

UNIVERSITY OF TARTU
Institute of Computer Science
Conversion Master in IT

Mari Vaiksaar

**Requirements Management in Off-The-Shelf Software
Implementation Projects: A Case Study in Playtech**

Master's Thesis (15 ECTS)

Supervisor: Fredrik Payman Milani

Tartu 2019

Requirements Management in Off-The-Shelf Software Implementation Projects: A Case Study in Playtech

Abstract:

Requirements management is considered a core competency for delivering quality software solutions. It is also counted among the main causes for project failure. This is true in the context of greenfield development as well as off-the-shelf (OTS) based software solutions. The challenge in OTS software implementation projects today from the software provider's perspective is ensuring successful completion of the solution setup that meets customer needs and satisfies requirements without compromising on delivery time and cost. Today, there is no requirements management approach that would consider the specifics of OTS based software implementation projects from the supplier's perspective and the particularities of the online gambling industry. This thesis addresses the lack of systematic approach to requirements management in OTS based online gambling software context in case company Playtech and attempts to answer the research question of how requirements can be managed when implementing OTS based online gambling solutions. Based on analysis and best practices from background research, a process is suggested for efficient requirements management in OTS gambling software implementation projects. The proposed process incorporates activities that are not present or are present only partially in the current practices, such as needs assessment, requirements management planning, requirements monitoring and controlling, reporting lessons learned and support transition. Alignment between all stakeholders as well as management is required to enable successful establishment of the requirements management process.

Keywords:

Requirements management, off-the-shelf software, online gambling, Playtech

CERCS: P170 Computer science, numerical analysis, systems, control

Nõuete haldus valmistarkvara rakendusprojektides: Playtechi juhtum

Lühikokkuvõte:

Nõuete haldust peetakse kvaliteetsete tarkvaralahenduste pakkumisel üheks põhipädevuseks. Samas on see ka üks peamisi tarkvaraprojektide ebaõnnestumise põhjuseid. Mõlemad väited kehtivad nii rätsepalahenduste kui valmistarkvara-põhiste lahenduste korral. Tarkvara pakkujate jaoks on väljakutse tagada edukas valmistarkvara rakendusprojektide elluviimine nii, et kõik kliendi vajadused ja nõuded saaksid rahuldatud ja et aja- ja ressursikulu oleks sealjuures võimalikult väike. Tänapäeval ei leidu nõuete haldusele ühtset lähenemist, mis oleks kohandatud valmistarkvara-põhiste rakendusprojektidele tarkvara pakkuja vaatest ning ühtlasi arvestaks interneti hasartmängutööstuse eripäradega. Magistritöö eesmärgiks on täita see tühimik, tuginedes juhtumiuuringule internetipõhist hasartmängutarkvara tootvas ettevõttes Playtech, ning leida vastus küsimusele, kuidas saaks interneti hasartmänguvaldkonnas valmistarkvara-põhistes rakendusprojektides nõudeid hallata. Tuginedes analüüsile ja teaduspõhiste parimatele praktikatele nõuete halduse valdkonnas, pakutakse magistritöös välja protsess nõuete efektiivseks haldamiseks hasartmängu-valmistarkvara rakendusprojektides. Nimetatud protsess hõlmab tegevusi, mis praeguses praktikas puudu või olemas vaid osaliselt, nagu näiteks vajaduste hindamine, nõuete halduse planeerimine, nõuete seire ja kontrollimine, süsteemne vigadest õppimine ja projekti tugivastutuse üleandmine.

Nõuete halduse protsessi eduka juurutamise eelduseks on joondumine kõikide sidusgruppide ning juhtkonnaga.

Võtmesõnad:

Nõuete haldus, valmistarkvara, interneti hasartmängud, Playtech

CERCS: P170 Arvutiteadus, arvanalüüs, süsteemid, juhtimine (automaatjuhtimisteooria)

Non-exclusive licence to reproduce thesis

I, Mari Vaiksaar,

1. herewith grant the University of Tartu a free permit (non-exclusive licence) to

reproduce, for the purpose of preservation, including for the purpose of preservation in the DSspace digital archives until expiry of the term of validity of the copyright

Requirements Management in Off-The-Shelf Software Implementation Projects: A Case Study in Playtech,

supervised by Fredrik Payman Milani, PhD.

2. Making the thesis available to the public is not allowed.

3. I am aware of the fact that the author retains the right referred to in point 1.

4. This is to certify that granting the non-exclusive licence does not infringe the intellectual property rights or rights arising from the Personal Data Protection Act.

Tartu, **9.01.2019**