Innovation is the process of creating new solutions to meet new or existing market requirements. Innovation involves the development of more effective business routines for business management, new production processes for product manufacturing, and improved services to enhance customer satisfaction. Design and production are closely related as the former focuses on planning and the latter deals with execution. From the operational perspective, design involves such activities as anticipating potential problems with the product, the manufacturing process or the service, providing creative solutions, and developing effective processes. Design also involves establishing plans for information flow along supply chains, and planning for shipping activities. In the contemporary manufacturing operating environment, the scope of design also extends to the services associated with the product. Service design refers to the planning and organizing activities to improve the linkage between service providers and customers. The key components of service design include identification of market requirements, specification of service, creation of new services, and/or modification of existing service to meet market needs. To remain competitive, it is essential for firms to adopt innovative approaches to managing service and manufacturing design. This special issue consists of thirteen papers that address the following key topics in innovative management of service and manufacturing design: service design in contemporary business operations, linkages between service design and manufacturing design, and approaches to manage operational processes.

We categorize the papers of this special issue into three sections. The first section deals with service design in contemporary business operations. It consists of one paper using a multi-phased QFD based optimization approach, and four papers using empirical research methods:
• Chowdhury et al.\(^1\) use a multi-phased QFD based optimization approach to sustainable service design.
• Lun et al.\(^2\) examine the influence of organizational capability in innovative business design in the context of intermodal transport operations.
• Shi et al.\(^3\) conduct an empirical study of third-party purchase to investigate emerging value-added service.
• Subramanian et al.\(^4\) study the role of operational capability and competitive market drivers to satisfy customers with innovative service in the context of a budget hotel.
• Yang and Zhao\(^5\) examine how integration – an emerging innovative approach in inter-firm relationship management between vendors and clients in logistics outsourcing relationships – is influenced by environmental uncertainties.

The second section investigates the linkages between service design and manufacturing design via two papers:
• Zhao et al.\(^6\) conduct a comparative study of manufacturing and service firms to examine customer orientation and innovation.
• Zhu et al.\(^7\) examine redesign of service modes for remanufactured products and consider its economic outcomes.

The final section considers approaches to manage operational process and effectiveness of the innovative management task:
• Prajogo\(^8\) investigates the strategic fit between innovation strategies and business environment.
• Jha et al.\(^9\) use a case study to illustrate platform based innovation.
• Lam and Gu\(^10\) develop an innovative market-oriented approach to examine intermodal networks.
• Yang et al.\(^11\) use a frontline employee perspective to investigate new service development from a frontline employee perspective.
• Zhang et al.\(^12\) explore how innovations are developed through services, co-creation with customers and supplier integration.
• Yang et al.\(^13\) use the social exchange theory approach to show the adaptability, openness and innovation orientation are related to the improvement of a buyer-supplier relationship.

References

\(^1\) Chowdhury M.H. and Quaddus M.A. (forthcoming), A multi-phased QFD optimization approach to sustainable service design, *International Journal of Production Economics*

\(^2\) Lun Y.H.V. et al. (forthcoming), Examining the influence of organizational capability in innovative business operations and the mediation of profitability on customer satisfaction: An application in intermodal transport operations in Taiwan, *International Journal of Production Economics*


5 Yang Q. and Zhao Z. (forthcoming), Are logistics outsourcing partners more integrated in a more volatile environment?, *International Journal of Production Economics*


10 Lam J.S.L. and Gu Y. (forthcoming), A market-oriented approach for intermodal network optimization meeting cost, time and environmental requirements, *International Journal of Production Economics*

