

Building the Capacities in the Cadastral and Land Registration Organizations at Individual Level, in Developing and Transition Countries

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SUMMARY

The importance of effective performance of the cadastral and land registration organizations in support of good governance and economical development of the societies is well recognised internationally. The processes of transition and growth of the developing countries, expansion of Information and Communication Technologies (ICT) and modern trends are pushing cadastral and land registration organizations to transform and to change the traditional way of doing business.

In order to face these challenges of transformation and change, a strategy for building the capacities should be developed and implemented, and it should be in alignment with the business and ICT strategies. Having as a guideline the achievement of the clearly defined and justified strategic objectives of an institution, a specific attention should be put on the development and building the capacities at individual level - *human resources development*.

This paper presents views on the importance of *timely informing* to all levels of staff about the coming activities/changes/reforms with justification and expected outcome from them; *transparency* in work; the need for *continuous learning and education*; *motivation* of the staff; introduction of *awarding* best workers and teams; improvement and straightening of the individuals as individual and within a group/team work; introduction of *competition* between employees and offices; introduction and implementation of customer orientation in every day working activities; increase awareness of employers contribution in further development of one organization, etc.

Finally this paper argues that skilled and motivated individuals are the fundament for prosperity and continues growth of one organization. Because of the specific nature of the cadastral and land registration organizations and importance of having skilled and experienced professionals from cadastral, legal, ICT and associated domains in house, it is recommendable via different methods and mechanisms, management to find out way and resources to keep and motivate them to stay for sustainable development of these organizations.

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1. INTRODUCTION

This paper addresses building the capacities in the cadastral and land registration organizations at individual level - human resource development - in the developing and in transition countries.

Trends like introduction of reforms and implementation projects for improvement of performance are overviewed in Chapter 2. Chapter 3 focuses on the importance of analyses of user requirements and recognition accomplishment of the 'user requirements' as a critical success factor. Development of the business and ICT strategies are addressed in Chapter 4 using the as a main input the results from the analyses of user requirements. Relevant issues and aspects about development of the strategy for building the capacities at the individual level are deeper elaborated in Chapter 5.

At the end this paper concludes that the skilled and experience human resources are the fundament for prosperity and growth of cadastral and land registration organization and it is recommendable that via different methods and mechanisms, management to find out way and resources to keep and motivate them to stay for sustainable development.

2. TRENDS IN CADASTRAL AND LAND REGISTRATION ORGANISATION IN DEVELOPING AND IN TRANSITION COUNTRIES

Developing and in transition countries usually by reorganizing and applying reforms in their ministries, governmental bodies and other authorities are making attempts for increasing the overall county growth and achieving a status of good governance. In these countries we are witnesses that in many governmental bodies different reforms, projects and activities for development of strategies for organisational development are present. These developments in the societies have influence on the cadastral and land registration organizations as well.

The importance of effective performance of the cadastral and land registration organizations in support of good governance and economical development of the societies is well recognised internationally (Groot and Molen, 2000).

In order to face these challenges of transformation and change cadastral and land registration organizations adequately dedicate capacities and resources for developing and implementing a strategy for building the capacities, which should be in alignment with the business and ICT

strategies. Cadastral organizations in the developing and in transition countries, recognize that transformation towards customer/user oriented doing business is an approach which would bring benefit to their performance and economical growth on long term.

Well performing cadastral and land registration organisations, world wide, consider achieving user requirements as a critical success factor and analyses of these requirements becomes a regular practice in their performance. The results of the analyses of the user requirements, external but also internal users – employees, are the basic input for the development of appropriate organizational strategies.

Efficient and effective performance or doing business of one cadastral organisation lies down in optimal use of *skilled human resources* and availability of the well organised and institutionalised technology in order to best identify and meet system and user requirements (Todorovski, 2008).

3. ANALYSES OF USER REQUIREMENTS

A land administration system is in part an administrative system that must meet the needs of good government. It must also address the requirements of non-governmental institutions and the general public. Before altering an existing system or introducing a new one, it is essential that the requirements of those who will use or benefit from the system are clearly identified (UN/ECE, 1996).

Recognised accomplishment of the ‘user requirements’ as a critical success factor, it is one of the main elements of this study too. Specific attention should be put on analysing user requirements in the period of development of business, ICT and building the capacities strategies within a particular cadastral and land registration organisation. Internal and external users should be analysed with respected relevance within their own domain.

Results from the analyses of user requirements - current and possible future requirements - should be used as an important input while practically developing the strategies for a cadastral and land registration organisation. In the paper (Todorovski and Lemmen, 2007) more details about the methodology, technique, interviews, template questionnaires and practical analyses of the user requirements could be found.

Considering that the overall performance of an organization, in parallel of available institutionalized ICT and application of appropriate technologies, is based on the work performed by the skilled human resources, a specific attention should be put on identification and meeting the requirements of the internal users.

Meeting user requirements - a critical success factor - is becoming a bigger challenge for all business. Cadastral organisations which succeed in this are more efficient in their performance, their products and services are increasingly demanded which gives them

opportunities for improvements and further development. Follow the motto: *Learn from the users what to do and how to do it* (Todorovski and Lemmen, 2007).

4. DEVELOPING BUSINESS AND ICT STRATEGIES

What is a strategy? Why do we need strategies?

One of the definitions for the term strategy in the literature is: **Strategy**, it is a course of actions involving logical combination of actors, factors, and action chosen to reach a long-term goal or vision. Strategy incorporates a logical sequence of steps (ISNAR, 1998).

A strategy can also be defined as description of the path from the ‘As-Is’ situation where particular organisation or domain currently is, to the ‘To-Be’ situation or desired improved future state.

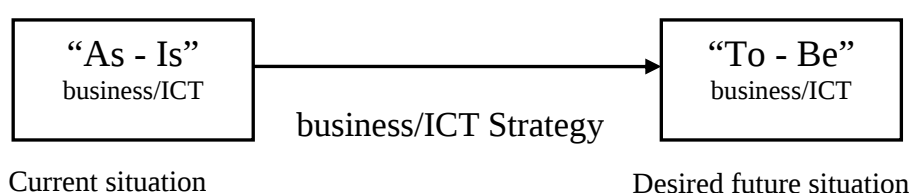


Figure no.1: Strategy: description of the path from “As-Is” to the “To-Be” situation

It is required to have a clear picture of the ‘To-Be’ situation – business/ICT situation – for better determining the directions and the way how to accomplish the desired future. It would determine in which direction improvements and development of business and ICT within the organisation should go. Defining the ‘To-Be’ situation should be based on the good overview of the “As-IS” business/ICT situation and knowing the possibilities that technology and standards are offering nowadays and future developments in this domains. Another important input would be the results from the analyses of the user requirements, both internal and external. Also lessons learned or ‘Good Practices’ from similar organisations from other countries could be helpful while formulating vision statements (Todorovski, 2006).

Business and ICT strategies should be developed in alignment, based on the results of the analyses of the user requirements. A strategy has to contain and start with a vision and mission statements. It is recommended that these statements are clearly stated, short but sharp with carefully chosen words. After these statements, a logical sequence of steps should follow including actors, factors, and actions required to reach a long-term goal, the desired improved future state. The steps should cover all important issues for the particular stage but not going to much in details. Described steps like this could be used afterwards for more detailed project for accomplishment of particular stage of the strategy. It is recommended that the steps in the strategy are divided in short-, mid-, and long term priorities and scheduled in a time table with expected date when each step would start and finish.

After a strategy document is finished and accepted as official strategy of an organisation, a task force with team leader should be appointed which would be responsible for its implementation. The team leader with his team should develop implementation strategy and very important: monitoring, reporting mechanism.

5. DEVELOPMENT OF STRATEGY FOR BUILDING THE CAPACITIES AT INDIVIDUAL LEVEL - HUMAN RESOURCES DEVELOPMENT

In parallel of the development of business and ICT strategies, a strategy for building the capacities building should be developed, and it is recommendable that all three are in alignment.

For the purpose of the ‘Workshop on Capacity Building in Land Administration for Developing Countries’ the participants have decided to adopt the definition on Capacity Building proposed by Goot/van der Molen as:

‘The development of knowledge, skills and attitudes in individuals and groups of people relevant in the design, development, management and maintenance of institutional and operational infrastructures and processes that are locally meaningful.’ (Groot and Molen, 2000).

This definition could be used as a base while further development of the strategy for building the capacities for a particular organization.

SWOT matrix for the building the capacities could be developed especially for the human resources, and as example matrixes from the paper (Todorovski and Lemmen, 2007), where business and ICT domain were analyzed, could be used. The following issues were derived from the SWOT matrix mentioned and they should be appropriately addressed within the strategy.

5.1. Timely informing of all levels of staff

Timely and correct informing, via periodical meetings, (e-)newsletters or info tables, of all levels of staff, is an activity which is recommendable to become a regular practice in the period of implementation of reforms and start and execution of the new projects with their justification and expected outcome at the end of reforms or project. Otherwise speculation about the outcome could occur and this could just cause unnecessary rumors and gossips in the corridors which could put unwanted shadow on the end result. The appropriate timely and correct informing could contribute on increasing the confidence at the employee’s side.

5.2. Transparency in work

Implementation of the transparency in work is not one time or isolated activity; it should be a part of national integrity system as proposed by Transparency International. Land sector is a

domain where transparency in work is an activity which would improve overall performance and gain bigger confidence within the general public. The following issues are some of the measures that could improve the transparency in Land Administration:

- availability of land information;
- open access to information about the ownership, value and use of land;
- standardized procedures for determination, recording and dissemination of information;
- supervision and possibility of appeal (accountability, code of ethics, openness, etc.)
- computerization (Molen, 2007).

From financial aspect it is good practice to present the overall performance via financial end year report with facts and figures about the past year, and if there are the same tables from the previous years then it can be depicted the progress in particular areas and exact financial benefit for the year passed. If a non transparent way of performance, management and every day work is present in one organization it reduces the confidence, increases uncertainty which makes employee's insecure, this leaves space for corruption.

5.3. Continuous training and education

Where just two decades ago spatial data was mainly carried on paper maps, map and three-dimensional topographic data is now accessible via Google Earth. Where accurate positioning was once the professional pride of highly trained geodesists, we now see such services provided by GPS-based consumer products. This revolution in technological developments and demand for information implies *the need for continuous upgrading professionals: 'lifelong learning'* (Molenar, 2006).

Organisations going virtual (Molen, 2008), this is a trend in the industry but professionals should be appropriately trained for performing in these virtual organizations.

Staff should be appropriately prepared for performance in the new digital environment (Miskovski et al., 2009). All employees should be fully PC literate, then educating and training with adequate trainings for using graphical applications and more advanced software application like GIS tools for processing graphical data, GIS analyses, topology and quality control.

In parallel with the specific trainings and education of staff additional workshops and seminars could be organized which would present new digital working procedures, increase ICT awareness and illustrate what benefit an organization could gain when working in a new environment. This could result with creation of new innovative products and services and in opening new business opportunities.

5.4. Motivation of staff

Motivation of staff could be related with terms such as: reason, encouragement, enthusiasm, or interest for causing a certain accomplishment or certain performance. Motivators could be anything from reward to coercion. When developing methods for motivation of staff it is good to know there are two kinds of motivation internal and external. Internal are these which are compelled to do something out of pleasure, importance or desire, and external appear when some external factors force the person to do something. Being acquainted with the basics for motivation it would be easier to plan some activities for increasing the motivation at employees side.

In cases of developing and in transition countries employees in cadastral and land registration organizations usually relate motivation with financial issues. One of motivation fact is that when introducing a private geodetic practice, the personal involved in the private companies receives bigger salaries then the state employed personal. This is a risk that should be identified from management side and adequately addressed this problem because large number of skilled and experienced geodetic staff may use the opportunity what private practice is offering and leave the state organizations. This case was evidenced in R. Macedonia.

During the reforms of cadastral organization related projects are in place to support the implementation of these reforms. Capacities from these projects could be used for motivation of the staff. By organizing workshops and seminars where international consultants would be moderators and trainer's staff could learn a lot of new and valuable issues relevant for their every day working activities, which could ease and improve their work.

Motivation could be accomplished if quality and skilled staff is sent on study tours abroad so they could see and learn how their colleagues are performing in other countries. Recommendation could be: educate, train and highly motivate skilled geodetic staff to stay in the cadastral organization.

5.5. Awarding best workers and teams

This is a very effective mechanism which would increase efficiency of the performance of the employee's. Usually the salaries in the land sector are regulated within a certain law or by law, if they do not provide a possibility for awarding, it is recommendable to insert this within the laws or the management should try to find out other possibility for awarding best workers or groups.

Even if this is not feasible then the best workers or groups could be awarded to be a part of some study tours for their specific specialization about their regular work or they could be awarded by sending them to appropriate trainings and educations (CAD or GIS trainings, ICT training / courses etc.). Participating in workshops and seminars is also a possibility. Study tours could also be organized within the organization, by exchanging visits between the local branch offices and the visits to the similar offices in the head office.

5.6. Competition between employees and offices

Competition is extension of the method of motivation. After introduction motivation and awarding practices continuation in this field could be introduction of competition between employees and offices. When the effective employees realize that they could be awarded by giving bigger efforts they will show a good example for the whole working environment and it is more likely that they will transfer this atmosphere to their colleagues and they all together go into competition as a team as a members of one very well performing office. Competition is close related with the awarding, the workers or groups which win in this competitions should be appropriately and periodically be awarded.

5.7. Straightening of individuals and individuals within a group/team work

Straightening of individuals and individuals within a group or a team could already be accomplished as a result of higher mentioned tools for building the capacities. Further straightening could be realized by organizing workshops for different level of staff. These workshops could be organized with the capacities within the ongoing projects, financial resources and international consultants with appropriate experience could execute these events. Team building activities realized via workshops and associated events is a recommendable practice. Another good practice is by improving the management, and management skills would increase the overall reputation of the organization.

5.8. Customer orientation

Once the organization recognize transformation towards customer orientation as a strategic goal and identification and meeting the ‘user requirements’ as a critical success factor, then this should be appropriately described and explained to all level of staff and implemented in every day working activities. When the employees realize that they are also users – internal users – and when organization is allocating resources for analyses and meeting internal user requirements, then accomplishment of this stage is more feasible. Then the staff better understands the customer orientation way of working, learn how to treat and cooperate with external users and they see more clearly the benefit from this kind of performing.

5.9. Awareness of employees of their contribution in further development of an organization

When some if the higher mentioned issues are developed and in place, and after the results of improved efficient performance are presented via measurable performance indicators on organizational and department level, then the employee realize that his good work contributes to the overall improved situation. They are more aware of their contribution in the current and future development of an organization and which gives them confidence to continue with their good work with continuous improvement. In this state the employees have a pleasant feeling of their accomplishment and contribution and next stage would be that they become more

innovative and think about new more integrated way of work and new innovative products and services.

5.10. Defining expectations from employee's if all this is accomplished

If an employer is allocating capacities and resource for building the capacities at individual level it should be also very clear to the employee's that in return it is expected from them to give a feedback in more effective and efficient performance. This could be achieved by organizing an informal meetings in pleasant atmosphere (joint coffee break for ex.) where employee's talk free and open with their managers and express their opinions what technological, organizational or motivation aspects which could improve their working conditions but also they would be asked from their side to define what could be expected from them if their requirements are accomplished. By implementing this practice they will respect and be more aware that organization is investing the building of the capacities at individual level.

6. CONCLUSIONS AND RECOMMENDATIONS

This study presents an overview of some trends and present activities within the cadastral and land registration organization in the developing and in transition countries. It underlines the importance of recognition and adoption of customer orientation in the performance of these organizations and presents some general issues, guidelines about how and for which purposes analyses of the users requirements could be performed. Results from these analyses should be used as a basics when further business and ICT strategies are developed and implemented. These strategies and the strategy for building the capacities should be in alignment. Important issues for the human resource development are appropriately addressed within this study and it is recommendable that these aspects are present in the strategy for building the capacities of a particular cadastral and land registration organization.

Finally this paper argues that skilled, experienced and motivated individuals are the fundament for prosperity and continues growth of an organization. Because of the specific nature of the cadastral and land registration organizations and importance of having skilled and experienced professionals from cadastral, legal, ICT and associated domains in house. It is recommendable via different methods and mechanisms, management to find out way and resources to keep and motivate them to stay for sustainable development of these organizations.

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Dimo Todorovski holds a diploma as a surveying engineer of the Faculty for Civil Engineering, at the University of Kiril and Metodij, in Skopje, Republic of Macedonia and obtains MSc degree in Geo-Information Management at International Institute for Geo-Information Sciences and Earth Observation ITC, in Enschede, the Netherlands in 2006. He is a head of digitizing department, Sector for digitizing of analogue maps at the Agency for real estate cadastre, R. Macedonia, and has a practical experience in fields of surveying, digital mapping, Cadastral Information Systems development, ICT and ICT Strategies. He is a Macedonian delegate of FIG Commission 7 and from September 2008 President of: Mak Holl Nuffic Alumni Association, association of Macedonian students which studied in the Netherlands educational institutions.

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