

MEDIA FACTSHEET



J-Ops Command Centre

JTC's J-Ops Command Centre is one of the first integrated building and estate operations command centres in Singapore. It houses multiple smart Facilities Management (FM) systems with functions such as building optimisation, estate monitoring and workflow automation, to allow JTC to remotely monitor and manage FM operations for majority of its developments and estates across the island.

Commissioned on 8 February by Second Minister for National Development, Desmond

Lee, the unveiling of the Command Centre marks a key step in JTC's FM Transformation Journey. The Command Centre allows JTC to achieve improvements in tenant comfort, reductions in energy leakages, and efficiencies in resource deployment. Beyond that, the team stationed in the Centre is able to pull and analyse data from pilot FM systems deployed in JTC developments. JTC is currently piloting systems to monitor lift performance, waste collection and user temperature preferences.

The smart FM systems housed in the J-Ops Command Centre include:

A. Building Optimisation System

The Building Optimisation System (BOS) is a cloud-based system that allows JTC to centrally and remotely monitor, analyse, and optimise performance of our buildings. The BOS monitors real-time operating data from different equipment within building sub-systems such as Air Conditioning and Mechanical Ventilation, Electrical, Fire Protection, Lifts, and Pumps systems across 39 JTC buildings, and provides analytical and diagnostic capabilities to help our facility managers identify and rectify inefficiencies.

With the use of sensors, the BOS allows us to detect specific equipment faults quickly. Faults, otherwise known as anomalies, prevent the equipment from working at its most optimal level. At a glance, the FM team is not only able to identify the location of the fault, but also gain access to historical data, advice on possible causes, and solutions related to the fault, thus expediting the rectification process. With this library of fault causes and solutions, JTC is also better able to harness and retain our FM expertise and knowledge base for managing its existing and future buildings.

As faults are detected earlier and rectified before they become an issue, industrialists occupying our buildings will face fewer disruptions caused by equipment breakdowns and benefit from having a more energy-efficient and comfortable work environment.

The amalgamated data is also used to provide better insights into how future buildings can be designed for better maintainability. This is the result of a successful pilot for 3 buildings, namely The JTC Summit, JTC MedTech Hub and JTC CleanTech Two. The pilot is currently in the production deployment stage which will be completed by mid2018.

B. Estate Monitoring System

The J-Ops Command Centre also houses an integrated Estate Monitoring System that pulls video feeds from the CCTVs deployed at more than half of JTC estates and developments. The system has integrated customised video analytics to bring potential security occurrences to the attention of the security team, which could then activate the required response on the ground quickly.

The system reduces the need for physical guards to conduct multiple routine patrols and the need to setup a security command centre in each of our buildings and estates,

without compromising security in our estates.

The system is also able to provide two-way communication which can help JTC remotely respond to trespassers and intruders. For examples, in the event of a trespassing, the Estate Monitoring System will be alerted and a pre-recorded message will play at the trespass site as the first line of warning. However, if the trespasser persists, the Command Centre will deploy on-the-ground security officers to the location. In addition, the security data consolidated from this system allows JTC to address existing manpower constraints facing the security industry.

C. Automated Workflow System

The Automated Workflow System is designed to be the backbone of JTC's FM digitalisation journey. The system digitalises all FM-related work orders as a bid to automate and improve the existing work processes. Feedback provided by customers or tenants regarding facilities faults are documented and tracked in the system, then re-routed to the respective facilities manager or technician to resolve. In addition, JTC expanded our channels of feedback submission last year. In October 2017, JTC launched the Report-A-Fault mobile application to empower our tenants and the public with the ability to easily submit facilities faults at our estates and developments.

With a one-point access to information on all work orders, JTC is able to perform in-depth analysis and studies to better understand our customers and tenants' feedback on building facilities. This database of faults and customer experience is also useful when deploying manpower and designing new buildings for optimal maintainability and operability.

D. Pilot FM Systems

As part of JTC's efforts to drive innovation, sustainability and productivity, we continually seek and test-bed new FM technologies to help us manage our buildings

better, greener and faster. At the J-Ops Command Centre, we are currently test-bedding three new FM systems, namely Comfy, Bigbelly Bins and the Bosch Lift Monitoring system.

Currently test-bedded in JTC Summit, Comfy is a mobile app designed to improve building occupants' comfort by allowing users to control the temperature in their workspace with the click of a button. Once the user indicates their preference, the application sends a signal to the mechanical vents to open or close for a short span of 10 minutes. Through the amalgamation of user preferences, JTC is able to not only improve the workplace experience, but also leverage these data for better building and development designs in future.

JTC is working with Bosch to pilot a lift monitoring system at Fusionopolis One in one-north. The system uses non-intrusive sensors on existing lifts to monitor real-time and historic utilisation data, abnormal behaviours and maintenance activities. Together with Bosch and our FM partners, JTC hopes to analyse the data and develop solutions and maintenance regimes, to help predict and prevent lift faults and incidents.

JTC has also deployed over 40 Bigbelly Bins across our developments and estates. These smart bins are solar-powered, self-compacting and cloud-connected to improve productivity and eliminate bin overflows. The JTC team is also able to access the system dashboard from the J-Ops Command Centre to optimise collection routines, understand waste patterns and better deploy manpower.