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### Requirements Management and its Application to the Corporate Website of the University

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#### Abstract

Requirements management understood as recording and analysis of the claims made by the stakeholders as well as the interaction with them is essential to maintain the quality of the project. The effective requirements management involves their collection, classification, and prioritization, analysis, setting the objectives to meet such requirements, and storing the information on them.

The paper reviews the research on the requirements management. The process can apply to different fields. For its effective functioning it is necessary to develop the requirements management system which should verify and analyze the requirements entering it. The work examines the construction features of this system and focuses on the specific management of the requirements for the corporate websites of universities.

*Keywords:* Requirements, requirements management, websites of universities;

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#### 1. Introduction

For the effective implementation of the requirements they should be managed. Requirements management is the process involving their identification, detection, documentation, analysis, tracing and prioritizing. It also means getting the agreement on the requirements, and then managing changes and notification of the stakeholders [3].

#### 2. Management of the requirements

Management of the requirements for a corporate website is a continuous process that is active during the life cycle of the product. Figure 1 visualizes it.

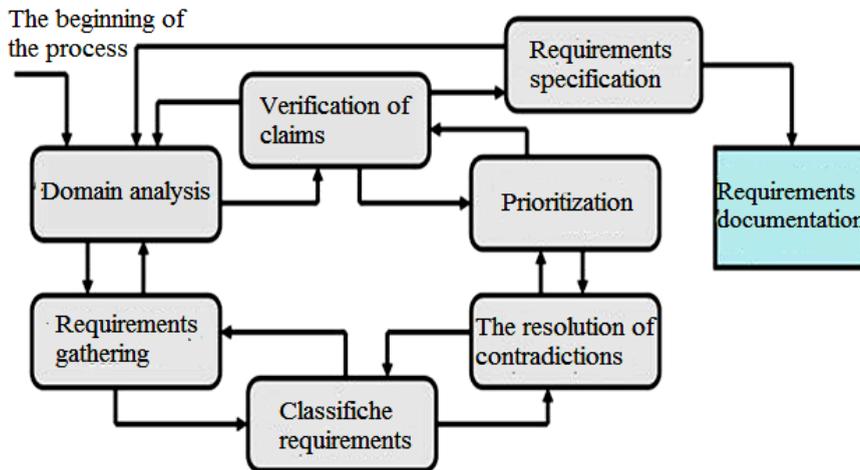


Fig.1 Management of the requirements for a corporate website

It is natural that not all requirements must be met because the requirements may contradict with each other. This requires analysts who determine the feasibility of the requirement. Also, due to the fact that the requirements are irregular to arrive one may receive a large number of requirements in a short period of time, and the team won't have time to manage them at once. Therefore, it is necessary to classify the requirements by importance, i.e. to prioritize them.

When taking the requirements into account, one must be sure to provide a link to the requirements source. The source can refer to some documents, link to a website, etc. But the storage of the source document in the system as well as storing the specific fragment of a text from which the request originated, though helpful, is not a mandatory service. The reasons for this are quite obvious:

- most of the documents may be not in the electronic form;
- the requirements obtained directly from electronic documents are usually few;
- each system typically supports only few formats for the electronic submission of documents which the manufacturer considers to be the most common;
- there is the incompatibility issue associated with the diverse sources of the requirements.

Dependency tracking among the requirements, on the contrary, is essential and allows one to monitor their development, transformation into the project design and implementation (either refusal or a neglect in run) while system is being developed. The development here refers to the creation of some requirements on the basis of others. For example, the repeated and unstructured requests made by many users can be transformed into formal system requirements that are structured according to the type. It results in both their ordering and qualitative change. For instance, the requirement for convenience can make one formulate the requirement for using a particular interface standard and the intuitiveness of the support can shape the requirements for the development tools. Naturally, such requirements processing means making a decision, so one should specify the source of the requirements.

Requirements management makes it necessary to track the number of requirements having different stage of implementation. This will enable one to control the requirements flow by changing the level of filtering requirements. Such measures will reduce the likelihood of a too heavy workload of the development team, or lack of load. An example of tracking the allocation of requirements at different stages of implementation is presented on Figure 2.

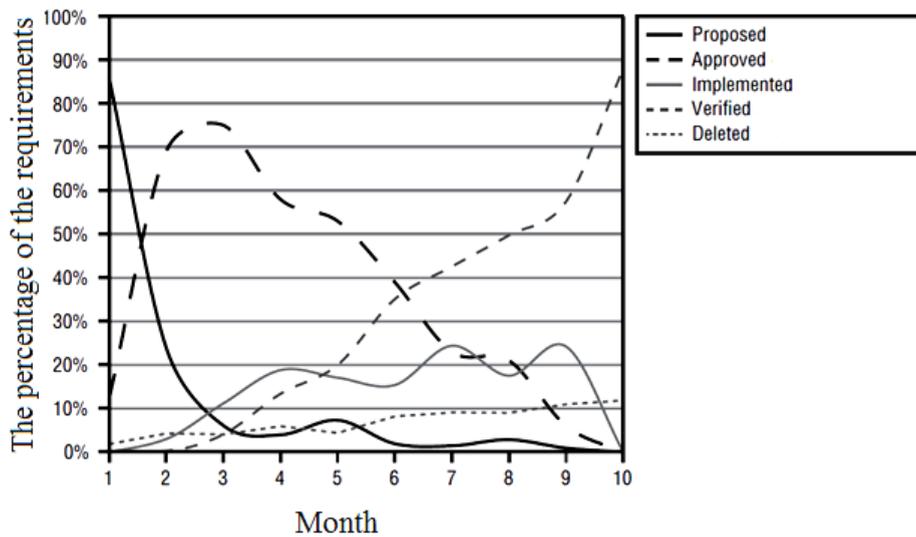


Fig.2 Tracking the allocation of requirements at different stages of implementation

The University website is a corporate portal that should perform many functions, such as providing applicants with the information, posting the contact information on all departments of the University, displaying the class schedules [2].

The University website is available for numerous users that can be categorized, for example, into teachers, or full-time students. Each user has his or her own information needs that must be met. A site team needs to gather and record the requirements for the site, and to adjust those areas of the site which are subject to change to the users' requirements [4, 5].

The effective management of the requirements for the site is impossible without establishing a communication channel between users and developers. It can be typified by a template of the requirement application, the email correspondence, phone calls, or the direct contact with the developers. Thus, having the channel for the interaction in place, the corporate website of the University becomes a system regulated by the feedback [1].

## Conclusion

Consequently, the management of the requirements for the corporate website of the University will meet the information needs of each site users' category more effectively. Currently such widespread systems of requirements management as IBM RationalRequisitePro, RedMine, Telelogic DOORS, SybasePowerDesigner and BorlandCaliberRM are used.

## References

1. Ahrendt, W.R., Taplin, J.F. (1951). Automatic Feedback Control. New York: McGrawHill Book Co.
3. Levenchuk, A. (2000). Corporate web and its employees. [Available at: <http://www.ibusiness.ru/offline/2000/133/4454.html> [Accessed:17/03/2016].

4. Popov, M. (2000). Climbing the website. [Available at: <http://www.ibusiness.ru/offline/2000/133/4310/.html>][Accessed:22/03/2016].
5. Spiridonova, E.M. (2012). Possible solutions "1C:E-learning" for the organization and conduct of distance and blended learning. *The use of "1C" Technologies for innovative environment creation in business and education*, Vol. 22 (2), p.124-127 [Available at: [http://www.1c.ru/rus/partners/training/edu/theses/files/tom2\\_2015.pdf](http://www.1c.ru/rus/partners/training/edu/theses/files/tom2_2015.pdf)] [Accessed:21/03/2016]