

## ABSTRACT

This project is concerned about how to apply the lean manufacturing concept to actual production within garment industries. The process will reduce or even eliminate wastes and any non-productive costs involved in the production line. It gives better working process together with improving work environment.

There are many useful tools to eliminate wastes and to advance work disciplines. The first is called "6S" and is being introduced in the garment industry. It results in better work environment, and cleaner and safer workstation. Second, is the "Value Stream Mapping" which is another popular method to identify the draw-back process that slows down the production. The mapping can give clearer status of each station and its current state and then expose the problem area. This will redefine the workflow and also reduce waste to smoothen incoming work flow. Third, is the "Kaizen" application, and this particularly affects work improvement. By using kaizen, issue is detected with corrective action in time. Management can resolve any unnecessary work in process, non-value added, over time, duplicate activities, unbalanced workload, etc. in a timely manner.

This project is the case study from one targeted factory. In the conventional process of sewing, garment is made and sewn one at a time. With new methodology tools such as lean process, sewing can be done in multiple numbers in a very organized way. Cycle production time is measured and WIP is shortened, and this results in better garment delivery. With proven track of production performance of the pilot factory, result is obvious in particular on the shorter lead-time and better flow of work in process.

In summary, if any manufacturer is adapted with change and apply more lean process, then their garment production can be executed within a rapid time frame with smoother flow of work, and perfect garment quality. Bottom line is that it will bring up the business and higher profit margin for the company.