Divide and Conquer: A Hygienic, Efficient, and Reliable Assembly-Line for Housekeeping

by

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Time: 10:30 am - 11:30 am
Online Session in Blackboard*: Research Seminar by Dr Rowan WANG

*This online session is open to students who registered LGT6111 / 6112 / 6113 / 6114 Research Seminars in Logistics I / II / III / IV. If other PolyU staff and students are interested to attend the captioned seminar, please register at the link https://polyu.hk/SpLQs by 5pm, 21 January 2021.

(Conducted in English)

Abstract:

This work focuses on the hotel housekeeping process. In a field study, a possible channel of disease transmission between consecutive guests in hotel rooms is revealed. In order to prevent the transmission, an innovative assembly-line housekeeping method is developed. To carefully design the assembly-line process, the service time distribution of each housekeeping operational step is characterized using data collected from the practice at hundreds of hotel rooms. An optimization model is proposed to optimize the operation. Through a pilot test, the performance of the new and traditional housekeeping methods are compared. The results show that the assembly-line housekeeping process achieves significant improvement in not only hygienic standards but also labor efficiency and service quality (error rate).

Bio:

Rowan Wang is an Assistant Professor of Operations Management at the Lee Kong Chain School of Business, Singapore Management University (SMU). Rowan's research interests include service and queueing systems, supply chain and inventory management, sharing economy, and socially responsible operations. His work has been published in journals such as Manufacturing & Service Operations Management and Production and Operations Management.

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All PolyU staff and students are welcome!