RELATIONSHIPS AND COLLABORATION BETWEEN SOFTWARE PRODUCT MANAGEMENT AND SOFTWARE PROJECT MANAGEMENT

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ABSTRACT

In this paper, we discussed the collaboration of Software Project Management and Software Product Management, within the software product companies so that we can analyze the dependencies between Software Project and Software Product and the relationships between the project and product managers. The software product is defined on the basis of the market success, meeting the internal business goals and the customer satisfaction. While the software projects are defined based on delivery time, the cost that are incurred from the project development and the quality. Product and project managers are characterized upon their role specific qualifications as well as their positioning within the organizational structure of a software product vendor. The purpose of the research is to provide the software product companies with benchmarking information of the current status of the market in Software Product Management and Software Project Management[1] aspects. The results answer current business issues such as the positioning of the roles of a product manager and a project manager within the company as well as their dependencies in the organizational Structure[2], as they are used in the contemporary market.

Keywords: Software Project Management, Software Product management, Product Manager, Project Manager.

I INTRODUCTION

In the software companies, both the Software project management and Software product management play a vital role in the organization and coordination of the their processes and activities which do not deal with the software product's development but also with the overall company's market strategy, the launch preparation of customer support as well as product, the product portfolio management [3] and communication efforts. The success of combining Software product management and Software project management together depends on the distinct concepts of Software Product and Software Project which are managed by the respective roles. In conceptual model, Software Project Management and Software Product Management are divided into two sub-categories; the project manager and the product manager (these are main managerial roles)[4] and their respective part of control (that is the software project and software product). The model is represented as shown in Fig. 1.
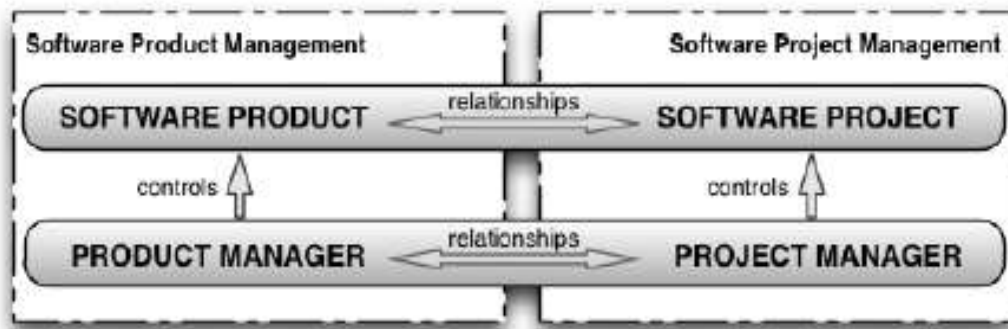
Fig. 1.Software Product Management and Software Project Management Conceptual Model.

In the current paper the following definitions have been constructed and used:

- *Software Product[5]*: A bundle of software functions accessible through a single interface and/or carrying a single name.
- *Software Product Suite*: A set of software products combined under a single name.
- *Software Project[6]*: A release of a software product or part of software product.

II RESEARCH METHODOLOGY

The methodology of this paper is centered around triangulation (as shown in Fig. 2) which is defined as the process in which several methods of the research and the collection of the data are used in such a way that the findings from one type of study can be checked against the findings derived from another type. The main objective of this process is to check the quality of the information that has collected and its reliability and validity.
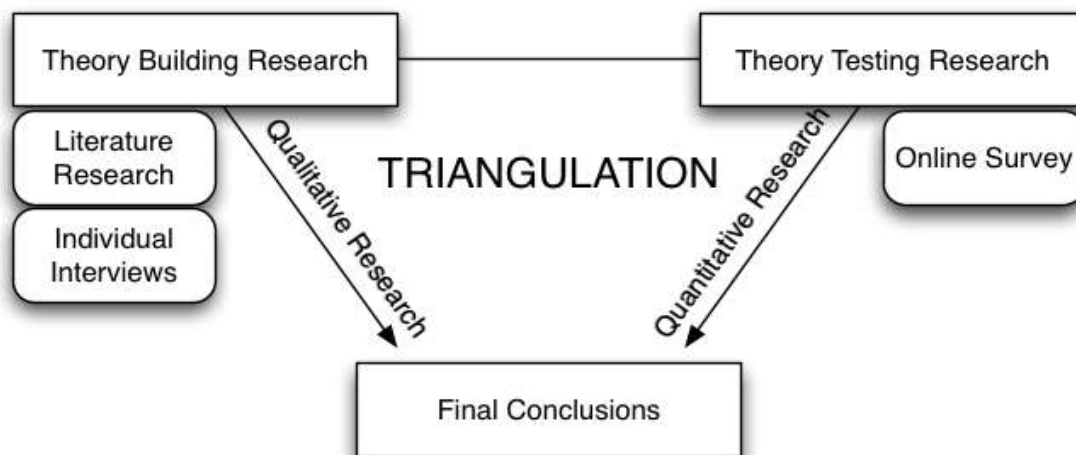
Figure 2: Research Methodology Diagram

III SOFTWARE PROJECT AND SOFTWARE PRODUCT

The software project related activities are concerned with more internal oriented activities such as deliver the projects on time, being within the specified budget, quality requirements etc.

Thus, in the present research the software project scope is defined as:

- Time referring to the delivery time, or in other words to the extent that software product is delivered on time or not.
- Quality referring to the degree the project meets the specified quality standards, delivers workable features and covers all specified product requirements.
- Cost/Budget referring to the financial cost for a product to be completed, or in other words to the degree a product is completed within the specified budget/cost.

And the product scope is defined as being concerned with the:

- Market Success referring to the level of the success of the software product in the specific market segment it is launched.
- Customer Satisfaction referring the to level of satisfaction the customers receive from using the product.
- Business Goals referring to the level of accomplishment of the internal goals related to the product such as performance levels projected sales etc.

IV PRODUCT MANAGERS AND PROJECT MANAGERS

Software Product Manager[7] is the manager responsible for a) the fit of the product with the market, b) the customer satisfaction and c) the internal business goals related to the product. Whereas Software Project Manager is the manager responsible for a) delivering the product in time, b) meeting product quality and c) developing the product within budget.

In order to examine the relationship between product and project managers several aspects that influence their communication and therefore their collaboration should also be taken into consideration. Organizational communication is fundamental not only for the organization as a unity, but also for the different leaders that operate within it.

Role specific qualifications

For the case of product manager position basic role functions include:

- Drive business results
- Ensure market-driven direction
- Guide product fit and function
- Manage multiple priorities

And the main activities of a project manager are:

- Establish plans
- Organize resources
- Set up controls
- Apply innovation for alternative actions

So after defining all the above parts, the conceptual model can be redefined which is shown in Fig. 3.
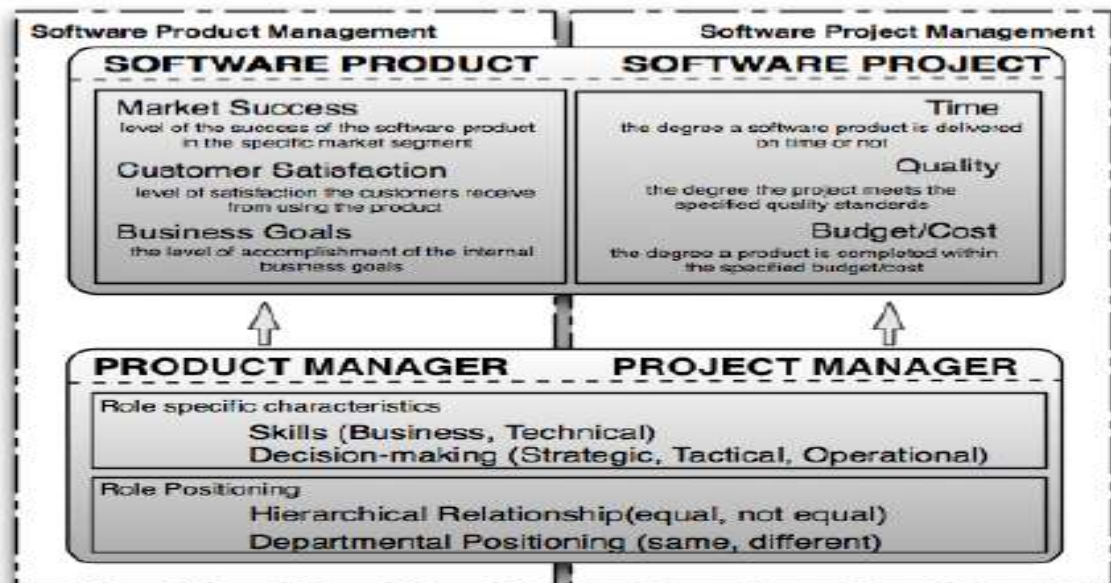
Fig.3. Software Product Management and Software Project Management Conceptual Model – Refined

In order to evaluate the relationship between software product and software project, qualitative data has been gathered from the six independent cases. The respondents were asked to qualify the effect of each one of the three project related (dependent) variables to each one of the three product (independent) variables.

V CONCLUSION

We have identified the relationship between software product and software project and the relationship between product and project managers.

For the first part, this research concluded that the project's quality seems to matter the most for the product's market success and the customer satisfaction. For the achievement of internal business goals, time and cost seem to be more influential but no significant relationship was proven. For the second part, the relationship between product and project managers was described based on two aspects; the specific role qualifications and the role positioning. As far as the first aspect is concerned, product managers were proved to be more business oriented and less technical and at the same time they are more involved into strategic and tactical decision making. Software project managers, on the other hand, are more technical oriented and less business and they are more involved into the operational and strategic decision-making.

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