# **10** VITAL CONSIDERATIONS FOR SOFTWARE IMPLEMENTATION:

## How to ensure success of your new land administration system
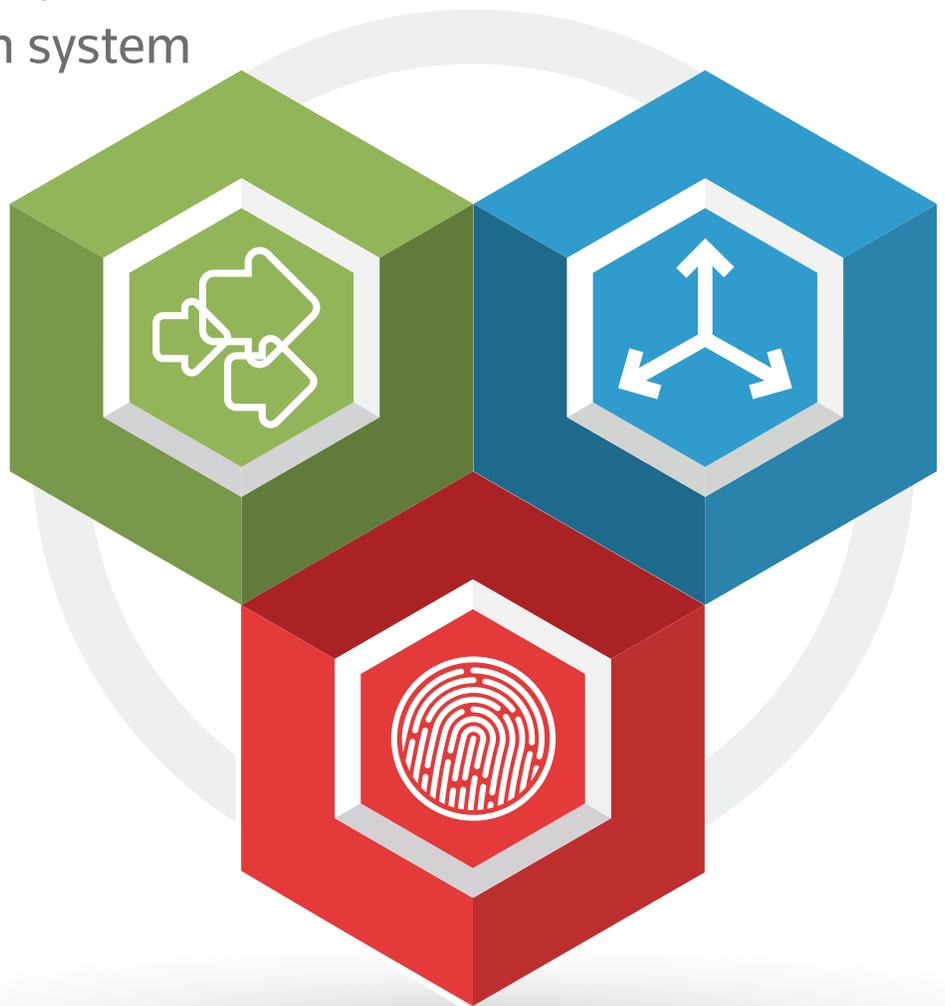
# INTRODUCTION

The implementation of a new land administration system is no small investment for modern governments in both developed and developing countries. The operation as a whole depends on the strength of the new system and the users' ability to wield it to its fullest potential.

The risk of adopting a new system can be minimized by evaluating it against the **3S Decision-Making Framework**. Ensuring that the governments' prospective solution is **secure, scalable and sustainable** enables the tempering of the challenges associated with change and positions the organization for both short- and long-term successes.

The following 10 considerations allow modern governments to gauge the security, scalability and sustainability of the solution being evaluated with helpful checklists:

## SUSTAINABILITY    SCALABILITY
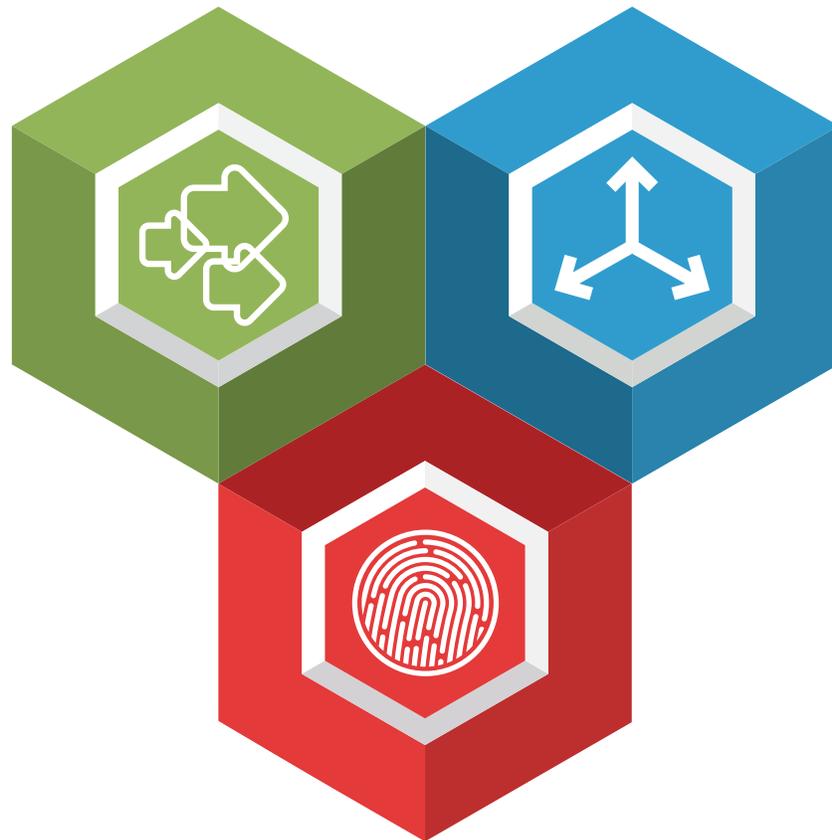
## SECURITY

# 1 KEEP PROPERTY RECORDS SECURE

Property records should always be held in secured and well-ventilated areas to prohibit deterioration and destruction due to weather elements and rodent or insect damage.

When these records are requested, care should be taken to ensure that they are not misplaced during transit.  Normally, land administration projects involves data conversion and referencing. If these records are not available, then there will be information gaps in the data and the history of title will not be available.

This issue can be taken a step further during data conversion or migration projects.  Introduce a methodology to detail sufficient handling and transport mechanisms of these often fragile documents.

**CHECKLIST:**

- ✓ Are property records filed in a secure, well-ventilated space?
- ✓ Is there a dependable transportation schedule when records are requested?
- ✓ Is a methodology in place to successfully manage record handling and transport?

**IMPACT:**

**SECURITY**

# 2 BUILD USER CAPACITY

It is understood that the ability to manipulate computer systems may not be available to land administration organizations in less-developed countries. Due to financial and other obligatory reasons, the access to the Internet or dedicated hardware may be limited or non-existent.

Likewise for all IT related projects, it is essential that the required framework be developed in terms of training and building the capacity of all users required to interact with these systems. Ensuring that the requisite background skills to manipulate these newly implemented systems promises the system is readily accessible.

It can be noted on various land administration projects that there is usually a lack of user confidence where many systems suffer from lack of use. Or, the system's intended users make minimal use of these systems and opt to manually perform the remainder of the transactions.

To combat this, potential users should be equipped with basic word processing and computer usage skills in a consistent manner to keep them abreast of new and emerging technologies. In addition, it would be beneficial to the organization to institute in their implementation plans that a core set of users are trained to further ensure the sustainability of the system.

**CHECKLIST:**

- ✔ How is the accessibility to relevant computer systems?

- ✔ Has there been an assessment of the employees' capacity for operating the system?

- ✔ If not, can the training be provided and/or harnessed in an effort to promote wider proficiency?

**IMPACT:**



**SUSTAINABILITY**

# 3  PREPARE FOR A FUNDAMENTAL CULTURAL CHANGE

A shift in culture is often required when implementing new systems. Governments must transition from the mindset of, "This is the way we always used to do it," to, "This is the way to do it now" and embrace the change process.

Organizations are now implementing fit-for-purpose land administration systems that align their business processes with industry standards and best practices. Therefore, the institutional change that comes with implementation should empower all levels of managers to motivate their subordinates to "buy-in" to the new operations. Speak in terms of reducing unnecessary bottlenecks and long-winded procedures. Cut through the "red tape" along the way, which could span for months.

**CHECKLIST:**

- ☑ Has the reception to the change been gauged?
- ☑ Has the benefits of the change been communicated to the team?
- ☑ Is there a general buy-in from the stakeholders?

**IMPACT:**

**SUSTAINABILITY**

# 4    PHASE PROPOSALS

Experience has taught us to divide a project into "sizeable chunks of phases." Software vendors have witnessed key donors and organizations submitting requests for a system with rich-features (some of which are normally "siloed") into one Request for Proposal, rather than phasing the delivery of the new project.

Many proposals will request big-ticket items within a short period of time. A phased proposal guarantees that the each phase is designed with scalability in mind to ensure continuity.

**There are many factors that would contribute to how a project is phased, such as:**

- The availability of funds and/or donors
- The organizations' current (and planned future) infrastructure
- The customers' ability to effectively balance the change management process

**CHECKLIST:**

☑ Have the most important features been identified to get the most out of the planned project?

☑ Is there a phased implementation plan in place to gradually introduce the new system?

**IMPACT:**

**SCALABILITY**

# 5 ENSURE INTEGRATION

To promote the solution's growth, it should be designed to easily integrate with existing off-the-shelf products. Integration can occur at the data-sharing or functional level and facilitate direct connection, or by import and export procedures.

Note that it is important to conduct a thorough investigation on existing systems already in use before re-tooling to ensure a successful integration.

**CHECKLIST:**

- Can the solution integrate with other products?
- What types of integration does the system support?
- How will this integration impact the current system in use?

**IMPACT:**
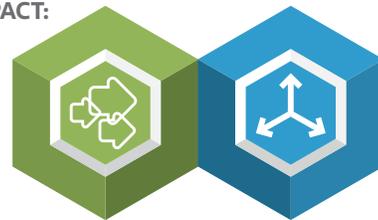


**SUSTAINABILITY  SCALABILITY**

# 6 REVIEW LEGISLATIVE CHANGES

It is vital that all land-related legislations, regulations and policies are reviewed in depth to ensure that the new system can accommodate any forthcoming legislative change after the project has been implemented and commissioned.

**CHECKLIST:**

- ☑ Does the system in consideration align with current legislation?

- ☑ Can the new system be altered to reflect new legislative changes?

**IMPACT:**

**SCALABILITY**

# 7   SUPPORT THE PROVISION OF ONLINE SERVICES

The ensured sustainability of land administration systems is evidenced when customers have the option of accessing the system online.  This enhances the ease of doing business with an organization.

The latest technological trends show increased online service offerings, from online payment to submission and secure transaction enquiries.  This benefits the organization by allowing users to initiate specific transactions, track the progress of transactions, receive email notifications on action items and perform searches of the property registry.  These capabilities ensure that the new system will serve medium- and long-term goals in providing custom government services.

**CHECKLIST:**

☑ Can users access the system online?

☑ Do the services online tailor to the customer?

☑ Do the online capabilities further the office's short- and long-term goals?

**IMPACT:**

**SUSTAINABILITY**

## 8 IDENTIFY OPPORTUNITIES TO INCREASE REVENUE GENERATION

After the deployment of a land administration system, organizations should consider modernizing their business model to offer services that facilitate increased revenue generation and further system investment. For example, offering express services for transactions: Registry searches, certified copy preparation, name changes, power of attorney documentation and other transactions.

Long-term gains would involve increased recognition and improved transaction turn-around times. This in turn will positively impact the organization's morale and boost revenue streams.

**CHECKLIST:**

- ☑ Does the system deliver on the mission, vision or mandate of the organization?

- ☑ What opportunities are available to align the business model more closely to the new system?

**IMPACT:**

**SUSTAINABILITY**

# 9 ENFORCE HARDWARE & SOFTWARE POLICIES

The hardware's security and the enforcement of a strict hardware and software maintenance policy are of paramount importance. This policy will detail the security and maintenance revision periods for the land administration system in terms of:

- Database management (including tuning, storage and backup)
- User credentials (includes password cycling)
- General update procedures

Note that this policy is separate from the software vendor support (ensuring security) and maintenance policy (enabling scalability and sustainability).

**CHECKLIST:**

- Has the vendor provided a software and hardware maintenance policy?
- Does the policy cover all updates to the implemented application?

**IMPACT:**

SUSTAINABILITY   SCALABILITY
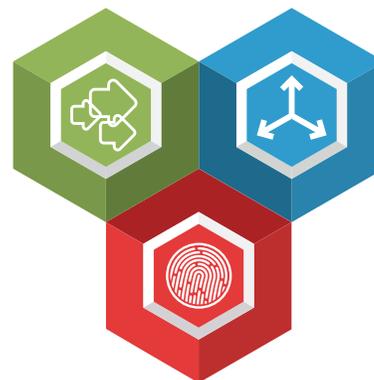
SECURITY

# 10 ASSURE STAKEHOLDER SUPPORT

During the implementation of customer-facing or any workflow management system, it is key that both internal and external stakeholders are invested. A lack of support can bring a system to a grinding halt and eventual collapse. On the other hand, positive support can exponentially boost a system—stakeholder investments, whether time or financial, will ensure the systems' success.

**CHECKLIST:**

- ☑ Identify the internal and external stakeholders of the new system

- ☑ Is there a network of collective support? If not, is buy-in possible?

**IMPACT:**

**SUSTAINABILITY**

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## ABOUT THE AUTHOR

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Lisa Kay Lewis is a URISA-certified GIS professional who has over 20 years' experience in GIS development, implementation and training.  She is currently employed at the Tax & Accounting unit of Thomson Reuters as a senior business analyst.

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Ms. Lewis has been employed in both the government and private sector for a number of years in Jamaica and the British Virgin Islands. She has a wealth of knowledge in the land administration and cadastre arena and has been instrumental in many international projects for Thomson Reuters in Uganda, Nigeria, Trinidad and Tobago, Dominica, Jamaica and British Columbia.