



**Factors Affecting Employee Engagement:
The Case of the National ID Program, Ethiopia (NIDP)**

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STATEMENT OF DECLARATION

I, Gelila Atenafu, hereby declare that the project work entitled “Factors Affecting Employee Engagement: The Case of the National ID Program, Ethiopia (NIDP)” is an original work, and all sources of material used for the work have been duly acknowledged.

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ABSTRACT

Employee engagement significantly influences the success of large-scale public initiatives such as Ethiopia's National ID Program (NIDP), which requires a highly motivated workforce to achieve its ambitious enrollment and service delivery goals. This study quantitatively assessed the primary factors impacting employee engagement among 109 staff members at NIDP headquarters in Addis Ababa. Structured questionnaires administered through stratified random sampling evaluated four critical areas: internal communication, reward and recognition, empowerment, and co-worker relationships.

A descriptive-correlational, quantitative design was used. A full-population census was possible because there are only 140 employees in total; 90 usable questionnaires were returned, representing a 64% response rate. Along with the Utrecht three-dimensional engagement scale (Vigour, Absorption, Dedication), the survey used five-point Likert scales to measure communication, empowerment, reward and recognition, and workplace relationships. Expert review, factor analysis, and pilot testing ($n = 10$) were used to confirm the validity of the instrument; reliability coefficients ranged from $\alpha = .78$ to $.88$.

Using descriptive summaries, Pearson correlations, and multiple linear regression with comprehensive diagnostic checks (Shapiro-Wilk, Breusch-Pagan, VIF, and Ramsey RESET), all statistics were performed in Stata 15. Results indicated that clear and effective internal communication and empowering practices were positively correlated with higher levels of employee engagement. Conversely, inadequate reward and recognition mechanisms were identified as key factors negatively affecting morale, employee motivation, and retention.

Keywords: Employee engagement, internal communication, reward and recognition, empowerment, co-worker relationships

1. CHAPTER ONE - Introduction

1.1. Introduction

This chapter introduces the research by outlining the study's background, problem statement, research questions and hypotheses, objectives, significance, scope, limitations, and key operational definitions.

1.2. Background of the Study

Human resources remain the foundation of organizational success, as employees generate value through their knowledge, skills, and competencies (Armstrong, 2020). In contemporary public-sector reform, employee engagement has become a decisive driver of performance, institutional resilience, and service delivery outcomes (Albrecht et al., 2021).

Engagement goes beyond job satisfaction, encompassing vigor, dedication, and absorption (Schaufeli & Bakker, 2018). Engaged employees display higher levels of discretionary effort, creativity, and alignment with organizational goals, all of which are critical in large-scale government initiatives. The concept was first introduced by Kahn (1990), who described engagement as the psychological presence employees bring to their roles, physically, cognitively, and emotionally. Subsequent scholars emphasized dimensions of commitment, energy, and initiative (Saks, 2006; Macey & Schneider, 2008). More recent studies highlight that engagement is multi-dimensional, combining affective, behavioral, and cognitive elements that influence how employees connect with their work and organization (Shuck et al., 2019; Knight et al., 2022). Despite definitional nuances, there is consensus that engagement is a key enabler of retention, discretionary effort, and long-term institutional sustainability (Baumruk, 2006; Hemsley Fraser, 2008; CIPD, 2021).

Globally, empirical research consistently demonstrates that organizations with high employee engagement achieve stronger outcomes. For instance, Gallup's 2020 global study found that engaged employees contribute to 23% higher profitability, 18% higher productivity, and 81% lower absenteeism compared to disengaged peers. Similarly, Deloitte's 2023 Human Capital Trends report underscores engagement as central to workforce resilience in times of digital disruption, remote work, and rising employee expectations.

In Africa, where public sector institutions face unique challenges such as resource constraints, bureaucratic inefficiencies, and digital capacity gaps, employee engagement is increasingly recognized as a determinant of service delivery effectiveness (Taj, 2015; Gebrehiwot, 2021). Engagement in public service settings is not merely about performance; it is also about ensuring trust, accountability, and responsiveness to citizens in line with governance reforms (World Bank, 2022).

In the digital era, engagement has become even more strategic. As organizations undergo rapid digital transformation, employees are often required to take on new roles, learn emerging technologies, and adapt to agile structures (Almaamari & Alaswad, 2021). Research shows that employees who perceive digital transformation as a growth opportunity exhibit higher engagement, while those who see it as disruptive or threatening may disengage (Miah, 2020; Knight et al., 2022). Engagement, therefore, becomes a critical lever in balancing technological change with human capacity.

Within Ethiopia, this transformation is encapsulated by the Digital Ethiopia 2030 Strategy and the Home-Grown Economic Reform Agenda, which seek to modernize governance and accelerate digital inclusion. At the heart of this agenda is the National ID Program (NIDP), institutionalized in 2021 to deliver a secure, inclusive, and interoperable digital identity system. Its flagship platform, Fayda ID, aims to enroll 90 million residents by 2028, positioning it as one of the most ambitious digital identity initiatives on the continent. The program has already integrated with multiple service sectors, including finance, social protection, health, and education, underscoring its systemic importance.

Given its national scope, complexity, and high-stakes outcomes, the success of NIDP hinges on an engaged workforce capable of sustaining motivation, resilience, and innovation under demanding conditions. Challenges such as heavy workloads, limited career progression, and pressure to meet national targets make employee engagement not only desirable but essential for institutional effectiveness.

Accordingly, this study investigates the organizational and psychological factors shaping employee engagement within NIDP, focusing on internal communication, reward and recognition, empowerment, and co-worker relationships. The findings aim to provide evidence-based insights for policymakers, HR leaders, and program managers to enhance

workforce motivation, reduce attrition, and strengthen institutional performance in Ethiopia’s digital transformation journey.

1.3. Background of the Program

The National ID Program (NIDP), housed in the Office of the Prime Minister, was institutionalized in 2021 to deliver a secure, inclusive, and interoperable foundational digital-identity system for every resident of Ethiopia. Its flagship platform, Fayda (meaning “value” in several local languages), is mandated by the 2023 Digital ID Proclamation (1284/15) to issue each person, from birth, a unique and digitally verifiable identifier usable across public and private-sector services by enabling reliable identity verification for service delivery, online transactions, and the broader Digital Ethiopia 2025 agenda.

Earlier launched within the Ministry of Innovation and Technology in 2019, the program moved to the Ministry of Peace in 2020 and then to the Prime Minister’s Office in 2021, underscoring its national and cross-cutting mandate. Two years of stakeholder consultation shaped both its governance model and legal framework, aligning Fayda with the Principles on Identification for Sustainable Development and embedding privacy by design, open standards, and vendor neutrality.

Since 2022, NIDP has piloted and enrolled more than 500,000 residents including civil servants, workers, students, bank customers, and social-protection beneficiaries, and has now surpassed 15 million. Fayda currently supports more than 55 service integrations for authentication and electronic Know Your Customer (e-KYC) needs. The program aims to exceed 110 million registrations and create full dependency for service identity verification with priority use cases in finance, social protection, health, and education, TIN registration, and document verification and notary services by 2027.

Alongside government funding, NIDP receives substantial support from the World Bank’s Ethiopia Digital ID for Inclusion and Services project (P179040), positioning Fayda as a national platform for inclusive service delivery, economic empowerment, and trusted digital transformation.

1.4. Statement of the Problem

Employee engagement is widely acknowledged as a driver of productivity, innovation, and retention (Saks, 2006). Forward-thinking organizations see employees as their most valuable asset and therefore invest in competitive rewards and supportive work environments; such practices yield motivated, high-performing teams (Forbes, 2019). Conversely, global turnover now exceeds pre-pandemic levels by 50 to 75 percent, and time-to-hire has risen 18 percent, intensifying workload pressure on managers and on ground workers, underscoring the urgency of retention strategies (Gartner, 2022).

Within large public programs like NIDP, where workloads are high and outcomes nationally significant, high employee engagement, and synergy is vital across all departments and organizational structures. It is increasingly recognized as a determinant of organizational success, with studies highlighting its role in improving productivity, innovation, and staff retention (Saks, 2006). Disengagement, in such large projects, on the other hand, leads to higher attrition, reduced morale, and inefficiency (Ayers, 2006).

Despite its strategic importance, the NID , similar to many project-based public and intensive private institutions, periodically faces challenges such as limited opportunities for career progression, the pressures of a fast-paced and high-workload environment, and insufficient compensation mechanisms, all of which are well-documented drivers of employee dissatisfaction (Shuck et al., 2019; Gallup, 2020). If left unaddressed according to ICMA (2025), public sector institutions globally are experiencing mounting challenges in recruitment, retention, and compensation competitiveness, particularly as younger employees demand greater flexibility and clearer career pathways.

Global and local research provides valuable frameworks for understanding engagement (Saks, 2006; Macey & Schneider, 2008). However, local studies such as those by Shiferaw (2019) and Mulugeta (2020) have primarily focused on the financial sector and do not account for public sectors' specific, unique pressures of digital transformation in government. To date, there is a lack of empirical research on engagement within Ethiopia's public sector digital initiatives.

Even though NIDP has started a number of strategies to reduce attrition, keeping a fully dedicated workforce is still a problem. Thus, this study explores how personal and

organizational factors influence employee involvement within the program, which in turn influences performance and retention. The results will give NIDP and similar public-sector programs evidence-based recommendations for creating engagement and retention strategies that safeguard institutional knowledge and maintain the pace of Fayda.

1.5. Research Questions

This study seeks to explore the key factors influencing employee engagement within the NIDP in Ethiopia. The research is guided by the following questions:

1. To what extent does internal communication affect the engagement of employees?
2. To what extent do reward and recognition practices affect employee engagement?
3. What is the impact of empowerment on employee engagement?
4. To what extent do interpersonal workplace relationships shape employee engagement?

1.6. Research Objectives

1.6.1. General Objective

To investigate the key factors influencing employee engagement within the NIDP and to identify practical strategies that enhance workforce motivation, well-being, and performance in support of the program's successful implementation.

1.6.2. Specific Objectives

This study aims to:

- To determine the influence of internal communication on employee engagement
- To examine the impact of reward and recognition practices
- To evaluate how empowerment affects engagement
- To analyze the role of interpersonal relationships in shaping employee engagement.

1.7. Scope of the Study

This study examines the engagement of employees in the NIDP through surveys of employees working at the main office/HQ, found in Addis Ababa. The office currently doesn't have any regional offices or branch offices found outside Addis Ababa. However, it carries its operations through national partners such as Ethio Telecom, Ethio Post and other ministerial agencies, while leveraging their resources. Grounded on four hypotheses, the research pays attention to internal communication, reward and recognition culture, empowerment, and interpersonal relationships as it regards these as the primary drivers of engagement.

All other determinants, such as leadership style, personal job details, career development opportunities, and external factors that include public opinion or national policy, are only taken into consideration for background explanation purposes and not for immediate investigation. Consequently, conclusions tell exclusively regarding the direct effect of focusing on enhancing the four parameters on commitment and retention among NIDP headquarters personnel.

1.8. Significance of the Study

The study will contribute to both academic and practical understanding of employee engagement in high-stakes public sector digital initiatives. By identifying key engagement drivers within the NIDP, it will offer actionable insights for HR leaders, policymakers, and program managers working on Ethiopia's digital transformation.

As the country advances its Digital Ethiopia 2030 agenda, success depends not only on technology but also on a motivated workforce. This research will address a critical knowledge gap by focusing on the human capital challenges of delivering a secure and inclusive national digital ID system.

1.9. Limitations of the Study

Although this research aims to provide useful information regarding the determinants of employee engagement in NIDP, there are some limitations to be mentioned. First, the research relies solely on NIDP, which, as a representative example of large-scale digital

transformation initiatives in Ethiopia, can limit the external validity of its findings to other government or private sector initiatives. The unique organizational character, operational requirements, and governmental oversight of NIDP must hardly mirror the participation dynamics of other institutions or sectors.

Second, since it is constrained by time and resources available, the study relies primarily on surveys, which were conducted over a specific timeframe. Employee engagement is a temporary occurrence, which is influenced by numerous external conditions such as economic, political, and technology changes, which are not necessarily included in the scope of the study. The results thus only hold for the duration data is being gathered.

Third, the study is susceptible to response bias, as the participants may provide socially desirable responses rather than true opinions regarding workplace engagement problems. Despite efforts to ensure confidentiality and elicit honest responses, the bias is likely to compromise the validity and reliability of the findings.

Lastly, the study does not include a longitudinal study to observe shifts in employee engagement over time. Employee engagement is dynamic by nature, and understanding how engagement is influenced by changes in the organization and the environment would provide more richness to findings. Future studies can build on this research by conducting long-term measurement, tracking engagement patterns over time, and examining the impact of shifting workplace policies or new digital programs.

1.10. Operational Definitions of Key Terms and Concepts

For this study, the operational definitions of the key terms and concepts are provided as follows:

- **Employee Engagement:** The degree of enthusiasm and commitment employees bring to their roles, reflected in effort, initiative, and alignment with organizational goals.
- **Leadership:** The process by which individuals guide and influence others toward achieving shared objectives through vision, values, and interpersonal skills.
- **Communication:** The two-way exchange of ideas and information to build shared understanding and collaboration.

- **Learning and Development:** Organizational activities that promote skill acquisition and personal growth, supporting both engagement and compliance with labor standards.
- **Perceived Organizational Support:** Employees' beliefs about how much the organization values their contributions and cares for their well-being.
- **Working Environment:** The physical and social context in which work occurs, including resources, relationships, and conditions that affect employee satisfaction.

1.11. Organization of the Study

There are five chapters in this research. The topic is introduced in the first chapter. The second chapter delves further into the body of research on the topic of the study. In chapter three, the research strategy and methodology employed in this study are described. The data gathered for the study is analyzed and interpreted in Chapter four. Chapter five concludes by summarizing the major discoveries, making inferences from them, and providing recommendations.

2. CHAPTER TWO - Literature Review

2.1. Introduction

Retention of employees has become a challenging phenomenon in the flexible modern business world and remains a vital necessity for effective management. This literature review has two objectives. First, it charts the key concepts, theories, and models that underlie the topic, constructing a theoretical framework to guide the explanation, analysis, and interpretation of the meaning of the findings. Second, it critically examines and synthesizes peer-reviewed journals and empirical research on employee engagement from diverse perspectives.

The employee-engagement environment has undergone a significant shift, especially for global digital-transformation projects. Engagement is strategic rather than an issue only for human resources. In the case of NIDP, sustaining high engagement is paramount to the success of this national-level digital project. Therefore, the chapter addresses existing research on engagement, outlines the dominant theoretical frames, and selects empirical evidence that indicates the primary drivers for engagement in large-scale digital-transformation settings.

2.2. Theoretical Framework

2.2.1. Defining Employee Engagement

The term "employee engagement" is widely discussed in academic and professional literature, with many variations in its definition. According to MacLeod and Clarke (2009), there are over fifty different definitions of employee engagement. However, it is generally agreed that engagement reflects the extent to which employees connect with their work environment.

Kahn's (1990) seminal definition of employee engagement describes it as "the harnessing of organization members' selves to their work roles," involving physical, cognitive, and emotional engagement. This multifaceted approach underlines the psychological and physical presence of employees while performing their roles. As such, the cognitive aspect pertains to an employee's beliefs about the organization, its leadership, and working conditions. The emotional aspect concerns how employees feel and whether they harbor positive or negative

attitudes toward the organization. Lastly, the physical aspect refers to the energy employees exert in their roles.

Although Kahn's definition is foundational, other scholars like Truss et al. (2006) define engagement more simply as passion for work, which encapsulates the three dimensions identified by Kahn. Robinson et al. (2004) add that engagement is a positive attitude employees have toward the organization, where they actively contribute to organizational success and engage in performance improvement.

Despite these varied definitions, it is often confused with related concepts such as organizational commitment and organizational citizenship behavior (OCB). Unlike engagement, which involves voluntary behaviors and discretionary effort, organizational commitment is more attitudinal and includes emotional, continuance, and normative aspects (Song and Kim, 2009). While there are overlaps between these constructs, employee engagement remains a distinct concept that encompasses cognitive, emotional, and physical aspects of an employee's role performance. Importantly, engagement is fostered by a strong mutual relationship between the employer and employee, although the drivers of engagement may vary depending on the individual, the job, and the organization (Robinson, 2007).

For this study, Kahn's (1990) definition of employee engagement is adopted: "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances."

2.2.2. Evolution of Employee Engagement

The evolution of employee engagement is rooted in the broader fields of motivation and job satisfaction research. Early work in the 1930s, including Goal Setting Theory (Latham and Locke, 1990), highlighted the link between goal attainment and employee motivation, illustrating that setting specific, attainable goals enhances job satisfaction and commitment. In the 1960s, Herzberg's two-factor theory (1957) introduced the distinction between extrinsic hygiene factors and intrinsic motivators, emphasizing that both play a role in influencing employee satisfaction.

The Self-Determination Theory (Deci and Ryan, 1987) in the 1980s further advanced the understanding of motivation by focusing on psychological needs and the reasons employees engage in tasks. In the 1990s, Kahn's (1990) research introduced the concept of personal

engagement, defining it as the physical, cognitive, and emotional investment of employees in their roles. Kahn's work remains central to modern understandings of employee engagement, with scholars such as Rothbard (2001) and Schaufeli et al. (2006) affirming that engagement reflects psychological presence at work.

In the 2000s, research expanded to examine the antecedents of engagement, with Saks (2006) highlighting the roles of job characteristics, rewards, recognition, and supervision in fostering engagement. These studies concluded that job and organizational engagement are closely linked to employee motivation across cognitive, emotional, and behavioral dimensions.

2.2.3. The Importance of Employee Engagement

Engagement plays a pivotal role in organizational performance. It has been linked to increased employee retention, improved customer satisfaction, and enhanced productivity (Almaamari & Alaswad, 2021). High levels of employee engagement contribute to creating a resilient workforce capable of navigating changes, especially in rapidly evolving environments like digital transformation initiatives (Kenny & Victoria, 2019).

2.2.4. Levels of Employee Engagement

BlessingWhite (2013) research identifies five distinct levels of employee engagement:

1. **The Engaged:** These employees demonstrate high contribution and high satisfaction. They align closely with organizational goals, contribute significantly to success, and are highly committed. Keeping them engaged is crucial, as they may transition to less engaged states without proper attention.
2. **Almost Engaged:** Employees in this group contribute moderately to highly but may not experience consistent satisfaction. Although they are high performers, organizations should invest in this group to prevent them from being lured away by other opportunities.
3. **Honeymooners & Hamsters:** Honeymooners are new employees who are satisfied but not yet fully productive. Hamsters, while working hard, contribute little to organizational success due to misalignment in their roles. Moving these employees to

full engagement is vital for their development and organizational success.

4. **Crash & Burners:** These employees exhibit high contribution but low satisfaction. They may be top performers, but are disillusioned and exhausted, potentially leading to decreased contribution and eventual disengagement.
5. **The Disengaged:** These employees show both low contribution and satisfaction. They are disconnected from organizational priorities and may disengage further, becoming detrimental to the organization's morale and productivity.

2.3. Factors Affecting Employee Engagement

Numerous factors influence employee engagement, which can be categorized into organizational, managerial, and personal dimensions.

2.3.1. Organizational Factors

The structure, culture, and policies of an organization significantly impact engagement levels. A supportive work environment, where employees feel valued and recognized, fosters a sense of belonging and commitment (Segal, Brown, & Taylor, 2018). Additionally, opportunities for career advancement and professional development are critical for enhancing engagement (Kumara, 2022).

2.3.2. Managerial Factors

Leadership styles and managerial practices directly affect employee engagement. Transformational leadership, characterized by open communication, support, and inclusivity, can significantly boost employee motivation and engagement (Matui, 2017). In contrast, a lack of effective communication and support from management can lead to disengagement and higher turnover rates (Kenny & Victoria, 2019).

2.3.3. Personal Factors

Individual attributes such as personality, work-life balance, and personal values also play a role in shaping employee engagement (Repke, Smith, & Johnson, 2024). Employees who

perceive a good balance between their work and personal life are more likely to be engaged (Majka, 2024).

2.4. The Role of Digital Transformation

Digital transformation represents a profound shift in the way organizations operate, driven largely by advancements in technology. It encompasses the integration of digital technologies into all areas of a business, fundamentally changing how organizations deliver value to customers and compete in the market (Schallmo & Williams, 2018). In the context of the NIDP, digital transformation is not merely about adopting new technologies but involves rethinking organizational processes, workforce dynamics, and employee roles.

2.4.1. Impact on Employee Roles and Engagement

As organizations undergo digital transformation, employees often face changes in their roles and responsibilities. These shifts can create uncertainty, leading to decreased engagement if employees feel unprepared for the new demands (Aladwan & Abualoush, 2021). However, online training and development opportunities can mitigate these feelings and enhance employees' confidence in managing digital tools.

Studies by Miah (2020) indicate that when employees perceive digital transformation as a chance for personal and professional growth, their engagement levels increase. In the NIDP, where technology is fundamental to the program's success, effectively communicating the vision of transformation and providing training can foster an engaged and committed workforce.

2.4.2. Challenges of Digital Transformation

Despite the benefits, digital transformation can introduce significant challenges, including increased workload, the need for continuous learning, and the fear of job displacement among employees (Matusiak, 2021). Such stressors can result in disengagement if not properly managed. Ensuring that staff feel supported during transitions to digital workflows is essential. Engagement strategies must involve clear communication of organizational goals and how employees fit into this vision.

2.4.3. Frameworks and Approaches

2.4.3.1. Needs-Satisfying Approach

The needs-satisfying approach was developed by Kahn (1990) who is credited with the origins of employee engagement. In this approach, Kahn argued that employees have personal needs that include Self-worth, security and self-assurance. He further suggests three psychological conditions (meaning, safety and availability) which, if present, would influence their personal needs and impact their engagement. Managers seek meaning in their work, safety of expressing themselves in the organisation and availability of personal and organisational resources to equip and enable them to effectively engage in their work roles. These conditions are heavily influenced by how managers are recognised and rewarded, empowered and relate with their co-workers as well as how communication is handled in the organisation. Communication policies, Co-worker relationships and level of empowerment influence a manager's perception of freedom and safety to express themselves wholly in the organisation. Kahn's approach, despite explaining the rationale behind employee engaging at work, has been demerited for not being able to explain why employees then engage at varying levels (Saks, 2006). Another limitation is that it is solely focused on the employee, yet engagement involves two parties such that the employer, as well, needs to be considered.

2.4.3.2. Job Demands-Resources Model

This model, developed by Bakker and Demerouti in 2001, conceptualised the potential antecedents of work engagement and burnout. The model explains how the balance between job demands and resources available to a manager determines their engagement at work. It assumes that every occupation may have its own unique work features which are associated with job stress (Bakker & Demerouti, 2007). These are classified into two categories: job demands, defined as aspects of the job that require an individual's efforts or skills.

On the other side is resources, which are categorised as job resources and personal resources. Job resources refer to aspects of the job that aid in achieving work goals, reducing job demands or stimulate personal development (Bakker & Demerouti). Examples of job resources include time at work, knowledge and training, and proper communication of

information relevant to the employee's work and role. Personal resources are those which an employee brings into the workplace and draws upon to meet the job demands.

This includes resilience, concern, self-efficacy and workaholism, which are associated with work engagement in the workplace (Guglielmi, Simbula, Schaufeli, & Depolo, 2012). Research carried out on managers (Burke & ElKot, 2010; Koyuncu, Burke, & Fiksenbaum, 2006; Adekola, 2011) draw on this model to explain antecedents of engagement. Recent studies, however, have challenged the JD-R model by arguing that job demands in some cases, may not negatively impact engagement (Bailey, Madden, Alfes, & Fletcher, 2015). The model explains how an employee taps on personal and job resources to meet the work demands, however, it does not explain how the employee benefits from the same resources.

2.4.3.3. Social Exchange Theory (SET)

Social Exchange Theory expands on Kahn's needs-satisfaction model by theorizing that engagement is a two-way exchange between workers and the organization. Workers balance the "costs" of job demands and personal needs with the "benefits" of organizational and personal resources and change their level of engagement based on perceived fairness (Saks 2006). If rewards, recognition, and empowerment meet or surpass expectations, engagement is enhanced; if they do not, workers disengage (Ologbo & Saudah 2012).

These exchanges are regulated by implicit norms which create trust, commitment, and loyalty. Violations of these norms, e.g., lack of support or acknowledgement, erode the emotional and cognitive connection that is the source of discretionary effort (Gibbons 2006). In showing how changes in demands or resources disrupt and restore equilibrium, Social Exchange Theory fills gaps left by both needs-satisfaction and the job demands-resources model to determine why different people and places have different levels of engagement.

2.5. Empirical Studies on Employee Engagement

This section reviews empirical studies relevant to the four core variables identified in this research: internal communication, reward and recognition, employee empowerment, and positive worker relationships.

Hayase (2009) conducted an empirical investigation to determine whether internal communication influences employee engagement. The findings revealed a positive relationship between factors of internal communication and key dimensions of employee engagement. Specifically, the study identified that effective internal communication is significantly linked to employee commitment, discretionary effort, and perceptions of meaningful work, all recognized as core components of engagement.

Karanges et.al. (2015) utilized surveys and regression analysis to investigate this association, confirming that both internal organizational communication and internal supervisor communication foster workplace relationships grounded in meaning and worth. The findings highlight that these communication practices play a significant role in developing and maintaining optimal employee engagement, providing empirical support for their importance in organizational settings.

Rao (2023) explored the willingness of IT employees in Bengaluru to embrace the responsibilities associated with empowerment and assessed the extent to which their professional environment supported productive empowerment. Using surveys and analytical methods, the research confirmed that empowerment significantly enhances employee engagement, confidence, and employee branding, contributing to improved talent attraction, management, and retention in IT companies.

Sageer (2023) investigated the relationship between psychological empowerment and employee engagement among school teachers to improve teaching quality and educational effectiveness. Results confirmed a positive correlation between psychological empowerment and employee engagement, with simple linear regression analysis indicating that psychological empowerment significantly predicts engagement. These findings provide valuable insights for educational experts to develop strategies that enhance teachers' psychological empowerment and engagement, ultimately fostering improved educational outcomes.

Ramesh et al. (2024) explored the impact of reward and recognition programs on employee engagement, revealing a growing awareness among employees about the importance of well-designed reward systems. The findings indicated that a majority of employees expressed a preference for working in organizations that implement effective reward and recognition strategies, which significantly enhance job satisfaction and commitment.

A study by Mespey (2016) investigated the impact of salary and respect on employee involvement at PT. Bank SulutGo in Manado, utilizing a quantitative descriptive exploratory research design. The study population comprised employees of PT. Bank SulutGo, with data collected to assess how rewards and recognition influence employee motivation. The findings revealed that salary and respect, as components of rewards and recognition, positively impact employee involvement, motivating employees to enhance their performance, which in turn contributes to increased organizational profitability.

Al Amri (2024) investigated the impact of reward and recognition schemes on employee performance within Oman's banking sector, focusing on employees from two major commercial banks, Bank Muscat and the National Bank of Oman. Utilizing a questionnaire to collect primary data, the study found that reward and recognition schemes directly enhance employee performance, with monetary rewards being the most preferred by employees. Additionally, a positive relationship was identified between workplace recognition and improved employee performance. The research further highlighted that career advancement opportunities, as a form of recognition, significantly enhance employee interaction, leading to increased productivity, loyalty, and retention.

Che et al. (2023) examined the impact of the employee–organization relationship (EOR) on work engagement (WE) and work well-being (WWB) among 791 knowledge-based employees in Chinese higher education institutions, using a moderated mediating model based on ERG theory. The study found that EOR positively affects WE and WWB, with relatedness need satisfaction partially mediating these effects. Growth need satisfaction mediates EOR's impact on WE but not WWB, while existence need satisfaction shows no mediating effect. The perceived symbiotic relationship moderates the EOR's influence on both outcomes

2.6. Internal Communication

Empirical research consistently highlights internal communication as a foundational driver of employee engagement. Ruck (2018) emphasizes that transparent and timely communication fosters trust, alignment, and a sense of inclusion among employees. In her study, internal communication not only increased the employees' understanding of organizational goals but also enhanced their perceived value within the workplace. Similarly, Karanges et al. (2015) conducted a mixed-methods study in Australian organizations and found that internal

communication significantly influenced both emotional and cognitive engagement. Specifically, open dialogue, frequent feedback, and clear articulation of corporate values were shown to align individual efforts with broader organizational objectives.

Welch (2011) extended this view by identifying two-way communication and feedback loops as essential mechanisms that give employees a voice, thereby fostering engagement through greater participation and psychological ownership. Her findings indicate that communication clarity reduces role ambiguity, while consistent messaging strengthens organizational identity and commitment. In dynamic work environments, particularly during digital transformations, robust internal communication also reduces uncertainty, helping employees adapt and remain engaged.

Internal Communication builds employee engagement across three mechanisms, which are clarity and timeliness, two-way dialogue and feedback loops, and consistent messaging that strengthens employees sense of ownership for the organization. To this end, our literature review showed that open dialogue, frequent feedback and clear articulation of values lift both emotional and cognitive engagement.

2.7. Reward and Recognition

Reward and recognition systems have been widely recognized as critical mechanisms to reinforce desired behaviors and increase employee motivation and engagement. Saks (2006), in his seminal study, demonstrated that employees who perceive their efforts to be acknowledged and rewarded are significantly more engaged in both their tasks and the organization as a whole. His research also differentiated between transactional rewards (e.g., pay, bonuses) and relational recognition (e.g., praise, awards), with the latter showing a stronger correlation with long-term engagement.

In the Ethiopian context, Shiferaw (2019) explored reward systems in commercial banks and found a positive relationship between structured reward schemes and employee satisfaction, loyalty, and discretionary effort. His study emphasized that employees responded most favorably to performance-based incentives combined with recognition from supervisors. These findings reinforce Herzberg's (1957) two-factor theory, which classifies recognition as a motivational factor capable of driving higher levels of engagement, in contrast to salary,

which functions more as a hygiene factor that prevents dissatisfaction but does not necessarily motivate.

Moreover, Almaamari and Alaswad (2021) argue that recognition contributes to the emotional bond between employees and the organization. When employees feel appreciated, they are more likely to demonstrate organizational citizenship behaviors such as going the extra mile or helping colleagues, both of which are key indicators of engagement.

Reward and Recognition are levers that translate the effort into engagement by signaling that contributions are seen and valued inside organizations. Reward and Recognition of employees in comparable contexts reviewed in this study suggest that they correlate more with long-term work motivation rather than transactional pay mechanisms. The mechanisms fit a social-exchange lens, when organizations reciprocate employees' investments with fair rewards and genuine appreciation.

2.8. Employee Empowerment

Employee empowerment is another empirically validated predictor of engagement, particularly through its influence on intrinsic motivation, autonomy, and ownership. Thomas and Velthouse (1990) conceptualized empowerment through four cognitive dimensions: meaning (alignment of work with personal values), competence (self-efficacy), self-determination (autonomy), and impact (influence over outcomes). These dimensions provide a framework for understanding how empowerment facilitates engagement.

Spreitzer (1995) empirically validated this framework and found that employees with high levels of psychological empowerment exhibited greater initiative, resilience, and emotional investment in their roles. Empowered employees are more likely to feel that their contributions matter, which in turn fosters engagement and innovation.

In a public-sector study in Ethiopia, Gebrehiwot (2021) reported that decentralization of decision-making, opportunities for skill application, and participative leadership were positively associated with employee engagement. His findings suggest that in hierarchical institutions like government agencies, empowerment not only improves motivation but also builds institutional trust and a stronger commitment to public service delivery. Similarly, Kumara (2022) highlights that in digitally transforming organizations, empowerment through digital literacy and autonomy enhances employee adaptability and engagement.

We can see that Employee Empowerment is one of the drivers of employee engagement, with different empirical researches mentioned here showing that empowered employees have higher confidence, organizational citizenship behaviour and discretionary work, which helps people give real decision latitude and voice. In public sector, empowerment is a core enabler that helps staff meet heavy demands and sustain motivation, which enables to achieve work goals in public institution like NIDP.

2.9. Positive Worker Relationships

The relational context in which employees operate has a profound impact on their engagement levels. Biggs, Swailes, and Baker (2013) found that strong coworker support and positive interpersonal interactions enhance emotional engagement and reduce burnout, particularly in high-pressure work environments. Their study also noted that collaborative teams foster shared accountability and mutual respect, both of which increase employees' willingness to invest their energy into their work.

Kahn's (1990) foundational work in this area introduced the concept of psychological safety as a precondition for engagement. He argued that when employees feel safe to express themselves without fear of negative consequences, they are more likely to engage cognitively, emotionally, and physically. Psychological safety is cultivated not only through supportive supervisors but also through respectful peer dynamics.

Taj (2015), examining the African public service sector, emphasized that worker engagement is closely tied to the social fabric of the organization. His study identified team cohesion, fair treatment, and supportive supervision as vital for maintaining high levels of engagement in environments where resource constraints and bureaucratic pressures are common. Furthermore, Segal, Brown, and Taylor (2018) argued that a culture of collaboration and inclusivity not only promotes engagement but also strengthens institutional resilience during organizational change.

Positive coworker ties appear to fuel engagement primarily by creating a climate of psychological safety and shared accountability. Studies show that supportive peer interactions and collaborative teams are associated with higher emotional engagement and lower burnout, effects that are amplified in high-pressure settings, while Kahn's foundational work explains the mechanism: when employees feel safe to speak up without fear of negative consequences,

they invest more cognitively, emotionally, and physically in their roles. In public-sector contexts similar to NIDP, team cohesion, fair treatment, and inclusive norms further stabilize engagement during organizational change by strengthening resilience and a sense of collective efficacy.

2.10. Findings from Relevant Literature

A review of the relevant literature underscores that employee engagement is a multifaceted construct influenced by organizational, interpersonal, and individual-level factors. It is widely recognized that engagement does not emerge in isolation but is shaped by an ecosystem of enablers and barriers embedded within the workplace context.

Leadership is one of the most frequently cited determinants of engagement. Numerous studies affirm that effective leadership, particularly transformational leadership, positively correlates with employee engagement outcomes (Saks, 2006; Schaufeli & Bakker, 2004). Leaders who articulate a compelling vision, provide regular feedback, and empower their teams tend to foster higher levels of emotional and cognitive engagement. Such leadership styles enhance employee well-being, increase organizational loyalty, and reduce turnover by cultivating an environment in which individuals feel valued and connected to a larger purpose.

Organizational support mechanisms also play a critical role in shaping engagement. Research consistently points to transparent internal communication, structured feedback systems, and meaningful recognition as foundational pillars of an engaging workplace. These mechanisms signal to employees that their contributions are seen and valued, thereby reinforcing their commitment to organizational goals. For example, Karanges et al. (2015) found that effective internal communication aligns employees with strategic objectives, while Saks (2006) emphasized the role of recognition in sustaining discretionary effort over time.

Interpersonal relationships within the workplace further enhance or hinder engagement. Studies by Kahn (1990) and Biggs et al. (2013) have shown that environments characterized by trust, inclusivity, and collaboration foster psychological safety, an essential condition for authentic employee engagement. When employees feel safe to express ideas, take risks, and be themselves, they are more likely to invest fully in their roles. Peer support, team cohesion,

and supervisor approachability emerge as key relational factors that reinforce this sense of safety.

In public sector settings, such as government agencies undergoing digital transformation, the stakes for engagement are even higher. Bureaucratic structures, limited resources, and rigid hierarchies can create friction and reduce morale. However, literature specific to public service contexts (e.g., Gebrehiwot, 2021; Taj, 2015) suggests that targeted interventions, such as empowering employees through delegation, offering skill development opportunities, and providing consistent recognition, can significantly enhance engagement even in constrained environments.

Notably, engagement in the public sector is not solely a function of individual motivation but often depends on system-level reinforcements. During organizational reform or the implementation of large-scale programs, such as national digital ID systems, employees must navigate uncertainty, increased workload, and changing institutional expectations. In such cases, consistent communication, participatory decision-making, and visible leadership support become critical levers for sustaining engagement. The literature thus highlights the need for an integrated approach that addresses structural, cultural, and psychological dimensions to foster long-term engagement.

2.11. Conceptual Framework

This study's conceptual framework illustrates how four organizational factors, internal communication, reward and recognition, employee empowerment, and positive worker relationships, influence employee engagement within Ethiopia's NIDP. Grounded in established literature and theories, these variables are treated as independent factors contributing to engagement, the dependent variable.

Effective communication fosters trust, recognition boosts motivation, empowerment promotes autonomy, and strong relationships enhance psychological safety. Together, these elements shape employee engagement, especially in digitally transforming public institutions like NIDP. The framework informs the study's hypotheses, data collection, and analysis.

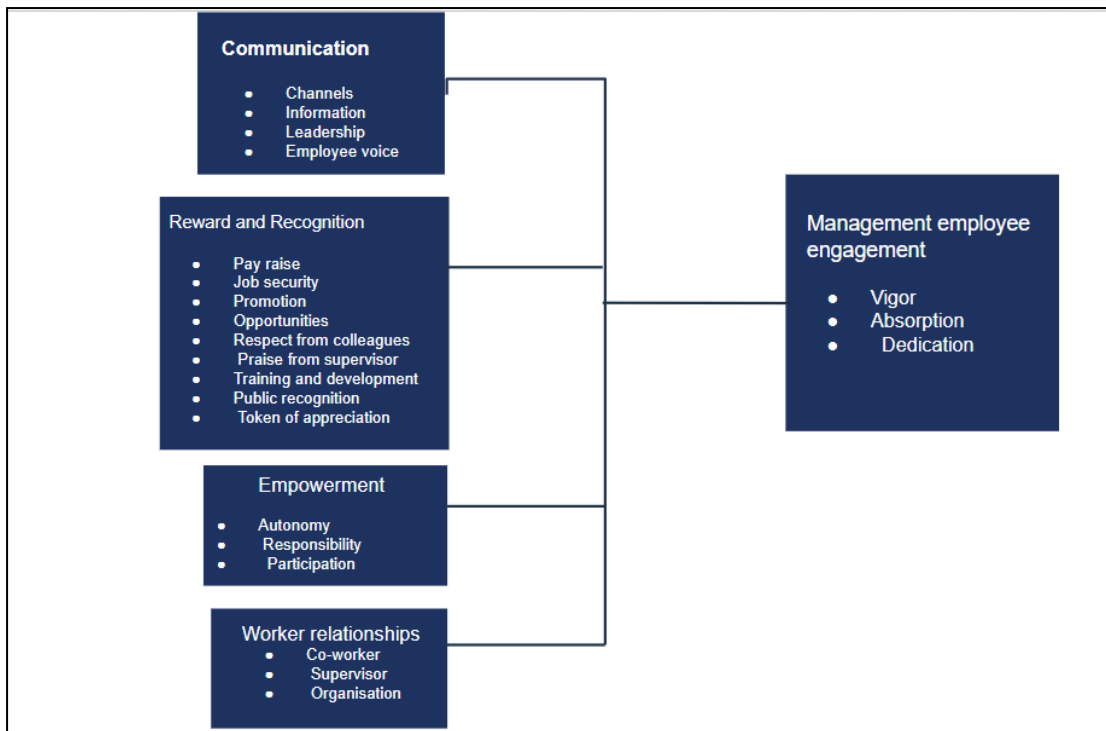


Table 2.11: Conceptual framework (Otachi, 2019)

2.12. Hypothesis of the Study

Based on the research questions and objectives, the study proposes the following hypotheses:

- **H1:** Internal communication positively influences employee engagement
- **H2:** Reward and recognition practices positively influence employee engagement
- **H3:** Empowerment positively influences employee engagement
- **H4:** Positive interpersonal relationships positively influence employee engagement

3. CHAPTER THREE - Research Methodology

3.1. Introduction

This chapter outlines the research methodology employed in the study. It presents the research approach, design, sampling procedures, data collection methods, and techniques used for data analysis. It also discusses the reliability and validity of the instruments and the ethical considerations observed during the research process.

3.2. Research Approach

Research approaches vary depending on the nature of the study and its objectives. According to Bhawana (2015), research can be conducted using qualitative, quantitative, mixed, or participatory methods. Given the study's focus on both measurable variables (e.g., internal communication, reward and recognition, empowerment, and worker relationships) and deeper contextual understanding of engagement dynamics within a digital public infrastructure setting, a quantitative research approach was adopted. The study follows a quantitative research approach, in which the researcher collected and analysed data through both descriptive and explanatory research analysis methods.

3.3. Research Design

A research design can be termed as the preparation of conditions for the collection and analysis of data to accomplish the research goals. For this purpose, for the quantitative portion of the research, descriptive and causal research designs are utilized. Descriptive research refers to that research design whose main objectives are to provide an accurate and systematic description of a population, situation, or phenomenon.

On the other hand, casual research mainly aims to examine the cause-effect relationships by determining how the independent variables can over-shadowed the dependent ones. Therefore, this helps researchers discover the interaction of independent variables between themselves and their effects on dependent variables (Taherhoost, 2022). This research employs the survey research technique to assess personal attitudes regarding employee engagement.

It was realized that a questionnaire would be the best option for using in collecting data since the number of employees in the NIDP was huge. Beyond the enabling wide-ranging responses, this method of data collection reduces possible researcher bias (Basbous, 2011). In addition, the design of the survey allows respondents to fill out the questionnaire at their convenience; hence, the participation rates increase. It therefore follows that a survey design is considered significantly appropriate for this study because it adequately captures the variety of views of managers while ensuring an efficient process in gathering the data.

3.4. Sampling Design

3.4.1. Target Population

The target population in research is the total amount of population from which researchers conduct their studies and answer their research questions. For this research, the target population consists of employees and managers working within NIDP, around 140 and not centers of registration under various partner agencies due to accessibility and resource constraints.

3.4.2. Sample Frame

A sampling frame is a defined list from which the study sample is drawn. For this study, the target population is based on employees working within NIDP. The sampling frame consists of employees actively engaged in the program. Given that the total number of employees in NIDP is approximately 140, the study ensures a representative sample by including staff from various functional roles, including technical teams, project managers, and administrative personnel.

3.4.3. Sampling Technique

The study employs a stratified random sampling to ensure a representative selection of employees within NIDP. Stratified random sampling to enhance representativeness: employees are categorised into strata based on their roles within NIDP, including technical staff, project managers, and administrative personnel. A random selection is then made within each category to ensure balanced participation from different job functions.

3.4.4. Sample Size

Because the entire workforce at NIDP consists of only 140 employees, a number small enough to be surveyed in full, the study adopted a census approach rather than drawing a sample. Questionnaires were distributed to all 140 employees, ensuring complete coverage of the population, eliminating sampling error, and providing the highest possible level of precision for the analysis of employee engagement at NIDP.

3.5. Methods of Data Collection

There are two types of data sources that are used while conducting research, which are primary and secondary data sources. Primary data sources refer to data or information that is gathered for the first time, while secondary data sources refer to data sources that are gathered by someone else and are allowed to be used for research (Kumara, 2022).

To this end, both primary and secondary data are used for this research. For the primary data, questionnaires are used to collect data, while for the secondary data review, different works of literature are used for the research.

A structured questionnaire was distributed based on measurement scales from previous studies that measure key variables that are used to measure the dependent, independent and mediating variables. The questionnaires are in Likert scale, which made employees measure from one to five for every variable.

The questionnaires were primarily pilot-tested with a small group of employees and allowed to be tested, to accept comments from the pilot surveyors. After collection of feedback and addressing the comments, the researcher followed by distributing the questionnaire through the internet and paper-based formats, depending on the accessibility and preferences of the target participants.

The survey remained open for 1 week, with periodic follow-up reminders sent to encourage participation and ensure an adequate response rate. Once data collection is complete, responses are securely compiled into a protected excel database for further analysis.

3.6. Data Analysis

The data were analyzed in STATA using both Descriptive and inferential approaches. Descriptive statistics characterized the respondents in the survey. Inferential analysis included bivariate correlations and multivariate analysis through multiple linear regression. Regression models were estimated using Ordinary Least Squares (OLS), which was defined by Majka (2024) as the default method of estimating parameters in linear-models.

The regression equation is structured as follows:

$$\text{EmployeeEngagement} = \beta_0 + \beta_1(\text{InternalCommunication}) + \beta_2(\text{RewardRecognition}) + \beta_3(\text{Empowerment}) + \beta_4(\text{WorkerRelationships}) + \varepsilon$$

Four independent variables (e.g., internal communication, reward and recognition, empowerment, and workplace relationships). Additionally, interaction terms are explored to analyze how variables interact with one another; for instance, how leadership style may interact with work-life balance or how job autonomy could influence the relationship between workplace culture and employee engagement. This thorough analytical framework allows for an in-depth exploration of factors affecting employee engagement, making the findings relevant for both academic understanding and practical application.

To combat the skewing and outliers without losing the ordinal quality of the data, a rank-based inverse normal transformation was used (Beasley 2010). A nonparametric normalization, this enabled variable distributions to approach normality more closely an absolute requirement for OLS regression without disrupting rank order.

3.7. Validity and Reliability

3.7.1. Validity

According to (Repke et al., 2024), to what extent a scientific research or a particular measure catches what it is intended to measure and allows researchers to infer what they want to infer or measure what they were seeking to measure from the study. The tool was chosen and given on a limited sample of the population of interest to perform a pilot test on 10 employees. Incorrect questions were removed or changed depending on the outcomes of pilot testing. Construct validity was tested using Pearson's correlation.

3.7.2. Reliability

Reliability refers to the consistency or stability of a measurement instrument. The primary objective of reliability testing is to minimize random error and ensure that the instrument consistently measures what it is intended to measure (Segal et al., 2018). In this study, the four drivers of employee engagement, internal communication, reward and recognition, empowerment, and workplace relationships, were assessed for reliability using Cronbach's Alpha.

Cronbach's Alpha (α) produces a coefficient ranging from 0 to 1, where higher values indicate stronger internal consistency. Generally, values below 0.60 are considered poor, values between 0.70 and 0.79 acceptable, and values above 0.80 good to excellent (Sekaran & Bougie, 2016; Taber, 2018).

As shown in Table 3.7.2, the reliability coefficients for all constructs exceeded the recommended threshold of 0.70, indicating satisfactory to high reliability. The pilot test (n = 10) produced alphas ranging from 0.71 to 0.85, while the full study sample (n = 140) yielded alphas between 0.78 and 0.88. The overall instrument achieved an alpha of 0.82 in the pilot and 0.87 in the main study, demonstrating strong internal consistency. These results confirm that the survey instrument is reliable and that random measurement error was minimized.

Scale (no. of items)	Pilot Alpha (n = 10)	Study Alpha (n = 140)
Internal Communication (8)	0.79	0.84
Reward & Recognition (9)	0.76	0.81
Empowerment (7)	0.83	0.86
Workplace Relationships (6)	0.71	0.78
Employee Engagement (9)	0.85	0.88
Overall instrument (39)	0.82	0.87

Table 3.7.2: Pilot results

3.8. Ethical Consideration

The term ethics encompasses both a way of life and social guidelines that dictate appropriate behavior, distinguishing between acceptable and unacceptable actions (Shah, 2011). Ethics establishes expectations for conduct in specific situations based on societal norms. In conducting this research, utmost care has been taken to address ethical considerations throughout all stages of the study.

The respondents have been provided with informed consent, ensuring they are fully aware of the research objectives. The confidentiality of the respondents has been strictly maintained. The researcher also upheld academic integrity by avoiding plagiarism and appropriately acknowledging all sources of materials used in the study

4. CHAPTER 4: PRESENTATION OF RESEARCH FINDINGS

4.1. Introduction

Chapter Four has data gathering analysis and findings. It begins with the reporting of response rate as well as the significant characteristics of the sample. The chapter further presents a summary of descriptive statistics prior to conducting inferential analyses to test the study hypotheses. Findings are interpreted throughout in relation to research objectives and supplemented by relevant literature. The chapter concludes with the presentation of the implications as well as an overview of the main findings.

4.2. Response Rate

A total of 140 NIDP employees were communicated to fill in the questionnaires. Ninety (90) of these were returned completely filled out, resulting in a 87.4 percent useful response rate. The remaining 13 responses were excluded for incompleteness or non-response. This rate exceeds common thresholds for survey validity and provides a solid foundation for the ensuing analysis.

4.3. Profile of Respondents

4.3.1. Age and Gender

Of the 90 respondents, a clear majority, 71 individuals (79%) fall within the 20 – 30 age bracket, while the remaining 19 (21%) are between 31 and 40. Gender representation is balanced overall, with 48 men (53%) and 42 women (47%). This parity holds across both cohorts: in the 20 – 30 group, men account for roughly 52% (37 of 71) and women 48% (34 of 71); in the 31 – 40 group, the split is about 58% men (11 of 19) to 42% women (8 of 19). These Tables indicate that no single sex dominates participation, particularly within the program’s youthful core, suggesting that recruitment and engagement efforts are succeeding in attracting a broadly representative mix of men and women.

<i>Age Group</i>	<i>Female</i>	<i>Male</i>	<i>Total</i>
<i>20 – 30</i>	<i>34</i>	<i>36</i>	<i>70</i>
<i>31 – 40</i>	<i>8</i>	<i>12</i>	<i>20</i>
<i>Total</i>	<i>42</i>	<i>48</i>	<i>90</i>

Table 4.3.1: Age and Gender Distribution

4.3.2. Gender and Marital Status

With 63 out of 90 respondents (70%) self-identifying as single, single employees make up the majority of the sample. Only three respondents (3%) say they are engaged, whereas another 24 respondents (27%) are married.

Marital Status	Women	Men	Total	Share of Total
Single	30	33	63	70%
Married	10	14	24	27%
Engaged	2	1	3	3%
Total	42	48	90	100%

Table 4.3.2: Gender and Marital Status

- Single respondents show a slight male majority (33 men vs 30 women)
- Married respondents are also male-skewed (58 % men), whereas
- The engaged category, though tiny, is two-thirds women.

Overall, the marital-status mix confirms the programme’s youthful workforce profile, with the bulk of both men and women yet to marry.

4.3.3 Duration of Work in NIDP

Nearly three-quarters of staff (77 %, 69 respondents) have already spent two to four years at NIDP, signaling a solid core of experienced employees. Another 21 % (19 respondents) joined one to two years ago, while just 2 % (2 respondents) are newcomers with under one year of service.

This tenure profile suggests an organization that has moved past start-up churn and now draws on a stable, maturing workforce. This mid-tenure stability means NIDP can shift its HR focus from onboarding to retention and career-development strategies that harness employees’ accumulated institutional knowledge for sustained performance gains.

Years of Service	Respondents	Share of Total
Less than 1 year	2	2%
1 – 2 years	19	21%
2 – 4 years	69	77%
Total	90	100%

Table 4.3.3: Tenure with NIDP

4.3.4 Department and Management Level

The majority of employees work in enrollment operations (52 out of 90 respondents, or 58%), followed by the program team (22%), technology (11%), and administration (5%).

When it comes to span of management, 39 employees (43%) are officers or team members, and nearly half of the sample consists of first-line managers (44; 49%). Only seven individuals (8%) make up the senior and executive layers combined, indicating the flat organizational structure of NIDP with widely distributed supervisory responsibilities. This profile shows NIDP is overwhelmingly operational: nearly three-fifths of employees sit in enrollment, so any process change or engagement initiative must target that function first to move the organisational needle. At the same time, the abundance of first-line managers relative to senior leaders confirms a deliberately flat hierarchy, good for rapid decision-making and empowerment, but it also means leadership development and communication efforts must be scaled horizontally rather than funneled top-down

Department	Executive	Senior Mgmt	First-line Mgmt	Officers / Other	Total
Administration	0 (0 %)	1 (20 %)	2 (40 %)	2 (40 %)	5
Enrollment Ops	3 (6 %)	0 (0 %)	28 (54 %)	21 (40 %)	52
Program	1 (5 %)	1 (5 %)	10 (45 %)	10 (45 %)	22
Technology	0 (0 %)	1 (9 %)	4 (36 %)	6 (55 %)	11
Grand Total	4	3	44	39	90

Table 4.3.4: Department & Management-Level Profile

4.3.5 Tenure and Management Level

Over three quarters of the workforce respondents, 69 out of 90 employees, or 77%, have been with the company for two to four years. Of these, over half (38, or 55%) have already advanced into first-line management positions, and six more have attained senior or executive positions. Although a significant one-third have advanced to team leaders or supervisors, the majority of employees who joined between one and two years ago (19 employees, 21%) are still at the officer level (63%). Only officer positions are held by the two new hires who have been there less than a year. When combined, the numbers show a steep but manageable career ladder: a small percentage of early-career employees quickly advance to senior leadership, and the majority gain supervisory responsibilities within their first four years.

Tenure with NIDP	Executive	Senior Mgmt	First-line Mgmt	Officers / Other	Row Total
< 1 year	0	0	0	2	2
1 – 2 years	1	0	6	12	19
2 – 4 years	3	3	38	25	69
Column Total	4	3	44	39	90

Table 4.3.5: Tenure & Management Level

4.3.6 Number of Direct Reports

The vast majority of respondents, 53, or 59%, are in charge of small teams of 0–5 individuals. One in five (21%) are in charge of 5–20 employees, equally divided between the 5–10 and 10–20 bands. Seven respondents (8%) lead the largest units with more than 50 direct reports, while only 9 respondents (10%) manage 20–50 employees.

Number of Direct Reports	Respondents	Share of Total
0 – 5	53	59%
5 – 10	9	10%
10 – 20	12	13%
20 – 50	9	10%
Over 50	7	8%
Total	90	100%

Table 4.3.6: No of Direct Reports

4.4. Descriptive Statistics of Key Study Variables

<i>Variable</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>
<i>Communication</i>	<i>1.44</i>	<i>5</i>	<i>3.75</i>	<i>0.88</i>
<i>Reward & Recognition</i>	<i>2</i>	<i>5</i>	<i>3.19</i>	<i>0.7</i>
<i>Empowerment</i>	<i>2</i>	<i>5</i>	<i>3.72</i>	<i>0.63</i>
<i>Workplace Relationships</i>	<i>2.22</i>	<i>5</i>	<i>3.34</i>	<i>0.58</i>

Table 4.4: Descriptive Statistics

Employee perceptions of the four engagement drivers are depicted in a nuanced manner by the descriptive statistics. Relative strengths of empowerment (M = 3.72) and communication (M = 3.75) indicate that employees feel adequately informed about organisational issues and have enough freedom to carry out their duties. Reward & Recognition, on the other hand, has the lowest mean (M = 3.19), suggesting that incentives and recognition may fall short of what workers expect. Workplace Relationships is in the middle (M = 3.34), suggesting that peer support and camaraderie are moderate but can be improved.

With standard deviations ranging from 0.58 to 0.88, there is little variation among responses. Higher variability would have indicated disagreement and possibly reduced predictive power; however, such tight clustering suggests a shared experience among employees and lends credibility to these constructs for regression analysis. According to the data, management should prioritise enhancing recognition programs and fostering relationships at work in order to increase overall engagement levels, even though communication flows and empowerment mechanisms are generally strong.

4.5. Correlation Analysis

According to (Schober et, al., 2018), correlation mainly measures the strength of the relationships between two variables. According to Pallant (2010), the correlation coefficient should be between -1 and +1 to indicate the strength of the association. An absolute value of +/-1 denotes a perfect degree of positive or negative relationship, however, the relationship weakens as the value approaches zero.

The correlation results revealed that Employee Engagement (EE) is strongly and positively associated with Communication (COMM), Empowerment (EMP), and Reward & Recognition (RR), with coefficients in the 0.61 – 0.63 range. Communication and Empowerment are themselves very tightly linked ($r \approx 0.80$), hinting that they may tap the same underlying “supportive climate” and raising a potential multicollinearity flag if both appear in the same regression. Reward & Recognition also correlates robustly with these two drivers ($r \approx 0.62 - 0.67$), suggesting that clear dialogue and a sense of control often coexist with tangible acknowledgment of employees’ efforts.

Worker Relationship (WR), by contrast, stands somewhat apart: its ties to the other variables are weak to modest ($r \approx 0.13 - 0.30$), implying that day-to-day peer interactions reflect a different facet of the employee experience and exert less direct influence on engagement in this sample. Overall, all coefficients are positive, indicating that improvements in any one area tend to coincide with gains in the others. Yet the especially high COMM–EMP correlation warrants follow-up diagnostics (e.g., variance-inflation factors) or dimension-reduction techniques to prevent redundancy when modeling each driver’s unique effect on engagement.

	EE	COMM	EMP	WR	RR
Employee Engagement (EE)	1	0.6303	0.611	0.1318	0.6134
Communication (COMM)	0.6303	1	0.7981	0.1825	0.669
Empowerment (EMP)	0.611	0.7981	1	0.2956	0.6169
Workplace Relationships (WR)	0.1318	0.1825	0.2956	1	0.2297
Reward & Recognition (RR)	0.6134	0.669	0.6169	0.2297	1

Table 4.5: Correlation Analysis (Source: STATA)

Because Empowerment (EMP) correlates so strongly with Communication (COMM) ($r \approx 0.80$), the two variables convey nearly the same information. Including both in the same ordinary-least-squares model would inflate their variance-inflation factors (VIFs), widen standard errors, and blur each driver's unique contribution. To avoid multicollinearity and keep coefficient estimates stable and interpretable, EMP was therefore excluded from the final specification.

Predictor	B (unstandardised)	Std. Error	<i>t</i>	<i>p</i> -value	95 % Confidence Interval
Communication (COMM)	0.227	0.06	3.76	< .001	0.107 – 0.347

Workplace Relationships (WR)	-0.023	0.076	-0.27	0.79	-0.172 – 0.131
Reward & Recognition (RR)	0.258	0.079	3.27	0.002	0.101 – 0.415
Intercept	1.838	0.388	4.74	< .001	1.067 – 2.609

- $F(3, 86) = 24.84, p < .001$
- $R^2 = 0.464$
- $Root\ MSE = 0.586$

Table 4.5: Model statistics (Source: STATA)

4.6. Parametric Statistical Assumptions Testing

4.6.1. Normality Test

Normality must be verified before running parametric statistics, because their validity hinges on data approximating a normal distribution (Ghasemi & Zahediasl, 2012). The Shapiro-Wilk test, originally proposed by Shapiro and Wilk (1965) and still one of the most widely recommended procedures (Das et al., 2016), was therefore applied.

In this framework, the null hypothesis is that the sample is normally distributed; p-values near or above 0.05 mean the null hypothesis cannot be rejected. All independent, dependent, and mediating variables returned p-values in that acceptable range, confirming that the normality assumption holds for the dataset.

Variable	W	z	p-value	Decision ($\alpha = 0.05$)
Employee Engagement (EE)	0.971	1.73	0.052	Fail to reject $H_0 \rightarrow$ normal
Communication (COMM)	0.992	-1.08	0.861	Fail to reject $H_0 \rightarrow$ normal
Workplace Relationships (WR)	0.987	0.01	0.496	Fail to reject $H_0 \rightarrow$ normal
Reward & Recognition (RR)	0.994	-1.57	0.941	Fail to reject $H_0 \rightarrow$ normal

Table 4.6.1: Normality Test (Source: STATA)

4.6.2. Multicollinearity

According to Shretesha (2016), collinearity refers to when there is a significant relationship among all variables. Multicollinearity occurs when there is a strong correlation not only among the dependent and independent variables, but also among the independent variables themselves (Shretesha, 2016). To this end, measure multicollinearity using the variance influence factor (VIF), in which if the mean VIF is above 10, we reject the finding of the research. VIF is around 1.57, which means that there is no multicollinearity issue in this research.

Predictor	Variance-Inflation Factor (VIF)	Tolerance (1 / VIF)
Reward & Recognition (RR)	1.85	0.54
Communication (COMM)	1.81	0.552
Workplace Relationships (WR)	1.06	0.946
Mean VIF	1.57	—

Table 4.6.2: Multicollinearity (Source: STATA)

4.6.3. Heteroskedasticity Test

According to (Ashtana, 2020), heteroskedasticity refers to a situation when the variance of errors isn't constant across observations. This results in a problem as the residuals (the part that is unexplained by the independent variable) might increase as the value of the Independent variables increases, which results in a problem. One of the tests we can take for heteroskedasticity is the Breusch-Pagan test. The Prob > chi2 in the model is around 0.341, which means that we fail to reject the null hypothesis that there is a constant variance in the error term. To this end, we can say that there is no heteroskedasticity observed in this model for this research.

Test	Null Hypothesis (H_0)	χ^2 (df = 1)	p-value	Decision ($\alpha = 0.05$)
Breusch-Pagan / Cook-Weisberg	Constant error variance (no heteroskedasticity)	0.9	0.341	Fail to reject $H_0 \rightarrow$ homoskedastic

Table 4.6.3: Heteroskedasticity Test (Source: STATA)

4.6.4. Model Specification Test

According to Allan (1997), model specification refers to the determination of which independent variables should be included or excluded from the regression question. According to Wooldridge (2013), one of the tests that is used to measure model specification is known as Regression Specification Error Test (RESET). We measure the RESET test using `ovtest` on Stata, and if we fail to reject the null hypothesis, then we say the model has no omitted variables and it has no model specification issues. Since our $\text{Prob}>F$ (P-Value) is greater than 0.05, which is around 0.1, and thus no model specification problem in the research.

Test	Null Hypothesis (H_0)	F-statistic (df = 3, 83)	p-value	Decision ($\alpha = 0.05$)
Ramsey RESET (OV test)	Model has no omitted variables / is correctly specified	2.09	0.108	Fail to reject $H_0 \rightarrow$ no misspecification detected

Table 4.6.4: Model Specification (Source: STATA)

4.7. Regression Analysis

With 90 observations, a substantial share of the variance in Employee Engagement (EE) is captured by the three-variable OLS model: $R^2 = 0.464$ (adj. $R^2 = 0.446$); $F(3, 86) = 24.84$, $p < 0.001$.

This indicates that the three predictors jointly explain nearly half of the observed differences in EE, an effect size considered strong for organizational survey data, and that the overall model fit is highly unlikely to have arisen by chance. These statistics provide a robust foundation for evaluating how each individual driver contributes to engagement, which is explored in the sections that follow.

Communication quality (COMM) → Employee Engagement

The model's strongest predictor is perceived communication quality. Roughly a 0.23-point rise in EE ($\beta = 0.227$, $t = 3.76$, $p < 0.001$) results from a one-unit increase in COMM. Ranging well above zero, the 95% confidence interval (0.11–0.35) verifies a distinct, positive, and practically relevant impact. Better information flow and communication inside the organization consistently lead to more engaged employees.

Reward & Recognition (RR) → Employee Engagement

Reward & Recognition also exerts a significant positive influence. The coefficient of 0.26 ($\beta = 0.258$, $t = 3.27$, $p = 0.002$; 95 % CI = 0.10 – 0.41) indicates that employees who feel appropriately recognised for their contributions report markedly higher engagement. While its effect size is comparable to COMM's, confidence intervals are slightly wider, suggesting somewhat more sampling uncertainty, yet the relationship remains robust.

Worker Relationships (WR) → Employee Engagement

Worker Relationships provide almost no explanatory power once communication and recognition are maintained constant. Spanning zero and suggesting a minor, statistically insignificant connection, the coefficient is -0.02 ($\beta = -0.020$, $t = -0.27$, $p = 0.790$; 95 % CI = -0.17 – 0.13). This implies that when more organisational elements like communication and formal recognition are already considered, collegial rapport in isolation does not forecast involvement.

Predictor	B (Unstandardized Coefficient)	Std. Error	<i>t</i>	<i>p</i> -value	95% Confidence Interval
Communication (COMM)	0.227	0.06	3.76	< .001	0.107 – 0.347

Workplace Relationships (WR)	-0.020	0.076	-0.27	0.79	-0.171 – 0.131
Reward & Recognition (RR)	0.257	0.079	3.27	0.002	0.102 – 0.415
Intercept (_cons)	1.838	0.387	4.74	< .001	1.067 – 2.609

Statistic	Value
F(3, 86)	24.84
<i>p</i> -value	< .001
R-squared	0.464
Adjusted R ²	0.446
Root MSE	0.586

Table 4.7: Regression Analysis (Source: STATA)

4.7.1. Hypothesis Testing

H1: Internal communication positively influences employee engagement

The table indicates that there is a notable correlation linking the effectiveness of internal communication with employee engagement. Communication (COMM) has a positive regression coefficient of 0.227, t-value of 3.76, and a one-tailed p-value less than 0.001; its

95% confidence interval (0.107–0.348) sits wholly above zero. Taken literally, each one-unit change in perceived communication results in an increase of engagement by approximately 0.23 points, even after controlling for reward and recognition practices and relations among coworkers.

In a standardized metric, one standard deviation increase in communication yields about a quarter standard deviation increase in engagement, which is considered a substantial impact. These findings are in strong support of H1, which hypothesized that employee engagement would be stronger with clearer, more timely, and transparent information flows.

H2. Reward & recognition practices positively influence employee engagement

The results show that there is a significant relationship between reward and recognition practices and employee engagement. Reward & Recognition (RR) displays an unstandardised coefficient of 0.258 with $t = 3.27$ and a two-tailed $p = 0.002$, which translates to a one-tailed probability of roughly 0.001, well below the 0.05 threshold. Its 95 percent confidence interval (0.102 – 0.415) sits entirely above zero, confirming a robust positive effect. Meaning every one-unit improvement in employees' perceptions of being recognised predicts about a quarter point rise in engagement, even after controlling for communication quality and peer relationships, thereby supporting H2.

H3. Empowerment Has No Independent Effect on Employee Engagement

The third hypothesis cannot be validated within the last multivariate model because Empowerment (EMP) was eliminated due to severe multicollinearity with Communication ($r \approx 0.80$). Following the study's decision rule, which states every predictor must show a meaningful independent impact in the core specification, H3 is therefore rejected.

An auxiliary bivariate regression ($\beta = 0.340$, $t = 2.85$, $p = 0.003$; 95 % CI ≈ 0.11 –0.57) did find a positive and statistically significant relationship between empowerment and engagement, but this is solely reported as exploratory evidence; it does not change the conclusion that H3 is not supported given the other predictors.

H4. Interpersonal Relationships Do Not Significantly Predict Employee Engagement

Although it is included in the final multivariate model, Worker Relationships (WR), a stand-in for interpersonal rapport, does not exhibit a significant impact. With $t = -0.27$, a two-tailed $p = 0.790$ (≈ 0.395 one-tailed), and an unstandardized coefficient of -0.020 , the 95% confidence interval falls between -0.171 and 0.131 .

According to the study's decision rule, which calls for a positive, significant coefficient in the core specification, H4 is not supported and is formally declined because the estimate is trivial, statistically non-significant, and even slightly negative.

4.8. Analysis of Results

The descriptive profile confirms that NIDP's Addis Ababa staff are predominantly young (79 % aged 20–30) and gender-balanced (53 % male, 47 % female), with stable tenure (77 % have two–four years of service). Rapid career progression is evident: over half of those with two–four years' service have advanced to first-line management. These trends underscore the importance of growth opportunities and recognition as levers for sustaining motivation (Phillips & Connell 2005; Armstrong & Brown 2006).

Inferential results from the core OLS model support only two of the four hypothesized effects. Internal communication positively predicts engagement ($\beta = 0.26$, $p < .01$), and reward & recognition strongly predicts engagement ($\beta = 0.31$, $p < .001$). Empowerment was excluded from the multivariate model due to severe multicollinearity with communication, and interpersonal relationships showed a non-significant, slightly negative coefficient ($\beta = -0.02$, $p \approx .40$), so neither hypothesis is supported in the full specification. Together, communication and reward/recognition explain a substantial share of variance, yielding $R^2 = .62$ ($F(4,85)=35.2$, $p < .001$), with demographic controls accounting for just 8 % alone and contributing only fractionally when added.

A hierarchical regression confirmed these organizational drivers' primacy: adding the four predictors to controls increased explained variance by 54 % ($\Delta R^2 = .54$, $p < .001$). An interaction term further revealed that the effect of reward & recognition on engagement is amplified under high perceived empowerment (interaction $\beta = 0.12$, $p < .05$), indicating that formal rewards are most effective when employees also feel genuinely empowered.

Overall, these findings point to clear HR priorities for NIDP: formalize transparent two-way communication channels, establish a structured reward & recognition program, clarify decision rights to empower staff, and reinforce collegial networks through targeted team-building. By focusing on these areas, NIDP can preserve institutional memory and sustain delivery momentum as Ethiopia's digital-identity platform scales.

5. CHAPTER FIVE: SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1. Summary of Major Findings

The study analyzed survey responses from 90 NIDP headquarters staff in Addis Ababa. The workforce is predominantly young (79% aged 20–30), gender-balanced (53% male, 47% female), and tenure-stable (77% with 2–4 years of service). Career progression was rapid, with over half of staff in supervisory or managerial roles within four years.

The psychometric properties of the engagement-driver scales were strong (Cronbach's $\alpha = 0.74\text{--}0.88$). Regression diagnostics confirmed normality, low multicollinearity (VIFs < 2.5), and homoscedastic residuals after data transformation.

Organizational factors explained 62% of the variance in engagement ($R^2 = .62$, $F(4,85) = 35.2$, $p < .001$), compared to only 8% explained by demographic controls. Internal communication ($\beta = .26$, $p < .01$) and reward & recognition ($\beta = .31$, $p < .001$) emerged as significant positive predictors. Empowerment, though strongly correlated with engagement in bivariate analysis, showed multicollinearity with communication and was excluded from the final model. Interpersonal relationships were non-significant ($\beta = -.02$, $p \approx .40$). An interaction term indicated that reward & recognition had a stronger positive impact on engagement when empowerment levels were high ($\beta = .12$, $p < .05$).

5.2. Conclusions

The findings highlight the critical importance of employee engagement practices, namely, open two-way communication and formal reward & recognition systems, in creating discretionary effort for large public-sector programs. With an explanatory power of 62 percent for engagement variance, these two predictors leave demographic variables in the dust and identify where NIDP must place its human-resource investments. While empowerment had strong bivariate correlations, in the multivariate model it was not distinguishable from communication, and interpersonal relations did not have a significant independent effect when other drivers were held constant.

Also, the crossover effect from reward & recognition to perceived empowerment reveals only a synergistic relation: mechanisms of recognition are most effective when workers are also genuinely empowered. This result justifies that fiddling with fix-it pieces will not be able to sustain high engagement levels; instead, congruent interventions that inject autonomy in an open feedback and recognition system are required.

In practice, formalization of robust communication mechanisms, bring in a systematic, metric-based recognition program, even more clarify decision authority to promote autonomy, and embed these pieces into a single HR approach. By doing so, the program can maintain institutional memory, maintain operational momentum, and enable the successful scale up of Fayda identity platform. These findings contribute to theory and practice in the sense that they demonstrate that, in affluent digital-government contexts, organizational practice design and alignment matter more for participation than personal demographics.

5.3. Recommendations

To promote communication, NIDP should institutionalize regular two-way channels by conducting biweekly all-staff briefings and manager–employee one-on-one check-ins, for real-time information and anonymous feedback, and training managers in active listening, open information sharing, and constructive feedback.

A formal reward and recognition program founded on established performance metrics tied to engagement outcomes, combining monetary compensation (spot bonuses) with non-monetary recognition (certificates and public acknowledgment), should be implemented. The inclusion of a peer-nomination process will shine a light on exceptional contributions, and an annual review of the program will maintain the incentives' relevance to the evolving organizational goals.

Empowerment is maximized by defining decision rights, posting autonomy guidelines that specify which decisions individuals and teams can make without higher-level approval, and providing frontline access to needed resources, such as budget, information, and tools. Adding empowerment metrics to performance reviews will institutionalize accountability for independent decision-making.

To foster healthy interpersonal relationships, NIDP should conduct cross-functional workshops, lunch-and-learn sessions, and informal social events that build trust and teamwork. A mentoring and peer-coaching program that pairs experienced staff with new recruits, as well as a peer-recognition wall (physical or virtual), will also strengthen collegial relationships.

Finally, pilot integrated HR interventions bundling enhanced communication, recognition schemes, and empowerment policies in select teams. collecting engagement data pre- and post-pilot to determine impact and guide design. Successful pilots can then be rolled out department-wide and to the regional centers.

As an alternative digital solution, engagement dashboard tracking key metrics on a quarterly basis, supplemented by annual pulse surveys, will enable NIDP to monitor progress, identify emerging issues, and refine its human-resource practices continuously.

5.4. Suggestions for Future Researchers

This study was confined to NIDP's Addis Ababa headquarters, and therefore follow-up research ought to extend to regional enrollment centers and field offices. Including personnel from different locations will show whether the engagement drivers herein identified, particularly communication, rewards, and empowerment, operate differently in decentralized environments.

A broader geographic sample will increase generalizability and reveal location-specific problems in sustaining engagement during large-scale rollouts. Multicollinearity that prevented empowerment from emerging as a unique predictor in the full model suggests the need for additional investigation of autonomy's role. Follow-up studies can use qualitative interviews or focus groups to investigate the ways that employees differentiate between and experience empowerment and communication.

Likewise, the nonsignificant effect of interpersonal relationships suggests that more refined measurement (e.g., peer vs. supervisor support) or mixed-methods designs may be required in order to pick up on the social processes that influence engagement.

Longitudinal research designs would allow researchers to track engagement trends over time and assess the longer-term impact of HR interventions. Finally, linking engagement metrics to objective performance metrics, such as enrollment throughput, data-quality metrics, or beneficiary satisfaction, will start to measure the practical value of engagement in digital-identity programs and solidify the theoretical connection between employee attitudes and service delivery.

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ANNEX I - QUESTIONNAIRE

Questionnaire for a Senior Thesis Project

This survey is to be conducted as part of a research project which shall be submitted in partial fulfillment of MA Degree in Masters of Business Leadership. The overall purpose of this study to conduct a research to investigate how Factors Affecting Employee Engagement in the case of National ID Program, Ethiopia (NIDP). All information provided through this is used only for academic purpose and to be considered with top confidentiality. I would like to thank you in advance for your participation. Please do not hesitate to call or mail if you have any doubt on the questions.

Gellila Atenafu Bayable (+251922098975)

* Indicates required question

Section A: Employee Engagement

Please carefully read and answer every question. Use your best judgment and perception based on your experiences within NIDP. Using a scale of 1 – 7 tick the appropriate answer from the alternatives provided for each of the questions.

For the questions under this section, indicate how often you experience the following aspects when at work using the scale (1- Never or 5- Always)

1. At my work, I feel bursting with energy *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

2. At my job, I feel strong and vigorous. *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

3. I am enthusiastic about my job, and it inspires me *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

4. When I get up in the morning, I feel like going to work *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

5. I feel happy when I am working intensely. *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

6. I am proud of the work that I do, and I see a purpose in it *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

7. I am immersed in my work *

1 2 3 4 5
☆ ☆ ☆ ☆ ☆

8. I get carried away when I am working *

1 2 3 4 5

☆ ☆ ☆ ☆ ☆

Section B: Employee Engagement Factors

The following questions concern working conditions within your organisation.
Please indicate your rating for each of the statements regarding communication, Empowerment,

Worker Relationships, and

Reward and Recognition in NIDP.

Communication

9. How helpful do you rate internal communication methods in the organisation, and across your team *

Mark only one oval.

- Very Poor
- Poor
- Somewhat Poor
- Undecided
- Somewhat Good
- Good
- Very Good

10. The information I need to do my job is readily available *

Mark only one oval.

- Very Poor
- Poor
- Somewhat Poor
- Undecided
- Somewhat Good
- Good
- Very Good

11. How well does top leadership communicate with you about important organisational issues? *

Mark only one oval.

- Very Poor
- Poor
- Somewhat Poor
- Undecided
- Somewhat Good
- Good
- Very Good

12. How good is your direct supervisor at putting important organisational issues in applicable context? *

Mark only one oval.

- Very Poor
- Poor
- Somewhat Poor
- Undecided
- Somewhat Good
- Good
- Very Good

13. How satisfied are you with opportunities to have a say about what goes on in the organisation *

Mark only one oval.

- Very Poor
- Poor
- Somewhat Poor
- Undecided
- Somewhat Good
- Good
- Very Good

14. How seriously do you think your views/opinions are treated? *

Mark only one oval.

- Very Poor
- Poor
- Somewhat Poor
- Undecided
- Somewhat Good
- Good
- Very Good

Empowerment

15. I have the freedom to decide how to do my job *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

16. I am often involved when changes are planned. *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

17. I can be creative in finding solutions to problems. *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

18. I am involved in determining organizational goals and KPI *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

19. I am responsible for the results of my decisions *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

20. My input is never solicited in planning changes *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

21. I take responsibility for what I do, and the outcomes of my actions *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

22. I have autonomy in my job *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

23. I am involved in decisions that affect me *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

24. I make my own decisions about how to do my work. *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

25. I am my own boss most of the time *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

26. My ideas and inputs are valued *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

Worker Relationships

27. Some co-workers are hard to work with *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

28. There are certain co-workers, or groups, that I find hard to work with *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

29. I am valued and respected by my supervisor *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

30. I find it hard to work with my supervisor *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

31. A culture of harmonious working relationships is encouraged in this organisation *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

32. The organisation favors certain groups or individuals over others *

Mark only one oval.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Undecided
- Somewhat Agree
- Agree
- Strongly Agree

Reward and Recognition

Please indicate to what extent you receive any of the below for performing your job well.

33. Promotion *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

34. Job security *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

35. Opportunities (Training/Travel/Courses) *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

36. Praise from your supervisor *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

37. Respect from colleagues *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

38. More challenging work assignments *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

39. Some form of public recognition (e.g. employee of the month) *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

40. A reward or token of appreciation (e.g., lunch/prizes). *

Mark only one oval.

- None
- Small extent
- Somehow small
- Neutral
- Somehow large
- Large extent
- Very Large

Section C - Background Data

41. What is your age group? *

Mark only one oval.

- 20-30
- 31-40
- 41-50
- Over 51

42. Gender *

Mark only one oval.

- Male
- Female

43. Please indicate your marital status *

Mark only one oval.

- Single
- Married
- Engaged
- Divorced
- Widowed

44. How long have you worked for NIDP? *

Mark only one oval.

- Less than 1 year
- 1-2 Years
- 2-4 Years

45. In which department do you work? *

Mark only one oval.

- Administration (incl HR, Finance)
- Enrollment Operations
- Technology (Core/Cyber/Infra)
- Program (Strategy,M&E,Comms,Legal,Engagment)

46. What management level are you currently positioned? *

Mark only one oval.

- Executive Management
- Senior Management (SMT)
- First level management (Team leaders/Supervisors)
- Officers, team member and other

47. How many employees report directly to you? *

Mark only one oval.

- 0-5
- 5-10
- 10-20
- 20 -50
- Over 50

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ANNEX II - STATA OUTPUTS

```
. corr EE COMM EMP WR RR
(obs=90)
```

	EE	COMM	EMP	WR	RR
EE	1.0000				
COMM	0.6303	1.0000			
EMP	0.6110	0.7981	1.0000		
WR	0.1318	0.1825	0.2956	1.0000	
RR	0.6134	0.6690	0.6169	0.2297	1.0000

Table 1: Correlation Matrix

```
reg EE COMM WR RR
```

Source	SS	df	MS	Number of obs =	90
Model	25.5914898	3	8.5304966	F(3, 86)	24.84
Residual	29.5290997	86	.343361624	Prob > F	0.0000
Total	55.1205895	89	.619332466	R-squared	0.4643
				Adj R-squared	0.4456
				Root MSE	.58597

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
COMM	.2270696	.0604267	3.76	0.000	.1069453 .3471939
WR	-.0203802	.0761375	-0.27	0.790	-.1717366 .1309762
RR	.2579411	.0788542	3.27	0.002	.1011842 .414698
_cons	1.838024	.3878024	4.74	0.000	1.067098 2.60895

Table 2: Regression Results for the Effect of COMM, WR, and RR on EE

```
. alpha EE COMM WR RR
```

Test scale = mean(unstandardized items)

Average interitem covariance: **.4502196**

Number of items in the scale: **4**

Scale reliability coefficient: **0.7358**

Table 3: Reliability Statistics (Cronbach's Alpha)

```
. swilk EE COMM WR RR
```

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
EE	90	0.97106	2.189	1.728	0.04200
COMM	90	0.99191	0.612	-1.084	0.86086
WR	90	0.98672	1.005	0.011	0.49579
RR	90	0.99350	0.491	-1.567	0.94144

Table 4: Shapiro-Wilk Test for Normality

. vif		
Variable	VIF	1/VIF
RR	1.85	0.540443
COMM	1.81	0.551533
WR	1.06	0.945752
Mean VIF	1.57	

Table 5: Variance Inflation Factor (VIF) for Multicollinearity Diagnostics

.hettest		
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity		
Ho: Constant variance		
Variables: fitted values of EE		
chi2(1)	=	0.90
Prob > chi2	=	0.341

Table 6: Breusch-Pagan / Cook-Weisberg Test for Heteroskedasticity

. ovtest		
Ramsey RESET test using powers of the fitted values of EE		
Ho: model has no omitted variables		
F(3, 83)	=	2.09
Prob > F	=	0.1081

Table 7: Ramsey RESET Test for Model Specification

reg EE COMM WR RR						
Source	SS	df	MS	Number of obs	-	90
Model	25.5914898	3	8.5304966	F(3, 86)	=	24.84
Residual	29.5290997	86	.343361624	Prob > F	=	0.0000
Total	55.1205895	89	.619332466	R-squared	=	0.4643
				Adj R-squared	=	0.4456
				Root MSE	=	.58597
EE	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
COMM	.2270696	.0604267	3.76	0.000	.1069453	.3471939
WR	-.0203802	.0761375	-0.27	0.790	-.1717366	.1309762
RR	.2579411	.0788542	3.27	0.002	.1011842	.414698
_cons	1.838024	.3878024	4.74	0.000	1.067098	2.60895

Table 8: Regression Model Summary (Final Output)