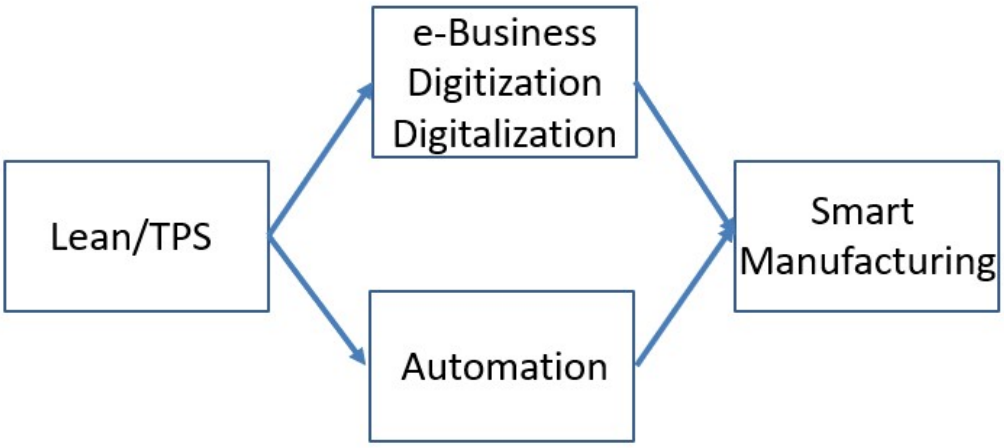
國立清華大學第十屆傑出產學研究獎得獎人簡介

工業工程與工程管理學系 陳建良教授

陳建良教授為本校工業工程系 1984 級系友，取得 University of Wisconsin-Madison 工業工程博士。主要研究與應用領域包括精實生產、智慧製造、資料科學、人工智慧、系統模擬、先進規劃排程等。陳教授帶領團隊應用工業工程理論與技術解決產業界的實務問題，長期與高科技產業包括半導體製造、TFT-LCD 製造、電子組裝、建築、醫院、傳統製鞋、成衣和砂輪等產業進行產學合作，跨足台灣、中國、印度、印尼、越南、泰國、菲律賓、柬埔寨和斐濟等。陳教授曾協助數十家公司，指導執行超過 1,000 項改善專案，節省數億元的生產成本，改善產品品質，縮短製程時間，提升訂單達交率，增加生產效率，以自動化與數位化取代人力因應缺工等具體績效。陳教授引導企業循序漸進推動持續改善，由精實(Lean, Toyota Production System, TPS)合理化紮根減少浪費與提升效率，進一步推動自動化(Automation)與數位化(Digitization and Digitalization)，再更進一步進階至智慧製造(Smart Manufacturing)，不斷提升生產力與競爭力，邁向工業 4.0，以成就永續經營。



Professor James C. Chen received a B.S. in Industrial Engineering from NTHU in 1984 and a Ph.D. in Industrial Engineering from the University of Wisconsin-Madison, USA. His research and application interests include lean production, smart manufacturing, data science, artificial intelligence, system simulation, and advanced planning and scheduling. He and his research team have been applying industrial engineering theory and technique to solve practical problems in the industry while cooperating on a long-term basis with high-tech industries such as semiconductor wafer fabs and Thin Film Transistor Liquid Crystal Display (TFT-LCD) fabs as well as electronics assembly, construction, hospital, and traditional industries such as footwear, apparel, and grinding wheel in Taiwan, China, India, Indonesia, Vietnam, Thailand, Philippines, Cambodia, and Fiji. He cooperated with tens of companies to execute more than 1,000 kaizen projects to significantly reduce production cost (in hundreds of millions of NT dollars), improve product quality, shorten production lead time, increase order on-time delivery rate, increase production efficiency, replace manpower by automation and digitalization due to labor shortage. Professor Chen guided enterprises to gradually execute continuous kaizen projects, from lean production (benchmarking Toyota Production System, TPS) to establish a solid foundation and eliminate waste and improve efficiency, to automation and digitization/digitalization, and finally move further to smart manufacturing. With these, enterprises can go for Industry 4.0 while increasing productivity and competitiveness for sustainable operations.