



29th World Congress International Project Management Association (IPMA) 2015, IPMA WC 2015, 28-30 September – 1 October 2015, Westin Playa Bonita, Panama

Complexity twice: Multi-project environment in education and shareholders with dynamic agendas - achieving mature decisions and project/ portfolio success.

Thomas Baumann^{a*}, Maximilin Doyen^a, Alice Swanger^b, Deborah Bayer^c, Amy Cell^d,
Sophie Stepke^e

^a*Orbitak International LLC, 31700 Telegraph Road, Bingham Farms, MI 48025 – USA,*

^b*Oakland County Workforce Development Board, 2100 Pontiac Lake Rd, Waterford, MI 48328 USA*

^c*Manufacturing, and Industrial Technology, Oakland Community College, 2900 Featherstone Rd, Auburn Hills, MI 48326 USA*

^d*Talent Enhancement, Michigan Economic Development Corporation, 300 N. Washington Square, Lansing, MI 48913, USA*

^e*ZF Group North American Operations, 15811 Centennial Drive, Northville/MI 48168/USA*

Abstract

Important in decision-making processes in a portfolio setting are the targets of each project and the consequences for portfolio success. Increase in a portfolio's complexity requires understanding of decision-making mechanisms, elements of complex projects and their impact on the portfolio. The involvement of international stakeholders adds complexity. The paper uses a real-world example (Competence Based Dual Education in Michigan) where this complexity exists and a mature decision-making process from industry, academia, and government stakeholders was successfully implemented. This paper will describe how models of decision making were considered, combined with models of complexity, transferred into applications, and facilitated success.

© 2016 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of IPMA WC 2015.

Keywords: decision making; shareholders.

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000 .

E-mail address: Thomas.Baumann@ORBITAK-INTERNATIONAL.COM

1. Introduction

Project management has become more complicated and complex (HAA, 2009). This is most evident when political implications impact core missions of multiple programs where success is critical for competitive survival, or when there are stakeholders from multiple organizations and the projects are highly visible.

Enterprises are often “project driven” and must find a way to manage parallel projects.¹ (HAY, 2010;4). The way these organizations can master such “multi-project” settings can be a crucial competitive advantage² as the projects are often using the same pool of resources. Multi-project-management (MPM) maturity is one key for business success and requires transferring MPM research results into “real world” operations.³

Educational institutions are facing similar situations. Multiple projects are funded from different sponsors, executed in partnership with different customers, implemented simultaneously and demand access to the same limited resources. Educational targets, variations in capability, funding and different decision-making approaches combine to create a highly complex and complicated PM environment.

In these settings a mature understanding about the MPM principles is needed to achieve an agreeable decision about what type of MPM is needed and accepted for each project and the entire portfolio.

2. MAT2- Description

The Michigan 2013/2014 Economic Summits were focused on the growing skills gap and the current disconnect between industry demand and the state’s ability to meet both current and future talent needs. Nationwide skills gap studies indicate that 67% of manufacturers are currently experiencing “a moderate to severe shortage of available, qualified workers” (MIR, 2012; 5). Industry faces the aging of their current workforce and expects a severe labor crisis when this group retires [SVL, 2009]. Additionally, this labor shortage is forcing employers to place engineers in technician roles, resulting in higher labor, recruitment, and turnover costs (ROY, 2000). As a result, Governor Rick Snyder created the Department of Talent and Economic Development (TED) and expressed the importance for Michigan’s⁴ leadership in talent development.

The Michigan Economic Development Corporation (MEDC) brought together a group of government, industry, and education leaders to address the current skills gap and to develop and implement the Michigan Advanced Technician Training (MAT²) system. The State government / MEDC provided the framework and political support to standardize, manage, and maintain the state-wide dual education system. Industry partners defined content and direction of MAT² programs, hiring and educating students. Education partners (community colleges) provided the competency-based education and training for students and for companies as trainers / employers.

The agreed vision was to establish a competency-based dual education system, train globally competitive employees, and to reduce the current/future skills gap (BHS, 2013), (BHS, 2014). After launching the first program (Mechatronics) in 2013, additional occupations were launched: Technical Product Design and IT-Technician in 2014 and Computer Numeric Control (CNC) in 2015. The MAT² system grew from a single program to a portfolio of complex, parallel programs, requiring a smart MPM strategy.

¹ In average approx. 40 percent of the employees are assigned to project work in their companies.

²See: (MIP, 2005, S. 181)

³See: (MON, 2009, p. 2); (ACA, 2004, p. 7); (FRI, et al. 2008, p. 1, 7), (PEN, 2005, S. 13).

⁴<http://michigan.gov/snyder/0,4668,7-277--349878--,00.html>

⁵ See: (HIL, 2002,23)

⁶ e.g. corporate level portfolio, See: (ICB, p.13)

Download English Version:

<https://daneshyari.com/en/article/1107521>

Download Persian Version:

<https://daneshyari.com/article/1107521>

[Daneshyari.com](https://daneshyari.com)