Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies
香港物流及供應鏈管理應用技術研發中心

LSCM

ABOUT LSCM

The Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM R&D Centre) was founded in 2006 with funding from the Innovation and Technology Commission of the HKSAR Government. Since its inception, the LSCM R&D Centre's mission has been to foster the development of core competencies in logistics and supply chain related technologies, such as Radio Frequency Identification (RFID), and to facilitate the adoption of these technologies by industries in Hong Kong and Mainland China.

The Centre is hosted by three leading universities in Hong Kong, namely the University of Hong Kong, the Chinese University of Hong Kong, and the Hong Kong University of Science and Technology. The establishment of the Centre marks the realisation of the concerted effort and enthusiasm on the part of the government, industry, academia and research institutes.

Vision

- **To be globally-recognised as a leading centre of excellence in logistics and supply chain management research and development**
- **To develop niche technologies that differentiate and achieve excellence**

Mission

- Conduct R&D activities to develop core technological competencies in the logistics and supply chain industries
- Facilitate the adoption of these technologies by industries in Hong Kong / Mainland China in order to enhance competitiveness
- Focus on deployment in specific industries and industry segments in Hong Kong in order to make an impact

Service

The Centre has been commissioned to be a one-stop resource for applied research, technology transfer and commercialisation, by undertaking the following roles and functions:

- Conduct industry-oriented researches
- Provide consulting and market intelligence services
- Provide a platform for business matching and technology transfer
- Facilitate intellectual property commercialisation

機構簡介

香港物流及供應鏈管理應用技術研發中心（簡稱LSCM研發中心）由香港特別行政區政府創新科技署於2006年斥資成立。自成立以來，LSCM研發中心一直致力於研發促進物流及供應鏈相關行業發展的各種技術（如：無線射頻識別（RFID）技術），並協助香港各行各業採用有關技術。

本中心由香港三所主要大學：香港大學、香港中文大學及香港科技大學協辦。本中心的成立，充分體現政府、業界、學術界及研究機構（官、產、學、研）之合作精神，及凝聚了其對科研發展之熱忱。
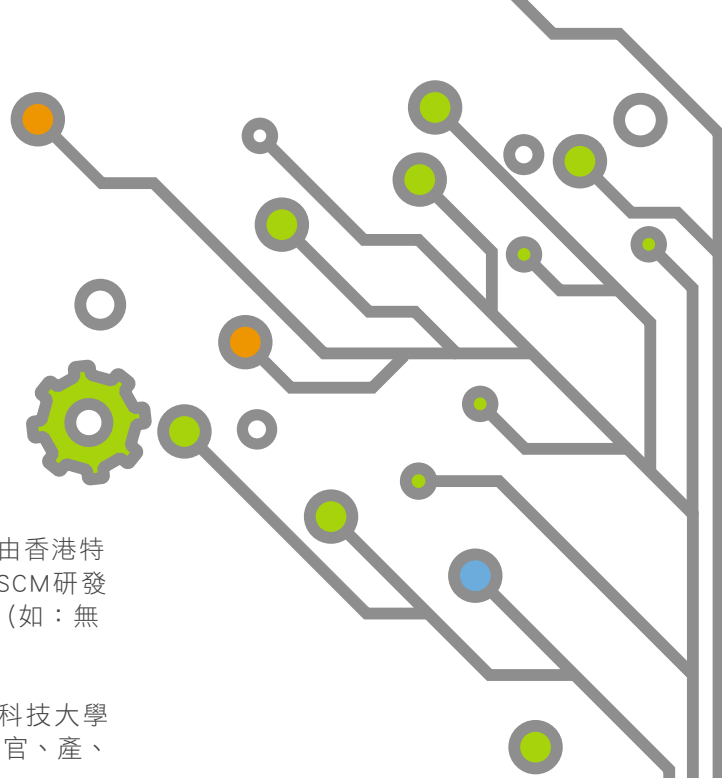
願景
- 成為全球公認的頂尖物流及供應鏈管理研發中心
- 致力發展獨特技術並在市場中脫穎而出及創造佳績

使命
- 通過持續研發，提升物流及供應鏈行業的核心科技實力
- 協助本港及中國內地的行業採用有關技術以提升競爭力
- 專注發展應用於與香港有關之特定產業的科研技術

服務
本中心的宗旨乃透過以下職能，提供一站式應用研究、技術轉移及商品化服務：

- 開展推動物流業發展的研究項目
- 提供諮詢及市場情報服務
- 提供商業配對及技術轉移平台
- 促成知識產權商業化

R&D Focus

To develop core technological competencies and enhance efficiency in the logistics and supply chain industries, the LSCM R&D Centre has undertaken industry-oriented research projects involving businesses and universities. R&D projects funded by the Centre range from the use of RFID in applications for manufacturing shop-floors, retail and distribution use, freight tracking and locating (indoor and outdoor) to monitor personnel in hospitals, as well as electronic lock (E-lock) technology to secure transshipment cargo containers. LSCM's technology roadmap is demand-driven with an emphasis on enabling industries to innovate and move up the value chain. This roadmap focuses on five major areas:

- Infrastructure Information Technology System
- Internet-of-Things (IoT) and RFID Technology
- Location-based Service (LBS) Technology
- Logistics and Supply Chain Analytics and Applications
- Supply Chain Security (Authentication / Logistics Security)

Funding Programmes

The funding programmes for R&D projects are administered by the LSCM R&D Centre and funded by the HKSAR Government's Innovation and Technology Commission (ITC). The Centre focuses on supporting R&D projects that would increase the added value, productivity and competitiveness of the logistics and supply chain industries in Hong Kong. ITC will provide financial assistance for the following four funding programmes:

- Platform Research Programme
- Collaborative Research Programme
- Public Sector Trial Scheme
- Contract Research Programme

The R&D Cash Rebate Scheme and Internship Programme will offer additional financial support for the sponsoring companies and recipient organisations undertaking R&D projects, respectively.

研發重點

為發展核心技術能力並提高物流及供應鏈行業的效率，LSCM研發中心致力與商界企業及大學攜手合作，進行以行業導向的研究項目，為提高物流及供應鏈行業的技術水平及效率作出貢獻。本中心資助的項目種類廣泛，包括：RFID應用於製造業車間、零售及分銷行業、以至貨物追蹤、醫院病人定位（室內、外）和監察的無線射頻識別技術應用、及負責轉運貨櫃保安的電子鎖技術等。本中心的技術發展以業界需求為導向，協助業界應用創新科技及提升在供應鏈上的價值。技術大綱集中於五大研發範疇：

- 資訊科技系統基礎建設
- 物聯網（IoT）及無線射頻識別技術
- 位置基礎（室內、外）服務（LBS）技術
- 物流與供應鏈分析及應用
- 供應鏈安全（核證／物流安全）

資助計劃

LSCM研發中心負責管理由香港特區政府創新科技署撥款資助的研發項目，並致力提高香港物流及供應鏈行業的生產力及競爭力。創新科技署為以下四類研究計劃提供資助：

- 平台研究計劃
- 合作研究計劃
- 公營機構試用計劃
- 合約研究計劃

投資研發現金回贈計劃及實習研究員計劃分別為參與研發項目的贊助公司與獲資助的機構提供額外的財務支援。

Technology Capabilities
研發技術

LSCM

EXPERTISE & PROJECTS
專門技術及研發項目

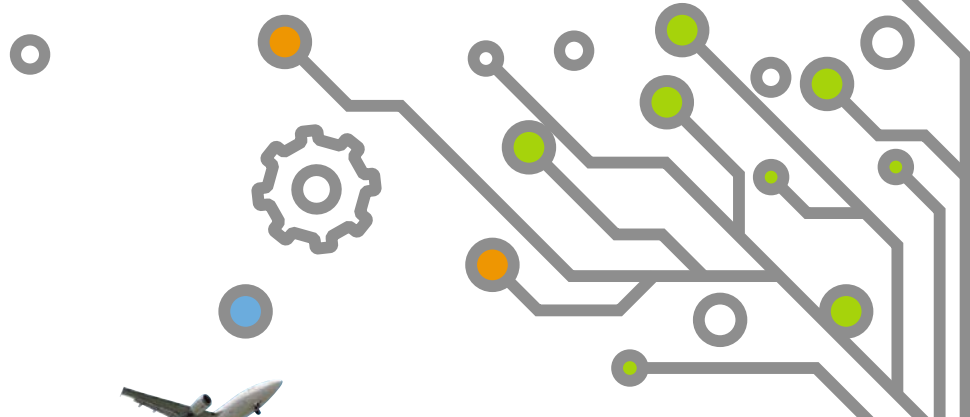| INFRASTRUCTURE INFORMATION TECHNOLOGY SYSTEM 資訊科技系統基礎建設	INTERNET-OF-THINGS AND RFID TECHNOLOGY 物聯網及無線射頻識別技術
ITFS E-Lock System 多模式聯運轉運貨物便利計劃 – 電子鎖系統	RFID Reader / Tag Chip Design 射頻識別閱讀器 / 標籤芯片設計
RFID Platform Interoperable Gateway 平台互聯互通射頻識別交換閘	Passive RFID Tagging 無源無線射頻識別標籤技術
Manufacturing Shop-Floor Information System 製造業車間資訊系統	Green Environmental-Friendly Tag 綠色環保標籤
Mobile Mesh-Network 移動蜂窩網絡定位	Environment Sensors (Temperature, Humidity) 環境傳感器 (溫度、濕度)
Product Information Kiosk 產品資訊展示亭	Portable / Mobile RFID Reader 手提 / 移動射頻識別閱讀器
Waterway Logistics Service Platform 水運物流服務平台	Smart Workplace Automation 智能工作場地自動化技術
Building Information Modeling System 建築資訊模型系統	Smart Shelving 智能貨架

LOCATION-BASED SERVICE TECHNOLOGY 位置基礎（室內、外）服務技術	LOGISTICS AND SUPPLY CHAIN ANALYTICS AND APPLICATIONS 物流及供應鏈分析及應用	SUPPLY CHAIN SECURITY (AUTHENTICATION / LOGISTICS SECURITY) 供應鏈安全（核證／物流安全）
Real-Time Indoor Locating Technology 實時室內定位技術	Supply Chain Visibility Platform 可視化供應鏈資訊平台	Product Authentication Service Platform (LSCM Authen√Tick™) 產品核證服務平台 (LSCM「認」真「析」貨™)
Outdoor GPS Positioning / Beidou Satellite System 戶外全球定位系統／北斗衛星系統	End-to-End Supply Chain Fulfillment 端到端供應鏈執行	Sensor-Integrated Active RFID for Food Supply Chain 適用於食品供應鏈的傳感器暨有源無線射頻識別技術
Indoor / Outdoor Position Tracking Platform 室內／外位置追蹤平台	Advance Notice System for Logistics 配合物流業的預報系統	Item Tagging, Security and Authentication 標籤貨物、保安及核證技術
Wifi Fingerprinting Algorithm Wifi訊號紋路演算法	Smart Container Loading Optimisation 智能裝箱優化	Cold Chain Applications for Food Supply Chain 食物安全冷鏈應用
Active RFID Positioning 有源無線射頻識別定位	Container Management System 貨櫃管理系統	
Passive RFID Zoning 無源無線射頻識別分區		
Wireless Sensor Network 無線感測網絡		
Asset / Personnel Tracking Device 資產／人員追蹤設備		

Partnership & Services

Partners & Business Matching

The establishment of the LSCM R&D Centre is a realisation of the coherent force and enthusiasm exhibited by the HKSAR Government, industry, universities and research institutes. Additionally, with strong partners specialised in different fields of expertise, the Centre acts as a platform for knowledge exchange, technical solution seeking and business matching.
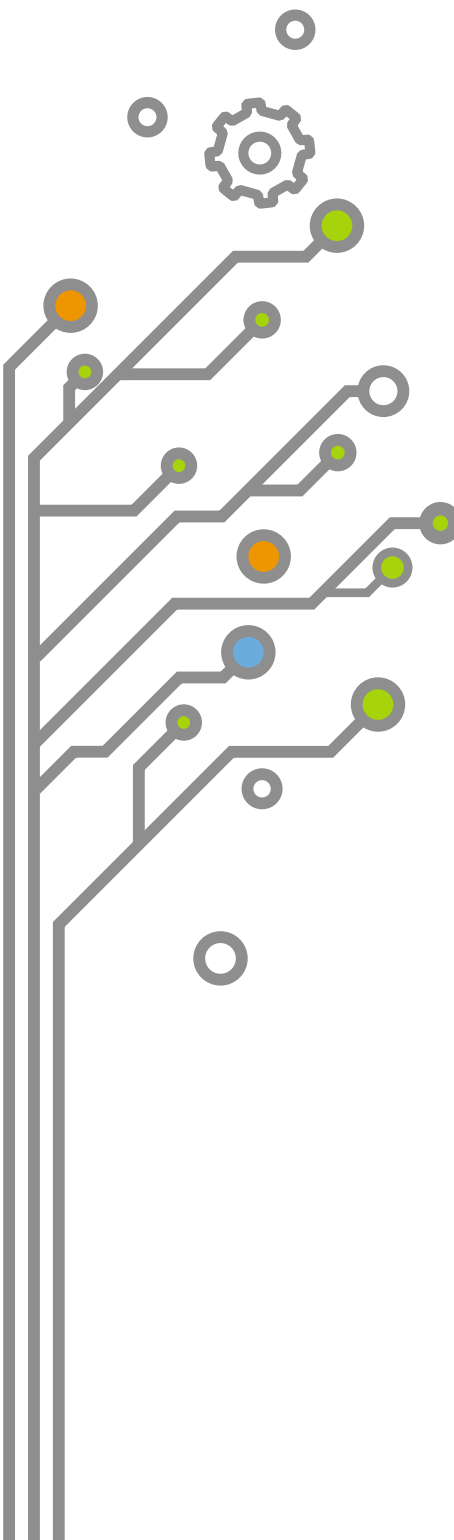
Technology Transfer

The LSCM R&D Centre undertakes a wide range of industry focused research projects and strives to facilitate the adoption of LSCM's technologies by the relevant industries. The Centre thus endeavours to serve as an interface between academia and the logistics and supply chain management industry for partnership and licensing opportunities, as well as for the dissemination of knowledge to the relevant industries through a variety of business development services and marketing activities. We strongly encourage you to visit our Technology Showroom which provides you new ideas as stimulus for the state-of-the-art business practices as well as an inducement to explore technology transfer.
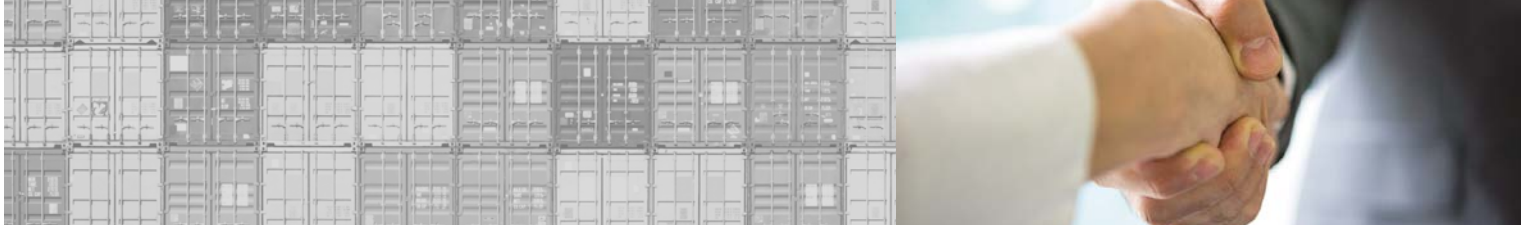
Research & Consulting Services

As one of the leading research centres in Hong Kong, the LSCM R&D Centre houses a pool of R&D experts with extensive experience in providing innovative and customised solutions to logistics industry players in Hong Kong and the South China region.

The Centre provides a wide range of research and consulting services, including various forms of research and funding studies, feasibility studies prior to system implementation, and hardware design customisation services, in order to improve operational efficiency.

合作夥伴及服務

合作夥伴及商業配對

LSCM研發中心的成立，體現出香港特區政府、業界、大學及研究機構的凝聚力和熱忱。此外，結合擅長於不同專業領域的合作夥伴，本中心已成為一個交流科研知識、尋求技術解決方案和進行商業配對的平台。

技術轉移

LSCM研發中心積極開展眾多應用於業界的研究項目，並致力推廣相關行業採用LSCM的技術。本中心亦竭力擔當學術界與物流及供應鏈管理業界之間的橋樑，創造夥伴合作及授權代理等商機，並借助一系列業務發展服務及市場推廣活動，向相關行業傳遞資訊。我們歡迎您參觀我們的技術展示廳，並為您的產品及服務提供新的意念和促成技術轉移。

研究及諮詢服務

LSCM研發中心作為香港其中一家首屈一指的研究中心，擁有經驗豐富的研發專家團隊，為香港及華南地區的物流業公司提供切合需要的創新解決方案。

本中心提供多種的研究及諮詢服務，包括不同形式的研究及資助計劃、系統實施前的可行性研究及專業的硬件設計服務等，務求為業界提高營運效率。

Membership Programme
會籍計劃

Membership provides networking opportunities across a broad range of industries as well as high calibre researchers and technology leaders. Additionally, you gain access to events, technical expertise, research resources and business opportunities. Depending on the nature and demands of your business, the LSCM R&D Centre provides members with an excellent platform for marketing and exposure, development and adoption of new and superior technologies as well as opportunities for learning and professional advancement. The membership registration is free of charge and the membership fee is waived perpetually. We invite you to become our member today and start enjoying our services.

我們的會籍計劃為不同行業的技術領袖以及優秀的研究人員提供聯繫交流的機會。此外，會員可參與各項活動，獲得技術專業知識及研究資源，掌握無限商機。LSCM研發中心會根據會員的業務性質和需求為會員提供一個卓越平台，以便開展市場推廣、發展業務和採用創新技術、及邁向專業化的發展。免費登記成為會員後，會員可享永久豁免年費優惠。我們誠邀您加入成為我們的會員，以便享用我們的服務。

MEMBERSHIP