Mapping the Business Processes Before Mapping the Ground:
The Strategic Link to Improve Land Administration

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Abstract

A common feature of land administration projects is significant investments in associated goods and services. In some projects, the acquisition of these goods and services become an end in themselves: aerial photos, ground survey, rehabilitation/establishment/upgrade of the geodetic and survey grid, digital photogrammetry technology, GPS, total stations, graphics software, computers, networking, etc. However, these are only a means to the much needed improvements in the security of land tenure which is usually the manifest goal of such projects. To bring more balance to this structural over-emphasis on goods and services, the key role of land administration business processes is discussed in this paper. It is argued that the adequate emphasis on business processes are needed in order to re-focus the land administration projects on their strategic mission, i.e., the improvements in production and delivery of land tenure security products and services. However, a re-focus alone is not enough, proper guidance is also required to take the next step for implementing business process improvements. Thus, a two-pronged approach is proposed. First, a method is put forward to identify core business processes as candidates for land administration investments, using process salience and worth as indicators. Second, process mapping is described as a useful tool to identify what improvements can be made to the core business processes. The two-part approach is aimed at offering essential yet practical how-to advice to implement much needed process-based improvements in land administration.
1. INTRODUCTION

Land administration, as a broad category of activities encompasses matters of land tenure, land value, land use and land management. In particular, land administration projects usually cover titling and registering of real property in developing and transition countries, and typically incorporate the provision of aerial photos, ground surveys, Global Positioning System, improving the national geodetic grids, computers, graphic software, etc. The intended goals of acquiring these goods and services usually include the following: increasing tenure security, and improving land (sales & rental) markets.

Although the general evaluation of the land registration and cadastre projects points to positive results, the realization of intended goals is difficult to assess. Additional detailed objectives regarding land administration institutional improvements have also been proposed: facilitating access to land information; adjudicating boundary disputes; land conflict resolution; enforcement of property rights; encourage registration; provide technical assistance; and improve proper land valuation/assessment.

Almost all of these more detailed objectives imply that the business processes through which land is surveyed, registered, valued, adjudicated, etc. are effective (if not efficient) in delivery of the intended products, be they titles, title abstracts, fiscal cadastre, etc. However, such an implicit assumption results in underestimating the administrative complexity of delivering typical land administration products. These assumptions although appearing to entail a clear end-to-end process from a customer/citizen point of view, in practice involve highly differentiated specialized functions and overlapping responsibilities. Unless the business processes of land administrations get targeted in tandem and with equal emphasis, the practical effectiveness of investments in such projects will remain sub-optimal. In other words, it is the mediating business processes that are the crucial link in making the aerial photos, GPS units, total stations, ground surveys, etc. useful for the production of a secure title in an efficient and effective manner.

In fact, it is argued by this paper that the core business processes of land registration and cadastre have not received the attention they deserve in land administration projects. There may be numerous reasons for this state of affairs. On the one hand, it is relatively easier to prescribe and specify bundles of goods and services for land administration. On the other hand, it is much harder to target and specify precise improvements in the business processes of land administration, which is an organizational and institutionally difficult problem involving both human and technical issues. Nevertheless, just because a problem is difficult, it should not prevent us from tackling it and developing methods for its solution.

We have identified the inadequate emphasis on business processes as an obstacle to effective implementation of land administration projects. Even if we agree with this premise, we still face two challenges to be able to put the right level of emphasis on the processes. First, how do we find out which particular process is the right one (“core”) to invest in or improve? Second, having identified a core process, the next problem is, how can we improve it and what are the typical issues we are expected to resolve? Addressing these two questions is taken up by the remainder of the paper.
2. BUSINESS PROCESSES: IMPERATIVE FOCUS FOR LAND ADMINISTRATION

2.1 The Process Paradigm

The low/no emphasis on business process syndrome is easy to observe through anecdotal evidence. Many land administration organizations have found that even dramatic levels of investment in the related goods and services often don’t translate into better overall performance—e.g., number of secure titles issued. In fact, they may work against the stated goal. A major and populous middle eastern country tried and did not succeed. After a few years of work, preparing approximately half million mapped parcels, the project architects are back to the drawing board. The second try, if it comes to that, will include a clear target of the existing business processes and how improve them. (see side bar for details).

Imagine a national Middle Eastern cadastral organization tasked with updating the existing records and creating a new system. It goes ahead and procures millions of dollars worth of equipment and software including digital photogrammetric workstations, GPS, total stations, precision 24 bit color scanners, UNIX servers, etc. Then it proceeds with the development of aerial photographs, digital ortho-photographs, and the associated planimetric and cadastral maps at 1:1000, 1:2000 and 1:4000 scales with very high accuracies. After 3 years of work, and more than half-million parcels created, the project is at an standstill mired in disputes. The project architects must contemplate how the system of metes and bounds descriptions and/or the non-uniform geodetic grid survey-based plats (site maps) can be unified to create a standard deed description for the final parcels that result from the digital system. The legal community is adamant that current and future technical system should be bridged properly. The digital planimetric/cadastral parcels from the project are not directly reconcilable with the deeded description of the parcel by metes and bounds or survey mapping. The reconciliation process will require a fresh approach for the land registration in the country. The policy makers and technicians are at a loss currently on how to bridge this technical-institutional gap. This is not a fictitious story. It is real and concerns a very populous Middle Eastern country. The central problem is that the production of parcel maps are not themselves an end, but only a means to establishing secure ownership for land. Marrying two methods, i.e., visual establishment of boundaries based on aerial photos (a mathematically-based techniques) versus the chain of evidence that establishes boundary based on many sources of information (a legal practice and an art of searching records at best), are problems that require careful thought and analysis. The proper approach to the land registration problem in the Middle East country in question is modernization of the land registration and cadastral business processes so that they support the real estate market as well as the financial sector development while providing a secure and credible tenure for the owners through a secure title—the product and the final customers. Focusing exclusively on the production of maps with the state-of-the-art technology without the proper attention to the improvement of the existing business processes for land registration will give us very accurate maps but perhaps wreak havoc with the legal juridical tradition of land tenure in the country. A more sensible approach would be to target the land registration business processes (both technical and legal) for improvement. Figure out where the bottlenecks, inefficiencies, inadequate capacities exist within the current processes. Then improve these processes through the focused and targeted land administration investments while keeping our “eyes on the prize”—customers and the true final product.

The implication of the above argument is that goods and services though essential in land administration, should be regarded as enablers for improving the land registration and cadastre business processes. So a framework is needed to aid in recognizing the essential role of business processes. A framework that is both simple and elegant but illustrates the inherent necessity of business process approach is required. One that is put forward by Steven Alter of University of San Francisco is called the Work-Centered Analysis framework. Alter’s contention is that since almost all work in organizations is carried out within or around business processes, we need to give these the attention they deserve in all projects that
target organizational improvements (particularly those involving large information technology investments). According to the framework, the primary role of the business processes are to produce products for customers. They are supported or involve: stakeholders, participants, information, and technology (see Figure 1). This framework or other similar ones, help to create a clarity of focus on business processes that is needed in implementing improvements to land administration.

Let’s illustrate the relevance of the business process approach with another case which is perhaps opposite of the middle eastern country. A large county government in the western U.S.A found itself dealing with a deluge of land subdivision applications in early 1990s’. By targeting its core business process, i.e., for processing plats, for improvement it managed to raise productivity and also achieve greater citizen satisfaction. The investments appeared rudimentary technologically but in terms of real impact they were precisely what was needed. Often, this very simple focus on reducing cycle time for plats and what it takes to do so in terms of related business process improvements is overlooked with disastrous consequences. (see side bar for details).
The Clark County (Nevada, home of Las Vegas) found that it was spending on average 1 year to process 120 subdivision plats or 2 plats every three days in the early 1990’s. However, due to explosive growth in population the number of subdivisions were increasing while the capacity of process the plats was constant and this meant a steady build up of backlog and a potentially embarrassing situation for the County Assessor who is in charge of the mapping of parcels and subdivision approvals. Upon inspection and instituting proper level of coordination which involved a high level of information and data sharing among various assessing functions as well as the County Survey office, they established a Plat Processing System. The PPS included the application and integration of several typical land administration investments simultaneously. The PPS meant that surveyors, draftsmen and assessment staff were unified in their goal of delivering an efficient and effective subdivision document to the public. Furthermore, now they would share the data across activities both to properly coordinate their work but also to minimize waste. The preliminary implementation results were very impressive—on average 200 plats were being processed in the first year of the project or 1 plat every day, that was an approximate 33% reduction in plat processing cycle time. This meant a sizable dollar saving but also a better product from the customer perspective—property owners were much happier in getting their deeds at a faster rate (and much more reasoned public hearings!!). The next step that Clark County is considering is actually adding location referencing to the appropriate phases of the PPS, to evolve the system into a Geographic Information Systems application so that low/high/no assessment parcels can be more easily pinpointed in relation to others. The PPS is a clear case of targeting the right business processes within an agency such as Clark County Assessor Office to effect better coordination and lower transaction costs. The land administration projects can learn from the experience of Clark County.

The moral of above stories is not that investments in land administration projects should not include the associated goods and services. Rather, the objective is point out that to produce the proper impact and substantially affect the capabilities that most influence a land administration agency’s performance —its core business processes need to be directly targeted for improvement. The land administration projects which do not target core business processes, are not only unlikely to achieve their intended improvements and they may also waste financial and human resources on disruptive and disappointing initiatives.

2.2 Determining Core Business Processes: Process Salience And Worth

How can land registration and cadastre organizations improve their core business processes? As a first step, a framework is needed to determine what a “core process” is. Such a framework can aid in deciding which business processes are worth improving and thus require investments. To distinguish core versus non-core business processes two aspects of processes should be assessed: the salience of a process, or its relative importance to a land administration organization, and the worth of a process, or the relative value added.7

This framework can be used to guide the land administration project investments by focusing attention, money, and human resources on a small number of major business process improvement opportunities within the land registration and cadastre sphere. In other words, the organization can marshal its scarce investment resources towards the business processes that make a difference to its mission. The salience and worth are described in more details below.

SALIENCE. The word salience suggests standing out from the general surface, being prominent; salient processes are the most prominent ones. They are the processes that relate most directly to the basics of land administration—those that visibly relate to the core business of land registration and cadastre—and the priority activities that keep the engine of everyday work running. It is not difficult to come up with
various examples in multitude of land administration projects where resources were invested without a clear focus on process approach or in processes that were not critical to their success. Some things are improved, sometimes dramatically, i.e., producing accurate aerial maps of the land parcel boundaries. However, in many land administration projects, the major bottleneck is usually not the map itself. Rather, it is the processing of map and the associated activities that consumes effort, financial resources and significant amount of time.

For example, in one cadastre organization post-processing of private surveyors’ work by the government surveyors and the quality control of the latter surveys consumed up to two-thirds of the total time it takes for them to get checked and approved. Thus, in terms of importance or salience any improvement to this portion of the survey work processing can have a far reaching impact on the overall performance of cadastral map preparation.

For a process to be salient it should be a long-term activity in the value chain of the organization. The value chain is usually defined as a series of activities according to which functioning of the organization can be understood in basic terms. According to Porter (1985) value chain activities fall under two generic broad categories: primary and support. Primary activities constitute the physical production of a product or service, delivery, and service: inbound logistics, outbound logistics, operations, delivery, and service. The support activities bolster the primary activities and each other by providing purchased inputs, human resources, and some form of technology to perform a given function. Porter divides support activities into four areas: procurement, technology, human resource management, and organization’s infrastructure. The first three can be associated with specific primary activities, or they support the entire value chain. The infrastructure usually supports the entire chain as the name implies. Figure 2 is a pictorial illustration of the value chain model of basic organizational activities.

![Value Chain Model of Organizational Activities](figure2.png)
To determine a salience of a process the following questions should be answered regarding the process:

- Can the process be accounted or included in the value chain of the organization? (if yes, then others should be answered, if not, it is candidate for elimination or outsourcing)
- Is it a customer facing process (key to the identity and service delivery of the agency)?
- Is it critical to the mission accomplishment of the organization?
- Is it a key support process (an overhead activity required to accomplish the mission)?
- Is it a mandated process required by law/regulation/etc.?
- Is it another type of process (candidate for elimination or outsourcing)?

If the answers to all above questions (except for last one) is positive, then the process is candidate for being salient. However, the degree of salience requires more situation-specific information and also awareness of mission-criticality which can only be assessed on a case-by-case basis. In general, customer-facing, mission-critical, support and mandated processes are regarded as highly salient.

In a land administration project some activities can be assessed in the following manner. Mass systematic ground surveys conducted one-time to initiate demarcation and field adjudication are clear examples of non-salient activity—they can be outsourced. The quality assurance/quality control and audit function of these surveys, however, is clearly a salient process which is in the value chain, because without such a compliance check and enforcement there is little trust in the work of the surveyors and thus its value. The proper record keeping and the associated infrastructure is also a salient support process, which directly contributes to accomplishing the mission of the land administration as the custodian of land records. Figure 3 illustrates the steps to follow in determining the salience of a process.

WORTH. The worth of a process is the relative customer and organizational value it adds for a land administration project. For example, GPS-based surveys may be implemented, providing impressive, measurable benefits (a very fast and quick boundary survey), but benefits are not value. Consider the project in the large Middle East country versus the Nevada county government both of which included the provision of sizable land administration investments. The former made productivity gains in technical map production with little visible improvements in title production and delivery processes. The latter, however, streamlined and accelerated a business process that in terms worth produced significant gains.

The basic principle of process worth is simple: any process ties up resources of the organization and also returns some value (some return negative value which is quite possible). A process that ties up resources but is value-neutral, is candidate for outsourcing or elimination. To determine a business process’s worth two questions should be answered:
• Approximately does the process tie up significant (financial and other) resources of the organization? (usually a threshold should be established based on the particular organization, say, 5% of the budget of a function, etc.)

• Does the process generate a positive or negative value after an approximate accounting?

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Figure 3—Determining the Salience of a Business Process for the Organization

If the answer to the first question is “not much”, then the process is probably not worth considering for improvement or it should be outsourced or may be eliminated. Although a process’s costs and generated value are basic economic considerations, it is realistic that in most land administration organizations, the managers will not be able to supply such information. Thus, the reader may question the utility of a framework based on information that is almost impossible to track. However, readers can be reassured that: (a) there is no need to collect massive cost data, because the underlying logic is more important (it is better to be approximately correct than to be precisely wrong!); (b) the notion of value being negative or positive speaks to processes being assets or liabilities for the organizations which is a reasonable assumption and quite easy to estimate rather than accurately calculate. Figure 4 illustrates the steps to follow in determining the worth of a process.
Let’s illustrate this through an example. A national land registration and cadastral agency is undergoing automation. The managers are being asked to come up with a list of processes and functions that should be automated. A long list of processes was produced including the automation of the actual title register, the map sheets, inheritance transfers, inter-family transfers, foreign-owner transfers, etc. Upon careful examination by the project team, it was discovered that the production and delivery of title abstracts contributes to less than 10% of the total revenue (a far cry from most of the latter transfers) generated through real estate fees, but it consumes more than 50-60% of staff time (primarily due to manual hand-copying of the information onto the title abstract form). Answering the above questions, the process ties up substantial amount of total staff resources of the agency and it is on the negative side of value added (i.e., although it is a liability in terms of value added, it is an integral function of land registry required by law). Therefore, it is a candidate for both improvement and automation.

Having determined the salience and worth of business processes within land administration it becomes relatively more straightforward to label the respective processes as either core or non-core, and a perhaps a third category, semi-core. The core business processes are those which have both high salience and high worth to the organization. Conversely, the business processes that are labeled as low-salience and low-worth are non-core. Furthermore, after performing such an assessment of business processes, some processes may end up being high-salience, low-worth and high-worth, low-salience. The latter may still be targeted for improvement for obvious reasons—labeled as “semi-core”. Figure 5 is a pictorial illustration of processes which are labeled core, semi-core and non-core (plotting salience versus worth with low-high categorization yields a conceptual 2 x 2 matrix with the upper-right-hand containing the core processes).
The rationale and approach to identifying core business processes are summarized below:

Land administration business processes are “core and non-core” (“semi-core”).

Importance of a business process is determined by whether it is: a value chain activity; customer facing; mission-critical; support; or mandated.

The worth of a process depends on how much organizational resources it ties up and what level of value added it produces (either negative or positive).

Sustainable projects prudently invest in core (& semi-core) land administration business processes.

The salience/worth framework and its proposed application does not depend on “hard” numbers but on high-level but realistic estimates of resource use/value added.

Bearing the above approach in mind, it is commonsensical that land administration business processes differ from one another in their importance to a land registration and cadastre organization’s survival, and that investing in core processes is more likely to help the organization’s success in delivering on its mission than investing in lesser ones. So far we have proposed a method to identify which processes should be targeted for investment and improvement. However, a different and perhaps a more vexing problem still exists: how to improve the processes that are targeted for investment? That is the topic of the next section.
3. PROCESS MAPPING: A USEFUL TOOL TO IMPROVE BUSINESS PROCESSES

In this section, we will describe “process mapping,” an essential analytic tool that offers a clear graphic representation of the workings of an organization’s processes. This is usually the precursor to understanding and improving the targeted business processes. It is through these land administration processes that the real work of land registration and cadastre gets accomplished. These business processes often embed tacit and explicit knowledge of land registration and cadastral business practices which are often accumulated over many years and distilled into unconscious business rules that are applied automatically. Thus, not all business processes can be or should be improved in the same way. Many business processes offer opportunities for greater effectiveness and efficiency, but only if they are analyzed individually. Below, we will discuss practical ways to “dissect” business processes for improvement.

We propose process mapping as a tool to be used to describe, in workflow diagrams and supporting text, every vital step of land administration business processes. Too often we believe that we know business processes, but in reality most managers who want land administration investments badly do not really understand what the underlying processes are composed of or how they can be improved, simplified, or eliminated. Process mapping is a proven analytical and communication tool intended to help us improve our existing processes or to implement a new process-driven structure enabled by land administration investments.

According to Davenport,⁹ “A process is thus a specific ordering of work activities across time and place, with a beginning, an end, and clearly defined inputs/outputs: a structure for action”. Often processes are rolling along (or, frequently, fumbling) in organizations, whether they are attended to or not. We have two choices—we can ignore processes and hope that they do what we wish, or we can understand them and improve them.

A business process is a series of steps designed to produce a product or service. Some cadastral/land registry processes (such as the map drafting) may be contained wholly within a function. However, most processes (such as survey/title subdivision processing/production) are cross-functional, spanning the “white space” between the boxes on the organization chart. What are some of the ways that, aided by land administration investments, business processes can be re-designed and improved:

• Eliminate duplicate activities
• Combine related activities
• Eliminate multiple reviews and approvals
• Eliminate inspections
• Minimize hand-off and re-do’s
• Simplify processes
• Process in parallel
• Eliminate movement of work
In order to improve business processes, first they need to be mapped and then they need to be linked to three organizational performance variables: (1) process goals, (2) process design and (3) process management. Each of these process-based variables is described below.

3.1 Process Goals

Each process should make a contribution to one or more enterprise land administration goals. Therefore, each process should also be measured against process goals that reflect the contribution that the process is expected to make to one or more enterprise goals. In practice most processes do not have goals. While functions (departments) usually have goals, most key processes cross functional boundaries. If we are working in a cadastre/land registry organization in which surveying is a key process, and if we ask for the goals of the cadastre (survey) process, the response usually is, “Oh, you mean the goals of the Cadastre Department.” When we reply that we really do mean the cadastre process—including those steps accomplished outside the Cadastre Department—we frequently get blank stares.

Performance measurement is most effective if it is done in relation to strategic or tactical organizational/enterprise targets, or goals. Process goals are derived from three sources: (1) enterprise goals, (2) customers’ requirements, and (3) benchmarking information. Process benchmarking—comparing a process to the same process in an exemplary organization—is very useful.

Process goals are usually linked both to enterprise goals and to customers’ requirements. Note that, in our examples, they are not merely goals for the cadastre department. These process goals also reflect the performance expected of focal process’ partners (land registry) in the process of say the subdivision plat processing and field survey operations. By meeting these goals, this process will make a significant contribution to the realization of the enterprise’s strategic vision: more efficient land registration and increased tenure security in the land market.

A cadastre department’s business goal may be to reduce the subdivision application cycle-time response to an average of “5-days by the end of next year.” The goals for this process might include:

- Error rate in Quality Check/Audit of Subdivision Surveys will be less than 1%.
- We will meet our 5-day cycle-time goal without increasing the staff complement by using geotechnology.
- We will provide our customers with a single point of contact for questions regarding their subdivision application processing.

To meet these business goals we should also establish process goals for the “subdivision plat” process. In all cases, the key “process mapping” goal is for the core processes to be linked to customer and organization requirements.

3.2 Process Design

After we have established goals for the core land administration processes, we need to ensure that the processes are designed to achieve those goals efficiently. To determine whether each process and sub-
process is appropriately structured, we should create a cross-functional approach to build our process map. This shows input-output relationships among process-dependent operations and departments, and documents in a step-by-step process the sequence of activities that are required to convert inputs to outputs for the specific process. Too often, one finds that there isn't an established process; the work just somehow gets done.

Figure 6 illustrates an "As-Is" (current state) process map of a subdivision plat process, as developed in a typical cadastre automation project. The team traces the process of converting the input (subdivision application) through all the intervening steps until the final required output (payment) is produced. The process map shows how all functions are involved as the application is processed. This process mapping structure allows you to identify all the critical interfaces, overlay the time to complete various sub-processes on the process map, start to define the opportunities for improvement, and identify "disconnects" (illogical, missing, or extraneous steps) in the processes.

As we document and analyze the current "As-Is" process for processing a subdivision application, we may identify a number of disconnects, such as:

- Secretariat takes too long to assign a work order number.
- Individual surveyors slows down the process by batch-handling applications.
• Quality checking of the plat and field survey check are done for all applications rather on an audit of a random sample for each.
• Quality checking of plats holds up the process because it is done in series with field verifications.

Reduction of cycle-time is usually a very deserving target in most process improvement efforts. In particular, outdated land administration business processes are excellent candidates. Experience of the author is consistent with the general findings of white collar business processes, where value added time (the time in which a product or service has value added to it, as opposed to waiting in a queue or being reworked to fix problems caused earlier) is typically less than 5 percent of the total processing time.\textsuperscript{10}

We then can create a "To-Be" Process Map, which reflects a “disconnect-free” subdivision process. That process map is shown in Figure 7. As Figure 7 shows, the major changes in the “To-Be” map may be:

• Direct application work order assignment data entry by Secretariat, with no delay.
• Reduce management checks through digital access to base map and registry system
• Requiring digital survey plat applications
• Eliminate drafting through COGO (digital coordinate geometry)
• Parallel plat quality checking and field verification.
• Elimination of multiple logbooks among functions (for each hand-over)

"As-Is" and "To-Be" process mapping are the central steps in process improvement projects. However, we should not get mired down in excessive "As-Is" detail; the objective is to aggressively eliminate, simplify, or improve our "To-Be" processes by using appropriate land administration investments including digital base maps (e.g., ortho-photos), COGO software, GPS receivers, Electronic Field Books, Total Stations, etc.

A successful process improvement effort results in a positive answer to the key process design or improvement question: Is this the most efficient and effective process for accomplishing the process goals, and can it be aided by the identified land administration investments?
3.3 Process Management

Unfortunately, even the most logical, goal-directed processes don't manage themselves. These are the four components of effective process management:

1. **Process Goal Management**: The overall process goals should serve as the basis for the establishment of sub-goals throughout the process.

2. **Process Performance Management**: After you have established a workable process and a set of goals and sub-goals for its performance, its managers should establish systems for obtaining internal and external customer feedback on the process outputs, tracking process performance against the goals and subgoals; judicious application of land administration investments can be a great boon here.

3. **Process Resource Management**: Managers have always understood that resource allocation is a major part of their responsibility. However, "process-focused" resource allocation tends to be different from the usual function-oriented approach.

4. **Process Interface Management**: A process map clearly displays the points at which one process activity function provides a product or service to another process activity.

Using process mapping as a tool, the following key land registration and cadastre business process management questions can be posed and answered:
1. Do we understand these processes?

2. Have appropriate process subgoals been set?

3. Is process performance managed?

4. Are sufficient resources allocated to each process?

5. Are the interfaces between process steps being managed?

6. Can the processes be improved or their interfaces?

7. Are the appropriate land administration investments identified to enable these improvements?

It should be noted that, only last step involves the introduction land administration goods and services investments.

4. CONCLUSIONS

It is a proposal of this paper that, traditional land administration projects agencies emphasize the technical aspects of the projects in the form of land administration goods and services. Nevertheless, these investments are merely inputs into the business processes of land registration and cadastre. As such, they are enablers of the land administration improvements. The real targets of opportunity are the land administration business processes which are enabled by these investments but usually do not receive the proper level of attention. The paper proposed a two-part approach to rectify this situation whereby: (a) the “core” business processes are identified and targeted for investment; and (b) improvements to these business processes are identified and implemented.

The approach to the identification of core business processes was based on determining their salience and worth to the organizations. Subsequently, a process can be labeled as core, semi-core, or non-core. The core and semi-core business processes are to be targeted for improvement and investment. The non-core business processes are proposed for elimination or outsourcing. The core (and semi-core) business processes are then analyzed for improvements—through application of land administration investments. The tool used to define the business process steps and the needed improvements is “process-mapping”. Process-mapping is a very simple and powerful tool to quickly identify and map business processes so that potential deficiencies can be revealed and targeted for improvement.

It is the belief of this author backed up by tangible results that, by standing the traditional motto of land administration “Let’s map the ground so that cadastral mapping and surveying can be more easily done” on its head and saying, “I have a land administration business process to improve, how can I use land administration investments to do so?”, we can increase the effectiveness and efficiency of land registration and cadastre investments significantly.
Notes


3 K. Deininger, and H. Binswagner, ibid.


