



#### Automated Surveillance Monitoring using AI

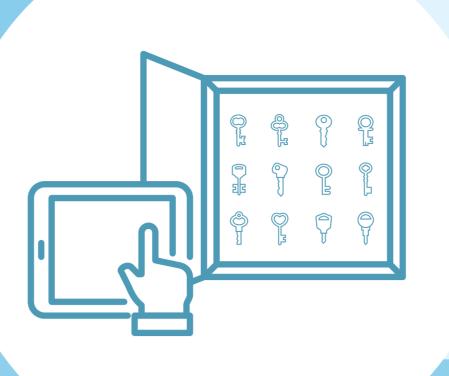
Automated Surveillance Monitoring using Artificial Intelligence to detects





## New Generation Key Management System

This is a next generation key system augmented with Touchscreen, Face Recognition access and AI for abnormality detection. This prototype will be piloted at Secom's (Singapore) premises.





abnormal event relating to safety, security, maintenance and operation in real time without the need to define any rules.



## SPaaS - Space as a Service

Space as a Service (SPaaS) is a technology platform that integrates the Marketplace, an e-commerce platform for buyers and sellers of Smart Building and Workplace solutions, products and consulting services and an Experience Portal, which allows users to view all the information from any application or product through an integrated platform. Users can connect not only legacy building systems but also enterprise systems, cloud services and mobile apps.











#### SS0ps.com

A cloud-based security operations platform to collect data and track performance of security officers by analysing movement and activities, and providing optimal processes and responses, thereby assisting to digitalise the security workflow and processes.





#### Project Helix

A tech and data platform that captures photo-realistic visual of units in any building (a) to enable marketing efforts by developers and real estate agents, (b) to help monitor real time maintenance and efficiencies at each unit, and (c) allow for asset owners to conduct accurate checks on assets before and after lease terms.

This project will also help to convert these multiple sets of information into light-weight and cost-effective BIM models, and to develop AI engines that will work with them.







# Multi-Function Light Field Camera with Edge Analytics for an Intelligent Carpark Management System (ICMS)

The Intelligent Carpark Management System (ICMS) combines a new multi-function light field camera with edge analytics using XJERA LABS' Athena A.I. platform to perform an analysis of the traffic patterns (e.g. vehicle speed, vehicle counting, vehicle classification) and also develop a predictive model to predict the scenarios likely to lead to traffic congestion.



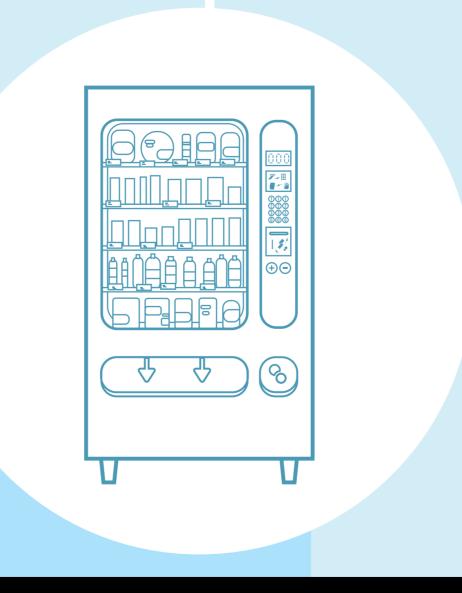
# Unmanned Retail Concept Store Using FR and AI for Seamless Shopper Experience

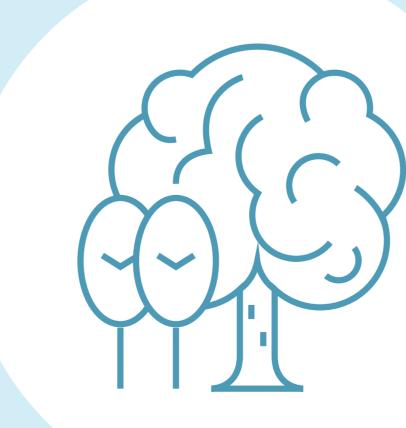
Using a combination of facial recognition. AT and predictive analytics, customers will receive curated product



# Smart Estates Solutions

IMDA has been working closely with the industry to understand their challenges. Two technology calls for innovative solutions (CFIS) for smart estates in 2018 have been issued and a total of 13 projects have been awarded.





# SMARTgreen Sensor and Artificial Intelligence Development

Through a live feed of the data of plant performance coupled with the SMARTgreen Artificial Intelligence Patented

# Innovative Physical Security Management Solution Incorporating IOT Video Analytics Alert and Interoperable Data Sharing to Achieve Strong Outcome Based Service Contracts

A Content Management System (CMS) and three mobile apps for the end-user, security officer and operation manager, which functions as an integrated platform for Building Owners, Physical Security Company Operation Managers and Security Officers.







#### Multi-Signal Surveillance Platform (MSSP)

SoundEye's sound localization and classification technologies that increase productivity of security teams, enhance situation awareness of command centres and improve response time for holistic decision making.





The fully extensible IoT-to-Digital Twin-to-Artificial Intelligence Smart Building Platform with integrated AR and Utilities Management System monitors, analyzes and proactively manages utility consumption through the real-time intelligent anomaly detection of energy and water usage. Additionally, by leveraging a Digital Twin, users will be able to wear AR glasses and visualise virtual objects or spaces and their characteristics, even through walls.





# 3D Digital Twin: Visualisation Intelligence Centre

A 360-degree photo-realistic view of estates with precise 3D model of buildings and areas captured using an innovative photo-grammetry method. This project will enable and automate image recognition and labelling that will allow real-time updates to the assets through live streaming of information via IOT sensors directly onto the 3D model.



Smart Parking

The solution aims to improve the traffic ecosystem with insights derived from the analysis of parking patterns using video analytics coupled with licence plate recognition (LPR). When coupled with a Traffic Management System, the solution can provide estate owners with a holistic view of the traffic conditions within the estate.