

Lean Management: A Case of a Malaysian Multi-Campus University

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Abstract—The reduction in funding for Malaysia’s public Higher Education Institutions requires Malaysian public universities to implement lean management strategies to optimize available resources. This paper presents a case study on resources optimization at University Teknologi MARA (UiTM) and its state branch campuses. A qualitative study was conducted across all the campuses and eleven out of twelve campuses responded in 2016. (One of the campuses opted not to be included). Written responses from these campuses were analyzed and categorized into eight waste practice categories for higher education institutions. In total, thirty-five types of waste practice were identified. Actions taken to eliminate each waste practice category were identified and discussed.

Index Terms—Higher Education Institutions, Lean Management, Waste Practices.

I. INTRODUCTION

The world oil price has dropped more than 60% since 2014. As a crude oil producing country, Malaysia’s economy is adversely affected. Therefore, on 19th January 2015, the Malaysian Government announced cut backs in the federal budget¹. Following that, in the 2016 Budget, the Malaysian government further reduced budget allocations for many ministries and agencies including, that for the Ministry of Higher Education (MOHE) which saw a 9.794% reduction from RM100,263,400 to RM 90,443,400². This resulted in the reduction of budget allocation for Malaysian public universities.

Universiti Teknologi MARA (UiTM) is the largest university in Malaysia. It has 12 state branch campuses in Malaysia. Furthermore, there are 21 satellite campuses under nine of the state branch campuses. The funding for each state branch campus is determined by the main campus located in Shah Alam, Selangor, which received an annual budget from MOHE.

Lean Management is the key to optimization when resources are limited. Prudent management of available resources and the generation of income from these resources through various measures must now be made a priority. The

most haves are what UiTM should strive for, leaving the nice to haves for better days. Prior to the implementation of Lean Management, a study focusing on identifying wasteful practices with the system of UiTM state campuses is essential. With its budget reduced by 23.72% or from RM2,618 million in 2015 to 1,997 million in 2016³, UiTM like its 19 other counterparts will have to be innovative and creative in the management of its funds to remain competitive. The study thus aims to (1) identify wasteful practices and (2) explore actions taken to eliminate the wastage.

II. REVIEW OF RELATED LITERATURE

Lean Management is a tested and proven tool for achieving significant performance improvements by delivering higher quality at lower costs^{4,5}. As such, Blazer⁶ suggested Lean Management principles and practices be adopted by Higher Education Institutions (HEI). In response to the 2008 financial crisis, Lean Management was adopted in HEI mainly to reduce practices leading to wastage, streamline processes making them more efficient and re-engage a workforce fatigued⁷ from the financial crisis (p6). In education, the application of Lean Management principle has significantly improved colleges’ and universities’ critical services and processes⁵.

HEI had focused on teaching and conducting research for centuries⁸. For last 2 decades, HEI has changed fundamentally due to the increase in the number of students^{9,10}, a higher expectation from the public¹⁰, increasing demand on the quality of education from parents¹⁰, the emphasis on the position of institutions in the world ranking¹⁰, the change in the demography of students¹⁰, increasing costs¹⁰, the reduction of public funding¹⁰, the change of funding structure for expansion and competition from other HEI^{9,10} and the globalization of HEI and research^{9,10}. The increasing intake of students had transformed the higher education from an exclusive to mass offering. Universities are competing for international students and staff resulting from the globalization of higher education. To be more efficient, universities need to improve their operations management^{9,10}. To meet higher expectations with constant budget cuts, HEI have adopted the lean service concept to stay competitive¹¹.

The main focus of the Lean Management concept is to identify and eliminate wastes. Womack and Jones⁴ define waste as a human activity that absorbs resources with no added value. Before waste can be removed, we must first recognize the types of waste in the organization’s processes and understand the causes. After confirming that it has no more added values, it should be permanently removed¹². In the manufacturing environment, the generic wastes were identified and classified. Duffy and Wong¹³ identified eight categories of waste, namely, excess motion, excess transportation, underutilized people, unprocessed inventories,

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