Immediate Release

LSCM R&D Centre Showcases New Technologies in GIES Helping Ageing In Place
Three Newly-developed Robots Enhance Elderly's Quality of Life and Safety

(Hong Kong, 13 June, 2017) The Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM R&D Centre) will join The Gerontech and Innovation Expo cum Summit (GIES), jointly held by the Government of the Hong Kong Special Administration Region and the Hong Kong Council of Social Service, co-organised by the Hong Kong Science and Technology Parks Corporation.

The Summit will take place in the Hong Kong Convention & Exhibition Centre Hall 3DE on 16-18 June. The LSCM R&D Centre's booth located at F16, will demonstrate how to deploy logistics and supply chain management technologies in elderly services. **Booth Opening Time: 16 June (1-7 PM), 17 June (10 AM-7PM), 18 June (10 AM – 5 PM).**

The latest inventions, including three elderly care robots, namely "Delivery Robot", "Tele-health Robot" and "Food Printer" will greatly relieve the shortage of labour in elderly care services. Other technologies which are newly developed in collaboration with organisations such as Tung Wah Group of Hospitals, Hong Kong Society for the Blind, Hong Kong Housing Society and Wing Wah Love Technology Services Limited include **Global Positioning System (GPS) Locationing Technologies for Assisting Caretakers in Locating Wandering Elderly**, **Radio-frequency Identification (RFID) Technologies for Safeguarding Elderly from Accidental Wandering**, **Tracking and Lost Prevention Device**, **Home-stay Wellness Sensing System** and **Infrared Thermal Sensing Safety Alert System for Elderly**. These technologies ensure elderly's safety to avoid getting lost and left in danger, meanwhile protect their privacy and autonomy. Other technologies like **RFID Blind Cane Navigation System**, **Service Logging and Information Kiosk System**, **Smart Phonebook** and **Smart Poster** will enhance the quality of life of senior citizens. Mr. Vincent Wong, Senior Project Manager of Technology Development from the LSCM R&D Centre will deliver a speech named "A person-centered approach of smart living in elderly homes" in "Living Smart, Caring Smart" workshop during the Summit.

The ageing population is becoming an increasingly serious issue in Hong Kong. According to the figures provided by the Census and Statistics Department in 2016, the proportion of people aged 65 and above in the total population rose from 12% in 2006 to 16% in 2016; it leads to a concern as there has long been a problem of shortage in elderly care workers. The LSCM R&D Centre thus dedicates to researching and developing technologies, as well as stretching technologies to elderly care services, improving the quality of life of the elderly and achieving the goal of "ageing in place".

Three Elderly Care Robots Enhancing Service Standards Of Homes For the Aged
To enhance the service standards of homes for aged, the LSCM R&D Centre has developed three elderly care robots, namely "Delivery Robot", "Tele-health Robot" and "Food Printer", to help workers to take care of the elderly.

Technology Developed by LSCM	Introduction of the 3 Elderly Care Robots
Delivery Robot	With image processing technologies, camera and multiple sensing devices, the robot can see things and move accordingly to avoid bumping into dangerous objects. The robot is able to track and follow workers automatically to move heavy objects in order to lower their workload and minimize the risk of injuries.
Tele-health Robot	Equipped with an advanced set of cameras for human detection and route planning, the robot can travel around in the elderly homes and provide quick health checkup. It can monitor and collect elderly's health data to relieve the shortage of medical service manpower. Caretakers will be alerted in emergency when immediate attention is needed.
Food Printer	Some elderly can only ingest food paste. "Food Printer" reshapes food paste into 3D semi-solid texture. So, elderly are more likely to restore the joy of eating by taking those visually attractive and nutritious 3D printed food.

Deploying Logistics and Supply Chain Management Technologies in Elderly Services

The LSCM R&D Centre has collaborated with 4 organisations, Tung Wah Group of Hospitals, Hong Kong Society for the Blind, Hong Kong Housing Society and Wing Wah Love Technology Services Limited, bringing the technologies they have developed into use for ensuring the safety of elderly and improving their quality of life.

Collaborating Organization	Description Of Technology Developed By LSCM R&D Centre
TWGHs Wong Cho Tong Social Service Building	**GPS Locationing Technologies for Assisting Caretakers in Locating Wandering Elderly** To monitor the location of wandering elderly when they are joining outdoor activities organized by day care centres. Caretakers can track elderly who are equipped with a device with GPS locationing technology. Staff will be notified in case they are beyond the safe zone to enhance the degree of safety.
TWGHs Wong Cho Tong Social Service Building	**RFID Technologies for Safeguarding Elderly from Accidental Wandering** By installing RFID readers near the main exits, when passive UHF RFID tagged vests which are worn by the elderly are detected leaving the centre, the system will alert and notify staff with the vest's ID for following up. This technology does not only ensure their safety but also maximizes their independence and autonomy.

TWGHs Jockey Club Rehabilitation Complex	**Infrared Thermal Sensing Safety Alert System for Elderly** The system can be installed in high-risk environments like bathroom and washroom. The system monitors and analyses the real-time thermal data to determine whether the elderly is in danger. If unusual readings are detected, for example, when the elderly does not move for a long time, the system will alert caretakers for immediate action when it detects that he/she may fall down or get fainted. It does not only put the elderly's privacy into account but also ensures timely assistance in place when home accidents happen or attention is needed, providing a reliable distance-home safety monitoring system for the elderly who live alone.
Barrier Free Access (HK) Limited (A wholly-owned subsidiary of The Hong Kong Society for the Blind) TWGHs Jockey Club Rehabilitation Complex	**RFID Blind Cane Navigation System** An audio guiding system leads the visually impaired to their destinations via the shortest route. The system was awarded the "Gold Medal with Congratulations of Jury" in the 44th Geneva International Exhibition of Inventions.
Hong Kong Society for the Blind	**Service Logging and Information Kiosk System** The system can be deployed in elderly care centres and attention homes. By using RFID technology, caretakers can perform service logging and workflow management immediately after completing the service. The system can also provide the elderly with useful information such as meal menu, activities schedule and weather report, which can reduce the workload of caretakers.
Hong Kong Housing Society "Ageing-in-Place" Scheme	**Home-stay Wellness Sensing System** The system is capable of monitoring the daily lavatory usage of the elderly living alone and determining whether there are any potential home accidents. In the event that irregular or discontinued lavatory usage is noted, the caregiver will be alerted to ensure the safety of the elderly.
Hong Kong Housing Society "Ageing-in-Place" Scheme	**Smart Phonebook** Similar to traditional phonebook. The elderly can flip to the page with contact information of the person. By "Easy Touch" Function (through RFID sensing), phone dialling and SMS sending can be done easily. This technology helps the elderly who are not familiar with smartphones to communicate with their family and friends.

Hong Kong Housing Society "Ageing-in-Place" Scheme	**Smart Poster** Similar to the Smart Phonebook, Smart Poster facilitates the daily of elderly by "Easy Touch" function. Elderly who do not have good eyesight can use RID reader to sense the tagged poster and then the content of poster will be read out by smartphone.
Wing Wah Love Technology Services Limited	**Tracking and Lost Prevention Device** Specifically designed for people with dementia who may wander away. The device can be used both indoors and outdoors. The technology can provide instant location tracking, geofencing function with notification and allow caregivers to view the user's location via apps.

About LSCM R&D Centre

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 Fund of the HKSAR Government, and co-hosted by The University of Hong Kong, the Chinese University of Hong Kong and the Hong Kong University of Science and Technology. It aims to strengthen the local Logistics Industry by providing a one-stop shop for technology transfer and commercialization, and reinforce the cooperation between the industry and research institutes, to bring about meaningful and significant benefits to the community.

Media Enquiry	
LSCM R & D Centre Eliza Cheng Tel: 2299 0116 Fax: 2299 0552 Email: echeng@lscm.hk	 Jamie Lo Tel: 2255 0846 Fax: 2299 0552 Email: jlo@lscm.hk
Impact Communications Company Carmen Poon Tel：9077 2790 / 3590 4775 Fax：3590 4630 Email: carmen@impact-cc.com	 Keith Kot Tel：6128 4455 / 3590 5846 Fax：3590 4630 Email: keith@impact-cc.com
Raymond Lee Tel：6539 4089 / 3590 2696 Fax：3590 4630 Email: raymond.lee@impact-cc.com	