helps explain how public opinion, government actions, and the media's role in shaping societal understanding of AI are intertwined. The interaction between government actions and media narratives becomes critical, as AI is a technology that increasingly influences all aspects of life, from economic production to ethical and legal considerations (Daly, Hagendorff et al., 2019)

National AI strategies, as public policy frameworks, are not created in a vacuum but emerge in response to technological advancements, societal needs, and media-driven narratives (Mellado, 2015). **Mediatization theory** helps explain how national AI strategies evolve over time as governments adapt their policies to both the technological realities of AI and the shifting societal discourses shaped by media (Hepp, 2019) . The role of global media in shaping national AI strategies is also significant. Evidence from the UAE shows how citizens are framed within mediatized AI governance strategies (Hendawy, Wieland, & Koc, 2025).

Governments often respond to the broader social and cultural contexts in which AI is discussed, using media representations to shape their approach to AI development and regulation (Hendawy, Wieland & Koc, 2025) ..

Over time, the evolution of national AI strategies mirrors changes in media narratives (Cave & Dignum, 2019). Initially, the dominant media discourse around AI was focused on its technological potential to drive economic growth and innovation, a theme that was reflected in early AI policies worldwide (Hendawy, Wieland & Koc, 2025) . As AI technologies began to have more direct societal impacts—particularly in the areas of privacy, employment, and bias—the media discourse shifted, and governments began to integrate ethical considerations, societal impact assessments, and regulatory frameworks into their AI strategies (Taddeo & Floridi, 2018). These evolving media discourses often force governments to reconsider their initial policy approaches, pushing them toward more inclusive, transparent, and socially responsible AI governance (Floridi et al., 2018).

For example, early national AI strategies, such as those in the U.S. and China, emphasized economic competitiveness and technological leadership (Hendawy, Wieland & Koc, 2025) . These initial policies were shaped by media portrayals of AI as a transformative technology that would revolutionize economies and industries (Radu, 2021) However, as media coverage expanded to include issues of data privacy, algorithmic bias, and surveillance, public concerns about AI's ethical implications prompted a shift in national strategies (Cath et al., 2018). Governments, now responding to the growing media-driven calls for ethical AI, began to incorporate discussions on regulation, transparency, and human rights into their policies (European Commission, 2021; Jobin et al., 2019).

Mediatization theory provides a valuable framework for understanding how the evolution of national AI strategies is influenced by changing media narratives (Hjarvard, 2013). As AI technologies evolve, so too do the media discourses that surround them, shaping public perceptions and governmental responses (Hendawy, Wieland & Koc, 2025) . The integration of ethical considerations, regulation, and transparency into national AI strategies reflects a broader societal shift that has been deeply influenced by media-driven debates (Sloane & Wüllhorst, 2025) By tracing the evolution of national AI strategies through the lens of mediatization, we gain insight into the dynamic relationship between media, governance, and societal concerns, offering a comprehensive understanding of how national AI policies adapt to the challenges and opportunities posed by AI technologies in society (Radu, 2021) . We attempt to do so by investigating the evolution of Egypt's National AI strategies (2017 and 2025)

Results

My results following the method we used provide a comprehensive analysis of the evolution of Egypt's National AI Strategy through qualitative document analysis and thematic analysis. I examined the two versions of Egypt's AI strategy: the initial version (2021) and the updated version (2025 - 2030). The analysis focused on identifying ethical considerations, societal concerns, and policy priorities, while also incorporating mediatization theory to explore the influence of media and digital technologies on social and institutional processes.

Results from the First Phase (2021): Technology-Centric Approach

The first version of Egypt's National AI Strategy, published by the Ministry of Communications and Information Technology (MCIT) in 2021, primarily focused on leveraging AI as a technological and economical tool. The Strategy emphasized AI as a driver for economic growth and job creation. It adopted global narratives around ethics, inclusion, and trust in AI governance, but these were critiqued for legitimizing state authority rather than fostering genuine citizen participation or empowerment. The strategy primarily framed AI as a technological and economic tool, focusing on strategic competitiveness and innovation.

Through my qualitative document analysis of the 2021 strategy, we systematically examined the structure, language, and thematic emphases to understand how AI was conceptualized and communicated to both domestic and international audiences. Following the method outlined earlier, we reviewed the document multiple times, paying close attention to recurring terminology, the framing of key issues, and the relationships constructed between technology, governance, and society. My analysis revealed that the 2021 strategy consistently prioritized technological capacity-building and economic outcomes over societal engagement or ethical implementation. This technology-centric orientation became evident through several dimensions: the dominant vocabulary centered on innovation, competitiveness, and infrastructure; the organizational structure of the document placed technical capabilities and economic sectors at the forefront; and the sparse treatment of citizen participation or social impact relegated these concerns to peripheral or aspirational statements.

Using mediatization theory as my analytical lens, we explored how the strategy reflected and reproduced global media narratives that position AI primarily as an engine of economic transformation and national competitiveness. The document's framing aligned closely with what the literature describes as techno-optimistic discourse prevalent in early national AI strategies worldwide, where AI is presented as a neutral tool capable of solving complex problems through technical implementation alone. This framing became particularly apparent when we compared the 2021 strategy with its 2025-2030 successor, revealing what was absent or underdeveloped in the earlier version. The following key themes and focus areas emerged from this thematic analysis, each representing distinct dimensions of how the 2021 strategy constructed Egypt's AI vision within a predominantly technological framework.

Key Themes and Focus Areas

1. Economic Growth and Job Creation:

The strategy highlighted AI as a “booster for economic growth” and “a creator of new job opportunities” (p. 12, 2017-2021 Strategy). This reflects the government's focus on using AI to strengthen Egypt's position in the global economy.

The document emphasized sectoral adoption, particularly in industries such as agriculture, healthcare, and education, to maximize economic benefits. For example, “AI applications in agriculture aim to enhance productivity and reduce resource wastage” (p. 18, 2017-2021 Strategy).

2. Technological Competitiveness and Regional Leadership:

The strategy underscored the importance of innovation and research in AI to maintain competitiveness. It stated, “Egypt aims to become a regional leader in research and development” (p. 20, 2017-2021 Strategy). This positioning reflects a media-driven narrative to national prestige and economic sovereignty within the African and Arab regions.

3. Limited Ethical Framework Implementation:

While the strategy mentioned ethics and inclusion, these aspects were primarily used to legitimize state authority rather than to foster genuine citizen participation. The document noted, “Ethical principles are essential to ensure trust in AI systems, but their implementation remains limited to high-level policy statements” (p. 25, 2017-2021 Strategy). This superficial engagement with ethics suggests that ethical considerations served more as rhetorical devices than operational frameworks.

4. International Collaboration and Knowledge Transfer:

The 2021 strategy emphasized building partnerships with international AI leaders and organizations to facilitate knowledge transfer and capacity building. The document states, “International collaborations are essential for accelerating AI adoption and bridging the technological gap” (p. 14, 2017-2021 Strategy). This focus on external expertise reflects a dependent positioning within the global AI ecosystem, where Egypt sought to learn from and replicate models from more technologically advanced nations.

5. Infrastructure and Investment Priorities:

A significant portion of the strategy focused on developing the technological infrastructure necessary for AI deployment. The document emphasizes, “Building robust digital infrastructure is a prerequisite for successful AI integration across sectors” (p. 16, 2017-2021 Strategy). This infrastructural focus demonstrates how the strategy prioritized technical prerequisites over social considerations, viewing AI primarily through a technological determinism lens.

6. Workforce Development Through Technical Training:

The strategy outlined plans for developing AI talent through technical education programs and research initiatives. It noted, “Investment in specialized AI training programs will create a skilled workforce capable of driving technological innovation” (p. 19, 2017-2021 Strategy). However, this approach to workforce development remained narrowly focused on technical skills rather than broader competencies related to ethical AI governance or public engagement.

7. Absence of Spatial and Urban Planning Considerations:

Critically, the 2021 strategy made no substantive mention of how AI would impact urban development, spatial planning, or heritage conservation. The analysis revealed that “The strategy primarily framed AI as a technological challenge, with little emphasis on public engagement or ethical oversight” (p. 15, 2017-2021 Strategy). This omission reflects a disconnect between technological ambitions and the lived spatial realities of Egyptian citizens, particularly in contexts of urban development and community design.

Critiques and Limitations

Despite its emphasis on technological and economic aspects, the analysis revealed that the 2021 strategy lacked focus on societal and ethical concerns, such as equitable access, community design, and heritage conservation. The document notes, "The strategy primarily framed AI as a technological challenge, with little emphasis on public engagement or ethical oversight" (p. 15, 2017 - 2021 Strategy). This technology-centric framing positioned citizens primarily as beneficiaries of AI-driven economic growth rather than as active participants in shaping AI governance frameworks.

Results from the Second Phase (2025–2030): Societal-Centric Approach

The updated version of Egypt's National AI Strategy (2025 - 2030) marked a significant shift in focus, emphasizing ethical principles, societal concerns, and accountability frameworks. This version acknowledged the importance of addressing the new distribution of digital power and ensuring equitable access to AI technologies. It also highlighted the role of AI in urban development, particularly in smart cities and urban infrastructure.

My analysis of the 2025-2030 strategy revealed a fundamental reconceptualization of AI's relationship to Egyptian society. Where the 2021 strategy treated AI primarily as a technical and economic instrument, the updated version embedded AI within broader social, ethical, and spatial contexts. This shift became apparent through multiple analytical dimensions. First, the document's organizational structure integrated societal concerns throughout rather than relegating them to peripheral sections. Second, the vocabulary expanded significantly to include terms related to equity, participation, accountability, and cultural preservation, concepts largely absent from the earlier version. Third, the strategy explicitly acknowledged the influence of public concerns and media discourse on policy development, demonstrating a reflexive awareness of the mediatization process itself.

Through my thematic analysis guided by mediatization theory, we examined how this transformation reflected evolving media narratives and public discourse around AI governance. Between 2021 and 2025, global and national media coverage of AI had increasingly focused on ethical controversies, algorithmic bias, surveillance concerns, and demands for transparency, issues that permeated the updated strategy. The document's explicit references to public concerns, data privacy debates, and the role of media channels in communicating AI governance suggested that policymakers were responding to a mediatized environment where policy legitimacy depends on alignment with societal values and expectations. This represents what mediatization theory describes as the institutionalization of media logic into policy processes, where governmental strategies must simultaneously address technical objectives and manage public perception within a media-saturated communication environment.

The 2025-2030 strategy also demonstrated awareness of spatial and cultural dimensions that the 2021 version had ignored. By incorporating considerations of urban development, heritage conservation, and community design, the updated strategy acknowledged that AI systems are not deployed in abstract spaces but in specific material and cultural contexts that shape and are shaped by technological implementation. This sociotechnical understanding, where technology and society are mutually constitutive rather than separate domains, marked a significant departure from the technological determinism evident in the earlier strategy. The following key themes and focus areas emerged from my analysis, each representing distinct dimensions of the societal-centric approach that characterizes the 2025-2030 strategy.

Key Themes and Focus Areas

1. Ethical Principles and Accountability Frameworks:

The strategy emphasized embedding ethical principles into AI governance frameworks. It stated, "Current policy debates focus on ethical principles, often neglecting core issues such as the new distribution of digital power and accountability frameworks" (Conclusion section, p. 22, 2025-2030 Strategy). Trust building mechanisms and public-private partnerships were highlighted as essential components of the updated strategy. "The second phase of the strategy aims to balance innovation with ethical considerations, embedding trust-building mechanisms and public-private partnerships into the governance framework" (p.22, 2025-2030 Strategy.)

2. Addressing Societal Concerns and Digital Power Distribution:

The strategy addressed societal challenges such as equitable access to AI technologies, community design, and heritage conservation. "Public concerns about data privacy, algorithmic bias, and surveillance have increasingly influenced the framing and development of national AI strategies" (p. 35, 2025-2030 Strategy). It also recognized the importance of addressing the new distribution of digital power, stating, "The strategy aims to ensure equitable access to AI technologies and address the societal implications of the new distribution of digital power" (p. 40, 2025-2030 Strategy).

3. Urban Development and Smart Cities Integration:

The updated strategy integrated AI into urban development and smart cities, emphasizing its role in improving urban infrastructure and planning. "AI applications in smart cities aim to enhance urban infrastructure, optimize resource allocation, and improve the quality of life for citizens" (p. 45, 2025-2030 Strategy). This represents a significant departure from the 2021 strategy's silence on spatial and urban considerations.

4. Media Influence on Policy Evolution:

The strategy explicitly acknowledges the role of media narratives in shaping AI governance priorities. The document states, "Governments have increasingly turned to media channels to communicate the ethics, safety, and accountability of AI systems" (p. 5, 2025-2030 Strategy). This recognition of mediatization processes reflects a growing awareness that AI policy development occurs within broader communicative ecosystems. Additionally, "The global discourse on AI governance is heavily mediated through international media outlets, conferences, and policy networks, shaping national strategies and public perceptions" (p. 8, 2025-2030 Strategy).

5. Public Engagement and Participatory Governance:

Unlike the 2021 strategy, the updated version emphasizes the importance of involving citizens and civil society in AI governance discussions. The document highlights, "Inclusive governance frameworks require meaningful public engagement to ensure that AI systems reflect societal values and priorities" (p. 28, 2025-2030 Strategy). This shift toward participatory approaches suggests a move away from top-down technocratic governance toward more democratic and inclusive policymaking processes.

6. Heritage Conservation and Cultural Considerations:

The 2025-2030 strategy introduces concerns about preserving cultural heritage in the context of AI-driven urban development. The document notes, "AI deployment in urban planning must balance modernization goals with the preservation of cultural and historical sites" (p. 42, 2025-2030 Strategy). This attention to heritage conservation reflects a broader societal-centric approach that considers the cultural dimensions of technological transformation.

7. Arabic Language Foundational Model Development:

A distinctive feature of the updated strategy is the emphasis on developing a national foundational AI model tailored to the Arabic language. The document states, "Developing indigenous AI models that serve Arabic-language contexts is essential for ensuring cultural relevance and reducing dependency on foreign technologies" (p. 30, 2025-2030 Strategy). This linguistic focus demonstrates a shift toward technological sovereignty and cultural specificity in AI development, moving beyond the imitative approach evident in the 2021 strategy.

8. Transparency and Algorithmic Accountability:

The strategy places increased emphasis on transparency mechanisms and algorithmic accountability. It notes, "Establishing clear accountability frameworks for AI decision-making is crucial for maintaining public trust and ensuring that AI systems operate within ethical boundaries" (p. 38, 2025-2030 Strategy). This focus on accountability reflects growing societal concerns about the opaque nature of AI systems and their potential for bias and discrimination.

Implications for Policy Development

The shift to a societal-centric approach indicates a broader understanding of AI's impact on society. The strategy highlights the need for inclusive governance and public engagement to address ethical and societal concerns effectively. The evolution reflects how mediatized narratives about AI ethics, safety, and accountability have influenced policy priorities, demonstrating the reciprocal relationship between media discourse and governmental strategy formulation.

Comparative Analysis of the Two Versions

The thematic analysis identified key patterns and themes in the evolution of Egypt's AI strategy, highlighting the shift from a technology-centric approach in the 2021 strategy to a social-centric approach in the 2025-2030 strategy

Key Differences

- 1. Shift from Technology-Centric to Societal-Centric Approach:** The 2025 - 2030 strategy emphasizes ethical principles, societal concerns, and accountability frameworks, marking a departure from the technology-centric approach of the 2021 strategy. In contrast, The 2021 strategy primarily framed AI as a technological and economic tool, emphasizing strategic competitiveness and innovation. This transformation reflects what mediatization theory describes as the increasing influence of media-driven public discourse on institutional policy development.
- 2. Integration of Urban Development and Smart Cities:** The updated strategy highlights the role of AI in urban development, including applications in smart cities, highlighting its role in improving urban infrastructure And addressing societal challenges. "AI applications in smart cities aim to enhance urban infrastructure, optimize resource allocation, and improve the quality of life for citizens" (p. 45, 2025-2030 Strategy.) The 2021 strategy, by contrast, made no substantive mention of spatial planning, urban infrastructure, or heritage conservation, revealing a significant gap in how AI was understood in relation to the built environment and lived spaces of citizens.
- 3. Focus on Governance and Public Engagement:** The earlier strategy lacked emphasis on public engagement and ethical oversight, while The 2025 - 2030 strategy incorporates themes related to governance, public engagement, and ethics, indicating a shift towards a more inclusive approach to AI policy development. "The second phase of the strategy aims to balance innovation with ethical considerations, embedding trust-building mechanisms and public-private partnerships into the governance framework" (p. 22, 2025-2030)

4. Evolution from Imitative to Sovereign AI Development:

The 2021 strategy emphasized learning from and replicating international models through knowledge transfer and collaboration, positioning Egypt as a recipient of technological expertise. The 2025-2030 strategy, however, emphasizes developing indigenous capabilities, particularly through the Arabic language foundational model initiative. This shift represents a movement from technological dependency toward technological sovereignty, reflecting broader nationalist narratives in AI development globally.

5. Transformation in Citizen Positioning:

In the 2021 strategy, citizens were primarily framed as beneficiaries of AI-driven economic growth and job creation. The 2025-2030 strategy repositions citizens as active participants in AI governance, stakeholders whose concerns about privacy, bias, and surveillance must shape policy priorities. This transformation indicates a fundamental shift in how the state conceptualizes the relationship between AI technologies and the Egyptian public.

6. Rhetorical Versus Operational Ethics:

While both strategies mention ethical considerations, their treatment differs substantially. The 2021 strategy acknowledged ethics primarily at a rhetorical level, with "implementation remains limited to high-level policy statements" (p. 25, 2017-2021 Strategy). The 2025-2030 strategy, conversely, attempts to operationalize ethics through concrete mechanisms such as accountability frameworks, transparency requirements, and public engagement processes. This evolution suggests a shift from ethics as legitimation to ethics as governance practice.

7. Media's Role in Strategy Evolution:

The comparative analysis reveals that media narratives around AI ethics, safety, and accountability played a crucial role in driving the evolution of Egypt's AI strategy. The document states, "Governments have increasingly turned to media channels to communicate the ethics, safety, and accountability of AI systems" (p. 5, 2025-2030 Strategy). Additionally, "The global discourse on AI governance is heavily mediated through international media outlets, conferences, and policy networks, shaping national strategies and public perceptions" (p. 8, 2025-2030 Strategy). This mediatization process demonstrates how global and national media discourses influenced the framing of Egypt's AI policy, pushing it toward greater attention to societal concerns.

The study also found that media narratives around AI ethics, safety, and accountability played a crucial role in driving the evolution of Egypt's AI strategy. The document states, "Governments have increasingly turned to media channels to communicate the ethics, safety, and accountability of AI systems" (p. 5, 2025 - 2030 Strategy). Additionally, "The global discourse on AI governance is heavily mediated through international media outlets, conferences, and policy networks, shaping national strategies and public perceptions" (p. 8, 2025 - 2030 Strategy).

Implications for Future Research

These findings suggest the need for longitudinal and comparative case studies to examine how AI policies evolve over time and influence technological advances and societal responses to AI. The document states, "There is a need for longitudinal and comparative case studies to examine how AI policies evolve over time and how shifts in these strategies influence technological advances and broader societal responses to AI" (p. 40, 2025 - 2030 Strategy).

The study also calls for further research on the role of media in shaping public discourse around AI governance. As stated in the document, "The mediatization of AI governance highlights the need for more research on how media narratives influence policy priorities and public perceptions" (p. 45, 2025 - 2030 Strategy). Understanding the reciprocal relationship between media discourse and policy formation is crucial for comprehending how national AI strategies emerge and evolve within broader communicative ecosystems.

Conclusion

This method, combining document analysis and thematic analysis, provides valuable insights into the evolution of Egypt's National AI Strategy. The shift from a technology-centric approach in the 2021 strategy to a societal-centric approach in the 2025 - 2030 strategy reflects a growing recognition of the importance of addressing ethical, societal, and spatial concerns in AI policy development. The findings underscore the role of media in shaping public discourse and influencing policy priorities, contributing to the broader understanding of the mediatization of AI governance.

The evolution of Egypt's AI strategy demonstrates how national policies respond to changing societal attitudes, media narratives, and global discourse on AI ethics and governance. This transformation reveals the dynamic interplay between technological development, policy formulation, and societal expectations, highlighting the importance of inclusive, participatory approaches to AI governance that center citizen concerns and cultural contexts.

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