

LEAN IN PRACTICE :

Lessons from KTPM ALOR SETAR

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Established in September 2003, Kolej Poly-Tech Mara (KPTM) previously known as Kolej Yayasan Pelajaran Mara (KYPM), is one of the largest private higher education institutions (Bumiputera) in Malaysia with around 17,600 students in nine campuses.

KPTM offered higher education learning in several fields such as Information Technology, Computer Science, Social Science, Health Science, Accounting, Business Management, Engineering, Human Science and Bio-Industry.

KPTM, managed by Kolej Poly-Tech Mara Sdn. Bhd., one of Majlis Amanah Rakyat (MARA)'s subsidiaries; currently, has produced more than 32 thousand graduates since its establishment in 2003.

Sustainable operation, viable financial position

Like most organisations and businesses, colleges and universities face a never-ending struggle to deliver valuable educational services while at the same time maintaining a viable financial position.

With the inevitable rise in prices of goods and drop in prices of

knowledge and information, higher education institutions are searching for a way out of the current situation.

A change in the current practice of the institution was very much needed and university administrators, faculty, and staff have a choice of either neglecting or embracing the change. For KPTM, the need to deal with operation management issues and compete in the current market forces with other institution motivate them to walk down the revolutionary path of quality improvement.

So, in 2014, KPTM Alor Setar (KPTMAS) introduced its quality journey with a bang through Lean management. Lean management has received a lot of attention for its achievement in helping organisations obtained dramatic performance improvements by delivering higher quality products or services at a lower cost.

Enchanted by its reputation, many colleges and universities tried to put it into practices and they have met with mixed success. The effort made to dramatically improve colleges and universities were often plateaued after initial benefits or outright failed.

Miraculously, it did not happen to KPTMAS. A staunch support from the management as well as the collective effort of many individuals working in a collaborative way within the institution had made the journey a success.

Several Lean initiatives have been replicated in different units within the campus and two of the projects will be laid out in this article.

Fast Service

The objective of this project is to improve processes in the bill paying system at the invoicing department. The maximum number of days given for completion of an invoice was 14 days but the department needed an average of 16 days to complete the task.

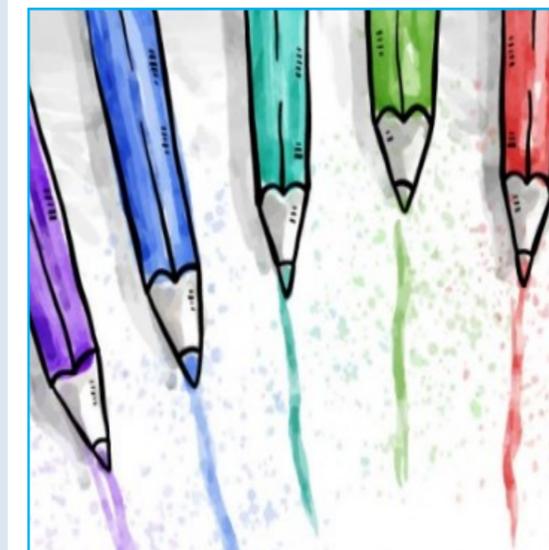
To cut out unnecessary steps from the process, an analysis was done to recognise the non-value added activities in the operation. Prior to Lean, on average, KPTM's staff needed to fill in four forms for finance department's reference and went through nine processes at Finance. Another 10 processes for Admin and HR to record information which then will be put in several different files.

After Lean implementation, staff only need to fill in one form, a combination of all four forms; go through six processes at finance, and another seven processes to record information at HR and Admin.

All information recorded are then kept in one single file. The changes made have eliminated six activities from the current processes, reducing the total cycle time to 15 minutes per unit making it possible to complete invoicing in 12 days, a reduction of 4 days from the average needed before.

Simple Process

Issuance of warning letter at KPTMAS was tedious, time-consuming, impractical and uneconomical. Due



Positive impact of speeding up the issuance of warning letter process

- Non-value added time from 2,915 minutes to 10 minutes;
- Paper was also reduced to nine rims from 70 rims; and
- Cost saving up to RM33,537.40 per year;

to the complicated processes of data recording and waiting for approval from respective units, lecturers spend most of their time completing the issuance of warning letters for students amidst other important activities.

On average, issuance of warning letter took 6 days to be approved and sent to respective individuals i.e. students, parents, mentors, lecturers and departments. KPTMAS also noticed that a lot of money was spent on hard copy of the warning letter. At least five warning letters will be photocopied and sent out.

In normal case, KPTMAS needs to provide five hard copy of warning letter for one students per one course. However, if the student was absent in all five courses, KPTMAS will need to provide 25 warning letters for that particular student.

To cut out on unnecessary waste in the processes, KPTMAS utilised their in-house expertise to develop an IT solution for data communication and recording.

Through this solution, all data were recorded and sent automatically to various units within KPTMAS for approval. Lecturers need to key-in students data only and the rest of the process were automatically updated to other units.

Once confirmation has been received, students, mentor and lecturers will be notified through email or other electronic medium (e.g.: mobile apps) on the issuance. Parents, on the other hand, will received a hard copy of the warning letter to ensure they were well-informed on the issue.

The integration of data through this system has reduced the non-value added time from 2,915 minutes to 10 minutes. Paper was also reduced to nine rims from 70 rims. In total, KPTMAS saved RM33,537.40 per year through this initiative.

Through Lean, KPTMAS manages to demonstrate significant improvement in their processes resulting in better service to students, reduced costs for the institution and provide greater employee ownership over how their work is done.

KPTMAS also saves a lot of resources and allows overburdened employees to redesign their work so that it is more meaningful and satisfying through the elimination of unnecessary steps and activities that add expenses and give no value to the institution.