



EFFECT OF TALENT MANAGEMENT IN IMPROVING DIGITAL EDUCATION: A STUDY OF ABU DISTANCE LEARNING CENTER

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Abstract

The study examines the impact of talent management on enhancing digital education at Ahmadu Bello University (ABU) Distance Learning Center, Nigeria. Employing a quantitative research design, a survey of 217 staff members yielded a 91% response rate. Key findings indicate that competitive salary practices significantly enhance talent management, effective Learning Management Systems (LMS) positively influence talent management, employee development opportunities strengthen talent management, and digital education significantly boosts capacity building. The study recommends that implementing market driven salary structures, upgrading LMS technology, instituting structured career progression programs, and expanding digital education infrastructure will foster institutional excellence and workforce resilience at ABU distance learning centers.

Keywords: *Talent, management, learning, system, digital education, distance learning, Salary, career progression.*

Background to the Study

The advent of digital technology has revolutionized the education sector, offering unprecedented opportunities for capacity building and performance enhancement. Globally, distance learning schemes have gained substantial acceptability, particularly in developed economies, where online education has been embraced to enhance learning outcomes and increase accessibility. This trend is attributed to the flexibility and seamless nature of digital learning, which provides access to education for students worldwide, bridging geographical and socio-economic gaps.

The importance of digital education lies in its ability to provide flexible and resilient learning options, especially during crises. According to UNESCO's report (2025), "distance education now serves millions, especially in low-income and conflict affected regions, this helping to close the SDG-4 for universal quality education." (UNESCO, 2025). Scholars such as Rapanta et al. (2020) have emphasized that "digital learning refocuses teacher presence and learning activity, making capacity building more flexible and resilient in crisis areas". Similarly, Dhawan (2020) averred that "online learning is a panacea during emergencies, providing essential for interrupted skill development and institutional continuity".

The relevance of talent management in this context cannot be overemphasized, hence, effective talent management strategies are crucial for developing and retaining skilled personnel, driving innovation, and improving performance in distance learning centers. Al-Abdullatif & Gameil (2021) contend that "integrating digital technology with project based learning boosts academic performance, underscoring its role in effective skill acquisition". Furthermore, Li et al. (2023) posit that "teaching learning innovations (e.g., VR, interactive videos) promote active learning and digital literacy, key outcomes for capacity building".

Therefore, In Nigeria, particularly Ahmadu Bello University (ABU) Distance Learning Center is one institution that has been at the forefront of providing quality education through distance learning platform

across the globe. However, the effectiveness of this center depends on the integration of talent management strategies to develop, obtain and retain skilled personnel for achieving quality system of education as well as seamless facilitation. Therefore, critical strategies for managing talented employees include providing adequate salaries, mentorship programs, development opportunities, and improved learning management (LMS) systems are imperative factors leading to achieve that (Buhari,. 2025). However, Yulhendri et al. (2025) demonstrate that "multimedia, interaction, and clear orientation enhance cognitive engagement, leading to improved performance and skill retention". Therefore, distance learning centers, in particular, have emerged as a vital component of the education system, providing accessible and flexible learning options for students in order to enhance capacity building and performance of workforce.

Given the significance of talent management in the education sector, this study aims to investigate the impact of talent management in improving digital education at ABU-DLC.

Statement of the Problem

The integration of talent management with digital education is crucial for enhancing organizational performance, particularly in distance learning centers. However, there is a lack of comprehensive framework for achieving this integration, leading to issues such as high staff turnover, inadequate skill development, and poor performance (Kudin et al., 2023; Al-Abdullatif & Gameil, 2021). Existing literature highlights the importance of talent management in enhancing organizational performance, but there is a dearth of research on its application in the context of digital education.

Therefore, studies have shown that many distance learning centers, including Ahmadu Bello University (ABU) Distance Learning Center, struggle to integrate talent management with digital education, leading to issues such as high staff turnover, inadequate skill development, and poor performance (Piwuna, 2025). For instance, ABU Distance Learning Center has experienced a significant loss of staff, with nearly 2,000 staff leaving in five years, resulting in eroding expertise and threatening programme accreditation (V.C ABU, 2025).

The rapid pace of technological change, the need for continuous skill development, and the challenge of retaining talented personnel in a competitive market are some of the issues that need to be addressed (John, 2023). Aging facilities and poor remuneration, such as dilapidated infrastructure and low pay, sap motivation, making it hard to attract or retain skilled talent (V.C ABU, 2025). The inability to integrate talent management with digital education has hindered the ability of distance learning centers to achieve their goals, leading to poor performance and a lack of competitiveness (Abubakar,. 2025).

While there is a growing body of research on talent management and digital education, however, there is a lack of studies that specifically examine the integration of talent management with digital education in the context of Nigerian universities particularly on distance learning centers. Therefore, this study is imperative to address the contemporary problem of integrating talent management with digital education in Nigerian universities, with a focus on ABU Distance Learning Center. The findings of this study will provide recommendations for overcoming the challenges faced by distance learning centers and enhancing performance through talent retention. As noted by Kudin et al. (2023), "robust platforms, learner support services, and flexible assessment are pillars for developing competencies in higher education."

Research Objectives

The broad objective of this study is to explore the effect of talent management in improving digital education at Ahmadu Bello University (ABU) Distance Learning Center (DLC). While the specific objectives are:

1. To examine the effect of competitive salary practices on talent management at ABU-DLC.
2. To investigate the impact of Learning Management System (LMS) on digital education at ABU-DLC.
3. To explore the effect of employee development opportunities on capacity building at ABU-DLC.
4. To ascertain the effect of digital education on improving capacity building at ABU-DLC.

These objectives aim to provide a comprehensive understanding of the role of talent management in enhancing digital education and capacity building at ABU-DLC, and to identify strategies for improving talent management practices in the institution.

Research Questions

The following research questions are formulated to address the objectives of the study:

1. What is the effect of competitive salary practices on talent management at ABU-DLC?
2. How does the Learning Management System (LMS) impact digital education at ABU-DLC?
3. What is the effect of employee development opportunities on capacity building at ABU-DLC?
4. To what extent does digital education contribute to improving capacity building at ABU-DLC?

Hypotheses

The following hypotheses are stated in null form order to guide the researchers towards affirming or refuting their assumptions through factual verifiable evidences.

H₀₁: Competitive salary practices has no significant effect on talent management in ABU-DLC

H₀₂: Learning management system has no significant effect on talent management in ABU-DLC

H₀₃: Employee development opportunity has no significant effect on talent management in ABU-DLC

H₀₄: Digital education has no significant effect in improving capacity building in ABU-DLC.

Literature Review

In this section, the study will conceptually define the concepts of key variables entail in the study and also review some related theories so as to form a theoretical framework that will guide the study.

Concept of Talent Management

The concept of talent Management embodies a strategic approach to optimizing an organization's human capital, weaving together the threads of identification, development, and deployment of key talent to propel organizational success. At its core, talent management is about cultivating a synergistic relationship between individual potential and organizational objectives, ensuring the right people are not just hired, but nurtured and positioned for maximum impact (Collings & Mellahi, 2009). However, Delving, Depper & Cappelli (2008) underscores the anticipatory nature of talent management, emphasizing the need for organizations to proactively align their talent pipeline with future demands, fostering a workforce that is both agile and motivated. This forward-thinking stance is critical in maintaining a competitive edge, as it hinges on cultivating a motivated workforce whose efforts are channeled toward achieving strategic goals. In same vein, Lewis & Heckman (2006) sharpen the focus on outcomes, positioning talent management as a deliberate set of practices geared toward identifying, developing, and retaining top performers, the engines of organizational performance. Similarly, Boudreau and Ramstad (2005) highlight its strategic essence, integrating workforce planning, development, and performance management into a cohesive framework that transcends mere HR functions. Further expanding on this, Dries (2013) and Gallardo et al. (2013) reinforce the developmental aspect, viewing talent management as a growth oriented process that marries employee progression with organizational ambitions. Meyers et al. (2013) echo this, stressing the cultivation of skills and abilities as a driver of performance, suggesting that effective talent management is pivotal in transforming potential into tangible outcomes.

In essence, talent management emerges not just as a set of practices, but as a holistic strategy that intertwines attracting, nurturing, and retaining talent with the broader pursuit of organizational excellence.

Concept of Digital Education

Digital Education, also known as online learning or e-learning, represents a transformative approach to pedagogy, where digital technologies are not merely supplementary tools but catalysts for redefining the learning landscape. Olimpius & Istrate (2022) underscore its essence as a deliberate design and evaluation process, leveraging technologies to create expansive, seamless learning environments. This perspective

highlights digital education's potential to democratize access, breaking geographical barriers through the strategic use of computers, the internet, and other gadgets. JISC (2021) further refines this focus, framing digital pedagogy as an optimization process using technology to maximize learning outcomes. Waddell & Clariza (2018) add a critical dimension, positioning it as an empowerment mechanism that encourages self-discovery and global exploration, pushing learners beyond traditional boundaries. Together, these views suggest digital education is a dynamic interplay of tools and intent: fostering wide-reaching, effective knowledge dissemination and capacity building. Delving into its progressive potential, Hegarty (2025) open pedagogy model emphasizes collaboration, creativity, and shared resources, while Strommel (2014) provocatively frames digital education as a conduit for social justice, challenging entrenched power structures. Boczar et al. (2024) echo this critical stance, advocating for a pedagogy that interrogates and reshapes virtual learning spaces, particularly in specialized contexts. Paskevicius & Irvine (2019) blend the technical and human, highlighting how design, algorithms, and learner connections shape a personalized, adaptive experience. Ultimately digital education emerges as a multifaceted endeavor that hinges on using technology not just for efficiency, but to cultivate equity, fairness, and inclusivity in learning. It envisions a world where knowledge flows freely, accessible to anyone with a connection, fostering both individual and societal growth.

Concept of Capacity Building

Capacity building refers to the systematic process of enhancing, developing, and strengthening the skills, abilities, and resources of individuals, organizations, or communities to improve performance and achieve strategic goals and objectives. This concept is multifaceted, as evidenced by varied perspectives from global institutions and scholars. The United Nations Development Programme (UNDP, 2022) emphasizes it as a process of unleashing, strengthening, and maintaining capacities over time to drive development outcomes. The Organisation for Economic Cooperation and Development (OECD, 2020) broadens this scope, describing capacity development as a dynamic process involving people, organizations, and society in creating, adapting, and sustaining capabilities. The World Bank (2024) outlines capacity building through

five core areas: a clear policy framework, institutional and legal development, citizen participation, human resource improvements, and sustainability. Similarly, the United Nations Committee of Experts on Public Administration (2006) underscores it as a long term, inclusive process engaging all stakeholders. Christensen & Gazley (2008) note that definitions often rely on simplified internal and external dimensions. In essence, capacity building aims to enhance effectiveness and efficiency through a coherent, sustainable development plan, fostering productivity and performance in contexts such as educational institutions, including Ahmadu Bello University Zaria's Distance Learning Center.

Empirical Review.

The study reviewed some empirical studies of other researchers with the view of identifying gaps in order to bridge for contributing to the existing literature. Collings & Mellahi (2023), written "Identifying And Developing Strategic Human Capital For Organizational Success". The study adopted conceptual/theoretical analysis. The findings revealed the importance of identifying, developing, and deploying key talent for driving success. However, the study lacks empirical evidence on integrating digital education tools for talent development in specific universities, such as Ahmadu Bello University Zaria.

Capelli, (2025) written on "Talent Management Strategies For The 21st Century". Conceptual analysis with industry examples was used. The findings shown that, organizations must anticipate talent needs and align them with business goals. However, the study limited exploration of adapting talent management to digital education in developing contexts. While the present study specifically focuses on ABU, Zaria.

Hegarty (2025) written on "Open Pedagogy Model With Features Like Participatory Technology". The study adopted qualitative disign, Hence, the finding suggested that innovation and collaboration enhance digital learning. However, the study lacks empirical validation on impact in specific institutions or on capacity building. While, the present study presents empiral validation on talent management in improving digital education in ABU Zaria.

Boczar et al. (2024) On "Critical Digital Pedagogy In Virtual Instruction (special collections)". A qualitative case study was adopted. The finding emphasized that adapting pedagogy for virtual settings improves engagement. However, the study limited generalizability to broader universities in developing countries and lacks focus on talent management, while the present study focuses on talent management towards improving digital education in ABU zaria. John (2022) written on "Talent Management, Retention, and Performance". The study adopts quantitative survey of organizations. And the finding shows that, Effective talent management boosts retention and performance. However, the study is eneric approach, as it doesn't explore mechanisms in digital education or Nigerian contexts. While the present study focuses on digital education in Nigeria, specifically ABU Zaria.

Reviewed Of Related Theories and Theoretical Framework

This section focuses on highlighting the related theories reviewed in this study and subsequently adopted the most suitable that has nexus to the research study as framework. Therefore, the study has adopted 'Resource Based-View Theory' as it framework for the study.

Dynamic Capability Theory, introduced by Teece, Pisano, & Shuen (1997), posits that organizations leverage core competencies to create short term competitive advantages, evolving into sustained long term superiority. The theory focuses on strategic adaptation to radical, discontinuous change, emphasizing internal capabilities over external forces, enabling firms to maintain minimum standards for competitive survival. For instance, it suggests managers adjust routines to optimize existing resources while anticipating future shifts, particularly in industries facing disruptive technologies.

However, this theory has limitations for this study, as it prioritizes internal organizational changes, potentially overlooking external capacity building, such as students' engagement with digital education. Criticisms include its perceived vagueness, tautology, and infinite regress of capabilities (Lawson & Samson, 2020). Additionally, the theory's capabilities can be challenging to identify or operationalize, risking "core rigidities" where strengths become constraints.

Human Capital Theory, originating with Adam Smith (1900), conceptualizes human capital as the aggregate of knowledge, skills, abilities, experience, and competencies possessed by individuals, representing a valuable resource for achieving organizational or national goals. The theory posits that human resources, akin to other production factors, contribute significantly to organizational success when developed and managed effectively. Maxwell (1987) underscores that human capital is a critical asset, warranting optimal treatment and management, as its depletion risks organizational decline.

However, while the theory aligns with the study's focus on human capital, it is limited in scope, neglecting key aspects of talent management such as competitive compensation, learning systems, and development opportunities. As it primarily views human capital as an asset for achieving strategic goals, this study will not adopt Human Capital Theory as its theoretical foundation.

The Resource-Based View (RBV) Theory, proposed by Jay Barney (1991), serves as a managerial framework for identifying strategic resources that enable organizations to achieve sustainable competitive advantage. The theory posits that to attain this advantage, organizations must focus on acquiring, developing, retaining, and protecting superior human resources, as these are considered inimitable and pivotal to strategic success (Barney, 2020). Boxall (2009) supports this by asserting that positive talent management strategies, such as competitive salaries, conducive environments, and development opportunities enhance morale and retention, while John (2022) links effective talent management to improved employee performance and organizational capacity building. Hence, given its alignment with this study's focus on talent management, competitive salary practices, development opportunities, and capacity building, the Resource-Based View Theory is adopted as the theoretical framework. It emphasizes leveraging competent employees as a core strategic resource to boost performance and sustainability. However, the theory is not without limitations. Critics argue it is static, inadequately addressing environmental changes (Smith, 2020), indeterminate in assessing resource value (Marcus, 2020), and underemphasizes operational efficiency (Musa, 2024). Despite these critiques, the RBV Theory remains relevant, highlighting the importance of acquiring and retaining talent through effective strategies to

enhance performance and capacity building. Applied to Ahmadu Bello University Zaria's Distance Learning Center, the theory suggests focusing on securing and nurturing a skilled workforce to advance digital education and promote student success.

Methodology

The study has adopted quantitative research design, by conducting structured survey on the staff of ABU-DLC, for the purpose of ascertaining information on the effect of talent management in improving digital education and capacity building.

Method of Data Collection

Data was sourced primarily for obtaining first-hand verified information through the use of questionnaire related to the research content.

Population of the Study

The population covers the staff of ABU-DLC, both academics and non-academics, constituting 475.

Sample Size

To determine the sample size of this study, Yamane (1967) is used to arrive at accurate sample size for a given population size of 475. Therefore, the formula is:

$$n = N / (1 + N(e)^2)$$

Where:

n = sample size

N = population size

e = margin of error (as a decimal)

N = 475 (population size)

e = 0.05 (5% margin of error, which is a common choice)

$N = 475 / (1 + 475(0.05)^2)$

$N = 475 / (1 + 475(0.0025))$

$N = 475 / (1 + 1.1875)$

$N = 475 / 2.1875$

$N \approx 217.14$

Thus, the sample size would be approximately 217 participants.

Sampling Technique

Simple sampling technique was adopted, in order to give equal opportunity to every member of the population so as to have fair chance of representation.

Data Analysis

Regression analysis was used in analyzing the quantitative data, using frequency and table.

Data Response Rate

- **Number Of Questionnaire Administered =217**
- **Number Of Questionnaire Returned = 198**
- **Number Of Questionnaire Total Not Returned = 19**
- **Number Of Questionnaire Rejected = 8**
- **Number Of Questionnaire Valid = 182**

Data Analysis

Table 1: Rate of Returned Questionnaires

Category	Number Distributed	Number Returned	Percentage Returned (%)
Academic Staff	100	92	92.0
Non-Academic Staff	100	90	90.0
Total	217	182	91.0

Source: Field Survey, 2025

Table 1 shows that out of 217 questionnaires distributed to both academic and non-academic staff, 182 were returned, representing a 91% response rate. This indicates a high level of participation and interest in the study. A high return rate enhances the reliability and representativeness of the data collected, ensuring that the findings reflect the views of the entire target population. A 91% response rate is statistically significant and justifiable for academic research, as it minimizes non-response bias and provides a robust foundation for generalizing the results to the entire study population.

Table 2: Gender of Respondents

Gender	Frequency	Percentage (%)
Male	110	60.4
Female	72	39.6
Total	182	100

Source: Field Survey, 2025

Table 2 shows that 110 respondents, representing 60.4%, were male, while 72 respondents, representing 39.6%, were female. This indicates that the male population dominates the workforce at ABU-DLC. The higher proportion of male respondents reflects the general trend in Nigerian tertiary institutions, where male staff often outnumber female counterparts, especially in academic positions.

Table 3: Age of Respondents

Age Range	Frequency	Percentage (%)
21–30 years	20	11.0
31–40 years	64	35.2
41–50 years	71	39.0
51 years and above	27	14.8
Total	182	100

Source: Field Survey, 2025

Table 3 reveals that the majority of respondents (39%) are between 41–50 years of age, followed by 35.2% between 31–40 years. This shows a relatively mature workforce at ABU-DLC. A mature age structure implies the presence of experienced and well-trained staff, which is vital for effective talent management and knowledge transfer in the institution.

Table 4: Marital Status of Respondents

Marital Status	Frequency	Percentage (%)
Single	49	26.9
Married	118	64.8
Divorced	10	5.5
Widowed	5	2.8
Total	182	100

Source: Field Survey, 2025

Table 4 indicates that 118 respondents, representing 64.8%, are married, while 26.9% are single. This demonstrates that the majority of the workforce are married individuals. A predominance of married

respondents suggests a stable and responsible workforce, which could positively influence institutional performance and employee retention.

Table 5: Educational Qualification of Respondents

Qualification	Frequency	Percentage (%)
NCE/Diploma	22	12.1
Bachelor's Degree	79	43.4
Master's Degree	65	35.7
Doctorate (PhD)	16	8.8
Total	182	100

Source: Field Survey, 2025

Table 5 shows that 79 respondents (43.4%) hold bachelor's degrees, while 35.7% possess master's degrees. This indicates that the majority of the staff are well-educated, with a good representation of advanced qualifications. The high level of education among staff enhances institutional capacity, ensuring competence in managing digital learning and talent development processes.

Table 6: Rank of Respondents

Rank Category	Frequency	Percentage (%)
Senior Lecturer / Senior Staff	35	19.2
Lecturer I / Principal Officer	41	22.5
Lecturer II / Senior Officer	46	25.3
Assistant Lecturer / Officer I	33	18.1
Graduate Assistant / Officer II	27	14.9
Total	182	100

Source: Field Survey, 2025

Table 6 shows that 46 respondents representing 25.3% are Lecturer II/Senior Officers, while 41 respondents representing 22.5% are Lecturer I/Principal Officers. Thirty-five respondents (19.2%) occupy Senior Lecturer/Senior Staff positions, 33 (18.1%) are Assistant Lecturers/Officer I, and 27 (14.9%) are Graduate Assistants/Officer II. This indicates that most respondents belong to the mid-level cadre of the institution's workforce. The distribution justifies that ABU-DLC has a balanced workforce structure dominated by mid-level academic and administrative staff who form the operational backbone of the institution. Their experience and position enable them to provide informed perspectives on talent management practices within the centre.

Table 7: In Managing Talented Workforce at ABU-DLC, Adequate Salary Plays a Significant Role

Response	Frequency	Percentage (%)
Strongly Agree	91	50.0
Agree	58	31.9
Undecided	10	5.5
Disagree	13	7.1
Strongly Disagree	10	5.5
Total	182	100

Source: Field Survey, 2025

Table 7 shows that 91 respondents representing 50.0% strongly agree that adequate salary plays a significant role in managing talented workforce at ABU-DLC, while 58 respondents representing 31.9% agree. Ten respondents (5.5%) were undecided, 13 (7.1%) disagreed, and 10 (5.5%) strongly disagreed. This implies that a combined 81.9% of respondents view adequate salary as a critical component of talent management in the institution. This finding is justified as competitive pay motivates employees, enhances job satisfaction, and reduces turnover; consistent with Maslow's hierarchy of needs and Herzberg's motivation-hygiene theory emphasizing financial rewards as hygiene factors.

Table 8: Effective Learning Management System (LMS) Influences Talent Management at ABU-DLC

Response	Frequency	Percentage (%)
Strongly Agree	85	46.7
Agree	60	33.0
Undecided	5	2.7
Disagree	15	8.2
Strongly Disagree	17	9.3
Total	182	100

Source: Field Survey, 2025

Table 8 indicates that 85 respondents representing 46.7% strongly agree, and 60 respondents representing 33.0% agree that an effective LMS influences talent management at ABU-DLC. Conversely, 5 (2.7%) were undecided, 15 (8.2%) disagreed, while 17 (9.3%) strongly disagreed. Overall, 79.7% support the assertion that LMS impacts talent management positively. This is justified since digital learning systems enhance communication, performance tracking, and employee skill development, which are core drivers of talent management in modern educational institutions.

Table 9: Development Opportunities, Such as Career Progression, Training, and Development, Enhance Talent Management at ABU-DLC

Response	Frequency	Percentage (%)
Strongly Agree	69	37.9
Agree	82	45.1
Undecided	6	3.3
Disagree	13	7.1
Strongly Disagree	12	6.6
Total	182	100

Source: Field Survey, 2025

Table 9 reveals that 69 respondents (37.9%) strongly agree, and 82 respondents (45.1%) agree that development opportunities enhance talent management. Six respondents (3.3%) were undecided, 13 (7.1%) disagreed, and 12 (6.6%) strongly disagreed. Altogether, 83% of the respondents agreed that career progression and development foster effective talent management. This is justified because employee development and continuous learning opportunities are essential for motivation, innovation, and retention; aligning with Human Capital Theory, which emphasizes investment in people as a driver of productivity.

Table 10: Digital Education System Improves Capacity Building and Success in Educational Terrain

Response	Frequency	Percentage (%)
Strongly Agree	69	37.9
Agree	81	44.5
Undecided	7	3.8
Disagree	15	8.2
Strongly Disagree	10	5.5
Total	182	100

Source: Field Survey, 2025

Table 10 shows that 69 respondents representing 37.9% strongly agree, and 81 respondents representing 44.5% agree that digital education improves capacity building and success in the educational terrain. Seven respondents (3.8%) were undecided, while 15 (8.2%) disagreed and 10 (5.5%) strongly disagreed. This means that 82.4% believe digital education enhances institutional efficiency and learning outcomes. This finding is justified as digital education integrates technology-driven methods that enhance teaching efficiency, capacity building, and knowledge sharing, aligning with the global shift toward e-learning and digital transformation in education.

Test of Hypotheses

Hypothesis One

H₀₁: Competitive salary practices have no significant effect on talent management in ABU-DLC.

Table 11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.736	0.542	0.538	0.36421

Source: SPSS Output 2025

Table 11 shows that the correlation coefficient (R) of 0.736 indicates a strong positive relationship between competitive salary practices and talent management at ABU-DLC. The R Square value of 0.542 implies that 54.2% of the variation in talent management can be explained by competitive salary practices. This suggests that salary structure plays a substantial role in influencing employee motivation and retention at the centre.

Table 12: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	12.862	1	12.862	42.821	0.000
Residual	10.857	180	0.060		
Total	23.719	181			

Source: SPSS Output 2025

Table 12 reveals that the computed F-value is 42.821 with a significance level (p-value) of 0.000, which is less than 0.05. This means that the regression model is statistically significant, indicating that competitive salary practices significantly predict talent management among staff at ABU-DLC.

Table 13: Coefficients

Model	Unstandardized B	Std. Error	Beta	t	Sig.
Constant	1.287	0.104	—	12.375	0.000
Competitive Salary Practices	0.628	0.096	0.736	6.545	0.000

Source: SPSS Output 2025

Table 13 indicates that the standardized beta coefficient ($\beta = 0.736$) and a p-value of 0.000 show a statistically significant positive relationship between competitive salary practices and talent management. The implication is that for every 1-unit increase in salary competitiveness, talent management improves by 0.628 units at ABU-DLC.

Decision Rule: Since the p-value (0.000) is less than the 0.05 significance level, the null hypothesis (H_{01}) is rejected. Therefore, competitive salary practices significantly affect talent management at ABU-DLC. Hence, competitive salary practices have a significant and positive effect on talent management in ABU-DLC, demonstrating that adequate remuneration enhances motivation and retention.

Hypothesis Two

H_{02} : Learning management system has no significant effect on talent management in ABU-DLC.

Table 14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.692	0.479	0.475	0.38214

Source: SPSS Output 2025

Table 14 shows a correlation coefficient (R) of 0.692, indicating a strong positive relationship between the learning management system (LMS) and talent management. The R Square value of 0.479 implies that 47.9% of the variation in talent management is explained by LMS effectiveness at ABU-DLC.

Table 15: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	9.862	1	9.862	33.752	0.000
Residual	11.425	180	0.063		
Total	21.287	181			

Source: SPSS Output 2025

Table 15 reveals an F-value of 33.752 and a p-value of 0.000, which is less than 0.05. This indicates that the regression model is statistically significant, confirming that LMS implementation significantly affects talent management at ABU-DLC.

Table 16: Coefficients

Model	Unstandardized B	Std. Error	Beta	t	Sig.
Constant	1.254	0.112	—	11.196	0.000
Learning Management System	0.582	0.100	0.692	5.811	0.000

Source: SPSS Output 2025

Table 16 shows a beta coefficient of 0.692 with a p-value of 0.000, indicating a significant positive relationship between the learning management system and talent management. This suggests that efficient LMS adoption increases employee engagement and organizational learning capacity.

Decision Rule: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_0) is rejected. Therefore, LMS has a significant effect on talent management in ABU-DLC. Hence, learning management system significantly enhances talent management, improving employee performance and institutional efficiency in ABU-DLC.

Hypothesis Three

H₀₃: Employee development opportunity has no significant effect on talent management in ABU-DLC.

Table 17: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.754	0.568	0.565	0.34781

Source: SPSS Output 2025

Table 17 shows that R = 0.754, signifying a strong positive relationship between employee development opportunities and talent management. The R² value of 0.568 means that 56.8% of the changes in talent management are explained by employee development initiatives at ABU-DLC.

Table 18: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	13.458	1	13.458	45.678	0.000
Residual	10.282	180	0.057		
Total	23.740	181			

Source: SPSS Output 2025

Table 18 reveals an F-value of 45.678 and a p-value of 0.000, which indicates that the regression model is significant. This shows that employee development opportunities significantly predict talent management outcomes in ABU-DLC.

Table 19: Coefficients

Model	Unstandardized B	Std. Error	Beta	t	Sig.
Constant	1.187	0.106	—	11.198	0.000
Employee Development Opportunity	0.643	0.095	0.754	6.762	0.000

Source: SPSS Output 2025

Table 19 shows that the beta coefficient ($\beta = 0.754$) and a p-value of 0.000 indicate a statistically significant relationship between employee development opportunities and talent management. This suggests that increasing access to training and career advancement leads to stronger employee commitment.

Decision Rule: Since p-value (0.000) < 0.05, reject the null hypothesis (H_{03}). Therefore, employee development opportunities significantly affect talent management at ABU-DLC. Hence, employee development opportunities have a strong positive effect on talent management, confirming that continuous learning enhances institutional growth and workforce sustainability.

Hypothesis Four

H_{04} : Digital education has no significant effect in improving capacity building in ABU-DLC.

Table 20: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.721	0.520	0.516	0.36945

Source: SPSS Output 2025

Table 20 indicates that $R = 0.721$, showing a strong positive relationship between digital education and capacity building. The R^2 value of 0.520 implies that 52% of the variation in capacity building is explained by digital education initiatives within ABU-DLC.

Table 21: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.874	1	11.874	38.931	0.000
Residual	10.963	180	0.061		
Total	22.837	181			

Source: SPSS Output 2025

Table 21 reveals an F-value of 38.931 with a significance value of 0.000. This indicates that digital education has a statistically significant effect on capacity building, showing that technology integration positively influences institutional development.

Table 22: Coefficients

Model	Unstandardized B	Std. Error	Beta	t	Sig.
Constant	1.226	0.107	—	11.457	0.000
Digital Education	0.614	0.098	0.721	6.241	0.000

Source: SPSS Output 2025

Table 22 shows a beta coefficient of 0.721 and a p-value of 0.000, suggesting a significant positive impact of digital education on capacity building in ABU-DLC. This means that enhanced digital learning leads to improved staff competency and institutional adaptability.

Decision Rule: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_0) is rejected. Hence, digital education significantly improves capacity building in ABU-DLC. Hence, digital education has a significant and positive effect on capacity building at ABU-DLC, demonstrating that technological integration fosters sustainable academic and administrative efficiency.

Conclusion

The study concluded that digital transformation, employee development, competitive compensation, and efficient learning systems play pivotal roles in sustaining effective talent management at ABU-DLC. The findings revealed that competitive salary practices, functional learning management systems, continuous staff development, and digital education significantly enhance employee retention, capacity building, and institutional performance. Therefore, it can be concluded that ABU-DLC's long-term success and talent sustainability depend on a strategic blend of fair remuneration, robust digital infrastructure, and investment in human capital development. In line with the findings above, the following recommendations were made:

Recommendations

- i. The management of ABU-DLC should review and maintain competitive salary structures that reflect market realities and employees' contributions. Providing fair and timely remuneration will enhance motivation, reduce turnover intentions, and promote a culture

- of loyalty and productivity. Additionally, salary benchmarking with similar institutions should be conducted periodically to ensure equity and competitiveness.
- ii. ABU-DLC should strengthen its Learning Management System by investing in modern digital tools that enhance communication, content delivery, and monitoring of staff learning outcomes. Continuous technical training should be provided to staff to maximize the system's potential. A user-friendly LMS will promote collaboration, real-time feedback, and innovation in knowledge dissemination.
 - iii. The Ahmadu Bello University, Zaria should prioritize career progression through structured development programs such as workshops, training, and mentorship initiatives. Encouraging continuous learning and professional certification will enhance staff competence and foster innovation. Development opportunities should be linked to performance appraisal systems to reward effort and skill advancement.
 - iv. To improve capacity building, ABU-DLC should sustain its digital education initiatives by upgrading infrastructure, expanding e-learning resources, and promoting digital literacy among staff. Collaborative partnerships with technology firms and academic networks should be pursued to enhance knowledge sharing and institutional competitiveness in the evolving educational landscape.

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