

# Project Management for New Sputtering System Development

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## Abstract

The study results an illustration of the project management body of new sputtering system development (NSSD). It is including that the project management (PM) method, with its structured task definition and simulation tools, is generally to use for managing new system development. However, NSSD in some areas of project management is incompletely meets the needs of new production development (NPD) in Industrial 4.0. The paper identifies that more research is required to design the system and lean project management methods, and to clarify which areas in particular they benefit and how to reliably achieve those benefits. Specifically, NSSD is characterized by complex interrelated activities and large uncertainties about precisely which solution path will be taken, such that the full scope of the project can often not be pre-schedule. This is likely to exist for innovation processes such as NPD. For practitioners, the main message is that the PM method provides a basic, but imperfect, tool for controlling and managing NPD. Several locations are identified where further research is required as two items, (1) better understand the causality between factors and project related, and (2) adapt PM methods to better serve the NPD process. The relevance for researchers is that gaps have been identified in the PM method as it is currently applied to NSSD.

## Keywords

New sputtering system, system development, project management, NPD

## Biography

**Yao-Chin Wang** is an Adjunct Assistance Professor, and Director of System Development in the Bay Zu Precision Co., Ltd., Taiwan. He earned B.S. in Electronics Engineering from Chung Yuan Christian University, Taiwan, master degree in Engineering Management from National Cheng Kung University, Taiwan and PhD in Photonics System Engineering from National Chiao Tung University of Taiwan. He has published many international journal and conference papers. His research interests include smart manufacturing, simulation, optimization and scheduling, manufacturing, and lean. He is member of CIEE, TPC, ASME and IEEE.