MEDIA RELEASE
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A*STAR'S SIMTECH JOINS HANDS WITH 8 COMPANIES TO OVERCOME COUNTING, TRACKING AND SUPPLY CHAIN WOES

8 industry partners will collaborate with SIMTech in three separate Memoranda of Understanding (MoUs). These will help companies harness radio-frequency identification technology (RFID) adoption to improve their business processes. A corporate lab will be set up to solve supply chain problems.

Singapore—A*STAR’s Singapore Institute of Manufacturing Technology (SIMTech) today signed three MoUs to allow companies to tap RFID technologies to track the movement of goods with accuracy, and to solve supply chain problems through better data analytics.

The MoUs were signed at the Manufacturing Productivity Technology Centre Annual Conference and Technology Exhibition 2014 in a ceremony witnessed by Mr Teo Ser Luck, Minister of State for Trade & Industry. This event was one of the activities under the National Productivity Month, an initiative to showcase how companies can improve productivity.

Tracking laundry with precision

SIMTech will form an RFID Laundry Consortium with four laundry service providers and two hotels to promote research collaboration in RFID technology. The collaboration will focus on improving the laborious and time-consuming process of laundry sorting and counting.

In addition, the six companies will participate in evaluating the RFID system that automatically counts and tracks the laundry as these are sent and received daily. With its expertise in this area, SIMTech is responsible for RFID tag testing, RFID gantry design, RFID middleware software, handheld and application software development. Participating industry partners will provide domain-specific and application scenarios as well as to jointly test the RFID tags with SIMTech to validate the reliability and accuracy of the RFID technology.
With the RFID system, the time taken to separate and manually count the laundry items before these are sent to the laundry service providers or hotels is expected to be reduced from hours to just under 30 minutes. Difficulties in reconciling the quantities and types of soiled versus washed laundry will be eliminated.

Currently, laundry sorting and counting is a laborious and time-consuming process which takes an average of six to 10 man-hours to complete.

The results of the pilots in this consortium will pave the way for industry-wide, full-scale adoption of the RFID system.

**Pinpoint tracking of goods on pallets**

Under a two-year MoU, SIMTech will join hands with LHT, one of the largest manufacturers of wooden pallets, to develop an RFID Palletised Goods Management System for the fast moving consumer goods (FMCG) sector.

The system is expected to increase the operations of FMCG companies by giving them better control, monitoring, planning at the sending and receiving points of the supply chain. Productivity gains can be expected as the time taken for stock management will be reduced by around 30 per cent.

With its expertise in RFID-based supply chain track and trace technologies, SIMTech will focus on design and development of the system. LHT will provide the RFID pallets, and the actual Palletised Goods Management System package including the required hardware and software. LHT will also spur adoption of the new system by getting its customers on board.

The new RFID Palletised Goods Management System will enable accurate and real-time track and trace of inventory, stocks in and out of the palletised movements in the supply chain.

**Diagnosing and treating supply chain problems**

SIMTech and business analytic specialist Antuit will set up a new Supply Chain Analytics Lab. The lab will look into areas such as risk analysis, demand disruptions prediction, risk mitigation to minimise effects and impacts of external disruptions and risk monitoring. It will also examine the impact of volatile disruptions on demand and quality, and find ways to minimise the impact on normal operations.

The new Lab, to be housed in SIMTech, will tap on the institute’s capabilities and technologies in addressing problems associated with complex supply chains, such as
disruptions caused by external events. It will also use big data analytics to enable better decision-making in the supply chain.

New tools and technologies are expected to emerge from the lab which will help companies manage their supply chain more efficiently. With its expertise in supply chain risk management, supply chain information management and data analytics, SIMTech will focus on developing techniques and frameworks. Antuit will provide the business problems including data from clients, and they will be responsible for commercialising the tools and technologies developed.

Commented Dr Lim Ser Yong, Executive Director of SIMTech, “Technology is a driver for productivity improvement and it can give the industry a good headstart and competitive edge.”

Quotes from MoU Members:

i) RFID Laundry Consortium

Mr Harry Toh, Director, Orchid Laundry:

“We leverage SIMTech’s RFID capability to help us automate the counting and handover process. Potentially, we can save half the manpower in counting. Our drivers would be able to pick up from more customers as the handover time is now greatly reduced.”

Mr Raphael Saw, Chief Operating Officer, Far East Hospitality Management (S) Pte Ltd:

“By adopting RFID technology into our Hotels, Far East Hospitality envisages quantifiable productivity gain and more efficient workflow processes. The technology will also enable the hotel to minimise Workplace Safety and Health (WSH) issues associated with repetitive tasks such as counting and sorting of linen.”

ii) RFID Palletised Goods Management System

Mr Thomas Yeo, RFID Project Manager, Kim Hiap Lee Co (Pte) Ltd Subsidiary of LHT Holdings Limited:

“RFID technology enhances productivity by eliminating unnecessary manpower wastage in retrieval of information for customers’ verification documentation. It authenticates proof of delivery of right goods, right condition, right location, right receiver and right time.”

iii) Antuit-SIMTech Supply Chain Analytics Lab
Mr Arijit Sengupta, Founder and Managing Partner, Antuit Pte Ltd:

“While Antuit has deep expertise in today’s tools and methodologies, we believe it is essential to invest in R&D to build next generation methodologies and tools which will bring supply chain analytics into the Big Data era and create long-term business benefits and outcomes which are potentially 5-10 times of what is achieved today through traditional solutions. To achieve this, we need the intellect and academic rigour of a lab which brings together business practitioners and leading academic experts to work on real business problems in an ambitious and unconstrained manner. The SIMTech and Antuit collaboration is meant to be the first step towards achieving that goal.”

IMAGES

Image 1: SIMTech’s RFID Laundry system improves labour productivity as it provides fast accurate laundry counting in minutes
Enclosed:
Annex A – List of Participants of MoUs

For media queries and clarifications, please contact:

Ms Lee Swee Heng
Agency for Science, Technology and Research
Tel: +65 6793 8368
Email: leesh@scei.a-star.edu.sg

About the A*STAR Singapore Institute of Manufacturing Technology (SIMTech)

The Singapore Institute of Manufacturing Technology (SIMTech) is a research institute of the Science and Engineering Research Council (SERC) of the Agency for Science, Technology and Research (A*STAR). SIMTech develops high value manufacturing technology and human capital to contribute to the competitiveness of the Singapore industry. It collaborates with multinational and local companies in the precision engineering, electronics, semiconductor, medical technology, aerospace, automotive, marine, logistics and other sectors.
About the Agency for Science, Technology and Research (A*STAR)

The Agency for Science, Technology and Research (A*STAR) is Singapore's lead public sector agency that fosters world-class scientific research and talent to drive economic growth and transform Singapore into a vibrant knowledge-based and innovation-driven economy.

In line with its mission-oriented mandate, A*STAR spearheads research and development in fields that are essential to growing Singapore’s manufacturing sector and catalysing new growth industries. A*STAR supports these economic clusters by providing intellectual, human and industrial capital to its partners in industry.

A*STAR oversees 18 biomedical sciences and physical sciences and engineering research entities, located in Biopolis and Fusionopolis, as well as their vicinity. These two R&D hubs house a bustling and diverse community of local and international research scientists and engineers from A*STAR’s research entities as well as a growing number of corporate laboratories.

For more info, please visit www.a-star.edu.sg
LIST OF PARTICIPANTS OF A*STAR SIMTECH MoUS

i) RFID Laundry Consortium
1. California Laundry (www.californialaundry.com)
3. Laundry Network (www.laundrynetwork.com.sg)
4. Orchid Laundry (www.orchidlaundry.com)
5. Royal Plaza (www.royalplaza.com.sg)

ii) RFID Palletised Goods Management System Consortium
LHT Holdings Ltd (www.lht.com.sg)

iii) Antuit-SIMTech Supply Chain Analytics Lab
Antuit (www.antuit.com)