



WORLDWIDE
ENVISION CENTRE

YOUR ESG PARTNER 你的 ESG 合作伙伴

WEC offers integrated ESG solutions under one roof for property management, maximising quality and efficiency, delivering the best outcomes for our clients.

WEC 為物業管理提供一站式綜合 ESG 解決方案，大大提高品質及效率，為我們的客戶創造最佳成果。



Worldwide Envision Centre

Established in 2006 by Mr. Samson Leung, Worldwide Envision Centre (WEC) is a prominent business conglomerate and a leading provider of property management services originated in Hong Kong and now expands to Europe and Southeast Asia.

With a remarkable 30-year track record in property investment and management, WEC offers comprehensive and sustainable solutions in the field. The company boasts extensive experience in both Japan and Hong Kong, making it a trusted partner in the industry.

As your preferred ESG partner, WEC has launched “WE SOLUTIONS” in 2023, providing a diverse range of integrated services that include IoT, energy saving, IT, cleaning, engineering, procurement, and sustainable business solutions. By offering all these services under one roof, WEC maximizes efficiency and quality, ensuring the best possible outcomes for our valued clients.

WEC由梁善為先生於2006年在香港成立，現時業務已經由香港發展至歐洲及東南亞。憑藉在房地產投資和管理領域超過30年的豐富經驗，WEC為客戶提供全面的ESG可持續發展方案，多元服務包括物聯網、能源管理、手機應用程序、智慧清潔、工程、採購等，透過一站式服務、數據轉型及雲端平台，讓物業管理達到最高成本效益，實現節能減排、保護環境，絕對是閣下首選的ESG合作伙伴。

Our Clients Include 我們的客戶包括：

Bank of America Tower
美國銀行中心

CBRE Limited
世邦魏理仕有限公司

Centralcon Properties Company Limited
中洲置業有限公司

Chinachem Group
華懋集團

China Construction Bank CCB Tower
中國建設銀行大廈

China Construction Bank Corporation
中國建設銀行股份有限公司

Chong Hing Bank Limited
創興銀行有限公司

Citibank (Hong Kong) Limited
花旗銀行（香港）有限公司

City Super (Hong Kong) Limited

Early Light International (Holdings) Ltd
旭日國際集團有限公司

Entertainment Building
中環娛樂行

Hang Lung Properties Limited
恒隆地產有限公司

Hong Kong Time Square
香港時代廣場

Hongkong Land Holdings Limited
置地控股有限公司

Jones Lang Lasalle Management
Services Limited
仲量聯行物業管理有限公司

Kerry Properties Limited
嘉里建設有限公司

Lai Sun Development Company Limited
麗新發展有限公司

Link Asset Management Limited
領展資產管理有限公司

One Peking
北京道一號

Savills Property Management Limited
第一太平戴維斯物業管理有限公司

Sun Hung Kai Properties Limited
新鴻基地產發展有限公司

Wheelock Properties Limited
會德豐地產有限公司

Wing On Plaza
永安廣場

Wing Tai Properties Limited
永泰地產有限公司



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Awards 獎項



System Awards,
Excellent Intelligent
Green Building 2023
優秀智能綠色系統獎,
優秀智能綠建築系統及
項目獎比賽2023



Outstanding Performance in the categories of
Green Building, Green Design & Livability,
CRECCHKI Real Estate ESG Awards GBA2023
在《房地產、環境、社會及
企業管治大獎》粵港澳大灣區2023中,
獲得「綠色建築」、「綠色設計」、
「宜居性」等類別的杰出表現獎



Innovative Initiative
Outstanding Award,
Hong Kong Green Awards 2023
創新倡議杰出表現獎,
香港綠色企業大獎2023



Powering a Sustainable Future: Our IoT & Energy-Saving Solutions

What is IoT

The Internet of Things (IoT) is a network of interconnected physical devices with sensors, software, and connectivity, enabling them to collect and exchange data.

Benefits

The solution improves efficiency in property management by enabling the monitoring and control of various systems and devices within a property. Through connected sensors and devices, property managers can gather real-time data on energy usage, occupancy levels, security, and maintenance needs. This data allows for proactive decision-making, optimizing energy consumption, identifying maintenance issues before they become critical, and enhancing overall operational efficiency. Automation and remote control capabilities further streamline tasks, reducing manual effort and enabling swift responses to property-related issues.

WEC is the leading IoT solutions provider in the field of property management in Hong Kong. We have installed the solutions in over 400 properties, including shopping malls, as well as Grade A offices and residential buildings.

推動可持續發展: IoT 及節能方案

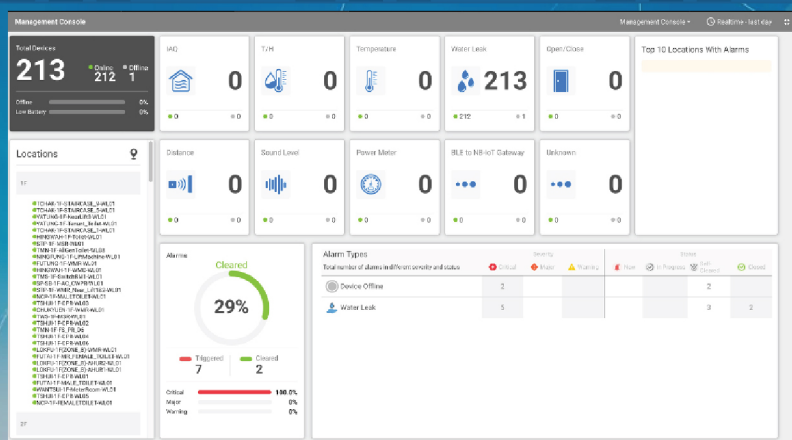
甚麼是物聯網

物聯網 (IoT) 是透過連接實體設備和感測器及雲端平台，收集和交換資料，達至各項監察和自動調控功能。

物聯網優勢

該解決方案透過監控和控制物業內的各種系統和設備來提高物業管理效率。透過連接感測器和設備，物業經理可以收集有關能源消耗、設施使用、安全和維護需求的即時數據。這些數據有助於主動決策、優化能源管理、了解設施損耗程度，自動化和遠端控制功能亦可以節省人手，提高整體營運效率。

WEC已在香港超過400幢物業中安裝了物聯網解決方案，其中包括購物中心、甲級商廈和住宅大樓等。



Management Console
Provide big picture for management about the status of sensors
雲端監察平台
讓管理人員有效地監察感測器的狀態



USE Case

Protect People – To enhance safety and provide timely assistance in disabled washrooms, sensors can be deployed to detect user activity. These sensors monitor motion within the facilities and promptly alert site management if a user remains motionless for an extended period. This proactive approach ensures that necessary measures can be taken for emergency rescue, ensuring the well-being of users in critical situations.

Protect Property – IoT technologies can be utilized to install sensors to monitor water leakage in critical area. The sensors are connected to a cloud portal that trigger immediate alert via SMS to notify duty staff of the potential leaks, preventing further damages to nearby lifts and the property, minimizing downtime and reducing repair costs.

Protect Products – Install temperature and humidity sensors in warehouses, cargo cabins, and semi-open refrigerators within retail shops to ensure an optimal environment for maintaining food quality. These sensors continuously monitor the conditions, allowing for timely adjustments and ensuring that the temperature and humidity levels are ideal for preserving the freshness and quality of food products.

實際應用

人身安全 – 为了提高傷健人士洗手間的安全性並提供及時協助，可以部署感測器來偵測使用者活動，如果使用者在洗手間內長時間不動，會立即向現場管理人員發出警報，讓管理人員可以及時處理緊急情況。

物業安全 – 安裝漏水感測器來監測高危地方的情況。感測器連接到雲端平台，若有漏水情況，可以透過發出SMS即時通知值班人員，防止對電梯和物業其他地方造成更大損壞，以維持正常服務及減低維修成本。

產品安全 – 在倉庫、貨倉或零售店的半開放式冰箱中安裝溫度和濕度感測器，持續監測現場環境，確保溫度和濕度水平適合儲存食品，確保食品鮮味和品質。



WEC IoT Platform

WEC物聯網監察平台



Sensors will continuously
monitor the status
感測器持續監控狀態



Once the sensor detected faults, data will
be transmitted to cloud immediately
一旦感測器偵測到故障，
立即傳輸信息到雲端



Apply logic to control different
devices for achieving automation
應用邏輯控制不同設備，實現自動化





Energy Saving

Energy-saving solutions in property management offer numerous benefits, including the reduction of operational costs, minimizing environmental impact, and promoting sustainability.

We achieve energy saving by utilizing advance technologies to integrate multiple proprietary systems, centralizing system data for optimized operational efficiency. On top of that, we improve air conditioning equipment performance through retro commissioning and implementing IoT Solutions with Artificial Intelligence (AI) System to reduce energy consumption.

Our innovative solution has been proven to deliver energy savings up to 5%-20%, resulting in reduced maintenance costs and minimized downtime.

節能方案

物業管理中的節能方案不但可以降低營運成本、更可以減少對環境的影響及促進永續發展。

WEC利用創新技術整合大樓內的各個專有系統，透過收集及分析系統數據以優化營運效率，加入物聯網技術，更實施人工智能（AI）來提高空調設備等設施的性能，減少能源消耗。

事實證明，我們的創新解決方案可節省高達 5%-20% 的能源，亦可以降低維護系統的成本和減少停機時間。

Reference Case - Hong Kong Time Square:

In our energy-saving initiatives at Hong Kong Time Square, we implemented the following measures:

1. Application of IoT Sensors and iPaint on the cooling tower water pipes to enhance cooling efficiency.
2. Utilization of AI technology to optimize power consumption in the chiller system.

As a result of these energy-saving measures, we have achieved substantial energy savings. On average, we save approximately 2,000 kWhr/day when the average temperature is 22°C, 3,000 kWhr/day when the average temperature exceeds 30°C. These results highlight the effectiveness of our energy-saving solutions in real-world applications.

參考案例 - 香港時代廣場

在香港時代廣場的節能方案中，我們實施了以下措施：

1. 運用iPaint降低冷卻系統水管溫度
2. 以物聯網技術聯動AI控制空調系統達至節能效果

這些措施帶來了顯著的節能效果；當室外平均溫度為 22°C 時，每天可節約 2,000 kWhr；當室外平均溫度超過 30°C 時，每天可節約 3,000 kWhr。



AI Prediction and Control Technology

人工智慧預測與控制技術

Building Management System (BMS)
樓宇管理系統

Open GIS Data
地理訊息資料

Artificial Neural Network (ANN)
人工神經網絡

Forecast of set points
設定點預測
 > ANN_TC models
ANN_TC 模型
 > Future cooling load
未來冷卻負荷

Data acquisition and processing
數據採集與處理

- > Keep receiving data
持續接收數據
- > Data quality checking and filtering
數據品質檢查和過濾

IoT sensor
物聯網感測器



Particle Swarm Optimization (PSO)
粒子群演算法

Optimization
最佳化

- > The best set point of the Cooling Tower unit
冷卻水塔機組的最佳設定點

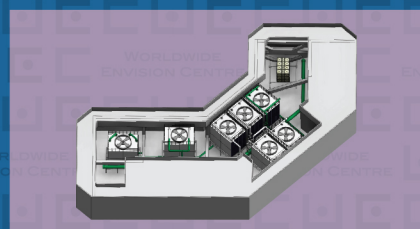
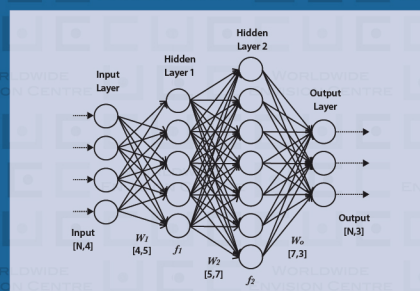
Artificial Neural Network (ANN)
人工神經網絡

Prediction 預測

- > ANN_Chx models
ANN_Chx 模型
- > Total power consumption of each individual Cooling Tower
每個冷卻水塔的總能耗

Define possible range of set points
定義設定點的可能範圍

- > Number of Cooling Tower in operation
運轉中冷卻水塔數量
- > Cooling Tower water temperature
冷卻水塔水溫



Optimal Control Strategy

最佳控制策略

- > Input the best set point data into BMS
將最佳設定點資料輸入樓宇管理系統

C-POLAR™ : Elevating Energy Efficiency and Air Filtration

WEC is dedicated to enhancing indoor air quality in modern cities. Our tailored solutions utilize the latest **C-POLAR™ + Volz** technology to upgrade the functionality of air handling units, fan coil units, and air purifiers in your ventilation system. This technology offers highly efficient air purification while significantly reducing power consumption, making it both eco-friendly and cost-effective.

Collaborating closely with you, our team of experts will customize **C-POLAR™ + Volz** air filters to seamlessly integrate with your specific systems. This ensures not only optimized filtration efficiency but also maximizes the advantages of this innovative technology.

C-POLAR™ : 提升能源效益和空氣質素

WEC 致力於提升現代城市的室內空氣質量。我們客製化的解決方案利用最新的 **C-POLAR™ + Volz** 技術，升級各類通風系統中的空氣處理機組、風機盤管和空氣淨化器的功能。此技術能高效淨化室內空氣，同時大大降低用電量，兼具環保和成本效益。

WEC 的專家團隊將與您緊密合作，提供度身訂造的 **C-POLAR™ + Volz** 空氣過濾網，完美配合您的通風設備，優化過濾效率，最大化地發揮這項創新技術的優勢。

C-POLAR™ + Volz Innovative Technology

C-POLAR™, in collaboration with German top air filter manufacturer **VOLZ**, has developed an ultra-high-quality air filter. The latest **C-POLAR™ + Volz** Air Filters feature the following key upgrades:

- Achieve MERV 15 performance after fully discharge. Highly efficient removal of airborne particles, including wildfire smoke.
- Certified energy-efficient performance with ultra-low pressure drop (On the point of 85 Pa), graded as Energy Class A.
- Captures, inactivates and eliminates up to 99.99% of viruses, bacteria, fungi and pollen. The antimicrobial function is proven by 16 institutes, including Harvard Medical School
- Fibreglass Free
- Included Pre-Filter
- Effective in adverse conditions such as: high humidity, fast air flow, and dust-loaded environmental conditions

C-POLAR™ + Volz 創新技術

C-POLAR™ 與德國頂尖空氣過濾網生產商**VOLZ**合作，研發出超優質空氣過濾網，全新過濾網集合多重升級功能：

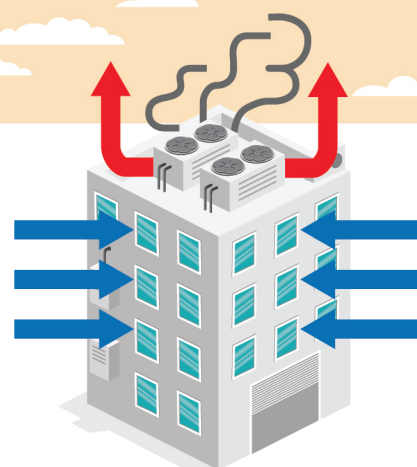
- 可達到MERV 15空氣過濾網性能，高效去除各類空氣傳播微粒
- 獲認證的節能功效，及超低風阻 (只有85 Pa)，達到A級能源等級
- 捕捉、滅活並根除高達99.99%的病毒、細菌、真菌和花粉。抗菌功能經哈佛醫學院等16間國際專業機構驗證。
- 不含玻璃纖維
- 附有前置濾網
- 即使在惡劣條件下，如高濕度、高風速、多灰塵環境，也能高效發揮作用



wec.com.hk

Presents
Healthy Indoor Air & Energy Savings
Utilizing
Air Filters Protected by C-POLAR™
Studies show C-POLAR™ protected filters capture, inactivate, and eradicate pathogens by up to 99.99% effectiveness.

利用受 C-POLAR™ 保護的空氣過濾網，能有效改善室內空氣質素和節能
實驗證明，受 C-POLAR™ 保護的空氣過濾網能捕獲、滅活和根除病原體高達 99.99%





Collaborating with
German top manufacturer VOLZ,

New C-POLAR™ + Volz Air Filters

have the following key features:

與德國頂尖空氣過濾網生產商 VOLZ 合作，
全新產品 C-POLAR™ + Volz 空氣過濾網
集合多重升級功能：



Filter Class acc. to ASHRAE 52.2	Filter Class acc. to ISO 16890	Particle Efficiency	Energy Consumption	Energy Class Threshold reference scale year 2019: (RS 4/C/061-2019)
MERV-15	ISO ePM1 70%	ePM ₁ 70 % ePM _{2.5} 75 % ePM ₁₀ 90 %	1.100 kWh/year	A

Filter Class acc. to ASHRAE 52.2	Filter Class acc. to ISO 16890	Particle Efficiency	Energy Consumption	Energy Class Threshold reference scale year 2019: (RS 4/C/091-2019)
MERV-15	ISO ePM1 70%	ePM ₁ 70 % ePM _{2.5} 75 % ePM ₁₀ 90 %	1.250 kWh/year	B

Application 實際應用:

We have installed C-POLAR™ Protected Filters in over 200 locations globally.

我們已在全球200多個地點安裝了C-POLAR™ 空氣保護濾網



Revolutionizing Cleaning : Innovative Cleaning Solutions

WEC leverages technology to enhance cleaning processes, utilizing innovative solutions, devices, sensors, and data analytics for improved efficiency, effectiveness, and sustainability. To enhance client satisfaction, we have also implemented a feedback mechanism that allows users to report cleanliness issues or suggest improvements in real-time.

Use Case :

Data-Driven Cleaning : Sensors strategically placed in washrooms to monitor traffic, occupancy levels, air quality, and waste bin fill levels. The collected data is then analyzed to optimize cleaning schedules and allocate resources efficiently, resulting in targeted and effective cleaning operations.

Robotic Cleaning : Mitigate staff shortages by utilizing robots to perform cleaning tasks during off-hours, such as overnight. Their high-speed cleaning capabilities allow them to efficiently cover large areas in less time, ensuring effective cleaning even with limited manpower.

Self-Cleaning : By applying the revolutionary "WEC Self Cleaning Solution" coating to curtain walls, raindrops have the ability to break down surface oil stains and penetrate pollutants, resulting in a self-cleaning effect that keeps the walls clean and clear. This remarkable solution not only saves manpower but also reduces the need for cleaning water and detergent.

革命性的清潔方案：創新環保清潔方案

WEC 利用創新技術優化清潔流程，以感測器聯動機器人自動清潔、分析數據來提高效率，為了提高客人滿意度，我們還實施了回饋機制，讓使用者即時報告清潔問題或提出改進建議，集思廣益，一起製定持續發展清潔方案。

實際應用：

數據驅動清潔流程：將感測器策略性地放置在洗手間，監測人流、使用率、空氣質素和垃圾箱容量等，進一步分析收集到的數據，按實際數據製定清潔程序，達至有效資源分配。

機器人清潔：利用機器人在凌晨時份自動執行清潔任務，在短時間內有效地清潔大範圍面積，即使在人力資源不足的情況下也可以確保清潔效果。

自潔塗層：透過噴灑革命性的「WEC自潔塗層」於室外玻璃幕牆，便可以透過下雨天的雨水分解表面油污和滲透污染物，從而產生自潔效果，使玻璃幕牆保持光潔清晰。這項卓越的解決方案不僅節省人力，還減少了對清水和清潔劑的需求。



Innovative Cleaning Solutions

創新環保清潔方案

Digital Transformation in Cleaning Services

清潔服務的數碼化轉型

Existing Building Cleaning Services

現有樓宇清潔服務

Labor Intensive
密集勞工

Unscientific Cleaning Spec
清潔規範不科學

Input Base Contract
輸入型合約

Cleaning Services Digital Transformation

清潔服務數碼化轉型

Maximum Use of Robots
最大限度地利用機器人

Scientific Cleaning
Spec Definition
科學化清潔規範定義

Output Base Contract
輸出型合約

Benefits

好處

Lower Cost
降低成本

Higher Quality
更高品質



Self Cleaning System

自潔系統

WEC self-cleaning solution can apply to:

WEC 自潔解決方案適用於：

Cladding Surface · Glass Facade · Solar Panel
Aluminium Panel · Stone Surface
Steel Surface · Painted Wall
建築物表面 · 玻璃幕牆 · 太陽能板
鋁面板 · 石材表面 · 鋼表面 · 油漆牆





Efficient and Real-time Communication : Mobile Application

WEC harnesses the power of mobile applications to establish a highly efficient communication platform for all its intelligent solutions. With round-the-clock accessibility, this platform guarantees that staff, property managers, tenants, and other stakeholders can maintain constant connectivity and collaborate effortlessly. Ensure productivity and utmost satisfaction among all involved parties.

Use Case :

Defect Reporting and Maintenance : Developers and Property Managers can conveniently attach photos, videos, and track the progress of each reported issue within the app. The paperless communication streamlines the management of tasks assigned to contractors, resulting in improved overall operational efficiency.

Smart Living : Tenants can conveniently manage tasks like maintenance requests, facility bookings, receive guidelines and emergency alerts to ensure effective communication with property managers.

Mobile Workforce : Offers flexibility, convenience, and real-time communication for remote staff working across the country. It provides innovative ways to streamline HR processes, enhance employee engagement, fosters efficient collaboration and improves overall employee satisfaction.

Members Privileges : By integrating shopping functions into mobile app, we cater to users' needs and expand market penetration. Engage users with exclusive offers and member perks, fostering loyalty through rewards and personalized recommendations.

高效實時溝通：手機應用程式

WEC利用手機應用程式滙聚各項智能方案，創建實時、高效的通訊系統。這個可以全天候運作的系統讓員工、物業管理、租戶和其他持份者能夠保持聯繫並有效協作，從而提高生產力和滿意度。

實際應用：

驗樓執修：建築商和物業管理可以將整個執修過程數碼化，不但可以附加照片、視頻，更可以追蹤每項工程的進度，簡化了分工的流程，從而提高整體營運效率。

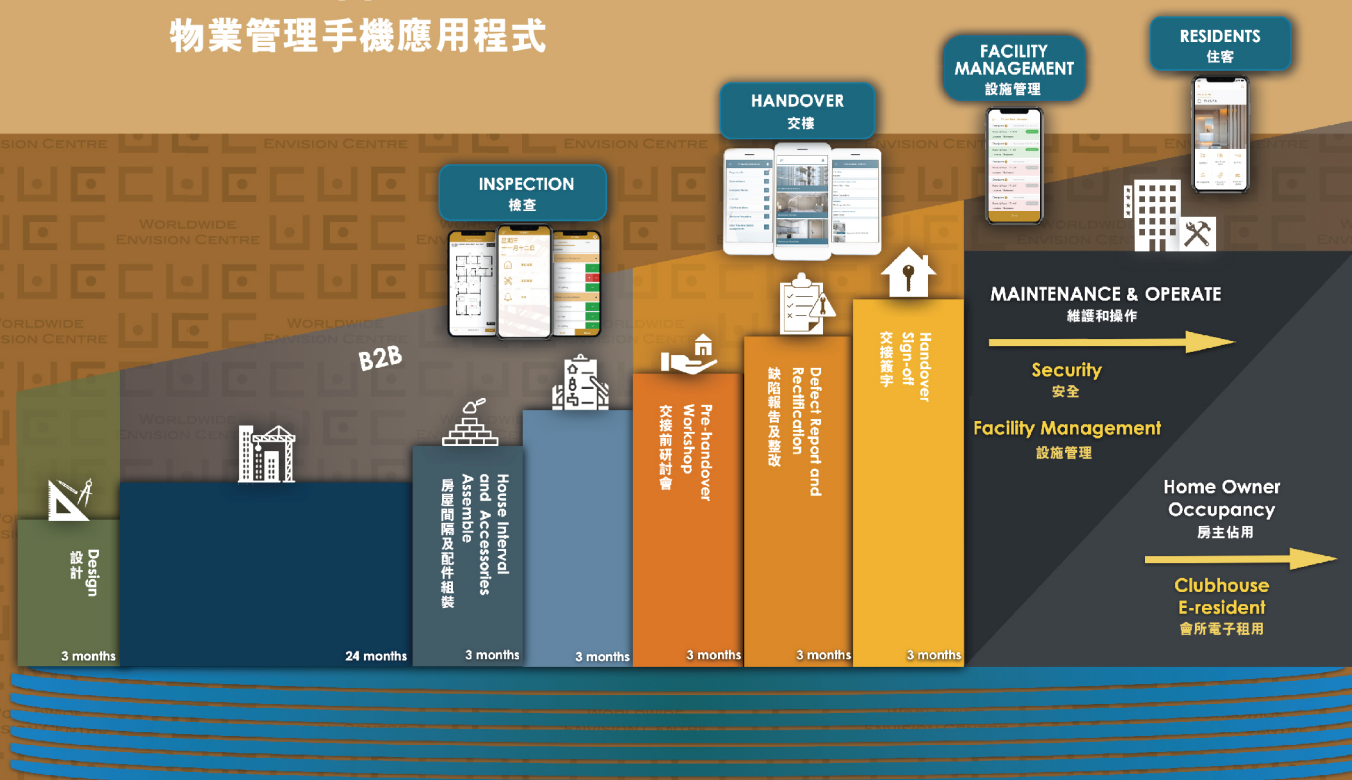
智慧生活：租戶可以手機處理各種瑣事，包括預訂設施、要求維修、閱讀通告、接收緊急信息等，藉此優化物業管理和租戶之間的溝通，提升客人滿意度。

企業內聯：企業可以此與大量身在全國各地的遙距工作人員即時通訊，運用這創新的工具能夠簡化人力資源流程、提供在線培訓、促進高效協作並提高員工整體滿意度。

會員優惠：將購物功能與特定手機應用程式整合，不但可以滿足該群組的購物需要，更可擴大市場滲透率，亦可以透過獨家禮遇和會員優惠吸引用戶，設獎勵計劃培養用戶對平台的忠誠度。

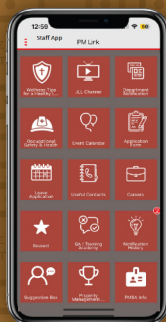


Property Management Mobile Applications 物業管理手機應用程式



Mobile Workforce

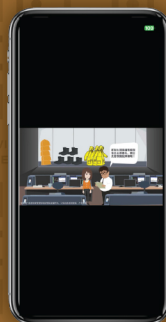
企業內聯



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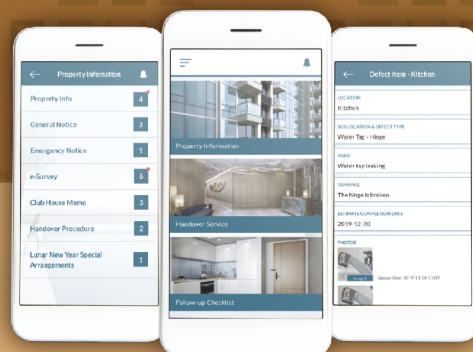


Leave Application
假期申請



Training Video
培訓影片

Handover 交樓





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