

# Analyses of user requirements - the first step towards Strategic Integration of Surveying Services

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## Introduction

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).

- meeting user requirements - considered as 'critical succes factor'



## Identify current and possible future Users

External users  
perspective:

who are the users;  
how are they using  
products/services;  
for which purposes

Internal users  
perspective:

who and how  
is producing,  
creating  
products/services



## Lists of External Users

- Ministry of transport and communications
- Ministri of agriculture, forestry and watersupply
- State statistic office
- Central registry of R.Macedonia
- Academia
- Municipality of city of Skopje
- Real Estate Aegncies
- Notaries
- Utility companies



## Lists of Internal Users - SAGW

- top management of SAGW
- project managers
- sectors managers of SAGW
- managers of local cadastral offices
- IT and business staff
- staff involved in creation/production of digital data, products



## Interviews internal users:

- strong points in SAGW performance
- weak Points in SAGW performance
- desired future situation for SAGW from:
  - business and
  - ICT perspective



## Interviews external users:

- their core business
- ICT strategy/policy
- links for data sharing/exchange; data modeling
- usage of www
- most used products/services from SAGW
- availability/accessibility of (digital) data within SAGW
- response time
- after sales support
- how to improve SAGW performance
- online access topics



## Methodology

- perform interviews based on questionnaires ('template')
- analyse the findings from the interviews and questionnaires
- sent the reports for revision to and ask for approval from interviewed persons
- receive the approval from interviewed, and agreement on the findings in the reports



## Analyses of user Requirements

- method of comparing the answers - result:
  - list of user requirement
- SWOT analyses - result:
  - SWOT matrixes



## User Requirements

- Customer orientation
- Marketing mechanisms
- ICT department - skilled ICT staff
- Digital products/services and delivery
- Develop *updating procedures* of digital graphical data in parallel with conversion of analogue data in digital



## User Requirements

- Remote access to the DB
- Web based interface
- e-conveyancing,
- Digital data catalogue, including metadata
- Introduction of DB concepts and adaptation to working operations
- Test the functionality of the e-Cadastre system



## User Requirements

- Work on development of integrated system
- Coordination and cooperation between data producers within organisation
- Involve users in development of data, products and services, processes and system specifications,
- Introduction and implementation of workflow management



## User Requirements

- Digitalisation of analogue maps could be outsourced, new law provides such an opportunity
- Development and standardisation of *automated links* for sharing data or exchanging geo-information with other organisations,
- Data protection - underestimated element! CSF
- Improvement registration apartments, through developed simple mechanisms for massive registration (currently 60% of the apartments are not registered in the REC register)



## User Requirements

- Application of new technologies and standards more from economical than from technical perspective
- Keep and use the 'cadastral parcel number' as key parcel identifier or unique parcel reference number, apart from it: unique building identifier, apartment identifier, 'common area' or known area name identifier, right identifier and subject identifier,
- include scanned cadastral maps as a separate layer in the GIS of SAGW



## User Requirements

- when data are standardised, it is easier to provide tailor made products
- Guarantee the delivery time
- Develop and use new developed simplified registration services,
- Conditions about use and price should be clearly stated and shown to the customer
- Copyrights,
- Include value of real estate it into REC register
- Development of E-payment mechanisms.



## Conclusions

*meeting user requirements  
- a critical succes factor -  
is becoming bigger challenge for all businesses  
(Surveying and Cadastre domain included)*

*Learn from the users what to do and how to it.*



thank you for your  
attention

