

Fact Sheet

EMBARGOED TILL AFTER MINISTER S ISWARAN'S SPEECH AT SG:D
INDUSTRY DAY, 17 OCT, 2019

DIGITAL SERVICES LABORATORY

Background

The Digital Services Laboratory (“**DSL**”) was launched as a three-year pilot programme in November 2018 to help address industry-level digitalisation challenges and support national strategic interest areas. Comprising of engineers and architects, the DSL team works with industry partners, to support them in their development, and subsequent commercial deployment of market-ready technology solutions. In the process, DSL leverages on the capabilities of local Institutes of Higher Learning and Research Institutes, and builds talent in emerging technologies.

Examples of industry sectors that have benefitted from DSL’s collaboration with industry partners are:

1. Automated In-Mall Distribution

The use of autonomous mobile robots (“**AMR**”) for deliveries of goods for commercial buildings yield promising productivity improvements. Such systems involve multitude technologies and solutions, including human and AMR interactions, goods carriage and security, AMR sensing and navigation, digital communication with infrastructure and intelligent delivery management. And the inter-working of these technology components, framed by a common reference architecture, were validated through Proof-of-Concepts (“**POC**”) with tech providers Gurusoft and Konica Minolta.

Following these POCs, which serve as learnings, DSL will develop and make available a nationwide technical reference architecture of autonomous delivery of goods for commercial buildings to benefit future deployments with lower implementation cost and better capability to scale. The adoption of common technical specifications and industry standards can help different stakeholders to cooperate, allowing for more cost-effective hardware specifications, autonomy-friendly intelligent building infrastructure, and safer human-robot collaborations.

2. National Speech Corpus

Since its launch in November 2018 with an initial set of 2,000 hours of read speech made up of locally accented audio and corresponding text transcriptions, there have been more than 100 downloads of the National Speech Corpus (“NSC”), by developers and industry partners, for speech application development and research purposes. IMDA is now adding another 1,000 hours of conversational speech to further enhance the accuracy of speech applications, from the industry.

Specific examples of the use of DSL’s technologies include IMDA’s partnership with Sentient.io, where Sentient.io developed a speech transcription application based on this NSC and a suite of supporting Natural Speech and Transcription Technologies (NSTT) for Mediacorp’s in-house transcription needs such as drama subtitling.

3. Intelligent Building Proactive Energy Management

Following a successful POC, DSL is collaborating with local tech providers to pilot and deploy AI-powered solutions to improve the energy efficiency of chiller plants and management systems. These AI technologies are in the area of Anomaly Detection, False Alarm Detection & Diagnosis, Failure Prediction and Condition-Based Lifecycle Management, and are expected to bring about efficiencies for the property assets where these technologies will be deployed.

For more information please see www.imda.gov.sg/DSL

About Infocomm Media Development Authority (IMDA)

The Infocomm Media Development Authority (IMDA) leads Singapore’s digital transformation with infocomm media. To do this, IMDA will develop a dynamic digital economy and a cohesive digital society, driven by an exceptional infocomm media (ICM) ecosystem – by developing talent, strengthening business capabilities, and enhancing Singapore’s ICM infrastructure. IMDA also regulates the telecommunications and media sectors to safeguard consumer interests while fostering a pro-business environment, and enhances Singapore’s data protection regime through the Personal Data Protection Commission. For more news and information, visit www.imda.gov.sg or follow IMDA on Facebook [IMDAsg](https://www.facebook.com/IMDAsg) and Twitter [@IMDAsg](https://twitter.com/IMDAsg).

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