

Evaluating the Public Administration Skills of Administrators at NIA-Kalinga Irrigation Management Office: Insights from Employees

Salome B. Daluping¹, Dr. Adriano G. Sabado²

¹Master in Public Administration, Northeastern College, Santiago City, Philippines

²Professor, Northeastern College, Santiago City, Philippines

Publication history: Received: April 20, 2026; Revised: June 1, 2026; Accepted: June 5, 2026

Email of Corresponding Author: sirthomjr.lsr@gmail.com

Abstract

This study evaluated the public administration skills of administrators at the National Irrigation Administration-Kalinga Irrigation Management Office (NIA-KIMO), Tabuk City, as viewed by employees. It determined the respondents' profile, assessed administrators' skills in leadership, team management, digital skills, and organizational innovation, tested differences in employees' viewpoints by profile, and examined relationships among the skill parameters. The study used a descriptive-correlational design with 122 NIA-KIMO employees selected through total population sampling. Data were gathered through a structured questionnaire patterned after public administration skills literature and treated using frequency counts, percentages, weighted mean, standard deviation, t-test, analysis of variance, and Pearson r correlation. Findings showed that most respondents were 31 to 40 years old, male, married, bachelor's degree graduates, and had served for 6 to 10 years. Administrators' public administration skills were rated High, with a grand mean of 4.09. Digital skills obtained the highest category mean, followed by organizational innovation, team management, and leadership. Age showed a significant difference in employees' viewpoints, while sex, civil status, educational attainment, and length of service did not. The skill parameters were also significantly related, showing that strength in one public administration skill area is connected with strength in other areas. The study concludes that NIA-KIMO administrators demonstrate strong public administration competencies, particularly in digital work practices and organizational innovation, but continued capability-building remains necessary to sustain responsive, people-centered, and technology-enabled public service.

Keywords: Digital Skills, Employee Perception, Organizational Innovation, Public Administration Skills, Team Management

1. Introduction

Public administration has become more demanding as government offices are expected to deliver services that are faster, transparent, inclusive, and technology-enabled. The work of administrators is no longer limited to routine supervision and compliance with established procedures. It now requires leadership, coordination, digital readiness, innovation, and the ability to guide people through complex organizational demands. The OECD (2017) emphasized that high-performing civil services need capable public servants who can work across boundaries, use evidence, manage change, and deliver better services to citizens.

Recent developments in digital government have strengthened the need to examine the skills of public administrators. The United Nations (2024) reported that digital public services continue to expand across countries, making digital competence and citizen-centered service design important parts of public sector performance. Similarly, the World Bank (2023) described GovTech maturity as a measure of how governments use digital systems to improve core operations, service delivery, citizen engagement, and enabling environments. These developments show that administrators must be able to use digital tools not only for convenience but also for accountability, coordination, and more responsive public service.

Leadership also remains a central public administration skill. In public organizations, leaders are expected to facilitate work, coach employees, communicate decisions clearly, motivate personnel, and act as agents of change. Gupta et al. (2017) noted that effective public administration depends heavily on leadership competencies that support ethical action, service orientation, and results-based performance. In the same way, Krpalek et al. (2021) stressed that public administration employees need both professional competences and soft skills to adapt to changing institutional demands and sustain professional growth.

Team management is equally important because public service is rarely performed by one person alone. Employees depend on administrators who can define tasks, identify staff strengths, promote collaboration, and manage priorities. This is especially true in technical agencies where administrative decisions affect operations, field coordination, resource use, and service delivery. Joynes et al. (2019) explained that twenty-first-century work requires communication, collaboration,

problem-solving, and adaptability, while Mahmood and Baskaran (2021) linked future-ready human skills with good governance practices.

Organizational innovation has also become a necessary skill for public administrators. Innovation in the public sector does not always mean introducing large reforms. Often, it begins with improving work processes, sharing knowledge, designing better coordination systems, and finding practical ways to solve recurring problems. Glavas et al. (2021) connected digital transformation in public administration with improved process management, while Ciancarini et al. (2023) stressed that public-sector digital transformation requires organizational, cultural, technological, and human capability shifts.

For NIA-KIMO, public administration skills are particularly important because the office supports irrigation management, agricultural productivity, and public service delivery in Kalinga. Administrators must guide personnel, coordinate operations, use digital systems, and respond to organizational needs while maintaining a service-oriented workplace. Assessing these skills from the viewpoint of employees provides a grounded view of how administrative competence is experienced by those who work under and with administrators.

This study therefore evaluates the public administration skills of NIA-KIMO administrators in terms of leadership, team management, digital skills, and organizational innovation. It also examines whether employees' viewpoints differ according to selected profile variables and whether the public administration skill areas are related to one another. The findings are intended to provide a basis for strengthening administrative capability, professional development, and responsive service delivery within the organization.

2. Material and methods

2.1 Research Design

This study used the descriptive-correlational research design. The descriptive part presented the profile of employees and their assessment of administrators' public administration skills in terms of leadership, team management, digital skills, and organizational innovation. The correlational part examined the relationships among the public administration skill parameters and tested differences in employees' viewpoints when grouped according to selected profile variables. This design was appropriate because the study described existing conditions and measured relationships among variables without manipulating the study environment (Curtis et al., 2016).

2.2 Locale of the Study

The study was conducted at the National Irrigation Administration-Kalinga Irrigation Management Office (NIA-KIMO) in Tabuk City. The locale was selected because the office supports irrigation management, agricultural productivity, and public service delivery in Kalinga, making it appropriate for assessing the public administration skills of administrators as viewed by employees.

2.3 Respondents of the Study

The respondents were 122 employees of the National Irrigation Administration-Kalinga Irrigation Management Office (NIA-KIMO), Tabuk City.

2.4 Sample and Sampling Procedure

Total population sampling was used because the number of employees was manageable and all employees were in a position to assess the public administration skills of administrators. Including the whole employee population allowed the study to capture a broad view of administrative skills as experienced in the workplace.

2.5 Research Instrument

Data were gathered using a structured questionnaire. The first part gathered the respondents' profile in terms of age, sex, civil status, highest educational attainment, and length of service. The second part measured public administration skills in leadership, team management, digital skills, and organizational innovation. Items were patterned after public administration skills literature and related competency studies, especially those emphasizing leadership, team management, digital capability, and innovation in public service (OECD, 2017; Krpalek et al., 2021; Glavas et al., 2021). A five-point scale was used, ranging from 1 for Very Low to 5 for Very High.

2.6 Data Gathering Procedure

Permission was secured from the concerned authorities before the questionnaires were administered. The researcher personally distributed and retrieved the questionnaires to maintain completeness of responses.

2.7 Data Analysis Techniques

Frequency counts and percentages were used to describe the profile of respondents. Weighted mean and standard deviation were used to determine the level of public administration skills. The t-test and analysis of variance were used to determine significant differences in employees' viewpoints when grouped according to profile variables. Pearson r correlation was used to examine relationships among the public administration skill parameters.

2.8 Ethical Considerations

The respondents were informed of the purpose of the study and were assured that their answers would be used only for research purposes. Participation was voluntary, and no names were presented in the manuscript. The data were treated with confidentiality and reported in summary form to protect the identity of the respondents and the office personnel involved.

3. Results and Discussion

3.1 Profile of Respondents

Table 1. *Frequency and percentage distribution of respondents in terms of age*

Age	Frequency	Percentage (%)
19-30 (Early Adulthood)	22	18.03
31-40 (Middle Adulthood)	65	53.28
41 and above (Late Adulthood)	35	28.69
Total	122	100.00

Table 1 shows that most respondents were in middle adulthood, with 65 employees or 53.28 percent. This was followed by those aged 41 and above, with 35 employees or 28.69 percent, while the youngest group, 19 to 30 years old, had 22 employees or 18.03 percent. The age distribution indicates that many employees are in a stage where work experience, task familiarity, and professional maturity may already be developed. In public organizations, age and work experience can shape how employees view leadership, digital practices, and organizational change (OECD, 2017; Krpalek et al., 2021).

Table 2. *Frequency and percentage distribution of respondents in terms of sex*

Sex	Frequency	Percentage (%)
Male	84	68.85
Female	38	31.15
Total	122	100.00

Table 2 presents that male respondents composed the larger group, with 84 employees or 68.85 percent, while female respondents accounted for 38 employees or 31.15 percent. This distribution shows that the workforce participating in the study was male-dominated. Since NIA-KIMO performs technical and field-related functions connected with irrigation service delivery, the sex distribution may reflect the nature of work assignments in the office. Public-sector studies note that workforce composition can affect how collaboration, task delegation, and communication are experienced in organizations (Joyne et al., 2019).

Table 3. *Frequency and percentage distribution of respondents in terms of civil status*

Civil Status	Frequency	Percentage (%)
Single	32	26.23
Married	90	73.77
Total	122	100.00

Table 3 reveals that married respondents formed the majority, with 90 employees or 73.77 percent, while single respondents numbered 32 or 26.23 percent. This means that most employees may be balancing work duties with family responsibilities. In public service organizations, administrators who communicate clearly, manage teams fairly, and promote supportive work practices help employees remain productive despite varied personal responsibilities (Gupta et al., 2017; Mahmood & Baskaran, 2021).

Table 4. *Frequency and percentage distribution of respondents in terms of highest educational attainment*

Highest Educational Attainment	Frequency	Percentage (%)
Bachelor's Degree Undergraduate	8	6.56
Bachelor's Degree Graduate	89	72.95
Master's Degree Graduate	24	19.67
Doctorate Degree Graduate	1	0.82
Total	122	100.00

Table 4 shows that most respondents were bachelor's degree graduates, with 89 employees or 72.95 percent. Master's degree graduates followed with 24 employees or 19.67 percent. Eight respondents or 6.56 percent were bachelor's degree undergraduates, while one respondent or 0.82 percent had a doctorate degree. The data indicate that the employee group had formal educational preparation that can support informed judgments about administrative skills. Public administration work increasingly requires continuous learning because digitalization and service reforms demand updated competencies (United Nations, 2024; World Bank, 2023).

Table 5. *Frequency and percentage distribution of respondents in terms of length of service*

Length of Service	Frequency	Percentage (%)
1-5 years	10	8.20
6-10 years	35	28.69
11-15 years	25	20.49
16-20 years	24	19.67
21-25 years	18	14.75
26 years and above	10	8.20
Total	122	100.00

Table 5 indicates that the largest group of respondents had served for 6 to 10 years, with 35 employees or 28.69 percent. This was followed by those with 11 to 15 years of service, with 25 employees or 20.49 percent, and those with 16 to 20 years, with 24 employees or 19.67 percent. Employees with 21 to 25 years accounted for 18 or 14.75 percent, while those with 1 to 5 years and 26 years and above each had 10 respondents or 8.20 percent. The distribution shows a workforce with substantial experience, making their assessment of leadership, digital skills, and innovation practices meaningful for organizational improvement (OECD, 2017; Krpalek et al., 2021).

3.2 Level of Public Administration Skills of Administrators

Table 6. *Level of public administration skills in terms of leadership*

Leadership Indicators	WM	SD	QD
Facilitator	WM	SD	QD
Capacity of communication to meet management goals.	3.80	0.45	H
Capacity to motivate public servants and enhance productivity and efficiency through communication.	3.46	0.50	H
Results orientation.	4.38	0.53	VH
Focus on the big picture and delegate smaller tasks to the team to accomplish goals.	3.65	0.48	H
Capacity to take advantage of differences.	3.68	0.58	H
Capacity to anticipate and influence change.	4.24	0.43	VH
Average Weighted Mean	3.87		High
Coach	WM	SD	QD
Capacity to analyze workers' profiles and recognize strengths.	3.71	0.46	H
Capacity to delegate.	4.04	0.39	H
Capacity to transform errors into learning opportunities.	4.44	0.54	VH
Capacity to help public servants learn how to solve problems.	4.21	0.41	VH
Average Weighted Mean	4.10		High
Change Agent	WM	SD	QD
Capacity to give feedback to public servants as part of organizational change.	4.45	0.50	VH
Capacity to share power.	3.93	0.28	H
Capacity to acknowledge public servant limitations and strengths.	3.73	0.51	H
Capacity to put the interest of the team ahead of personal ambition and self-interest.	3.94	0.52	H
Capacity to access both public servant emotional and rational sides.	3.91	0.41	H
Capacity to project a positive and optimistic outlook.	4.13	0.45	H
Average Weighted Mean	4.02		High
Communicator	WM	SD	QD
Presentation skills.	3.73	0.45	H

Leadership Indicators	WM	SD	QD
Capacity for asking effective questions.	4.04	0.40	H
Capacity to listen.	4.19	0.61	H
Capacity for facilitation and problem-solving.	4.15	0.36	H
Average Weighted Mean	4.03		High
Motivator	WM	SD	QD
Capacity to build public servant confidence.	4.03	0.49	H
Capacity to help public servants use and apply their skills.	3.87	0.56	H
Capacity to drive public servants development.	4.01	0.51	H
Capacity to be supportive.	4.01	0.44	H
Average Weighted Mean	3.98		High
Grand Mean	4.00		High

The category mean for leadership was 4.00, described as High. Among the leadership sub-areas, coaching received the highest mean of 4.10, followed by communicator at 4.03, change agent at 4.02, motivator at 3.98, and facilitator at 3.87. The highest indicator was the capacity to give feedback to public servants as part of organizational change ($M = 4.45$), followed by transforming errors into learning opportunities ($M = 4.44$), results orientation ($M = 4.38$), anticipating and influencing change ($M = 4.24$), and helping employees solve problems ($M = 4.21$). The lowest indicator was motivating public servants through communication ($M = 3.46$), though it remained High. The findings show that administrators were viewed as capable leaders, especially in feedback, learning from mistakes, and results-focused action. This agrees with Gupta et al. (2017), who linked public leadership competence with results orientation and people management, and Krpalek et al. (2021), who emphasized feedback, professional growth, and soft skills as important public administration competencies.

Table 7. *Level of public administration skills in terms of team management*

Team Management Indicators	WM	SD	QD
Managing projects of innovation.	4.06	0.52	H
Identifying priorities and complex situations.	3.87	0.52	H
Communicating organizational change.	4.19	0.48	H
Working in collaboration to achieve goals.	4.11	0.52	H
Analyzing possible innovations to be implemented.	4.01	0.29	H
Sharing knowledge.	4.04	0.64	H
Average Weighted Mean	4.04		High

The category mean for team management was 4.04, described as High. The highest indicator was communicating organizational change ($M = 4.19$), followed by working in collaboration to achieve goals ($M = 4.11$), managing projects of innovation ($M = 4.06$), sharing knowledge ($M = 4.04$), analyzing possible innovations ($M = 4.01$), and identifying priorities and complex situations ($M = 3.87$). These results indicate that administrators were viewed as able to coordinate work, share information, and guide teams through changes. Team-based communication and collaboration are essential in modern public organizations because public service tasks require shared responsibility and adaptive problem-solving (Joyne et al., 2019; Mahmood & Baskaran, 2021).

Table 8. *Level of public administration skills in terms of digital skills*

Digital Skills Indicators	WM	SD	QD
Planning the work progress.	4.25	0.45	H
Defining team activities.	4.12	0.38	H
Identifying team skills.	4.15	0.44	H
Knowledge about digital teamwork practices.	4.25	0.47	H
Distributing the activities according to team skills.	4.15	0.48	H
Average Weighted Mean	4.18		High

The category mean for digital skills was 4.18, described as High and the highest among the four public administration skill areas. The leading indicators were planning the work progress and knowledge about digital teamwork practices, both with means of 4.25. These were followed by identifying team skills and distributing activities according to team skills, both with means of 4.15, while defining team activities obtained 4.12. The findings indicate that administrators can use digital work practices to organize tasks, match people with responsibilities, and improve coordination. This aligns with the United

Nations (2024), which described digital capability as central to modern public service, and World Bank (2023), which linked digital maturity with better government operations and service delivery.

Table 9. *Level of public administration skills in terms of organizational innovation*

Organizational Innovation Indicators	WM	SD	QD
Managing projects of innovation.	4.08	0.46	H
Identifying priorities and complex situations.	4.06	0.50	H
Communicating organizational change.	4.14	0.52	H
Working in collaboration to achieve goals.	4.41	0.62	VH
Analyzing possible innovations to be implemented.	4.13	0.48	H
Sharing knowledge.	4.16	0.46	H
Average Weighted Mean	4.16		High

The category mean for organizational innovation was 4.16, described as High. The highest indicator was working in collaboration to achieve goals ($M = 4.41$), followed by sharing knowledge ($M = 4.16$), communicating organizational change ($M = 4.14$), analyzing possible innovations to be implemented ($M = 4.13$), managing projects of innovation ($M = 4.08$), and identifying priorities and complex situations ($M = 4.06$). The pattern shows that innovation in NIA-KIMO is strongly linked with collaborative work and knowledge exchange. Public-sector innovation depends on leaders who can connect people, manage change, and turn ideas into workable improvements (Glavas et al., 2021; Ciancarini et al., 2023).

Table 10. *Summary of administrators' public administration skills*

Skill Area	Mean	QD	Rank
Leadership	4.00	High	4
Team Management	4.04	High	3
Digital Skills	4.18	High	1
Organizational Innovation	4.16	High	2
Grand Mean	4.09	High	

The category mean for public administration skills was 4.09, described as High. Digital skills ranked first with a mean of 4.18, followed by organizational innovation ($M = 4.16$), team management ($M = 4.04$), and leadership ($M = 4.00$). Although all areas were rated High, the ranking shows that employees gave the strongest assessment to administrators' digital work practices and innovation-related capacities. This result is timely because public administration now depends on both human-centered leadership and technology-enabled coordination (OECD, 2017; United Nations, 2024; World Bank, 2023).

3.3 Difference in Employees' Viewpoints When Grouped According to Profile

Table 11. *Difference in employees' viewpoints on administrators' public administration skills when grouped according to profile*

Profile Variable	Test Value	p-value	Decision
Age	2.025	.004	Significant
Sex	.555	.960	Not Significant
Civil Status	.685	.500	Not Significant
Highest Educational Attainment	.776	.785	Not Significant
Length of Service	1.531	.058	Not Significant

Table 11 shows that age was the only profile variable with a significant difference in employees' viewpoints on administrators' public administration skills ($p = .004$). Sex ($p = .960$), civil status ($p = .500$), highest educational attainment ($p = .785$), and length of service ($p = .058$) did not show significant differences. This means that employees from different age groups viewed administrators' skills differently, while the other profile variables did not create meaningful variation in perception. This result may be connected with how different generations experience digital work, leadership communication, and organizational change. Studies on public-sector competencies note that public servants' digital and professional skills must be developed continuously because employees may differ in readiness, expectations, and work habits (OECD, 2017; Krpalek et al., 2021; World Bank, 2023).

3.4 Relationship Among Public Administration Skill Parameters

Table 12. *Relationship among the parameters of public administration skills*

Skill Pair	r-value	p-value	Interpretation
Leadership and Team Management	.208*	.013	Significant
Leadership and Digital Skills	.161*	.023	Significant
Leadership and Organizational Innovation	.524**	.000	Highly Significant

Skill Pair	r-value	p-value	Interpretation
Team Management and Digital Skills	.322**	.000	Highly Significant
Team Management and Organizational Innovation	.167*	.047	Significant
Digital Skills and Organizational Innovation	.699**	.000	Highly Significant

Table 12 shows that all public administration skill parameters were significantly related. The strongest relationship was between digital skills and organizational innovation ($r = .699$, $p < .001$), followed by leadership and organizational innovation ($r = .524$, $p < .001$), and team management and digital skills ($r = .322$, $p < .001$). Smaller but still significant relationships were found between leadership and team management ($r = .208$, $p = .013$), team management and organizational innovation ($r = .167$, $p = .047$), and leadership and digital skills ($r = .161$, $p = .023$). These results show that public administration skills do not operate separately. Administrators who are stronger in digital skills tend to be stronger in innovation, while leadership is also closely connected with change-oriented practices. Recent literature supports this pattern, noting that digital transformation in government requires leadership, collaboration, skills development, and organizational readiness working together (Glavas et al., 2021; Ciancarini et al., 2023; United Nations, 2024).

4. Conclusion & Recommendations

The findings show that employees of NIA-KIMO were mostly in middle adulthood, male, married, bachelor's degree graduates, and had served in the organization for 6 to 10 years. This profile presents a workforce with formal educational preparation and enough work experience to provide informed assessments of administrators' public administration skills. Administrators were rated High in all public administration skill areas. Digital skills obtained the highest mean, followed by organizational innovation, team management, and leadership. This indicates that employees see their administrators as capable of using digital work practices, introducing work improvements, coordinating teams, giving feedback, and guiding personnel toward organizational goals. Age was the only profile variable that showed a significant difference in employees' viewpoints. This means that generational differences may affect how employees assess administrative competence, especially in areas involving digital work, communication, and change. Sex, civil status, educational attainment, and length of service did not significantly affect perceptions. All public administration skill parameters were significantly related. The strongest relationship was between digital skills and organizational innovation, showing that technology-related competence is closely tied to the ability to introduce improvements in the organization. The results affirm that public administration skills strengthen one another and should be developed as an integrated set of competencies rather than as separate abilities.

Based on these findings, NIA-KIMO administrators demonstrate strong public administration capability. Continued training in leadership communication, digital teamwork, innovation management, and intergenerational collaboration can help sustain these strengths and further improve organizational service delivery. It is recommended that NIA-KIMO continue capability-building activities in leadership communication, digital teamwork, innovation management, and intergenerational collaboration. Administrators may also strengthen feedback mechanisms, employee coaching, and knowledge-sharing practices so that public administration skills remain responsive to workplace needs and service delivery demands.

The study was limited to 122 employees of the National Irrigation Administration-Kalinga Irrigation Management Office in Tabuk City. Since the data were based on employee perceptions gathered through a structured questionnaire and analyzed using descriptive and correlational statistics, the findings may not fully represent the views of external stakeholders or long-term organizational performance. The results should therefore be interpreted within the specific office, respondent group, instruments, and School Year 2025-2026 covered by the study.

Compliance with ethical standards

The study adhered to institutional ethical standards in the conduct of public administration research. Participation was voluntary, the purpose of the study was explained to the respondents, and informed consent and office protocols were observed before data collection. Individual identities and office personnel details were protected by reporting the data in summary form only, and all responses were treated with confidentiality and used solely for research purposes. The authors take responsibility for the integrity of the manuscript, acknowledge the contributions and sources used in the study, retain responsibility for copyright matters, and declare that no conflict of interest was involved in the preparation of this work.

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