PMOMM:
The Project Management Office Maturity Model

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ABSTRACT

The Project Management Office (PMO) is a relatively new type of organizational unit, responsible for supervising internal projects. However, PMOs do not always create and deliver the necessary knowledge for the decisional process. This paper proposes a solution to this problem through the literature-based Project Management Office Maturity Model (PMOMM) that evaluates whether if PMO related processes are implemented and supported by technology. PMOMM consists of 30 main project management processes, organized into 7 capability areas. In order to assess the maturity level of a PMO, a maturity assessment questionnaire was developed. Then, 10 case studies were conducted in which the PMOs of the corresponding organizations were evaluated against PMOMM. The results of the analysis were tested for validity and confirmed by the case study respondents. PMOMM received positive feedback from these experts, stating that the PMOMM represents an easy, yet detailed checklist for organizations to determine the current situation of their PMO.

KEYWORDS

Business Intelligence, Maturity Modeling, Multiple-Case Study, Organizational Benchmark, Performance Management, Project Management Office, Project Management Processes

1. INTRODUCTION AND PROBLEM STATEMENT

At present moment, nearly every company or organization is part of a dynamic economic environment, generally referred to as world economy or global economy. This economy, which is based on the economies of local societies, is characterized by a global distribution of products and services. For organizations to survive, they must adapt themselves to the globalization aspect, by means of gaining and sustaining competitive advantage. To achieve this, they must gather and process very rapidly information (Choo, 1995). Both tasks involve difficulty, as organizations often find themselves facing with uncertainty. To face this uncertainty, Kaye (1996) suggests that “organizations must collect, process, use, and communicate information, both external and internal, in order to plan, operate and take decisions”.

The challenge of the global economy has meant that organizations need to revise the managerial decision process. This process is considered to be the most fundamental part of any organization, and has a direct impact on business operations. The quality and speed of the decisional process have been researched by various scholars (Forbes, 2005; Perlow, Okhuysen, & Repenning, 2002). To deliver on these attributes, there is a trend toward implementing a Project Management Office (PMO) within the organization. A PMO is described as “an organizational unit to centralize and coordinate the management of projects under its domain” (Committee, 2004). It is argued that the PMO exists
in the broader context of project management, described as a “dynamic decision process, whereby a business’s list of active new product […] projects is constantly up-dated and revised” (Cooper et al., 2001).

According to PMBOK (Committee, 2004), the PMO is responsible with: coordination of human resources across all projects, coordination of communications, quality standards and risk assurance activities, monitor project schedule, monitor project budget, and monitor overall risk and coordinate. Hence, the primary aspect of this organizational unit is to manage information that can be directly related to these features. In most scenarios, all the relevant information that managers need to make good decisions is not readily accessible, because of the lack of appropriate technologies to give the available information a usable form (Monahan, 2000). Business Intelligence (BI) technologies come to support the decision process regarding the management of projects, by means of gathering, analyzing and disseminating relevant information for various operations. These processes and the way in which they are employed are closely related to the maturity of the PMO.

Before organizations can undertake any initiative to improve the processes of a PMO, they must gain an understanding of its current state. Here is where maturity models come in place, by assessing an organization’s PMO maturity level and identifying areas of improvement. The following statement best describes the idea behind maturity models: “the basic concept of all maturity models is based on the fact that things change over time and that most of these changes can be predicted and regulated” (Rajterić, 2010). Organizations can position their processes on the maturity scale by using a maturity model, which is put to practice through the use of an assessment instrument.

Although project management is a mature field of study, there is no maturity model to evaluate if the processes specific for a PMO are implemented and supported by technology. Therefore, this paper proposes a solution to the problem mentioned above by developing a Project Management Office Maturity Model (PMOMM), which provides an answer to the following research question:

*How can the maturity of a PMO be assessed and acted upon?*

### 2. RESEARCH APPROACH

The method selected in conducting this research is design science approach (Hevner et al., 2004). The case of design science as an Information Systems (IS) research paradigm is argued by March and Smith (1995). The authors state that the method contributes to the applicability of IS research by better addressing the problems faced by Information Systems (IS) practitioners.

The research process follows the research steps of design cycle defined by Vaishnavi and Kuechler (2007): awareness of problem, development, evaluation, and conclusion. Awareness of the problem was raised from conducting literature review and discussing with project management practitioners and experts. Based on these sources, the problem, which was described in the previous section, was identified. As a solution to this problem, this paper aims at creating a maturity model (PMOMM) and corresponding assessment instrument, which can help organizations in identifying the PMO current maturity level and take actions upon it. The finding from the literature review and expert interviews led to identifying the components of the maturity model and formulating the initial version of the model and the assessment questionnaire. To evaluate the PMOMM, we adopted multiple-case study design (Yin, 2009). Ten organizations belonging to the financial, services, and technology sector participated in this research. The respondents hold important position within the organization, from senior project manager, to head of global PMO. Each organization has more than 10.000 employees. Analysis of the data collected led to the formulation of an organizational benchmark, and the results of the research were tested for validity by conducting interviews with the same respondents from the case studies. In the final step, results are summarized, conclusions are drawn, and suggestions for further research are made.
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