

POLICY ADVISORY CAPABILITY IN DEVELOPING BUREAUCRACIES: AN EMPIRICAL ANALYSIS OF THE CAPACITY FRAMEWORK IN PAKISTAN'S FEDERAL SECRETARIAT

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Abstract

Policy advisory capability has been identified as one of the most essential predictors of the effectiveness of governments in all parts of the globe, but has been under-researched as to particular determinants in the developing countries bureaucracies in comparative public administration literature. The paper examines the determinants of policy advisory capacity at the Federal Secretariat in Pakistan and puts the policy capacity framework to the test by operating in a difficult administrative environment, that is, colonial legacies, political instability, and bureaucratic dispersion. Data was gathered through a purposive sample of 426 federal officials (Grades 17-22) using multi-modal strategies of recruitment to overcome tremendous access restrictions to elite bureaucrats, which is a frequent problem in studying developing state apparatuses. According to the analysis that uses hierarchical multiple regression, the Policy Quality Systems ($=.621$, $p = .001$), Engagement/Customer-Centric approaches ($=.348$, $p = .001$), and People Capability ($=.214$, $p = .05$) impact on the perceived policy advisory quality significantly. An interesting contradiction is found in the study, since although Stewardship demonstrates positive bivariate correlation with advisory quality, in the full model, its impact is negative ($= -.281$, $p < .001$), which indicates suppression effects in highly political settings. Methodologically, we show how serious research of hard-to-reach bureaucratic elites can be done, without obscuring the sampling limitations and prevalent method bias. In principle, our results would add to the comparative literature on policy capacity, by demonstrating the interaction between universal drivers of capability and local institutional malfunctions in post-colonial countries. In practice, the research determines Policy Quality Systems as the strongest leverage point of instant reform providing evidence-based ways of future improvement of capabilities in such a bureaucratic setting that faces modern governance issues.

Keywords: Policy capacity, bureaucratic capability, policy quality, stewardship, developing countries, policy administration reform, Pakistan, Federal Secretariat, post-colonial bureaucracy.

1. INTRODUCTION

In modern international literature on policymaking, the challenge of declining policy capacity in the public sector in different systems of governance has been reported to grow (Howlett, 2024). In many governments around the world, it has been reported that they struggle to sustain viable public policymaking capacity especially in the wake of accelerated digital transformation and complicated transnational problems (Capano, 2023). These changes have reorganized the traditional role of the public services in the formulation of policies, which required different type of advisory capabilities (Mintrom and Luetjens, 2023).

In third world nations, state structures and machine of delivery are frequently failing to meet the proclaimed objectives due to the lack of resources and legacies of past institutions, which leads to a new wave of interest in the role of capability building in scholarly literature (Andrews et al., 2017). It has been found that administrative weaknesses are always major limiting factors to the growth results and a major obstacle to the realization of the Sustainable Development Goals (World Bank, 2023). Development organizations in reaction have been putting more focus on institutional capacity building and have accepted that structures, procedures, and the wider governance structures have a large role in state performance (Fukuyama, 2022).

Pakistan is also an interesting case study in this world discourse, especially, considering its recent administrative changes and the current governance issues. The bureaucracy of the country, which is organized in accordance with the 2020 Civil Service Reform, still has to overcome the differences in interests and service competition and introduce the digital governmental projects (Government of Pakistan, 2022). The Federal Secretariat, the primary policy-making machine, has evolved into a place where the old bureaucratic models meet the new demand of governance, where control of the Secretariat is converted to policy power in an ever more complicated federal system (Jabeen & Jadoon, 2023).

Throughout the history of Pakistan, the state has experienced significant socio-economic development threats, such as climate vulnerability, energy transitions, pressure on the health system, lack of education, and economic stabilization requirements (World Bank, 2024). The Human Development Index ranking (164/193 countries in 2023/2024) of Pakistan remains below regional neighbors India (134) and Bangladesh (129), and thus there are still problems with the lack of effective policy solutions (UNDP, 2024).

Theoretical Contribution:

Although the policy capacity framework (Wu, Howlett, and Ramesh, 2018) has been conceptualized to work well in established governance systems, its relevance and comparative significance in bureaucracies of developing nations are subject to less comprehension, with its application and operational manifestations being associated with unique limitations involving digital divides, political instability, and post-colonial administrative heritages. The paper fills this theoretical and empirical gap through systematic testing of the fundamental dimensions of this framework; Stewardship, Policy Quality Systems, People Capability, and Engagement/Customer Centric approaches, in the context of the Federal Secretariat in Pakistan at a time of massive administrative change.

This paper explores the following question:

1. How far can the existing policy capacity drivers be used to explain policy advisory capability in an environment of digital transformation and ongoing politicization?

Resolving this question, we are contributing in three Objectives:

(1) Nevertheless, the theoretical model is supported by empirical evidence in a reform period in a poorly studied bureaucratic setting,

(2) Context specific information about policy capacity factors to digital transition in post-colonial states, and

(3) Methodological considerations of studying elite bureaucratic activities in the context of transformation of governance.

2. LITERATURE REVIEW

Policy capacity has long since developed in the current scholarship of public administration, especially with the rise of digital governance and evidence-based policy movements (Howlett, 2022). Modern theories consider capacity as multi-tiered phenomena that include individual, organizational, and systemic data as well as come to include more and more digital competences (Mergel et al., 2023). The new policy capacity framework is characterized by the analytical capacity (policy analysis skill), operational capacity (implementation resources and digital infrastructure), and political capacity (complex policy processes management in polarized settings skill) (Howlett and Ramesh, 2023).

Policy advisory capability Applied models have developed in collaboration with practitioners, and most recently, adapting models have focused on digital transformation and agile policymaking competencies (Mintrom and Luetjens, 2023). The global view of stewardship, people, systems, and engagement as the integrated capabilities, which are interrelated, has been revised to incorporate digital literacy and data analytics capabilities (OECD, 2023). Nevertheless, it is mostly applied in a non-elastic situation, that is, in the developed countries with developed digital infrastructure.

In bureaucracies of third world economies, current capability dilemmas are in the form of digital disparities, brain drain, and the challenges posed by the speed of governance change (Andrews et al., 2017). The case of Pakistan

bureaucracy in particular is a reflection of these contemporary challenges as it has been navigating digital governance projects under the backdrop of structural limitations that are persistent (Jabeen & Jadoon, 2023). Recent research on Pakistani administration has captured such changing challenges but has failed to apply updated policy capacity frameworks in a systematic manner in elucidating set-ups of advisory quality in the digital era. Theoretical accounts of differences in capabilities in such situations continue to draw on the digital governance theory (Mergel et al., 2023) and adaptive capacity models (Andrews et al., 2017) by focusing on how organizations become resilient in a fast-changing environment. Nevertheless, the relationship between the traditional capacity pillars and the new digital competencies in changing bureaucracies is the least empirically studied field.

3. THEORETICAL PREPARATION FRAMEWORK AND HYPOTHESES DEVELOPMENT

In this research, a modernized integrated policy capacity framework has been used (Howlett and Ramesh, 2023), adjusted to the modern bureaucracy of Pakistan. The framework assumes four inter-relationship pillars that digital-era governance needs to have in terms of policy advisory capability:

- 1. Stewardship:** Strategic foresight, digital transformation, and adaptability-based leadership behaviors in volatile environments.
- 2. Quality System Policy:** Structured and depicted digital and analogical procedures that guarantee strict evidence utilization, data analytics, and quality control of policy development.
- 3. People Capability:** Personal and collective skills that include existing policy competencies as well as developing digital capabilities.
- 4. Engagement/Customer-Centric Approaches:** The systematic multi-channel inclusion of stakeholders and citizens in policy-making processes, preferably by using digital platforms.

Contextual Adaptation

To make use of this framework in modern-day Pakistan, one needs to take into account three contextual mediators: (1) continuing digital governance programs despite structural limitations, (2) institutional memory issues and political volatility, and (3) conflicting priorities of the traditional bureaucratic operations and the implementation of reforms (Government of Pakistan, 2022).

We theorize that formal Policy Quality Systems and digitally-enhanced People Capability might be key stabilizing agent in such transitioning environments, perhaps overtaking the role played by high-level Stewardship in the periods of transition.

Theories Development in this theoretical positioning we obtain 5 testable hypotheses:

H1 (Stewardship): We can posit that stewardship behaviors will be positively related to the quality of policy advisory based on the modern stewardship theory that tends to give special attention to adaptive leadership (Uhl-Bien and Arena, 2023). We would however expect this relationship to be both complex and may be mediated by the implementation capacity especially considering the context of implementation of reforms in Pakistan whereby the leadership focus is divided among various priorities.

H2 (Policy Quality Systems): It is proposed by digital institutional theory that digitalized systems, especially ones that use digital tools, introduce data-driven professionalism pressures (Mergel et al., 2023). Our hypothesis is that the existence of policy quality systems will lead to a significant improvement in policy advisory quality, in that it will bring structure and standards with the help of which consistent performance within the context of change can be achieved.

H3 (People Capability): To determine the significance of both traditional expertise and digital competencies to organizational performance, contemporary human capital theory (Autor, 2022) has been highlighted. We hypothesize that the overall competence of policy professionals will be a powerful predictor of quality of policy advisory practices, which may be the most robust capability pillar in digital transitions.

H4 (Engagement/Customer-Centric): The theory of digital age public value (Mazzucato, 2023) and the co-production strategies insisted that the policy legitimacy demands the multi-channel engagement of the stakeholders. Our hypothesis is that the policy advice based on advisory processes that involve traditional and digital means of engagement will result in the creation of the policy advice that will be seen as more legitimate and implementable.

H5 (Demographics): Although the traditional correlation between demographic factors and capability exists, the process of digital transition can change these associations. We use these as control variables to find out whether traditional signs of human capital could still be predictors in the light of digital transformation.

4. RESEARCH METHODOLOGY

4.1 Research Design and Context

The research has a quantitative survey design as it uses a structured method to quantify the perceptions of policy advisory capability in the Federal Secretariat in Pakistan throughout its digital transformation phase (2023-2024). Since the research of bureaucratic functions in the process of reform implementation is dynamic and requires a balance between comprehensiveness and pragmatism, this methodology makes it possible to conduct data collection that may reflect both stagnant issues and newly developed competencies.

4.2 Population and Sampling Strategy

The population of interest will include all federal officials in Basic Pay Scales 17-22 (estimated as n=31,452 according to the 2022-2023 Federal Government statistics) and who have the primary role of formulating policies in the Federal Secretariat of Pakistan (Government of Pakistan, 2023). A real probability sample of this population is much difficult to achieve because:

- (1) restructuring of bureaucracies in reforms,
- (2) different access and literacy of digital access, and
- (3) geographic and ministerial dispersion.

We thus settled on a stratified purposive sampling approach where we used a calculated sample size (n=426 calculated using an adjusted sample calculation of 5% margin of error and 95% confidence level) as a recruitment goal. It is a modern methodological change of adapting the study of bureaucracies in transition (Jilke et al., 2023). Built contacts with the officials were based on a variety of channels in order to maximize the diversity: official email and digital communication platform, ministry portal, official portals professional network, and stratified referrals. The ultimate sample that was analysable was 399 full responses (93.7% response rate), which is a modern cross section of grade, ministry, and service backgrounds that is in line with current bureaucratic demographics.

Table 1: Sample Characteristics (N=399, 2023-2024 Data Collection)

Characteristic	Categories	Frequency	Percentage
Grade Level	BS-17	142	35.6%
	BS-18	101	25.3%
	BS-19	79	19.8%
	BS-20	47	11.8%
	BS-21	23	5.8%
	BS-22	7	1.8%
Digital Proficiency	Basic	156	39.1%
	Intermediate	187	46.9%
	Advanced	56	14.0%
Experience	<5 years	92	23.1%
	5-10 years	134	33.6%
	11-15 years	101	25.3%
	>15 years	72	18.0%
Education	Bachelor's	148	37.1%
	Master's	205	51.4%
	MPhil/PhD	46	11.5%

4.3 Instrument Development and Measures

The survey tool modifies the existing scales of the validated scales in current policy capacity studies (Howlett and Ramesh, 2023), but the crucial elements are also fine-tuned by reviewing experts and conducting pilot tests (n=35 officials). The measures of all constructs were performed on 5-point Likert scales (1=Strongly Disagree to 5=Strongly Agree), with further items covering digital capabilities.

Policy Advisory Quality (Dependent Variable): 18 items of perceived policy advice quality, including digital evidence use ($=.971$). Sample item: The policy advice that has been generated in my ministry includes the appropriate data and digital evidence systematically.

- **Stewardship:** 7 questions that measure leadership in digital transformation and adaptive management ($=.918$). Sample question: "The top management adequately leads the digitalization of policy-making."
- **Policy Quality Systems:** 8 items about formal digital and analog quality assurance (20). Sample question: "My ministry has incorporated use of digital tools in the quality assurance of policy."
- **People Capability:** 12 items that measure both conventional knowledge and the digital skills ($=.951$). Sample item: "The policy staff are sufficiently digitally-skilled to do modern policy analysis."
- **Engagement/Customer-Centric:** 8 items assessing multi-channel stakeholder engagement (1 =.869). Sample question: Our policy formulation involves both the traditional and online engagement processes.
- **Digital Control Variables:** Measures of access, proficiency, and availability of the tools in a digital version.

4.4 Addressing Contemporary Methodological Constraints

4.4.1 Common Method Bias (CMB) Assessment

We used the modern procedural and statistical fixes of the common method bias pursuant to new methodologic advice (Podsakoff et al., 2023). In the procedural sense, we used temporal separation in measurement where feasible, different endpoints of scales, and psychological separation in the form of survey design. We statistically performed modern CMB tests with the unmeasured latent method factor approach which ensured that the variance of the methods explained less than 25 percent of all variance. We also utilized the correlation marker technique using a number of markers whereby we obtained consistent results regardless of the marker used.

4.4.2 Limitations in Sampling in Digital Transition Situation.

We are strictly aware of sampling constraints of research on bureaucracies in the age of digital transition as a legitimate problem of modern research in the field of public administration (Jilke et al., 2023).

We followed: (1) stratification based on digital proficiency levels, (2) the use of multi-mode data collection that could be used by different levels of digital access, and (3) the analysis of non-response bias that demonstrated that there were no significant differences between early and late respondents on critical variables.

4.5 Analytical Approach

Hierarchical multiple regression analysis using contemporary model diagnostics was used with control variables being digital access variables, the variables were entered in theoretically meaningful blocks. We checked multicollinearity by the Variance Inflation Factors (VIFs), and all of them, not exceeding 8 (the largest = 7.21), were at acceptable levels according to modern guidelines (Hair et al., 2022). We used strong standard errors as the means of considering possible heteroscedasticity and was heavily involved in residual analysis to assure regression assumptions.

5. RESULTS

5.1 Reliability and Descriptive Statistics.

Each of the scales had high reliability (Table 2). Descriptive statistics demonstrated changing trends, in that Policy Quality Systems had better mean scores ($M=2.78$, $SD=0.71$) than previous research indicating reform effects, whereas Digital Engagement approaches had emerging but constrained effects ($M=2.34$, $SD=0.69$).

Table 2: Scale Reliability and Descriptive Statistics (2023-2024 Data)

Variable	Cronbach's α	Items	Mean	SD	Min	Max
Stewardship (ST)	.918	7	2.45	0.87	1.14	4.71
Policy Quality Systems (PS)	.853	8	2.78	0.71	1.50	4.38
People Capability (PC)	.951	12	2.67	0.83	1.42	4.92
Engagement/Customer-Centric (EG)	.869	8	2.34	0.69	1.25	4.13
Policy Advisory Quality (QP)	.971	18	2.41	0.72	1.17	4.33
Digital Capacity (DC)	.892	5	2.56	0.78	1.20	4.40

5.2 Correlation Analysis

Table 3 also showed significant positive correlations between all variables ($p<.01$) in bivariate correlations. Policy Advisory Quality had the closest relationship with Policy Quality Systems ($r=.712$) and People Capability ($r=.691$), and Digital Capacity showed the potential intentions ($r=.523$). Inter-correlations of independent variables were expected in nature with Digital Capacity having moderate correlation with all traditional capacity pillars.

Table 3: Correlation Matrix (2023-2024 Data)

Variable	1	2	3	4	5	6
1. Stewardship	1					
2. Policy Quality Systems	.821**	1				
3. People Capability	.687**	.798**	1			
4. Engagement/Customer-Centric	.726**	.785**	.732**	1		
5. Policy Advisory Quality	.445**	.712**	.691**	.538**	1	
6. Digital Capacity	.612**	.678**	.701**	.645**	.523**	1
*Note: ** p < .01*						

5.3 Regression Analysis

Some interesting contemporary trends were identified by the hierarchical regression findings (Table 4). The total variance in Quality of Policy Advisory was explained by demographic and digital control factors with an explanatory capacity of 28.3 (Model 1). Inclusion of Stewardship raised the amount of explained variance to 49.1% (Model 2) and the standardized coefficient (= .498) is positive and below .001. Nevertheless, adding Policy Quality Systems to the model (Model 3) led to further increases in variance explained (71.2) and the coefficient of Stewardship was found to be negative (= -.258, p < .001), indicating the continued existence of patterns of statistical suppression.

Table 4: Hierarchical Regression Results Predicting Policy Advisory Quality (2023-2024 Data)

Predictor	Model 1	Model 2	Model 3	Model 4	Model 5
Controls					
Digital Access	.245***	.187**	.102*	.095*	.087*
Digital Proficiency	.312***	.254***	.134**	.128**	.121**
Experience	-.141*	-.189***	-.087	-.091*	-.076
Education	-.389***	-.441***	-.278***	-.282***	-.341***
Capacity Variables					
Stewardship		.498***	-.258***	-.264***	-.281***
Policy Quality Systems			.845***	.698***	.621***
People Capability				.231***	.214*
Engagement/Customer-Centric					.348***
Model Statistics					
R ²	.283	.491	.712	.724	.749
Adjusted R ²	.274	.483	.706	.718	.742
ΔR ²		.208***	.221***	.012**	.025***

F	28.734***	63.218***	124.892***	116.537***	108.924***
*Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Standardized coefficients shown*					

The entire model (Model 5) was able to explain 74.9% variance of Policy Advisory Quality. The strongest predictor was the Quality Systems of policy ($=.621$, $p=.001$), and then there was the Engagement/ Customer-Centric approaches ($=.348$, $p=.001$). People Capability was also important ($\beta=.214$, $p<.05$) and it is possible to conclude that it is important in the digital transition. The coefficient of stewardship ($=.281$, $p<.001$) showed a negative value, which is a continued suppression effect that should be theoretically interpreted in the modern contexts. There were significant effects that were consistent and across models on digital controls.

5.4 Hypothesis Testing Summary

H1 (Stewardship): In part with modern complexity. There is a positive bivariate correlation but negative relationship between stewardship in full model, which indicates changing patterns of mediation in digital transition.

H2 (Policy Quality Systems): With a strong support ($=.621$, $p<.001$), it proved that this is the most important aspect of the modern bureaucratic environment.

H3 (People Capability): Supported ($2 =.214$, $p<.05$), and showing its remaining relevance in the digital transformation.

H4 (Engagement/Customer-Centric): H4 is strongly supported (440, $p=.001$), with the trend of increasing significance of multi-channel engagement.

H5 (Digital Controls): Supported, and the positive impacts of digital proficiency were all found to be consistent ($=.121$, $p<.05$).

6. DISCUSSION: POLICY CAPACITY IN THE TRANSITIONAL BUREAUCRACY OF PAKISTAN

Our empirical investigation has yielded results that affirm and contradict the existing ideas of policy capacity in bureaucracies of the developing nations. This positive relation of Policy Quality Systems ($=.621$) is not an exception as the theory of institutional foundations is correct, but the ever-present complication of the effects of Stewardship and dynamic nature of People Capability can indicate that there will be important nuances that will have to be theorized and re-examined in practice. This discussion puts the findings into context in three areas, viz. the theoretical implications of the capacity frameworks within the transitional settings, comparative insights in the digital age governance in the developing countries and practical means of undertaking the sequenced reform implementation in the distinct institutional environment of Pakistan.

6.1 Theoretical Implications: Refining Policy Capacity Frameworks for Transitional Contexts

6.1.1 The Primacy of Institutional Scaffolding Over Leadership Charisma

The most reliable finding, which we made, is the high, enduring predictive capability of Policy Quality Systems in all models and defies traditional wisdom in administrative change that makes leadership transformation the central change agent. Although the leading visionary leadership can be catalyzed by the stewardship theory (Davis et al., 1997) or adaptive leadership frameworks (Uhl-Bien and Arena, 2023), our data indicate that in a bureaucracy under digital and institutional change, the facilitative role of systemic scaffolding might be a stronger basis of capability improvement. This is consistent with the latest institutional work theory (Lawrence, Leca, and Zilber, 2013), which suggests that enduring change is neither created as a product of intermittent acts of leadership but is rather produced through gradual and rather mundane effort to change routines, procedures, and standards. In the Federal Secretariat in Pakistan, where political rotation and outside influences continue to dominate positions of leadership, institutional memory in the form of sound policy quality systems would last longer than the tenure of an individual. Such systems, such as standardized evidence bases, obligatory consultation procedures, quality assurance check point transparency, establish what we call procedural path dependency: once institutionalized, they give rise to self-enforcing expectations that lock arbitrary decisions and increase the rigor of technical review, even in times of lax leadership attention or even more crises of political pressure.

6.1.2 The Stewardship Paradox: When Leadership Becomes a Mediated Variable

The fact that Stewardship is transformed into a negative predictor in all multivariate models but was a positive bivariate correlate thus is our most theoretically provocative result. This statistical suppression indicates that the effect of leadership on the quality of policy advisory is mediated, and the leadership does not have a direct influence on policy advisory quality. We would interpret this as the manifestation of the fact, that in disintegrated, politicized bureaucracies, formal leadership (administrative stewardship) tends to lose touch with operational capability. Top bureaucrats might be able to master their political maneuvers and acquisition of resources, conventional stewardship roles, and at the same time compromise procedural integrity by way of ad hoc

interventions or patronage promotions. Therefore their beneficial influences on organizational resources (summed up in bivariate correlations) can be superseded by any adverse effects on procedural consistency (realized when systems are controlled out). This paradox leads to the hypothetical refinement; in transitional developing situations, stewardship would perhaps have to be disaggregated into political stewardship (external legitimization and resource mobilization) and procedural stewardship (internal system maintenance and protection). The latter, which is mostly not present in the current set-up in Pakistan, but according to our data, might be of more essence to retain the quality of advising. This is consistent with the new literature on the topic of institutional stewardship (Ansoll, Srensen, and Torfing, 2022), which highlights the role of leaders as guardians of just procedures and not heroes of change.

6.1.3 Capability as Configuration: Knowledge of Pillar Interdependencies.

The configurational character of policy capacity is highlighted by the changing importance of the People Capability, which is important in the role of bivariate analysis, but insignificant when the system is controlled. Capability pillars seem to relate in synergies or substitutions, as opposed to being independent contributors. Our results indicate two options of a transitional situation including (1) a systems-compensatory configuration where the high quality systems can partially compensate moderate weaknesses in the individual capability by providing systematic directions and quality checks, and (2) a skills-amplification configuration where a high individual capability can partially generate quality gains in the presence of weak systems but cannot reach optimal levels unless supported by systematic efforts. Such configurational knowledge goes beyond additive conceptions of capacity building to more interactive conception. It implies that reform diagnostics must evaluate not only an absolute level of each of the pillars of capabilities but also their relative balance and interaction patterns. In the case of Pakistan, the existing arrangement seems not optimal: medium strength of the system and variable individual capability makes up a brittle capacity that works sufficiently well in normal conditions and breaks in the event of stress. These nonlinear and interactive relationships should be more factored into theoretical models in order to inform context-sensitive reform.

6.2 Modern Comparative Implications: The Digital Transition of Developing Bureaucracies.

6.2.1 The Commandment of Gradual Change in Digital Transition.

The dynamic capability relationships that we have seen in our data highlights a strong urgency among the need to adapt sequentially in bureaucratic change, and not to transform all fronts at once. The fact that the Policy Quality Systems is placed prominently as the pillar that the country should be developed with implies that the transformation of bureaucracies into the digital realm might be approached in phases: initially, establishing high-quality policy regimes and quality checks should aim to be conducted; second, incorporating digital tools into the developed quality checks should be implemented; and third, building the stewardship and engagement capacity that will be able to utilize this strengthened footprint. This observation refutes the dominant big bang model of digital transformation of the government that many technical assistance programs encourage (World Bank, 2023). Rather, it is consistent with new evidence on adaptive administration (Andrews et al., 2017) that states that complex bureaucracies better internalize change in a series of learning-intensive steps. In the case of Pakistan and other such settings this means reform projects should not be tempted to simultaneously embark on parallel projects on digital platforms, capacity training and leadership development. A better approach could be a discursive style of digital scaffolding with the new technologies being incrementally stuck on to the thriving backbones of procedures to enable organizational learning and reduce the destabilizing impact of unchecked digital fragmentation.

6.2.2 Digital Tools as Accountability Mechanisms in Politicized Environments

The fact that our Engagement/Customer-Centric systems continue to be positively effective as a separate phenomenon, even when the digital capacity controls are ignored, suggests the underestimated purpose of these systems as latent forms of accountability. In places where horizontal accountability to the people is largely replaced by vertical accountability to political masters, online and offline communication lines may establish other avenues of feedback and accountability. This echoes this new literature on accountability by digitization (Peixoto and Sifry, 2023), which postulates that technology has the capacity to rewire policy processes to be more transparent and responsive (without intention). The implementation of a systematic stakeholder consultation, be it in the form of a public hearing, a citizen panel, or an online feedback portal, in the Federal Secretariat of Pakistan, traditionally a cloistered policy advisory body, gives bureaucrats some sort of reputational risk management. The likelihood of adviser basing their recommendation on evidence and acting in the public interest increases when advisors know their recommendation will be subject to further scrutiny by interested parties. It redefines engagement as a normative democratic good to a strategic capacity that contributes to increasing the credibility and defensibility of policy advice under the controversial political conditions. Thus, engagement system investment is not only a way of enhancing policy making but also establishing institutional resilience and justification of bureaucracy role in governance, which is important given that bureaucracies continue to face the threat of being assumed to be political.

6.2.3 Hybidity as Eco-Pathway to Sustainability.

The fact that the existing engagement practices remain relevant as well as the emergence of new digital platforms is an indication that hybrid models of governance might be the most effective in developing nations as opposed to complete digital transformation. Similar trends are observed in comparative research conducted in India (Arora, 2019) and Kenya (Mutungi and Were, 2023): effective digital governance is not in the approaches of technology

first but in the cautious incorporation of digital technologies into the existing cultures and capabilities of the administration. In the case of Pakistan, this principle of hybridity is relevant in terms of capability pillars, i.e. integrating databases of digital policy with the traditional methods of analysis, online consultation with physical juries with citizens, and digital learning with mentorship and experience. This hybrid identifies the embeddedness of bureaucratic labor in social relations and institutional memories which cannot be entirely digitized. It also presents practical limitations of digital divides, differences in technological literacy and infrastructure limitations that define most developing scenarios. In theory, this implies the move (evolution) of digital government forms (that are preoccupied with technology implementation) into digitally-enabled government forms that focus on proper inclusion of technology into already established administrative ecosystems.

6.3 Implications of this study to the Administrative Reform Trajectory in Pakistan.

6.3.1 Strengthening Targeted Systems as an Urgent Goal.

Our results give an empirical rationale of the need to focus on the Policy Quality Systems improvement as the most effective point of entry of the current administrative reforms of Pakistan. The government and its development partners should instead focus on: (1) Standardizing the minimum evidence requirements on policy submissions across all ministries, (2) Instituting mandatory ex-ante and ex-post evaluation schemes with standardized methodologies, (3) Creating centralized policy information systems that can integrate the information sources across ministries and develop on the existing paper-based workflows, and (4) The institutions of independent quality assurance units in the planning divisions of key ministries. These interventions must be based on simplicity and implementability without the use of too sophisticated systems beyond the existing absorption capacity. It should aim at producing good enough systems that are regularly utilized as opposed to perfection systems that are still theoretical.

6.3.2 Strategic Stewardship Development by means of Guarded Space.

Considering the complicated nature of leadership, the reforms must be aimed at nurturing the concept of stewardship by upholding the formation of institutions and indirect strategies instead of merely training individuals to be leaders. In particular: (1) Introduce protected reform zones into a few ministries where the integrity of procedures is formally safeguarded by governance charter or checks and balances, and stewardship behaviors are allowed to evolve in reduced-risk environments; (2) Cross ministerial communities of practice of policy professionals that are semi-autonomous of hierarchical structures and peer-based stewardship; (3) Tie leadership assignments to procedural performance metrics which reward system maintenance and performance besides traditional output measures; and (4) Build up stewardship narratives that celebrate bureaucratic merits. These methods acknowledge the fact that stewardship is a product of institutional structures and professional identities at least as much as it is a product of personal characteristics.

6.3.3 Reforming Architecture to be Adaptive.

The results of our analysis of complex, mediated relationships between the pillars of capability underline one more practical implication the necessity to integrate adaptive learning into the design of the reform. The old linear project constructs, where the log frame is fixed and the indicators are pre-defined are not appropriate to construct the kind of inter-connected flexible ability that we have discovered in our examination. Rather, reform initiatives, either locally or with the assistance of international partners- need to include systematic learning feedback loops. This may include data boards monitoring system use, staff capacity ratings and policy quality indicators in real-time; periodic pause and reflect sessions with reform implementers to make sense of these dynamics; and the institutional power to shift resources in response to what the data will tell them about the binding constraints (Andrews et al., 2017). As an example, when the data demonstrates that the systems of digital policy are being installed but not used due to the insufficiency of people capability, the resources can be easily redirected toward the additional software acquisition and to the specific cohorts of digital literacy. It is the management-for-results method, where relationships between inputs and outcomes are put in the spotlight over the inputs in complex bureaucratic ecosystems, which are needed to navigate the non-linear road map of capacity development. It makes reform not only a delivery problem but also a learning problem, which creates not only a stronger bureaucracy but also a more learning-oriented one.

6.3.4 Cultivating Demand for Quality through Strategic Transparency

In addition to the supply-side capacity building, our results indicate that policy advice on the demand of quality policy should also be nurtured within the political-bureaucratic ecosystem. Capacity investments get more returns when the politicians and senior officials appreciate the importance of rigorous policy analysis, and punish sloppy work. Some of the practical strategies encompass: (1) Strategic transparency initiatives that increase the visibility of policy advice quality to oversight institutions and the wider public, which create reputational incentives toward quality; (2) Co-production of policy with political operatives to create their values of quality through direct experience; (3) Policy impact tracking systems that demonstrate how policy quality relates to success in implementation; and (4) Professional recognition systems that reward exemplary policy work inside and outside the bureaucracy. These demand-side interventions are complementary to the traditional supply-side capacity building and generate positive interdependences amongst expectation and performance cycles.

6.4 shortcomings and Future study directions.

6.4.1 Methodological limitations in the research of transitional context.

The main limitation of our study is the purposive sampling approach, which is a broader research issue of researching the elite bureaucracy functions in times of active reforms. Future research would utilize new methods

like: (1) Linked administrative-survey designs that would bridge perceptual data with administrative data on policy quality; (2) Datary and experience sampling that would track the dynamics of capability in action; (3) Comparative case tracking across ministries of specific policy processes to test the effects of particular capacity-building interventions; and (4) Experimental elements included in an ongoing reform that would test the impact of a specific capacity-building intervention. Such methodological developments may address certain shortcomings and give more detailed information on causal processes.

6.4.2 Capacity Evolution Temporal Dynamics.

Our cross-sectional design measures capacity relationships at one point in the reform history of Pakistan but is not able to track the way that those relationships have changed over time. The longitudinal research is required to know: (1) The sequencing effects, how the investment of specific capability pillars initially leads to different long-term paths of reform as compared to balanced strategies; (2) The critical junctures, at what points in the reform processes, the investments in capacity deliver disproportionate returns; (3) The regression risks, under what conditions capacity gains no longer pay off despite further investment; and (4) The intergenerational transmission, how capability accumulation is transferred or lost across bureaucracy cohorts. This kind of time breakdown would give essential advice how reform investments should be made and at what speed.

6.4.3 Political Economy of Capacity Building.

Lastly, our research is mainly administrative oriented and does not fail to recognize political limitations. Further inquiries ought to more methodically incorporate the analysis of political economy to comprehend: (1) Distributive politics of capacity investment, who gains and loses in various capability upgrades; (2) Elite commitment, how political leaders can invest in bureaucratic capability without incurring in the short-term; (3) Patronage-capability trade-offs, how political leaders can alter their alliances to sustain capability investments through and after political cycles; and (4) Coalition building to reform, who can form alliances with whom to gain over capacity investment between political cycles. These questions go beyond the technical capacity building to the basic political pillars of the administrative reform.

7. CONCLUSION

The paper is timely in testing policy capacity frameworks in the digital governance transition in Pakistan. Through the analysis of capability pillars within the ongoing reform implementation, we can go beyond the unchanging evaluations of capability to the dynamic evaluation of capability in the changing governmental situations.

We propose that the policy capacity of the digital-era emerges as a result of complicated interrelations between the existing capability pillars and the new digital ones. The amplified Policy Quality Systems role, which accounts for a significant variance over other variables, implies that during transition circumstances, systemic digital integration is the most powerful leverage area towards capability building. The current stewardship paradox suggests that the leadership approach might have to be modified to meet the requirements of successful digital transition management.

On a methodological level, we show that applying rigorous research on transitioning bureaucracies needs adaptive designs taking into consideration digital access differences and dynamics of reform implementation. Our digital controls and stratified approach provide approach methodologies to analogous new contemporary studies.

In theory, our research would allow adding to the literature on the development of policy capacity as it shows how digital transition changes the relationships between capability in its traditional forms. The altering comparative significance of the capacity pillars in the context of transformation indicates that frameworks should be capable of respond in a temporal fashion and be contextually responsive.

In practical terms, since Pakistan and other developing nations have to find their way through digital governance transitions despite the ongoing developmental struggles, our results provide evidence-based policy: focus on systemic digital integration, embrace hybrid capability strategies, plan reforms strategically, and track the changing capacity relationships. The insights come at a very opportune time when nations are striving to achieve Sustainable Development Goals in the digital transformation.

Finally, it is necessary to increase the ability to advise policies in digitally transitioning developing countries, both in theory (understanding the changing capacity dynamics) and in practice (sequencing the implementation). Through the systematic and contextual insight of further research into these dynamics, scholars and practitioners can together devise more productive strategies to create the competent, flexible bureaucracies that are required to address the 21st century governance challenges.

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