Tallinn University of Technology

Faculty of Information Technology

PROJECT INFORMATION SYSTEM FOR ESTATE DEVELOPERS

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xxxxxIAPM

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Content

1. Background

The project is executed to model and build an information system for estate developers allowing executing, accepting and monitoring funding for projects aiming either renovating existing property or build a new one. This is a supporting activity for our primary business of renting out offices and apartments.

The estate developer has quite a big set of properties all over Germany and the number of objects is approximately 1000. Some of them require renovations, others do require complete rebuilding and sometimes we do buy objects aiming to fund such activities to make the property ready to be rented out.

The company has approximately 50 branches in majour cities and in some, very big cities like Berlin, several offices. Each office is responsible for their territory and works directly with construction companies and subcontractors, although for very big projects or similar projects the central office should be involved to get a sensible pricing.

Currently the process of funding is not transparent enough to see whether we have spent more than it was planned, where we do have delays and who actually approved the renovation budget. So we miss both the project level view (authorisation) and the general perspective.

The biggest problem funding estate renovation are constant changes. During the work it can be discovered that some elements of construction need more work (bad walls, leaking roof etc). Besides we want to avoid problems that ENRON has faced, when actual loss has been hidden from company owners till the very last moment. So in the process of accepting the renovation managers from different levels are normally involved, although there are different levels of accept: if the required funding is less that 10 000 EUR then local branch manager can accept it, if the required amount is more than 1 000 000 EUR then only the CFO should set the final decision: accept or reject.

The actual figures should be read by project from the current ERP system for consolidation, which is OCRA.

2. Project goals

A. Provide an authorization hierarchy.
    a. We do need to define levels of authorisation required per funding dependent on office location, so the funding will be accepted or rejected on the predefined level of authority and connect this to projects
    b. Follow this process, so it will be clear who is responsible for executing, tracking and completing each project

B. Provide the general transparency
    a. Each project should be tracked, so we would have a budget, adjustments, forecasts during execution in case of any extra costs involved and actual cost closing the project so we can learn for next process budgeting
    b. We should have a set of reports producing a general view on how we as a company are doing by areas, project types, expenses involved etc

C. Provide other build in checks and extra rules
    a. Avoid miscalculation of budget
    b. Avoid miscalculation of VAT
    c. Calculate other key figures required by central office

D. We do need to make the new information system in place by the end of Q2 investing approximately 120 000 EUR into building such

3. Expected results

<u>Final result:</u>

- A web based information system located on the company internal server with a possibility to enter projects, authorise those and derive reports

Intermediate or other deliveries

- Architecture high and low level documentation
- Database dictionary
- Software code with comment
  Note: Code will be property of the software vendor although the project owner can still develop it further independently
- Manuals

4. Restrictions and constraints

The system will be available only if you are logged into the corporate network
The first release will not allow you forming ad hoc reports, i.e. we will use a fixed set of reports, which will only depend on the open dialog parameters (company, period to derive data for) and will not be changeable: formulae, layout etc

The system will allow up to 10 levels of authorisation and will be able to handle up to 10 000 projects with an acceptant performance (open a project: up to 1 minute, generate any report – no more than 3 minutes for a report of no more than 300 lines)

The first release will be available only using IE, Chrome, Safari or Firefox and will not be available for mobile platforms except iPad.

5. Target groups, stakeholders

	How they are affected	How they affect the project	Benefits
Project sponsor – central office	They will be responsible for more projects. They have to accept each project within one day or contact the project owner (instead of reviewing projects monthly)	They should provide rules, checks and reporting package (both layout and calculations)	Better transparency of individual projects and reports from the general level
Users in branches	They will have to enter more data		The project allows them to delegate the responsibility to the central office
IT department	They will have to administrate 1. New web site 2. Infrastructure allowing accessing corporate net per branch	Define minimum/maximum requirement on hardware and bandwidth	(negative) – more work required on every day basis

6. Assumptions, dependencies and resources

Role	Assigned person	Responsibility area
Project Manager	Jan-Erik Bladh	• Functional specifications • Design of reporting packages • UAT
Scrum master	Deniss Kumlander	• Creation of the project plan and schedule including iterations • Meetings • Tracking the schedule and bridging between project owners and dev
Developer	Andy Creig Norma Armstrong Neil Chang	Development of software and hardware implementation; support during the beta and other kind of testing
Translator	External: ”All ling” company	Translation of the system to German language and verification of English language (UK)
Testers	Inno Baranov Dave Cross	System in-depth testing on all stages
OCRA tech consultant	Hilke Crantz	Building a bridge between OCRA and the new system

- Project development will require
  - Hardware:
    - Internal development server
    - Isolated test environment available for all branches (which will be also host the production environment later)

        - ❖ Internet connection and VPN system in place for all branches
        - ❖ At least 1 iPad

    - Software
        - ❖ Additional 3 licenses of Visual Studio 2010
        - ❖ VMWare licences to host virtual images
        - ❖ Additional ORACLE licenses

- Software will be developed following best agile practices
- Software should use banking rounding procedure calculating
- Software will be documented following customer company internal standards Rx12002 and Rx12003
- Testing should be conducted accordingly to IEEE 829 standard (see: http://en.wikipedia.org/wiki/IEEE_829)

7. Risks

- ❖ The schedule is very tide – we have no lag between the estimated ERD and required completion date (end of 2011-Q2). Risk: we can be late. Probability: 15%
- ❖ Dependency on the ERP system. Risk: The bridge will either not be delivered on time or will require additional specification, development etc. Probability: 5%
- ❖ Reporting package spec will not be delivered on time due high load of customer executives. Probability: 5%

8. Project estimated cost

The total project estimated cost is 110 000 EUR including

1. Software package – 90 000EUR
    a. Architecture, consulting: 25 000 EUR
    b. Projects package: 37 000 EUR
    c. Reporting package: 28 000 EUR

2. Hardware required as an infrastructure for the new web based project environment – 20 000 EUR – central office.
   Note: Other hardware required or each branch is not included into the total and should be purchased by branches independently.

Additional associated cost: Training session for all branches in one place. Estimated cost: 10 000 EUR + 1 000 EUR per branch member participating in the event. The event is planned to be held in Postdam, 2011-06-31, Meriton hotel.

9. Milestones

Deadline	Name
2011-03-12	Decide on the project form layout
2011-04-12	Final decision on required reports
2011-04-21	Development completed on the project form including input of adjustments, forecast, actual
2011-05-22	Development completed for reporting packages; Code freeze
2011-06-03	Testing completed; UI freeze
2011-06-12	Translation completed
2011-06-25	Beta testing and UAT completed
2011-06-30	ERD – release date.