

Special Award for Small Enterprises and Start-ups – Shing Hing Plastic Manufacturing Limited 小型企業及初創企業特別獎 – 成興塑膠製品有限公司

Report from the Board of Examiners

Shing Hing Plastic Manufacturing Limited (hereafter, Shing Hing) was founded in 1995. The company focuses on the design and manufacture of PVC plastic animal toys, supplying both local and overseas markets. It is ODM for the license brand of Animal Planet and has its own house brand WENNO, an educational toy series featuring physical animals with value-added interactive games via mobile app and augmented reality (AR).

Shing Hing has built a solid management platform. Its Senior Management is committed to innovation and digital transformation. As a focus of action, the company has partnered with external consultants to develop a new level of benchmarking and process and product optimization through real-time data visualization and automation.

Since 2016, “Industry 4.0” has been a key strategic goal of the company. Under this framework, the company has updated design in production procedures and sustainability, enabling it to streamline its workforce by 40%, restructure middle management, execute annual appraisals based on real-time digital Key Performance Index (KPI), embed the notion of “data as the single source of truth” with training, and maintain continuous performance improvement through data visualization and transparency with excellent operational efficiency and effectiveness.

The six-year “Industry 4.0” revolution has inspired accuracy and excellence in production line management. Improvement results include consistent increase in monthly sales, satisfaction rate of 100% among 90% of customers, increased on-time shipment, increased passing rate on finished products, and increased productivity due to reduced scrap rate.

Family culture is nurtured with emphasis on staff engagement, two-way communication, and workers’ health and safety. “Knowledge Management Control Procedure” maintains good classification of company knowledge from internal resources (e.g., patents, intellectual property, and knowledge and lessons gained from experience, including failures) and external resources (e.g., standards, academic exchanges, professional conferences, and customer feedback).

Senior Leaders’ passion and determination for management excellence and continuous improvement are deeply rooted. Since the adoption of the “2020+ Smart Factory Solution” in 2016, the company has achieved steady growth in annual sales turnover with aggregate increase. With the adoption of additional management tools, such as Enterprise Resources Planning (ERP), Manufacturing Execution System (MES) and in-house developed supply chain management system, the company expects to see even better results in the coming years.

評審委員會報告

成興塑膠製品有限公司成立於1995年，主要業務為設計及生產PVC塑膠動物玩具，產品行銷全球。公司現時由兩兄弟合力經營，雖說是傳統家族企業，但其管理平台發展成熟。

管理層重視創新，由2016年開始夥顧問共同發展「工業4.0」，推行數碼轉型，保持行業競爭力，現時已可實時監控生產流程，並實現流程標準化。在代工生產塑膠玩具，及自家品牌「Wenno」以外，實體兒童教育玩具也加添了手機程式、擴增實境(AR)等科技元素。

圍繞工業4.0作發展軸心，成興所有生產流程設計及可持續發展，均按照工業4.0的管理要求展開，優化流程後精簡40%人手，重整中層管理架構。每年績效評估以實時數據作為關鍵績效指標(KPI)的基礎，領導層以幫助落實工業4.0為大前提，為員工培訓。其中一項推動措施為「去excel化」，強調以數據作單一資訊來源，並以流水線上的感應器實時量度生產，實現資訊數據透明化。數據化量度貫穿公司各部門，運用「數碼KPI機制」分析製作流程，達至持續績效改善，提升整體營運效益。

公司強調家庭文化，重視職安健，鼓勵員工雙向溝通，更鼓勵基層員工與管理層直接對話。亦制定「知識管理控制流程」，內部知識(專利、知識產權、實戰經驗、失敗經驗)及外來知識(行業標準學術交流、專業會議、客戶回饋)均會作系統化整理及維護。

工業4.0改革為成興帶來更精準的生產線管理，於多方面可見成效，如準時付運率、成品通過率均有增加，而報廢率及返工下跌。在同樣的付出下得到更優秀的出品。更為直接的影響在於90%客戶滿意度高達100%；每月銷售額亦較3年前增加。

自2016年提出「2020+成興智能工廠」專案，成興營收持續增長至2018年，毛利率顯著上升，顯示成興於七大管理範疇下的優秀表現。成興最亮眼的優質管理之道，在於管理層對行業抱有很大的熱誠和改革決心，畢竟工業4.0需要經過數年變革管理始見成效，現時成興的企業資源規劃(ERP)、工廠營運管制系統(MES)、自家開發的供應鏈管理系統以及可持續發展均有長足進步，可期待成興在優質管理的支持下有更長遠的發展。