Strategic Factors Affecting Implementation of ICT in the Judiciary Sector in Kenya: A Case of Mariakani Law Courts

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ABSTRACT
In the judiciary, ICT can be adopted to enhance efficiency, access, timeliness, transparency and accountability, and helping the judiciaries to provide adequate services (Sturges, 2008; Yen, 2005). The use of information and communication technology (ICT) is considered one of the key strategic elements to significantly improve the administration of justice in a country since the benefits are enjoyed directly by the citizens. The rapid development of technology opens up new opportunities that were unthinkable only a few years ago (Tseng et al. 2008). Specific objectives of the study were: To establish the influence of Skills development on implementation of ICT in the Kenyan judiciary, to determine the influence of strategic leadership on implementation of ICT in the Kenyan judiciary, to establish the extent of which organizational technological preparedness affects ICT adoption in Kenyan judiciary. This study used descriptive design. The population included a sample size of 44 members of staff in Mariakani Law Courts. Judicial officers and staff in the court were chosen as the target population since they interact with majority of the technologies and are aware of all the ICT needs in the court system. Data was collected using structured questionnaires, and findings analyzed using SPSS software. The findings of the study showed that there is a positive relationship between ICT skills development, strategic leadership and organization technological preparedness with implementation of ICT at the Judiciary in Kenya.

1. Introduction
The benefits of ICT have been verified by many leading companies worldwide, and ICT is a significant tactic in most companies’ and sectors (Jakachira, 2009; Hlungulu et al. 2010). In the judiciary the core aim has been reducing delay, improving economy, efficiency and effectiveness and the more general objective of promoting confidence in the justice system through the use of new technologies. This is the reason the use of technologies for the laudable aim has become an important area of research (Ndou, 2004). However, given the nature and importance of the judiciary as one of the equal pillars of the State authority, and compared to other public services, due process, equality before the law, impartiality and independence should also be carefully taken into account. According to Scott (2010) changes in the judiciary is not something that can be done in a single day or by an individual because of the structural and procedural changes, such as the ones driven by the introduction of the new technologies. The use of information and communication technology (ICT) is considered one of the key elements to significantly improve the administration of justice in a country since the benefits are enjoyed directly by the citizens. The rapid development of technology opens up new opportunities that were unthinkable only a few years ago (Tseng et al. 2008).

In the judiciary, ICT can be adopted to enhance efficiency, access, timeliness, transparency and accountability, and helping the judiciaries to provide adequate services (Sturges, 2008; Yen, 2005). New possibilities are emerging for the integration and automation of court procedures and practices. In addition, the use of the internet, can offer the chance to open the judiciary to the public, providing both general and specific information on its activities, thereby also increasing legitimacy. There is a need for some kind of guidance for assessing the new ICT tools and under what circumstances to use them since they are considered to be of extreme interest for the development of better performance in the judiciary now and in coming years (Kordha, Gorica & Ahmetaj, 2011).

Globally, a number of statutory reforms have been introduced to allow the use and the exchange of electronic data and documents within national judicial systems, but also between them and with supranational courts. The availability of web services, the possibility of consulting on-line legislation and case law, the use of electronic filing, the electronic exchange of legal documents, are only some examples that are spurring the judicial administrations around the world to rethink their current functions and activities (Velicogna, 2007; Gichoya, 2005; Orna, 2004).

1.1 Background of ICT Adoption in Kenyan Judiciary
The Judiciary is the system of courts of justice in a country, the arm of government charged with the responsibility to administer justice. Every country has this arm and in Kenya, it’s established under chapter 10 of the Constitution of Kenya 2010 (Kenya Const. art. 159 - 173). The advancements of the 21st century have led to an emergence of many disciplines with great potential to solve existing problems. One such potential field is ICT, which has over the years been increasingly adopted in many processes to avert the
problems of ineffective and inefficient service delivery. Interdisciplinary collaborations have led to a symbiotic relationship between ICT and law. One of the key areas of interest is automation of the judicial processes.

In Kenya the Judicial Information Communication Technology Committee (JICT) was established on 15th October, 2008. Its main aim is to oversee all ICT matters in the Judiciary (Reiling, 2010). Its membership is drawn from the Court of Appeal, High Court, Registrar of the High Court, finance office, ICT office, National Council for Law Reporting, e-Government and the Kenya ICT Board. The Judiciary Strategic Plan 2009 – 2012 guides its co-ordination of ICT projects and investments (Gomez, 2012). The JICT Committee has initiated several activities such as the digitization of court records and the creation of a case management system, development of the ICT policy and strategic plan, establishment of communication infrastructure, acquisition of hardware and software, and tele-presence court sessions. Some of the strategies that were adopted in the first plan have been implemented in some courts, however, there are no follow up researches that have been carried out to show how they have bettered performance in the judiciary (Alter, 2011; Cunningham, 2006; Cislaghí et al. 2009). This means that the role of ICT has not been well understood by members of the judiciary and it accounts for the reason it has not been well adopted.

The digitization of hardcopy records was the first step taken towards automating the Judiciary’s processes. An ICT consultant was commissioned to carry out a needs assessment with a view to determining the nature and volume of the court records to be digitised, developing a digitisation strategy, and preparing an implementation plan. With the assistance of the ICT Board and the Judiciary, the consultant organised the court records for the last ten years and a total of 325,000 files were prepared for digitization (Reiling, 2010). By October 2010, Digital Scape Company Ltd and DPH India (the firms awarded the contract to digitize the records) had scanned five million pages of the 30 million targeted pages of court records. The current status of this project is unknown.

Deloitte Consulting Ltd was contracted through the assistance of DFID, the World Bank and the Ministry of Finance (FLSTAP) to assist the Judiciary in developing an ICT Policy and Strategic Plan (Alter, 2011). The Judiciary ICT Strategic Plan identified ICT initiatives necessary for the automation of the judiciary’s processes and provided a road map for implementation. Both the Policy and the Plan were officially launched in October 2010.

Plans are under way to improve communication and sharing information and resources through the use of ICT. Contracts have been awarded to establish Local Area Networks (LAN) in High Court stations. At the time of the visit, a tender had been issued for the supply of ICT equipment out of which 350 UPS, 200 printers and 100 desktop computers had been purchased at the time of this study.

1.2 Mariakani Law Courts

Mariakani Law Courts is a chief magistrate’s court located in Mombasa County. The court has benefited from the judiciary’s plans to implement ICT. This is because of its rank. In the first plan the government wanted to have tele-systems in all chief magistrate courts (Markovic, 2014). This was implemented in Mariakani Law Courts.

The first tele-presence link has been established between the Court of Appeal in Nairobi and its sub-registry in Mombasa, with the assistance of the ICT Board. Video cameras and screens have also been installed in refurbished and soundproofed rooms in the Mombasa and Nairobi Law Courts (Odima, 2014). This facility enables parties in Mombasa to have their cases heard by a Court of Appeal Judge or Judges in Nairobi through tele-presence. This is expected to reduce the cost of litigation and facilitate speedy access to justice as parties in Mombasa will not need to travel to Nairobi when the Court of Appeal is in session there.

The first cases were relayed in October, 2010 from Mombasa during the official launch of the ICT Policy and Strategic Plan (Owuor, 2014). The Court of Appeal heard three cases via video conference where the bench sat in Nairobi while the respective lawyers were in Mombasa. It is envisaged that if the pilot tele-justice system in the Court of Appeal is successful, the system may be employed in criminal cases (Shrivastava & Bhattacherjee, 2014; Odima, 2014). The tele-system may then be installed in the Prisons and the Chief Magistrates Courts, so that, where appropriate, cases may be dealt with without remanded accused persons being brought to the court. The implementation of this system in the criminal courts is subject to the appropriate legal infrastructure being put in place. A challenge in Mariakani Law Courts is that follow ups are not made on the technologies that are implemented (Siele, 2014). The need of the ICT in the court has not been well understood. This is the reason why most of the technologies become inactive after some time. Therefore this study is intended to bridge the knowledge gap and seeks to determine the effects of ICT on improving performance in the judiciary using the case of Mariakani Law Courts.

2. Literature Review

2.1 Technology Acceptance Theory

Some studies used technology acceptance model or theory of planned behaviour in order to understand the adoption of new technology in public sector setting (Aboelmaged, 2010; Wahid, 2010; Davis, 1989). Although those models suggest perceived usefulness and perceived ease of use as critical antecedents to users' technology adoption process, those models are not specific on the implementation of a new technology. Our theoretical framework draws on Croom & Brandon-Jones (2007), which is found useful to understand key challenges of ICT implementation in judiciary sector.

2.2 Logistics Theory

Logistics is defined as the planning, organization, and control of all activities in the material flow, from raw material until final consumption and reverse flows of the manufactured product, with the aim of satisfying the customer’s and other interest party’s needs and wishes i.e., to provide a good customer service, low cost, low tied-up capital and small environmental consequences (Jonsson & Mattsson, 2005). Logistics is also defined as those activities that relate to receiving the right product or service in the right quantity, in the right quality, in the right place, at the right time, delivering to the right customer, and doing this at the right cost. In most of the cases logistics is seen from the perspective of an operative way of transporting or moving materials from one point to another or producing service. The credibility of this operation is based on how good is the design of the system that leads to this kind of logistics. Logistics systems encompass operative responsibilities, which include administration, operation and purchase and constructive duties as well as detailed design, (Lumsden, 2003).

Logistics management is an integrating function which coordinates and optimizes all logistics activities, as well as
integrates logistics activities with other functions, including marketing, sales, manufacturing, finance, and information technology, (Van Hoek et al., 2001)

2.3 Innovation Diffusion Theory

The Innovation diffusion theory is a model grounded in business study. Since 1940’s the social scientists coined the terms diffusion and diffusion theory (Dean, 2004). This theory provides a framework with which we can make predictions for the time period that is necessary for a technology to be accepted. Constructs are the characteristics of the new technology, the communication networks and the characteristics of the adopters. Clemons, (1992) redefined a number of constructs for use to examine individual technology acceptance such as relative advantage, ease of use, image, compatibility and results demonstrability. The advantage of the improved system is that it has allowed better communication between the judicial officers and other staff members since they have to communicate to ensure that less time is taken to realize value on the time spent.

2.5. Conceptual Framework

![Conceptual Framework](image)

**Figure 2.1. Conceptual Framework.**

2.5.1 Skills development

Skills development refers to special ability or expertise that enabling one to perform an activity by using a computer efficiently and its related peripherals in executing organizational duties. Skill development is the ability to do something well. Armstrong (2009) explains that training is directed at changing people’s knowledge, experience, skills and attitudes.

Due to the continually increasing use of computers in our daily communications and work, the knowledge of computer systems and the ability to work with programs have become essential requirements in any modern office. The degree of knowledge and proficiency required varies from individual to individual. In order to assist members in an organization in determining the level of proficiency necessary to perform adequately in positions within their respective departments, a description for the different degrees of familiarity with skills and ability to use computer systems and programs is important. This provides the need to understand those staff in need of more knowledge and training to facilitate them execute their duties thus leading to excellent performance.

There are three levels of proficiency commonly known and this include beginner, intermediate, and advanced. These levels reflect the standard steps in the acquisition and development of computer skills. (Concordia University 2011, Cashman S. and Vermaat F,2011)

2.5.2 Organizational Technological Preparedness

Organizations have generally been distinguished by and are suffering from their restricted access to particular resources compared with large organizations [Nieto and Fernández, 2005]. The literature on IT adoption suggest that, due to the public organizations’ unique characteristics, their financial resources, technical and managerial resources, information resources accessibility, internal and external expertise, market accessibility and in-house IT knowledge and experience can hinder or simplify the adoption of IT, and positively or negatively affect this process as well [Thong, 2001, (Caldeira and Ward, 2003), Nguyen, 2009].

Financial resources are one of the most crucial resources which are known as the key organizational performance requirements and are the critical success factors, based on resource-based theory [Wu et al., 2006]. As implementation of a new IT system and its components requires long term investment [Nguyen, 2009] as well as the high cost of IT infrastructure [Walczuch, et al., 2000], only public organizations that have adequate financial resources would consider adoption of IT as a feasible project to undertake. Hence, Organizations’ owner/managers who have access to necessary financial resources are more able to establish the desired IS. However, despite a number of studies, it has been revealed that the financial restriction of Organizations regarding IT adoption is attributable to the high cost of IT tools and infrastructure [Walczuch, et al., 2000]. However, Dibrell et al., (2008) and Wu et al., (2006), suggested that IT implementation expense is not major factor hindering IT adoption process in organizations, since the price of computer hardware and software has considerably declined in recent years. It has been acknowledged that public organizations are suffering from a lack of in-house IT expertise which might negatively affect the process of IT adoption. As a result, Organizations are facing significant risks and problems with their computerization regarding their inadequate knowledge of IS/IT implementation. Cragg and Zinatelli, (1995) conducted a longitudinal study over an eight-year period of IS sophistication and evolution in eighteen small firms and demonstrated that evolution and sophistication of IS within small firms was be drastically inhibited when small enterprises suffer a lack of internal expertise. This view is supported through a study by Caldeira and Ward, [2003] who revealed that internal expertise consisting of employees, supervisors, or those from top management teams are powerful determinants of IT adoption and success. In addition, knowledge of IT is another key resource influencing IT adoption in Organizations. Development of internal IS/IT knowledge and skills is one of the most important bases required for providing superior levels of IS/IT adoption and satisfaction in Organizations (Caldeira and Ward, [2003]).

In most organizations, employees are regarded as significant assets, and along with the role of owner/manager, seriously affect the firm’s survival and success [Nguyen, (2009), Melville, et al, 2004]. These assets, as the users of IT within Organizations, are another precious resource for firms (Caldeira and Ward, [2003], which need to be developed to contribute to the success of business [Egbu, et al, 2005], Zhou, Li, & Lam, (2009)
In order to facilitate the successful implementation of IS in organizations, and to avoid adoption failure, these businesses should also augment the level of IS knowledge among potential IS users through providing employees with computer education and training courses (Thong, 2001). Sarosa and Zowghi, (2003) and Ghobakhloo et al. (2010), suggested that IT acceptance among users of IT who form part of a firm’s employee base would impose positive impacts on IT adoption. According to these authors, the level of IT adoption and usage by users would be affected through the provision of IT courses and training, while higher knowledge of IT among users would help them in implementing new technology.

2.5.3 Strategic leadership

Leadership is an important aspect of society that has defined civilization values and goals through time (Young, 2004). Moreover, leadership has evolved into a strategic activity that includes communicating a vision, developing organizational structures and processes, managing change initiatives, and creating capabilities (Selznick, 1984; Hitt, 2002).

According to Cyprus s. (2010), Strategic leadership means using strategy in the management of workers. The main strategy usually employed in a strategic style of leadership is to motivate workers to take the initiative to improve their productive input into the company. Strategy involves thinking and planning. Strategic leaders always look ahead and analyze the present in terms of preparation for what may be ahead for the business. Strategic leaders are aware of their working environment and those they work with. Strategic leaders are adaptable and growth-oriented. They take responsibility for getting things done by training employees to think and act more effectively to achieve the best result possible for the company. To promote ICT integration in the Judiciary, leaders should adopt strategies that make ICT part of the daily routine or tasks of the staff. These strategies may include but not limited to frequent use of e-mail as the main method of communication among staff and other stake holders in the judiciary system, accessing the intranet to download data and using a word-processor and other computer applications (Twinnomujuni, 2011).

2.5.4 IT Solution

The process of IT adoption within SMEs also depends on characteristics of marketed IS/IT itself which consist of a cluster of factors including type, process compatibility, user friendliness and popularity of implemented IS/IT, quality of software available in market and the costs of IT [Caldeira and Ward, (2003), Salmeron and Bueno, (2006)]. For adoption of enterprise application software, easy-to-understand and relatively long-experienced enterprise applications are more effective in SMEs as compared to hard-to-understand and brand-new applications [Shin, 2006]. Given that information systems and technologies are considered as the major enablers of superior business performance, quality of IS/IT products available in the market (e.g., attribute of the selected product, its reliability and usefulness) could be an important determinant when it comes to deciding on the adoption IS/IT products among SMEs [Caldeira and Ward, (2003), Sardana, (2008)].

The technological characteristics of IT products available in the market, including their compatibility and security, are also significant determinants of IT adoption in organizations (Grandon and Pearson, 2004). Compatibility is an important technological characteristic perceived by individuals, which was suggested by Diffusion of Innovation theory as a driver of the decision to adopt a new system. IT compatibility can be defined as the extent (or ease) with which IT is integrated with the existing technological infrastructure, culture, values, and preferred work practices of an organization [Beatty, et al., 2001]. Several prior studies on IT adoption within SMEs found that IT adoption and usage is significantly affected by the compatibility of relative products ([Hong and Zhu, (2006), Saffu, et al., 2008]). It is imperative that CEOs of SMEs consider the most appropriate application in their businesses when deciding whether or not to implement new IT [Nguyen, (2009)]. Deficient IT investment decisions (regarding the compatibility and security issues of IT products) can impose a significant impact on organizational profitability [Ghobakhloo, 2011]. It can participate in enhancing SME performance. Nevertheless, with no effectual IT adoption and development strategy in the right place, the anticipated and demanded performance enhancement may not materialize. Therefore, with its counter-productiveness, IT might be considered as an asset sinkhole [Ghobakhloo, 2011]. In this regard, it was found that the high cost of IT tools and expensive software in addition to ICT security concerns are the major risks of ICT adoption perceived by Malaysian and Australian SMEs [Love, et al., (2005)]. With regard to the above-mentioned findings, it could be inferred that technological characteristics of marketed IT products has become one of the common concern of SMEs when it comes to adopting IT. Another factor that affects adoption of IT within SMEs is cost of IS/IT. Love et al., (2005) suggested that although the prices of hardware and software have noticeably decreased and become more affordable, the difficulty of estimating the costs of IT adoption (which leads to uncertainty about anticipated IT benefits) is still a significant barrier to IT investment in SMEs. According to Love et al.,(2005) although IT’s direct costs result from the implementation of new technology, however, these direct costs are usually underestimated and regarded as the cost of hardware, software and installation. It is suggested that beside initial costs of software and hardware, costs of IT implementation should include personnel training and development expenses, as well as costs of post implementation [Love et al.,(2005)]. In addition, indirect costs of IT adoption may be more significant than direct costs [Love et al.,(2005)]. Indirect costs also comprise the early cost of any temporary loss in a firm’s productivity [Love et al.,(2005)], human factors costs, organizational costs for transforming from former systems to new work practices, and costs associated with any changes to systems and business procedures [Ghobakhloo, 2011], while management time is the main, considerable indirect cost in various organizations [Love et al.,(2005)]. With regard to the aforementioned perspectives, it could be inferred that cost is still regarded as an essential issue when it comes to adopting and implementing IT in SMEs [Nguyen, 2009]. The rationale behind it is that in spite of decreases in the initial and direct costs of IT adoption, such as costs of hardware, installation and configuration, software and/or licensing in recent years, SMEs, characterized by restricted financial resources typically experience difficulty in estimating and affording total and long-term expenses associated with IT adoption.

3. Methodology

This study used the descriptive survey design. The design enabled the researcher to summarize the findings in a way that will be appropriate for carrying out a holistic, in depth and
comprehensive investigation on the effects of ICT in the judiciary. The number of participants was 50 and this increasing credibility and reliability.

4. Research Findings and Discussion

4.1 ICT resources accessed as part of work

The findings of the study on use of ICT resources accessed as part of work indicate that 78.9% had access to computers while only 21.1% had access to phones. These findings imply that the respondents had access to various ICT mediums on daily basis in the dispensation of their duties. Table 4.3. ICT resources accessed as part of work.

<table>
<thead>
<tr>
<th>ICT resources accessed as part of work</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>30</td>
<td>78.9</td>
</tr>
<tr>
<td>Telephones</td>
<td>8</td>
<td>21.0</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100</td>
</tr>
</tbody>
</table>

4.2. Extent of which ICT resources in Mariakani Law Courts are improving the general performance

The findings of the study on the extent of which ICT resources in Mariakani Law Courts are improving the general performance, 78.9% of the respondents felt that ICT resources had greatly enhanced general performance to a large extent. The remaining 21.1% were in agreement that ICT resources had enhanced general performance to some extent.

Table 4.4 Extent of which ICT resources in Mariakani Law Courts are improving the general performance.

<table>
<thead>
<tr>
<th>Views</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Extent</td>
<td>30</td>
<td>78.9</td>
</tr>
<tr>
<td>Some Extent</td>
<td>8</td>
<td>21.0</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3 Extent of use of ICT resources in service delivery

On the extent of use of ICT resources in service delivery on daily basis, 84.2% of respondents had direct access to a large extent while only 15.8% had direct access to some extent.

Table 4.5. Extent of use of ICT resources in service delivery.

<table>
<thead>
<tr>
<th>Views</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT plays a great role</td>
<td>8</td>
<td>84.2</td>
</tr>
<tr>
<td>ICT plays no role</td>
<td>30</td>
<td>15.8</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100</td>
</tr>
</tbody>
</table>

4.4 Analysis of influence of Skills development on implementation of ICT in the Kenyan judiciary

Table 4.7: Section B: Analysis of influence of Skills development on implementation of ICT in the Kenyan judiciary.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>%Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary level of proficiency</td>
<td>3.55</td>
<td>90.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Advanced level of proficiency</td>
<td>3.50</td>
<td>94.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Tertiary Level of proficiency</td>
<td>3.40</td>
<td>60.3</td>
<td>1.2</td>
</tr>
<tr>
<td>No skills completely</td>
<td>3.31</td>
<td>55.7</td>
<td>1.2</td>
</tr>
</tbody>
</table>

The study findings reveal that staffs at Mariakani law court have knowledge in computer applications and usability. This is evident to the fact that respondents expressed having very good ordinary level computer skills with a mean of 3.55 and a standard deviation of 1.0. Respondents also expressed having very good advanced computer skills. Respondents agreed that their tertiary computer proficiency is good with a mean of 3.40 and a standard deviation of 1.2 and lastly other respondents agreed to have no skills of computer at all with a mean of 3.31 and a standard deviation of 1.2.

4.5 Extent of which organizational technological preparedness affect ICT adoption in Kenyan judiciary

Mariakani law courts have the right ICT infrastructure to enable successful ICT adoption. Table 4.8. Extent of which organizational technological preparedness affects ICT adoption in Kenyan judiciary.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>%Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a relevant ICT equipment within their reach and having working internet connection available most of the time</td>
<td>4.06</td>
<td>81.2</td>
<td>1.03</td>
</tr>
<tr>
<td>The ICT equipment are in satisfactory working condition</td>
<td>4.23</td>
<td>86.4</td>
<td>0.84</td>
</tr>
<tr>
<td>Most shared facilities include printers; scanners and photocopiers, with few cases of laptop and desktop sharing</td>
<td>3.97</td>
<td>79.4</td>
<td>1.14</td>
</tr>
<tr>
<td>Mariakani law courts have the right ICT infrastructure to enable successful ICT adoption</td>
<td>4.53</td>
<td>90.4</td>
<td>0.58</td>
</tr>
<tr>
<td>Shared ICT computers have shared passwords therefore compromising document security</td>
<td>4.04</td>
<td>80.8</td>
<td>1.08</td>
</tr>
<tr>
<td>The organizations’ resources was greatly and positively influence the successful adoption process</td>
<td>3.86</td>
<td>77.2</td>
<td>1.22</td>
</tr>
</tbody>
</table>

Respondents agreed that Mariakani law courts have the right ICT infrastructure to enable successful ICT adoption with a mean of 4.06 and a standard deviation of 1.03. This is further supported by Respondents who agreed that they had relevant ICT equipment within their reach and having working internet connection available most of the time with a mean of 4.32 and a standard deviation of 0.84. This is testimony that the law courts have reliable ICT infrastructure. The organizations’ resources will greatly and positively influence the successful adoption process as indicated by respondents agreeing with a mean of 3.86 and standard deviation of 1.22. This was evident by respondents who felt Mariakani Law courts was sufficiently prepared for successful ICT adoption.

4.7 Influence of strategic leadership on implementation of ICT in the Kenyan judiciary

Table 4.9. Influence of strategic leadership on implementation of ICT in the Kenyan judiciary.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>%Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>When leaders are committed to the successful implementation of the ICT strategy, it works well</td>
<td>4.53</td>
<td>96.4</td>
<td>0.87</td>
</tr>
<tr>
<td>The leaders have a huge role to play in the successful adoption of ICT since they provide directions towards organization mission and vision</td>
<td>4.32</td>
<td>73.2</td>
<td>1.01</td>
</tr>
<tr>
<td>Currently, leader’s role in successful ICT adoption is minimal</td>
<td>3.86</td>
<td>80.6</td>
<td>1.04</td>
</tr>
<tr>
<td>Adoption process for the IT solution was depend on the benefits the government is likely to accrue from the process</td>
<td>3.98</td>
<td>79.2</td>
<td>0.92</td>
</tr>
<tr>
<td>The government’s policy and strategic direction dictates the success or failure of the adoption process</td>
<td>4.76</td>
<td>82.3</td>
<td>0.86</td>
</tr>
<tr>
<td>The government’s role of financing the ICT adoption process makes it the central player on the successful adoption process</td>
<td>4.65</td>
<td>85.7</td>
<td>0.83</td>
</tr>
</tbody>
</table>

The leaders have a huge role to play in the successful adoption of ICT since they help in policy formulation and implementation. From the above table, respondents strongly agreed with a mean score of 4.53 and a standard deviation of 0.87, that when leaders are committed to the successful implementation of the ICT strategy, it works well since they are a part of the policy formulation and implementation process. Respondents agreed with the statement that leaders have a huge role to play in the successful adoption of ICT since they provide directions towards realization of organization mission and vision with a mean score of 4.32 and
a standard deviation of 1.01. Respondents also agreed that currently, leader’s role in successful ICT adoption is minimal with a mean score of 3.86 and a standard deviation of 1.04. When asked if adoption process for the IT solution was dependent on the benefits, the government is likely to accrue from the process, respondents agreed with a mean of 3.98 and a standard deviation of 0.92. Otherwise, respondents strongly agreed with the statement that the government’s policy and strategic direction dictates the success or failure of the adoption process with a mean score of 4.76 and a standard deviation of 0.86. Finally, respondents also strongly agree with the statement that the government’s role of financing the ICT adoption process makes it the central player on the successful adoption process, with a mean of 4.65 and a standard deviation of 0.83.

4.8 Coefficient of Correlation

Karl Pearson’s coefficient of correlation (r) was used to show the relationship between Skills development, strategic leadership, and organizational technological preparedness with adoption of ICT in the Judiciary in Kenya. According to the findings, correlation between Skills development and adoption of ICT is 0.432; strategic leadership is shown by a correlation of 0.132; there was also a positive correlation of 0.243 between organizational technological preparedness and adoption of ICT as shown in Table 4.10 below.

Table 4.10. Correlation

<table>
<thead>
<tr>
<th></th>
<th>Adoption of ICT</th>
<th>Skills development</th>
<th>Strategic leadership</th>
<th>Organizational technological preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>adoption of</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills</td>
<td>.432</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic</td>
<td>.132</td>
<td>.344</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>.243</td>
<td>.232</td>
<td>.329</td>
<td>1</td>
</tr>
<tr>
<td>technological</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>preparedness</td>
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</tbody>
</table>

4.9 Coefficient of Determination (R2)

Table 4.11. Coefficient of Determination (R2)

Model Summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.623</td>
<td>.318</td>
<td>.296</td>
<td>.458</td>
<td>.623</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Skills development, strategic leadership, organizational technological preparedness

Table 4.11 showed that the coefficient of determination was 0.296. Coefficient of determination is the extent to which changes in the dependent variable can be explained by the changes in the independent variables. From the findings, this meant that 29.6% of adoption of ICT in the Judiciary is attributed and determined by the three independent factors investigated in this study (Skills development, strategic leadership, organizational technological preparedness). The rest is by other factors not included in this study.

4.10 Anova

The study used ANOVA to establish the significance of the regression model from which t-significance value of p <0.05 since F= at 4, 34 is 14.69 as shown in Table 4.7. The model was statistically significant in predicting factors affecting implementation of ICT in the judiciary in Kenya where the regression model had a probability of less than 0.5. as shown in the table below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>81.146</td>
<td>14.687</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5.527</td>
<td>1.423</td>
<td>.023</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>86.673</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.11 Multiple Regressions

The researcher conducted a multiple regression analysis as shown in Table 4.8 so as to determine the relationship between implementation of ICT in the Kenyan Judiciary and four variables investigated in this study. The regression equation was:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \]

Where

\[ \alpha: \text{is a constant term,} \]

\[ \beta_n: \text{coefficients to be determined} \]

\[ \epsilon: \text{the error term.} \]

Y: Implementation of ICT in the Judiciary in Kenya

X1: ICT Skill development

X2: Strategic leadership

X3: Organizational technological preparedness

From the regression equation established above, taking all factors constant at zero, implementation of ICT in the Judiciary in Kenya is 0.000. The findings analyzed shows that taking all other independent variables at zero; a unit increase in ICT Skill development will lead to a 0.645 increase in Implementation of ICT in the Judiciary in Kenya. A unit increase in Strategic leadership will lead to a 0.320 increase in Implementation of ICT in the Judiciary in Kenya and lastly a unit increase in organizational technological preparedness will lead to 0.211 increases in Implementation of ICT in the Judiciary in Kenya. This implies that four variables have a positive relationship with Implementation of ICT in the Judiciary in Kenya as shown in Table 4.13 below.

Table 4.13. Regression coefficient.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.000</td>
<td>.120</td>
<td>.004</td>
</tr>
<tr>
<td>ICT Skill development</td>
<td>.645</td>
<td>.260</td>
<td>.530</td>
</tr>
<tr>
<td>Strategic leadership</td>
<td>.320</td>
<td>.231</td>
<td>.117</td>
</tr>
<tr>
<td>Organizational technological preparedness</td>
<td>.211</td>
<td>.355</td>
<td>.376</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Implementation of ICT in the Judiciary

5. Conclusions

The researcher considered factors and issues that relate to strategic ICT adoption and integration in the Mariakani Law Courts. Given the fast developing ICT, it is expected that ICT will bring changes in the way organizations are run and governed. It is thus important for the policy makers, government ministries administrators and management to understand the effects of ICT implementation and integration and the strategies that can be appropriately explored to make such changes viable to all.

A comprehensive approach is required in planning, developing, operating and maintaining the government’s ICT security processes. The ICT security measures need to be
incorporated early, in the requirement specification and design of the ICT system, before the implementation stage to ensure a cost-effective and comprehensive system. The ICT security process must cover all aspects of operation, including mechanisms used by hardware and software systems, networks, databases and other related systems and facilities. The goal is to achieve a secure working environment for employees and other persons working at or visiting the government’s facilities as well as to help establish processes to ensure the protection of information. There should be restricted access to buildings and workstations, use of passwords, computer anti-viruses and anti-hacking mechanisms.

The managerial beliefs and support in initiatives and participation in adoption and diffusion of IT innovation in organizations play a key role in its success. Top management support and commitment has often been considered to play a crucial role in any initiation and implementation process. It has great power to influence other members’ behavior within the organizations. Through long-term strategic vision, top management can encourage the entire organization to learn and participate in ICT integration. In addition, by strong support from top management through resource allocation, facilities provision, training, moral support, motivation and encouragement can lead to the successful implementation of ICT in government offices.

6. Recommendations

The research findings and interpretation reveal that measures need to be taken to ensure that the ICT adoption integration in government offices reaches its full utilization and achieves its maximum potential. What have been done are the initial stages in ICT implementation but more effort need to be taken to ensure the sustainability of the implementation. The following recommendations are put forward for consideration.

1. The management should provide enough quality ICT equipment for every staff. Enough facilities combined with the relevant skills will translate to timely delivery of services. Sharing of facilities results to time wastage and delays in service delivery. Also the sharing trends may result in loss of facilities, malicious damage of electronic data and compromises the privacy of the users. For quality and timely service delivery, there should be enough facilities for everybody.

2. New technologies are fast emerging and for ICT integration in any organization to remain relevant, the personnel must be trained continuously so as to be at par with the new trends. Government ministries should ensure that they train their personnel in ICT so as to enable them deliver quality services that meets the standards of the current times. It is also very important to train people in the areas of their specialization, not just the basic general skills. They should be provided with the relevant software and training on how to use them. For example the technical people need to learn the technical related ICT skills like CAD designs, accounts personnel require ACCT skills and Quantities and Contracts department personnel was require Orion skills for their daily operations.

3. The management should encourage and support the use of ICT in all areas in the judiciary. There should be emphasis on email as the official means of communication in the place of the traditional written memos. Emails are faster, easier and cost effective means of communication. All the departments should be interconnected via the Local Area Network (LAN) and intranet should be introduced where personnel can access information at the click of the button. It is also important to motivate the staff otherwise the same staff was use ICT to frustrate and delay delivery of service. The management should also empower the ICT section through increased resource allocation, both human resource and funding.

4. The ICT department is very crucial in the implementation of ICT projects. Mariakani Law courts should therefore be ready and willing to invest in the ICT department. It need to be allocated enough resources both human resource and funding. With enough resources the ICT department was be in a position to put all the required ICT equipment, genuine software and the necessary connections to enable a smooth running ICT integration project. ICT personnel should also be deployed to every department. This will enable faster resolution to ICT related queries ensuring uninterrupted service delivery.

5. ICT infrastructure is normally very delicate and prone to damages if not well handled or maintained. Maintenance of the ICT equipment should be done regularly to detect, repair or replace worn out parts and defects. Failure to maintain regularly may lead to complete damage of components prompting the purchase of new equipment. This should be avoided since the cost implications are high.

6. Access security measures should also be employed and adhered to strictly. Most of the losses of ICT equipment occur due to the unauthorized access to buildings and workstations. Use of access control systems and surveillance cameras need therefore to be installed for a secure working condition. The security guards need also to be more vigilant and ensure that only the staffs and those with genuine, legal and acceptable intentions are allowed to access the premises. This was to prevent unauthorized access to premises and workstations and also the loss of ICT equipment. Also personnel need to be trained on the need to use passwords and the dangers of sharing passwords. Ministries should also invest in genuine anti-viruses softwares and the staff need to be encouraged to use the anti-viruses at all times and especially when accessing the internet. This was minimize malicious damage of e-information.

7. Finally, Mariakani Law Courts should make sure that the ICT policy is well known to all the employees and that policy guidelines are followed to ensure a smooth and successful implementation of ICT integration projects in government offices. ICT integration has a great potential of enhancing service delivery. All the stakeholders should play their parts to ensure the success of ICT integration in the government offices. Everybody should be made to understand that ICT is a tool that is used to solve human issues. It normally makes human activities easier but can never and was never replace human beings. There should be no fear in adopting ICT. At this point in time everybody should be ready, eager and willing to adapt to the changing times.

7. Suggestions for Further Studies

The study suggests further research to be done on the attitude toward ICT use by senior staff and the senior management. Most of the senior staff and those in senior management positions have used both systems of service delivery; the traditional manual systems and the modern technology based system of service delivery. A research needs to be done to have their opinion on both systems.

7. References


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