
Preface

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Since the belt conveyer assembly line had been developed and used in Ford's factory 100 years passed. A lot of operation technologies to achieve more effective and flexible assembly operations were developed as the techniques of production and information grew. Now, diversity of production form like as traditional assembly line, lean production, cellular manufacturing, seru production has been widely researched and applied in the past 50 years. Many organisations have applied the new production concepts in their manufacturing and service processes. While traditional assembly line is not a unique choose, cellular manufacturing forms can be designed or converted from job shops, and non-assembly line forms can be used to instead the traditional assembly lines.

We have organised a workshop in Asian Conference of Management Science and Applications (ACMSA2013) in 2013, to provide a forum for exchanging the latest developments in the field of lean and CM/SP. A lot of presentations and discussions have been executed in the workshop. This special issue selects several topics of lean, CM/SP from the workshop, to highlight the diversity in production forms to inquire and answer what form is suitable in the changing market environment.

Celikbilek and Sürer proposed a topic of designing problem in cellular manufacturing system. They used a lot splitting technique to divide a product lot into smaller ones then they can be manufactured in different points in time and dispatched to the customer with different transportation methods in order to achieve optimal total net profit.

Hiroshi et al. discussed how to shorten an assembly line to improve the performance of mixed-model assembly line by using a simple pull-off table. Simulation approach to compare the number of alternative job sequences where the table can be altered with that from the original sequence where the random access buffers such as an automated storage and retrieval system is discussed.

Yu et al. treated a special case in where a conveyer assembly line is converted to a seru production system, so-called line-seru conversion problem. They clarify the

combinatorial complexity of the line-seru conversion with two typical scheduling rules of first come first service (FCFS) and shortest processing time (SPT), and states complexity with FCFS is much more than that with SPT.

We cannot cover all the fields of lean and CM/SP because the capacity of the special issue, but it make a chance to bring researchers and practitioners together to obtain synergy between scientific developments and empirical experiences. We also will make a new special issue on the same topic through the contributions in the workshop of Asian Conference of Management Science and Applications in 2015. We welcome researchers to submit their paper on this topic to the *Asian Journal of Management Science and Applications*.