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Navigating Strategic Communication: A Study of Modality in the National Artificial Intelligence Policy of Pakistan

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Original Article

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National Artificial Intelligence Policy; Strategic Communication criteria; Modality; Policy directives; Strategic complexity

Abstract

This study investigates Pakistan's National Artificial Intelligence Policy (2022) to determine how strategic communication and linguistic techniques effectively convey intentions and manage societal challenges. It addresses how modality informs institutional objectives by integrating Modality (Halliday & Matthiessen, 2004) with Strategic Communication criteria/drivers (Zerfass et al., 2018). The qualitative analysis evaluates the policy directives against seven parameters of strategic complexity: resource, competition, innovation, engagement, operational, environment, and risk-driven criteria. Findings indicate that high-obligation modalities (e.g., "shall," "will") convey institutional obligation, whereas adaptable modalities (e.g., "may," "can") allow flexible nature in dynamic conditions. It also demonstrates the policy's priority of promoting diversity, encouraging innovation, and aligning with global AI practices. Future directions may investigate the influence of modalities on the stakeholder's perception and interpretation of policy documents.

Introduction

Artificial Intelligence (AI) is establishing itself as an integral part of global advancement, generating novel approaches in every field. As sovereign nations struggle with AI's outcomes, strategic policymaking has become necessary to tap its benefits while alleviating related issues. The National Artificial Intelligence Policy of Pakistan, designed by the Ministry of Information Technology and Telecommunication, exhibits this comprehensive effort. The primary intent of the policy is to build an extensive framework for the implementation of AI through fostering research, standards of ethics, and structural improvements that coincide with global patterns and national requirements. Pakistan holds substantial opportunity to integrate AI into its fiscal and societal structure fueled by constantly expanding digital goals. However, limitations such as minimal computing facilities, lack of public understanding, and talent inadequacies demand a policy that is both aspiring and practicable. This article systematically analyzes the communication methods incorporated in the National AI Policy to gauge their effectiveness while engaging stakeholders in the common goal of a digital economy.

Background of the Study

The global scope of the use of AI suggests its crucial role in enabling invention and economic development. Studies exhibit how AI policies in states like China, the United States, and Singapore have promoted technological advancements by focusing funds on research, public-private collaborations, and regulatory structures (Makridakis, 2017). In turn, it is a vital strategic discourse within the digital landscape. In recent years, there has been an increasing awareness of the relevance of language, discourse, and communication within strategic studies (Balogun et al., 2014; Vaara & Langley, 2021). This focus mirrors a more generalized "language turn" in the organization and management inquiry (Cornelissen et al., 2015). It would not be dismissed as a "fashion" or "fascination" but as a breakthrough that could extensively enhance our awareness of strategy as a societal and organizational practice with the interplay between distinct players across multiple settings. However, there has been an increased focus on language in various domains of strategy research, specifically within studies of strategy processes and practices that target the public and organizational dynamics of strategy.

The need for transparent and strategic communication in the execution of policies has been noted in the academic literature. In strategic communication, persuasion with novel strategies becomes essential through the multifaceted network of sense-making actions within a competitive environment. The sense-making is the purposeful usage of language to influence the targeted audience, as language is "a network of systems, or interrelated sets of options for making meaning" (Halliday, 1994, p.15). This communication rests on logical components, such as language tools, which determine the position of the messengers. With this aim, the current study is based on the investigation of strategic communication criteria suggested by Zerfass et al. (2018) and the system of modalities reflected in these drivers (Halliday & Matthiessen, 2004). As Zerfass et al. (2018) propose, productive communication is vital for aligning stakeholders and preserving policy integrity. Pakistan's AI policy draws on an eclectic approach, incorporating outreach tasks, ethical AI applications, and technical expenses to create an architecture for the adoption of AI. It adheres to international standards, showcasing Pakistan as a promising leader in Asian AI development. With this particular aim, the study highlights the strategic communication patterns (criteria and modalities) articulated in Pakistan's National AI policy.

Research Objectives

The study attempts:

1. To analyze the realization of Strategic Communication criteria in the National Artificial Intelligence Policy of Pakistan
2. To explore the application of modality marker (type and orientation) for practical strategic intent in Pakistan's National Artificial Intelligence Policy

Research Questions

1. What criteria/drivers of Strategic Communication are employed to project Pakistan's National Artificial Intelligence Policy?
2. How do the modality markers (type and orientation) of strategic communication represent the strategic intent of National AI policy?

Statement of the Problem

Policy manuals are above conventional administrative text; they function as strategic tools connecting governmental intends with community needs. The language employed in policy documents is significant in a developing nation like Pakistan, where technology implementation challenges comprise

inadequate knowledge, low infrastructure, and societal disparities. Recent scholarship indicates that policies generally collapse because of inappropriate priority setting, limited inclusiveness, and an abundance of public consensus (Zerfass et al., 2018; Hallahan et al., 2007). Considering the growing value of AI in local and global contexts, there are insufficient studies about the effective use of linguistic practices in national policies to represent strategic goals successfully. This gap tends to be significant in developing countries, where policies require balancing vision with practicality while managing diverse societal constraints. Thus, this study strives to thoroughly analyze the policy's communication criteria and modalities to determine how adequately it promotes its preferences.

Significance of the study

This study is of significant relevance as it extends the field of strategic communication by analyzing the execution of theoretical notions within the policy framework to connect stakeholders and stimulate unified action. In practical terms, it demonstrates how policy language can overcome the gap between intent and viability, primarily in the third-world context. The study's findings offer substantial value for national and international policymakers, scholars, and practitioners. It could also assist in strengthening policy discourses and ensuring seamless execution.

Delimitation of the study

This study mainly explores the draft of the National AI Policy of Pakistan (2022), analyzing its strategic goals and nuances of language. It doesn't examine the policy's successful operation, though it provides an overview of how the policy presents its goals. This research excludes other variables, including stakeholder feedback and the real-world impact.

Literature Review

Strategic communication is a purposeful form of persuasive discourse focused on influencing a targeted audience through organized measures to achieve an organization's aims. It appears as an area for consideration after Hallahan et al. (2007) put it forward in plain language as "the purposeful use of communication by an organization to fulfill its mission" (p.3). The purpose of communication and language in strategy processes and practices can be explored from a range of perspectives. Post-structural, critical discourse analysis, narrative, rhetoric, conversation analysis, and metaphor orientations are all discussed by Balogun et al. (2014). Within the strategy-as-practice inquiry field, multiple research directions emerged that are of particular concern, such as narrative (Dalpiaz & Di Stefano, 2018) and the mechanics of strategy conversations (Spee & Jarzabkowski, 2011). In addition to identifying language as a distinct entity, research has also examined its association with other aspects of society and sociomateriality (Wenzel & Koch, 2018).

Practitioners have long known that strategic operations are inherently linguistic, and scholars in this field of strategy have become more convinced that language not only communicates but also shapes reality. Thus, it is necessary to commence at the micro level while recognizing the increasing curiosity in the theoretical basis of strategic activities. For the micro-level understanding, the current study is grounded in a systemic functional language model (Halliday, 2009). Systemic functional theory centers around diverse underlying semiotic parameters: system, instantiation, stratification, and metafunction (Halliday, 2009; Matthiessen, 2015).

Firstly, SFL focuses on system over structure. The system or paradigmatic construction is the primary type of linguistic organization (Halliday, 2009) and is viewed as a more abstract notion "realized in the form of structure" (Halliday, 2009, p. 64). The study explores the system of Modality and evaluates its structural understanding. Secondly, the association between system and text in Systemic Functional Linguistics (SFL) has been defined by instantiation. A text represents the system of a language, and the system of a language incorporates the potentially underpinning all manifestations. It recognizes

modality as the systemic dynamic that communicates modal meanings. Thirdly, in SFL, language is treated as a tiered semiotic system consisting of three strata: semantics, lexicogrammar, and phonology/graphology (Halliday, 1994). The modality system dwells within the lexicogrammar stratum. Furthermore, in Systemic Functional Linguistics, language is organized metafunctionally (Halliday, 1994). These include the mapping of the experiential, interpersonal, and textual strands. Modality is part of the interpersonal organization of the language, which is the prime focus of the research. It refers to the 'interpersonal aura' of the speaker's approach to the proposition and proposal (Thompson, 2004, p.70).

Language turns into a means of empowerment when it holds the capacity to handle extra functional demands. It becomes an asset in its soft power through identity arbitration and is enacted as a new organizational language. Communication is the primary medium in which stakeholders, such as internal and external, play an integral part (Thomas & Stephens, 2015). This is corroborated by O'Hair et al. (2016), who establish this communication on attaining potential in situational awareness, setting goals, and communicating ability. Considering these factors, influencing a community to "reallocate resources to initiate and sustain change" (Werder, 2015, p.273) is a form of "public diplomacy" (Farwell, 2012, p. 15). However, Zerfass et al. (2018) contend that these investigations fail to focus sufficiently on stakeholder groups' needs and transforming approaches in practice. Following that, he advocates that entities and organizations be mindful of the dynamic communication environment and the practical factors defining their roles. He mentioned some common factors that lead to strategic complexity, which could indicate communicators' ability to execute their ideas effectively. These drives are Resource-driven, Competition-driven, Environment-driven, Risk-driven, Innovation-driven, Engagement-driven, and operationally driven.

Therefore, strategic communication is a comprehensive, multifaceted practice based on crafting strategies to meet stakeholders' needs. Though many practices, such as advertisements, yearly reports, and policy documents, are utilized to guide the target population's actions, communication functions as a core persuasive force. Policy is vital for any organization, as it forms the framework for all management activities connected with executing policy. Policy documentation thus supplies instructions for practice, enabling extensive knowledge to encourage successful action. The concept of 'documents' has been interpreted here as digital or physical artifacts generated by producers for users to work within a specific setting (Prior, 2003). Documents cannot function as distinct entities; instead, they must be recognized within the social framework of meaning in which they are generated and used (Dalglish et al., 2020). This study is primarily focused on the National Artificial Intelligence Policy of Pakistan, designed by the Ministry of Information Technology and Telecommunication, under the dynamics proposed by Zerfass et al. (2018) and the underlying meaning construed through the Modality (Halliday & Matthiessen, 2004) function of SFL.

Research Methodology

This research aims to analyze the strategic communication and language modalities in Pakistan's National Artificial Intelligence Policy. This section outlines the research design, population, sample technique, data collection, and analysis methods.

Research Design

This study draws on a qualitative method of inquiry within an interpretive paradigm to explore the policy document's core meanings and contextual variations. The methodology is both descriptive and exploratory, aimed at identifying the policy's strategic communication and analyzing how linguistic elements drive shareholder engagement and policy results. The interpretivist position offers an extensive understanding of the contextual and social factors embedded in the policy's communication.

This paradigm asserts that interpretivist investigators can obtain the truth only through societal frameworks, including communication, awareness, shared purpose, and resources (Myers, 2019).

Data Collection Method

For the research concerns, the data collection for the present study incorporates the National AI policy of Pakistan designed by the Ministry of Information Technology and Telecommunication. The sample was carefully selected to maximize the outcomes of pertinent research issues. The purposive sampling method was adopted for the appropriate collection of the data. The basis for purposive sampling allows the researcher to deploy his expertise in choosing the data. This implies that the study focuses on items connected to the policy's strategic communication and linguistic interpretation.

Conceptual Framework

This study's conceptual framework incorporates Strategic Communication criteria and Systemic Functional Linguistics (SFL) to analyze the strategic communication and language modalities in Pakistan's National Artificial Intelligence Policy. This framework supplies a theoretical foundation for considering how the policy's communication replicates strategic goals, involves stakeholders, and conveys intentions through language.

Organizations should be informed of the evolving communication environment that influences their functioning. In this case, Zerfass et al. (2018) indicate some prevalent drivers visible in every strategy plan of action. These are mentioned below;

1. Resource-driven: crucial allocations of resources for assets with a high value,
2. Competition-driven: to surpass an opponent by preventing direct competition,
3. Environment-driven: Changing in environmental conditions result from political events or innovations in technology,
4. Risk-driven: Highly risky circumstances that include win-or-lose outcomes,
5. Innovation-driven: When new initiatives are explored as innovative strategies,
6. Engagement-driven: The accessibility of free resources for the strategic player, and
7. Operationally-driven: When the operational framework is modified for various factors for testing resources across multiple functional areas.

The strategic communication drivers help to identify the specific policy document as strategic, which is further evaluated in terms of the modality function of SFL. Modality, as stated by Quirk et al. (1985), is the "manner in which the meaning of a clause is qualified to reflect the speaker's judgment of the likelihood of the proposition it expresses being true" (p.219). Chilton (2004) asserts that while the modal application is subject to current practices, distinct patterns allow models to be presented on a scale. This is appropriate for understanding whether the proposition or proposal showcased in the policy document is significant for the nation's integrity.

According to Halliday (1994), modality consists of four major categories: type, orientation, value, and polarity. There are two broad types of modality: modalization and modulation. A proposition or proposal is recognized with two clauses (Halliday & Matthiessen, 2004). When the clause exchanges information, it is known as a proposition and is also termed a modalization. Likewise, when the clause appears to exchange goods and services, it is identified as a proposal and is also known as modulation (Eggins, 2004).

Either of the two types are further divided into two subclasses. Modalization is separated into probability and usuality, whereas modulation is divided into obligation and inclination (Halliday & Matthiessen, 2004). The second parameter in modality is orientation. It corresponds to subjective or

objective expressions of modality, whereby speakers either explicitly or implicitly transmit the source of their opinion (Halliday & Matthiessen, 2004). Modality orientation refers to the speaker's modal responsibility, which depicts the speaker's explicit responsibility for what they say (Thompson, 2004). The third variable in modality is value, comprising high, median, and low values. The fourth variable is degrees of polarity, which assesses semantic spaces of the clause's positive and negative aspects.

The current study evaluates the policy document only based on the type and orientation of the statements provided. By omitting polarity, the spotlight is elevated on the intensity and trajectory of exchange rather than just affirmation or negation, promoting an informed understanding of the policy's stance on the advancement of AI and management.

Data Analysis Method

The study of the National Artificial Intelligence Policy document involves a systematic textual analysis that employs close reading, allowing for an in-depth understanding of its strategic communication methods and linguistic features. This methodology is divided into two phases: macro-structural analysis and micro-structural analysis, each focusing on various aspects of the text.

Close reading is a thorough analysis method emphasizing a detailed and systematic study of a text's organization, language, and meaning. This approach efficiently analyzes policy documents, enabling researchers to present explicit evidence and consequences (Halliday & Matthiessen, 2014). Close reading helps identify the text's objectives, analyze the strategic intent, and explore the linguistic choices that affect stakeholder involvement. This methodology aligns with the findings of Zerfass et al. (2018), who stress the importance of strategic communication in achieving organizational goals, and Martin & Rose (2007), who points out the significance of modality and other linguistic features in expressing priorities and obligations.

Phase 1: Macro-Structure Analysis

The text's macro-level analysis involves examining the policy document's strategic coherence. This analysis is based on the strategic communication criteria Zerfass et al. (2018) outlined. Each section is evaluated to ensure alignment with the strategic communication criteria. Excerpts and statements that exhibit these attributes were selected and evaluated.

Phase 2: Micro-Structure Analysis

The micro-level analysis investigates the policy's linguistic specifics. It focuses on modalities to examine how priorities and possibilities are conveyed. This phase uses the Systemic Functional Linguistics (SFL) tradition, primarily emphasizing modality (Halliday & Matthiessen, 2014). After selecting strategic communication criteria from phase one, this phase further analyzes the linguistic attributes through the lens of modality to comprehend the policy's objectives and prioritize actions.

Data Analysis and Discussion

This study's analysis focused on Zerfass et al.'s (2018) strategic communication criteria/drivers and the Modality type and orientation proposed by Halliday and Matthiessen (2014).

a. Resource-Driven:

1. "The Ministry of IT & Telecom shall notify the establishment of an autonomous high-tech National AI Fund (NAIF)... to allocate a part (not less than 30%) of its funds to NAIF on a perpetual basis for the research and development of AI and allied technologies" (Policy, p. 1).

This statement highlights resource-driven complexity by regularly allocating considerable financial resources (30%). The long-term financing plans align with Zerfass et al. (2018), which emphasize the demand for sustainable resource utilization in strategic projects.

Modality Analysis:

i. Type (Modulation: Obligation)
"shall" implies a substantial obligation, signifying a legitimate and binding directive. It offers the institution's commitment, emphasizing that the formation of funds is imperative.

ii. Orientation (Explicitly Objective)
The Ministry of IT and Telecom is explicitly allocated institutional competence. The phrase “to allocate a part (not less than 30%) of its funds” sets concrete criteria, avoiding any doubt about the obligation. This explicit responsibility resonates with measures to improve accountability, as Adejare (2014) explained, where clear modality strengthens the performative nature of declarative claims.

2. “To develop High-Performance Computing Infrastructure at all CoEs and auxiliary centers nationwide with distributed access and connected to global AI infrastructure” (Policy, p. 13).

The above statement emphasizes that setting up High-Performance Computing (HPC) infrastructure involves significant funds in intangible and tangible assets. Investing in such structures displays a commitment to ongoing technological advancement and productivity.

Modality Analysis:

i. Type (Modulation: Obligation)
"To develop" expresses a clear institutional goal but is less specific than "shall." This implies an average degree of responsibility, indicating that the commitment is of significant value but may be subject to future events. The neglect of stronger modal auxiliaries like the word "shall" supports adaptability, signifying possible variations in application.

ii. Orientation (Implicitly Objective)
The responsibility is institutionalized but not directly defined, which leads to an inclusive accountability design.

b. Competition-Driven:

3. "Pakistan must collaborate with other countries to share best practices and expertise in AI... and strengthen international partnerships to adopt international best practices" (Policy, p. 7).

The statement outlines Pakistan's plan to acquire an edge over competitors in AI through indirect techniques, including international partnership and knowledge exchange. Collaboration as an approach to enhancing competitiveness is significantly appreciated in strategic policies and management research.

Modality Analysis:

i. Type (Modulation: Obligation)
The modal verb "must" signifies a high degree of desire and an obligatory demand for action. According to Zerfass’s notion, this accords with a proactive plan to gain a competitive edge through knowledge-sharing and partnership.

ii. Orientation (Explicitly Subjective)
The policy explicitly assigned Pakistan's obligation as an independent body, highlighting an explicit and purposeful institutional dedication to international participation. The modality shows obligation, which reveals the strong institutionalized priority toward global collaboration.

4. "To organize bilateral AI partnerships with leading AI adopters globally... at least three partnerships in Asia Pacific Region, 3 in the EU, and 2 in Africa" (Policy, p. 14).

The assertion represents Pakistan's policy of creating an identity in the global AI ecosystem through strategic collaborations in key domains. By uniting assets and skills, these relationships allow mutually beneficial competition to develop without the expense of competing directly. Dalglish et al. (2020) propose incorporating these aims into policy frameworks to assure clarity and consistency with international standards.

Modality Analysis:

i. Type (Modalization: Probability)
The implicit goal in "to organize" denotes a moderate likelihood, showing a strategic intention with flexibility for modifications according to practicalities.

ii. Orientation (Explicitly Objective)
The specific geographically defined priorities (Asia Pacific, EU, Africa) reinforce the demand for institutional transparency and concentration, placing partnerships as a vital operational concern with an explicit regional scope.

c. Environment-Driven:

5. "Entities offered access to public data for research, analysis, and servicification shall be subject to the scrutiny of service/technology to ensure transparency and sustainability in a controlled environment" (Policy, p. 22).

The above statement promotes ethical adaption to environmental concerns by placing entities with access to public data under investigation. It implies that technology is utilized responsibly and transparently, promoting trust and achieving socially sustainable standards.

Modality Analysis:

i. Type (Obligational: Modulation)
The expression "shall be subject to scrutiny" shows a strong, mandatory condition, forcing companies through assessment. This standard is definitive and displays a firm policy's authoritative tone.

ii. Orientation (Explicit Objective)
The point made about " ensuring transparency and sustainability" reveals identifiable, factual outputs rather than subjective direction.

6. “Smart meters powered by IoTs can monitor and optimize the consumption of electricity, water, and other fuels and help establish sustainable usage of valuable energy resources” (Policy, p. 30).

This sentence emphasizes sustainability and proper utilization of natural resources, which are important for addressing environmental difficulties. It fixes technological and ecological requirements with the help of IoT-enabled smart meters, ensuring that resource usage is in line with sustainability goals.

Modality Analysis:

i. Type (Probabilistic: Modalization)
The phrase "can monitor and optimize" shows possibility rather than certainty. The term "can" implies low modalization, indicating a possibility instead of an absolute conclusion. This gentler tone facilitates willingness while showcasing the probable benefits of IoT technology.

ii. Orientation (Explicit Objective)
The aim, “help establish sustainable usage of valuable energy resources," is stated explicitly, thus relating the statement to the environmentally driven feature.

4. Risk-Driven:

7. “AI can analyze clinical data, medical images, health behaviors, and genomic data to create a customized individual risk score” (policy, p.19).

The potential to provide tailored individual risk ratings minimizes the possible risks to society by promoting early detection and control of diseases. This correlates with risk-driven complexity, as indicated by Zerfass et al. (2018). In the healthcare sector, the uncertain nature of ailments, outbreaks, or individual health trends makes this an essential field for AI applications. Makridakis (2017) explains how AI may be utilized in handling extreme risks and "black swan" catastrophes with the help of statistical analysis, which this application explicitly complements.

Modality Analysis:

i. Type (Modalization: Possibility)
The verb "can" express a modest degree of likelihood, showing that AI is competent. However, its use is conditional upon many factors, including data access, legal structures, and the effective implementation of policies. It provides adaptability to deal with a variety of medical concerns.

ii. Orientation (Explicitly Objective)
The claim highlights AI's technological resources, characterizing it as an administrative or structural instrument while eliminating humans of accountability. This impartiality strengthens trust in AI as a trustworthy, data-driven tool for reducing risks.

8. "Smart city-based projects... shall target high accuracy of person and object detection to ensure citizen safety" (Policy, p. 19).

This sentence shows a concrete plan for minimizing risk by incorporating AI technology into city infrastructure. Precision and security in detecting networks are operational techniques that prevent high-risk situations.

Modality Analysis:

i. Type (Modulation: Obligation)
The phrase "shall target" suggests an important decision, reflecting an obliged institutional demand for achieving predefined safety goals. This represents effective modulation, highlighting a vital need for lowering risk.

ii. Orientation (Explicitly Objective)
Responsibility is explicitly given to the organization regulating projects related to smart cities, maintaining accountability and clear operational agendas.

5. Innovation- Driven:

9. “To establish at least 1,000 AI-led R&D initiatives shall be funded in academia and the private sector via fiscal and non-fiscal support by 2026” (Policy, p11).

The above statement relates to an innovation-driven level of detail, as it supports groundbreaking attempts in research and development through the distribution of monetary and institutional backing to businesses and academia. Zerfass et al. (2018) claim that dismantling conventional obstructions to encouraging innovation is an essential trait of strategic complexity, which this instruction directly aims.

Modality Analysis:

i. Type (Modulation: Obligation)
Using "shall be funded" suggests a strong commitment, expressing firm institutional support for executing the intended activities. This exhibits effective modulation, which facilitates innovation within defined time frames.

ii. Orientation (Explicitly Objective)
Responsibility has been allocated institutionally, as the directive directly expresses accountability for sustaining these activities. The policy's apparent objectivity implies that stakeholders in academia and private industry consider it legitimate and practical.

10. “The CoE-AI shall provide fiscal/logistical/data support for up to PKR 200,000 or any other agreed amount per research for effective research and thesis, leading to publications of regional/international journals, whitepapers, and case studies for new R&D projects” (Policy, p 25).

This sentence indicates innovation-driven complexity by triggering advanced development and research through financial and logistical support. Concrete information further advocates research advancement and worldwide collaboration through directed funding, stimulating innovation, and raising societal ecosystems.

Modality Analysis:

i. Type (Modulation: Obligation)
The expression "shall provide" conveys a restrictive responsibility, showing an important organizational willingness to serve researchers and confirm meaningful results, like publications and case studies.

ii. Orientation (Explicitly Objective)
The obligation is strongly institutional. The statement recognizes the Centers of Excellence in AI (CoE-AI) as the competent organization to provide the required support. It also promotes stakeholder trust in the policy's potential to foster worthwhile research.

6. Engagement-Driven:

11. “Ministry of IT & Telecom may engage the Ministry of Information and Broadcasting and allied department(s), the PTA and licensees, and other relevant National/Provincial institutions to ensure maximum outreach of the program through print, broadcast, social media, and the internet” (Policy, p. 23).

This assertion relates to engagement-driven complexity, prioritizing partnerships within many national and territorial bodies to ensure comprehensive outreach. It also addresses the problems of motivating diversified stakeholders while strengthening communication in achieving strategic goals, particularly for awareness-raising projects.

Modality Analysis:

i. Type (Modalization: Possibility)
The phrase "may engage" implies an intermediate level of likelihood, showcasing mobility in accomplishing outreach campaigns. This reduced commitment promotes responsiveness according to situational demands or the availability of resources.

ii. Orientation (Explicitly Subjective)
The statement refers to the possible action of the Ministry of IT & Telecom, expressing institutional authority when considering the participation of other organizations. This intense subjectivity shows the ministry's direction and facilitates inter-organizational coordination.

12. “The CoE-AI shall put particular emphasis on indigenous research innovation with respect to Generative AI and, in this regard, engage with the OpenAI platform and allocate a special quota for startups/R&D institutions/companies working in this space” (policy, p 28).

This statement highlights engagement-driven complexity by presenting the interaction between the Center of Excellence in AI (CoE-AI) and external institutions such as the OpenAI platform, startups, and R&D institutions. This further connects different groups of stakeholders to work together on novel ideas, enhancing diversity and mutual goals.

Modality Analysis:

i. Type (Modulation: Obligation)
The expression "shall put particular emphasis" indicates a high degree of responsibility, displaying a strong commitment by the institution to fostering locally produced innovation. Similarly, "allocate a special quota" states precise modulation, showing that certain assets would be kept aside for a particular purpose.

ii. Orientation (Explicitly Objective)
The sentence allocates obligation to the CoE-AI, explicitly stating that the institution is responsible for performing this directive. This transparent objectivity improves institutional legitimacy and promotes credibility among stakeholders, particularly startups and research groups.

7. Operationally Driven:

13. “The Fund shall function under a Chief Executive Officer hired from the industry on open merit. The term, experience, expertise, remunerations, perks, and privileges will be formulated by NAIF (BoD) through a reputable local/international Human Resource Consultant” (Policy, p.17).

This statement focuses on operational complexity by introducing planned governance for the AI Fund, which involves competent recruitment and resource allocation.

Modality Analysis:

i. Type (Modulation: Obligation)
The expression "shall function" conveys a strong commitment, reflecting an institutional dedication to the AI Fund's governance. Additionally, "will be formulated" conveys medium-to-high obligation, implying an organized yet adaptive method for establishing operations.

ii. Orientation (Explicitly Objective)
The duty is allocated to institutional entities that include NAIF (Board of Directors) and the Human Resource Advisor, which provide competence and integrity. This visible objectivity shows the policy's commitment to open and effective operations execution.

14. “The Ministry of IT & Telecom, through CoE-AI, shall organize a “National High-Tech Internship Placement Program” with at least 20,000 internships shall be offered annually...” (Policy, p.24).

This sentence displays operational complexity by documenting a planned effort to develop and administer a National High-Tech Internship Placement Program.

Modality Analysis:

i. Type (Modulation: Obligation)
The phrases "shall organize" and "shall be offered" convey an essential level of obligation, suggesting an institutional determination to execute the program. These potent modalities indicate leadership and dedication to executing the project.

ii. Orientation (Explicitly Objective)
The Ministry of IT & Telecom and CoE-AI are clearly accountable, defining transparency about the institutions responsible for implementation. This explicit objectivity supports stakeholder assurance in the program’s trustworthiness and stability.

Conclusion
The study of Pakistan's National Artificial Intelligence Policy provides a practical plan for managing the complex challenges of adopting AI with disciplined and strategically designed measures. The policy resonates with the seven drivers of strategic complexity communication defined by Zerfass et al. (2018), thus exhibiting firm commitments to resource effectiveness, innovation, engagement, and productivity in operation. Strong modalities in policy documents include "shall" and "will," which suggest valuable institutional determination, providing transparency and accountability in important directives like the foundation of the National AI Fund, encouraging research and innovation, and implementing skill development projects. As Thompson (2001, p. 151) emphasizes, the crucial role of modal use “reveals something of the choices that are available” in communicating information and “something of the way written discourse is constructed.” Chilton (2004) further highlights that beliefs of local reality determine one's modal preferences. Connecting both ideas explains policymakers' prevailing selection of "shall" or “will” rather than possibilities. The less restrictive modalities, such as "may," convey a willingness to adapt to conditions involving situational freedom of choice, such as collaborative and citizen programs. These linguistic and strategic dimensions collectively ensure that the policy outlines its goals effectively while constructing a framework for sustained execution. This study emphasizes the essential link between strategic goals and linguistic competence, thus allowing future research on how these policy structures contribute to tangible implications and the participation of stakeholders in the expanding AI landscape. By incorporating modality analysis with feedback from stakeholders, future research could potentially fill the gap between policymaking and feasible outcomes so that AI policies correspond with expanding socio-economic factors.

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