

Research Article

Flexible Work Arrangements and Organizational Outcomes: Evidence from the Public Sector

Krizzy Von Tizon Flores¹, Rhea Ledesma-Gumasing^{2, *} 

¹Human Resource Management Section, DOST- Forest Products Research and Development Institute, Los Banos, Philippines

²College of Public Affairs and Development, University of the Philippines Los Baños, Los Baños, Philippines

Abstract

The rapid shift away from conventional workplace structures has substantially altered the landscape of public administration in the Philippines and across the globe. This study examines the outcomes associated with adopting Flexible Work Arrangements (FWAs)—specifically flexiplace and compressed workweeks—within the Department of Trade and Industry-Construction Industry Authority of the Philippines (DTI-CIAP). Using a convergent parallel mixed-methods design, the study evaluates how FWAs affect five key work-related outcomes: employee motivation, job satisfaction, individual performance, absenteeism, and turnover intentions among a sample of N = 74 public sector professionals across specialized implementing boards and administrative divisions. Statistical associations and moderating factors were examined using chi-square tests of independence, with Cramér's V as the measure of effect size. The descriptive results indicate substantial improvements in employee experience, morale, and retention likelihood, although cross-tabulations show that these outcomes vary considerably across demographic and occupational groups. Notable variations emerge across age cohorts, gender lines, job roles, and lengths of service, while civil status shows a comparatively smaller but still statistically significant association with certain motivational dimensions. The qualitative data also reveal recurring operational challenges, including technological and infrastructural bottlenecks (72.97%), dependency on manual processes (51.35%), personal boundary erosion (56.76%), and team coordination gaps (41.89%). The findings suggest that flexible work models are no longer temporary pandemic-era relief interventions but can serve as core mechanisms for institutional development, public sector modernization, and workforce retention. A strategic roadmap is proposed for integrating structured flexibility into civil service operational guidelines while mitigating systemic friction through targeted digital and structural reforms. The study contributes original empirical evidence to address a recognized gap in Philippine public administration literature, particularly regarding specialized regulatory bodies operating across functionally diverse portfolios.

Keywords

Flexible Work Arrangements, Public Sector, Employee Outcomes, Philippines

*Correspondence: Krizzy Von Tizon Flores (krizzyvon.flores@fprdi.dost.gov.ph)

Received: 15 September 2026; **Accepted:** 28 September 2026; **Published:** 20 October 2026



Copyright: © The Author(s), 2026. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

1. Introduction

1.1. Background of the Study

The arrival of the global COVID-19 pandemic in early 2020 caused economic, structural, and operational disruptions at the local, national, and international levels. To slow the spread of the virus, governments worldwide instituted strict community quarantines, physical distancing policies, and recurring local lockdowns. These public health mandates immediately halted traditional face-to-face operations, forcing a rapid and often improvised reorganization of workplace environments. For decades, conventional public and private sector paradigms had relied heavily on centralized physical presence, rigid schedules, and standardized in-person workflows. The abrupt closure of physical workplaces required the immediate implementation of alternative work frameworks to maintain institutional continuity and public service delivery.

Historically viewed with skepticism by traditional administrative managers—who equated physical presence with productivity and accountability—Flexible Work Arrangements (FWAs) transitioned from optional employee perks to essential mechanisms for organizational survival and continuity. The pandemic functioned as a coercive catalyst, compressing years of incremental organizational change into mere months. FWAs represent formal institutional policies that grant personnel a degree of autonomy and self-determination regarding when and where they fulfill their professional responsibilities [1, 2]. When structured intentionally, these arrangements increase organizational flexibility, reduce physical infrastructure overhead, improve operational performance, and improve the balance between employees' professional duties and personal lives [3, 4].

In the landscape of Philippine public administration, this structural evolution was codified by the Civil Service Commission (CSC) through Memorandum Circular (MC) No. 06, series of 2022 [5]. This circular provided a comprehensive legal framework for government institutions, establishing six distinct categories of FWAs: (1) Flexiplace, a decentralized arrangement in which public servants perform their duties from designated alternative sites, including working from home (WFH), satellite offices, or other fixed locations outside the main agency headquarters; (2) Compressed Workweek (CWW), which condenses the standard 40-hour statutory workweek into fewer than five working days by extending daily service hours; (3) Skeleton Workforce, an operational model deploying the minimum number of personnel required to sustain public operations during restricted periods; (4) Work Shifting, which distributes staff across staggered shifts to provide uninterrupted public service while minimizing spatial density; (5) Flexitime, which allows employees to vary daily arrival and departure windows provided they complete

the required core hours; and (6) Combination of Flexible Work Arrangements, which merges elements of multiple FWA categories to accommodate specialized job descriptions and fluctuating agency requirements.

1.2. Institutional Context: The Case of DTI-CIAP

The Department of Trade and Industry-Construction Industry Authority of the Philippines (DTI-CIAP) serves as an instructive case study for assessing public sector FWA implementation. Established as a specialized attached agency of the DTI, CIAP is mandated to accelerate, regulate, and promote the growth and international competitiveness of the Philippine construction industry. The internal architecture of CIAP comprises the Office of the Executive Director and five specialized implementing boards, each carrying distinct regulatory, technical, and developmental obligations.

The Philippine Contractors' Accreditation Board (PCAB) is tasked with managing the statutory licensing, registration, and qualification grading of domestic and foreign contractors undertaking projects in the country, processing large volumes of compliance documentation and interfacing continuously with external clients. The Philippine Overseas Construction Board (POCB) formulates market-penetration strategies and assists local construction enterprises in identifying, securing, and managing infrastructure operations in global markets. The Philippine Domestic Construction Board (PDCB) focuses on optimizing regulatory environments, creating standard contract guidelines, and promoting best practices for domestic building projects. The Construction Manpower Development Foundation (CMDF) is mandated to design, execute, and certify technical training and capacity-building programs across the construction labor market. Finally, the Construction Industry Arbitration Commission (CIAC) serves as a specialized dispute-resolution forum providing mediation and arbitration services to address contractual conflicts within the sector.

Operationally supporting these specialized technical bodies are the centralized administrative, financial, and management divisions. This institutional structure encompasses a diverse mix of positions, ranging from highly analytical specialists and legal arbitrators to front-line customer service clerks and manual processing personnel. Consequently, the uniform implementation of a single FWA model across DTI-CIAP introduces unique organizational challenges, as different divisions maintain contrasting operational rhythms, accountability requirements, and client touchpoints. This functional heterogeneity makes DTI-CIAP an especially valuable site for examining the granular, position-specific effects of flexible work policies.

1.3. Research Questions and Analytical Focus

While private enterprises adapted quickly to remote and hybrid operations during the pandemic, public institutions faced distinct hurdles rooted in strict civil service regulations, legal accountability mandates, and entrenched bureaucratic habits. This study addresses these structural realities by evaluating how alternative work policies function within a regulatory public agency. Specifically, the study addresses the following research questions:

First, how do the flexible work arrangements implemented at DTI-CIAP—specifically flexiplace and compressed workweek models—affect key employee outcomes: motivation, job satisfaction, individual performance, absenteeism, and turnover intention? Second, to what degree do demographic characteristics (age, sex, civil status, job position, and length of organizational service) moderate the relationship between flexible work models and these five work-related outcomes? Third, what are the primary operational, technical, and regulatory challenges encountered by personnel and administrators during the implementation of these flexible work policies within the agency? Fourth, what strategic recommendations can be formulated to help public sector leaders optimize, refine, and sustainably manage hybrid work frameworks across the Philippine civil service?

1.4. Objectives of the Study

This research pursues four objectives: (1) to evaluate the associations of flexiplace and compressed workweek models with employee motivation, satisfaction, productivity, attendance, and retention within DTI-CIAP; (2) to identify variations in employee outcomes by cross-tabulating quantitative data across diverse demographic and professional segments; (3) to analyze the systemic challenges, process deficiencies, and regulatory bottlenecks that hinder flexible operations within a government framework; and (4) to develop a practical roadmap for public sector administrators and policymakers to guide future structural reforms and targeted digital investments.

1.5. Significance of the Study

This study contributes to the growing body of literature on Development Management and Governance as well as Organizational and Institutional Development (OID) within the public sector context. While existing research extensively covers FWA dynamics in international corporations and private firms, there remains a substantial gap in empirical evidence on public sector applications in developing countries—particularly within highly specialized, multi-board regulatory agencies. Public agencies must balance employee flexibility with strict statutory accountabilities, open-access mandates, and transparent resource use, creating a fundamentally different operational environment from their private sector counterparts.

This research provides useful, evidence-based insights for

civil service modernizers, human resource practitioners, and public administrators seeking to transition government workflows from industrial-age presence models to outcome-oriented, results-driven frameworks. The findings are particularly relevant for Philippine government agencies navigating the post-pandemic institutionalization of hybrid work policies under CSC MC No. 06, s. 2022, offering a grounded empirical basis for policy calibration rather than relying solely on international benchmarks that may not account for local regulatory constraints, infrastructural realities, and workforce characteristics.

1.6. Scope

This investigation focuses on the personnel and management structures of DTI-CIAP. The empirical quantitative and qualitative data were gathered from a final sample of $N = 74$ active public servants across the agency's central administrative units and five specialized implementing boards. The study evaluates alternative arrangements utilized during the post-pandemic stabilization phase (2022-2025), specifically analyzing flexiplace (telecommuting/WFH) and compressed workweek variations as the two most widely adopted FWA formats within the agency.

The primary analytical focus is confined to the interaction between alternative work structures and five core behavioral metrics: motivation, satisfaction, performance, absenteeism, and turnover intention. While the sample provides a detailed view of DTI-CIAP, generalizations to the broader Philippine civil service should be made with caution, given the agency's specific regulatory mandates, multi-board operational complexity, and particular technological infrastructure. The limitations of the study and directions for future research are discussed in Sections 7.3 and 7.4.

2. Review of Related Literature

2.1. Theoretical Foundations: Job Characteristics Theory

To understand how flexible work models influence employee outcomes, this study draws on the Job Characteristics Theory (JCT) developed by Hackman and Oldham [6, 7]. JCT posits that the structural design of work tasks directly shapes specific psychological states, which in turn drive individual and organizational outcomes such as motivation, performance quality, job satisfaction, and employee retention. Unlike classical motivation theories that focus primarily on individual needs or external incentives, JCT locates the source of workplace motivation in the architecture of the job itself—a perspective that is especially illuminating in the context of deliberate structural interventions like FWAs.

The classical JCT framework outlines five core job dimensions. Skill Variety refers to the degree to which a position

requires an employee to use a diverse range of talents, capabilities, and cognitive activities. Task Identity captures the extent to which a job requires the completion of a whole, identifiable piece of work from inception to conclusion with a visible outcome. Task Significance reflects the perceived impact and importance of the work on the lives, well-being, or operational output of other individuals inside or outside the organization. Autonomy describes the amount of freedom, independence, and personal discretion granted to an employee in scheduling daily work tasks and determining the specific procedural steps to execute them. Finally, Feedback captures the clarity and directness with which an employee receives information regarding the effectiveness and quality of their performance outputs.

According to Hackman and Oldham, these five core dimensions foster three critical psychological states: Experienced Meaningfulness of the Work, derived from high skill variety, task identity, and task significance; Experienced Responsibility for Outcomes of the Work, driven directly by high operational autonomy; and Knowledge of the Actual Results of Work Activities, developed through clear, timely performance feedback. These psychological states are theorized to be the proximate drivers of intrinsic motivation, satisfaction, quality performance, and low absenteeism.

In this study, FWAs are treated as structural interventions that modify these core job dimensions, particularly autonomy. By allowing employees to control their working location and hours, FWAs alter the day-to-day architecture of public sector roles. This expanded autonomy amplifies the employee's sense of personal responsibility for their assigned outputs. Instead of relying on passive compliance monitored by physical attendance logs, workers assume direct ownership of their project milestones, aligning with contemporary outcome-oriented management practices increasingly adopted across the Philippine civil service.

Furthermore, FWAs alter skill variety and feedback dynamics within a digital workplace. Operating productively in a decentralized environment requires public servants to develop self-management competencies, master remote collaboration technologies, and navigate asynchronous communication networks—all of which expand the effective skill variety of their roles. However, decentralization can also weaken face-to-face feedback channels, requiring managers to establish clear, metric-driven tracking frameworks to sustain performance clarity. The interplay between enhanced autonomy and potentially reduced feedback quality is a central analytical tension explored throughout this study.

2.2. Global Trends and the Philippine Legal Framework for Flexible Work Arrangements

The adoption of alternative work arrangements has grown

globally over the past two decades, driven by advances in information technology, shifting employee values, and the need for organizational agility. The pandemic accelerated these existing structural trends, compressing multi-year institutional roadmaps into immediate operational mandates. Post-pandemic data consistently indicate that organizations across sectors are not returning wholesale to rigid traditional schedules but are instead standardizing hybrid and outcome-based operational systems [8, 9].

In the Philippines, prior to the COVID-19 pandemic, the adoption of FWAs was largely confined to well-resourced private multinational enterprises. However, the health crisis forced a nationwide paradigm shift, accelerating FWA adoption across diverse sectors. Empirical literature highlights that FWAs—supported by robust technological resources and communication tools—significantly enhance employee motivation, job satisfaction, perceived organizational trust, and work-life balance by mitigating commuting costs and increasing schedule autonomy [10, 11]. In Higher Education Institutions (HEIs), while remote work is highly feasible, professionals demonstrate a distinct preference for hybrid models tailored to the nature of their specific tasks [12].

To govern this shifting landscape, the Philippine government institutionalized remote work in the private sector through Republic Act No. 11165, otherwise known as the Telecommuting Act of 2018 [13]. The Department of Labor and Employment (DOLE) subsequently revised the Act's Implementing Rules and Regulations (IRR) through Department Order No. 237, s. 2022 [14], formalizing the interdependence between adaptive organizational policies and employee operational needs. For the public sector, the Civil Service Commission (CSC) Memorandum Circular No. 6, s. 2022 [5] permanently institutionalized FWAs across government agencies—a landmark policy shift that aligned Philippine public administration with global trends while acknowledging the unique accountability requirements of civil service work.

2.3. Positive Impacts of FWAs on Employee and Organizational Outcomes

2.3.1. Enhancing Job Satisfaction and Well-Being

FWAs allow employees to better integrate their professional duties with personal responsibilities such as child care, elder care, and continuing education, while simultaneously reducing the physiological and psychological toll of long daily commutes. Prior research [8, 9] suggests that granting schedule autonomy lowers employee burnout, improves mental health markers, and increases overall job satisfaction. This is particularly salient in the Philippine metropolitan context, where extreme urban congestion can add two to four hours of unproductive commuting time to an employee's daily schedule—time that flexible arrangements effectively redirect toward personal restoration or focused work.

2.3.2. Boosting Motivation and Performance

When organizations offer flexibility, employees often respond with higher discretionary effort—a pattern aligned with social exchange theory. Workers who feel supported by flexible organizational policies tend to exhibit greater internal motivation, increased cognitive focus, and higher task performance [4, 15]. Autonomy allows staff to work during their peak cognitive hours, leading to higher quality outputs and quicker turnaround times on complex deliverables. Importantly, this performance enhancement is mediated by the degree to which employees possess the self-regulation competencies necessary to manage decentralized workflows effectively—a factor that varies significantly across demographic and positional groups, as this study's findings illuminate.

2.3.3. Reducing Absenteeism and Voluntary Turnover

FWAs help minimize unplanned leave by allowing employees to handle personal emergencies or minor health issues without consuming a full day of sick or casual leave. The capacity to adjust working hours asynchronously provides a buffer against the minor domestic disruptions that frequently trigger unnecessary absence in rigid attendance-based systems. Additionally, organizations that offer flexible options have demonstrated stronger talent attraction and retention, helping lower voluntary attrition and preserve specialized institutional knowledge—an especially critical consideration for regulatory agencies that depend on long-term sector expertise [9, 16].

2.4. Challenges and Systemic Risks in FWA Implementation

2.4.1. Blurred Boundaries and Work-Life Overlap

Despite the documented benefits, telecommuting often blurs the boundary between professional space and domestic life. Without a clear physical separation, employees may experience an 'always-on' expectation, leading to unintended overtime, chronic cognitive load, and elevated stress levels that paradoxically erode the well-being benefits that FWAs are designed to produce. Prior studies describe this phenomenon as boundary permeability [17, 18], where the structural cues that demarcate work from rest in a traditional office setting are absent in home environments, making psychological disengagement significantly more difficult.

2.4.2. Communication Gaps, Isolation, and Reduced Organizational Cohesion

Decentralized teams frequently face communication challenges including delays in coordinating tasks, lack of real-time guidance, and diminished opportunities for the informal, hallway-style collaboration that underlies much of an organization's tacit knowledge exchange [19]. Long-term remote isolation can progressively weaken organizational cohesion and

reduce an employee's sense of belonging within their team—a risk that is particularly acute for newer employees who have not yet built strong collegial networks within the agency.

2.4.3. Operational Friction in Highly Regulated Public Institutions

Public sector entities face distinctive challenges that private firms do not. Civil service regulations, standard auditing requirements, and public accountability mandates create layers of procedural compliance that are difficult to execute fully in decentralized settings. Transitioning to hybrid models requires adjusting existing performance management systems, ensuring data security for sensitive citizen records, maintaining physical document chains for legal compliance, and training supervisors to manage remote teams effectively—all while sustaining uninterrupted public service delivery. These structural constraints create a higher baseline of operational friction for public sector FWA implementation compared to the corporate environments that dominate the existing FWA literature.

2.5. Recent Empirical Evidence on Hybrid and Flexible Work

Recent studies have strengthened the evidence base on how flexible and hybrid arrangements shape employee outcomes. In a six-month randomized controlled trial involving 1,612 employees of a technology firm in China, Bloom et al. [9] found that allowing employees to work from home two days a week improved job satisfaction and reduced quit rates by one-third, with no detectable effect on performance ratings over the following two years of reviews. Notably, the reduction in attrition was significant for non-managers, female employees, and those with long commutes—groups whose circumstances parallel several subgroups examined in the present study. In the public administration literature, Kim and Oh [20] analyzed panel data on Korean women managers and found that the actual use of flextime mitigated the negative effect of work-to-life spillover on organizational commitment; they also examined differences between public and non-public organizations and concluded that providing flexibility policies is insufficient unless employees are able to use them effectively. Together, these studies suggest that the retention and commitment benefits of FWAs depend on how the arrangements are used and by whom.

Evidence from the Philippines points in a similar direction. Drawing on qualitative survey data from 92 employees, Caringal-Go et al. [19] identified the main challenges of post-pandemic hybrid work as unstable internet connectivity, commute fatigue and the logistical burdens of onsite work, the transition between remote and onsite work, blurred work hours and boundaries, and difficulties in collaboration. Employees identified flexible work policies, regular communication and feedback sessions, mental health and well-being sup-

port, and the digitization of processes with technological support as the most helpful human resources initiatives. Not all evidence is uniformly positive, however. In a study of organizations in five Asia-Pacific countries, Mariappanadar and Kramar [21] found that flexible high-performance work arrangements such as telework and compressed workweeks could negatively affect organizational performance, although employee benefits and trade union influence moderated these effects. These findings reinforce the need to examine FWAs not only in terms of their availability but also in relation to the infrastructural, procedural, and managerial conditions under which they are implemented—conditions that remain largely unexamined in specialized Philippine regulatory agencies.

2.6. Research Gap

Despite extensive FWA literature, a distinct research gap exists at the intersection of public sector institutionalization, theoretical task design, and specialized regulatory agencies in developing economies. Three specific gaps motivate this study. First, a public sector execution gap remains: while macro-level mandates such as CSC MC No. 6, s. 2022 have been established, empirical data are lacking on how these translate into micro-level operational realities within highly bureaucratized Philippine agencies. Second, a theoretical-regulatory mismatch exists under JCT: current literature heavily documents how autonomy boosts motivation in corporate environments but largely overlooks how this autonomy operates when bound by rigid civil service accountability rules, public auditing protocols, and state data security requirements. Third, a specialized agency blind spot persists in local research, which predominantly focuses on higher education or general managerial cohorts. To the authors' knowledge, no prior empirical study has evaluated concurrent FWA models within a multi-board regulatory body like DTI-CIAP, which manages diverse portfolios ranging from technical contractor accreditation to quasi-judicial arbitration.

Consequently, a critical gap exists in understanding how FWA structural designs modify core job dimensions under JCT to influence employee performance and well-being within highly specialized, multi-functional Philippine government attached agencies. This study directly addresses this deficit by evaluating the empirical outcomes of DTI-CIAP's localized FWA implementation.

3. Conceptual Framework and Research Methodology

3.1. Conceptual Framework

The relationship between flexible work structures and employee outcomes within DTI-CIAP is guided by a conceptual model incorporating Independent, Moderating, and Depend-

ent variables. The Independent Variable comprises the alternative work models authorized under CSC guidelines and operationalized within DTI-CIAP: specifically, Flexiplace (remote work/telecommuting) and the Compressed Workweek. These represent the two primary FWA formats formally integrated into the agency's human resource management protocols during the study period.

The Dependent Variables consist of five behavioral metrics that reflect employee engagement and operational efficiency across the agency: (1) Motivation, measured by employees' perceived internal drive to engage with their work; (2) Job Satisfaction, reflecting the degree to which employees find fulfillment in their professional roles; (3) Performance, capturing self-reported and supervisory assessments of task quality and output volume; (4) Absenteeism, tracking changes in patterns of unplanned leave and lateness; and (5) Turnover Intention, measuring the likelihood that employees would consider leaving the agency under or absent flexible work policies.

The Moderating Variables consist of five core individual and professional characteristics that influence how employees experience and adapt to flexible arrangements: Age, Sex, Civil Status, Position/Job Function, and Length of Service. These demographic dimensions were selected based on existing literature suggesting that their interaction with FWA policies is neither uniform nor predictable, and that policy effectiveness is substantially conditioned by who is implementing it and under what life circumstances. Using chi-square tests of independence and Cramér's V effect size measures, this study examines the associations among these variables across demographic subgroups and identifies the most operationally significant challenges in FWA implementation.

3.2. Research Design

This study employs a convergent parallel mixed-methods research design, combining quantitative statistical testing with qualitative thematic analysis to provide a comprehensive and mutually reinforcing view of FWA implementation within DTI-CIAP. This design was selected because the complexity of the research questions—spanning statistical relationships, effect sizes, and organizational process challenges—could not be adequately addressed by either approach in isolation.

The quantitative path utilizes closed-ended survey data scored on five-point Likert scales, analyzed using SPSS v.31.0.0 software. Chi-square tests of independence were applied to determine significant relationships between demographic attributes and work outcomes, with Cramér's V calculations providing standardized effect size measures to assess the practical strength of observed associations. The qualitative path analyzes open-ended text responses from the same survey instrument, evaluating operational friction, communication challenges, and infrastructure constraints through systematic thematic analysis. The integration of these two data streams enables triangulation, whereby qualitative themes either corroborate or complicate the patterns suggested by the statistical

data.

3.3. Target Population and Sampling Frame

The study focused on personnel across the specialized boards and support units of DTI-CIAP. Of the total employee

population of 90 active personnel, 74 employees, selected through stratified sampling, completed the survey instrument, yielding an 82.2% response rate. Stratified sampling was employed to ensure proportional representation across all organizational units, preserving the structural diversity of the agency's workforce in the analytical sample.

Table 1. Stratified Sampling of Respondents by Organizational Unit.

No.	Stratum / Organizational Unit	Population in Stratum	Sample Size
1	Administrative Division	26	21
2	PCAB	30	25
3	PDCB / PO CB	12	10
4	CMD F	15	12
5	CIAC	7	6
	Total Population	90	74

3.4. Data Collection Instrument and Ethical Protocols

The primary data collection tool was a structured survey questionnaire divided into three main components. The Demographic Assessment captured individual attributes including age, biological sex, civil status, current job position, and total years of service within the agency. The FWA Outcome Evaluation section consisted of closed-ended questions scored on a five-point Likert scale (from Strongly Agree to Strongly Disagree) designed to measure perceived shifts in motivation, satisfaction, task performance, attendance, and turnover risk under flexible setups. The Hurdles and Challenges Audit component comprised open-ended qualitative queries allowing respondents to detail specific operational friction points, communication delays, and infrastructure constraints they experienced during FWA implementation.

The study adhered to established ethical standards throughout. All respondents were fully briefed on the research objectives and participated under a voluntary framework with guaranteed withdrawal rights at any point. To protect participant privacy, data were anonymized at the point of collection, stripped of personal identifiers, and secured in encrypted, re-

stricted-access repositories. To optimize data quality, the survey instrument was pre-tested in coordination with the DTI-CIAP Human Resource unit with a pilot group of 20 employees closely matching the demographic and operational board distribution of the target population. Feedback from this pilot phase was used to refine technical terminology into clear, accessible language, eliminating potential sources of response bias before full-scale data collection.

4. Empirical Results and Quantitative Analysis

4.1. Age Cohort Analysis: Non-Linear Polarization Effects

The quantitative interaction between alternative work models and employee behavioral metrics was evaluated through non-parametric chi-square tests of cross-tabulated data, organized by each of the five demographic moderating variables. This analytical approach allows for identification of whether observed changes in employee outcomes are significantly linked to specific demographic characteristics or represent chance variation.

Table 2. Summary of FWA Statistical Significance Across Age Cohorts.

Age Cohort	Significant Metrics (out of 12)	Operational Finding / Trend
18-25 Cohort	0 / 12	No statistically significant variance; outcomes driven by onboarding factors.
26-35 Cohort	6 / 12	High impact zone; acute variance in work-life balance and motivation metrics.

Age Cohort	Significant Metrics (out of 12)	Operational Finding / Trend
36-45 Cohort	0 / 12	Stable baseline; high adaptability; no disruptive variance detected.
46-55 Cohort	0 / 12	Consistent operational baseline regardless of work setting.

The age-cohort analysis reveals a distinct non-linear, polarized pattern in how FWAs influence employees at DTI-CIAP. Rather than a uniform gradient of impact across the career lifespan, flexiplace and compressed workweek arrangements are associated with pronounced statistical variation concentrated primarily within a single demographic target: the 26-35 age cohort, which records 6 out of 12 metrics showing statistically significant relationships.

This early-to-mid career volatility reflects the life-stage reality of employees in this bracket, who typically balance accelerating professional responsibilities with critical personal milestones such as establishing households, raising young families, or pursuing advanced education. For this cohort, FWAs function as a highly active variable: altering work location or schedule directly shifts their levels of motivation, stress management, and resource allocation. They do not engage with FWAs passively; the flexibility structurally alters their daily capacity to perform and their overall organizational commitment.

In contrast, both the mid-career (36-45) and late-career (46-55) cohorts return zero out of 12 significant relationships, indicating a stabilization effect where employees have established settled operational habits and personal routines that absorb FWA variations without measurable disruption. This absence of statistical variance should not be read as FWA ineffectiveness for these groups; rather, it suggests homogeneity of responses and high adaptability. Whether working remotely or under a compressed schedule, their motivation, output, and organizational alignment remain steady, suggesting that the agency can reliably deploy these cohorts across any FWA configuration without significant performance risk.

For the youngest cohort (18-25), the zero significant metrics suggest that entry-level employees' workplace motivation is primarily driven by foundational onboarding factors—technical training, peer socialization, and institutional orientation—rather than scheduling autonomy. These employees utilize FWAs but are not yet at a life stage where work timing and location constitute primary motivational drivers.

4.2. Gender-Differentiated Impacts on Motivation and Job Satisfaction

The cross-tabulation of FWA outcomes against biological sex reveals a pronounced gender asymmetry, wherein FWAs function as a significantly more potent motivational mechanism for female employees compared to their male counterparts. The stark contrast between the statistically significant

relationships observed among female personnel and the near-complete absence of variance among male cohorts indicates that gender serves as a critical moderating variable in the FWA-motivation nexus.

These findings are consistent with evidence that flexible arrangements yield particular benefits for women, who often carry a dual burden of professional obligations and domestic expectations [9, 16, 20]. Female public servants at DTI-CIAP derive a more pronounced psychological benefit from FWAs—most notably through optimized work-life enrichment and heightened job satisfaction—which directly translates into elevated self-efficacy and internal motivation. The data further show strong associations between FWA access and female employees' reported ability to manage work-related stress and anxiety, with Cram  r's V values in the Strong to Very Strong range for several motivation and satisfaction indicators.

A vital policy implication follows from this finding: rather than adopting a gender-neutral framework that assumes equivalent FWA impacts across all staff, DTI-CIAP and the broader civil service should employ a gender-sensitive approach when designing and calibrating FWA policies. This means ensuring that flexible arrangements are actively promoted to female personnel, that supervisors are trained to recognize and address the dual-burden dynamics that shape female employees' work experience, and that performance metrics are structured to reward output quality rather than hours of visible presence.

4.3. Civil Status Variations: Shared Alignment with Divergent Intensities

The cross-tabulation of FWA indicators against civil status reveals a high degree of shared operational alignment, with both married and single employees showing statistically significant associations on 6 of 12 measures. Both groups exhibit significant relationships between flexibility and their motivation to work, accessibility to stakeholders, desire to perform better, resource management capacity, and overall workplace focus. However, critical divergences emerge regarding the strength of these associations (as measured by Cram  r's V), particularly on dimensions of organizational belonging, resource optimization, and domestic time allocation.

For married employees, the link between FWAs and work motivation shows a strong Cram  r's V, suggesting that the policy functions as a primary operational incentive for this group. Conversely, single employees exhibit a more intense relationship between flexibility and focused task execution (Strong

Cram 's V), leveraging remote environments primarily as uninterrupted deep-work settings rather than as motivational tools per se.

A particularly striking divergence emerges on the dimension of remote organizational belonging. While both groups show statistically significant relationships with the statement 'I feel a sense of belongingness even when working remotely,' the strength is Relatively Strong for married employees but only Weak for single employees. This may indicate that married employees benefit from an embedded household support

structure that provides social sustenance during periods of physical isolation from colleagues. Single employees, who may lack this domestic social buffer, appear more vulnerable to feelings of organizational disconnection in remote settings—a finding with direct implications for HR intervention design. Single personnel at DTI-CIAP require proactive digital engagement strategies to replicate the social functions that the physical office serves in their professional lives.

4.4. Comprehensive Evaluation of the Five Work Outcome Dimensions

Table 3. Consolidated Summary of FWA Outcomes Across Work Dimensions.

Outcome Dimension	Core Indicator Statement	Statistical Significance	Cram�'s V Strength	High Impact Zone
Job Satisfaction	FWA helps me manage stress and anxiety.	Significant	Strong to Very Strong	Females & >55 cohort
Employee Motivation	FWA motivates me to go to work and gives a sense of accomplishment.	Significant	Relatively Strong to Strong	Married cohorts & 26-35 staff
Work Performance	FWA allows me to focus on my work and perform better through schedule flexibility.	Significant	Strong	Female, single, & early-career staff
Absenteeism	FWA allows me to manage resources and maintain attendance continuity.	Significant	Relatively Strong to Strong	Single & early-to-mid-career staff
Turnover Intention	Overall impact on institutional loyalty and retention intent.	Significant	Strong (inverse)	Agency-wide; especially >55 cohort

4.4.1. Job Satisfaction

The data show a significant association between FWA access and job satisfaction, with a Strong to Very Strong Cram 's V concentrated among female personnel and the pre-retirement (>55) cohort. Under JCT, job satisfaction is directly tied to experienced meaningfulness of work and perceived autonomy. The elimination of daily commuting stress and the introduction of schedule flexibility appear to lower burnout and reduce anxiety. For the over-55 demographic, flexibility serves as a crucial physical and cognitive relief mechanism, while female staff derive substantial satisfaction from the eased burden of balancing professional milestones with domestic responsibilities. These findings underscore that well-designed FWAs do not merely improve convenience—they functionally reconfigure the psychological experience of public service work.

4.4.2. Employee Motivation

FWAs show a significant association with employee motivation, particularly among married employees and the early-career (26-35) cohort, with Cram 's V values in the Strong

range. The association between FWAs and motivation is consistent with the autonomy-to-incentive pathway described by JCT. When DTI-CIAP grants schedule autonomy, employees interpret this institutional trust as high organizational regard—a signal that the agency values their well-being alongside their productivity. For the 26-35 cohort, this structural flexibility acts as an external recognition mechanism that triggers higher discretionary effort, potentially encouraging employees to exceed standard public service benchmarks. For married employees, the motivational effect appears to operate through the resource-freeing mechanism of reduced commuting and greater schedule control, which reduces domestic friction and cognitive load.

4.4.3. Work Performance

The association between FWAs and performance is statistically significant, with a strong Cram 's V driven largely by single and female employees. Performance improvements appear to arise from matching cognitive focus with environmental control. Single employees leverage remote work settings to block out conventional open-office disruptions, generating uninterrupted deep-work windows that enable faster and

higher-quality processing of complex workflows such as regulatory data tracking and audit preparation. For female employees, the performance gains appear to operate through a satisfaction-to-effort pathway: reduced stress and improved work-life integration translate directly into greater concentration and output quality during working hours. Importantly, position-based analysis reveals that performance outcomes under flexible models are closely tied to job design: Analysts and Specialists handling research, policy formulation, and data-driven tasks adapt most effectively to remote environments, while Supervisory and Managerial staff report additional coordination overhead in managing decentralized teams.

4.4.4. Absenteeism

While aggregate chi-square tests do not show statistically significant absenteeism across, it appeared in sub groups—indicating that overall attendance metrics remained stable after the policy shift—targeted cross-tabulations within the 26-35 Age Cohort and Female Personnel reveal significant reductions in unplanned partial-day absences and late arrivals. These segments report that flexiplace options allow them to manage domestic emergencies and medical appointments without consuming full-day sick or vacation leave. By adjusting working hours rather than taking blanket absences, employees maintain project momentum and sustain continuous administrative output for their teams. The net effect is not necessarily a dramatic reduction in total leave consumed but rather a meaningful improvement in leave efficiency—unplanned emergency leave decreasing while flexible schedule adjustments absorb minor disruptions.

4.4.5. Turnover Intention

The strongest associations in this study emerge in the rela-

tionship between flexible work policies and employee retention intent. Chi-square tests show significant associations with age cohort ($p = 0.039$) and length of service ($p = 0.029$), with response patterns indicating lower turnover intention under FWAs. Employees with over a decade of service ($\chi^2 = 19.45$; Cramér's $V = 0.582$) and those in the pre-retirement cohort (>55 years) indicate that flexible options are a primary factor in their decision to remain with the agency, providing crucial physical and cognitive accommodation for age-related needs. Mid-career staff with 4-6 years of tenure indicate they would consider leaving if FWAs were discontinued—a finding with immediate operational implications for retention planning. In a public sector context where salary competitiveness with private industry remains structurally constrained, FWAs represent a high-value non-monetary retention mechanism [9] that DTI-CIAP should explicitly position as a core element of its employer brand.

5. Qualitative Analysis: Process Bottlenecks and Operational Challenges

5.1. Overview of Systemic Hurdles

While quantitative survey responses indicate broad support for alternative work models across DTI-CIAP, the open-ended qualitative feedback from all 74 respondents illuminates a complementary picture of persistent operational, technical, and regulatory challenges that create friction in day-to-day FWA implementation. Thematic analysis of these responses reveals that challenges cluster into seven primary categories, each with distinct root causes and policy implications.

Table 4. Primary Challenges and Bottlenecks in FWA Implementation (N = 74).

Primary Category	Specific Process Impediment	Frequency (f)	Percentage (%)
Infrastructure & Technical	Unstable home internet connectivity and localized power failures.	54	72.97%
Personal Boundaries	Overlap between professional tasks and personal or domestic time; chronic 'always-on' expectations.	42	56.76%
Process Operational	High dependency on physical documents, manual files, and wet signatures.	38	51.35%
Team Coordination	Communication delays with supervisors and peer units; asynchronous response lags.	31	41.89%
External Client Service	Delays in processing frontline inquiries and client response lag.	29	39.19%
Regulatory Compliance	Complex administrative requirements for civil service compliance logging.	26	35.14%
Role Ambiguity	Unclear daily assignments and lack of real-time task adjustments.	18	24.32%

5.2. Infrastructural and Technical Constraints

The most prevalent challenge—cited by 72.97% of respondents—is infrastructural and technical in nature. Public servants working from home frequently encounter uneven home internet reliability, localized power disruptions, and hardware limitations that interrupt video conferences, delay cloud access, and slow digital workflows, a pattern also reported among hybrid workers in other Philippine organizations [19]. These interruptions are especially problematic during time-sensitive regulatory processes, where delayed submission of documents or broken communication during virtual hearings can have legal and administrative consequences.

A secondary technical challenge involves data security protocols. Because agency databases contain sensitive regulatory and contractor files, security configurations often restrict remote access from personal devices, compelling staff to rely on on-site office servers for critical data retrieval. This limitation creates a structural paradox: employees are formally authorized to work from home, but key data systems remain tethered to physical office infrastructure. Resolving this tension requires targeted investment in secure virtual private network (VPN) infrastructure, cloud migration of regulatory databases, and device management programs that allow authorized remote access without compromising data integrity.

5.3. Document Dependencies and Manual Process Friction

Identified by 51.35% of the workforce, continued reliance on physical documentation represents a significant structural impediment to effective FWA implementation, particularly within PCAB. Several core regulatory processes traditionally require original paper blueprints, physical certifications, and hand-signed approvals—procedural requirements rooted in civil service regulations that pre-date digital work environments. When staff operate under a flexiplace model, these paper-dependent workflows stall: employees are periodically forced to return to the physical office to retrieve paper records, execute compliance forms, or process original documents that cannot be handled digitally.

This challenge is not merely a convenience issue—it represents a systemic structural misalignment between the agency's formal FWA authorization and its underlying business process architecture. Until the physical document dependency is resolved at the process level, the full productivity potential of flexiplace arrangements will remain constrained by mandatory periodic office returns. The PCAB digital transformation initiative—which shifted contractor licensing applications to a unified online platform—provides a scalable model for addressing this challenge agency-wide.

5.4. Boundary Erosion and Employee Burnout Risk

A notable wellness challenge reported by 56.76% of respondents is the blurring of work and personal boundaries in remote settings. Without the physical and temporal demarcation that an office environment provides, many employees find it difficult to psychologically disengage at the end of the formal workday. Managers may send work requests, task assignments, or approval requests outside standard business hours via digital channels, creating an implicit expectation of continuous availability that erodes the recovery time employees need for sustained performance.

This boundary permeability paradox—whereby the policy designed to reduce stress inadvertently creates a new stress vector—underscores the importance of institutional communication norms as a complement to structural FWA policies. Left unaddressed, chronic boundary erosion can progressively offset the wellness benefits of reduced commuting and schedule autonomy, ultimately undermining the very outcomes the FWA policy is designed to produce. Policy intervention in this area requires both formal guidelines (defining digital communication hours) and cultural shifts at the supervisory level.

5.5. Team Coordination and Role Ambiguity

Decentralized operations introduce collaboration challenges for 41.89% of respondents, with communication delays across asynchronous digital channels creating friction in approval chains and task coordination. In a co-located office, minor coordination questions can be resolved through a brief physical interaction; in remote environments, the same query may require email, chat message, or a scheduled video call, each introducing delay and cognitive switching cost. For regulatory tasks with time-sensitive deadlines—such as arbitration scheduling at CIAC or accreditation status updates at PCAB—these coordination delays carry real service delivery consequences.

An additional 24.32% of respondents report role ambiguity under FWA conditions, describing uncertainty about daily task priorities and difficulty staying aligned with changing supervisory directives when real-time communication is asynchronous. This ambiguity directly attenuates the autonomy benefits that JCT predicts, because autonomy without clear task identity and feedback produces not empowerment but disorientation. Addressing this challenge requires not only better digital communication tools but also more structured supervisory communication practices—regular virtual stand-ups, clear written task briefs, and defined response-time expectations.

6. Synthesis, Institutional Analysis, and Development Governance Implications

6.1. Aligning Empirical Results with Job Characteristics Theory

Interpreting the quantitative findings through Job Characteristics Theory suggests that schedule flexibility measurably alters the psychological environment of public service roles at DTI-CIAP. Offering flexiplace and compressed workweeks modifies the design architecture of these positions by expanding the Autonomy dimension. This expanded autonomy, as JCT predicts, amplifies the employee's experienced responsibility for work outcomes: staff move away from passive compliance monitored through physical attendance and instead assume direct ownership of project milestones and output quality.

However, the qualitative data introduce an important qualification: the autonomy dividend is contingent on the availability of clear, timely feedback. When job expectations are ambiguous or supervisory response times lag in asynchronous digital environments, the psychological state of experienced responsibility cannot fully develop, and the motivational benefits of autonomy are suppressed. This finding suggests that DTI-CIAP's FWA implementation would benefit from explicit attention to the Feedback dimension of JCT—establishing structured check-in protocols, digital task boards, and milestone-based performance reviews that maintain clarity and accountability without replicating the surveillance logic of presence-based monitoring.

The qualitative challenges around boundary erosion and role ambiguity also speak to the Task Identity dimension: when work bleeds into personal time without clear boundaries, the psychological experience of work as a discrete, identifiable task—one with a clear beginning, middle, and end—becomes fragmented. This fragmentation reduces the intrinsic satisfaction that JCT associates with task identity, partially explaining why the wellness benefits of FWAs are not uniformly experienced across all respondent groups.

6.2. FWAs as Instruments of Public Sector Modernization

Within the framework of Development Management and Governance, alternative work arrangements serve as more than employee convenience policies—they function as structural catalysts for institutional modernization and digital transformation. The implementation of hybrid operations creates organizational pressure to update technical systems, secure remote network access, and transition from paper-based administrative routines to interoperable digital platforms. In this respect, the operational challenges documented in this study are

not merely obstacles to be managed but are diagnostic indicators of the agency's digital transformation readiness.

The 72.97% infrastructure challenge rate, for example, signals a clear organizational development imperative: DTI-CIAP's capacity to sustain hybrid operations long-term is fundamentally dependent on investment in reliable, secure digital infrastructure. Similarly, the 51.35% document dependency rate identifies specific business processes that require digitization priority. Framing these challenges not as problems caused by FWAs but as pre-existing structural deficiencies that FWAs have made visible and urgent is a critical reorientation for institutional leadership—one that transforms FWA implementation from a human resources exercise into a comprehensive modernization program.

Furthermore, hybrid operations directly strengthen public institutional resilience. An agency capable of maintaining full or near-full operational continuity across geographically decentralized networks is significantly more resilient to external shocks—whether health crises, severe weather events, or infrastructure disruptions—than one dependent on centralized physical presence. The COVID-19 pandemic exposed the service delivery vulnerability of presence-dependent organizations; DTI-CIAP's investment in FWA infrastructure is simultaneously an investment in operational continuity assurance.

6.3. Functional Differentiation Across DTI-CIAP's Specialized Boards

A key insight from the empirical data is that a single, uniform FWA model cannot optimally serve all divisions within DTI-CIAP due to the fundamentally different operational demands of each board. Central Administrative Units—including human resources, finance, and accounting—manage structured internal databases and workflows that are highly compatible with flexiplace models, as tasks can be executed digitally and tracked through electronic systems without requiring physical presence.

Specialized implementing boards present a more differentiated picture. PCAB's high volume of external public applications and physical documentation creates greater vulnerability to process disruptions under pure remote models, making a hybrid approach—with designated remote days for analytical work and on-site days for client-facing processing—the most suitable configuration. CIAC's quasi-judicial arbitration functions require careful scheduling of in-person proceedings while allowing hearing preparation to proceed remotely. POCB's global market engagement and CMDF's training delivery may benefit from compressed workweek configurations that maximize concentrated blocks of focused time. This operational differentiation argues strongly for board-level customization of FWA parameters rather than agency-wide uniformity.

7. Conclusions and Strategic Policy Recommendations

7.1. Key Conclusions

This study provides original empirical analysis of the effects of flexible work arrangements within the Philippine public sector, using DTI-CIAP as a theoretically informed and organizationally rich case study. The quantitative data indicate that flexiplace and compressed workweek options are significantly associated with improved employee motivation, job satisfaction, work performance, attendance continuity, and institutional retention. These positive outcomes are not uniform but are substantially shaped by demographic moderators: individuals in the 26-35 age cohort and female employees exhibit the strongest FWA sensitivities, while married employees derive the strongest motivational returns and single employees benefit most in terms of focused task performance.

Retention data offers perhaps the most strategically significant finding: FWAs function as a powerful non-monetary retention mechanism, with strong associations between flexible work access and lower turnover intention across multiple tenure and age segments. In a public sector context where salary competitiveness with private industry is structurally constrained, this finding positions FWAs not merely as a welfare benefit but as a core organizational strategy for preserving institutional knowledge and reducing the high administrative costs of talent attrition.

The qualitative findings reveal that while the motivational and performance case for FWAs is empirically robust, the operational sustainability of these arrangements is contingent on resolving four interconnected structural challenges: internet infrastructure inadequacy, physical document dependency, personal boundary erosion, and team coordination gaps. These are not peripheral implementation issues—they represent structural constraints that, if left unaddressed, will progressively erode the quantitative benefits documented in this study. Flexible work models are no longer short-term emergency responses; they are permanent components of modern public administration. To sustain these frameworks effectively, public institutions must transition from presence-based monitoring to outcome-oriented performance management while investing strategically in the digital infrastructure and communication protocols that decentralized operations require.

7.2. Strategic Recommendations for Policy Optimization

7.2.1. Accelerate the Transition to Fully Digital Workflows

To resolve paper-based process bottlenecks, DTI-CIAP and allied Philippine government agencies should prioritize investment in secure cloud databases, legally recognized digital signature platforms (consistent with Republic Act No. 8792,

the Electronic Commerce Act of 2000 [22], and its implementing regulations), and integrated electronic document management systems. The PCAB online licensing platform demonstrates the viability of this transition and should be scaled across all implementing boards. Priority digitization targets should include contractor accreditation documentation chains, compliance reporting forms, inter-division approval routing, and civil service time-tracking submissions. Each digitized process directly expands the proportion of work that can be executed effectively in remote or hybrid settings, multiplying the operational return on FWA investment.

7.2.2. Establish Clear Digital Communication Standards

Divisions across DTI-CIAP should adopt formalized digital communication protocols that define expected response windows by communication channel and urgency level, establish designated times for virtual team meetings, and introduce digital task-tracking boards to maintain workflow transparency without creating redundant administrative reporting burdens. These protocols should be developed collaboratively between supervisors and their teams to ensure buy-in and practical fit with each board's operational rhythm. Clear communication standards serve a dual function: they reduce the coordination gaps that 41.89% of respondents identified as a challenge, while simultaneously establishing the boundaries that protect employees from boundary erosion.

7.2.3. Institutionalize the Right to Disconnect

To protect employee well-being and prevent the chronic boundary erosion that 56.76% of respondents reported, DTI-CIAP should formally institutionalize a Right to Disconnect policy aligned with CSC guidelines and international labor standards. This policy should establish specific communication blackout periods outside standard business hours, clarify that responses to non-emergency digital communications are not expected outside designated working times, and provide supervisors with training on managing remote teams without defaulting to constant availability expectations. The Right to Disconnect is not a productivity concession—it is a psychological recovery investment that protects the sustained performance gains that the quantitative data associates with well-implemented FWAs.

7.2.4. Transition to Outcome-Based Performance Management

Because motivation and performance are statistically associated with schedule flexibility rather than physical presence, DTI-CIAP should update its Strategic Performance Management System (SPMS) to prioritize clear, milestone-driven Key Performance Indicators (KPIs) over conventional daily time logs and presence records. Performance evaluations should center on objective deliverables—cases resolved, accredita-

tion applications processed, arbitration proceedings completed, training modules delivered—within agreed timelines. This transition reduces the regulatory tracking fatigue that 35.14% of respondents identified as a challenge while creating a more accurate and motivationally effective basis for performance assessment. It also aligns civil service practice with the outcome-oriented management philosophy that underlies the CSC's FWA mandate.

7.2.5. Implement Demographic-Calibrated FWA Configurations

The empirical data argue against uniform FWA application across all offices and personnel categories. DTI-CIAP's human resource leadership should work with board directors to customize FWA configurations that align with both functional demands and demographic composition. Analytical and policy-focused units with high concentrations of 26-35 and female employees should receive expanded flexiplace access to maximize the documented performance and retention returns. Frontline customer service positions should be configured on compressed schedules or rotating hybrid shifts that maintain service continuity. Supervisory and managerial staff should receive targeted support for decentralized team management—including tools, training, and explicit time allocations for virtual coordination—to address the coordination overhead documented in the position-based analysis.

Additionally, retention-focused interventions should specifically target the high-value senior cohort (>55 years, >10 years of service) by preserving and, where possible, expanding their flexible work access, recognizing these arrangements as a primary driver of their institutional loyalty and a critical mechanism for retaining irreplaceable sector expertise within the construction regulatory ecosystem.

7.2.6. Address the Social Deficit for Single Employees

Given the statistically weak connection to remote organizational belonging reported by single employees, DTI-CIAP should implement proactive social engagement structures within its FWA framework. These should include structured virtual team check-ins with both task and non-task social components, regular in-person touchpoints integrated into hybrid schedule rotations, and digital community spaces that foster informal interaction beyond task-driven communication. Ensuring that single employees maintain strong social ties to their teams and to the agency's broader mission is not merely a wellness consideration—it is an operational imperative that sustains the organizational commitment and institutional identity that underlie long-term public service performance.

Beyond team-level interventions, the agency should invest in periodic agency-wide hybrid gatherings—quarterly all-hands meetings, cross-board collaboration workshops, and informal social events—that reconstruct the organizational com-

munity experience that full-time remote arrangements necessarily attenuate. Strategically designed in-person events serve as relational anchors that sustain the social fabric of the organization across extended remote periods.

7.2.7. Build Institutional Capacity for Hybrid Work Management

Successful FWA implementation ultimately depends not only on policy design and digital infrastructure but on the capability of first-line supervisors and middle managers to lead effectively in hybrid environments. The position-based analysis in this study reveals that supervisory and managerial staff report the highest levels of difficulty in managing decentralized teams—a finding that points to a systemic leadership development gap. DTI-CIAP's HR leadership, in coordination with the CSC's Civil Service Institute, should design and deliver targeted capability-building programs covering remote performance coaching, asynchronous communication facilitation, hybrid team dynamics, and digital project management tools.

These capability investments are particularly urgent given the agency's multi-board operational complexity. Supervisors managing technical specialists across regulatory portfolios require different hybrid management competencies than those overseeing administrative support staff or frontline client service personnel. Role-differentiated leadership development tracks—rather than generic one-size-fits-all training—would maximize the practical relevance and transfer of learning for supervisors across DTI-CIAP's diverse operational landscape. Investing in supervisory capability for hybrid work is not a peripheral human resource activity; it is a foundational prerequisite for the long-term sustainability of the FWA framework that this study's empirical findings support.

7.3. Limitations of the Study

Several limitations should be considered when interpreting these findings. First, the study was conducted in a single attached agency with a sample of 74 employees. Although the response rate was high and the sample was stratified across organizational units, the findings reflect the specific mandate, workforce composition, and technological infrastructure of DTI-CIAP and cannot be generalized to the wider Philippine civil service without further testing. Second, the cross-sectional design captures perceptions at a single point during the post-pandemic period. In the absence of a pre-implementation baseline or a comparison group of employees without access to FWAs, the results describe associations between FWAs and work outcomes rather than causal effects.

Third, all outcome measures were based on self-reported perceptions collected through a survey administered in coordination with the agency's Human Resource unit. Performance, absenteeism, and turnover intention were therefore not corroborated by administrative records such as attendance logs, Strategic Performance Management System ratings, or actual separation data,

and the responses may be affected by common-method variance and social desirability bias. The psychometric properties of the instrument, such as internal consistency and construct validity, were not formally established beyond pilot testing.

Fourth, the analysis relied on chi-square tests of independence and Cramér's V. These statistics capture bivariate associations but cannot control for overlapping demographic characteristics (for example, age, civil status, and length of service are likely to be correlated), nor can they formally test moderation or the direction of effects. Subgroup sizes were small, so some cross-tabulations may have had expected cell frequencies below the conventional threshold, and the large number of tests conducted across 12 indicators and five demographic variables increases the risk of Type I error. Finally, this study examined only flexiplace and the compressed workweek; the other FWA categories under CSC MC No. 06, s. 2022, the perspectives of external clients, and in-depth supervisory accounts were beyond its scope, and the qualitative data were limited to open-ended survey responses.

7.4. Suggestions for Future Research

Future research could address these limitations in several ways. Multi-agency studies with larger probability samples drawn from national government agencies, government-owned and -controlled corporations, and local government units would allow comparisons between regulatory, frontline, and support-oriented organizations and would test whether the demographic patterns observed at DTI-CIAP hold more broadly. Longitudinal or quasi-experimental designs, such as pre- and post-implementation comparisons, difference-in-differences analyses across agencies that adopt FWAs at different times, or randomized pilots of hybrid schedules similar to the trial reported by Bloom et al. [9], would provide stronger evidence on causal effects and on whether benefits persist over time.

Future studies should also link survey data with objective indicators, including leave and attendance records, performance ratings, processing times for permits and accreditation, client satisfaction scores, and actual separation data. Multivariate techniques such as ordinal logistic regression, structural equation modeling, and multigroup analysis would allow researchers to formally test the moderating roles of demographic variables while controlling for confounders, and to examine whether the psychological states proposed by Job Characteristics Theory mediate the relationship between FWAs and work outcomes. Validated multi-item scales would further strengthen measurement.

Finally, qualitative work using interviews and focus groups with supervisors, frontline staff, and external clients could deepen understanding of how FWAs affect coordination, accountability, and service quality in regulatory settings. Particular attention should be given to the difference between the availability and the actual use of FWAs [20], the other FWA

categories provided under CSC MC No. 06, s. 2022, the effectiveness of interventions such as right-to-disconnect policies and digital workflow reforms, and the experiences of groups identified in this study as distinct, including single employees, women with caregiving responsibilities, and employees approaching retirement.

Abbreviations

CWW	Compressed Workweek
CSC	Civil Service Commission
DTI-	Department of Trade and Industry -
CIAP	Construction Industry Authority of the Philippines
FWA	Flexible Work Arrangement
FWAs	Flexible Work Arrangements
HEIs	Higher Education Institutions
HR	Human Resources
IRR	Implementing Rules and Regulations
JCT	Job Characteristics Theory
KPI	Key Performance Indicator
PCAB	Philippine Contractors' Accreditation Board
PDCB	Philippine Domestic Construction Board
POCB	Philippine Overseas Construction Board
SPMS	Strategic Performance Management System
VPN	Virtual Private Network
WFH	Work From Home

Author Contributions

Rhea Ledesma Gumasing: Conceptualization, Formal Analysis, Supervision, Writing – review & editing

Krrizy Von Tizon Flores: Conceptualization, Data curation, Investigation, Methodology, Writing – original draft

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Klindžić, M., & Marić, M. (2019). Flexible work arrangements and organizational performance - The difference between employee and employer-driven practices. *Društvena istraživanja*, 28(1), 89-108. <https://doi.org/10.5559/di.28.1.05>
- [2] Kossek, E. E., & Michel, J. S. (2011). Flexible work schedules. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology* (Vol. 1, pp. 535-572). American Psychological Association. <https://doi.org/10.1037/12169-017>
- [3] Allen, T. D., Merlo, K., Lawrence, R. C., Slutsky, J., & Gray, C. E. (2021). Boundary management and work-nonwork balance while working from home. *Applied Psychology*, 70(1), 60-84. <https://doi.org/10.1111/apps.12300>

- [4] Kim, J. S., & Ryu, S. (2017). Employee satisfaction with work-life balance policies and organizational commitment: A Philippine study. *Public Administration and Development*, 37(4), 260-276. <https://doi.org/10.1002/pad.1794>
- [5] Civil Service Commission. (2022). Memorandum Circular No. 06, series of 2022: Policies on flexible work arrangements in the government. Civil Service Commission, Republic of the Philippines.
- [6] Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60(2), 159-170. <https://doi.org/10.1037/h0076546>
- [7] Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250-279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7)
- [8] Shifrin, N. V., & Michel, J. S. (2022). Flexible work arrangements and employee health: A meta-analytic review. *Work & Stress*, 36(1), 60-85. <https://doi.org/10.1080/02678373.2021.1936287>
- [9] Bloom, N., Han, R., & Liang, J. (2024). Hybrid working from home improves retention without damaging performance. *Nature*, 630(8018), 920-925. <https://doi.org/10.1038/s41586-024-07500-2>
- [10] Teng-Calleja, M., Caringal-Go, J. F., Manaois, J. O., Isidro, M. Q. Y., & Zantua, R. M. S. (2020). Examining organizational response and employee coping behaviors amid the COVID-19 pandemic. *The Journal of Behavioral Science*, 15(3), 34-50. <https://so06.tci-thaijo.org/index.php/IJBS/article/view/242518>
- [11] Trovela, C. A., San Juan, J. M. L., Tria, M. A. C., Tria, S. K. T., Trinchera, K. I. G., Tuazon, A. L. V., Tumabini, C. J. J., Maloloy-On, E., & Sta. Ana, M. L. D. (2023). A descriptive cross-sectional study on the motivation of work-from-home office workers in the National Capital Region. *Health Sciences Journal*, 12(1), 57-65. <https://ejournals.ph/article.php?id=20109>
- [12] Mendoza, R. U., Cruz, J. L., & Alano, A. (2022). Telecommuting under the New Normal: Assessing the implementation of the Philippine Telecommuting Act. *Asian Development Review*, 39(2), 115-138.
- [13] Republic Act No. 11165. (2018). An Act institutionalizing telecommuting as an alternative work arrangement for employees in the private sector (Telecommuting Act). Congress of the Philippines.
- [14] Department of Labor and Employment. (2022). Department Order No. 237, series of 2022: Revised implementing rules and regulations of Republic Act No. 11165 (Telecommuting Act). DOLE, Manila.
- [15] Weideman, M., & Hofmeyr, K. B. (2020). The influence of flexible work arrangements on employee engagement: An exploratory study. *SA Journal of Human Resource Management*, 18, a1209. <https://doi.org/10.4102/sajhrm.v18i0.1209>
- [16] Fuller, S., & Hirsh, C. E. (2019). "Family-friendly" jobs and motherhood pay penalties: The impact of flexible work arrangements across the educational spectrum. *Work and Occupations*, 46(1), 3-44. <https://doi.org/10.1177/0730888418771116>
- [17] Jackson, P., & Roberts, M. (2021). Boundary theory and remote work: Navigating the blurred lines between professional and domestic life. *Academy of Management Review*, 46(4), 712-735.
- [18] Pedersen, V. B., & Lewis, S. (2012). Flexible friends? Flexible working time arrangements, blurred work-life boundaries and friendship. *Work, Employment and Society*, 26(3), 464-480. <https://doi.org/10.1177/0950017012438571>
- [19] Caringal-Go, J. F., Mactal, M. T. D., Cruz, C. M. Y. O., & Ramos, R. E. V. R. (2025). Enhancing work-life balance in hybrid work arrangements in the Philippines: A qualitative study on employee crafting behaviors and human resources support. *International Perspectives in Psychology*. Advance online publication. <https://doi.org/10.1027/2157-3891/a000126>
- [20] Kim, T., & Oh, M. (2025). Work-to-life spillover and organizational commitment: The moderating role of flextime and sectoral differences between public and non-public organizations. *Public Personnel Management*, 54(4), 521-556. <https://doi.org/10.1177/00910260251319817>
- [21] Mariappanadar, S., & Kramar, R. (2014). Sustainable HRM: The synthesis effect of high performance work systems on organisational performance and employee harm. *Asia-Pacific Journal of Business Administration*, 6(3), 206-224. <https://doi.org/10.1108/APJBA-03-2014-0039>
- [22] Republic Act No. 8792. (2000). Electronic Commerce Act of 2000. Congress of the Philippines.