iP

Discover. Develop. Deploy.

innovation PLAYGROUND

An Initiative of Supply Chain Asia

Advisory & Engagement

Automation & Robotics

Internet of Things & Sensors

Smart Distribution Centre

Intelligent Supply Chains

LEARNING JOURNEYS

Industry 4.0 & Supply Chain Transformation

Demonstrations of emerging technologies and its applications

Proof of Concepts and Industry initiatives

The enhanced benefits from smart technologies cannot be harnessed as bespoke solutions. To be able to obtain exponential benefits from the adoption of smart technologies, there is a need to bring all the different parts together - the effect of confluence. Unlike "integration" that tries to glue various parts and components together, "confluence" manages the interfacing of various technologies and ensure it smooth flow - an output that will raise the level of operating efficiencies and effectiveness.

Smart DC | Real Time Location System (RTLS) | Autonomous Mobile Robots

Smart Distribution Centre

What are the components and composition of a Smart Distribution Centre? Besides the overall intelligence that must be embedded in the overall operations, a Smart Warehouse must have the following:

- Internet of Things (IoT) – the use of sensors, devices and equipment to collect data, update information systems and create real-time decision making tools and applications
- Autonomous conveying applications – this can be supported by autonomous mobile robots as well as conveyors and specialised intra-logistics transportation system
- Artificial intelligence, through the development of machine learning and deep learning applications and solutions

Technologies Showcases & Walkthroughs

Robotic Process Automation

Robotic Process Automation (RPA) is software technology that's easy for anyone to use to automate digital tasks. With RPA, software users create software robots, or "bots", that can learn, mimic, and then execute rules-based business processes. RPA automation enables users to create bots by observing human digital actions. Show your bots what to do, then let them do the work. Robotic Process Automation software bots can interact with any application or system the same way people do—except that RPA bots can operate around the clock, nonstop, much faster and with 100% reliability and precision.

Real Time Location System (RTLS)

Supply chain and Logistics companies often rely on location information to increase efficiency and safety while reducing costs. Real-time location systems track and manage assets or people as they move through an indoor facility. These systems can be thought of as indoor GPS because they can provide a similar level of location and movement data, both in real time and in detailed tracking histories.

Autonomous Mobile Robots

An autonomous mobile robot (AMR) is any robot that can understand and move through its environment without being overseen directly by an operator. Typically, this is achieved through an array of sophisticated on-board sensors, computers, and maps, which allow AMRs to understand and interpret their environment in order to function as a form of asynchronous transportation.

Internet of Things - Sensors & Actuators

The Internet of Things is a major contributing factor of the new Data Economy. The value of an IoT system goes beyond the original intended use case, for instance in automation. This is because further value lies in the intelligence that an IoT system creates. Sensors are the source of IoT data. Furthermore, sensors and actuators in IoT can work together to enable automation at industrial scale. Finally, analysis of the data that these sensors and actuators produce can provide valuable business insights over time.

Artificial Intelligence, Machine & Deep Learning

AI is an umbrella discipline that covers everything related to making machines smarter. Machine Learning (ML) is commonly used along with AI but it is a subset of AI. ML refers to an AI system that can self-learn based on the algorithm. Systems that get smarter and smarter over time without human intervention is ML. Deep Learning (DL) is a machine learning (ML) applied to large data sets. Most AI work involves ML because intelligent behaviour requires considerable knowledge.

Immersive Technologies - AR & VR

Immersive technologies create distinct experiences by merging the physical world with a digital or simulated reality. Augmented reality (AR) and virtual reality (VR) are two principal types of immersive technologies. These technologies share many of the same qualities. However, AR blends computer-generated information onto the user's real environment, while VR uses computer-generated information to provide a full sense of immersion.

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An Initiative of Supply Chain Asia

IP@SCA was initially set up as Supply Chain & Logistics Innovation Playground (SCLIP) in 2017. In that initiative, SCLIP was designed as a platform to curate, host and showcase emerging technologies that were impacting the logistics and supply chain industry.

Over time, we evolved our engagement with these solutions and started to focus on SMART TECHNOLOGIES. The premise behind this was the recognition of the benefits that the effective adoption of selective technologies can lead to an enhanced and highly effective and efficient operations.

This was only possible when "intelligence" can be cultivated into the overall operating environment. Intelligence comes from access to an extensive base of data and information that companies often cannot cope with on its own.

It will require the development of "artificial intelligence" or machine learning applications.

Today, IP@SCA is focused on assisting and supporting companies and professionals in acquiring knowledge and access to these solutions to super-charge their operations.

ABOUT INNOVATION PLAYGROUND

The Innovation Playground is an initiative by Supply Chain Asia. IP@SCA is set up to promote the adoption of smart technologies such as Internet of Things, Autoomous Mobile Robots, AI-enabled intelligence systems and solutions as well as immersive technologies such as Augmented Reality (AR) and Virtual Reality (VR).

INDUSTRY ADVISORY & ENGAGEMENT PROGRAM

IP@SCA seeks to provide a platform to improve collaboration across supply chain operations - internal and external.

Besides learning and experiential opportunities for companies and individuals, the centre will also provide opportunities to explore how they can leverage artificial intelligence, machine learning, automation, and user experience technologies to drive enhancements into their business processes.

Discover
- Validate and review applicable and new technologies for the Logistics and Supply Chain
- Study the impact/benefits from the adoption of such technologies
- Provide platforms for Ideation and Concept testing

Develop
- Together with our tech partners, conduct industry studies to further articulate the viability of the technologies
- Explore how these technologies can be integrated to current working environments
- Controlled development through Proofs of Concepts and Commercial Trials

Deploy
- Provide advisory and engagment support to companies seeking better understanding on the use and impact of technologies
- Extend consultation services through partnerships with tech vendors and solutions providers where needed
- Assist in commercial deployments that impact the industry on a larger scale

BECOME A SOLUTION ENDORSER

Promote your tech solutions at the Smart Technologies Centre. We have both 6-month and 12-month packages that comes with extensive support and engagement with the Supply Chain Asia community network.

6-MONTH PROGRAM ($3,000)

- Webinars (1 session)
- Solution display/promotion @ Innovation Playground
- Full Corporate membership privileges for 10 reps
- Full privilege access passes to SCA events
- Awards & Gala Dinner (1 seat)
- Web banners (1)
- Article postings (non-advertorial)
- Co-hosting of learning journeys (limited to 20 paxs) @ Innovation Playground

12-MONTH PROGRAM ($5,000)

- Webinars (2 sessions)
- Solution display/promotion @ Innovation Playground
- Full Corporate membership privileges for 10 reps
- Full privilege access passes to SCA events
- Awards & Gala Dinner (2 seats)
- Web banners (1)
- Article postings (non-advertorial)
- Co-hosting of learning journeys (limited to 20 paxs) @ Innovation Playground

Email us at admin@scasia.org for more details.