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Strategic Leadership and Digital Land Management System Implementation in Tana River County, Kenya

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***Abstract*— Many obstacles in public service delivery have been overcome through the use of technology. Kenya's government has made major investments in land management digitization in order to address recurring challenges and provide a favorable economic environment for land transactions and management. While the Ardhisasa policy attempts to enhance land management and administration in Kenya by guaranteeing secure property rights, promoting efficient land use, and improving access to land for development, the implementation of this new system is fraught with difficulties. Therefore, this study examined strategic leadership and digital land management system implementation in Tana River County, Kenya. Specifically, the study sought to examine stakeholder involvement, management competencies, ethical practices and communication and implementation of Digital Land Management System in Tana River County. The study was anchored on stakeholder theory. The study targeted employees in Ministry of Land and Physical Planning and the National Land Commission in Tana River County. The study used stratified random sampling to select respondents. The inferential results revealed that the effect of stakeholder involvement on implementation of digital land management system in Tana River County is strong, positive and significant. Inferential results also showed that management competencies and implementation of digital land management system in Tana River County Kenya have positive and significant association. The study suggests that in order for Tana River County and other counties in Kenya to realize improved implementation of digital land management system, improved stakeholder involvement practices are required.**

***Index Terms*—Strategic Leadership, Digital Land Management system, Management Competencies, Stakeholder Involvement.**

I. INTRODUCTION

Land is a production component that, when used properly, promotes economic progress. The digitization of land records information systems improves land administration efficiency, reduces corruption, and promotes transparency [1]. It makes records more available to citizens and simplifies real estate transactions. The Kenyan government recognized this fact and has worked tirelessly to improve land transaction operations in the country via the use of legislation and technology known as National Land Information Management System (NLIMS). According to [2], some of the allegations that have been disclosed are the need to revamp land negotiations to work with digitized records (instead of physical records) to provide a carry out solution, financial constraints, and leadership. Leadership has a substantial impact on strategy creation and implementation success.

Several ideas about leadership support the premise that managers who successfully carry out leadership responsibilities outperform those who fail to do so [3]. Not only are managers seen as more effective by their assistants, but also by upper management and peers, when they display a diversity of leadership behaviors and carry out those responsibilities on a regular basis [4]. However, the frequent failures of implementing initiatives is well-documented, and there are still a number of obstacles to plan acceptance. Strategic leadership is regarded as a critical driver of successful implementation. The fact is that in many organizations, just over half of the plans are executed. In a study of 276 important operational directors, it was discovered that 57% of businesses were unsuccessful at implementing strategic objectives [5]. A further investigation of Chinese corporations conducted in 2006 revealed that 83% of the examined organizations fail to implement strategies while just 17% believe they have a solid implementation procedure [6].

a) Global Perspective on Implementation of Digitization Land Management Practices

According to data from the World Bank, 70% of the world's population does not have access to land titles. Citizens' access to economic prospects can be hampered by the condition of their land rights. According to [7] land ownership records are critical for governments in order to gather taxes, provide products and services, and create territory authority. Given the importance of land register to economic development, World Bank has led efforts to increase land registration in a number of nations [8]. In Bangladesh, Nahrin and Rahman admitted in 2009 that the Land Information System (LIS) is the most accountable and practical systematic strategy for building modern land management and administration [9]. The use of computerized property records completely altered how land ownership is administered in India [10].

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b) Regional Perspective on Implementation of Digitization Land Management Practices

[11] made the case that one of the advantages of digitizing the system for managing land in Ghana is an enhancement of land title security, a decrease in land document falsification, physical reorganization/recertification, secured land registration, an enhancement in the construction and operation of infrastructure assets, and an increased capacity for greater revenue mobilization. [12] found that there is no established model for land management and administration in Nigeria.

c) Locally Perspective on Digitization Land Management Practices

Kenya is one of the nations where integrating systems for managing records inside ministries has proven to be extremely difficult. According to [13], the country must use new technology to improve record management if it is to realize its vision for 2030, which calls for improving effectiveness and efficiency in service delivery. In its efforts to enhance the efficiency of land transfer operations, the Kenyan government has made tremendous progress. In Kenya, the land management process has grown ineffective, cumbersome, unreliable, restricting, repetitive, unaccountable, and expensive, hurting the effectiveness and efficiency of service delivery [14]. Additionally, as a result of the manual the management of land system, service delivery to citizens has increasingly degraded, and enormous amounts of paper records have amassed to an unmanageable position that is untenable in this period of reforms and ongoing demands for citizen-focused services. The Government of Kenya, through Ministry of Land, began an endeavor to computerize its services in order to deal with these enormous issues brought on by Paper-Base Systems. The NLIMS was created in 2008 as the sole response to the aforementioned difficulties. According to [15], digitization would increase records management's effectiveness and efficiency.

A. Statement of the Problem

According to [16], more than 90% of land in Africa is undocumented, and nearly 70% of the global population lacks access to appropriate land titling. According to a UNHF report on Bangladesh Land Management, some of the problems in land administration in Bangladesh include 2.35 million acres (25% of all land) being disputed, nearly 1.3 million acres of public land being illegally grabbed, approximately 3.2 million litigations pending with civil courts, and each dispute taking more than 9.5 years. This explanation leads to the conclusion that the current land management method and administration in Bangladesh and other African countries is exceedingly inefficient and ineffectual in meeting today's development issues. A major reform program is urgently needed. The ability of ICT to capture, store, process, and disseminate land records represents a milestone in land administration. The goal of digitization is to eliminate the inefficiencies of manual transactions. According to [17], the implementation of electronic services in Abuja's land governance decreased corruption that resulted from the legal searches conducted to confirm land records and the recertification of property titles. According to [18], the majority of land registries in Ghana lack automation, which has led to register manipulation, double allocations, dual registration, and missing registers. In Kenya, land service delivery suffers from impoverished transparency, unaccountability, corruption, conventional leadership systems, poor workplace conditions, and staff members with little instruction on modern data management systems, resulting in inefficiency, rigidity as before, ineffectiveness, inefficiency, and frustration [19]. Currently, National Land Information Management System has been operationalized in Tana River County, there is no empirical evidence exists to illustrate how strategic leadership affects implementation of Tana River County's digital land management system.

B. Objectives of the Study

The study general objective was to examine strategic leadership and digital land management system implementation in Tana River County Kenya. Specifically, the study sought:

i. To determine the effect of stakeholder involvement and digital land management system implementation in Tana River County Kenya
ii. To examine the effect of management competencies and digital land management system implementation in Tana River County Kenya.

II. LITERATURE REVIEW

A. Theoretical Framework

There are numerous ideas that link strategic leadership and adoption of digital land administration systems.

1) Stakeholder Theory

Dr. F. Edward Freeman published the first version of stakeholder theory in his book Strategic Management in 1984. According to the theory, shareholders are merely one of numerous stakeholders in an organization who, as a result, are those who are impacted by or connected with a business or the organization. This theory supports the definitions of stakeholders provided by numerous academics including [20], [21], [22]. According to Freeman's Stakeholder Theory, a company's performance and success will depend on how it handles, manages, and fulfills the interests of its stakeholders because stakeholders are essential to all of an enterprise's activities.

The stakeholder theory exists in a variety of forms that classify stakeholders, their actions, and their roles. Using the normative stakeholder theory of stakeholder identification, stakeholders of a company are identified, along with their values and operational ethics. Descriptive In contrast to instrumental stakeholder theory, which links stakeholders to the firm's profitability goal, stakeholder theory is based on the idea that ignoring the interests of stakeholders is both reckless and unethical [23]. Stakeholder theory fulfills following two purposes: it describes how businesses behave and how they run their businesses. This theory therefore will be important to this research as it identifies various stakeholders, describes what their roles are, and demonstrates the interrelationships between them, the firms and the project organization. This theory can be used to explain the relationship between stakeholder involvement and implementation of digital land

management system in Tana River County.

2) Implementation Theory

Implementation theory, as defined by [24], is a part of the mechanism design that offers a framework for scenarios in which resources are distributed among consumers and agents, but the information needed to make these choices about allocation is spread and kept confidential, and the users who have access to this private information act carefully in order to maximize the usefulness of it. It is beneficial to share knowledge and viewpoints when knowledge is required to arrive at a decision in order to develop a better judgment [25]. The core of implementation theory is a methodical approach to creating information exchange processes, which is then followed by an approach of allocation that results in the best decision-allocation process in respect to previously established and stated performance metrics. [25] provide an example of the necessity of knowledge exchange in order to make more informed decisions. To prevent opposition and to educate their subjects (employees) on the significance of strategy and the company as a whole, how strategy will affect them, and managerial objectives for strategy implementation, the leaders of strategy ought to engage their subjects (employees) in key decisions.

The systematic methods for creating information exchange systems and allocation according to performance metrics are the focus of this theory. In order to increase customer happiness and the success of strategy implementation, this theory highlights the importance of establishing strategies that are specific to the needs of the business. [26] assert that the effectiveness of strategic leaders' judgments is significantly influenced by their level of expertise and experience in handling a variety of situations in order to render a reliable and correct judgment. The main claim is that how assets are allocated inside the company has an impact on how the strategy is implemented. In order to establish an atmosphere that is favorable to execution of strategies, managers of strategy must make educated judgments about how assets and infrastructure will be allocated. [27] asserts that communication is a key element in the dissemination of knowledge between upper management and staff. Strategic leaders specify the company's role in the implementation of strategies. By highlighting the importance of carrying out strategies in terms of increasing effectiveness and value in service delivery, leadership at all stages should inspire employees to work toward the defined goals. In the words of [28], collaboration among management and employees can be used to view implementation; cooperation is a key component of successful execution of plans. [24] asserts that meeting deadlines, allocating duties, and executing tasks effectively all involve cooperation.

B. Conceptual Framework

Conceptual is model that guides the development of a research study or helps organize the understanding of a specific phenomenon, hence depicting the relationships between these variables and how they collectively influence academic achievement as shown in figure .1 below.

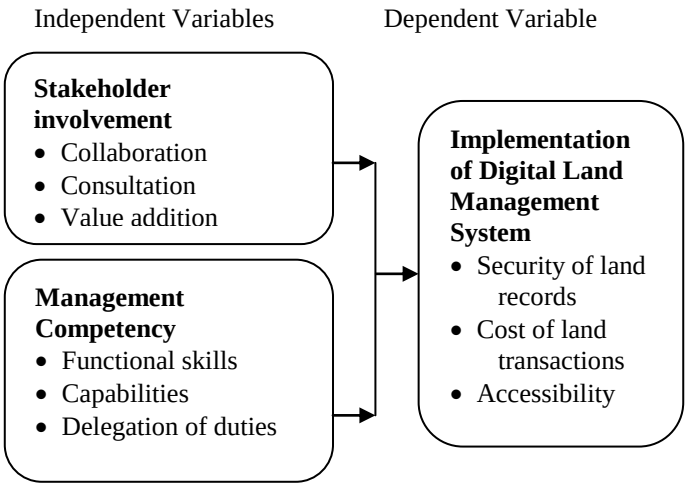

Fig 1: Conceptual Framework

1) Stakeholder Involvement

According to [29], a stakeholder is any person, group, or organization with an interest in or that is affected by the operations of a business's time, money, or output. The corporation focusing on the clients it serves in order to provide suitable managerial techniques, as well as the way a stakeholder contacts the company for the purpose of claiming his or her rights, are two distinctive approaches that the stakeholder theory contains. The interaction between an organization and its stakeholders appears to be the subject of one end of the coin, whilst the accountability of each stakeholder to the organization appears to be the subject of the other. Geographical location is another way to categorize stakeholders, which encompasses stakeholders from the inside out. Internal stakeholders are those who are employed by the company, such as management and staff. Stakeholders from the outside are individuals or groups that operate independently of the organization in question and have an effect on its ability to continue operating [30].

These organizations include customers, vendors, governmental bodies, regional communities, and labor unions. According to [31], the definition of stakeholder involvement is "the early and continual process of creating and sustaining relationships with varied audience about complicated problems based on mutual confidence and respect." Successful stakeholder engagement promotes the formation of strategic partnerships, results in power sharing during issue resolution, and eventually results in greater backing for decisions. Strategies for including stakeholders ought to be viewed as useful tools for "public relations," image-building, or garnering support for a decision made behind closed doors. As such, they should be considered as a continuous connection between all of the societal collaborators who are concerned about the same issues. Decision-makers should consider the perspectives of various stakeholders during the phase of consultation in order to enhance the project's layout before execution or to make required adjustments during execution.

2) Management Competencies

Fundamental abilities are the resources and aptitudes that provide a business a competitive edge. The functional capabilities of a business, such as production, finance, advertising, and study & development, are often related to its

fundamental skills. According to [32], core competences enable firms to create and deliver goods that offer clients special advantages and value. As an illustration, Philip Morris has established core competencies in its marketing division, particularly in terms of promotion abilities [33]. Corporate managers act as strategic leaders by making choices that will support the growth, upkeep, exploitation, and leveraging of their company's key competencies. Sharing resources between units is a requirement for utilizing core competencies. The most effective core competencies typically depend on intangible assets, which are less apparent to rivals because they are related to employees' knowledge or abilities.

Effective strategic leaders encourage exchange of intangible assets throughout their organizations' business units [33]. Core competences are established and used across several organizational units (economies of scope) in many large, diversified organizations to gain a competitive edge. For instance, Miller Beer has used marketing and promotion skills throughout its various industries [34]. The creation, maintenance, and use of core competencies are especially helpful for managing complicated interactions between businesses that operate in many worldwide marketplaces in many multinational firms [35].

To ensure that businesses achieve their desired results, controls are required [36]. These are official information-based processes that managers utilize to keep or change organizational activity patterns. Controls support and promote strategy change, enable strategic leaders establish credibility, and show stakeholders the value of their initiatives [37]. According to [33] the organization's capacity to oversee, monitor, and assess performance for programs, initiatives, and monthly results needs to be solidly established. Therefore, it is the responsibility of leaders to develop and carry out two categories of in-house controls, which are financial oversight and strategic controls.

3) Implementation of Digital Land Management System

There are numerous benefits as a result of digitizing land records. First and foremost, it increases transparency while decreasing corruption ([38]. Land records can now be accessed instantaneously via digital platforms, reducing the need for paper documentation and physical files [7]. This accessibility boosts public trust while decreasing the possibility of fraudulent activities. [9] argued that digitization improves land administration efficiency by reducing bureaucratic red tape and ensuring accurate and up-to-date information.

County exists to carry out a number of specific goals, including: providing citizens with essential public services; promoting national and community development through skill development, boosting economic activity and employment, creating technological advances and infrastructure; pursuing socio-economic goals; and achieving value for money given that the public sector is answerable to taxpayers. County Government of Tana River is demanding to its citizens services delivery [38].

The Digital Land Management System in Kenya is an initiative aimed at improving land administration processes and enhancing efficiency in the management of land records and transactions. It involves the digitization of land-related information, including land titles, surveys, and property records, and the development of an integrated digital platform for land management.

One of the key goals of the Digital Land Management System is to streamline land transactions and reduce the time and bureaucracy involved in land-related processes [19]. By digitizing land records and implementing online services, the system aims to make it easier for individuals and businesses to access land-related information, apply for land titles, and carry out other land transactions [39]. While specific performance metrics and evaluations of Digital Land Management System in Kenya may vary, several potential benefits and challenges have been identified in the digitization process.

The digital system can enhance transparency in land transactions, reducing corruption risks and improving accountability in the land management process. Increased efficiency by eliminating manual paperwork and streamlining processes, the system has the potential to significantly reduce the time and effort required for land-related transactions [2]. Enhanced access to information; digitization allows for easier access to land records and information, enabling individuals and businesses to obtain necessary documentation more efficiently. Better land governance: By supplying accurate and current information on ownership of land, boundaries, and actions, the system can help to improve the management of land [1]. It is significant to highlight that since my previous knowledge update, the Kenyan Digital Land Acquisition and Management System's performance may have changed or improved. I advise using current papers, research, or official documents, and properly citing them, to get the latest and most accurate data.

C. Empirical Review

This section covered previous literature on stakeholder involvement, management competencies, ethical practices and corporate culture.

1) Stakeholder Involvement

Involving stakeholders as a tactic to boost organizational performance was the focus of a 2013 study by Obonyo on Kenya's Ministry of Land, Housing, and Urban Development. A case study including interviews of the Ministry's top management was the method employed to investigate the research subject. According to the study's findings, stakeholder involvement has enhanced the strategic planning process for the Ministry. For instance, improved collaboration has affected the law, the Ministry's service charters and standards, customer service guidelines, and information sharing procedures. Additionally, the time required to carry out the strategy has been reduced.

(2019) [40] examined the organizational performance and strategic leadership of Nairobi County's Department of Investigations into Crimes. A descriptive research approach was employed in this investigation. The study intended audience was the senior DCI officials in Nairobi City County. With the aid of stratified random sampling, the sample size was established. A combination of both primary and secondary information were used in the analysis. The acquired data was analyzed using descriptive and inferential

statistics in SPSS. The study findings demonstrated that effective strategic leadership techniques boosted organizational performance to the required level.

[41] examined the effect of stakeholder' assessment on the performance of organizations in a different study. The findings of the study supported the value of stakeholder analysis in enhancing organizational performance and the contention that an organization's success depends on its capacity to effectively represent the interests of its key stakeholders. In her research, [42] examined the function that stakeholders served in the implementation of strategies at G4S Kenya Limited. In-depth information was gathered utilizing an interviewing guide. The management of G4S Kenya received the question-answer manual. The qualitative analysis made use of content analysis. The study found that early employee participation in the formulation of strategies helps staff understand goals, style, and cultural norms and prevents them from catching themselves off guard, putting everyone on the same playing field, letting staff own the approach, and ensuring better results.

2) Management Competencies

Employee competences were examined in [43] study as potential indicators of organizational performance. The study used a cross-sectional approach to research, and data were gathered using a planned survey and a convenience sample. Confirmatory factor analysis was applied to assess the dimensions' validity and reliability. The modeling of structural equations was then used to test the proposed hypotheses. With the possible exception of confidence in oneself, which had a negligible and adverse impact, the findings indicated that some staff skills had a favorable and considerable impact on organizational performance.

A study conducted by [44] investigated the relationship between management competences and business performance in a sample of large airline organizations in Jordan. According to the study findings, abilities (leadership, solving issues, strategic competency, and customer focus) have positive link with organizational performance in Jordan's airline sectors. Organizational innovation was viewed to be tied to strategic competence, while customer attention was thought to be linked to the company's competitive edge.

[45] studied how managers' intellectual capabilities affect the success of projects. Managers in Pakistan's public sector provided quantitative data for the study. The study employed a method of random sampling to hand out questionnaires for surveys to participants and collected cross-sectional data. In order to test research hypotheses, regression and correlation analyses were performed. The study's findings showed that intellectual competences have a considerable beneficial impact on project success, and they have consequences for academics and project managers as they develop policies to increase project success.

III. RESEARCH METHODOLOGY

The descriptive research design was used in this study to determine its overall objective. This study focused on gathering information in quantitative form from participants using this study design. The research study was conducted at state Ministry of Lands and Physical planning, National Land Commission and County Ministry of Lands and Physical planning within Tana River County. The study unit of analysis was the state Ministry of Lands and Physical Planning, National Land Commission, and Tana River County Ministry of Lands and Physical Planning, while the unit of observation was employees from state Ministry of Lands and Physical Planning, National Land Commission and Tana River County Ministry of Lands and Physical Planning. There were 150 employees within the state Ministry of Lands and Physical Planning, National Land Commission, and Tana River County Ministry of Lands and Physical Planning during the period of study.

Table 1: Target Population

Level	N	(%)	n
State Ministry of Lands and Physical Planning	50	33.3%	36
Tana River County Ministry of Lands and Physical Planning	75	50.0%	55
The National Land Commission	25	16.7%	19
Total	**150**	**100**	**110**

The following regression model was assessed.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e}$$

Where:

Y = implementation of digital land management system in Tana River County

X_1 = Stakeholder Involvement

X_2 = Management Competencies

IV. RESEARCH FINDINGS AND DISCUSSIONS

A. Response Rate

At the end of the one-week period, 101 of the 110 questionnaires distributed had been returned by respondents. Upon sorting, three were discovered to be incomplete and/or poorly filled, interfering with the analysis of the data. As a result of the research, 98 questionnaires were completed and so met the standards for analysis. This figure represents a 89.1 percent effective response rate. When employing surveys in social sciences, a response rate of 50% or more is acceptable.

B. Descriptive Statistics

The respondents were asked to rate their level of agreement on statements on each of the variables. The study used a Likert scale with five (5) points, that ranges from 1 to 5 where 5 = strongly agree, 4 = agree, 3= neutral, 2= disagree and 1= strongly disagree. The descriptive statistics was presented using frequency percentage, mean and standard deviation of each response. The description results in this section has been presented per objective in tables.

1) Stakeholder involvement and digital land management system implementation

The study first objective was to determine the effect of stakeholder involvement and digital land management system implementation in Tana River County, Kenya. This section presents the respondents views on various aspects of stakeholder involvement. The study adopted indicators presented in Table 2 as measures of stakeholder involvement.

Table 2: Stakeholder Involvement

Stakeholder Involvement	SD %	D %	N %	A %	SA %
There is good collaboration among teams in the organization	9.2	5.1	21.4	40.8	23.5
Involvement of stakeholders enhances implementation of digital land management system	0.0	9.2	28.6	48.0	14.3
Involvement of stakeholders in strategic planning improves performance of digital land management system	8.2	11.2	14.3	53.1	13.3
Continuous stakeholder involvement ensures improvement in implementation of digital land management system	8.2	16.3	10.2	0.0	65.3
The views of external stakeholders are important in development of digital land management system	8.2	15.3	18.4	12.2	45.9
Both internal and external stakeholders were involved in implementation of digital land management system	3.7	7.9	12.6	36.3	39.5

From Table 4.3, the results the statement that there is good collaboration among teams in the organization, majority respondents 40.8% of the respondents agreed; 23.5% strongly agreed; 7.1 21.4% were neutral; 9.2% strongly disagreed; and 5.1 disagreed. The statement had a mean value of 3.64; which is less than composite mean of 3.77, suggests that it negatively influenced the dependent variable hence need for improvement as good collaboration among employees will lead to effective implementation of Digital Land Management System.

Result of Table 2 showed that 48.0% and 14.3% respondents respectively agreed and strongly agreed that involvement of stakeholders enhances implementation of digital land management system; 9.2% disagreed and 28.6% were neutral. This statement had mean score value of 3.67; which was smaller than composite mean value of 3.72; indicating this particular item has a negative influence of implementation of Digital Land Management System in Tana River County, thus there is need to improve stakeholder involvement practices. The study findings also revealed that 53.1% and 13.3% of the respondents respectively agreed and strongly agreed that involvement of stakeholders in strategic planning improves performance of digital land management system; 8.2% strongly disagreed; 11.2% disagreed; and 14.3% were not sure. This statement's mean value was 3.52 smaller than composite mean value of 3.72, indicating that it had a negative influence implementation of Digital Land Management System, thus there is need for improvement.

Moreover, results of Table 4.3 showed that 65.3% of respondents strongly agreed that continuous stakeholder involvement ensures improvement in implementation of digital land management system; 8.2% strongly disagreed; 10.2% neither agreed nor disagreed; and 16.3% disagreed. Mean score of 3.98 for this particular item implied that statement positively influenced implementation of Digital Land Management System, since this value was greater than composite mean value 3.72. Regarding the question of whether opinions from outside parties are significant in the development of a digital land management system, 45.9% of respondents highly agreed, 12.2% agreed, 18.4% were neutral, 8.2% strongly disagreed, and 15.3% disagreed. These study findings implied that this statement positively influenced the implementation of digital land management system as indicated by mean value of 3.72 that was equal to composite mean 3.72.

Study results further revealed that majority 35.7% and 30.6% respondents respectively agreed and strongly agreed that both internal and external stakeholders were involved in implementation of digital land management system; 21.4% disagreed and 12.2% were neutral as shown in Table 4.3. The statement had a mean value of 3.76, which was more than composite mean value of 3.76, indicating a positive impact on implementation of Digital Land Management System. The composite mean value on effect of stakeholder involvement on implementation of digital land management system was 3.72. This indicated that majority of respondents agreed with statements on effect of stakeholder involvement on implementation of digital land management system.

A standard deviation value of 1.18 implied that there was small variation on responses given by respondents. These study results agrees with [42] who discovered that early employee involvement in the strategy process assists employees to comprehend goals, style, and norms of culture and also hinders them from being caught off guard, putting every worker on the same platform, allowing staff to own the method, and guaranteeing better results. Strategies for stakeholder involvement could be viewed as crucial tools for "public relations," image-building, or securing support for a choice that was reached behind closed doors. During the consultation phase, decision-makers should examine the opinions of numerous stakeholders in order to improve the project's layout before execution or to make necessary revisions during execution.

2) Management competencies and digital land management system implementation

Examining the relationship between managerial skills and the adoption of a computerized land management system in Kenya's Tana River County was the second study goal. The respondents were asked to rate the extent to which they agreed with statement concerning management competencies and digital land management system implementation in Tana River County. Results presented in Table 3 shows views of respondents measures of management competencies and implementation of digital land management system.

Table 3: Management Competencies

Management Competencies	SD %	D %	N %	A %	SA %
There is good collaboration among teams in the organization	4.1	11.2	20.4	35.7	28.6
Involvement of stakeholders enhances implementation of digital land management system	0.0	21.4	19.4	40.8	18.4
Involvement of stakeholders in strategic planning improves performance of digital land management system	9.2	9.2	8.2	69.4	4.1
Continuous stakeholder involvement ensures improvement in implementation of digital land management system	9.2	8.2	10.2	39.8	32.7
The views of external stakeholders are important in development of digital land management system	3.1	4.1	14.3	57.1	21.4

Study results shows that majority 35.7% and 28.6% respondents respectively agreed and strongly agreed that the organization leadership has good technical skills needed for implementation of digital land management system; 4.1% strongly disagreed, 11.2% disagreed and 20.4% were neutral. A mean statement value of 3.73 greater that composite mean 3.70; indicated that the statement has a positive effect on implementation of digital land management system in Tana River County Kenya. The results also showed that (40.8%) respondents agreed that managers have good communication skills; 21.4% disagreed; 19.4% neither agreed nor disagreed; and 18.4% respondents strongly (see Table 4.4 above). This particular item mean value was 3.56, which was less than composite mean 3.70, implying that the line statement has a negative effect on dependent variable, thus there is need for improvement in managers' have good communication skills.

Further results showed that majority (69.4%) respondents agreed that managers possess sensible decision-making skills concerning digital land management system; 4.1% strongly agreed; 8.2% were neutral and a total of 18.4% disagreed. A mean value of 3.50 scored by this statement which was less than composite mean 3.70 which implied that the statement was negatively affecting the implementation of digital land management system in Tana River County Kenya. Thus, there is need for improvement.

On whether managers possess coordination skills for achieving quality results on digital land management system, 39.8% and 32.7% of respondents respectively agreed and strongly agreed; 9.2% strongly disagreed; 8.2% disagreed; 10.2% were neutral-see Table 4.4. The statement mean value was 3.79, which is greater compared to composite mean 3.70; implying that the statement has a positive effect on implementation of digital land management system. Lastly, on whether managers have good leadership and interpersonal skills; 57.1% agreed; 21.4% strongly agreed; those that were neutral included 14.3%; and only adding up to 7.2% of the respondents strongly disagreed. Statement mean value of 3.90, which the greater than composite mean value of 3.70 indicated that overall, the statement has a positive effect on implementation of digital land management system. The impact of managerial abilities on the adoption of a digital land management system was measured using a composite mean value that was 3.70. This showed that the majority of those who participated agreed with comments on how managerial competences affected the introduction of a digital land management system in Tana River County, Kenya. These results are similar with [44] study's findings that showed intellectual competences have considerable beneficial impact on project success, and they have consequences for academics and project managers as they develop policies to increase project success. Effective strategic leaders encourage exchange of intangible assets throughout their organizations' business units [44]

3) Implementation of Digital Land Management System

The study dependent variable was digital land management system implementation in Tana River County, Kenya, as a result, survey asked respondents to rate how much they agreed or disagreed with certain assertions about the establishment of a computerized land management system. Table 4 presents results.

Table 4: Implementation of Digital Lanf Management System

Implementation of Digital land mgt System	SD %	D %	N %	A %	SA %
Implementation of digital land management system has created online platform for paperless transactions that are easy, efficient and transparent	0.0	12.2	40.8	28.6	18.4
Digital land management system provides online platform for paperless transactions that are cost effective	0.0	23.5	26.5	50.0	0.0
Digital land management system had enhanced security of land records	0.0	8.2	15.3	59.2	17.3
Digital land management system has increased land transactions activities	0.0	21.4	0.0	58.2	20.4
Digital land management system has cut down organization cost of land transactions	0.0	5.1	29.6	43.9	21.4
All land administrative activities are visible on our website	0.0	8.2	18.4	64.3	9.2

Table 4 results on the statement that implementation of

digital land management system has created online platform for paperless transactions that are easy, efficient and transparent indicated that 40.8% of respondents were neutral; 28.6% agreed; 18.4% strongly agreed; and 12.2% disagreed. This statement had a mean score of 3.53, which is less than composite mean 3.66 implying that this statement was negatively affecting implementation of digital land management system. The findings of Table 4. further revealed that majority 50.0% of respondents agreed that digital land management system provides online platform for paperless; 26.5% were neutral; and percentage of respondents that disagreed were 23.5%. The statement had a mean value of 3.27; that was smaller compared to composite mean of 3.66; indicating that the statement was negatively affecting the implementation of digital land management system. According to Table 4. findings, 59.2% of respondents agreed and 17.3% strongly agreed that digital land management systems had improved the security of land records, while 8.2% disagreed and 15.3% were indifferent. The average of this statement was 3.86, higher than the composite mean of 3.66, indicating that it had a favorable impact on the adoption of the digital land management system.

Table 4 results further showed that 58.2% and 20.4% respondents respectively agreed and strongly agreed that digital land management system had increased land transactions activities; and only 21.4% disagreed. The statement had mean value of 3.78; which indicated a positive effect on implementation of digital land management system, since it was greater than composite mean 3.66. Result of Table 4. show that, majority 43.9% of respondents agreed that digital land management system had cut down organization cost of land transactions; 21.4% strongly agreed; 29.6% were neutral; and only 5.1% disagreed. This statement was positively affecting implementation of digital land management system since its mean value of 3.82 was greater than composite mean 3.66. Table 4. results lastly showed that majority 64.3% respondents agreed that land administrative activities are visible on our website; 18.4% were neutral; 9.2% strongly agreed and those respondents that disagreed were 8.2%. The mean value of 3.74 for this statement greater than composite mean value 3.66 implied that the statement was positively affecting dependent variable.

From the composite mean value of 3.66 shown in Table 3.66 above, it can be inferred that the majority of respondents agreed with the assertions regarding implementation of digital land management system in Tana River County. These study results are in agreement with study by Ismail, (2023) who revealed that land records can now be accessed instantaneously via digital platforms, reducing the need for paper documentation and physical files. This accessibility boosts public trust while decreasing the possibility of fraudulent activities. Islam, (2017) argued that digitization improves land administration efficiency by reducing bureaucratic red tape and ensuring accurate and up-to-date information. The Digital Land Management System in Kenya is an initiative was aimed at improving land administration processes and enhancing efficiency in the management of land records and transactions. [19] study also had similar views as they revealed that one of the key goals of the digital land management system in Kenya was to streamline land transactions and reduce the time and bureaucracy involved in land-related processes.

V. Inferential Statistics

To further establish relationship between strategic leadership and digital land management system implementation in Tana River County, Kenya, the study employed both correlation and multiple regression analysis. Inferential results are further discussed in the following subsection.

1) Correlation Analysis

The study used correlation analysis to evaluate the strength of relationship between independent variables including management competencies and digital land management system implementation in Tana River County. The correlation is employed to show the direction of a change in one variable in relation to another. While a negative Pearson correlation value indicates a negative connection, a positive Pearson correlation value suggests a positive association. As the value approaches either negative 1 or positive 1, the strength of the link increases. The correlation data results are presented in Table 5 of the study results.

Table 5: Correlation Analysis

		Implementation of digital land management system
Stakeholder Involvement	Pearson Correlation	.504**
	Sig. (2-tailed)	.001
	N	**98**
Management Competencies	Pearson Correlation	.549**
	Sig. (2-tailed)	.000
	N	**98**

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5 correlation results show that stakeholder involvement has a strong, positive significant relationship with the implementation of digital land management system in Tana River County, Kenya (Pearson Correlation= 0.504, sig value= 0.001<0.05). This implies that an improvement in indicators of stakeholder involvement positively leads to an increase in implementation of digital land management system in Tana River County, Kenya. The findings of this study concur with [42] who noted that successful stakeholder engagement promotes the formation of strategic partnerships, results in power sharing during issue resolution, and eventually results in greater backing for decisions. Early employee involvement in strategy development process assists employees to comprehend goals, style, and norms of culture and also hinders them from being caught off guard, putting every worker on the same platform, allowing staff to own the method, and guaranteeing better results.

Table 5 correlation results showed that the relationship between management competencies and implementation of digital land management system in Tana River County, Kenya is strong, positive and significant (R=0.549,

Sig=0.000<0.05). This implies that an improvement in the indicators of management competencies positively leads to an increase in implementation of digital land management system in Tana River County, Kenya. The study findings are similar to the findings of [44] who argued that intellectual competences have considerable beneficial impact on project success, and they have consequences for academics and project managers as they develop policies to increase project success. Effective strategic leaders encourage exchange of intangible assets throughout their organizations' business units. Effective strategic leaders encourage exchange of intangible assets throughout their organizations' business units [33]. Core competences are established and used across several organizational units (economies of scope) in many large, diversified organizations to gain a competitive edge.

2) Multiple Regression Analysis

The study conducted a multiple regression analysis to analyze the relationship between strategic leadership practices (management competencies, communication, ethical practices, and stakeholder involvement) on implementation of digital land management system. At a 5% level of significance, the beta coefficients' significance was examined.

Table 6: Analysis of Variance (Model Significance)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.246	4	0.811	28.494	0.000
	Residual	7.948	93	0.085		
	Total	11.194	97			

a. Dependent Variable: Implementation of digital land management system

Table 6 ANOVA test results showed that the F value was 28.494 with a significance of p value = 0.000<0.05, meaning that relationship between management competencies, communication, ethical practices, and stakeholder involvement and implementation of digital land management system was significant. The ANOVA statistics at 5% level of significance also show that the value of F computed is 28.494 and the value of F critical at 4 degrees of freedom and 93 degrees of freedom at 5% level of significance is 2.46960. Thus, the F computed is greater than the F critical (29.928>2.46960), indicated that the overall model was statistically significant at 5% significance level. Study results on regression coefficients are presented in Table 7.

Table 7: Regression Results

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	3.589	0.396	9.074	0.000
Stakeholder involvement	0.438	0.076	5.758	0.000
Management competencies	0.538	0.089	6.048	0.010

a. Dependent Variable: Implementation of digital land management system

Table 7 results shown that regression coefficient of stakeholder involvement was (β=0.438, sig=0.000), this indicated that association between stakeholder involvement and implementation of digital land management system is positive and significant. The implication these results is that a unit increase in stakeholder involvement would results to an increase of 0.438units in implementation of digital land management system in Tana River County. The study findings are consistent with [42] study results that discovered that early employee involvement in the strategy process assists employees to comprehend goals, style, and norms of culture and also hinders them from being caught off guard, putting every worker on the same platform, allowing staff to own the method, and guaranteeing better results.

Table 7 regression results show that management competencies has a positive and significant effect on digital land management system implementation (β =0.538, Sig=0.010). The results indicate that a unit increase in management competencies would results to an increase of 0.538 units in digital land management system implementation at Tana River County. [44] argued that intellectual competences have considerable beneficial impact on project success, and they have consequences for academics and project managers as they develop policies to increase project success. Effective strategic leaders encourage exchange of intangible assets throughout their organizations' business units. Effective strategic leaders encourage exchange of intangible assets throughout their organizations' business units [33]. Core competences are established and used across several organizational units (economies of scope) in many large, diversified organizations to gain a competitive edge.

VI. CONCLUSIONS

The study concluded that stakeholder involvement positively affect the implementation of digital land management system in Tana River County, Kenya. The implementation of a digital land management system is facilitated by improved stakeholder involvement practices, such as ensuring that teams within an organization work well together, involving stakeholders during the implementation of the system, including all stakeholders in the system's strategic planning, and accepting external stakeholders' opinions during the system's development. Apart from that, the study found a substantial and favorable association between managerial competences and the adoption of a computerized land system for management in Tana River County, Kenya. A corresponding increase in management competencies practices such as ensuring land organization leadership has the technical expertise required for the implementation of a digital land management system; ensuring managers have good communication skills; ensuring managers have the judgment necessary to make sound decisions regarding the system; ensuring managers have coordination skill necessary to produce quality results on digital land management system will to an increase in digital land management system implementation.

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