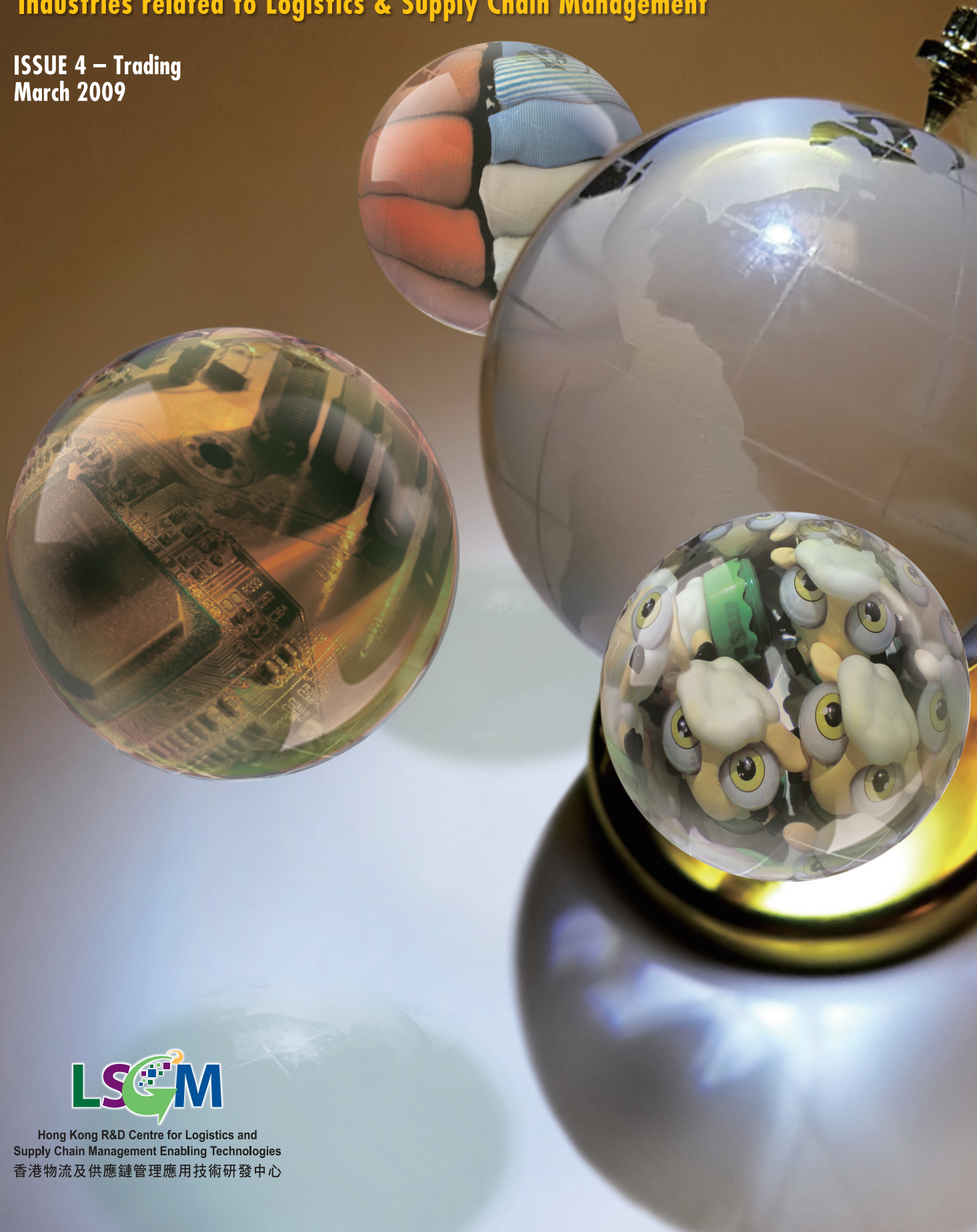


LSCM MARKET INTELLIGENCE REPORT

**A Market Intelligence Study on Enabling Technologies for
Industries related to Logistics & Supply Chain Management**

**ISSUE 4 – Trading
March 2009**



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



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BACKGROUND

INTRODUCTION

Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM R&D Centre) is established with funding support from the Innovation and Technology Commission of the HKSAR Government and is commissioned to provide a one-stop shop for technology transfer and commercialization through the following roles:

- Conduct industry-oriented research
- Provide technology and market intelligence
- Provide a platform for exchange of intellectual property/technology
- Promote technology development, transfer and knowledge dissemination
- Facilitate intellectual property commercialization

Since inception, the LSCM R&D Centre was given the mission to foster the development of core competencies in applied R&D in logistics and supply chain related technologies and facilitate adoption of these technologies by industries in Hong Kong and mainland China. Our long-term goal is to strengthen Hong Kong's economic competitiveness and maintain its position as a world-class leading logistics hub in the PRD region.

This Project, titled **"A Market Intelligence Study on Enabling Technologies for Industries related to Logistics & Supply Chain Management"** is to empower the logistics and supply chain community in Hong Kong and PRD region with market and technology intelligence for industry users to locate and adopt new technologies, for technology vendors to identify market needs so as to develop relevant applications and for R&D parties to gain inspiration from global technology landscape and to identify prevailing technology gaps for further R&D.

This Publication, namely "LSCM Market Intelligence Report (Issue 4) – March 2009" is to share findings from on-site company visit exercise focusing on trading industry in Hong Kong. Likewise, we also present the latest updates of China's RFID industry development in this issue following a series of related articles that we published in last year. It's worth a look for those who missed it, all past reports are available for free download at www.lscm.hk/mi.



BACKGROUND

PROJECT TEAM

It has been our mission to provide market intelligence and we place emphasis on enabling technologies which are essential for us to carry on our commitment and dedication to technology development. To support the study, the Project Team has pulled in expertise from the LSCM R&D Centre as well as professionals from the industry in Hong Kong and mainland China to take a combination of approaches to gather industry problems, technology needs and technology development gaps in Hong Kong and PRD while keeping a close watch on technologies, policies and standards developments in China.

To gather extensive market intelligence from logistics and supply chain community in Hong Kong and PRD, the Project Team is proud to partnering with the **Hong Kong Productivity Council** and **Research Center for Modern Logistics Technology and Management of Lingnan (University) College, Sun Yat-Sen University** to carry out the collaborative work in the region. They are experienced in conducting surveys and have good industry network to support our broad-based market study. In addition, the Project Team is working in close collaboration with the **HKU School of Business** in the preparation of findings and insightful analysis out of this market study. This consultancy support includes sharing and discussion of reference materials, advice on writing approach, research expertise and efficient feedback.

Hong Kong Productivity Council

Hong Kong Productivity Council (HKPC) is a public body established by legislation of Hong Kong with 40 years of history in serving manufacturing and related servicing industry. The mission of HKPC is to help Hong Kong enterprises to improve productivity and enhance value along the value chain in terms of consultancy service, training, technology transfer and other programs.

Role in the Project

- Advise on research methodology
- Carry out in-depth interviews with enterprises in Hong Kong
- Liaise with local industries and promote project results

Research Center for Modern Logistics Technology and Management Lingnan (University) College, Sun Yat-Sen University

Founded in July 2002, Research Center for Modern Logistics Technology and Management is a leading research institute of Sun Yat-sen University. The mission of the Center is to foster excellence in cutting-edge logistics research, education, and industrial collaboration in order to promote the development of modern logistics in China.

The Center is committed to research, education, and industrial collaboration of various aspects of logistics management. Logistics problems among the research domains of the Center include logistics system analysis and design, regional logistics strategy and planning, organizational logistics system design and optimization, distribution center design, transportation management and routing optimization, organizational supply chain management, management information systems in logistics and supply chain.



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PROJECT TEAM

Role in the Project

- Carry out in-depth interviews with enterprises in PRD
- Liaise with industries in PRD and promote project results

School of Business, The University of Hong Kong

The HKU School of Business was established after its transformation from the Department of Management Studies in the Faculty of Social Sciences in 1995. Since then, the School of Business has rapidly expanded its variety of programs in terms of major and minor subjects, as well as enhances its intake of the best and the brightest local and non-local students. Apart from offering academic programmes, the Faculty of Business & Economics organizes its research and teaching development activities in clusters through research centres that draw on members within the Faculty and across campus. The research outputs delivered by the Faculty are highly recognized and treated as a leading source of innovative thinking for government and business in Hong Kong and the region.

Role in the Project

- Advise on research direction and provide perspectives in writing market intelligence reports

On the China Watch part, the Project Team has partnered with **RFID China Alliance** to have a close watch on the new developments in China. It has an extensive network that the project team members can leverage in gathering information about technology adoption, policy changes and development of national RFID standard in China.

RFID China Alliance

RFID China Alliance is the only non-profit industrial association on RFID in China. The Alliance, comprised of RFID chip, label, middleware, reader, and printer solution providers, was founded on Nov 5, 2005, under the leadership of the Ministry of Information Industry (MII) of the People's Republic of China. Its core responsibility is to promote RFID's industrial development in China, and provide up-to-date information on RFID Chinese governmental policy, latest technological developments while holding an open attitude on RFID standards and protocol.

Role in the Project

- Closely monitor the policy and standard developments in China
- Provide regular update on RFID adoption and application among industries in China



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PROJECT TEAM

The following are core members of the Project:

Project Coordinator and Principal Investigator

Mr. Anthony KWOK
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Deputy Project Coordinator and Co-Investigator

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Manager, Marketing,
LSCM R&D Centre



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ACKNOWLEDGEMENTS

The Project Team would like to thank many organizations and individuals who have contributed to the development of this publication.

We would like to record our sincere appreciation for the following companies, which participated in in-depth interviews to share invaluable opinions with us. The report could not have been produced without their willingness to assist the project team in understanding the change in industry trends and technology needs.

FP Festival Product (Hong Kong) Limited
Global Technology Exchange LLC
KOA Electronics (Hong Kong) Limited
Mobicon Holdings Limited
Montaco Enterprises Limited
Oji Interpack Hong Kong Limited
Outokumpu Asia Pacific Limited
RC2 (Hong Kong) Limited
Richina Development Limited
Shanell Limited
Shivalaya (Hong Kong) Limited
Sino Link SCS (Asia) Limited
Suburfarm Investment & Trading Company Limited
Syswell International Limited
TFE Hong Kong Limited
Tone World International (Hong Kong) Limited

We would like to express our appreciation to the following industry support organizations, which helped us to promote the project activities and related results by all means.

Digital Trade and Transportation Network Limited
Federation of Hong Kong Industries - Transport and Logistics Services Council
GS1 Hong Kong
Guangdong and Hong Kong Feeder Association Limited
Guangdong RFID Technology Service Center
Hong Kong Association of Freight Forwarding And Logistics Ltd
Hong Kong CFS and Logistics Association Ltd
Hong Kong Electronics & Technologies Association
Hong Kong Logistics Association
Hong Kong Productivity Council
Hong Kong Science & Technology Parks Corporation
Hong Kong Shippers' Council
Hong Kong Trade Development Council
Hong Kong Wireless Development Centre
Hong Kong Wireless Technology Industry Association



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Hong Kong

Hong Kong Productivity Council

Dr. Lawrence Cheung

School of Business, The University of Hong Kong

Dr. Benjamin Yen

Pearl River Delta

Research Center for Modern Logistics Technology and Management Lingnan (University) College, Sun Yat-Sen University
--

Prof. Chen Gongyu

Dr. Zhang Hongbin

China

RFID China Alliance

Madam Zhang Qi

Mr. David Ouyang

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Last, and most important, thanks to the colleagues of the LSCM R&D Centre-specifically Management Team, Industry and Technology Programs Team, Administration Team and PR & Corporate Communication Team for their dedication and unfailing support to this project.





LSCM Annual Conference 2009 – Innovation in Action

In March 2009, more than 200 delegates including industry practitioners, technology leaders and senior executives, as well as representatives from research organizations and government joined the LSCM Annual Conference 2009.

The guest of honor at the Conference was Mr. Duncan PESCOD, JP, Permanent Secretary for Commerce & Economic Development (Communications & Technology) of the HKSAR Government. The event also featured two Conference Keynotes by Dr. Thomas LI, Director of IBM China Research Laboratory and Mr. David SHANNON, Senior Vice President, Product Management, Marketing & Strategy of Savi, A Lockheed Martin Company.

The Conference offered three tracks of concurrent presentations by researchers and industry experts from local and overseas sharing how innovative technologies can improve the efficiency of the logistics and supply chain industry today.

Selected presentations are available to LSCM members, please visit www.lscm.hk to gather more conference proceedings.



The Plan for Adjusting and Rejuvenating the Logistics Industry

In March 2009, China's State Council announced the **"Plan for Adjusting and Rejuvenating the Logistics Industry"** (hereinafter called the **"Plan"**) to boost the logistics sector. Highlights of the Plan include building of a special district for logistics development as well as promoting industry standard and logistics information platform.

On March 26th, Mr. Dingyi DAI, Vice Chairman of China Federation of Logistics & Purchasing delivered a speech at the **2009 Lingnan Logistics and Supply Chain Management Summit** and shared his views on the Plan and offered audiences with detailed background on the development of logistics industry in China. That was an impressive keynote and thanks to our collaborating organization, Sun Yat-sen University for sharing us with Mr. DAI's speech. Interested parties please contact Ms. Kelly Lam at (852) 2299 0550 or email: klam@lscm.hk.



LSCM Market Intelligence Report

Valuable market and technology intelligence from supply chain experts as well as sharing of latest RFID industry development await you. Industry-support organizations and enterprises can join us as Supporting Organization or Centre Member. Anyone who is not a LSCM member but interested in becoming one, email us at membership@lscm.hk.

To download all past reports and learn more about the project **"Market Intelligence Study"**, visit www.lscm.hk/mi.



EDITOR'S COLUMN

RFID & Food Safety – Technology Development and Adoption

Food safety is now a very hot topic around the world and this widely concerned topic has drawn attention of many countries to make a severe push on the countermeasures that should be taken, for instance, the new slaughterhouse requirement for calves in UK which came into force on January 2009 as well as China's new food safety law which will go into effect on June 1 this year are examples of new legislation. New policy driven by food safety and the rising emphasis on supervision are calling for the increasing market demand for food traceability and tracking along the supply chain.

RFID has been used in a broad-spectrum of market segments in which logistics has been one of the main applications of RFID. To understand the technology development and adoption of RFID in food supply chain, the Project Team has conducted a desk research in the past couple of months. Below table summarizes the list of 13 projects running in various countries. Each project represents specific application areas along the food supply chain and all projects are further classified by three maturity levels, namely **Designing**, **Pilot** and **Production**. Profiles of some projects being listed in Table 1 and the corresponding source of information are supplemented in Table 2.

Table 1: Summary of Projects by Maturity Level

	Project Index	Detailed Description
Designing:	(a)	Thailand: Using RFID to manage prawns and other food Fish
	(b)	Hong Kong: Feasibility of RFID in enhancing poultry traceability
	(k1)	Hong Kong: A pilot running under the project "RFID Application Service Technology in Guangdong-Hong Kong Import/Export Supervision and Management" to track products from farms to distributors
Pilot:	(c)	US: Temperature sensor project to track products transport between factories and distributors
	(d)	Australia: Temperature sensor project to tracks products from distributors to retailers
	(e)	UK: Agricultural spraying project to monitor farming stage only
	(f)	Norway: Track meat project to track meat from farms to retailers
	(g)	US: Cattle tattoo project to track cattle from farms to slaughterhouses
	(h)	Germany: Meat tag project to track meat from retailers to consumers
	(k2)	Hong Kong: A pilot running under the project "RFID-based Interoperable Gateway for Logistics Service Platforms" to track products from farms to retailers
	(k3)	Hong Kong: A pilot running under the project "RFID-enabling Shenzhen Hong Kong integrated food safety and supply chain public information platform" to track products from farms to distributors
Production:	(i)	Germany: RFID food pallet
	(j)	China: RFID Food Safety Solution in Beijing Olympic

Remarks:

Designing: Researchers are performing feasibility studies and field tests to analyze the environments for pilot implementation.

Pilot: Researchers have completed the initial studies. Project developers are developing and running pilot projects with stakeholders.

Production: Satisfactory results were obtained from pilot projects. Project developers are collaborating with industry partners on technology transfer and commercialization activities.



EDITOR'S COLUMN

RFID & Food Safety – Technology Development and Adoption

Table 2(a): Highlights of Projects in Designing Phase

Project Index	Detailed Description
(a)	<p>Thailand: Using RFID to manage prawns and other food Fish</p> <p>Researchers in Thailand were investigating the benefits of radio frequency identification for tracking prawns and fish to monitor growth and improve breeding in August 2008. The department of fisheries science has successfully embedded passive RFID tags in giant prawns, Nile tilapia and walking catfish. The team had released preliminary results of trials examining the use of RFID to monitor cultured species that are kept separate for breeding.</p> <p>The objectives of the project are to determine a suitable position for RFID tagging, and the effect of tagging on growth, survival rates, stress protein expression and histological change. The project has received 3 million baht in funding from the National Electronics and Computer Technology Center (Nectec), a research and development agency operating under Thailand's Ministry of Science and Technology that aims to promote the RFID industry in the country.</p> <p>The RFID tag needs to be embedded inside an animal's body, and the project is studying the chip's exact placement so the creature is not harmed in any way. An animal is identified by means of a tag's unique serial number, which is stored in a database, along with other information, such as the animal's breed, growth and diet. Growth is tracked monthly to monitor the animal's overall development, and the software helps researchers analyze the data. If the tags identify that an animal is not growing well, researchers can implement crossbreeding to improve the species.</p> <p>Source: http://www.rfidjournal.com</p>
(b)	<p>Hong Kong: Feasibility of RFID in enhancing poultry traceability</p> <p>The Centre for Food Safety (CFS) of Food and Environmental Hygiene Department of Hong Kong (SAR) Government has released a paper on the feasibility of applying RFID technology to enhance poultry traceability on 15th July 2008. An abstract of the paper is provided as below:</p> <p>Poultry are highly mobile animals and reared in flocks of large number. Tagging is a labor intensive process which is not welcomed by farmers. The small body size of poultry renders the attachment of the RFID tag becomes very difficult. The pecking behavior in poultry may increase the chance of damage or loss of tags. Poultry are unlikely to walk through the passageway readers one after another, and some of them may even jump or fly over the reader. It is almost impossible for any kind of reader to read the individual information correctly from their tags if they are kept inside a cage. It is time consuming and labour intensive to use hand-held readers to read the information of each individual bird considering their continuous movement within cages and large number in a consignment.</p> <p>CFS will further explore the concept as the research is limited and there are foreseeable operational difficulties in using RFID to enhance poultry traceability. In addition, CFS believes that there is also a need to consider its feasibility in both local and Mainland farms, and at control points.</p> <p>Source: http://www.legco.gov.hk</p>
(k1)	<p>Hong Kong: A pilot running under the project "RFID Application Service Technology in Guangdong-Hong Kong Import/Export Supervision and Management" to track products from farms to distributors</p> <p>This project focuses on the development of a cross-border goods supervision service platform. The aim of this platform is to facilitate e-logistics, information exchange and supply chain applications between Guangdong and Hong Kong. The project is still under discussion and yet to be confirmed.</p> <p>Source: LSCM R&D Centre</p>



EDITOR'S COLUMN

RFID & Food Safety – Technology Development and Adoption

Table 2(b): Highlights of Projects in Pilot Phase

Project Index	Detailed Description
(c)	<p>US: Temperature sensor project to track products transport between factories and distributors</p> <p>On February 2009, a distributor in California has taken part in a pilot RFID supply chain program. They affixed semi-passive RFID tags with temperature sensors to monitor pallets of produce shipped to Hawaii in ocean liners. Once the pallets arrive, the Hawaiian distributor will identify the pallets with RFID and check integrated temperature sensor readings to verify proper temperatures were maintained before accepting the shipment.</p> <p>The Hawaii Produce Traceability Initiative is jointly administered by the Hawaii Farm Bureau and the state's department of agriculture. It focused on testing RFID systems to provide traceability for produce exchanged by in-state growers, distributors and supermarkets.</p> <p>In the new phase, a California produce distributor will put reusable semi-passive RFID tags with integrated temperature sensors on pallets bound for shipment to Honolulu. The tags will be automatically read when they leave the warehouse in California, and when they are received at the facility in Hawaii. After the facility identifies the pallets and ensures products were kept at acceptable storage temperatures, it will remove individual cases and re-label them with passive RFID tags.</p> <p>According to the project administrator and an official with the State of Hawaii Department of Agriculture, RFID has proven to be reliable and effective for food traceability but the costs are still too high for the agriculture industry.</p> <p>Source: http://www.rfidupdate.com</p>
(f)	<p>Norway: Track meat project to track meat from farms to retailers</p> <p>On 9th July 2008, IBM has announced an agreement with Matiq, the IT subsidiary of Nortura, Norway's largest food supplier to use RFID solutions to track and trace poultry and meat products from the farm, through the supply chain, to supermarket shelves. The system will be the first of its kind in the Scandinavian countries.</p> <p>IBM and Matiq will develop and manage the technology infrastructure to enable track and trace solutions for the Norwegian food market. Product packaging will include RFID tags to help ensure that products are kept in optimal conditions throughout the supply chain.</p> <p>Using this solution, Norwegian suppliers and supermarkets will be able to monitor and analyze their entire food supply process, ideally increasing efficiency and reducing costs as well as improving food safety.</p> <p>Source: http://www.rfidnews.org</p>
(k2)	<p>Hong Kong: A pilot running under the project "RFID-based Interoperable Gateway for Logistics Service Platforms" to track products from farms to retailers</p> <p>The objective of this project is to demonstrate the applicability and effectiveness of the RFID-based interoperable gateway system on cross border (i.e. Hong Kong / Guangdong) livestock traceability. The project was started in 1st April 2008 and pilot tests were completed on 28th Feb 2009.</p> <p>Source: LSCM R&D Centre</p>



EDITOR'S COLUMN

RFID & Food Safety – Technology Development and Adoption

Table 2(c): Highlights of Projects in Production Phase

Project Index	Detailed Description
(i)	<p>Germany: RFID food pallet</p> <p>German retailer Metro Group has expanded its store-level RFID activities into France, and has contracted with logistics provider DHL to tag and track pallets delivered there on August 2008. The companies announced DHL will begin tagging 1.3 million food pallets used for delivery to all 89 METRO Cash & Carry self-service wholesale stores in France, where DHL is Metro's exclusive logistics provider.</p> <p>DHL and METRO Group say the rollout is the largest RFID project in the French retail industry. They estimate 1.3 million pallets will be tagged annually. DHL is equipping five food distribution centers with RFID systems to supply METRO Cash & Carry. DHL will tag food pallets at its distribution centers, read them as the pallets are loaded onto delivery trucks, and transmit the shipment data to METRO Cash & Carry. The pallets will be read again when they are received at the retail stores, and the tag read data will be compared to the previously-sent order and shipment information to verify delivery accuracy.</p> <p>Source: http://www.rfidupdate.com</p>
(j)	<p>China: RFID Food Safety Solution in Beijing Olympic</p> <p>BearingPoint, Inc. was appointed by Beijing Food Safety Administration Office for the 2008 Beijing Olympic Games Food Safety Action Program. It has implemented both RFID and bar-code technology into the food safety system.</p> <p>In the food safety system, each container of food was tracked using a bar-coding system or RFID tag at every phase in the supply chain from the manufacturer, through distribution centers and eventually to the caterers. Every container of food was labeled with a unique identification code or tracking number and was scanned into the system at every location in the supply chain. During each scan, the system encrypted and transmitted the information collected from the bar-code or RFID system via the Internet to a centralized database of information. This database contained detailed information such as expiration dates, manufacturer, origination, etc., allowing not only monitor the safe passage of food throughout the supply chain, but ensure its freshness, quality and security.</p> <p>In addition, every transportation vehicle was equipped with sensors that transmitted real-time information over the cellular network such as the location of each vehicle and even the temperature inside each of their refrigeration units.</p> <p>The system was not only capable of tracking the food throughout every step of the supply chain, it was intelligent enough to automatically generate alarms when food was potentially spoiled, mishandled or tampered with in any way. In the event that the system detected food along the supply chain that was not fit for consumption, it was also capable of actually facilitating the logistics of a food recall, and even instructing and engaging emergency response teams if necessary.</p> <p>Source: http://en.starfarm.com.cn</p>

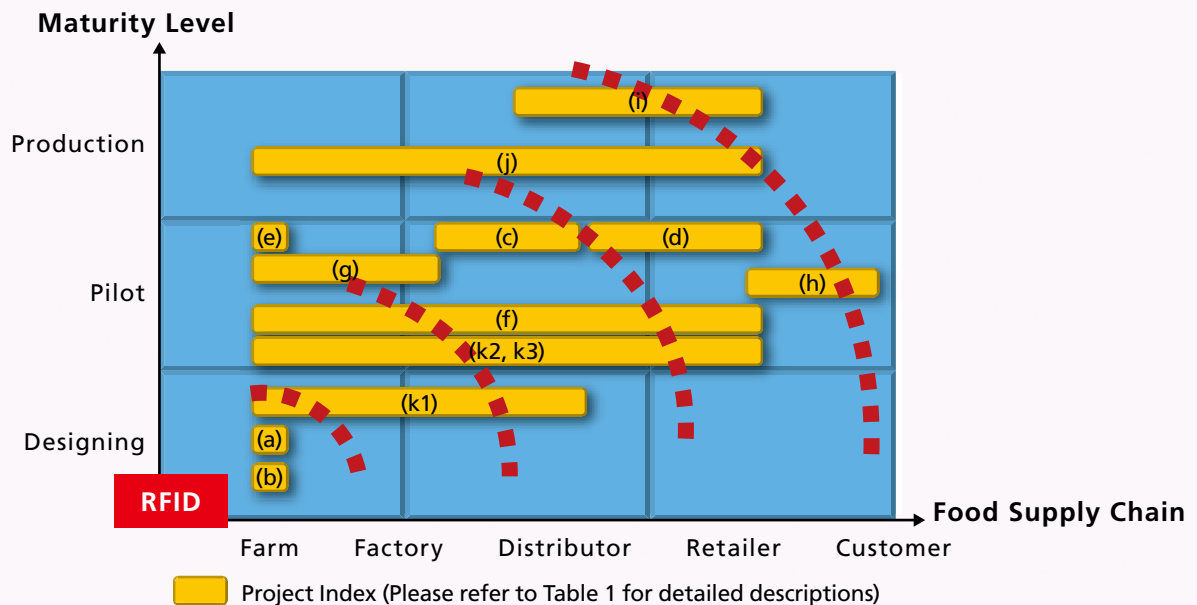


EDITOR'S COLUMN

RFID & Food Safety – Technology Development and Adoption

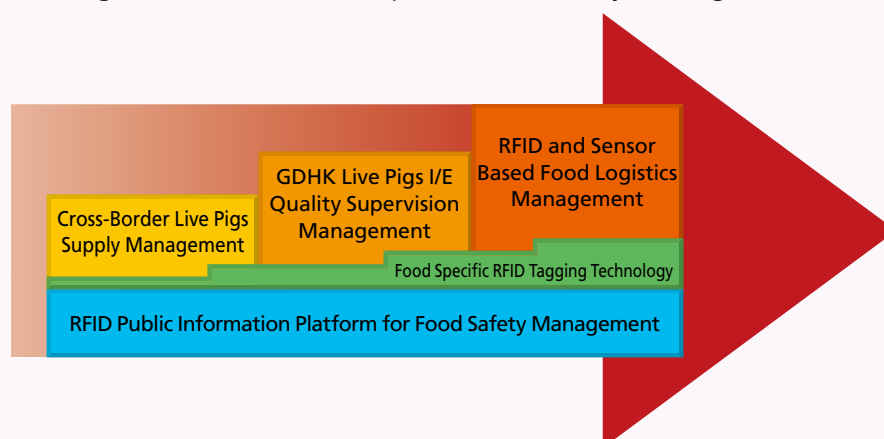
Figure 1 illustrates the matrix of project maturity level vs. coverage along the food supply chain based on these 13 projects.

Figure 1: Project Maturity Level and Food Supply Chain Coverage



We hope that you will find this few pages update on the technology development and adoption of RFID in food safety useful and informative. It is noteworthy that food industry practitioners and researchers are aligned with government's policy development and have demonstrated the coherent force and enthusiasm in carrying out various collaborative applied research activities towards food safety management. We believe that enabling technologies based on RFID and wireless sensing networks to facilitate management of food safety and food traceability are driving the RFID market with tremendous opportunities behind the legal pressures. Figure 2 shows our R&D roadmap for food safety management with emphasis on addressing technology gaps in hardware, software, systems and network design and development. At LSCM, we welcome your valuable input to our future research directions as well as your active participation in our industry and R&D activities.

Figure 2: LSCM Roadmap for Food Safety Management



EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

In the light of the background as introduced, one of the main roles of the LSCM R&D Centre includes empowering the logistics and supply chain community in Hong Kong and PRD with market and technology intelligence. The LSCM R&D Centre was awarded a 2-year project, titled **"A Market Intelligence Study on Enabling Technologies for Industries related to Logistics & Supply Chain Management"** in 2008 to focus its efforts on the study of enabling technology areas which are of the greatest industry concerns. Accordingly, the release of a suite of **LSCM Market Intelligence Report** that offers industry players with analytical results from in-depth interviews from a wide spectrum of industries is a major work that we have been undertaking. We have benefited from the views gathered through a series of on-site company visits, forums and meetings along with finding cause for both requirement and concern from local industries. To provide both research users and providers with a comprehensive view on RFID industry development, we also offer featured report on policy, standardization and the adoption & application of RFID Technology in relevant industries in China on a regular basis.

Traders are sensitive to changes and the impacts on trading activities behind the rapid development of Asia. It is apparent that Hong Kong's role as a trading centre has been undergoing challenges of changing business activities and increasing competition. In this report, we examine respondents' current I.T. adoption status and how they face with unfavorable business environment. When asked which level describes the best their current I.T. application status, 75% of the respondents believed that they applied limited I.T. solution to automate a specific area of operations. Among various I.T. applications, Accounting (ACC), Wi-Fi and Purchase Order (P.O.) were the top three most widely adopted applications/technologies. The study also found that improvement on operational efficiency and customer service would motivate trading companies to upgrade their technological capabilities. Nevertheless, budget was ranked as top concern among the three areas (People/Budget/Technology) when deploying an I.T. application (*Details refer to **Section 3-4 of Broad Coverage***). Despite the technological aspects, respondents expressed that *Sales Turnover Dropped, Oil Price Issue and The Market is Diminishing* were the top three concerns. It is worth noting that 65% of surveyed companies believed that I.T. can help enhancing their competitiveness and over 80% said they would invest on I.T. applications in the next five years. In the meantime, *Sales & Marketing/Customer Relationship Management and Communication with Internal & External Parties* were ranked as top two areas to strengthen along with future I.T. adoption (*Details refer to **Section 5-6 of Broad Coverage***). As far as the importance of Hong Kong to maintain its role as a trading hub is concerned, firms should strive to equip with better supply chain management and place emphasis on adding values to their services. While illustrating the general threats faced by traders in Hong Kong, the corresponding strategies and examples of industrial application were reviewed in **Section 8 of Broad Coverage**.

The performance of China's electronic information industry for the period January to September 2008 saw a steady growth and recorded a business revenue of RMB4,201.16 billion, a rise of 19.5% compared to the same period in 2007. The software industry maintained rapid growth and registered a total revenue of RMB576.47 billion. The article "Policy of China RFID Industry Development" published in the **"Global/China Watch"** section shares the characteristics of economic activities in China and the major economic indicators of the electronic information manufacturing industry during the said period. For instance, as affected by the global economic slowdown, a sluggish growth in export has shown (dropped by 4.5% compared to the same period in 2007) and it was 0.6 percentage point lower than the national foreign export growth rate. Like many countries around the world buffeted by global financial



EXECUTIVE SUMMARY

turmoil, the Chinese Government has taken practical measures to stimulate domestic demand. In the fourth quarter of 2008, China's State Council issued ten measures that aim to expand domestic demand and boost economic growth. The newly implemented policies by the State Council will involve an additional investment about RMB4,000 billion, which is equivalent to 29.2% of social fixed asset investment in 2007, and is also equivalent to two percentage points of actual GDP growth every year (*Details refer to Section 1-2, "Policy of China RFID Industry Development" of Global/China Watch*).

Other updates on China's RFID industry development include the cooperation details as established in the "Memorandum of Korea-China-Japan RFID Round Table Meeting" (hereinafter called the "Memorandum") among the three countries. The "Korea-China-Japan RFID Round Table Meeting", which was set up in mid 2008 aims to establish a functional institution that can well represent the benefits of RFID industry in China, Japan and Korea. The ultimate goal of collaboration as stated in the Memorandum is to promote economic cooperation and development of RFID technology in Eastern Asia region. Apart from international cooperation, it is worth noting that the Chinese Government has reiterated to promote and accelerate integration of informatization and industrialization. The "Opinions about Accelerating Integration of Informatization and Industrialization of Guangdong Province" (hereinafter called the "Opinions") recently prepared by the Department of Information Industry and the Economic and Trade Commission has clearly outlined the directive thought, development goal, key responsibilities, basic strategy and precautionary measures of integration of informatization and industrialization. The Opinions follows the innovative idea of "Boosting of Informatization and Industrialization Integration" as suggested by the 17th Party Congress, which was also the first opinion related to informatization and industrialization integration advocated by a provincial government, representing a significant breakthrough resulting from liberating ideas (*Details refer to Section 3-4, "Policy of China RFID Industry Development" of Global/China Watch*).

In the last section of the article, "The 'Eleventh Five-Year Plan' Investment Guide for Information Technology Application" (hereinafter called the "Guide") that recently announced by the Ministry of Industry and Information Technology indicated the major development areas of the "Eleventh Five-Year Plan" as well as the investment guide of information technology and product applications. From the Guide, it has clearly stated that Enterprise Resources Plan (ERP), e-commerce, barcode technology and RFID are crucial applications of productions and operations for enterprises. For industry-specific information technology and product, twelve application areas of information technology were listed with RFID technology being used in them all (*Details refer to Section 5, "Policy of China RFID Industry Development" of Global/China Watch*).

Lastly, we look at the national pilot programs of mobile E-commerce which was one of the six key guiding programs deployed in the Eleventh Five-year Plan of E-commerce Development. Various pilot applications in line with local characteristics currently running in provinces and municipalities include: mobile payment, public transportation, utility payment, mobile shopping, mobile healthcare service, agriculture-related mobile e-commerce, mobile e-commerce for special market, e-commerce for SMEs, mobile information service of logistics, mobile tourism service, and integrated business application for the coming Asian Games (*Details refer to "The Adoption & Application of RFID Technology in Relevant Industries in China" of Global/China Watch*).

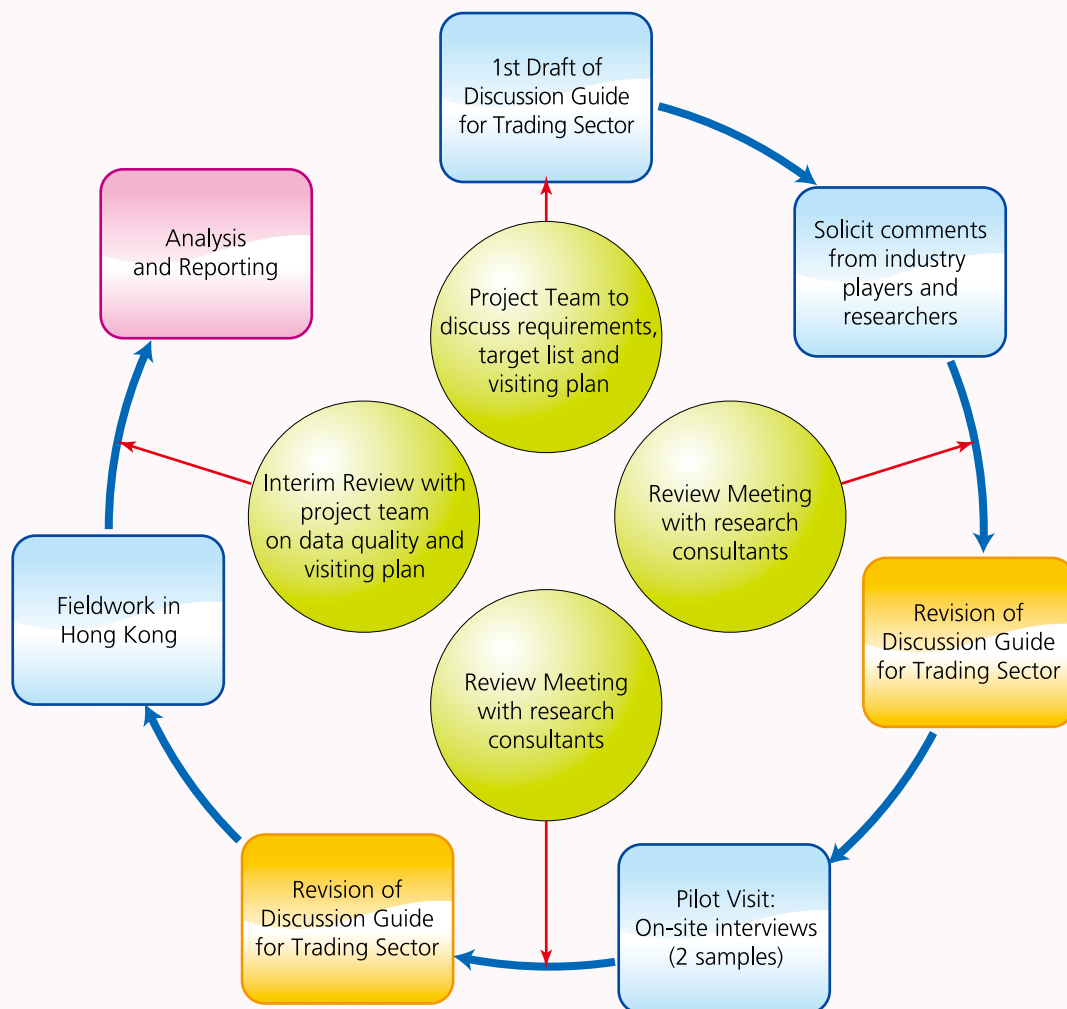


BROAD COVERAGE



BROAD COVERAGE

The essential details presented in this section are based on information collected from 20 trading companies from Hong Kong. All interviews were carried out by research consultants between November and December in 2008, the average duration per interview took approximately 1.5 to 2 hours. For each company, the research consultant is required to probe opinions and stimulate discussion surrounding the company's demand and aspiration to new technologies, user requirement specifications, adoption and barriers to new technologies, logistics and supply chain product knowledge, industry issues as well as how government policies will affect industry operations. To maintain consistency of interview approach, a suite of industry focused discussion guide was in use (Appendix A) and the following diagram outlines the methodology of the study.





BROAD COVERAGE

PROFILE OF PARTICIPANTS

1 Profile of Participants

1.1 Profile of Participants by Business Nature

Among the 20 participants who engaged in Hong Kong trading industry, they are classified according to business nature which was summarized in the following table. Household Goods accounted for 15% (3 out of 20), Drugs and Pharmaceuticals accounted for 5% (1 out of 20), Plastic/Paper Products accounted for 10% (2 out of 20), Wearing Apparel accounted for 15% (3 out of 20), Machinery, Equipment and Supplies accounted for 40% (8 out of 20) whereas Other Specialized Products accounted for 15% (3 out of 20). Export countries include Europe, US, Malaysia, Indonesia, Taiwan, Japan, Singapore, Iran, and Southern China.

1.1 Table

Analysis of Participants by Business Nature

Business Nature	Number of Participants	%
Household Goods	3	15%
Drugs and Pharmaceuticals	1	5%
Plastic/Paper Products	2	10%
Wearing apparel	3	15%
Machinery, Equipment and Supplies	8	40%
Other Specialized Products	3	15%
Total	20	100%

1.2 Profile of Participants by Presence Nature in Hong Kong

Among the 20 trading companies in Hong Kong, it was indicated that 10 out of them were the subsidiary of overseas headquarters; whereas the rest 10 respondents were headquartered in Hong Kong. Details were summarized in the following table.

1.2 Table

Analysis of Participants by Presence Nature in Hong Kong

Presence Nature	Number of Participants	%
HK Office is the Headquarter	10	50%
HK Office is Subsidiary of Overseas Headquarter	10	50%
Total	20	100%

1.3 Profile of Participants by Employee Size

Among the 20 trading companies in Hong Kong, 10 out of them employed less than 20 staffs. Respondents who employed with 20-50 staffs accounted for 40% (8 out of 20). Both 51-100 and over 100 accounted for 5% respectively, details were summarized in the following table.

1.3 Table

Analysis of Participants by Employee Size

Number of Staffs	Number of Participants	%
< 20	10	50%
20-50	8	40%
51-100	1	5%
> 100	1	5%
Total	20	100%



BROAD COVERAGE

PROFILE OF PARTICIPANTS

1.4 Profile of Participants by Mode of I.T. Employment

While analyzing the participants' mode of I.T. employment, the findings indicated that among the 20 respondents, majority of them adopted Outsourced model (accounted for 70%), whereas 6 respondents employed I.T. staff on their own (accounted for 30%).

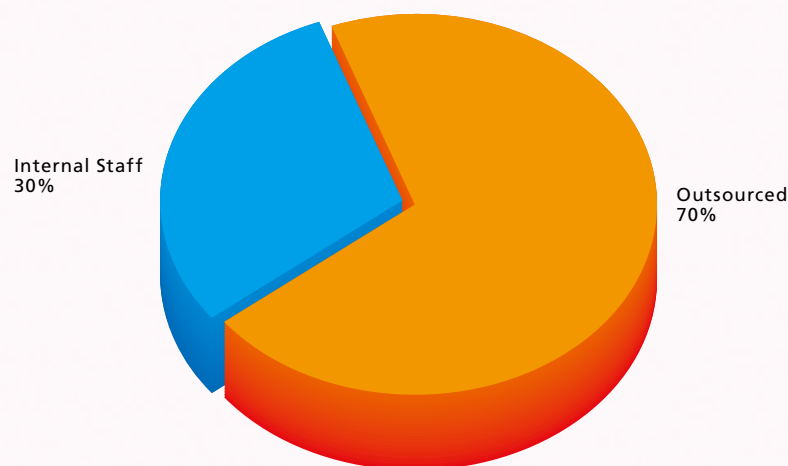
1.4 Table

Analysis of Participants by Mode of I.T. Employment

Mode of I.T. Employment	Number of Participants	%
Outsourced	14	70%
Internal Staff	6	30%
Total	20	100%

1.4 Chart

Analysis of Participants by Mode of I.T. Employment



1.5 Profile of Participants by Job Title

Among the 20 trading companies in Hong Kong participating in the survey, 16 out of them were graded Director or Manager (accounted for 80%). Details were summarized in the following table.

1.5 Table

Analysis of Participants by Job Title

Job Title	Number of Participants	%
Director	6	30%
Manager	10	50%
Planner	2	10%
Not Specified	2	10%
Total	20	100%



BROAD COVERAGE

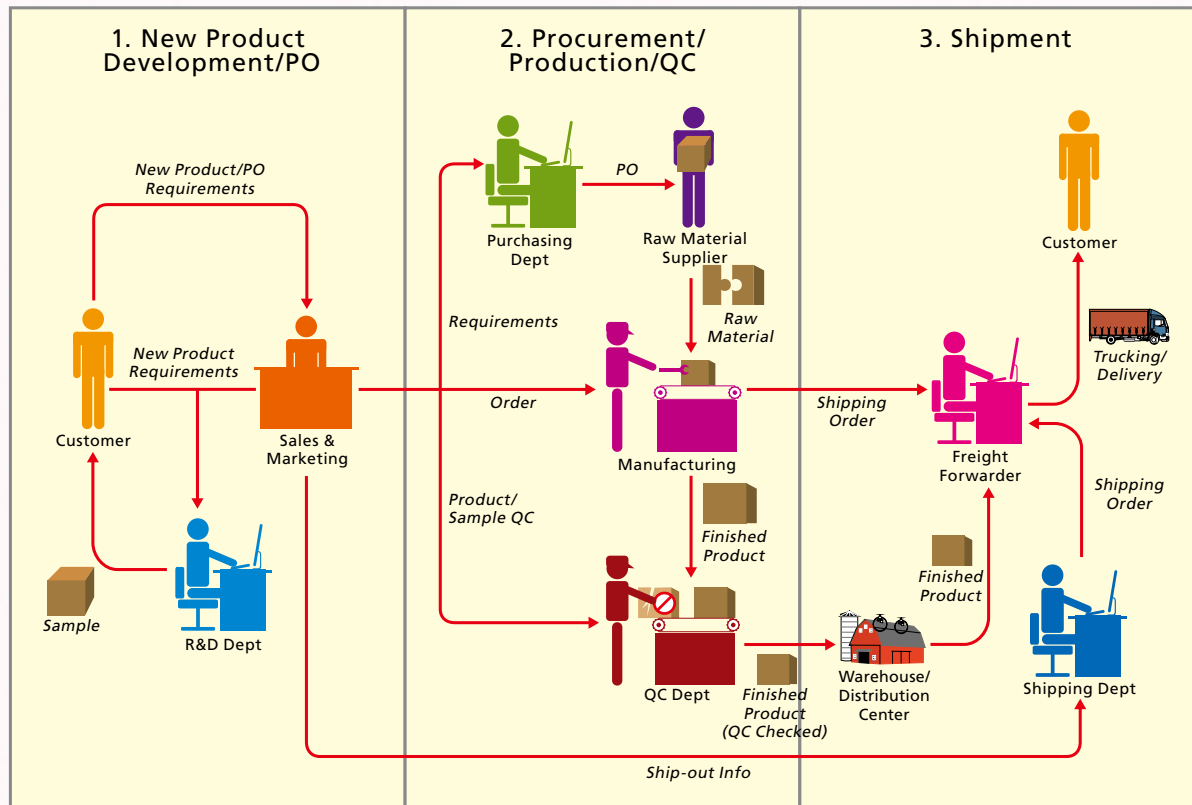
FINDINGS

2 Business Process

In this section, participants explained their business operations to identify information flows and required technology needs. It was found that their businesses were running like what we described in below generic workflow diagram.

2 Diagram

Generic Workflow Diagram of Hong Kong Trading Industry





BROAD COVERAGE

FINDINGS

2.1 Most Time Consuming Process

Among the 20 participants, there were 17 participants provided information on their most time consuming process. As it was an open-ended question, participants were welcome to suggest more than one opinion. Apart from 35% opinion indicated that they were satisfied with current operation; the most time consuming process faced by trading practitioners were Merchandising (accounted for 26%).

2.1 Table

Analysis by Most Time Consuming Process

Most Time Consuming Process	%
Satisfied with Current Operation	35%
Merchandising	26%
N/A	13%
Shipping Follow Up	9%
R&D	9%
Cargo Consolidation	4%
QC	4%
Total	100%

2.2 Most Costly Process

Among the 20 participants, there were 10 participants provided information on their most costly process. As it was an open-ended question, participants were welcome to suggest more than one opinion. Apart from the 50% N/A opinions and 30% of the respondents were satisfied with current operation; the most costly process faced by trading practitioners were again Merchandising (accounted for 15%).

2.2 Table

Analysis by Most Costly Process

Most Costly Process	%
N/A	50%
Satisfied with Current Operation	30%
Merchandising	15%
R&D	5%
Total	100%



BROAD COVERAGE

FINDINGS

3 Current I.T. Applications

In this section, current I.T. applications and level of usage out of the 15 traders from Hong Kong were examined.

3.1 Analysis on Current I.T. Applications

The 20 participants were asked to provide information on their current I.T. applications and their satisfactory level were examined (Satisfactory Level: 1=Less satisfactory; 5=Most satisfactory). All participants provided information and the findings were summarized in the following table.

Among the various applications, ACC, Wi-Fi and P.O. were the top three most popular applications adopted by participants, which accounted for 85%, 80% and 75% respectively.

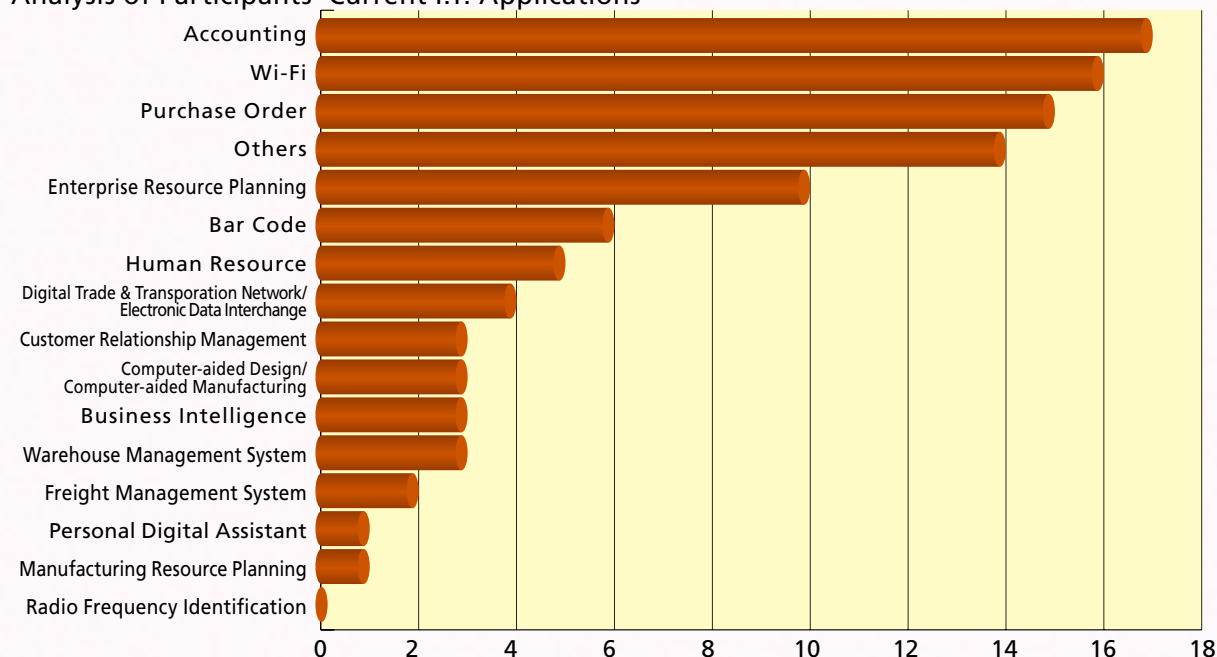
3.1 Table

Analysis of Participants' Current I.T. Applications

Applications	Number of Participants Currently Using	%	Number of Participants (Rated Satisfied to Very Satisfied)	%
Accounting	17	85%	9.5	56%
Wi-Fi	16	80%	11	69%
Purchase Order	15	75%	0	0%
Others	14	70%	9	64%
Enterprise Resource Planning	10	50%	4	40%
Bar Code	6	30%	5	83%
Human Resource	5	25%	2	40%
Digital Trade & Transportation Network/ Electronic Data Interchange	4	20%	2	50%
Warehouse Management System	3	15%	2	67%
Business Intelligence	3	15%	1	33%
Computer-aided Design/ Computer-aided Manufacturing	3	15%	2	67%
Customer Relationship Management	3	15%	1	33%
Freight Management System	2	10%	0	0%
Manufacturing Resource Planning	1	5%	0	0%
Personal Digital Assistant	1	5%	0	0%
Radio Frequency Identification	0	0%	0	0%

3.1 Chart

Analysis of Participants' Current I.T. Applications





BROAD COVERAGE FINDINGS

3.2 Analysis on Current I.T. Applications Status

In this section, participants were asked to select the most describing sentence for their current I.T. application status. The majority of the respondents believed they were in the stage of "Apply limited I.T. solution to automate a specific area of operations (e.g. document management system, warehousing system but not full ERP, finance & accounting system only, etc.)", 15 out of 20 respondents opted for this stage, which accounted for 75% of the total respondents. It was followed by the stage "Full I.T. implementation with integration with other internal systems", 4 out of 20 respondents opted this sentence, which accounted for 20% of the total respondents. Results were shown in the following table.

3.2 Table

Analysis of Participants' Current I.T. Application Status

Current I.T. Application Status	Number of Participants	%
1 Totally manual, no hardware & software	0	0%
2 No knowledge and awareness of I.T.. application. The company has no I.T. solution to solve for daily operating issues (except MS Office, public email account, etc.)	0	0%
3 Have knowledge and awareness of I.T. application but don't use any I.T. solution (except MS Office, public email account, etc.)	0	0%
4 Apply limited I.T. solution to automate a specific area of operations (e.g. document management system, warehousing system but not full ERP, finance & accounting system only, etc.)	15	75%
5 Full I.T. implementation with an integration with other internal systems	4	20%
6 Full I.T. implementation with an integration with both internal and external systems	1	5%
Total	20	100%

3.3 Analysis of Participants' Perceived Competitiveness on Current Technology Solutions

In addition, participants were asked the perceived competitiveness of their current technology solutions versus the industry today (1=Less competitive; 5=Most competitive). It was indicated that only 21% of the participants perceived their current technology solutions were ranked level 4, no respondents perceived their current technology solutions as most competitive (level 5). Detailed findings were summarized in the following table.

3.3 Table

Analysis of Participants' Perceived Competitiveness on Current Technology Solutions

Competitive Level	1	2	3	4	5	Total
% of Participants	5%	24%	50%	21%	0%	100%



BROAD COVERAGE FINDINGS

3.4 Analysis on I.T. Investment Plan in next 5 Years

The 20 trading companies were asked to indicate if they would invest the I.T. application in the next 5 years. 17 out of them (accounted for 85%) would improve their I.T. applications in the next 5 years, whereas the rest expressed the opposite.

3.4 Table

Analysis of Participants' View on I.T. Investment

Company will Improve the IT application in next 5 Years	Number of Participants	%
Will	17	85%
Will Not	3	15%
Total	20	100%

3.5 Analysis on Proposed Improvement in I.T. Applications

The 20 participants were asked to indicate their proposed improvement in I.T. applications. Business Intelligence (BI) ranked the highest which accounted for 19%; it was followed by Customer Relationship Management (CRM), which accounted for 10%.

3.5 Table

Analysis of Participants' View on Improvement in I.T. Applications

Proposed Improvement in I.T. Applications	%
Business Intelligence	19%
Customer Relationship Management	10%
Purchase Order	5%
Warehouse Management System	5%
Product Design	5%
SAP	5%
Knowledge Management	5%
N/A	67%



BROAD COVERAGE

FINDINGS

4 I.T. Applications Barriers and Concerns

In this section, the biggest challenges in I.T. applications and the motivating factors perceived by participants for adopting I.T. were examined. In addition, participants were prompted to rank the importance of 3 factors (People, Budget and Technology) in deploying I.T. application in their company.

4.1 Analysis on Major Challenges Perceived by Participants

The 20 trading companies were asked to indicate the major challenges they faced with technology adoption (1=Less challenging; 5=Most challenging). The findings indicated that Limited Budget ranked the highest (accounted for 71%), followed by Lack of Industry/Government Support (accounted for 65%). Both Data Integration and Business Process Re-engineering ranked the same (accounted for 59%).

4.1 Table

Analysis on Major Challenges Perceived by Participants

Challenges for I.T. Applications	Number of Respondents	Rating on 4 to 5 (Challenging to Most Challenging)	%
Limited Budget	17	12	71%
Lack of Industry/Government Support	17	11	65%
Data Integration	17	10	59%
Business Process Reengineering	17	10	59%
Shortage of Skilled IT People	19	10	53%
Complexity of Application	18	7	39%
Difficult to Assess ROI	16	5	31%
User's Recognition on Application Value is Low	18	5	28%
Difficult to Cope with Rapid Technological Changes	18	5	28%

4.2 Analysis on Motivating Factors

The participants were prompted to rate the most important motivating factors when deciding to enhance or upgrade their technological capabilities and customer offering (1=Less important; 5=Most important). It was indicated that Improves Operation Efficiency/Productivity ranked the highest (accounted for 94%), it was followed by Improves Customer Service (accounted for 79%) and Improve data quality (accounted for 74%).

4.2 Table

Analysis on Motivating Factors

Motivating Factors	Number of Respondents	Weighed (Least to Most Important)	%
Improves Operational Efficiency/Productivity	18	17	94%
Improves Customer Service	19	15	79%
Improves Data Quality	19	14	74%
Direct Customer Request	16	11	69%
Reduce Human Error	19	13	68%
Reduce Labor Costs	19	10	53%
Corporate Image	17	9	53%
Clear ROI	17	8	47%



BROAD COVERAGE FINDINGS

4.3 Analysis on Rankings among People, Budget and Technology

In addition, the participants were prompted to rank on the three concern areas in deploying an I.T. application (People/Budget/Technology). Among a total of 20 respondents' provided information, half of them ranked Budget as the top concern (accounted for 50%), it was followed by Technology (accounted for 40%) and People (accounted for 10%). The findings were summarized in the following table.

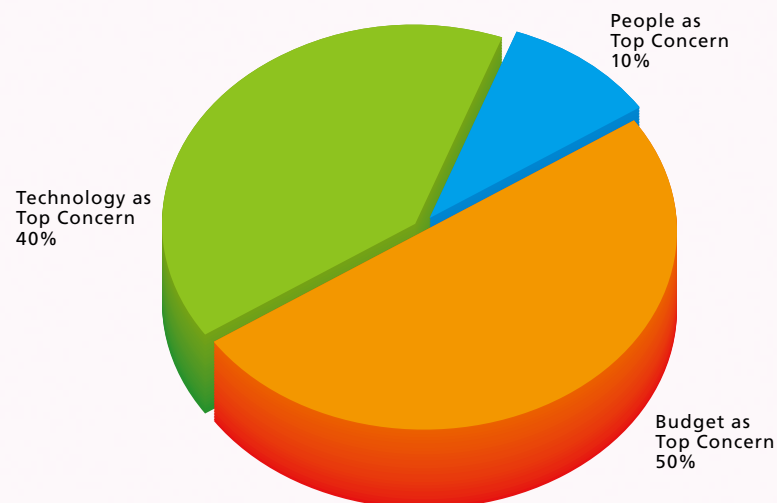
4.3 Table

Analysis on Rankings among People, Budget and Technology

	People	Budget	Technology	Total
Number of Respondents who ranked as top concern	2	10	8	20
%	10%	50%	40%	100%

4.3 Chart

Analysis on Rankings among People, Budget and Technology





BROAD COVERAGE

FINDINGS

5 Industry Trends/Characteristics

5.1 Analysis on Industry Trends/Characteristics

In this section, 19 out of 20 trading companies provided opinions on in what ways the industry characteristics would affect their technology application needs in the future. The findings were categorized into Industrial Trend/Characteristics; Policy Factors and Economic Factors. Among the participants' provided information, majority of the respondents indicated that Sales Turnover Dropped and Oil Price Issue were regarded as key industry trend, which accounted for 31% and 25% respectively followed by The Market is Diminishing (accounted for 16%).

5.1 Table

Analysis on Industry Trends/Characteristics

Industrial Trend/Characteristics	%
Sales Turnover Dropped	31%
Oil Price Issue	25%
The Market is Diminishing	16%
Bank Tightened the Credit	13%
USD Fluctuation	13%
Vendor Tightened the Credit	3%
Total	100%

5.2 Analysis on Policy Factors

In light of policy factors which affect their business operation, the issues of Policy compliance and China new labor law increased operation cost were the respondents' key concerns, which accounted for 58% and 42% respectively.

5.2 Table

Analysis on Policy Factors

Policy Factors	%
China New Labor Law Increased Cost	42%
Policy Compliance Issue	58%
Total	100%

5.3 Analysis on Economic Factors

In light of economic factors which affect their business operation, the findings indicated that Increased Competition and Increased Operation Cost accounted for the majority of the opinions, both accounted for 34%; it was followed by Payment Delay or Bad Debt, which accounted for 16%.

5.3 Table

Analysis on Economic Factors

Economic Factors	%
Increased Competition	34%
Increased Operation Cost	34%
Payment Delay or Bad Debt	16%
Shorter Delivery Lead Time	13%
Economic Down-turn Causing Smaller Order	3%
Total	100%



BROAD COVERAGE

FINDINGS

6 Future I.T. Applications

In this section, the 20 respondents were invited to provide information on their current I.T. investment budget level and their future I.T. applications were examined.

6.1 Analysis on Current I.T. Adoption Cost

Participants were further asked to provide information on the percentage of the total investment in their I.T. adoption (Current I.T. Investment Cost to Revenue). It was indicated that among the 20 participants, most of them invested 4-6% of revenue into I.T. adoption (accounted 30%). Detailed findings were summarized in the following table.

6.1 Table

Analysis on Current I.T. Adoption Cost

Current Investment % to Revenue	%
Less than 1%	20%
1% - 3%	25%
4% - 6%	30%
7% - 9%	0%
Over 9%	10%
Not Specified	15%
Total	100%

6.2 Analysis on Future I.T. Adoption

The 20 trading companies were asked to provide comments on their future I.T. strategic plan. As this section comprises open-ended questions, participants were welcome to suggest more than one opinion. From respondents' provided information, the findings suggested that Sales and Marketing/Customer Relationship ranked the highest, which accounted for 15% each; whereas Communications with Internal & External Parties ranked second which accounted for 15%. It was followed by Supply Chain Track & Trace which accounted for 11%. The findings were summarized in the following table.

6.2 Table

Analysis on Future I.T. Adoption

Future I.T. Adoption	%
Sales and Marketing/Customer Relationship	15%
Communication with Internal & External Parties	15%
Supply Chain Track & Trace	11%
Compliance Management	11%
Forecasting/Event Management	11%
Warehousing & Distribution	9%
Business Intelligence	9%
Purchasing/Supplier Relationship	7%
Production Planning	7%
Product Design	3%
Simulation and Optimization	3%
Total	101%

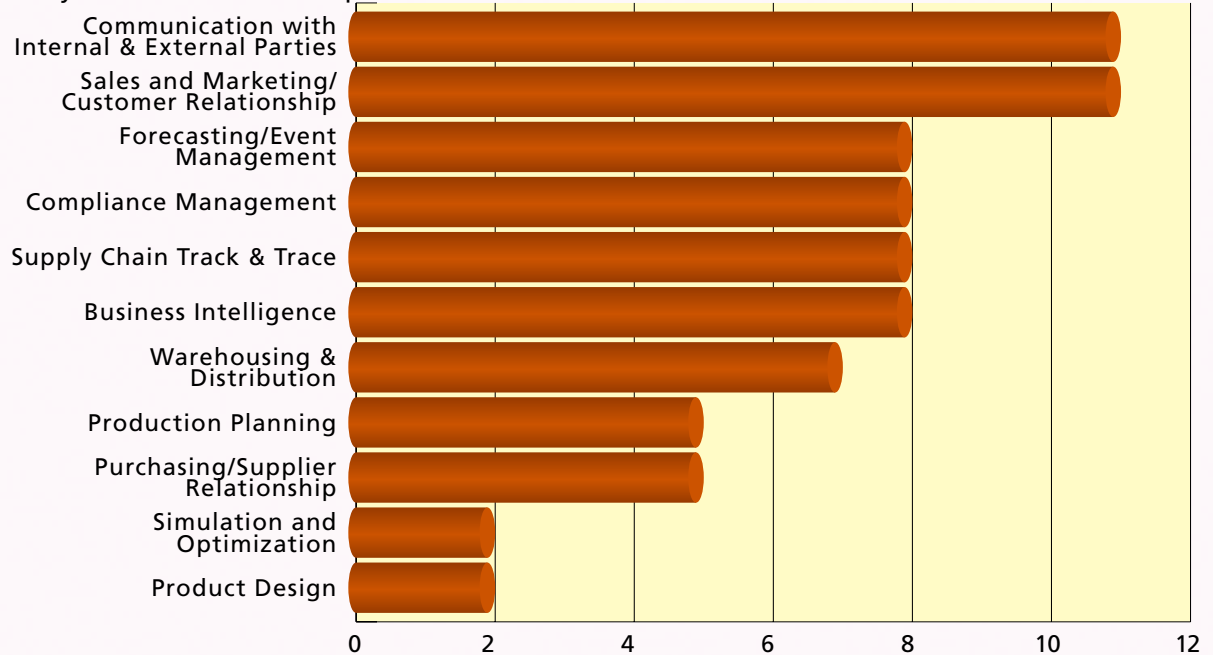
Remarks: The above figures are rounded to the nearest integer



BROAD COVERAGE FINDINGS

6.2 Chart

Analysis on Future I.T. Adoption



6.3 Analysis on Whether I.T. is Able to Enhance Company's Competitiveness

The 20 trading companies were further asked to provide opinion on whether I.T. is able to enhance the company's competitiveness (1=Less Agreeable; 5= Most Agreeable). The finding indicated that 70% of the respondents ranked between level 4 to 5.

6.3 Table

Analysis on Whether I.T. is Able to Enhance Company's Competitiveness

Agreeable Level	1	2	3	4	5
%	5%	10%	15%	5%	65%



BROAD COVERAGE

FINDINGS

7 R&D Demand & Aspiration

In this section, the 20 trading companies discussed their R&D demand and aspiration from government with our consultants; and their interests on government sponsored R&D program were also examined.

7.1 Analysis on Industry/Government Support

In this section respondents were asked if they were interested in participating in R&D projects and their preferences on:

- If government is willing to support 90% over the total cost of such R&D project, are you willing to invest together with other companies within the industry the remaining amount and share the project deliverables; and
- If government is willing to support 50% over the total cost of such R&D project, are you interested in invest the remaining amount and own the IP rights of the project deliverables.

All the 20 respondents shared opinion with us from which 15 respondents shown interests in participating in R&D projects (accounted for 75%); whereas 5 respondents expressed the opposite. The findings were summarized in the following table.

7.1 Table

Summary on Government Sponsorship R&D Scheme

Government Sponsored Scheme/Respondents	Number of Respondents	%
Interested in Participating in R&D Projects	15	75%
(A) Government Support 90% Scheme	11	68%
(B) Government Support 50% Scheme/ Company Own the IP right	5	32%

Remarks: One respondent interested in both scheme (A) and (B)

7.2 Analysis on Interested Areas on LSCM Roadmap

In this section, participants were asked to indicate their interested areas on LSCM R&D roadmap. Among the 20 participants, there were 16 participants provided opinions and they were summarized as follow.

RFID Hardware & System

6 out of 16 (38%) participants indicated that they are interested in Theme 1 “Low Cost RFID Tag Manufacturing Techniques” is set on easing the cost issue of adoption and deployment for RFID.

Networking & Infrastructure Technologies

10 out of 16 (63%) participants indicated that they were interested in Theme 5 “In the infrastructure technologies track steers for low-barrier adoption of logistics IT with the approach of “On-Demand Technologies for Logistics Application Software Service Platforms”. 5 out of 16 (31%) were interested in Theme 6 “Enabling Technologies for Enterprise e-Logistics Internetworking”, fostering the use of IT for logistics integration, addresses the common problem in industry for effective and efficient business process integration across enterprise boundary.

Applications & Decision Support Technologies

3 out of 16 (19%) participants indicated that they were interested in Theme 10 “Positioning Technologies and Optimization for Asset Tracking and Monitoring” will add to the capability of real-time cargo tracking.



BROAD COVERAGE FINDINGS

7.2 Table

Summary on Interested Areas on LSCM R&D Roadmap

RFID Roadmap	Number of Respondents	%
RFID Hardware & System		
Theme 1 "Low Cost RFID Tag Manufacturing Techniques" is set on easing the cost issue of adoption and deployment for RFID	6	38%
Theme 2 "RFID for Manufacturing and Packaging Industries" stresses on easy use of RFID for product manufacturers who need to tag product shipment with RFID	1	6%
Theme 3 "RFID Testing and Qualification" targets for helping users to test and select appropriate RFID solutions to best fit their use	3	19%
Theme 4 "RFID beyond Gen 2" is to push the envelope of current RFID technology to support practical applications for range, accuracy, security, memory and sensor requirements	0	0%
Networking & Infrastructure Technologies		
Theme 5 In the infrastructure technologies track steers for low-barrier adoption of logistics IT with the approach of "On-Demand Technologies for Logistics Application Software Service Platforms"	10	63%
Theme 6 "Enabling Technologies for Enterprise e-Logistics Internetworking", fostering the use of IT for logistics integration, addresses the common problem in industry for effective and efficient business process integration across enterprise boundary	5	31%
Applications & Decision Support Technologies		
Theme 7 "RFID Systems for Specific Environments" will foster the development for RFID application systems for niche but critical requirements in common logistics operations	1	6%
Theme 8 "Enabling Technologies for Mobile Logistics" encourages innovative applications for distribution and delivery which are mobile in nature	1	6%
Theme 9 "Sensor-enabled Logistics Applications" will enable automation in cargo monitoring	1	6%
Theme 10 "Positioning Technologies and Optimization for Asset Tracking and Monitoring" will add to the capability of real-time cargo tracking	3	19%
Theme 11 "Enabling Technologies in Electronic Seal Based Logistics" participates in the contemporary e-seal standards development which is taking place actively not only in the global arena but also across the local border of Hong Kong and Shenzhen	0	0%



BROAD COVERAGE

FINDINGS

7.3 Analysis on Government Support Areas

In this section, all 20 respondents participated to rate their required Government support. Majority of the respondents were interested in Education (Training, Seminars to Increase Awareness on I.T. Application) which accounted for 42%, it was followed by Financial Support and Share Information Platform (accounted for 21%). The findings were summarized in the following Table.

7.3 Table

Summary on Government Support Areas

Government Support Areas	%
Education (Training, Seminars to Increase Awareness on I.T. Application)	42%
Financial Support	21%
Share Information Platform	21%
Standarization	8%
Lower Tax to Encourage More I.T. Applications	4%
Lower Transaction Cost for Trade Declaration	4%
Total	100%



BROAD COVERAGE RECOMMENDATIONS

In this section, the general threats faced by trading industry practitioners were illustrated in addition to the findings that associated with the respondents participating in the in-depth interview; then the corresponding strategies of providing value-added service were examined. It was followed by illustrating two examples of I.T. adoption for providing value-added services. Finally a successful industrial application by an enterprise was reviewed as a case study.

8.1 General Threats to Hong Kong Traders

¹ By the early 2000s, Hong Kong was a leading sourcing centre in the Asia-Pacific region. According to Government figures, in 2001, the trading sector produced a net output of HK\$244.1 billion, or 20% of GDP. The figure has grown up to HK\$305 billion, or 22% of GDP in 2006 based on the information from Census and Statistic Department of the HKSAR Government. Though Hong Kong's trading companies have been facing challenges of changing business activities and increasing competition, the importance of trading to the Hong Kong economy remains apparent. Hong Kong's import and export trading firms were typically small and medium-sized enterprises (SMEs). They were active in sourcing garments, toys, electronic products and other manufactured goods. They carried out three main types of sourcing activities: i) sourcing goods produced in Hong Kong; ii) sourcing goods from around the region for re-exports; and iii) sourcing goods from one country to be shipped directly to a third country without touching Hong Kong ground. The import business of Hong Kong trading firms was generated mainly by the firms, distributing capabilities under the identity of agents or dealers. They usually specialized in one area or products and represented one or more foreign brands. The boundary of their trading map usually included Hong Kong, Mainland China (or certain parts of it) or other countries in Asia.

In Section 5.1, respondents indicated that *Sales Turnover Dropped*, *Oil Price Issue* and *The Market is Diminishing* were the top three concerns. In order to maintain a favorable margin, buyers tend to directly deal with sellers to save fees associated with traders (agents). In fact, Hong Kong trading companies were facing increased competition from foreign firms that accessing the China market directly. A decade ago, international giants like Carrefour, Wal-Mart had started to establish their own buying offices in China. Such phenomenon was further accelerated with the improved port facilities in Mainland China. Seaports around the Shenzhen and Guangzhou areas, such as Yantian, Shekou, Chiwan and Guangzhou's own port continued to develop; it further brought an unfavorable condition for Hong Kong traders.



BROAD COVERAGE RECOMMENDATIONS

The improved port facilities in China also affected Hong Kong's re-export trade. By the late 1990s, the growth of Hong Kong's re-export trade had slowed down, while offshore trade developed dramatically. The major distinction between Hong Kong's offshore trade and re-export was that for the former, the goods went directly from the suppliers to the destination without going through the customs office of Hong Kong. ¹According to Government figures, in 1997, the total value of Hong Kong's offshore trades was HK\$1 trillion; comprising 84.5% of the total value of re-exports. In 2000, the value of offshore trade amounted to HK\$1.4 trillion, exceed the re-exports figures for the first time. Between 1997 and 2000, offshore trade grew at 10.6% per annum, well above the re-export growth rate. It was predicted that by 2010, only 30% to 50% of the import and export trading activities in the region would be made through Hong Kong, compared to 80% in the early 2000s.

While facing such unfavorable business environment, the majority of the respondents (65%) agreed in Section 6.3 that advanced I.T. competency could enhance company's competitiveness. In Section 6.2, it was indicated that for future I.T. adoption, respondents regarded *Sales and Marketing/Customer Relationship* was the most significant attribute; it was followed by *Communications with Internal & External Parties*. In fact, sales and marketing is not limited to building a website with a comprehensive electronic product catalogue, there are a lot of reliable and effective online marketplaces to promote respective products and services to worldwide potential customers. In addition, equipped with advanced I.T. competency could reduce human errors in the complicated merchandising process, it could save the cost of air freight forwarder brought by belated production schedule; better customer relationship could be achieved to this end.

8.2 Provide Value-Added Services to Enhance Competitiveness

For export trading firms headquartered in Hong Kong, they often had sourcing and/or manufacturing operations in low-cost locations in mainland China, other parts of Asia or beyond. Most of them were family-run businesses and employed traditional ways of doing business.

¹ In general, trading firms in Hong Kong could be divided into three categories:

- i. *Left hand-right hand traders*: trading firms that matched sellers and buyers without adding any significant value to the process still dominated the industry in terms of the number of businesses. Those firms were characterized by the conduct of a straight-forward sourcing operation, usually identifying goods produced in mainland China or Hong Kong and shipping these generally to Western markets.
- ii. *Traders with some value added services*: many firms had begun to source raw materials for their suppliers and provided finance for these materials. They often used letters of credit from their customers as a guarantee for raising finance for their purchase orders. Other firms developed a sub-contractor relationship with a number of factories, in which they exerted significant control over the management of production, including quality control.
- iii. *Traders with sophisticated value-added services*: in certain cases, exporting firms added value to their traditional activity to such an extent that it was difficult to maintain the label of exporter. For example, some firms became designers and manufacturers of components for their supplier factories to produce finished goods, which the firms subsequently exported.



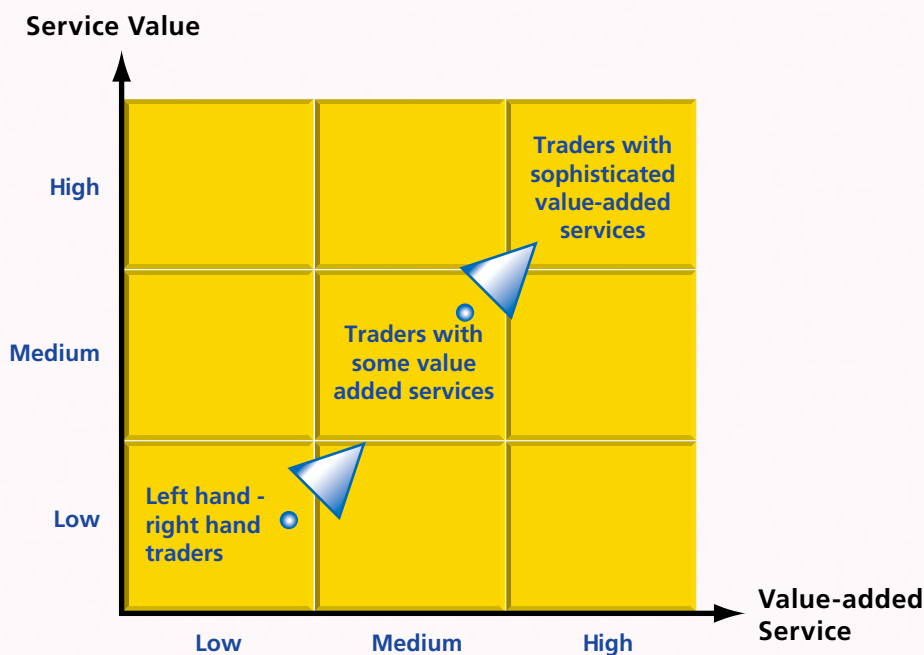
BROAD COVERAGE RECOMMENDATIONS

In Section 1.3, findings indicated that employee size under 20 accounted for 50% of the total respondents, whereas number of employee from 20-50 accounted for 40%; over 51 employees only accounted for 10% of the total respondents.

In Section 1.2, it was noteworthy to pinpoint that among the 20 respondents, 50% of the respondents were headquartered in Hong Kong, whereas 50% were subsidiaries of overseas mother companies, they served mainly as the sales and marketing arm for the overseas headquarters. It was recommended that domestic traders should base on its resources, strategically consider moving from providing “some value added services” to providing “sophisticated value-added services” mentioned above. Since the trading industry had been developed for more than several decades, it had been gone through dramatically changes; it was believed that traders merely provided “Left hand-right hand trade” could not meet buyer’s increasing demand. Most of the traders provided some kinds of value-added services, like sourcing raw materials, QC services to meet customers’ needs. Domestic traders should strategically provide advanced value-added services to further enhance competitiveness; for instance, to articulate in design and advanced materials sourcing solutions. Manufacturing cost was transparent and easily access with the ease of e-Commerce, it was advised that providing unique value-added services would be one of the means to keep loyal customer relationship and enhance traders’ competitiveness to explore new clients in new markets.

8.2 Diagram

Strategy of Shifting to Provide Sophisticated Value-added Services





BROAD COVERAGE RECOMMENDATIONS

8.3 E-Commerce – a Catalyst to Facilitate Buyers Meet Sellers

The prevail of e-Commerce, an international marketplace was perceived as the catalyst for matching buyers and sellers instantaneously, which further diminish the traditional traders' value. ² Alibaba.com was the largest online B2B company in China in terms of number of registered users and market share by revenue. Alibaba focused on global importers and exporters, through active listings, enquiry exchanges, instant messaging, discussion forums and other user-friendly community features, suppliers and buyers formed large, interactive online communities on its marketplaces. Suppliers and buyers would use the marketplaces to establish their presence online, identify potential trading partners and conduct business with each other. Suppliers and some buyers could use the marketplaces to host their company profiles and catalogues in standardized formats known as "storefronts" and post "listings" such as products, services and trade leads. Users could view storefronts and listings in over 30 industry categories and nearly 5,000 product categories by either searching for keywords or browsing through the online industry directory.

Alibaba.com's mission statement was "讓天下沒有難做的生意" ("to make it easy to do business anywhere"). To accomplish this mission, Alibaba.com had set forth a competitive strategy to make its online marketplaces more effective for SMEs around the world.

First, Alibaba.com aimed to increase the size of the marketplaces through the expansion of its user base and active listings. The company believed that the breadth and quality of users and listings were critical to the success of the marketplaces. To that end, Alibaba.com leverages the networking aspect of its online marketplaces, its leading market position and the "Alibaba" brand name to increase its user base worldwide. It also planned to conduct targeted marketing to potential users in specific industries and geographic locations.

Second, Alibaba.com putted continuous efforts to enhance community experiences to further improve user loyalty and activity through continued development and introduction of new features and tools. Specifically, it planned to invest further in the existing instant messaging service, online forums and other communication services. Alibaba.com also planned to continue organizing regular meetings, training and offline events for registered users and paying members to further build up the sense of community.

Third, Alibaba.com was keen to monetize its user base after providing years of free service to the majority of its members. The company would strive not only to convert more users into paying members, but also to generate more revenue from existing paying members through sales of value-added services, such as additional keyword listing and premium listing placement.

Alibaba was not the only e-Commerce player which facilitate an international marketplace facilitate direct deal between buyers and sellers. International B2B giant Global Sources, enhance its online service by other channels such as print business directories and exhibitions to add value to both buyers and sellers. On one hand, the successful of Alibaba and Global Source had indeed made international trade more transparent, it had further threatened the traditional value provided by traders on the other.



BROAD COVERAGE RECOMMENDATIONS

The popularity of e-Commerce had accelerated the process of globalization. Alibaba and Global Source had indeed provided convenience for buyers and sellers. In spite of this, there were still a lot of overseas buyers relied on traders to act as a sourcing and buying agent in China. It was particular true to those small-to-medium or new buyers to the China market. On one hand they were aware that the worldwide factory — China could provide competitive manufacturing goods; on the other hand they also know that the service quality, QC quality and government policy was difficult to manage in China. Under such circumstance, a trustworthy and competent agent who could provide quality deliverables would still have their market value for those small-to-middle size overseas buyers. Unlike the worldwide retailer giants, they could not afford to establish their own buying offices in China; at the same time they could not find the value-added services they were looking for from Alibaba or Global sources. By sacrificing a reasonable margin for traders, they could save time and assure the complicated sourcing and quality issues. If traders could appear as well-established and trustworthy partners, they could still be the small-to-medium overseas buyers' consideration. To this end, better equipped I.T. competency for internal management and external promotion would pose advantages for traders. Apart from that, providing advanced value-added service would be a means to better serve loyal customers and increasing profit margin.

8.4 I.T. to Enhance Merchandising Competency

In Section 2.2 and 2.3, respondents expressed that the most time consuming process along their business operation was *Merchandising*. In addition, it was noteworthy to pinpoint that in Section 3.1, *P.O.* was one of the widely adopted I.T applications among the respondents (75%); however, the satisfactory level of deploying P.O. was very low. No respondents rated their user experience as satisfactory- to-very satisfactory.

Typical trading firm required to collect specifications from buyers and conduct sourcing and matching accordingly before delivery. Due to the fact that traders relied on OEM factories for production, traders required to spend significant resources in matching buyers and production needs. They required to create correct sales orders that match between the customers and the OEM manufacturers' production specifications. Their staff needed to search, source and consolidate many different OEM products in order to fulfill the ordering requirements as well as issuing correct purchase orders. Each order would involve different products categories, photos and product features. Lack of a comprehensive document management system that systematically manages their products portfolios would create error and inefficiency.



BROAD COVERAGE RECOMMENDATIONS

In Section 3.1, respondents indicated that the adoption of *Enterprise Resources Planning (ERP)* solution was low, only 50% of the respondents were currently using ERP and the satisfactory-to-very satisfactory level rated only 40%. ERP refers to an enterprise-wide information system designed to coordinate all the resources, information, and activities needed to complete business processes such as order fulfillment or billing. ERP solution is characterized by supporting a variety of business functions such as manufacturing, supply chain management, financials, projects, human resources and customer relationship management from a shared data store. ERP system is based on a common database and a modular software design. The common database could allow different departments of a business to store and retrieve information in real-time. Ideally, the data for the various business functions were integrated. A competent ERP or P.O. system could enhance company's efficiency, reducing human errors and providing better customer satisfactory. It was particular practical for trading firms which had to go through the complicated merchandising process. According to this finding, it was noted that trading practitioners were sensitive to the economy changes (in both origin and destination regions). In addition, they were more parsimonious as in Section 4.3, 50% of the respondents rated *Budget* as top concern in adopting I.T. It was advisable for trading firms to adopt small-scale I.T. to be more adaptive and responsive to environment changes.

8.5 Case Study: Adding Value to Traditional Distribution Model: Integrated Distribution Services Group (IDS)

Adding value to customers is widely regarded as one of the means to enhance competitiveness in trading industry. Integrated Distribution Services Group (IDS) demonstrated a successful case of turning a mere distribution function to 'Value-Chain Logistics' model.

Adding value to traditional distribution business has been perceived as the strategy to tackle declining margin and enhancing competitiveness in trading industry.³ Integrated Distribution Services Group (IDS) was a subsidiary of Li & Fung Group (LFG) principally engaged in the provision of logistics services, the marketing and distribution of consumer and healthcare products and manufacturing. The Group operates mainly in geographical areas of Hong Kong, Taiwan, Thailand, Malaysia, Singapore, the Philippines, Indonesia, Mainland China, Brunei and the United States of America.

In 1999, IDS established through the acquisition of Inchcape Marketing Services (IMS). IMS was a 150-year-old British trading company; it had a highly diversified business which lacked a core focus. It was facing declining and the value-adds provided to its brand owners were low. Management of Li & Fung Group (LFG) decided that this would be the opportunity to take over a nonperforming company and revamp that to what would become the revolutionary IDS Group. Throughout a decade, IDS has successfully established a model named 'Value-Chain Logistics' to provide brand owners and retailers with a customized end-to-end supply chain management solution: from manufacturing all the way through to delivery of finished goods to retail stores. By investing heavily in technology and building a pan-Asia manufacturing, distribution and logistics network, IDS became a one-of-a-kind provider of integrated distribution services in Asia.



BROAD COVERAGE RECOMMENDATIONS

While Li & Fung Limited's core business focused on sourcing products and materials from Asia and selling them to the West, IDS as a service provider can be thought of as 'reversing' the trading model: getting global brands of fast-moving consumer goods (FMCG) and healthcare products to Asia and making them available to Asia consumers. Leveraging Li & Fung's years of experiences in this region, the management saw the opportunities to reinvent the distribution business into a more competitive business model.

Management introduced a new concept named 'Value-Chain Logistics', and was the basis for IDS' value proposition to its customers. Value-Chain Logistics positioned logistics as the fundamental enabler to drive maximum efficiency and responsiveness in all the steps: from manufacturing to distribution to the final consumers. IDS positioned logistics as the main front-end business connecting traditional distribution services and manufacturing. These three core services formed a complete value-chain solution: from procurement of raw materials for manufacturing to delivery of finished goods to end consumers in Asia.

2 Three-Year Strategic Plans after Acquisition

Soon after the acquisition, IDS introduced a three-year strategy planning cycle that aligned the overall business direction and commitment throughout the organization. This planning process was term 'Phased Aggressive Evolution' within the company and guided the transformation of the IDS Group. Quarterly meetings were conducted to review and measure progress against the plan. While the first three-year strategic plan focused on ways to 'do things better'; the second three-year strategic plan focused on ways to 'do things differently'. During this time, IDS had developed a new business model based on the concept of a "Menu of Services": customers were able to customize what they buy by selecting from a number of à la carte service items.

Technology Investment to Differentiate from Competition

In addition to reorganization, senior management at IDS also took another important strategic decision to invest heavily in technology. While these investments were made when revenues were still low and unprofitable, the management team believed this was critical to allow IDS to deliver on its menu of services and to differentiate IDS from the competition.

Through its heavy investments in technology, IDS was able to develop an integrated and regional IT infrastructure, which allowed each of its three business streams to interact and share information. For each of the business streams, IDS also adopted specific applications tailored for IDS' services. The most unique feature of the IDS network was its web-based portal, called "Trigantic", which could be accessed by customers so they had regional visibility of IDS' operations on a near real-time basis. In addition, IDS had developed proprietary applications which enabled on-the-ground employees to collect market data in real time. With the IDS technology platform, the entire supply chain instantly became more transparent for brand principals, who now had full visibility on where the goods were in the supply chain.



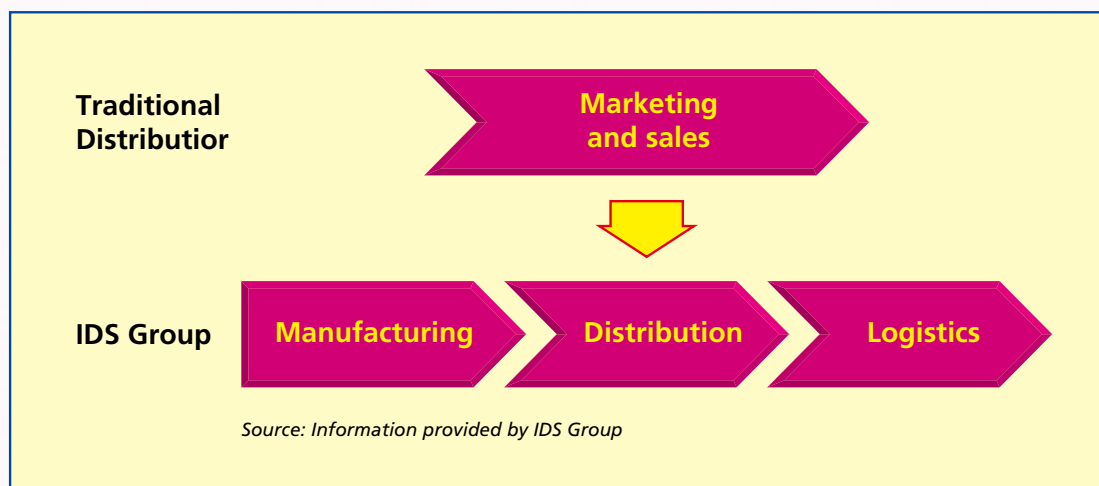
BROAD COVERAGE RECOMMENDATIONS

Such revolutionary initiatives had proven to be accepted by its customers and principals. IDS' unique business model enabled the company to achieve impressive results. Revenue rose from US\$466 million in 2002 to almost US\$1 billion by 2006; operating margins achieved a compounded annual growth rate of over 48 percent in the same period. Since the company went public in 2004, its market value had multiplied fivefold by mid-2007.

The following Diagram showed the evolution of IDS Group which turned a traditional distributing to a 'Value-Chain Logistics' model. Riding on its competitive advantage of distribution efficiency, IDS further extended the value-added services into the process of Manufacturing and Logistics. By successfully adding value to customers on one hand, it further raised the profit margin for IDS in each different process on the other. Of course it could not be applicable or it could not be the appropriate step for small-to-medium sized trading firms to acquire manufacturing functions like IDS, it was advisable that trading practitioners should take reference for creating value-added initiatives to their customers. For instance, how to provide more value-added service to their customers along the manufacturing, distribution, and logistics process? It could be varied according the each customer's specified needs. However, it was necessary and important for trading practitioners to review their current business process, service deliverables, and come up with a more competitive trading solution to face the changing and fiercer international business environment.

8.5 Diagram

Traditional Distributor Offerings vs. IDS Group Offering





BROAD COVERAGE RECOMMENDATIONS

8.6 LSCM to Facilitate Technology Adoption by Industries through Market-driven R&D

As far as the importance of Hong Kong to maintain its role as a trading hub is concerned, firms should strive to equip with better supply chain management and place emphasis on adding values to their services. Amid the evolution of business activities, traders are recommended to assess their technology needs and seek support in developing and adopting relevant technologies. The LSCM R&D Centre is commissioned to provide a one-stop shop for technology transfer and commercialization. For years, the LSCM R&D Centre has been running and managing over 20 R&D projects that aim to break down the technology barriers in hardware, software, systems and network design and development for industries along the supply chain. For full list of our projects and R&D programs available for industry and research collaboration, please visit www.lscm.hk.

Reference

¹ Vincent Mak, "Hong Kong's Trading Industry: Challenges From Mainland China", 2003 by The Asia Case Research Centre, The University of Hong Kong

² Ricky Lai, "Alibaba.com", by The Asia Case Research Centre, The University of Hong Kong

³ Jenny Tung, "Integrated Distribution services Group (IDS): Redifing the Asia Distribution Landscape", by Stanford Graduate School of Business, Case: GS-59, Date: 02/05/08



GLOBAL / CHINA WATCH



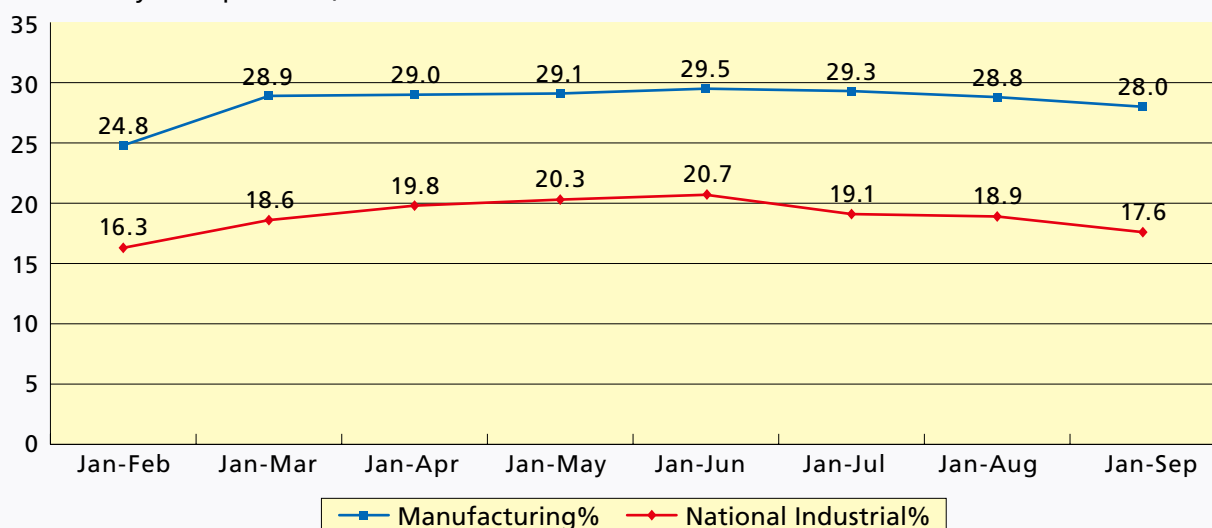
1. The Performance of China's Electronic Information Industry: Jan-Sep 2008

China's electronic information industry has seen a steady growth in the first three quarters of 2008, with its scale expanding and re-structure deepening. From January to September 2008, the industry realized a business revenue of RMB4,201.16 billion, a rise of 19.5% compared to the same period in 2007. Among the returns, the manufacturing industry investment netted RMB3,624.69 billion, a surge of 17.6% year-on-year; the software industry grossed revenues of RMB576.47 billion, an increase of 32.8% year-on-year. The industrial added-value of the manufacturing industry reached RMB842.83 billion, an increase of 20.5% year-on-year. Below are the characteristics of economic activities in China during the said period:

(a) The industry expanded at slower pace, and remained lower than the national industrial average growth

From January to September, the increasing rate of core business revenues of sizeable manufacturers dropped 3.1% compared to the second quarter, and decreased 2.1% compared to the same period last year. Comparing to the average national industrial growth rate at 28%, the manufacturing sector was 10.4% lower and with a wider gap of 1.6% compared to the first half of 2008.

Comparison of Growth between Manufacturing and National Industrial Sector from January to September, 2008



Reasons for sluggish growth: First, affected by the global economic slowdown, this led to the export growth rate dropped by 4.5%. As exports represent more than 60% of total production of the electronic information industry, slowdown of growth rate is inevitable. Second, affected by technical advancement and structural adjustment, the overall development of the industry has been sluggish. The growth of telecommunications equipment, computer and family audio-visual industries dropped by 10.4%, 7.1% and 6.6% respectively. Third, associated with series of natural disasters and this has brought negative impacts on the industry.



(b) Significant development of structural adjustment

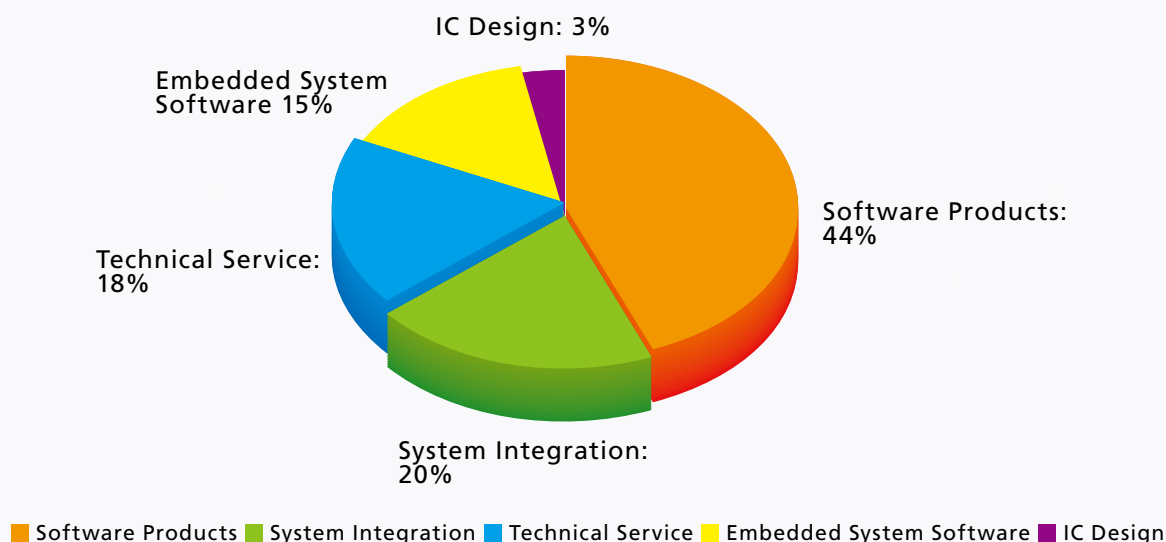
First, the software and basic components industries have experienced faster developments. From January to September, the revenue growth rates of software, electronic components and electronic parts were 32.8%, 31.7% and 24.2% respectively, which were 13.3%, 12.2% and 4.7% higher than the industries. Judging from this percentage distribution, the software industry occupied 13.7% of the whole electronic information industry from January to September, representing an increase of 1.4% (and surged by 12.3% compared to the same period in 2007); the electronic parts industry occupied 28.6% of the whole electronic information industry, representing a surge of 1.7% (and rose 26.9% compared to the same period in 2007).

Second, high-end products maintained rapid growth momentum in the market, with productions of LCD and PDP televisions saw a hefty rise of 51.8% and 162.1% respectively. Flat panel televisions occupied 29.8% of the whole colored television market sales; notebook computers saw an increase of 28.7%, occupied 72.5% of the whole mini-computer market; LCD occupied more than 93% of the display monitor market.

(c) The software industry maintained rapid growth

From January to September, China's software industry continued to pick up its pace as it grew 32.8% compared to the same period in 2007, registered a total revenue of RMB576.47 billion, with the growth rate increased by 9.2% compared to 2007. Software products continued to be the main driver of growth with a total revenue of RMB254.85 billion, surged 34.4% compared to the same period in 2007, represented 44.2% of the total revenue of the software industry. The software technical service has seen the fastest growth, with accumulated revenue of RMB103.5 billion, an increase of 43.4% compared to the same period last year, and registered an average growth rate of 10.6% compared to the software industry. Among these, the software outsourcing service earned RMB11.9 billion, registered a growth rate of 82.8%; the system integration service earned RMB116.61 billion, registered a growth rate of 28.4%; the embedded system software registered a revenue of RMB846.3 billion, a rise of 25.2% year-on-year; IC design earned RMB16.89 billion, an increase of 22.1% year-on-year.

Revenue Distribution of the Software Industry from January to September, 2008





(d) Production level of the majority of merchandise on the plunge

From January to September, the whole industry manufactured a total of 427.077 million units of mobile phones, a decrease of 17.5% year-on-year (25.4% in 2007) and surged 7.9% over last year. Micro-computers had seen a production figure of 104.793 million, up 18% year-on-year and down 16.7% over the last year. Integrated circuits were at 31.99 billion pieces, rose 59.9% year-on-year and plummeted 9.9% over last year. Outputs of traditional electronic products continue to shrink and have seen negative growth. Among them, productions of telephone handsets dropped 5.4%, fax machines down 13%, cameras plummeted 25.3% and printers decreased 4.5%.

(e) Import/Export growth rate was lower than the national foreign trade

From January to September, the total import/export value of electronic information products was registered at US\$671.92 billion, up 18.2% year-on-year. Among these, export accounted for US\$389.8 billion, an increase of 21.7% compared to 2007, but dropped 4.5% compared to the same period in 2007. It was 0.6 percentage point lower than the national foreign export, represented 36.3% of the total export in China. The total import was valued at US\$282.12

billion, a rise of 13.7% compared to 2007, dropped 6.5% year-on-year, represented 15.3 percentage points lower than the national foreign import, and accounted for 31.6% of the total export in China.

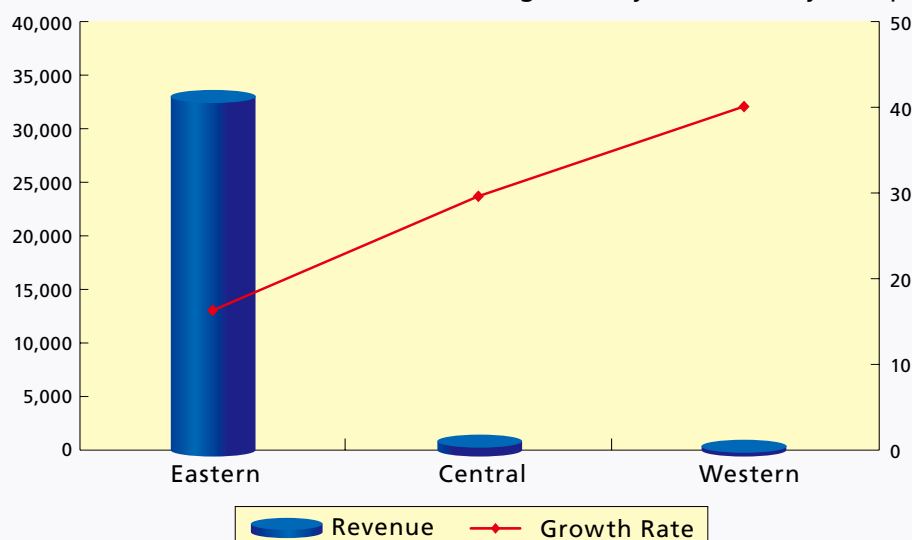
(f) Local and foreign enterprises showed different developments

From January to September, foreign manufacturing enterprises reported a 15.2% increase in revenue growth rate, which was 2.4 percentage points lower than the average of manufacturing sector, and marked for continuous 17-month below the average. Revenue of local manufacturers was increased at 27%, 9.4 percentage points higher than the average rate of manufacturing sector. Private enterprises saw a remarkable revenue increase at 30.9%, which was 13.3 percentage points higher than the average growth rate of manufacturing sector.

(g) Central and Western districts continued to develop faster than the Eastern

From January to September, the manufacturing sector of Central and Western Districts in China generated revenue of RMB233.24 billion, surged 33.9% compared to the same period in 2007, which was 16.3 percentage points higher than the average growth rate of manufacturing. Both Chongqing and Jilin saw the fastest growth – chalking rates of 81.4% and 65.8% respectively.

Regional Revenue Distribution of the Manufacturing Industry from January to September, 2008





The manufacturing sector in the Eastern District earned RMB3,391.45 billion, rose 16.7% year-on-year and was 0.9 percentage points below the average growth rate of the manufacturing sector, accounted for 93.6% of the industry and dropped 0.7 percentage points year-on-year. Both Beijing and Tianjiang experienced negative growth continuously over the past six months.

The following three tables illustrate the major economic indicators of the electronic information manufacturing industry from January to September, 2008. (Information Source: Ministry of Industry and Information Technology of the People's Republic of China, 05 November 2008)

Table 1: Production Volume of Major Electronic Goods from January to September, 2008

Product Names	Units	Accumulated Production This Month	Same Period Last Year	% Change
Mobile Phone (GSM CDMA)	10,000	42707.7	39575.6	7.9
Programmed Control Switchboard	10,000	3352.7	4144.3	-19.1
Mobile Telecommunication Station Equipment	10,000	1047.9	1244.9	-15.8
Telephone Handsets	10,000	12109.3	12800.5	-5.4
Fax Machine	10,000	594.9	683.6	-13.0
TV:	10,000	6609.9	5764.4	14.7
Color TV	10,000	6502.5	5578.1	16.6
Rear Project TV	10,000	0.6	5.9	-89.5
Plasma TV	10,000	1786.5	1176.8	51.8
Ion TV	10,000	148.9	56.8	162.1
AV Recorder	10,000	170.2	227.9	-25.3
Micro-Computer	10,000	10479.3	8882.6	18.0
Notebook Computer	10,000	7598.1	5905.5	28.7
Server	10,000	156.6	265.6	-41.0
Monitor:	10,000	10322.9	10391.4	-0.7
LCD Display	10,000	9724.2	8921.3	9.0
Printer	10,000	3011.0	3153.7	-4.5
Electronic Components:	10,000	61149501.5	51525984.3	18.7
Chip Components	10,000	26465605.0	20271414.1	30.6
Color Picture Tube	10,000	5045.9	4986.4	1.2
Semiconductor Device	10,000	17130473.9	16499852.4	3.8
Semiconductor Integrated Circuit	10,000	3199399.2	3021225.3	5.9
Digital Camera	10,000	5567.9	4687.2	18.8



Table 2: Major Economic Indicators of the Electronic Information Manufacturing Industry from January to September, 2008 (1)

Units : RMB10,000

Unit Names	No. of Enterprises	Major Business Revenues		Industrial Add-Values	
	(Total)	(Accumulated)	% Change	(Accumulated)	% Change
Total No. of Enterprises	16178	362469485.3	17.6	84283240.3	20.5
Telecommunication Equipment Manufacturing Industry	1365	60650631.6	9.1	13525313.9	14.4
Radar Manufacturing Industry	47	914238.0	6.0	255986.6	6.0
Broadcasting Television Equipment Manufacturing Industry	391	2351700.0	17.8	674010.1	17.7
Electronic Computer Manufacturing Industry	1439	110509462.4	12.4	20088071	13.8
Family Use Audio-Visual Equipment Manufacturing Industry	988	27565486.5	12.9	5164297.7	14.4
Electronic Devices Manufacturing Industry	2398	49783852.7	31.7	14146224.4	31.6
Electronic Components Manufacturing Industry	5976	70508878.2	24.2	19223271.8	24.4
Electronic Testing Equipment Manufacturing Industry	674	4122045.5	25.3	1383130.2	25.9
Electronic Special Use Equipment Manufacturing Industry	1321	9211149.3	33.0	2823269	33.1
Electronic Information Electro-mechanic Manufacturing Industry	1050	9952260.3	20.2	2741396.6	20.6
Other Electronic Information Industry	529	16899780.8	21.3	4258269	24.5
Hong Kong , Macau & Taiwan Investment Foreign Enterprises	7440	282259413.7	15.2	62850387.4	17.8
State-owned Holdings Enterprises	939	23733869.4	18.5	5564145.6	16.0



Table 3 : Major Economic Indicators of the Electronic Information Manufacturing Industry from January to September, 2008 (2)

Units : RMB10,000

Unit Names	No. of Enterprises	Major Business Revenues		Industrial Add-Values	
	(Total)	(Accumulated)	%	(Accumulated)	%
Total No. of Enterprises	16178	362469485	17.6	84283240	20.5
Beijing City	671	19059588	-2.2	3738473	-0.1
Tianjin City	426	13479710	-3.3	2932480	-0.5
Hebei Province	171	1833838	40.8	552243	41.9
Shanxi Province	42	659095	31.9	135792	29.4
Inner Mongolia Autonomous Region	23	845160	32.5	172168	54.2
Liaoning Province	401	6158150	20.3	1510974	23.8
Jilin Province	47	417831	65.8	107074	52.5
Heilongjiang Province	51	170304	16.4	45858	19.7
Shanghai City	1042	40926831	12.7	8002702	13
Jiangsu Province	2804	78935354	25.9	19387646	26.5
Zhejiang Province	2508	19258087	10.1	4841596	14.4
Anhui Province	270	2486727	23.9	599554	25.8
Fujian Province	554	14142174	19.6	3109320	23.3
Jiangxi Province	152	1518343	38.7	381130	38.3
Shandong Province	1072	27083032	31.7	6681123	35.9
Henan Province	203	2685347	44.7	746721	47.8
Hubei Province	243	3759274	23.8	984733	24.8
Hunan Province	198	1423908	16.9	389646	19.2
Guangdong Province	4555	117383162	15.7	27419970	18.9
Guangxi Zhuang Autonomous Region	97	808084	72	190773	66.2
Hainan Province	5	77198	29.4	20921	36.6
Chongqing City	57	548328	81.4	115756	65.3
Sichuan Province	382	6208447	46	1536123	49.4
Guizhou Province	31	482789	23.8	108341	23.3
Yunan Province	14	92665	30.3	22212	28.9
Shanxi Province	122	1757373	26.6	472558	23.5
Gansu Province	27	134050	-0.2	39058	0.6
Qinghai Province	3	12883	-11.5	3781	-12.2
Ningxia Hui Autonomous Region	1	34405	0	10322	0
Xinjiang Uyghur Autonomous Region	6	87351	9.8	24196	10.5



2. China's State Council Issued Ten Measures to Boost up Domestic Demand by Injecting RMB100 Billion in the Fourth Quarter of 2008

Like many countries around the world buffeted by global financial turmoil, the Chinese Government has taken practical measures to stimulate domestic demand. On November 5, the State Council has convened an executive meeting to analyze and plan for measures to effectively stimulate domestic demand and promote economic growth. Ten measures that aim to expand domestic demand and boost economic growth have been confirmed at the meeting, which include accelerating construction of affordable and low-rent housing; speeding up rural infrastructure construction; accelerating railway, highway and airport transport infrastructure construction; beefing up health and medical service, cultural and education development; strengthen ecological and environmental protection; enhancing innovation and industrial restructuring; rebuilding after earthquake; income increments for urban and rural citizens; a full implementation of value-added tax reform and restructuring and strengthen the financial support to maintain economic growth. The macro-economic policy has been readjusted, with active fiscal policy and moderately easy monetary policy to be adopted. The newly policies implemented by the State Council will involve an additional investment about RMB4,000 billion, which is equivalent to 29.2% of social fixed asset investment in 2007, and is also equivalent to two percentage points of actual GDP growth every year.

3. The Korea-China-Japan RFID Round Table Meeting

Beginning June 2008, the associations related to the RFID industry from China, Japan and Korea (including CIITA RFID China Alliance, Japan Automatic Identification Systems Association and Korea Association of RFID/USN) have agreed to hold an annual "Korea-China-Japan RFID Round Table Meeting" in the respective countries. For this reason, the three parties have signed a "Memorandum of Korea-China-Japan RFID Round Table Meeting" (hereinafter to be named the "Memorandum").

The "Memorandum" has clearly stated the details of the "China-Japan-Korea Round Table Meeting", which includes five areas: its mission, the substantial collaboration details, operation model, set-up of the secretariat office and operations mechanism among all attending institutions from China, Japan and Korea.

The "Korea-China-Japan RFID Round Table Meeting" aims to establish a functional institution that can well represent the benefits of RFID industry in China, Japan and Korea. It helps to promote non-governmental RFID organizations of these countries in the following three collaborative areas: (1) Promoting the RFID infrastructures and resources construction among China, Japan and Korea; (2) Facilitating exchange of RFID human, material, information and technical resources among these countries; and (3) Initiating collaborations on handling global market / technical problems and disputes. The ultimate goal of collaboration is to promote economic cooperation and development of RFID technology in Eastern Asia region.



Below are substantial details of cooperation among the three countries:

(a) Share of Information. It includes the establishment of a joint web portal; dissemination of important information related to the participating organizations; and announcement of information on global RFID technology as well as information on RFID market and standardization among China, Japan and Korea.

(b) Personal Communication. It includes (i) mutual visits of delegations among three countries; (ii) support exchange and cooperation among all members of participating institutions; (iii) joint organization of exhibitions/conferences; (iv) on the precondition of cooperation and result sharing, the countries will promote development of RFID pilot applications together; (v) joint launch of RFID investigation and research projects, and to publish reports on relevant topics; (vi) mutual collaboration in developing public/common RFID infrastructural resources; (vii) joint participation in the competitive global market and mutual support on RFID technology; and (viii) training and exchange of talents in RFID technology, which includes the establishment of a professional training mechanism for talents of RFID technology, and joint development and implementation of a certification system for RFID professionals.

4. Guangdong Announced Opinions About Accelerating Integration of Informatization and Industrialization

In order to implement the spirit of the 17th National Congress of the Communist Party of China and to accelerate integration of informatization and industrialization, the General Office of the People's Government of Guangdong Province issued "Opinions about

Accelerating Integration of Informatization and Industrialization of Guangdong Province" (hereinafter to be named as the "Opinions") prepared by the Department of Information Industry and the Economic and Trade Commission. It has clearly outlined the directive thought, development goal, key responsibilities, basic strategy and precautionary measures of integration of informatization and industrialization. The Opinions follows the innovative idea of "Boosting of Informatization and Industrialization Integration" as suggested by the 17th Party Congress, which was also the first opinion related to informatization and industrialization integration advocated by a provincial government, representing a significant breakthrough resulting from liberating ideas.

In point number five of the "Opinions" that mentions the basic strategy of the "Logistics Intranet" project. The project aims to propel the development of "Logistics Intranet" characterized by the application of RFID technology. It actively follows the development direction of international enterprises, implements electronic code and RFID standardization of national products, and promotes RFID technology in industrial production and logistics. By building of RFID industry and R&D bases, the project aims to elevate service standards of the RFID Technology Service Center on provincial level. With opportunities brought by the integration of RFID technology, Global Positioning System (GPS), Geographical Information System (GIS), wireless communication technology and internet, the development of independent intellectual property right and technical industrialization has never been easier. Thanks to the support of governmental departments that constructed the regional modern logistics public information center



and public information service platform, the foundation of “Logistics Intranet” has been formed – which helps to promote logistics integration among different departments and bring convenience to custom clearance. It also enhances cooperation among Guangdong, Hong Kong, Macau and other countries, and to attract worldwide logistics enterprises to invest in our provinces. At the same time, the Opinions also promotes tighten interconnections of public logistics information service platform with relevant platforms in Hong Kong and worldwide and active participation in international supply chain management in order to take local enterprises to the global stage.

5. The “Eleventh Five-Year Plan” Investment Guide for Information Technology Application issued by the Ministry of Industry and Information Technology

The “Eleventh Five-Year Plan” marks the important period when China endeavors to build a moderately wealthy and socialist harmonious society. It is also the start-up period, solidifying its status as the leading Information Technology kingdom. Recently, the Ministry of Industry and Information Technology has announced “The ‘Eleventh Five-Year Plan’ Investment Guide for Information Technology Application” (Hereinafter to be named as the “Guide”) which consists of two major parts: advance development and foremost areas in the application of Information Technology, and the investment guide of Information Technology and Product Applications.

The first section of the “Guide” has clearly outlined the development the “Eleventh Five-Year Plan”: enhances production efficiency and enterprise profitability of

traditional sectors with the support of information technology; the application of information technology has greatly increased the growth of GDP and built a frugal yet harmonious society. It has also implemented comprehensive e-commerce and complete product lifecycle management, realizing an integrated use and sharing of information and resources among different industries and large- and medium-sized enterprises. Thanks to the application of Information Technology, the social environment has seen remarkable improvement, and informatization level of the society has been on the rise. The scale of IT professionals can satisfy the needs in China. The development of IT consulting services is on the right track, nurturing a group of new informationized consulting service enterprises that are competent, branded and influential.

In part one of the “Guide”, it has mentioned the major development areas of the “Eleventh Five-Year Plan”: (a) greatly promote informatization and modernization of the agricultural industry; (b) transform and elevate four major traditional industry areas, including manufacturing of equipment, handicraft logistics, trade and business circulation and resource extraction. It strives to profoundly develop the e-commerce and modern logistics industries, and to support information technology such as internet services for business and trade enterprises, realized sharing of resources and information; to promote application of the intelligent transport system, to accelerate building of the information platform nationally and regionally, and to streamline supply chain management. In terms of resource extractions, it aims to promote IT applications of the production safety and monitoring system, alarm system, environmental monitoring system and information archive, in



order to increase the sustainable development capability of resource driven enterprises; (c) greatly develop electronic products used in industrial applications, and to support the development of software system integration industry and new information consulting service industry; (d) support the construction of public technology service system based on the principles of "industrial concentration and regional characterization". Application testing of information technology will be conducted in different areas, industries and traditional enterprises with distinctive characters, providing them with new perspectives of information technology and a common service platform catered to specific industries; (e) enhance information literacy for enterprises and cities. In terms of design, production, manufacturing, management, finance and sales performance, different enterprises of different styles are provided with information technology specified to their needs. This helps to enhance logistics, capital and information flow, market competitiveness and capability of sustainable development; (f) priority formulating of information technology application standard for different industries and regions. The industries and regions should insist on the principle of standardization comes first.

The second part of the "Guide" is divided into investment guides for application of generic technology and application of industry-specific information technology and product. In the investment guide for application of generic technology, it has clearly stated that Enterprise Resources Plan (ERP), e-commerce, barcode technology and RFID are crucial applications of productions and operations for enterprises. While in the investment guide for application of

industry-specific information technology and product, it has listed out twelve application areas of information technology, with RFID technology being used in them all, which include: (1) agricultural information technology applied in the livestock cultivation system; (2) automobile information technology applied in the production lines of automobile and RFID anti-theft system; (3) electrical information technology applied in the electrical equipment management system; (4) textile and clothing information technology applied in the supply chain system; (5) coal information technology applied in the coal mine monitoring system; (6) building and construction information technology applied in the city's underground integrated sewage management information system, the city's transport equipment management information system, the city's public transport information system, the building automatic control system and digitalized community intelligent information integrated service system; (7) building materials information technology applied in the logistics information system and the industry's informationized platform; (8) commercial information technology applied in the RFID based logistics management system; (9) transport information technology applied in the integrated intelligent transport management system, waterway, public road goods logistics and information service transport network system, One Card system in cities for public transportation, and air transport customs monitoring system. Others application areas of technology and products include shipping, petrochemical, space and aviation, medical and health care and light industries.



THE ADOPTION & APPLICATION OF RFID TECHNOLOGY IN RELEVANT INDUSTRIES IN CHINA

1. National Development and Reform Commission (NDRC) convened an expert panel to assess the first batch of pilot programs on ICT application

The Notification on Organizing the ICT Application Pilot Programs by the General Office of the NDRC (F.G.B.G.J 2008 No. 618) is actively adhered to by local governments, departments, ministries, and central enterprises. By August, the recommendation stage for the first batch of pilot programs has witnessed the involvement of 34 provinces, autonomous regions, and municipalities; 7 central government departments and 11 central enterprises through the submission of 304 pieces of materials for the pilot programs in 7 areas covering mobile E-commerce, electronic verification service, credit information service, comprehensive information service for new countryside, E-commerce service for SMEs and RFID application, and other service areas. On November 18, 2008, 210 organizations and units recommended the pilot programs, which passed the initial screening of the panel of experts. Likewise, these organizations and units attended the defense and final judgment meeting. The Department of High-Tech Industry of the NDRC will finalize the list of the first batch of pilot programs based on the experts' recommendations.

2. Introduction of the national pilot programs of mobile E-commerce

Mobile E-commerce refers to the electronic commercial activities which are based on the mobile technology, RFID technology, and the Internet technology together with smart mobile terminals like mobile phone,

PDA, Palm computer, and other devices. It combines multiple technologies in mobile communication, mobile terminal, IT, IC card, and RFID to realize the electronic flow of information, capital, and logistics that provide the ubiquitous service for any kind of needs in commerce.

The national pilot program of E-commerce is one of the six key guiding programs deployed in the *Eleventh Five-year Plan of E-commerce Development*. Since June 2007, the former Informatization Offices of the State Council and China Mobile Communications Corporation have pushed forward the national E-commerce pilot program. The local pilot provinces and municipalities like Hunan Province and the cities of Chongqing and Guangzhou promoted various pilot applications in line with local characteristics, including mobile payment, public transportation, utility payment, mobile shopping, mobile healthcare service, agriculture-related mobile e-commerce, mobile e-commerce for special market, e-commerce for SMEs, mobile information service of logistics, mobile tourism service, and integrated business application for the coming Asian Games.

As early as 2004, the Hunan branches of China Mobile and UnionPay started to offer various services like mobile lottery, on-line shopping, and mobile payment for phone bills which were all based on mobile payment. Currently, the customer base has reached 1.5 million people whose China Mobile cards in Hunan are linked with their bank cards, dedicating RMB40 million yuan in value each month. This has been ranked the first in the country in terms of number of customers and transaction value. A couple of years ago, the Hunan branch of China Mobile has led the



THE ADOPTION & APPLICATION OF RFID TECHNOLOGY IN RELEVANT INDUSTRIES IN CHINA

way in developing services such as the VIP E-card, E-appointment for hospital, mobile ticket-booking and mobile coupon, and other services. It also invented a mobile bank card and a very popular all-in-one card that links cell phone, access control, and consumption functions together allowing customers to use their mobile phones as bank cards and access control cards to make payments at department stores and their workplace. The Hunan branch of China Mobile also proposed solutions to meet the daily consumption demand of the all-in-one card of the cell phone and public transportation, all-in-one card for campus, and cell phone payment for utility charges. As the innovation cradle of E-commerce products of China Mobile, the Hunan branch has been focusing on the development of mobile E-commerce and spares no effort to implement key programs, such as the VIP E-card of GoTone, barcode voucher, RFID and mobile payment, and other programs. It explored and submitted applications for 12 independently developed mobile E-commerce patents which belong to advanced patent levels both at home and abroad. The Hunan branch of China Mobile has been the frontrunner in mobile E-commerce innovation.

The municipality of Chongqing has stressed the importance of mobile E-commerce pilot programs and issued the *Development Program for Mobile E-commerce in Chongqing* in March 2008 to propel the systematic growth of mobile E-commerce in the municipality. By November, 2,594 POS machines have been laid out and 191,000 mobile wallet subscribers have been attracted, with an accumulated transactions of up to 2.868 million times, dedicating a value of RMB15.66 million yuan. Chongqing also has taken the initiative to

create a favorable environment for mobile E-commerce development thereby attracting upstream and downstream enterprises to form an industrial cluster in this field. On March 10, 2008, the Informatization Office of the State Council officially awarded Guangzhou the status of a national pilot city of mobile E-commerce. The office supported Guangzhou to build up a national-level mobile E-commerce Industrial Zone as well. As one of the first pilot programs approved by the state, Guangzhou took this significant step and seized this early opportunity in developing the mobile E-commerce. An important application in this pilot program is the mobile subway ticket in Guangzhou. According to relevant sources, mobile phone subscribers of China Mobile could pay for their subway ride through mobile phones after they change their SIM cards. They can also avail of this service even if they want to keep the same mobile phone by installing an additional antenna available in any business outlet of China Mobile. This technology is still in the pilot stage and will be fully implemented after relevant experience is gained. The value of the E-commerce trade in Guangzhou which is above RMB130 billion yuan, ranks third among the big cities of the country. E-payment is comparatively popular here as evidenced by the largest POS and ATM networks in the country. The total number of bank cards issued reached 35 million pieces with an average of 3 cards each person. Moreover, the trade value from card payments ranks first in the country. The "Yangchengtong" card reached a total of 8.5 million pieces with daily transactions of up to 2.5 million times and a value of RMB5 million yuan. With a good foundation and huge potential for mobile E-commerce applications, the Guangdong branch of China Mobile has ranked first for the past decade, and offers



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services like the mobile E-boarding card, mobile lottery, mobile audio/visual books and magazines, and other services. Mobile payment for consumption has accumulated to RMB150 million yuan. The supporting systems for mobile E-commerce, which include logistics, credit, E-payment, security validation, and similar systems have been improved. The modern logistic center is growing in its influence, with the Baiyun International Airport ranking third in terms of passenger and cargo capacities while the Guangzhou Port's throughput capacity ranks third. In addition, a transshipment center of FedEx Asia Pacific in the Baiyun International Airport will be in operation this year. These are the good foundations and prime conditions for launching the mobile E-commerce pilot program in Guangzhou City. An open and coordinated labor-division mechanism for the pilot program will be adopted with the government guiding and the enterprise like the Guangdong branch of China Mobile playing a major role in program development. Efforts will be heightened in developing a mobile payment program, public platform of mobile logistics, and mobile E-commerce platform for SMEs. By the end of 2010, there will be more than 2,000 business partners in the development of the mobile E-commerce. The projected market value will reach 4 billion yuan and the industries related scale value will reach RMB10 billion yuan each year.

In China, with the popularization of on-line transactions using bank cards, E-commerce is maturing and mobile E-commerce is emerging. It is estimated that mobile

E-commerce subscribers in China will reach 72 million people with a market value of RMB1.17 billion yuan. There are several advantages for the development of the mobile E-commerce in China. First, the number of mobile phone subscribers in China is the highest in the world, with 600 million subscribers according to the latest data. This huge consumer base provides a good foundation for the mobile E-commerce and mobile payment relying on the RFID. Second, various applications in the mobile payment system that uses the RFID technology and anti-counterfeit technology for mobile phone RFID allows for secure payment anytime anywhere. This adheres to the consumption behavior as it is needed by the people due to its convenience and anti-counterfeiting security feature. Besides, mobile payment reduces transaction cost complementing the national informatization efforts, i.e. *killing more birds with one stone*. The state deployed strategic guidelines and targets for the national informatization development from 2006 to 2020. As an IT technology that benefits the masses, mobile payment is one of the important parts in the national informatization effort. Fourth, emerging from the field of new commercial settlement and payment service, mobile E-commerce has a huge market potential, attracting the attention of telecommunication, financial, and IT professionals. Operators, mobile phone manufacturers, and the financial sector are joining hands to promote mobile payment and drive the development of the whole industrial chain forward.



APPENDIX A

DISCUSSION GUIDE – TRADING

Background Information

- Company Name, job title and/or department
- Size of Company – No. of staff in Hong Kong, Mainland China and Overseas
- No. of I.T. staff in Hong Kong, Mainland China and Overseas
- Year of Establishment
- Business Nature (e.g. Toy, Watch, Garment, Electronic Component)

Section A:

Business Process

In this section, we ask participants how they typically do their business to identify information flow and technology needs derived from their business processes.

A generic work flow diagram applicable for the industry sector being studied

- This work flow diagram outlines typical workflow of your industry, say how you prospect/satisfy your customers, design your products, manage production (outsourcing), manage material flows (if any) as well as finished goods distribution to your customers. How far do you think this diagram illustrates how you do your business? Do you have anything to add?
- As per above work flow diagram, what kind of information flows is critical for your operations?
- Which process is the most time consuming?
- Which process is the most costly?
- What are the critical areas in your business processes while collaborating with other business partners along the supply chain, such as manufacturers, buyers, 3PL, etc.?
- What is the pain point(s) you see in your business processes in complying with relevant governmental and industrial regulatory authorities?

Section B:

Current I.T. Application Level

In this section, we ask participants how they currently apply information technology for their business operations.

A slide illustrating possible I.T. solutions for their business operations

- What I.T. solutions are you using? Why or why not (Section C)? Who is/are the service providers? And what about the service model?
- How does information technology fit in the above processes? (e.g. CRM for sales & marketing, ERP for production & logistics management, EDI with external parties via DTTN, etc.)
 - ♦ If RFID is checked as one of the possible I.T. solutions, please also ask the following questions:
 - How specifically RFID technology is related to you?
 - How do you perceive the value of RFID brought to you and to the industry (or the entire supply chain) at large?
- Are you using information platform (HK, Mainland China and Overseas) to collaborate with your business partners? (e.g. DTTN, Savi.net, Cargo 2000, etc.)
- How satisfied are you with the current technology solutions within your company today? Please rate the selected items in terms of the degree of satisfaction. (1 = Less satisfied; 5 = Most satisfied)
- How competitive are you with the current technology solutions Vs the industry today? (1 = Less competitive; 5 = Most competitive)
- In addition to your current status, how competitive and in what areas you think you are in view of the next 5 years of the development trends?
- What are the improvements you have noticed?



APPENDIX A

DISCUSSION GUIDE – TRADING

Show a multiple choice sheet for participant's selection

- Please click the following most describing your current I.T. application.
 - ♦ Totally manual, no hardware and software
 - ♦ No knowledge and awareness of I.T. application. The company has no I.T. solution to solve for daily operating issues (except MS Office, public email account, etc.)
 - ♦ Have knowledge and awareness of I.T. application but don't use any I.T. solution (except MS Office, public email account, etc.)
 - ♦ Apply limited I.T. solution to automate a specific area of operations (e.g. document management system, truck assignment system but not full fleet management concerned, finance & accounting system only, etc.)
 - ♦ Full I.T. implementation with an integration with other internal systems
 - ♦ Full I.T. implementation with an integration with both internal and external systems

Section C:

I.T. Application Barriers & Concerns

In this section, we ask participants what are their concerns and difficulties to apply I.T. solutions.

- What is the biggest challenge your company faces with technology adoption?
Please rate the selected items in terms of the degree of challenge.
(1 = Less challenging; 5 = Most challenging)
 - ♦ data integration
 - ♦ limited budget
 - ♦ difficult to assess ROI
 - ♦ difficult to cope with cope with rapid technological changes
 - ♦ shortage of skilled IT people
 - ♦ user's recognition on application value is low
 - ♦ lack of industry/government support
 - ♦ complexity of application software
 - ♦ other (please specify)
- When deciding to enhance or upgrade your technological capabilities and customer offering, what are the most important motivating factors?

Please rate the selected items in terms of the degree of importance.

(1 = Less important; 5 = Most important)

- ♦ improves operational efficiency
- ♦ improves customer service
- ♦ direct customer request
- ♦ reduces labor costs
- ♦ improves data quality
- ♦ clear ROI
- ♦ reduce human error
- ♦ corporate image
- ♦ other (please specify)
- Please rank the following concern areas on an I.T. application:
 - ♦ Price
 - ♦ People
 - ♦ Technology

Section D:

Industry trends/characteristics

In this section, we ask participants how their industry characteristics will affect their technology application needs in the future.

- What are some hot issues/trends of your industry now? (threats, opportunities, new customer's requirements, etc.)
 - ♦ For instance, how you perceive the impact of outbound migration of manufacturing from GD to outer provinces?
 - ♦ How would you see the business opportunity to develop connection with the emerging manufacturing countries, such as Vietnam, Indonesia, etc?
 - ♦ What impact the new labour law has been exerted on your business?
- Do you foresee any micro/macro trends that are going to impact your industry in the future?
- How is this transformation going to affect your business process?
- Do they cast any implications on your technology application needs? If so, what are they and why?
- Do you have any IT strategy to adapt to these changes? If so, what are they?



APPENDIX A

DISCUSSION GUIDE – TRADING

Section E:

Future I.T. Applications

In this section, we ask participant what their future I.T. strategic plan is.

- In order to cope with future business environment and customer's requirements, what kinds of I.T. solutions your company plans to implement? If NO, why?

Show a list of potential application areas for participant to comment

- What business applications and how you will automate them with technology in future?
 - ◆ Product design
 - ◆ Sales and marketing/Customer relationship
 - ◆ Purchasing/Supplier relationship
 - ◆ Production planning for Factory Order generation and shipment control
 - ◆ Warehousing & Distribution
 - ◆ Communication with internal & external parties (e.g. Portal Technology and Electronic Document Exchange)
 - ◆ Supply chain track & trace
 - ◆ Supply chain security
 - ◆ Compliance management
 - ◆ Forecasting
 - ◆ Simulation (e.g. Trading Simulation) and Optimization
 - ◆ Business Intelligence
 - ◆ Others
- What do you expect the % of the total cost in your IT adoption?
- What is your current spending (in terms of % and/or absolute amount)?
- Do you agree IT able to enhance competitiveness? (Score 1 to 5, 5 is most agreeable)

Section F:

R&D Demand & Aspiration

In this section, we ask participant what industry/ government support are needed in IT adoption

- Do you have any expectation for government/ R&D Centre in helping the industry in term of short-term & long-term?

Show LSCM's 2008 R&D Roadmap for participant to comment

- In which areas of LSCM R&D roadmap are you interested in? And what other key technology initiatives would your company be interested?
- Are you interested in participating in R&D projects if such R&D project can resolve your business problems and improve your company competitiveness?
- If government is willing to support 90% over the total cost of such R&D project, are you willing to invest together with other companies within the industry the remaining amount and share the project deliverables? Can you think about the possible themes/ topics for such joint R&D project?
- If government is willing to support 50% over the total cost of such R&D project, are you interested to invest the remaining amount and own the IP rights of the project deliverables?
- Do you think the function and long-term goal of the LSCM R&D Centre contributes to strengthening Hong Kong's economic competitiveness? If not, why?



APPENDIX B

ORIGINAL TEXT OF “POLICY OF CHINA RFID INDUSTRY DEVELOPMENT”

中国RFID产业发展政策

原文：中国RFID产业联盟

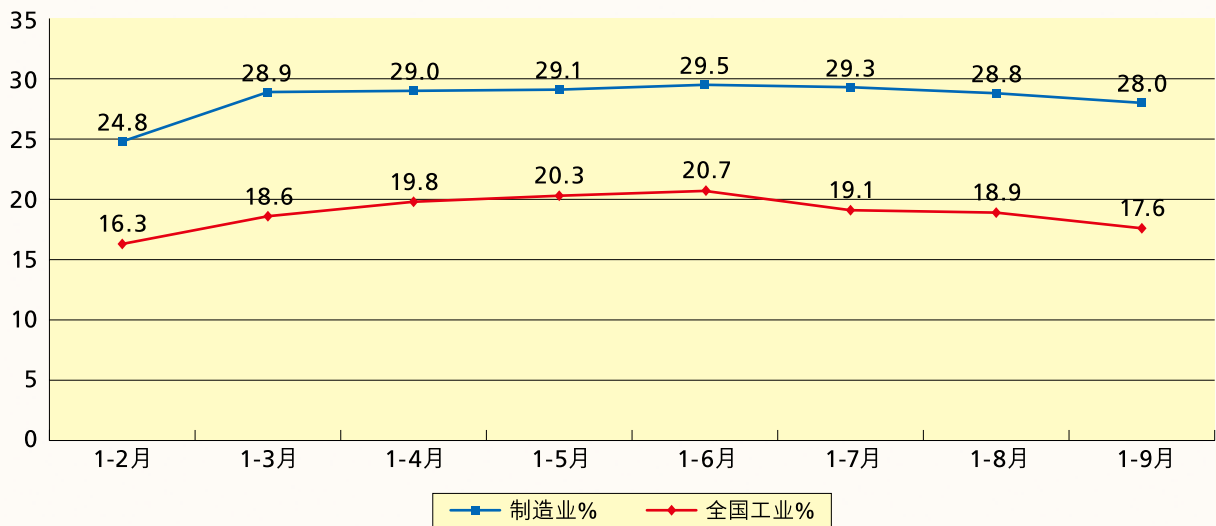
(一) 2008年1-9月中国电子信息产业运行情况

去年前三季度，我国电子信息全行业继续保持平稳发展，产业规模不断扩大，结构调整继续深化。1-9月，规模以上电子信息产业实现主营业务收入42011.6亿元，同比增长19.5%。其中制造业36246.9亿元，同比增长17.6%，软件业5764.7亿元，同比增长32.8%。制造业实现工业增加值8428.3亿元，同比增长20.5%。经济运行特点：

(1) 产业增速放缓，继续低于全国工业平均增速

1-9月规模以上制造业主营业务收入增速比二季度下降3.1个百分点，比上年同期下降2.1个百分点；增加值增速比二季度下降3.6个百分点。相比全国工业平均增速(28.0%)，制造业增速低了10.4个百分点，差距比上半年提高1.6个百分点。

2008年1-9月电子信息制造业与全国工业收入增速对比情况



发展放缓的原因：一是受全球经济放缓影响，出口增速同比下降4.5个百分点，由于电子信息产业出口依存度超过60%，由此必然影响增长速度。二是受技术升级和结构调整影响，整机发展速度放缓。通信设备、计算机、家用视听行业增速比全行业分别低10.4、7.1和6.6个百分点。三是今年以来连续发生严重自然灾害，对产业发展带来一定冲击。

(2) 结构调整进展明显

一是软件、基础元器件行业保持较快发展。从增速看，1-9月软件业、电子器件、电子元件行业收入增速分别为32.8%、31.7%和24.2%，高出全行业平均增速13.3、12.2、4.7个百分点。从比重看，1-9月软件业收入占全行业比重达13.7%，同比(12.3%)提高1.4个百分点；电子器件行业收入占全行业比重达28.6%，同比(26.9%)提高1.7个百分点。二是高端产品保持快速增长。其中液晶、等离子电视生产增速分别增长51.8%和162.1%，平板电视占彩电的比重达到29.8%；笔记本电脑增长28.7%，占微型计算机比重达到72.5%；液晶显示器占显示器比重超过93%。



APPENDIX B

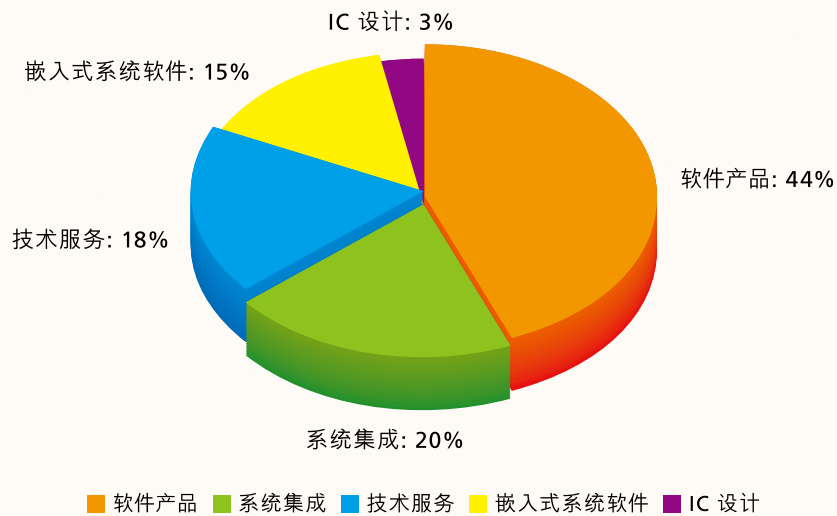
ORIGINAL TEXT OF “POLICY OF CHINA RFID INDUSTRY DEVELOPMENT”

(3) 软件业增速保持高位

1-9月,我国软件业继续保持快速增长的态势,累计完成软件业务收入5764.7亿元,同比增长32.8%,增速比去年同期高9.2个百分点。

软件产品仍是产业的主要构成部分,1-9月共完成收入2548.5亿元,同比增长34.4%,占软件业总收入的44.2%;软件技术服务增长最快,累计完成收入1035亿元,同比增长43.4%,增速比软件业平均增速高10.6个百分点,其中软件外包服务收入119亿元,增速达到82.8%。系统集成收入为1166.1亿元,同比增长28.4%;嵌入式系统软件完成收入846.3亿元,同比增长25.2%;IC设计收入168.9亿元,同比增长22.1%。

1-9月软件业收入构成情况



(4) 多数产品生产增速有所回落

1-9月全行业生产手机42707.7万部,同比增长7.9%,比上年同期(25.4%)下降17.5个百分点;微型计算机10479.3万部,同比增长18%,增幅同比下降16.7个百分点;集成电路319.9亿块,同比增长5.9%,增幅同比下降9.9个百分点。传统电子产品进一步萎缩,增幅呈现负增长。其中电话单机产量增幅同比下降5.4%;传真机同比下降13%;录相机同比下降25.3%;打印机同比下降4.5%。

(5) 进出口低于全国外贸增幅

1-9月,电子信息产品进出口总额6719.2亿美元,同比增长18.2%。其中,出口3898亿美元,同比增长21.7%,增幅比上年同期回落4.5个百分点,低于同期全国外贸出口增幅0.6个百分点,占全国外贸出口额36.3%;进口总额2821.2亿美元,同比增长13.7%,增幅比上年同期下降6.5个百分点,低于同期全国外贸进口增幅15.3个百分点,占全国外贸进口额的31.6%。



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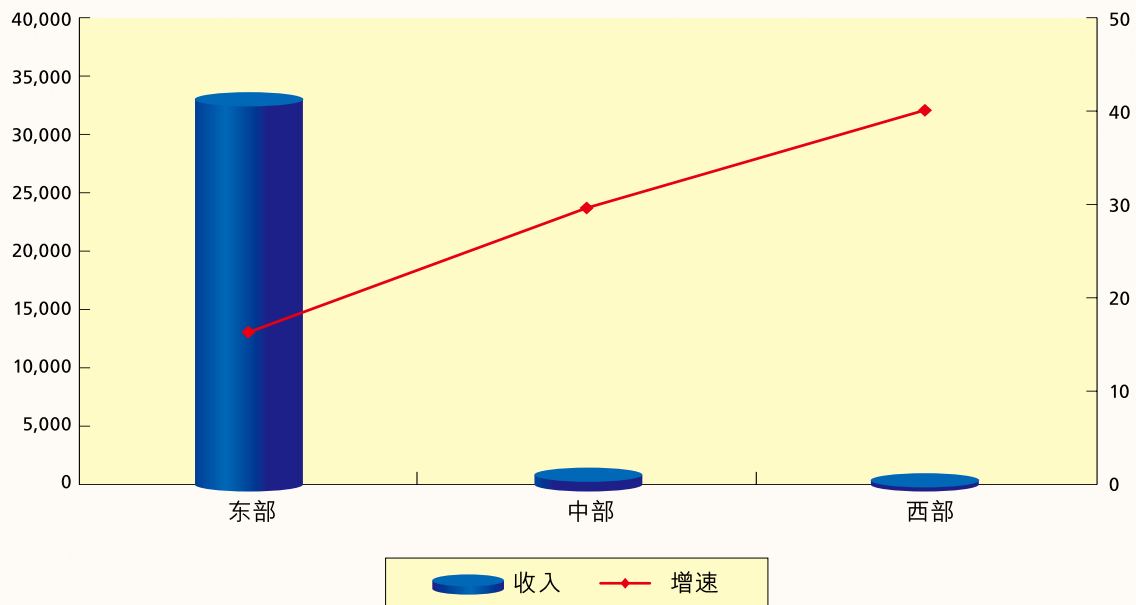
(6) 内外资企业呈现不同发展态势

1-9月外资企业制造业收入增速15.2%，低于制造业平均增速2.4个百分点，其收入增速连续17个月低于制造业平均水平。内资企业制造业收入增速27%，高出制造业平均增速9.4个百分点，特别是私营企业表现突出，收入增速达到30.9%，高出制造业平均增速13.3个百分点。

(7) 中西部地区发展继续快于东部地区

1-9月，我国中西部地区制造业共实现收入2332.4亿元，同比增长33.9%，高出制造业平均增速16.3个百分点，其中重庆、吉林发展较快，收入增速分别达到81.4%和65.8%；东部地区制造业实现收入33914.5亿元，同比增长16.7%，低于制造业平均增速0.9个百分点，占制造业比重93.6%，同比下降0.7个百分点，特别是北京、天津两省持续6个月呈负增长。

2008年1-9月制造业分地区收入完成情况





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下面三张附表是电子信息制造业今年1-9月的主要经济指标完成情况(数据来源:工信部运行监测协调局, 发布时间:2008年11月05日)。

附表1:2008年1-9月规模以上电子信息制造业主要产品产量完成情况

产品名称	单位	本月累计	去年同期	增减%
移动通信手持机(GSMCDMA)	万部	42707.7	39575.6	7.9
程控交换机	万线	3352.7	4144.3	-19.1
移动通信基站设备	万信道	1047.9	1244.9	-15.8
电话单机	万部	12109.3	12800.5	-5.4
传真机	万部	594.9	683.6	-13.0
电视机	万台	6609.9	5764.4	14.7
其中:彩色电视机	万台	6502.5	5578.1	16.6
其中:背投电视机	万台	0.6	5.9	-89.5
其中:液晶电视机	万台	1786.5	1176.8	51.8
其中:等离子电视机	万台	148.9	56.8	162.1
录相机	万台	170.2	227.9	-25.3
微型电子计算机	万部	10479.3	8882.6	18.0
其中:笔记本电脑	万部	7598.1	5905.5	28.7
服务器	万部	156.6	265.6	-41.0
显示器	万部	10322.9	10391.4	-0.7
其中:液晶显示器	万台	9724.2	8921.3	9.0
打印机	万部	3011.0	3153.7	-4.5
电子元件	万只	61149501.5	51525984.3	18.7
其中:片式元件	万只	26465605.0	20271414.1	30.6
彩色显像管	万只	5045.9	4986.4	1.2
半导体分立器件	万只	17130473.9	16499852.4	3.8
半导体集成电路	万块	3199399.2	3021225.3	5.9
数码相机	万台	5567.9	4687.2	18.8

附表2:2008年1-9月规模以上电子信息制造业主要经济指标完成情况(一)

单位:万元

单位名称	企业数	主营业务收入		工业增加值	
	(个)	本月累计	增减%	本月累计	增减%
全部企业合计	16178	362469485.3	17.6	84283240.3	20.5
其中:通信设备制造业	1365	60650631.6	9.1	13525313.9	14.4
雷达制造业	47	914238.0	6.0	255986.6	6.0
广播电视设备制造业	391	2351700.0	17.8	674010.1	17.7
电子计算机制造业	1439	110509462.4	12.4	20088071	13.8
家用视听设备制造业	988	27565486.5	12.9	5164297.7	14.4
电子器件制造业	2398	49783852.7	31.7	14146224.4	31.6
电子元件制造业	5976	70508878.2	24.2	19223271.8	24.4
电子测量仪器制造业	674	4122045.5	25.3	1383130.2	25.9
电子专用设备制造业	1321	9211149.3	33.0	2823269	33.1
电子信息机电制造业	1050	9952260.3	20.2	2741396.6	20.6
其它电子信息行业	529	16899780.8	21.3	4258269	24.5
其中:外商港澳台投资企业	7440	282259413.7	15.2	62850387.4	17.8
其中:国有控股企业	939	23733869.4	18.5	5564145.6	16.0



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附表3：2008年1-9月规模以上电子信息制造业主要经济指标完成情况(二)

单位：万元

单位名称	企业数	主营业务收入		工业增加值	
	(个)	本月累计	增减%	本月累计	增减%
全部企业合计	16178	362469485	17.6	84283240	20.5
北京市	671	19059588	-2.2	3738473	-0.1
天津市	426	13479710	-3.3	2932480	-0.5
河北省	171	1833838	40.8	552243	41.9
山西省	42	659095	31.9	135792	29.4
内蒙古自治区	23	845160	32.5	172168	54.2
辽宁省	401	6158150	20.3	1510974	23.8
吉林省	47	417831	65.8	107074	52.5
黑龙江省	51	170304	16.4	45858	19.7
上海市	1042	40926831	12.7	8002702	13
江苏省	2804	78935354	25.9	19387646	26.5
浙江省	2508	19258087	10.1	4841596	14.4
安徽省	270	2486727	23.9	599554	25.8
福建省	554	14142174	19.6	3109320	23.3
江西省	152	1518343	38.7	381130	38.3
山东省	1072	27083032	31.7	6681123	35.9
河南省	203	2685347	44.7	746721	47.8
湖北省	243	3759274	23.8	984733	24.8
湖南省	198	1423908	16.9	389646	19.2
广东省	4555	117383162	15.7	27419970	18.9
广西壮族自治区	97	808084	72	190773	66.2
海南省	5	77198	29.4	20921	36.6
重庆市	57	548328	81.4	115756	65.3
四川省	382	6208447	46	1536123	49.4
贵州省	31	482789	23.8	108341	23.3
云南省	14	92665	30.3	22212	28.9
陕西省	122	1757373	26.6	472558	23.5
甘肃省	27	134050	-0.2	39058	0.6
青海省	3	12883	-11.5	3781	-12.2
宁夏回族自治区	1	34405	0	10322	0
新疆维吾尔自治区	6	87351	9.8	24196	10.5



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(二) 国务院十项措施拉抬内需，四季度先投1000亿

面对全球金融危机日益演化为全球经济衰退，中国政府强力启动了刺激内需计划。11月5日，国务院召开常务会议，研究部署进一步扩大内需促进经济平稳较快增长的措施。会议确定了当前进一步扩大内需、促进经济增长的十项措施。主要包括，加快建设保障性安居工程；加快农村基础设施建设；加快铁路、公路和机场等重大基础设施建设；加快医疗卫生、文化教育事业发展；加强生态环境建设；加快自主创新 and 结构调整；加快地震灾区灾后重建各项工作；提高城乡居民收入；全面实施增值税转型改革；加大金融对经济增长的支持力度。宏观政策重新定调，将实行积极的财政政策和适度宽松的货币政策。国务院出台的新措施将在未来两年内新增加约4万亿元的投资，相当于2007年全社会固定资产投资额的29.2%，约相当于每年拉动真实GDP增长2个百分点。

(三) 关于中日韩三国RFID行业圆桌会议的情况

自2008年6月开始，中日韩三国相关RFID行业组织(中国RFID产业联盟CIITA、RFID、日本自动识别协会JAISA、韩国RFID协会KARUS)商定，每年在中日韩三地各举办一次“中日韩RFID圆桌会议”，为此三方共同签署了《中日韩RFID圆桌会议备忘录》(以下简称备忘录)。

《备忘录》明确了“中日韩RFID圆桌会议”的宗旨、中日韩三国各方参与机构、运营方式、三国间合作具体将包括的内容、秘书处的组成与运营机制等五部分内容。

“中日韩RFID圆桌会议”旨在：建立一个可代表中日韩三国RFID利益的一个职能机构，以促进中日韩三国民间RFID组织，在以下三个领域的合作：(1)促进中日韩三国各国的RFID基础设施、资源建设；(2)启动中日韩三国间RFID人力资源、物质资源、信息资源、技术资源的交流；(3)在应对国际市场/技术问题、争端上展开合作。合作最终旨在推动东亚区域内RFID的经济合作与发展。

三国间合作的具体内容包括以下几部分：

1、信息共享。包括建立联合网站；发布三国参与机构的重要信息；发布全球RFID技术、三国RFID市场及标准方面的资讯。

2、私人交流。指(1)开展三国交流合作代表团间的互访；(2)三国各方参与机构会员间的交流与合作支持；(3)展览/会议合作；(4)在合作、成果共享的前提下，共同推动相关RFID试点项目的开展；(5)共同开展RFID调研项目，并出版相关调研报告；(6)合作共同开发公共/共享的RFID基础资源；(7)共同参与全球市场竞争与合作，支持相互间的RFID技术合作；(8)RFID人才资源开发与交流。包括合作共同开发与分享RFID专业人才培养机制，合作共同开发和实施、可被三国认可的RFID专业人才资格认证系统。

(四) 广东出台加快推进信息化与工业化融合意见

为深入贯彻落实党的十七大精神，加快推进广东省信息化与工业化融合，近日，广东省府办公厅转发省信息产业厅、经贸委《关于加快推进我省信息化与工业化融合的意见》(以下简称《意见》)，明确了全省推进信息化与工业化融合的指导思想、发展目标、主要任务、基本策略和保障措施。这是党的十七大提出“大力推进信息化与工业化融合”的崭新命题以来，省级地方政府出台的第一个关于信息化与工业化融合的意见，是广东省解放思想活动的重大突破和重要成果。

《意见》提出的基本策略第五点——“物联网”工程推进策略。推进以RFID技术应用为主要特征的“物联网”发展。积极跟踪国际产业发展动向，参与国家物品电子编码和RFID标准的制订，大力推进RFID技术在工业生产和物流各个环节的融合渗透。建设RFID产业基地和研发基地，提高省RFID公共技术支持中心的服务水平。把握RFID技术、全球卫星定位系统(GPS)、地理信息系统(GIS)、无线通信技术和互联网等相互融合带来的机遇，发展自主知识产权新技术，推进相关技术产业化。在国家有关部门支持下，建设我国区域性现代物流公共信息中心和公共信息服务平台，形成“物联网”的基



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础,促进各部门各领域物流业务融合和通关便利化。加强粤港澳合作和国际合作,积极吸引国际物流企业到我省发展,加强公共物流信息服务平台与香港以及国际相关平台的对接,积极参与国际供应链管理,促进本土企业国际化。

(五) 工信部发布信息技术应用 “十一五”投资指南

“十一五”是我国全面建设小康社会、构建社会主义和谐社会的重要时期,也是信息产业强国战略的重要起步期。日前,工业和信息化部发布了《信息技术应用“十一五”投资指南》(以下简称《指南》)。《指南》分为:信息技术应用发展思路与重点领域;信息技术与产品应用投资指南等两大部分。

在《指南》第一部分中,明确指出“十一五”发展思路是:通过信息技术改造有效提高传统产业的生产效率和企业效益,信息技术应用在推动GDP增长、建设节约型社会、构建和谐社会中的贡献率显著增强。……全面实施电子商务和产品全生命周期管理,基本实现行业、大中型企业及企业间信息资源综合利用与共享,企业信息安全得到有效保障。……信息技术应用的社会环境明显改善,信息技术应用投入显著增加,全社会的信息化水平明显提高,信息技术应用人才规模基本满足国内需要,信息化咨询服务业得到长足发展,培育一批有实力、有名牌、有影响的新型信息化咨询服务企业。

在《指南》第一部分中,提出“十一五”重点发展领域有:(1)大力推进农业信息化和现代化;(2)改造和提升装备制造、工艺流程、商贸流通和资源开采等四大传统产业领域。要大力发展电子商务和现代物流业,支持商贸流通企业应用互联网等信息技术,实现资源共享、数据共用和信息互通;推广应用智能化运输系统,加快构建全国和区域性物流信息平台,优化供应链管理。在资源开采领域重点推广安全生产监测监控系统、预警系统、环保监测系统、资源数据库等信息技术的应用,提高资源型企业的可持续发展能力;(3)大力发展工业应用电子产品,扶持软件和系统集成业、新型信息咨询服务业的发展;(4)支持构建公共技术服务体系。要按照“行业抓重点、地方抓特色”的原则,择优选择一批各领域、各行业、各具特色的

传统产业企业开展信息技术应用试点,培育一批面向传统产业提供信息技术推广应用服务的示范企业,建立一系列针对特定行业的信息技术推广应用公共服务平台,以点带面,全面推进传统产业的改造与优化升级;(5)大力推进企业信息化和城市信息化。根据不同企业特点,在设计、生产、制造、管理、财务、营销等各环节应用适合的信息技术,实现物流、资金流和信息流的集成和优化,增强企业核心竞争力和可持续发展能力;(6)优先制定行业和区域信息技术应用标准。各行业和各区域推进信息技术应用应坚持标准先行的原则。要统一标准、规范,促进和确保各行业和各区域信息系统的互联互通、准确可靠和无限外延。组织制订、完善农业、商业、煤矿、城市、家庭、RFID等重点领域的共用信息技术标准和产品标准,解决信息技术应用过程中信息源的数据编码标准和接口规范问题。

《指南》第二部分把投资指南分为共性技术应用投资指南和重点行业信息技术与产品应用投资指南。在共性技术应用投资指南中明确指出在企业生产经营管理中重点应用企业资源计划(ERP)、电子商务、条码技术和**无线射频技术**。在重点行业信息技术与产品应用投资指南部分中,列出了十二个领域的信息技术应用,这十二个领域的信息技术应用系统很多都离不开RFID技术。如(1)农业信息技术应用的牲畜养殖系统;(2)汽车行业信息技术应用的汽车制造生产线、汽车RFID防盗系统;(3)电力行业信息技术中的电力设施管理;(4)纺织服装行业信息技术应用中的供应链系统;(5)煤炭行业信息技术应用中煤矿安全监测监控系统;(6)建设行业信息技术应用中城市地下综合管线管理信息系统、城市交通设施管理信息系统、城市公共交通信息系统、楼宇自动化控制系统、数字社区智能化信息综合服务系统等;(7)建材行业信息技术应用中行业信息化平台建设、物流信息系统;(8)商业信息技术应用中基于无线射频识别技术的物流管理系统;(9)交通运输信息技术应用中的综合性智能交通管理系统、水路、公路货物物流和信息服务运输信息网络系统,基于公交一卡通的城市一卡通系统、空运海关监管系统等。同时,促进船舶、石油化工、航天航空、医疗卫生、轻工等领域共用和专用信息技术及产品的应用。



APPENDIX C

ORIGINAL TEXT OF “THE ADOPTION & APPLICATION OF RFID TECHNOLOGY IN RELEVANT INDUSTRIES IN CHINA”

我国相关行业对RFID技术的采纳与应用情况

原文：中国RFID产业联盟

(一) 国家发改委组织召开首批信息化试点专家答辩评审会

《国家发展改革委办公厅关于组织开展信息化试点工作的通知》(发改办高技〔2008〕618号)下发后，得到了地方、部门和中央企业的积极响应，截至8月，共有34个省区市、7个中央部门、11家中央企业参加了首批试点推荐工作，在移动电子商务、电子认证服务、信用信息服务、新农村综合信息服务、中小企业电子商务服务和射频识别技术应用等7个领域中报来304份试点材料。2008年11月18日，通过专家初选的210个试点推荐单位参加了选拔国家试点的答辩评审工作。发改委高技术司将在专家推荐意见基础上，择优遴选第一批国家试点，目前有关工作正在进行中。

(二) 国家移动电子商务试点示范工程介绍

移动电子商务是基于移动通信技术、RFID技术和互联网技术，通过手机、个人数字助理、掌上电脑等移动智能终端，所进行的电子商务活动。移动电子商务融合移动通信技术、移动终端技术、IT信息技术、IC卡技术以及RFID等多项技术，实现信息流、资金流和物流的电子化，提供随时、随地、随身、随心的商务服务。

国家移动电子商务试点示范工程是国家《电子商务发展“十一五”规划》部署的六大重点引导工程之一。2007年6月开始，原国务院信息化工作办公室和中国移动通信集团公司共同推进国家移动电子商务试点示范工程。湖南省、重庆市、广州市等国家移动电子商务试点示范省市分别结合当地情况，务实推进手机支付、公共交通、公共事业缴费、移动购物、移动健康保健服务、农业移动电子商务、专业市场移动电子商务、中小企业移动电子商务、移动物流信息服务、移动旅游服务、亚运会移动商务综合应用等多项应用试点工作。

早在2004年，湖南移动与湖南银联在全省范围开通了手机支付业务，基于手机支付，建立了手机投注、网上购物、手机缴话费等业务体系。截止目前，湖南移动手机支付绑定银行卡的客户规模达到了150万，月平均交易金额超过了4000万元，客户数和交易量一直稳居全国第一。近一年多来，湖南移动先后在全国率先开发了“VIP电子卡”、“电子医疗预约挂号”、“移动定票”、“手机折扣券”等业务，在国内首创开发了“手机银行卡”和“手机单位门禁消费一卡通”，使得手机可替代银行卡和门禁卡在商场和单位内部进行现场支付，受到了广大客户的普遍欢迎。湖南移动还结合与老百姓生活日常消费相关需求提出了手机公交一卡通、手机校园一卡通和手机代交公用事业费用的解决方案。作为中国移动电子商务产品的创新基地，湖南移动一直以来高度重视移动电子商务发展，扎实推进重点项目工作开展，包括全球通VIP电子卡、二维条码凭证、RFID、手机支付业务等，并挖掘和提交了12项自主知识产权的具有国际国内领先水平的移动电子商务专利申请，移动电子商务产品创新工作在全国遥遥领先。

重庆市委市政府高度重视移动电子商务试点工作，市政府于2008年3月发布了《重庆市移动电子商务发展规划》，系统推进移动电子商务的发展。截止到11月，重庆移动已铺设了2594台POS机，发展了手机钱包卡用户19.1万，累计交易286.8万次，累计消费金额1566万元。重庆市还积极营造移动电子商务产业发展环境，吸引移动电子商务产业链上下游企业形成产业集聚。2008年3月10日，国务院信息化办公室正式批准广州市为国家移动电子商务试点示范城市，支持广州建设国家级移动电子商务产业园。广州成为国内第一批由国家认可的移动电子商务试点示范点，占领了移动电子商务发展的先机，对广州市的电子商务发展意义非凡。广州手机地铁票则是试点城市建设方案的重要应用。据悉，凡中国移动的手机用户，想实现“手机地铁票”功能，在手机号码保持不变的情况下，到营业厅更换SIM卡，加装天线，就能实现通过手机支付地铁票。目前该技术还处在试点阶段，摸索总结经验后将全面推广。广州市电子商务交易额居全国大城市第三位，2006年交易额超过1300



APPENDIX C

ORIGINAL TEXT OF "THE ADOPTION & APPLICATION OF RFID TECHNOLOGY IN RELEVANT INDUSTRIES IN CHINA"

亿元，电子支付应用普及程度较高，拥有全国最大的POS和ATM网络，发行银行卡3500万张，人均持卡3张，刷卡交易额全国第一，发行“羊城通”卡850万张，日交易量250万笔，交易额500万元。移动电子商务应用基础较好、发展潜力大，中国移动广东公司运营业绩连续10年位居全国第一，开发了手机电子登机牌、手机彩票、手机影音书刊等应用，手机支付消费金额累计达1.5亿。全市物流、信用、电子支付、安全认证等移动电子商务支撑体系日臻完善，现代物流中心辐射能力持续增强，白云国际机场客货运能力、广州港吞吐量名列全国前三名，白云国际机场联邦快递亚太转运中心今年将投入运营。因此，广州市具有开展移动电子商务试点的良好基础和成熟条件。试点示范工程将采用政府引导、广东移动等企业为主体建设的开放的社会化分工协作机制，加快推进手机支付、移动物流公共平台和中小企业移动电子商务平台等建设，到2010年底，发展移动电子商务业务合作伙伴超过2000家，移动电子商务的市场规模达到40亿元，移动电子商务相关产业的年产业规模达到100亿元。

在国内，随着银行卡网上交易的普及，电子商务应用正日趋成熟，移动电子商务业务发展方兴未艾，预计2008年底，我国移动电子商务用户将达到7200万，市场规模将达到11.7亿元。移动电子商务在中国发展具备如下优势：首先，我国手机用户全球第一，最新数据显示，目前全国手机用户已超过6亿户，庞大的用户数为移动电子商务且以RFID技术为手段的手机支付发展奠定了良好基础。其次，利用手机RFID技术形成的手机支付和手机RFID防伪应用广泛，且能够实现随时随地支付，随时随地防伪，适宜且符合我国国民消费习惯，百姓日常生活需要这种便捷的支付和防伪服务。此外，手机支付降低了社会交易成本，一举多得，与国家信息化建设相辅相成。国家部署了2006年至2020年全国信息化建设的战略方针和目标，手机支付作为惠及普通大众的信息技术，也代表了国家信息化发展的一项重要内容。第四，目前移动电子商务在新兴商业结算支付服务领域方兴未艾，具有巨大的市场潜力，已引起电信、金融、IT界的共同关注。运营商、手机厂商、金融行业等都在联手合作，积极推广手机支付，共同拉动整个产业链发展。



APPENDIX D

MEMBERSHIP APPLICATION FORM



Act Now!

Apply Centre Membership
on or before
31 March 2010 to enjoy
Annual Membership
Fee Waiver!

Centre Membership Scheme

Promotional Terms and Conditions:

1. The promotional period is between 1 April 2009 and 31 March 2010 inclusive (the "Promotional Period").
2. Applicant is required to submit the completed application form via mail or online channel together with all supporting documents within the Promotional Period. A notification letter will be sent to the successful applicant by mail.
3. Membership application is subject to the LSCM R&D Centre's usual membership approval procedure.
4. Membership and annual membership fee waiver for successful applicant will expire on 31 March 2010. Next membership year will be started on 1 April 2010, annual membership fee shall be payable upon renewal.
5. The LSCM R&D Centre reserves the right to amend the promotional offers and these terms and conditions at any time without prior notice. In the event of any disputes arising out of this promotion, the decision of the LSCM R&D Centre shall be final.



A member of Hong Kong R&D Centres
香港研發中心成員



APPENDIX D

MEMBERSHIP APPLICATION FORM

Application Form for LSCM R&D Centre Membership

Membership Categories *(please select and mark with a tick)*

Centre Membership Categories

☐ Individual Membership

☐ Company / Institute Membership

☐ Technology / Solution Provider Membership

Part IA- General Information *(For "Company/ Institute" & "Technology /Solution Provider" Membership Only)*

Company Name (in English)

(In Chinese)

Office Address / Correspondence Address

Telephone Number

Facsimile Number

Email

Postcode

Country

Website

Name of Representative (in English) ☐ Ir ☐ Prof ☐ Dr ☐ Mr ☐ Mrs ☐ Ms

(in Chinese)

Position (in English)

(in Chinese)

Business Registration Number

Year of Establishment

No. of Staff (in Hong Kong)

No. of Staff (outside Hong Kong)

Part IB - General Information *(For individual Membership Only)*

Name (in English) ☐ Ir ☐ Prof ☐ Dr ☐ Mr ☐ Mrs ☐ Ms

(in Chinese)

Correspondence Address

Telephone Number

Email

Your Job (please specify your company name)

Postcode

Country

Part II - Industry *(please mark with a tick)*

☐ Government

☐ Non-profit Organization

☐ University

☐ Technology - Hardware Vendor

☐ Technology - Software Vendor

☐ Technology - System Integrator

☐ 3rd / 4th Party Logistics Service

☐ Shipping

☐ Freight Forwarding - Air / Sea

☐ Storage & Warehousing

☐ Carrier Services

☐ Cargo Terminal Operators

☐ Trucking

☐ Logistics & Courier Services

☐ Retailer

☐ Manufacturer

☐ Others, please specify:



APPENDIX D

MEMBERSHIP APPLICATION FORM

Part III - Payment Method

By Cheque

Please issue a cheque for the appropriate amount made payable to "Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies Limited". Please write the full name of your company at the back side of the cheque. An acknowledgement of receipt will be returned to you within Ten(10)working days.

Issuing Bank: _____ Cheque Number: _____

Part IV - Terms and Conditions

1. Membership commences on 1 April and expires on 31 March each year. Annual Membership Fee will be calculated on quarterly basis (three months) for members joining at any time of the year.
2. Annual Membership Fee is payable upon application. Please issue a cheque payable to "Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies Limited", and attach it to the application form.
3. Annual Membership Fee:
 - Free (Individual Membership)
 - HK\$2,000 (Centre Membership - Company / Institute)
 - HK\$10,000 (Centre Membership - Technology / Solution Provider)
4. Applications for membership will be considered by the LSCM R&D Centre at the regular meeting scheduled for that purpose, the entire application procedure will take around Forty-five (45) working days.
5. The applicant reserves the right of terminating the membership by giving no less than Thirty (30) days' written notice to the LSCM R&D Centre Office.
6. The LSCM R&D Centre reserves the right to use member's company name and logo for display in our official functions and marketing materials.
7. The LSCM R&D Centre reserves the right to amend these Terms and Conditions at any time without prior notice.

Part V - Declaration of the Applicant

1. The applicant declares that all particulars given in the application are true and correct.
2. The applicant agrees to the Terms and Conditions and the Bylaws relating to Membership (Appendix 1).
3. The applicant agrees to pay the annual membership fee upon application.
4. The applicant agrees the information submitted can be used by the LSCM R&D Centre for membership related purpose.**

Authorization Signature:

Position:

Date:

(For company membership, please sign with company chop)

****About Your Information and the Personal Data Privacy Ordinance**

The membership data can be used by the LSCM R&D Centre for membership related purposes such as production of the Members' Directory, issuing membership certificate, sending out circulars and publications, conducting surveys, or other directly related activities in print or on-line format. If you wish to make alternative arrangement or not to receive certain information, please inform us in writing. For unsuccessful applications, personal data collected will be destroyed after Six (6) months.

For LSCM R&D Centre Use

Membership Application Received on:

Received By:

Approved at Regular Meeting held on:

Membership Number:

Membership Class:

Remarks:

Handled by:

Funded by:



創新科技署
Innovation and
Technology Commission





APPENDIX D

MEMBERSHIP APPLICATION FORM

Appendix 1

BYLAWS OF THE HONG KONG R&D CENTRE FOR LOGISTICS AND SUPPLY CHAIN MANAGEMENT ENABLING TECHNOLOGIES

ARTICLE I MEMBERSHIP

SECTION 1

Categories of Membership: Membership in the Centre shall be in Three (3) categories as follows:

Individual: An individual membership shall be available to all person who is interested in innovative logistics and supply chain related technologies

Company / Institute: An organization membership shall be available to all companies / institutes, e.g. small or medium sized enterprises, venture capitalists, R&D organizations and universities

Technology / Solution Provider: An organization membership shall be available to all companies that provide solutions and technologies to end-user companies, e.g. vendors, SI

SECTION 2

Membership Application Procedures: Application for membership in the Centre shall be made by completing the prescribed form. The completed form shall be returned to the Centre in person, by mail or through on-line submission.

In person / By Mail:

1. Obtain the application form in person from the LSCM R&D Centre Office or download the form online.
2. Carefully read the Notes to applicant on the application form to understand the requirements and procedure for application for membership.
3. Submit the completed application form and a copy of Business Registration with annual membership fee* to the LSCM R&D Centre Office in person or by post. Please issue a cheque for the appropriate amount made payable to "HK R&D Centre for Logistics and Supply Chain Management Enabling Technologies Limited". An acknowledgement of receipt will be returned to you.
4. The LSCM R&D Centre Office will contact you for further information if necessary and will inform you of the result of the application in due course. The cheque payment will be settled only when the application is approved.
5. For membership enquiries, please contact the LSCM R&D Centre Office at (852) 2299 0551 quoting your reference number or email us at membership@lscm.hk

*Applicable to company membership only

On-line Submission:

1. Select "Online Registration" under Membership of the Centre's official website at www.lscm.hk.
2. Carefully read the Notes to applicant on the on-line application form to understand the requirements and procedure for application for membership.
3. Submit the completed form and select payment method.

(a) By Cheque

Please issue a cheque for the appropriate amount made payable to "Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies Limited". The cheque should be sent together with a copy of Business Registration* to the following address within Two (2) weeks:

Hong Kong R&D Centre for Logistics and
Supply Chain Management Enabling Technologies
Room 202, Level 2, Block B, Cyberport 4
100 Cyberport Road, Hong Kong
(Ref.: Membership Application - Reference No. XXXX)

Please write the full name of your company at the back side of the cheque. An acknowledgement of receipt will be returned to you.

(b) By Credit Card

Please input credit card information on-line and the annual membership fee will be debited from this credit card only when the application is approved. Please send a copy of Business Registration* by fax: (852) 2299 0552 or email: membership@lscm.hk within 2 weeks.

4. The LSCM R&D Centre Office will contact you for further information if necessary and will inform you of the result of the application in due course.
5. For membership enquiries, please contact the LSCM R&D Centre Office at (852) 2299 0551 quoting your reference number or email us at membership@lscm.hk

*Applicable to company membership only.

The LSCM R&D Centre reserves all rights to amend the Terms and Conditions on the prescribed form at any time without prior notice.

SECTION 3

Membership Dues and Admission: Membership commences on 1 April and expires on 31 March each year. Annual Membership Fee shall be payable upon application. For renewal, Annual Membership Fee shall be payable on or before the first day of the next membership year.

Annual Membership Fee:

Individual:	Free
Company/Institute:	HK\$2,000.00
Technology / Solution Provider:	HK\$10,000.00

Membership fee will be calculated on quarterly (three months) basis for members joining at any time of the year.

The amount of Annual Membership Fee shall be determined annually by the Centre provided that the Centre may in its absolute discretion reduce, remit or waive any Annual Fee from or paid by an Individual, a Company/Institute or a Technology/Solution Provider member.

SECTION 4

Termination of Membership: Memberships may be terminated:

- (a) by resignation: A member in good standing, may resign at any time by giving Thirty (30) days written notice, and no annual dues or any part(s) thereof shall be refunded. Resignation shall take effect not earlier than Thirty (30) days after receipt of the written notice by the Centre.
- (b) by lapsing: A membership will be considered as lapsed and automatically terminated if such member's dues remain unpaid for Thirty (30) days after the first day of the membership year; however, the Centre may grant a grace period of an additional Thirty (30) days to such delinquent members. Members whose membership has lapsed shall be allowed to rejoin as a renewing member at the absolute discretion of the Centre.
- (c) by expulsion: A membership may be terminated by expulsion as provided in Section 7, Article I of these Bylaws, or any other conduct that is seriously prejudicial to the Centre.

SECTION 5

Transfer of Membership: Membership of the Centre shall not be transferred or assigned.

SECTION 6

Reinstatement: A person / company whose membership has been terminated for non-payment of dues may be reinstated as a member upon payment of the current annual dues. A person / company whose membership has been terminated for any other reasons may apply for reinstatement as a new applicant only as prescribed in Section 2 and 3 of this Article I. Reinstatement shall not be granted to persons / companies with any outstanding indebtedness to the Centre.

SECTION 7

Rules of Conduct: These Guidance Notes apply to all Members. The Centre may change or add any Rules from time to time provided that such changes or additions are not contrary to these Bylaws.

- (a) Members shall demonstrate a level of competence consistent with their class of membership
- (b) Members shall at all times act with integrity and contribute to society
- (c) Members shall not infringe intellectual property rights including but not limited to copyrights, trademarks, service marks, trade dress, design rights (registered or not) and patents of other, and shall give proper credit for intellectual property rights when usage of such right is granted
- (d) Members shall respect the privacy of other
- (e) Members shall be honest and trustworthy
- (f) Members shall be fair and not to discriminate regardless of religion, gender, disability, age, or national origin
- (g) Members shall reject bribery in all its forms, and shall avoid engaging in work or act that leads to conflict of interest situation
- (h) Members shall seek, accept, and offer honest criticism of R&D work, and to credit properly the contributions of others

SECTION 8

Personal Data Privacy Ordinance: The membership data can be used by the LSCM R&D Centre for membership related purposes such as production of the Members' Directory, issuing membership certificate, sending out circulars and publications, conducting surveys, or other directly related activities in print or on-line format. If you wish to make alternative arrangement or not to receive certain information, please inform us in writing. For unsuccessful applications, personal data collected will be destroyed after Six (6) months.

SECTION 9

Amendments: These Bylaws may be amended by the Board of Directors of the Centre from time to time at its discretion. In case of any discrepancy between the Bylaws and the Memorandum of Association of the Centre, the Memorandum of Association of the Centre shall prevail.



APPENDIX D

MEMBERSHIP APPLICATION FORM

Centre Membership		
Category	Criteria and Benefits	Annual Fee
Individual Membership	<p>Individual participates as an ordinary member.</p> <p>Members' Benefit</p> <ul style="list-style-type: none"> • Entry to international networks of companies and researchers • Have preference to participate in LSCM R&D Centre's organized events (e.g. training, conference) 	Free
Company / Institute Membership	<p>Company / institute participates as an ordinary member, e.g. small or medium sized enterprise, venture capitalist, R&D organizations and universities.</p> <p>Members' Benefit</p> <ul style="list-style-type: none"> • Entry to international networks of companies and researchers • Access to LSCM R&D Centre's project portfolio and information, provided that project confidentiality is not comprised • Have preference to participate in LSCM R&D Centre's organized events (e.g. training, conference) • Access to membership networks and member area on website • Have preference to participate / sponsor / co-organize in LSCM R&D Centre's events • Company name listed on LSCM R&D Centre website • Have rights to display "Member of LSCM R&D Centre" on business card and other various functions, occasions, materials and applications subject to approval 	HK\$2,000
Technology / Solution Provider Membership	<p>Companies that provide solutions and technologies to end-user companies. They will have preference to participate / speak / sponsor / co-organize in Centre's events.</p> <p>Members' Benefit</p> <ul style="list-style-type: none"> • Entry to international networks of companies and researchers • Access to LSCM R&D Centre's project portfolio and information, provided that project confidentiality is not comprised • Have preference to participate in LSCM R&D Centre's organized events (e.g. training, conference) • Access to membership networks and member area on website • Have preference to participate / sponsor / co-organize in LSCM R&D Centre's events • Company name listed on LSCM R&D Centre website • Have rights to display "Member of LSCM R&D Centre" on business card and other various functions, occasions, materials and applications subject to approval • Opportunity to champion new Supply Chain Management enabling technologies • Eligible to participate in providing consulting and solutions to LSCM R&D Centre community 	HK\$10,000

Application Procedures

1. Obtain the application form in person from the LSCM R&D Centre Office or download the form online.
2. Carefully read the notes to applicant on the application form to understand the requirements for membership.
3. Submit the completed form and a copy of Business Registration with annual membership fee* to the LSCM R&D Centre Office in person or by post. Please issue a cheque for the appropriate amount made payable to "Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies Limited". An acknowledgement of receipt will be returned to you within Ten(10)working days.
4. Postal address: Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies, Room 202, Level 2, Block B, Cyberport 4, 100 Cyberport Road, Hong Kong
5. The LSCM R&D Centre Office will contact you for further information if necessary and will inform you of the result of the application in due course. The cheque payment will be settled only when the application is approved.
6. For membership enquiries, please contact the LSCM R&D Centre Office at 2299 0551 quoting your reference number or email us at membership@lscm.hk.

* Applicable to company membership only



APPENDIX D

MEMBERSHIP APPLICATION FORM



即日起

成功申请成为研发中心会员，
可获豁免会员年费！
推广优惠至2010年3月31日，
请即行动！

研发中心会员计划

推广优惠条款及细则：

1. 推广期由2009年4月1日起至2010年3月31日止，首尾两天包括在内（「推广期」）。
2. 任何人士须于推广期内透过邮递或网上填妥研发中心会员申请表及交妥申请所需之文件，成功申请者将获专函通知。
3. 研发中心会员申请须通过本研发中心的一般会员审批程序。
4. 成功申请者之会籍有效期及所获豁免之会费一律至2010年3月31日止。新一年度之研发中心会员会籍将于2010年4月1日起重新开始，届时旧研发中心会员必需缴交年费，方可更新研发中心会员之新会籍。
5. 本研发中心保留权利可修改优惠及本条款及细则，而毋须预先通知。是次推广如有任何争议，本研发中心保留最终决定权。



A member of Hong Kong R&D Centres
香港研发中心成员



APPENDIX D

MEMBERSHIP APPLICATION FORM

香港物流及供应链管理应用技术研发中心——会员申请表

会员类别 (请于适当位置划上勾号)

中心会员

☐ 个人

☐ 公司/学院

☐ 技术/方案供应商

甲部 (一) — 申请人资料 (只供「公司/学院」和「技术/方案供应商」会员填写)

公司名称 (英文)

(中文)

办事处地址/通讯地址

电话号码

传真号码

电邮地址

邮政编号

国家

公司网址

公司代表人姓名 (英文)

(中文) ☐ 工程师 ☐ 教授 ☐ 博士 ☐ 先生 ☐ 太太 ☐ 女士

职衔 (英文)

(中文)

商业登记证号码 (等同营业执照注册号)

公司成立年份

香港职员人数

海外职员人数 (香港以外地方)

甲部 (二) — 申请人资料 (只供个人会员填写)

申请人姓名 (英文)

(中文) ☐ 工程师 ☐ 教授 ☐ 博士 ☐ 先生 ☐ 太太 ☐ 女士

通讯地址

电话号码

电邮地址

职业 (请列明公司名称)

邮政编号

国家

乙部 — 业务性质 (请于适当位置划上勾号)

☐ 政府机构

☐ 非牟利机构

☐ 大学/学院

☐ 硬件供应商

☐ 软件供应商

☐ 系统整合商

☐ 三方/四方物流服务业

☐ 航运业

☐ 货运业-空运/海运

☐ 仓库及货仓管理业

☐ 运输业

☐ 货柜码头经营者

☐ 货车运输业

☐ 物流及速递服务业

☐ 零售商

☐ 制造商

☐ 其他, 请列明:



APPENDIX D

MEMBERSHIP APPLICATION FORM

丙部—付款方法

支票

请以支票支付会员年费，抬头祈付「香港物流及供应链管理应用技术研发中心有限公司」。请于支票背面填写公司名称。本研发中心将于收妥支票后十个工作日内向阁下发回收据。

银行名称：_____ 支票号码：_____

丁部—条款及细则

1. 会籍每年由四月一日起生效，三月三十一日期满。如于年中入会，会费将以季度(三个月)计算。
2. 报名须缴付年费。请以支票付款，抬头祈付「香港物流及供应链管理应用技术研发中心有限公司」，并连同申请表一并交回。
3. 年费：
 - 免费 (个人会员)
 - 港币2,000元 (中心会员-公司/学院)
 - 港币10,000元 (中心会员-技术/方案供应商)
4. 会员理事会将于下次例会讨论会员申请，申请过程约需四十五个工作日。
5. 申请人保留取消会籍之权利，但必须给予本中心办事处不少于三十天的书面通知方为有效。
6. 本研发中心有权于本研发中心之公开活动或宣传资料中展示会员的公司名称和商标。
7. 本研发中心保留更改条款及细则内容之权利，恕不另行通知。

中文译本如与英文原文有差异，概以英文为准。

戊部—申请人声明

1. 申请人确认申请表上填写的所有资料均属正确无误。
2. 申请人同意本研发中心提供之条款及细则和参阅附例(见附件1)。
3. 申请人同意于提交会员申请表时缴交年费。
4. 申请人同意本研发中心使用阁下已递交的资料用于与会籍有关的用途。**

授权人签名 (如申请人为公司，请盖上公司印章)	职衔	日期
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**关于阁下的资料与《个人资料(私隐)条款》

会员提交的资料，只可供本研发中心作与会籍有关的用途，如以印刷本或电子形式编制《会员名录》、签发会籍证书、发出函函及刊物、进行意见调查，或其他直接相关的活动。阁下欲作其他资料使用的安排或不想收到某些资料，请书面通知本研发中心。落选申请人的个人资料将于六个月内销毁。

只供本研发中心使用

会员申请表收妥日期：	接收职员：
会籍批核日期：	会员编号：
会员类别：	
备注：	负责职员：

资助：



創新科技署
Innovation and
Technology Commission





APPENDIX D

MEMBERSHIP APPLICATION FORM

附件1

香港物流及供应链管理应用技术研发中心附例

第1条 会籍

第1节

会籍类别：本中心会籍分为如下三(3)个类别：

个人：

个人会籍适用于所有对创意物流及供应链相关技术感兴趣的人士

公司 / 学院：

机构会籍适用于所有公司/学会，例如中小型企业、创业资本家、研发机构及大学

技术/解决方案供应商：

机构会籍适用于所有为最终用户公司提供解决方案及技术的公司，例如软件开发商及系统整合商

第2节

会籍申请程序：如欲申请本中心会籍，须填写指定表格，然后亲身或以邮递方式交回本中心，或于网上递交表格。

亲身/以邮递方式递交

1. 亲身前往香港物流及供应链管理应用技术研发中心办事处索取申请表格，或于网上下载表格。
 2. 细心阅读附载于申请表格上的申请人须知，以了解申请会籍的求。
 3. 将填妥的表格连同商业登记副本及会费*，亲身或以邮递方式递交香港物流及供应链管理应用技术研发中心办事处。请在支票写上适当金额，抬头请写「香港物流及供应链管理应用技术研发中心有限公司。」确认收据将于十(10)个工作日内寄回申请人。
 4. 如有需要，香港物流及供应链管理应用技术研发中心办事处将与申请人联络，要求提供进一步的资料，并将在适当时候通知申请人有关申请的结果。支票将于申请获得批准后始过数。
 5. 有关会籍查询，请致电(852) 2299 0551与本中心办事处联络，并报上参考编号，或致电邮往membership@lscm.hk与本中心办事处联络。
- *只适用于公司会籍

网上递交：

1. 登入本中心的正式网站 www.lscm.hk，在会籍项下选择「网上登记」。
2. 仔细阅读附载于网上申请表格的申请人须知，以了解申请会籍的要求。
3. 提交已填妥的表格，并选择付款方式。

以支票付款：

请在支票写上适当金额，抬头请写「香港物流及供应链管理应用技术研发中心有限公司。」支票须于两(2)星期内连同商业登记副本送交下述地址。支票背面请写上申请人公司的全名。确认收据将于十(10)个工作日内寄回申请人。

香港物流及供应链管理应用技术研发中心
香港数码港道100号数码港4B座2楼202室
(有关申请会籍事宜一参看编号XXXX)

以信用卡付款：

请输入信用卡资料，会费将于申请获得批准后始从有关信用卡户口扣除，请于两(2)星期内传真商业登记副本至(852) 2299 0552或电邮至membership@lscm.hk。

4. 如有需要，香港物流及供应链管理应用技术研发中心办事处将与申请人联络，要求提供进一步的资料，并将在适当时候通知申请人有关申请的结果。
5. 有关会籍查询，请致电(852) 2299 0551与本中心办事处联络，并报上参考编号，或致电邮往membership@lscm.hk与本中心办事处联络。

香港物流及供应链管理应用技术研发中心保留权利随时对指定表格上的条款及细则进行修订，而毋须事先发出通知。

第3节

会费及入会费：会籍每年由四月一日起生效，三月三十一日期满。年费须于申请入会时缴付，续会年费则于下一会籍年度首日或之前缴付。

年费：

个人：	免费
公司 / 学院：	港币2,000.00元
技术 / 解决方案供应商	港币10,000.00元

如于年中入会，会费将以季度(三个月)计算。

第4节

会籍终止：会籍可于下述情况下终止：

退会：

纪录良好的会员可随时给予三十(30)天书面通知要求退会，年费将不获退还。退会生效日期不得早于本中心收到书面通知的日期。

会籍失效：

如会员于会籍年度首日三十(30)天内仍未缴付会费，其会籍将被视为失效且自动终止；然而，本中心可给予该等逾期未付会费的会员额外三十(30)天的宽限期。本中心会酌情批准会籍已失效的会员重新入会成为续会会员。

开除会籍：

会员可因本条例第1条第7节的规定或任何其他严重损害本中心的行为，而被开除及终止会籍。

第5节

会籍转让：本中心会籍不得转让或转借。

第6节

恢复会籍：因欠缴会费而被终止会籍的人士/公司，可于缴付该年度会费后恢复会籍。因任何其他原因而被终止会籍的人士/公司，只可按照本条例第1条第2及3节所指定的程序以新申请人身份申请恢复会籍。于本中心有任何未清缴债项的人士/公司，将不获准恢复会籍。

第7节

行为守则：以下的指引适用于所有会员。本中心可不时对任何守则作出增修，惟所增修的内容不可与该等附例相违。

1. 会员应展示与其会员等级相符的能力水平
2. 会员应时刻保持诚信，并对社会作出贡献
3. 会员不得侵犯知识产权，包括版权及其他方面的专利权；如获授权使用，应遵守知识产权法规
4. 会员应尊重他人的隐私
5. 会员应待人诚实可靠
6. 会员应处事公正，且不因宗教、性别、残疾、年龄或国籍等因素而产生歧视
7. 会员应拒绝接受任何形式的贿赂，并应避免参与会导致利益冲突情况出现的工作或行动
8. 会员应寻求、接受及提出对研发工作诚意的批评，并适当地对他人的所作贡献予以提述。

第8节

个人资料(私隐)条例：会籍资料可供香港物流及供应链管理应用技术研发中心作会籍相关的用途，如以印刷本或电子形式编制《会员名录》、签发会籍证书、发出通函及刊物、进行意见调查，或其他直接相关的活动。会员如欲另作安排或不想收取若干资料，请以书面通知本中心。未获接纳申请入会人士的个人资料，将于六(6)个月后退毁。

第9节

修订：本中心董事局或会不时酌情对本附例进行修订。假如本附例与本中心《组织大纲》存有任何歧异，概以本中心《组织大纲》为准。



APPENDIX D

MEMBERSHIP APPLICATION FORM

中心会员		
会员类别	准则及权益	年费
个人	<p>以个人名义成为基本会员。</p> <p>会员可享权益</p> <ul style="list-style-type: none"> • 打开公司和研究的国际网络 • 拥有优先权参与本研发中心举办之活动（例如培训、会议） 	全免
公司/学院	<p>以公司/学院名义成为基本会员，例如中小型企业、投资者、研发机构和大学。</p> <p>会员可享权益</p> <ul style="list-style-type: none"> • 打开公司和研究的国际网络 • 在不泄露研发项目机密的原则下，会员可得到本研发中心的研发项目纲要及资料 • 拥有优先权参与本研发中心举办之活动（例如培训、会议） • 登入会员网络及会员专用网页 • 拥有优先权参与/赞助/合办本研发中心的活动 • 公司名字可刊登于本研发中心之网页 • 有权于名片上或于不同活动、场合、刊物和申请上显示「香港物流及供应链管理应用技术研发中心会员」之字样，但须获本研发中心批准 	港币2,000元
技术/方案供应商	<p>为终端用户公司提供方案和技术的公司。他们享有优先权参与或赞助本研发中心举办之活动，亦可于活动中参与演讲或与本研发中心合办活动。</p> <p>会员可享权益</p> <ul style="list-style-type: none"> • 打开公司和研究的国际网络 • 在不泄露研发项目机密的原则下，会员可得到本研发中心的研发项目纲要及资料 • 拥有优先权参与本研发中心举办之活动（例如培训、会议） • 登入会员网络及会员专用网页 • 拥有优先权参与 / 赞助 / 合办本研发中心的活动 • 公司名字可刊登于本研发中心之网页 • 有权于名片上或于不同活动、场合、刊物和申请上显示「香港物流及供应链管理应用技术研发中心会员」之字样，但须获本研发中心批准 • 有机会使用新的供应链管理应用技术 • 可参与提供顾问服务和方案予本研发中心 	港币10,000元

申请程序

1. 亲身前往本研发中心办事处索取会员申请表或从本研发中心网站下载。
2. 请仔细阅读会员申请表上的申请人须知，以了解会员计划的申请条件及程式。
3. 填妥会员申请表后，连同商业登记证副本和会费*亲身递交或邮寄至本研发中心办事处。请以支票付款，抬头祈付「香港物流及供应链管理应用技术研发中心有限公司」。本研发中心将于收妥支票后十个工作日内向阁下发回收据。
4. 如有需要，本研发中心办事处会联络阁下以获取更多资料和通知阁下会员申请的结果。本研发中心只会在申请获批后才兑现交回之支票。
5. 通讯位址：香港数码港道100号数码港4B座2楼202室 香港物流及供应链管理应用技术研发中心。
6. 有关会员申请查询，请致电2299 0551联络本中心办事处，查询时请引述阁下的参考编号以便翻查资料。亦可以电邮至 membership@lscm.hk 查询。

* 只适用于公司会员



Hong Kong R&D Centre for Logistics and
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