如何運用雲端及流動技術持續疫下零售營運

Tim Lo

Sales Director

Computer And Technologies Software (Hong Kong) Limited

Challenges in Retail Sector

1 Frontline staff roster change frequently - - - - - - Require flexible platform to manage

2 Back-office staff work-from-home - - - - - - Require remote document access

3 Business continuity during close downs - - - - - - Require O2O operation platforms

4 Existing IT systems are incapable and insufficient - - - - - - Require operations via Web & Mobile

Technologies to Support Business Continuity

| O2O | 5G | Cloud | Web | Apps |

Mobile Platforms and 5G Services

Web+ Apps
- Auto synchronization (real-time)
- Dashboard (single source of truth)

Mobility
- 5G mobile broadband
- Support pop-up store and rotation
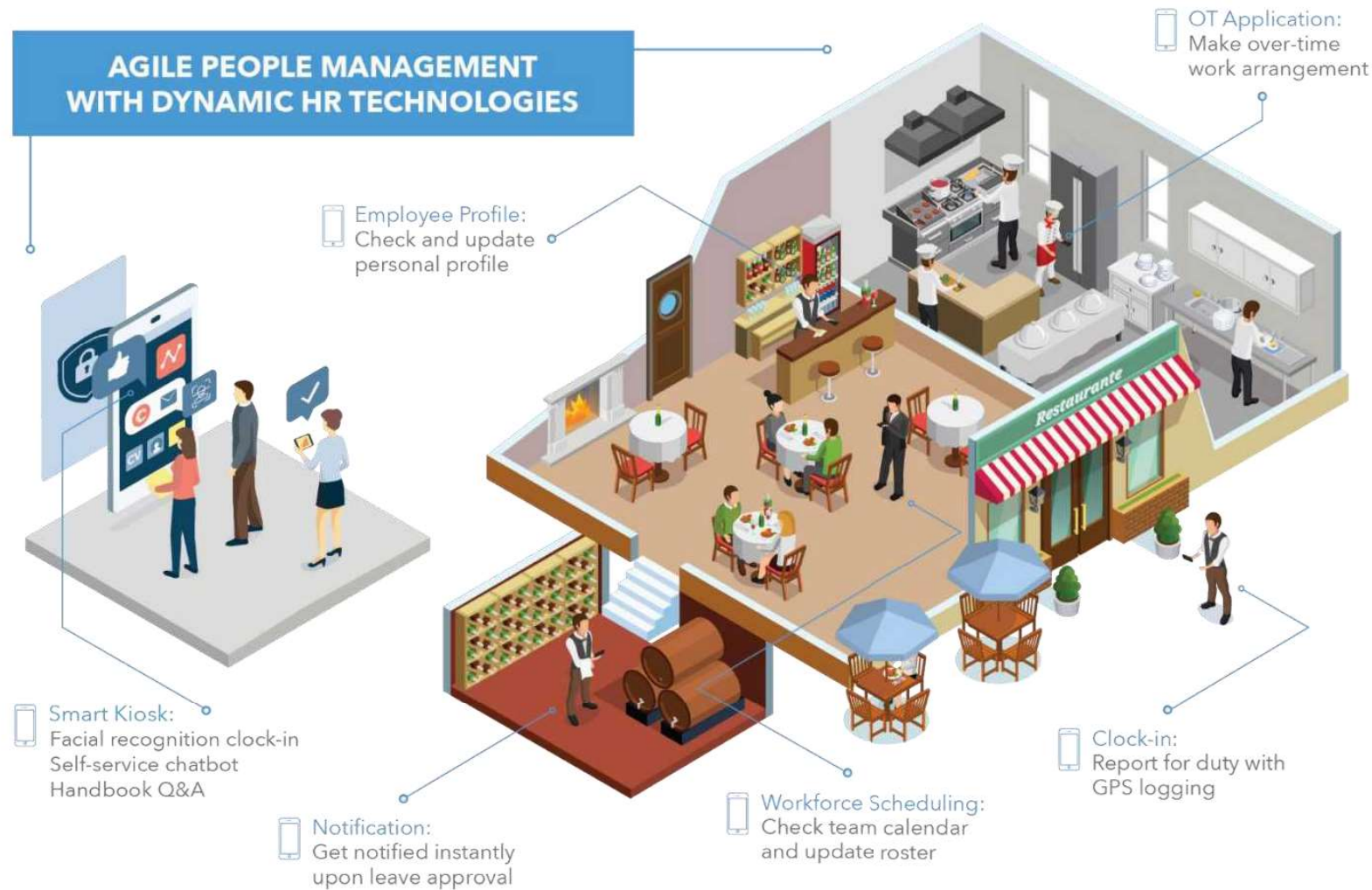
Common Cloud Technology Enabled/ Supported

- Reduce hardware investment (Pay-as-you-go)

- Business continuity: 7x24 resilience (always on)

- Expansion: scale up and scale out

- Auto backup and recovery

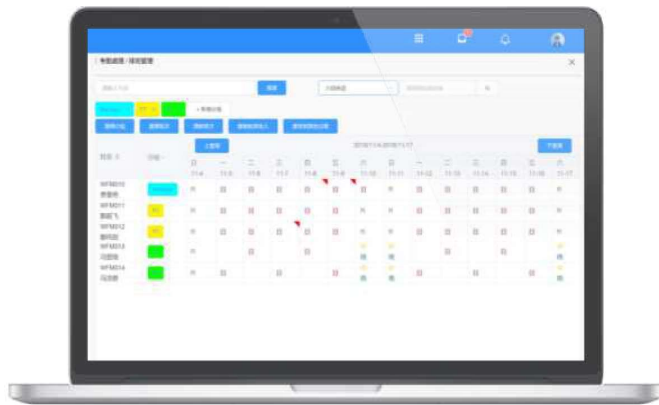- Secured information repository (encryption, access right control)

-Examples:

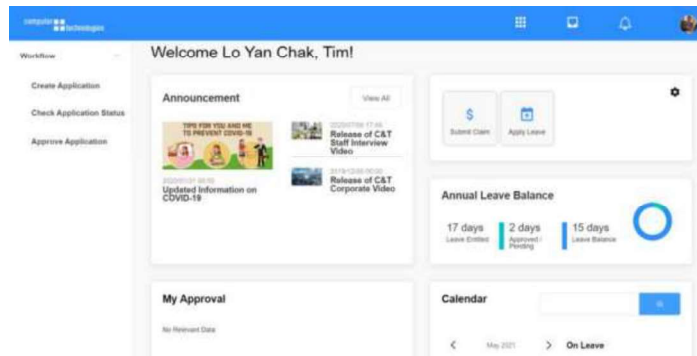HR Management
Document Management
POS

Example 1: HR Management System (Web & Mobile)

AGILE PEOPLE MANAGEMENT
WITH DYNAMIC HR TECHNOLOGIES

OT Application:
Make over-time work arrangement

Employee Profile:
Check and update personal profile

Smart Kiosk:
Facial recognition clock-in
Self-service chatbot
Handbook Q&A

Notification:
Get notified instantly upon leave approval

Workforce Scheduling:
Check team calendar and update roster

Clock-in:
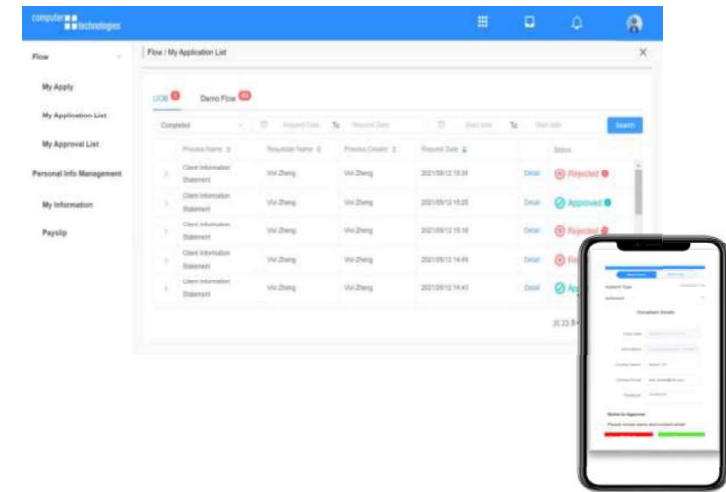Report for duty with GPS logging

Example 1: HR Management System (Web & Mobile)

Roster Management

Self-serviced Portal

Application & Approval

Example 2: Document Management (Web & Online)

Information Management

Web-based Centralize Document Repository

- Web Access (Eng/Chi)
- Secured Document Viewer
- Access Control File & Folder
- Advance Search Tool
- Drag & Drop File Upload
- User Activity Audit Log

Doc. Approval	Email Alert
Auto Reminder	Doc. Circulation
OCR	Scan and e-file

Workflow Automation

Workflow automating & optimization

- E-form Builder (Web)
- SMS/Email Alert
- User Configured Workflows
- Auto Track and Trace
- Dashboard Summary
- API for Data-exchange
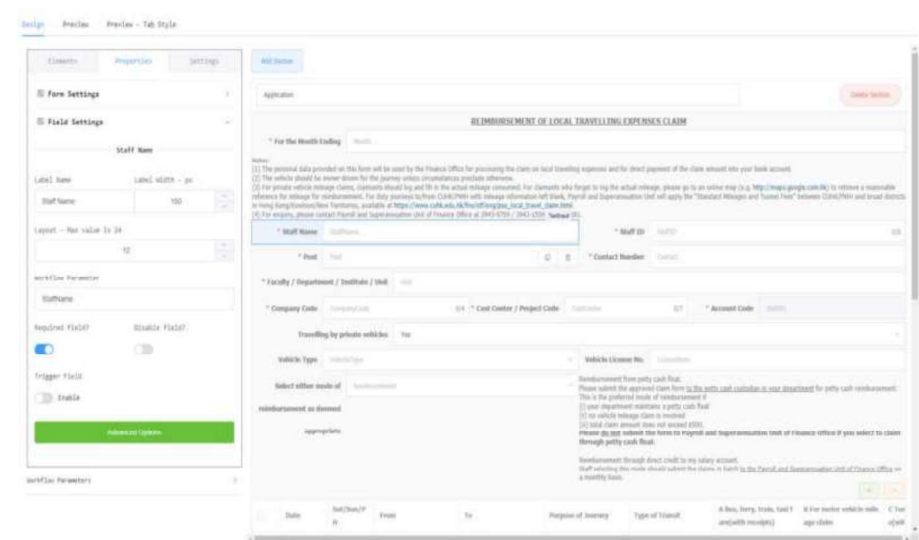
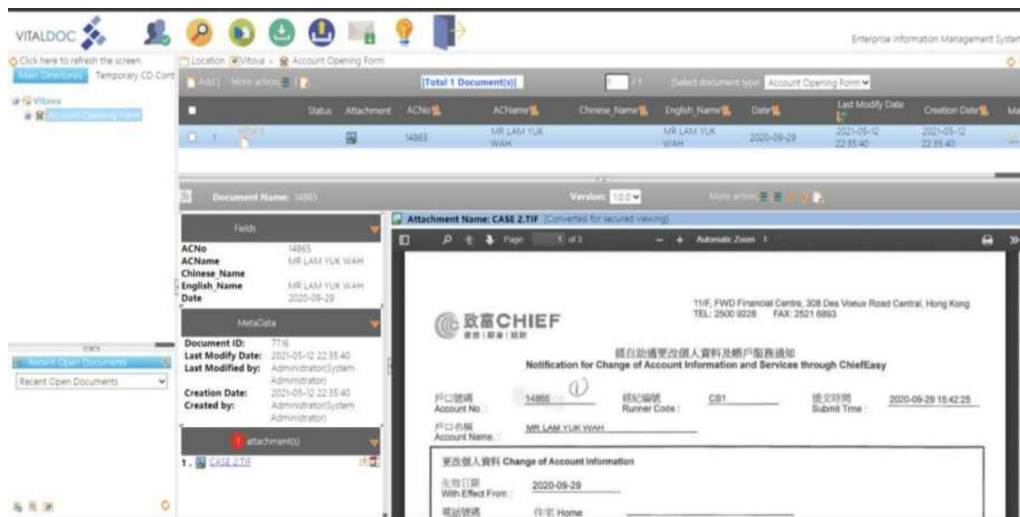| Expenses Claim	Leave Application
Account Opening	Contract Approval
Procurement	Case Management

Example 2: Document Management

- Auto scan hard-copies
- Optical character recognition
- Auto e-filing

- Online e-form (web + app)
- E-Workflow automation

Example 3: POS System (Web & Mobile)

1.Cloud Ready
Support back-end deployment on common cloud platforms

2.Real-time Mix & Match Engine
User self-configured promotion and discount package

3.Flexibility
Simplify integration with existing and future systems with ERP/ CRM/ cloud & O2O

4.Mobility
Support multiple devices, mobile payment and cloud platforms

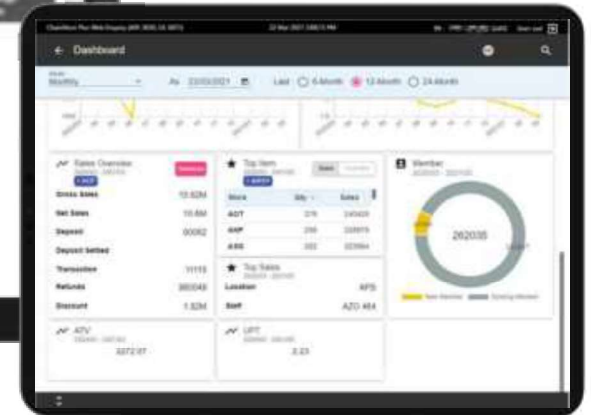# Example 3: Multi-device Support (Mobile with 5G)

Example 3: Serving VIP and Queue Busting

Product Enquiry
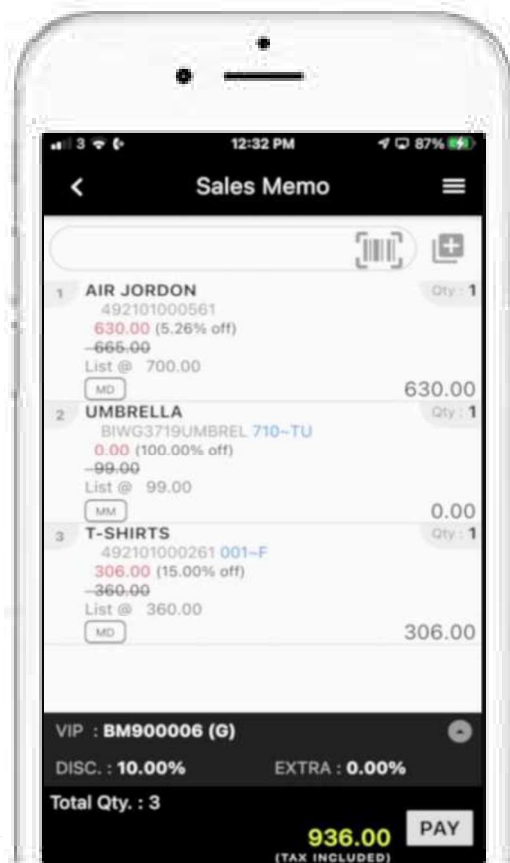
Global ePoints
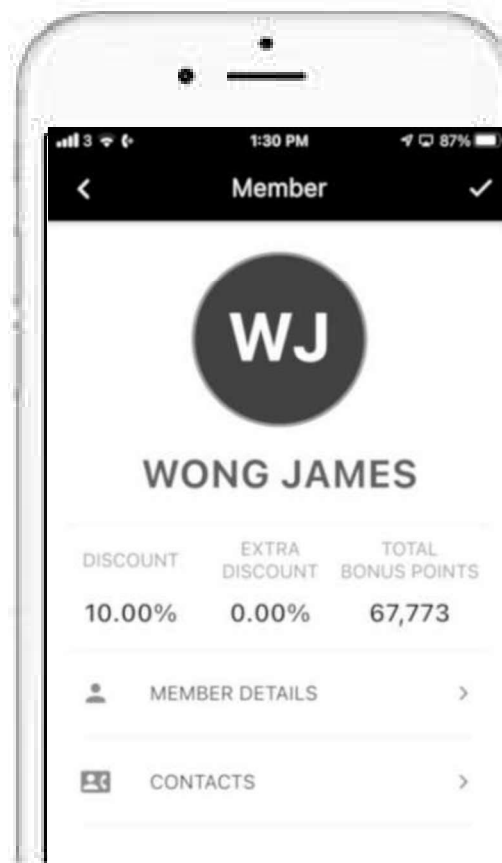
Queue Busting
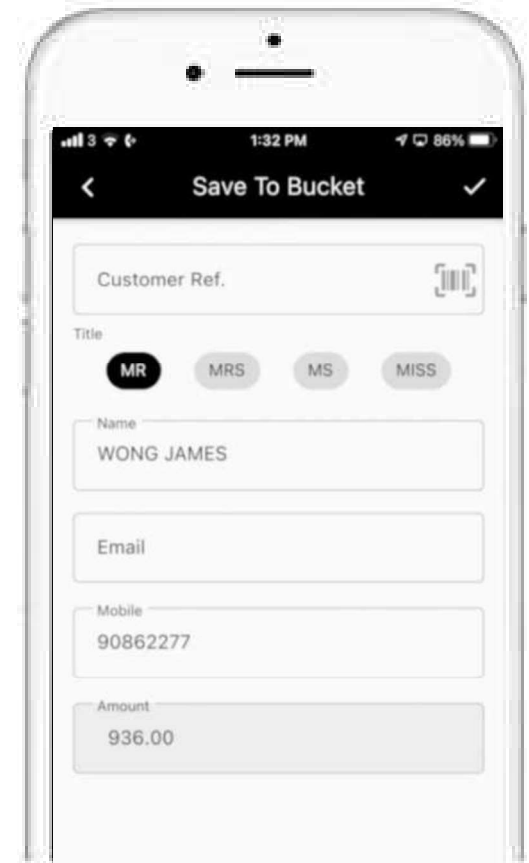
Example 3: Mobile Payment
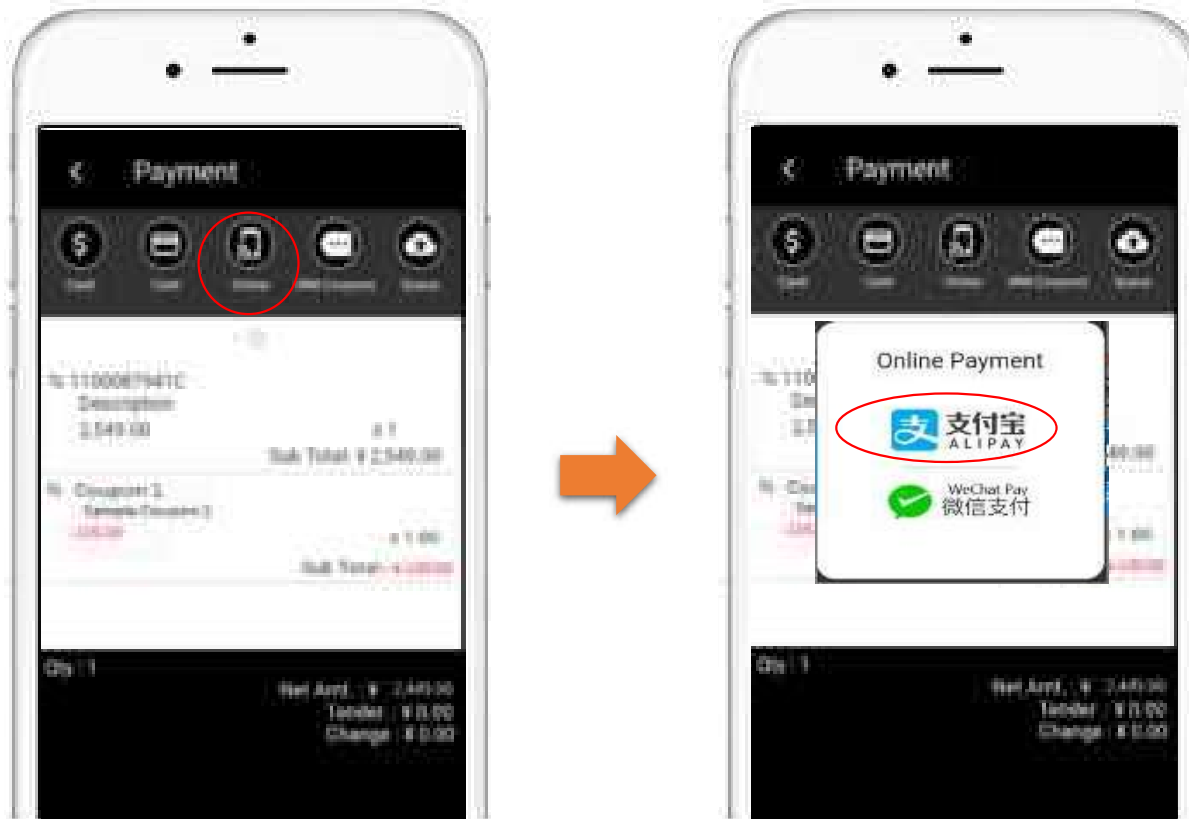
Source: paxtechnology.com

Available on iOS & Android

Example 3: Business Dashboard on Web and Mobile

Management information on the go
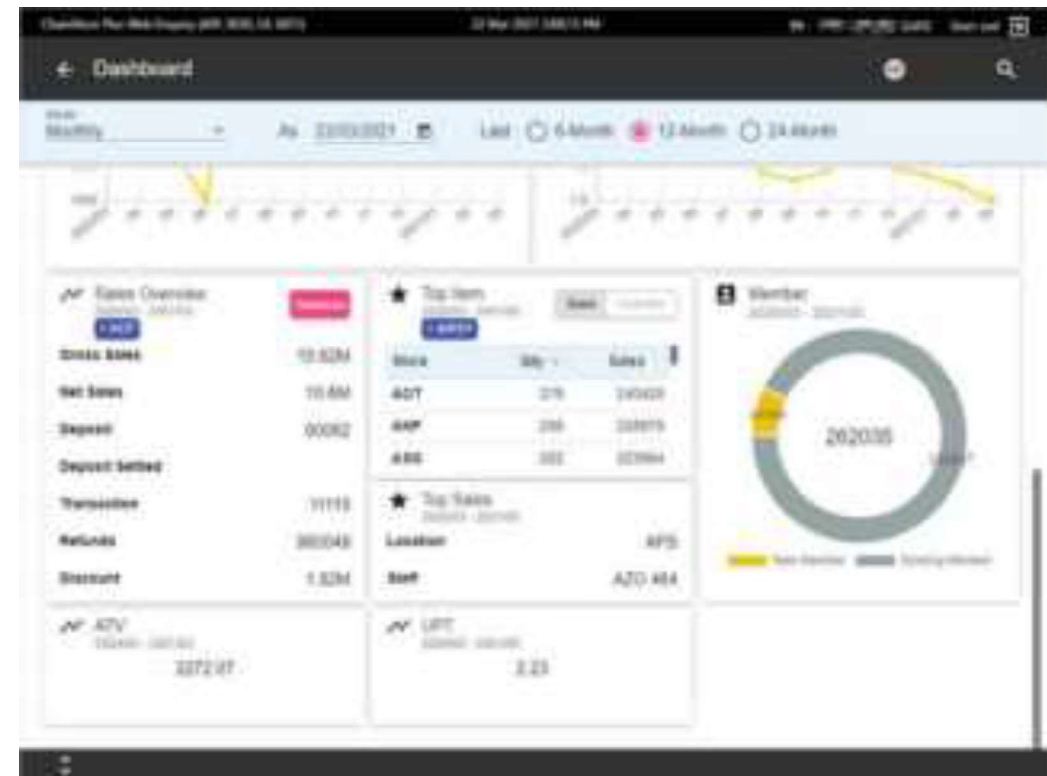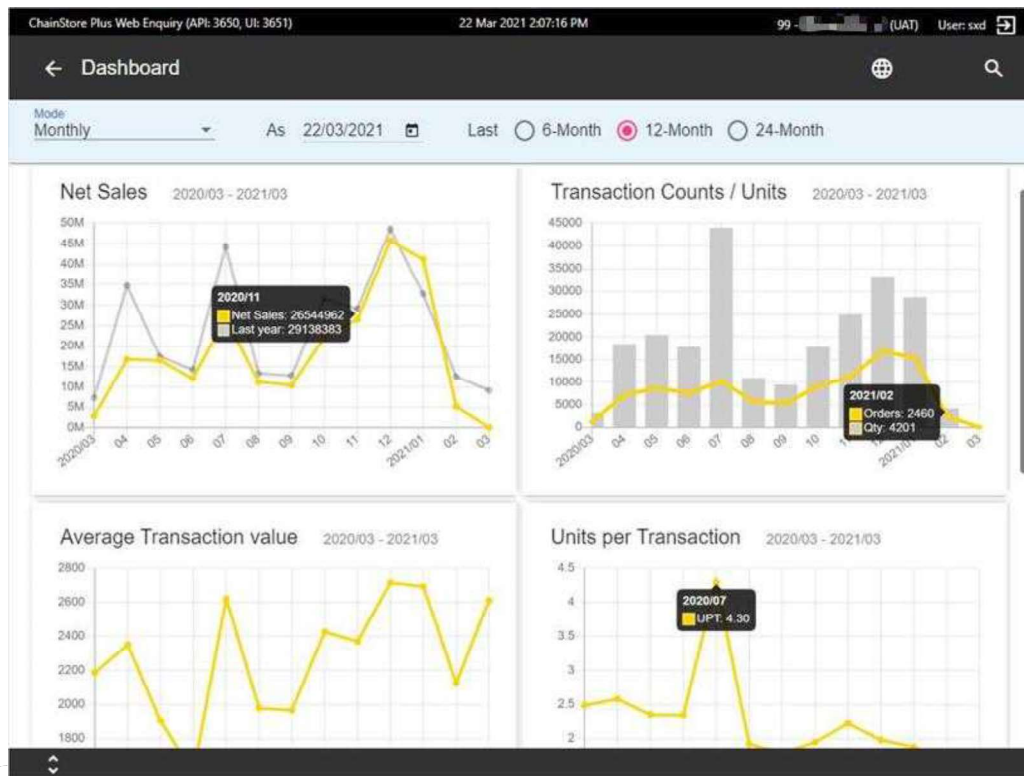
ICT technology is key to support Business Continuity

#5G #Web #Apps #Mobile #Cloud

Thank you.

ChainStore plus

Cert of Merit
發展證書

HONG KONG
ICT AWARDS
2017 香港資訊及
通訊科技獎

Tim Lo
C&T Software (HK) Ltd.
2503 8155
tim_lo@ctil.com

chainstoreplus.com

雲服務 及 多雲連接 打通線上線下全渠道

Prepared by Joel Choi

Car Companies are becoming A.I. companies

Spin studios can have **Streaming** platforms
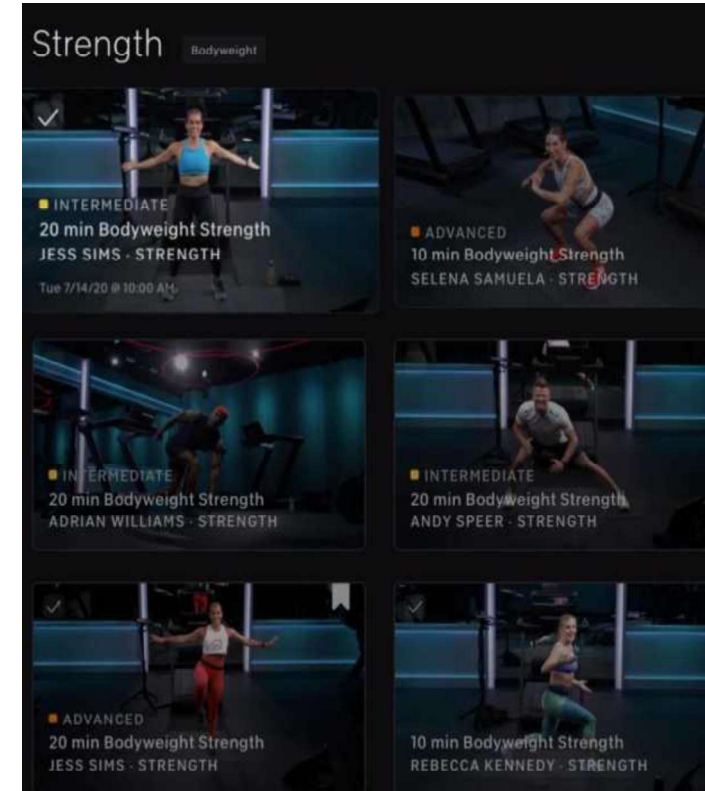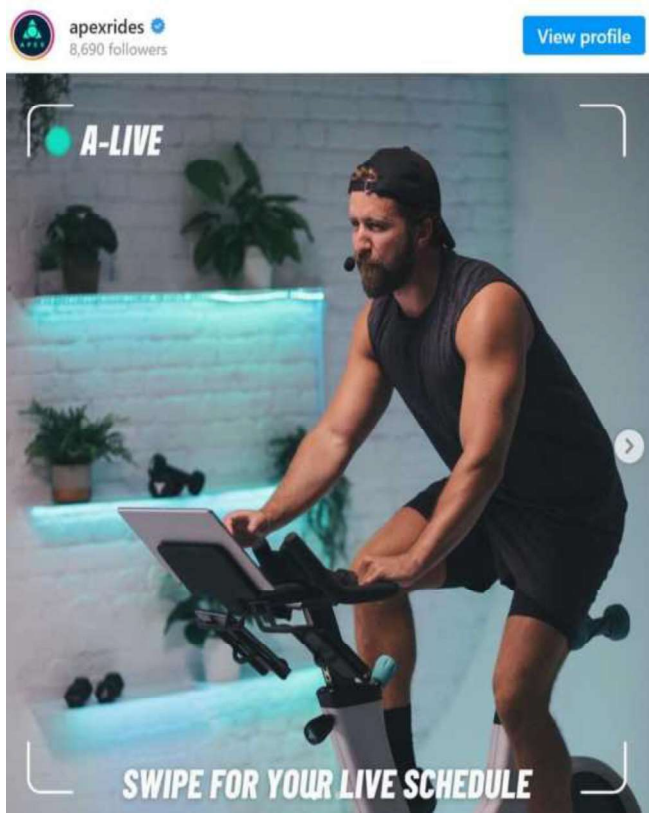
Restaurants are opening Virtual kitchens

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I.T. departments are moving to the Cloud

Cloud computing – Top advantages

Cost

Agile

Security

Global scale

Reliability

Productivity

Performance
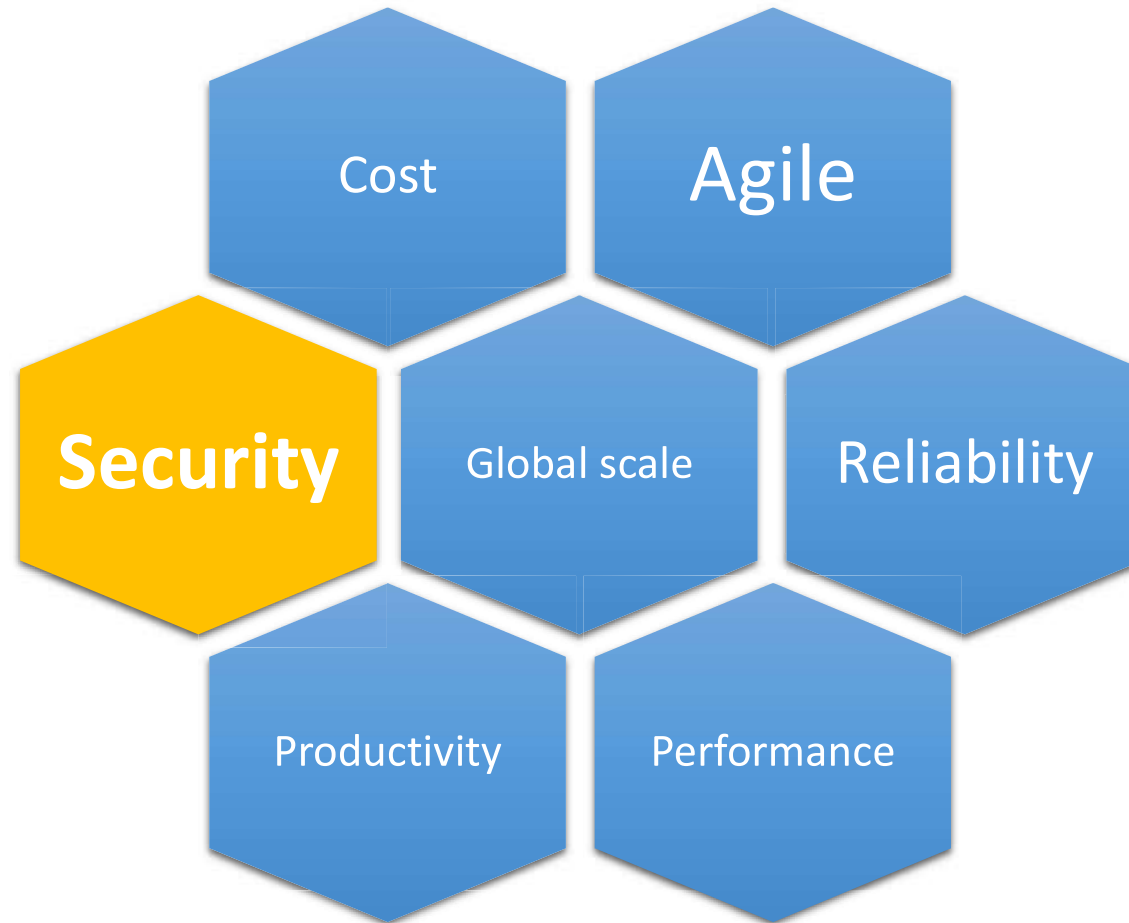
Today's enterprises:
DISTRIBUTED APPLICATIONS AND WORKFORCE
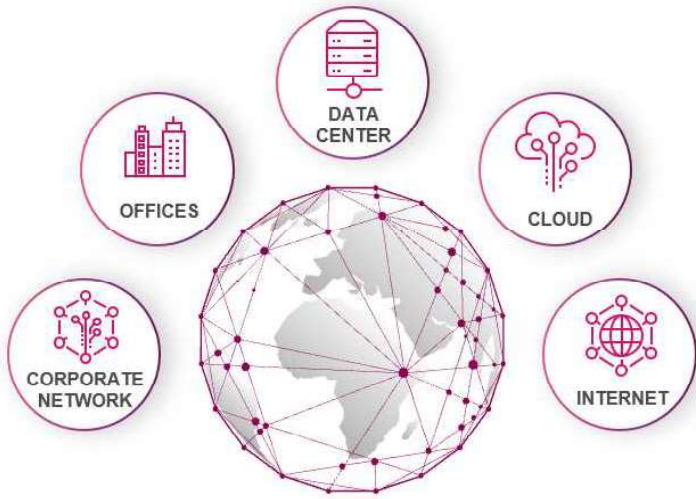
APPLICATIONS
are everywhere
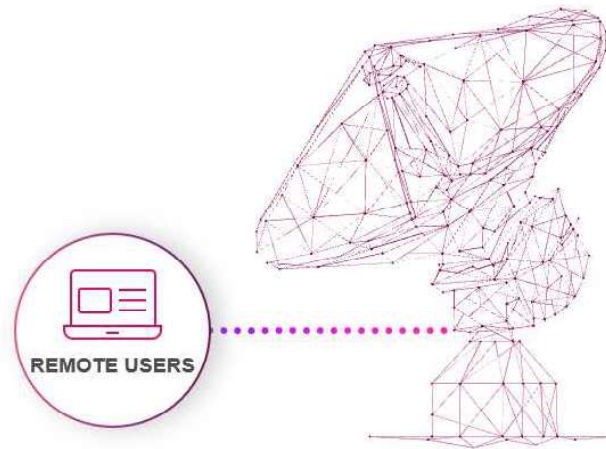
REMOTE USER ACCESS
is the new normal
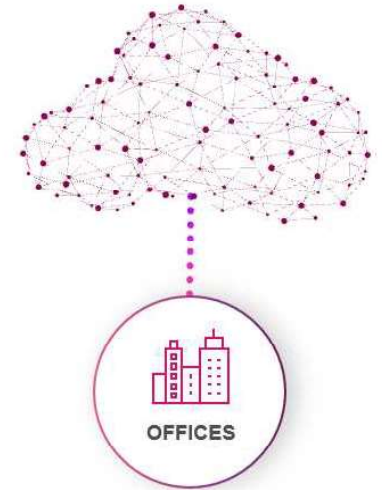
OFFICES CONNECT DIRECTLY
with SD-WAN

Hybrid work requires new security paradigms

Increased Attack Surface

45% see uptick in cyber attacks since Covid-19

Complex Management

46% challenged with scaling performance

Poor User Experience

67% cite performance / latency as top user complaint

*It's time to rethink **network security***

The new network security: SASE

Secure Access Service Edge

Network security as a **consolidated cloud service**

Zero-trust access to corporate networks and applications

Secure connectivity to internet and SaaS

Advanced **threat prevention**

Secure Remote Access

CORPORATE

CORPORATE NETWORK

DATA CENTER

IaaS

INTERNET & SAAS

SaaS

INTERNET

Harmony Connect

Securely connect to everything

MANAGED DEVICES

BYOD

OFFICES

r r rst – c r m t cc ss
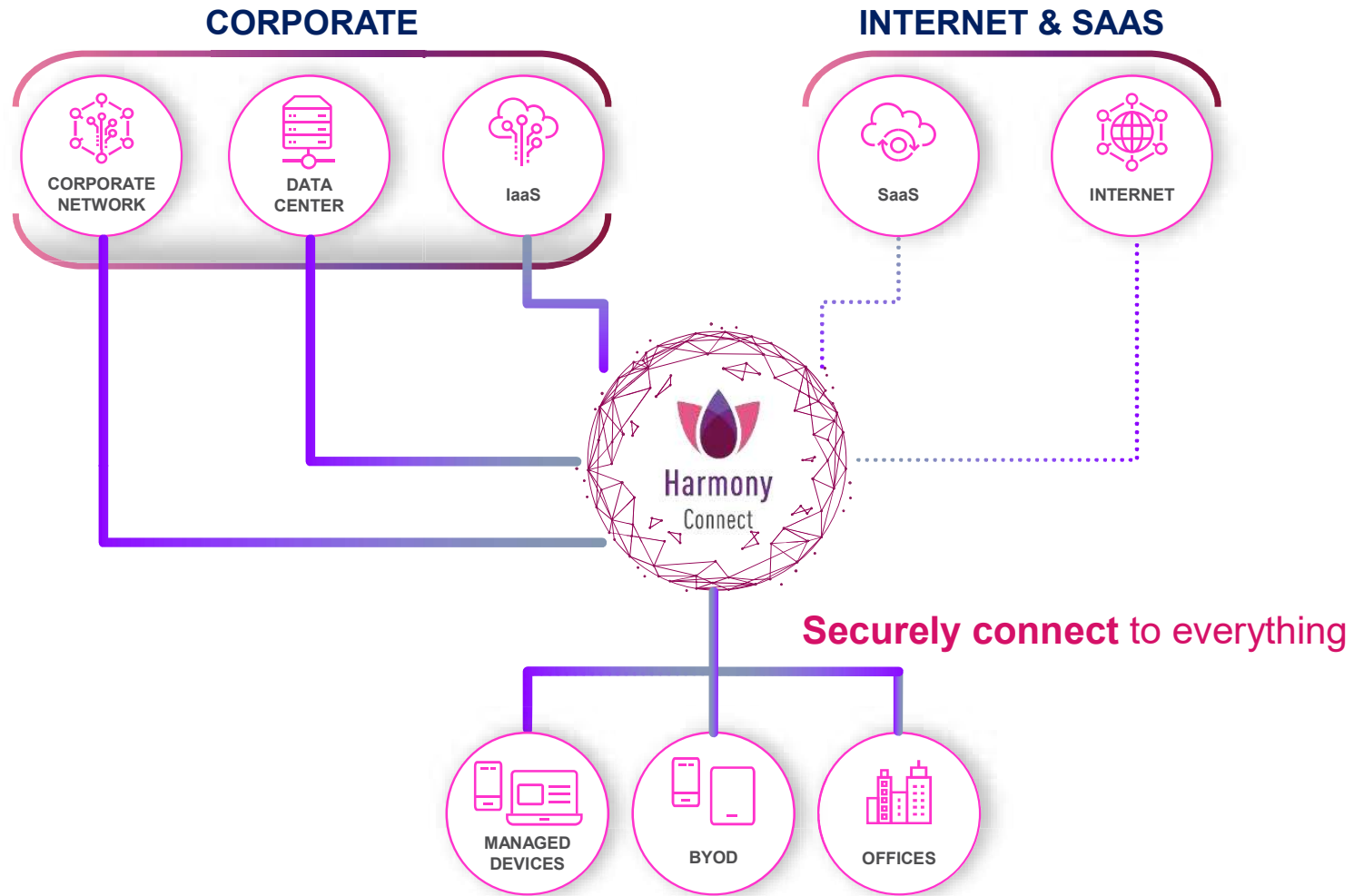
BYOD and Contractors ⚫····● User-friendly **clientless remote access**, no agent required

Employee Devices ⚫····● **Extend remote access** with VPN-as-a-service for PC, Mac and mobile

AS EASY AS CONNECTING TO SAAS
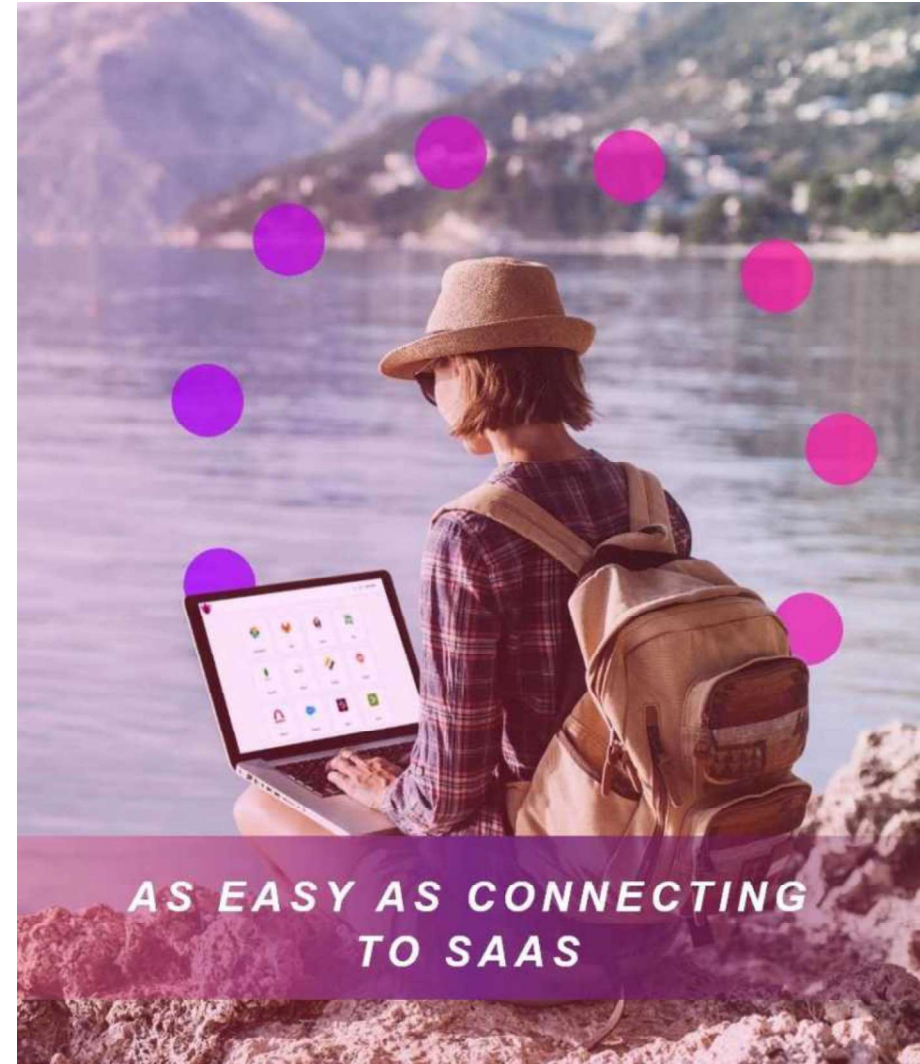
TWO ACCESS MODES, SINGLE ARCHITECTURE

NETWORK LEVEL

New

Harmony Connect **Client**

Zero-trust
access policy

- Any application, any protocol

- Layer-3 network VPNaaS

SD-WAN, gateway, or router

Harmony Connect

Outbound tunnel

Application
Connector

Datacenter
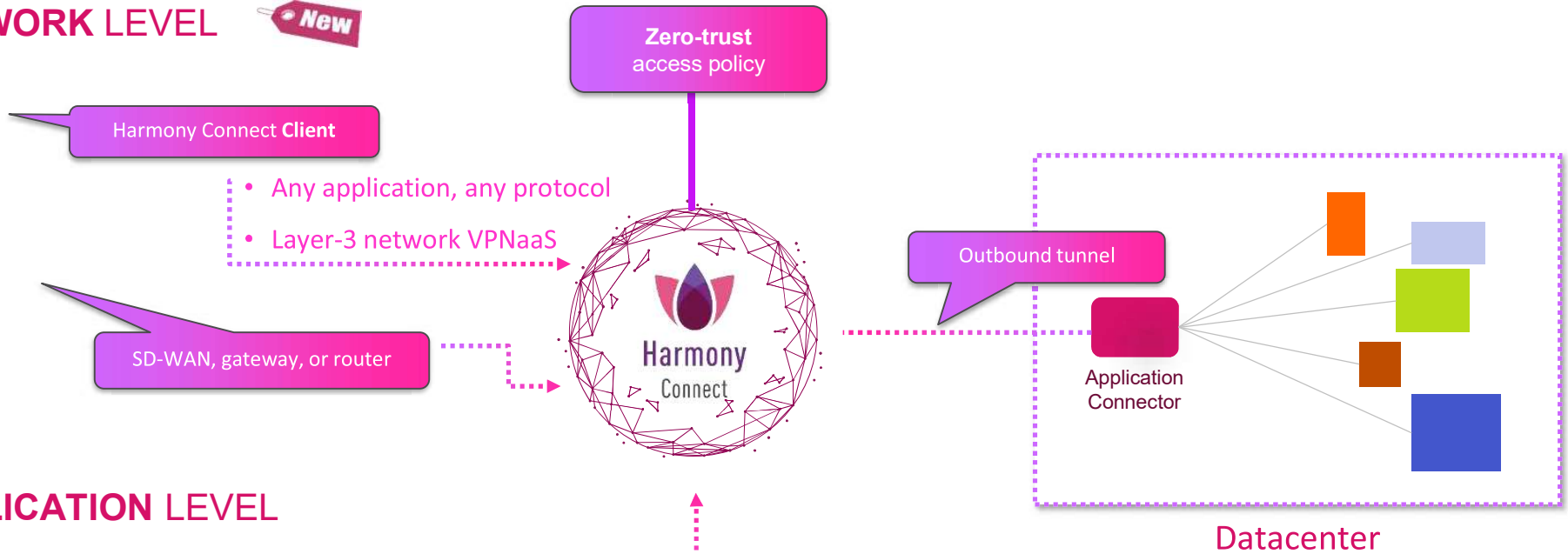
APPLICATION LEVEL

Clientless connection

- Web, RDP, SSH, SQL

- Application-level reverse proxy

Secure Internet access

CORPORATE

CORPORATE NETWORK

DATA CENTER

IaaS

INTERNET & SAAS

SaaS

INTERNET

Harmony Connect

Securely connect to everything

MANAGED DEVICES

BYOD

OFFICES

M   rni   Int rn t   cc ss   c rit

Prevent Threats
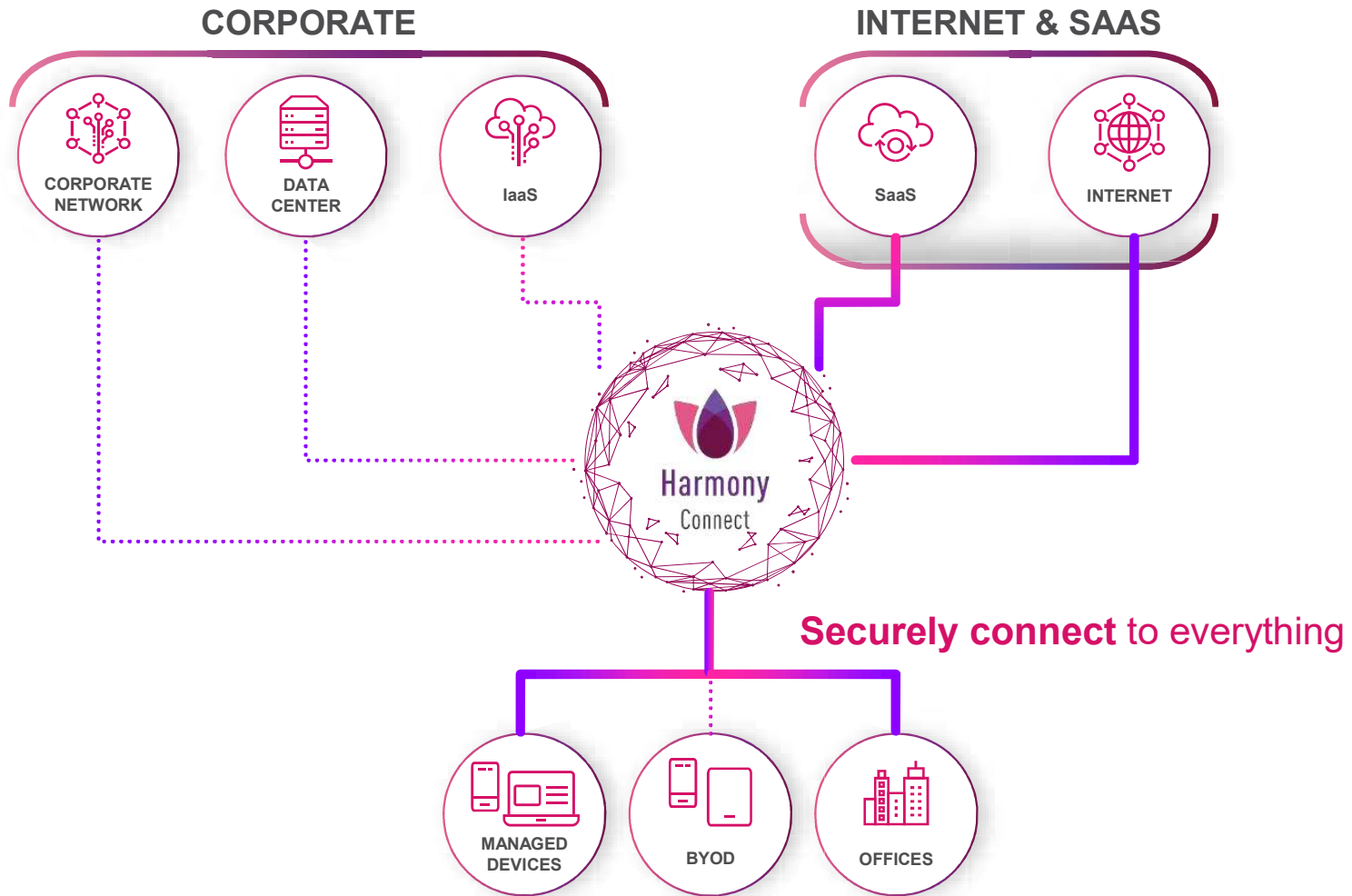
Protect users from
zero-day malware and phishing

Control Access

Control internet access with
application control and URL filtering

TOTAL USER & DATA PROTECTION

c r Int rn t acc ss
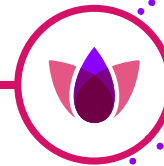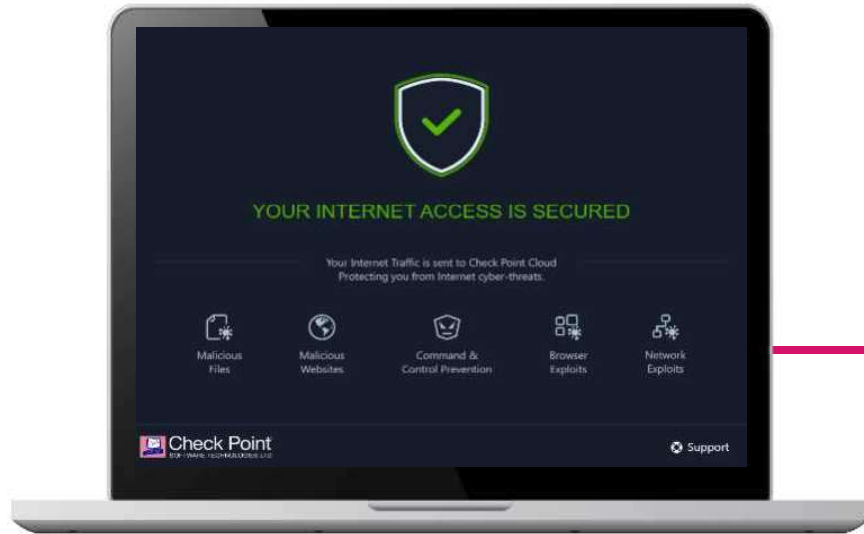
Secure Web Gateway Features

Threat Prevention

- Zero-day sandboxing
- Intrusion Prevention System (IPS)
- Phishing prevention
- Malware and C2 bot prevention
- Full SSL Visibility

Access Control

- Cloud Firewall
- URL Filtering
- Application Control (8,600+ Apps)

Data Protection

- Cloud DLP
- Granular policy
- Predefined data types

Cloud Service

Int grat   ith

Consistent Security

Enforce **consistent security policies** across 1000s of branches

Fast Setup

Secure a new branch in **less than 5 mins** with advanced automation

Fully Tested Integrations

Tight integrations with SD-WAN leaders

Azure Virtual WAN

CISCO

velocloud
Now part of VMware

VERSA
NETWORKS

aruba
a Hewlett Packard
Enterprise company

aryaka

nuagenetworks

ORACLE
Talari

silver peak

CiTRIX

cradlepoint

PROTECT BRANCH-TO-INTERNET CONNECTIONS

mmar – arm n C nn ct

Secure Hybrid & Remote Work

- Secure Remote Access
- Secure Internet & SaaS Access
- Secure Branch Connectivity

DYXnet **SD-WAN**

DYXnet's SD-WAN service provides exceptional user experience with its cost-effective carrier-grade network capability

DYXnet's SD-WAN service provides a significantly cost-effective, carrier-grade network capability, enabling enterprises to benefit from stability, agility, security, manageability, and simplicity and reduce network costs of up to 50%.

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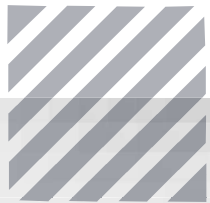
Why SD-WAN?

Cost efficiency

Improve performance

Recognize applications

Easy deployment

Our Network

SD-WAN Orchestrator

Public Internet

salesforce · aws · Microsoft Azure · Office 365 · 阿里云

DYXnet Backbone Network

Hub Site
SD-WAN Edge

Leased Line

Leased Line

Public Internet

Public Internet

Public Internet

Public Internet

Branch #1
SD-WAN Edge

Branch #2
SD-WAN Edge

Dynamic Branch to Branch VPN

	Router		Private Overlay Tunnel (via Leased Line)
	Public Internet		Public Overlay Tunnel (via Public Internet)
	Leased Line		Dynamic Branch to Branch - Private Overlay Tunnel (via Leased Line)
			Dynamic Branch to Branch - Public Overlay Tunnel (via Public Internet)

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Key Features - Dynamic Multi-Path Optimization (DMPO)

Continuous path monitoring and application traffic flow optimization.

Path per packet load balancing on multiple WAN bandwidth in customer site to maximize the bandwidth utilization.

Traffic control using layer 2 to 7 attribute. e.g. VLAN, IP address protocol, and applications.

Path selection via customer policy + WAN resilience management provided.

4 **Non-critical Internet traffic**

*Le*TV.com乐视网

土豆网
每个人都是生活的导演

3 **Critical traffic e.g. ERP**

VCE

Branch Edge

VCE

DYXnet
MPLS Network

Int rn t

VCG

WWW

Branch Edge

VCE
Hub Edge

1

Dynamic branch to branch tunnel

2 **Backhaul certain traffic to hub first, e.g. other Web browsing**

互聯一線 賦能未來 Together We Empower The Future

Key Features - p pplicati n c gniti n
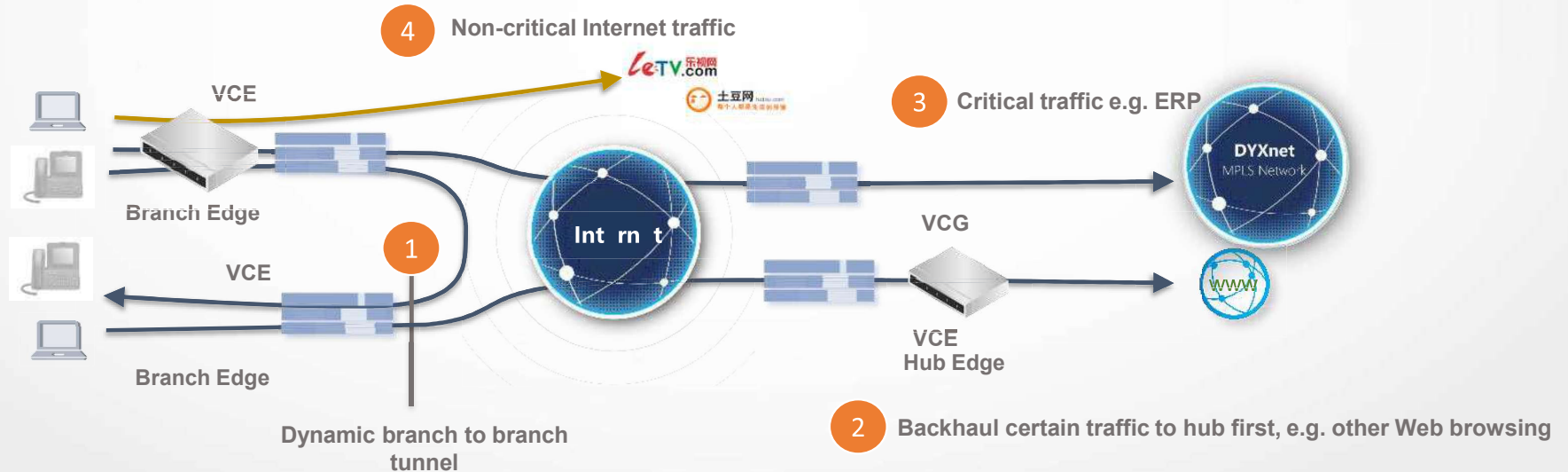
VeloCloud Deep Application Recognition

… 3000+ Applications

Some More Key Features...

- Network & operation dashboard
- Policy management
- Historical usage statistic
- Connectivity monitoring with remote diagnostics

Centralized Management Portal

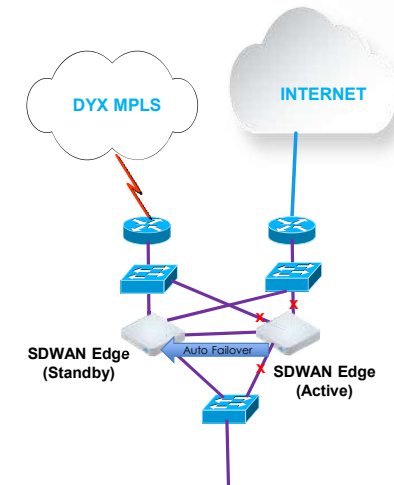- Remote handling by an orchestrator for device activation, configuration diagnosis, etc.
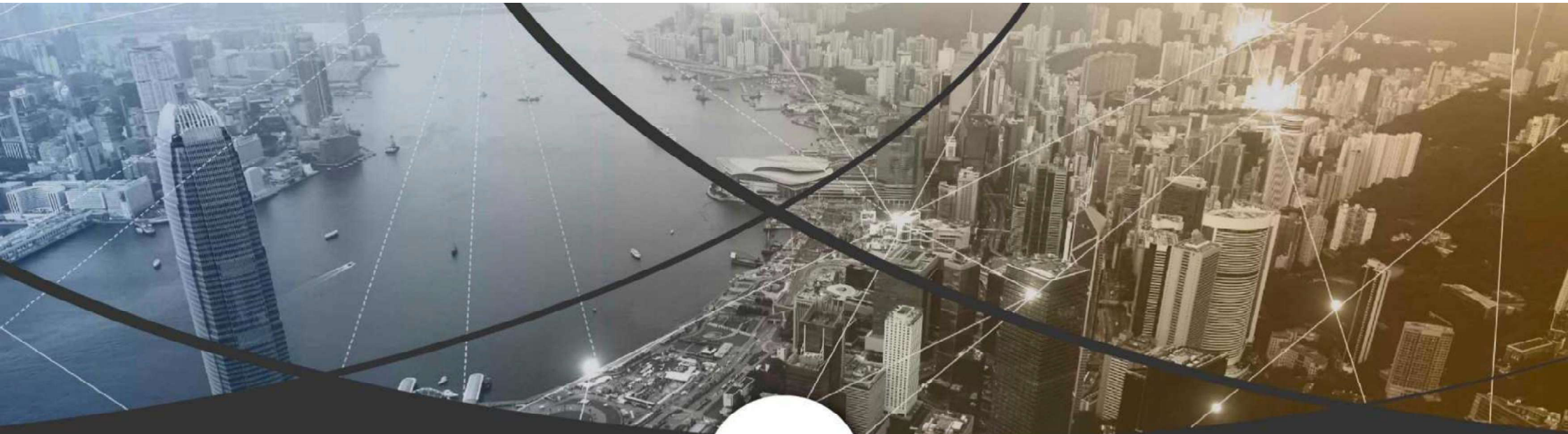- Simple plug and use

Zero-touch Configuration
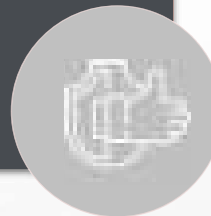
- Hot standby solution with both active edge and standby edge

High Availability

互聯一線 賦能未來 Together We Empower The Future

Successful Case References   A Fast-food Restaurant Chain in Hong Kong & Mainland China
How we enable rapid configuration for the changing consumer preferences & demands

Business Needs

- Support more than 100 branches.
- Fast Deployment and managed equipment system
- Need cost effective network redundancy solution for real time application
- Require Centralize management tool.

DYXnet Solution Deployment

- High Availability SD-WAN Solution using fixed (Broadband) + mobile(4G) network service via SD-WAN Gateway (VCG).
- Customer management portal (VCO) for user management.
- 7 x 24 DYXnet service support.

How our solution works
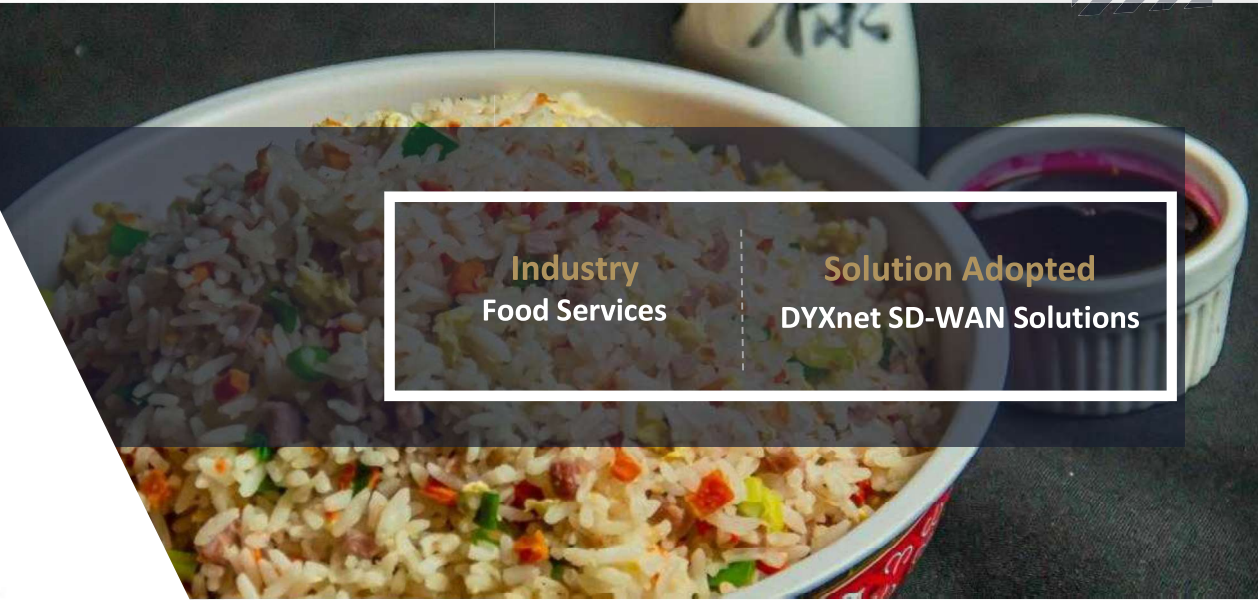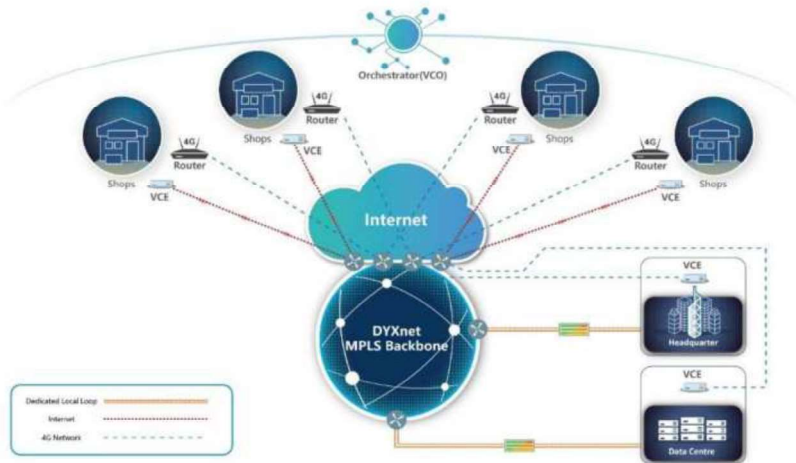
Industry	Solution Adopted
Food Services	DYXnet SD-WAN Solutions

Key Benefits:

- Efficient diagnosis of fault compared with legacy network design
- Provide a centralized management tool to cater rapid business changes and configuration update

DYXnet
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Successful Case References
How we helped Gogoro to develop their enterprise cloud network

gogoro

About Gogoro

Taiwan based developer of electric scooters which has expanded
to 125 points. Listed on Nasdaq

Client Needs

- An one-stop platform to integrate its intranet architecture
- Data from the corporate headquarter, stores and AWS public cloud platform need to be linked and exchanged.
- The increasing number of stores creates an urging need for network solutions.

Industry
Manufacturing

Solution Adopted
DYXnet SD-WAN Solutions

DYXnet Solution Deployment

- A SD-WAN + MPLS VPN network design, featuring more than two types of connection options including MPLS network, broadband Internet, and 4G/5G mobile network over 100 service locations.
- Speed up Gogoro's store network deployment and leverage their existing Internet circuit to perform active transmission.
- By using DYXnet's stable MPLS network backbone and AWS public cloud platform for data exchange

"

Despite its competitive price, DYXnet spares no effort in providing integrated network solutions without delay. We did not hesitate to engage DYXnet for its network service throughout the preparation work for new shops, from network infrastructure as well as after-sales support service.

Information Technology Department of Gogoro Taiwan Limited
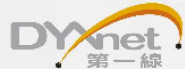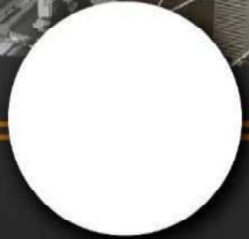
DYXnet
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About DYXnet

- Founded in 1999, DYXnet is a leading carrier-neutral network service provider in Greater China

- DYXnet was acquired by VNET Group (NASDAQ: VNET) in August 2014 and is now a member of its new sub-brand – NEOLINK

Backbone network with total bandwidth of more than 565G, peering with 400+ carriers, internet exchange centers and enterprises worldwide

With network POPs in nearly 50 cities worldwide

Serving 20,000+ MPLS private network client sites

Trusted by 1700+ Global Enterprise Customers

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DYXnet's Parent Company

A leading carrier- and cloud-neutral data center services provider in China

6,000+ quality customers, **1,000+** technical experts
Resources sharing with over 6,000 quality customers

50+ data centers **78,000+** cabinets
Adhering to the craftsmanship spirit with continuous improvement
to the manageability and security of its data centers

20+ years of experience
Managed by the experienced and professional team;
PUE optimisation to ensure competency of data centers

2,000G+ Internet Bandwidth, **1,000G+** high speed direct connect
Quality network connection, highly stable private network

Security

Cloud

Network &
connectivity
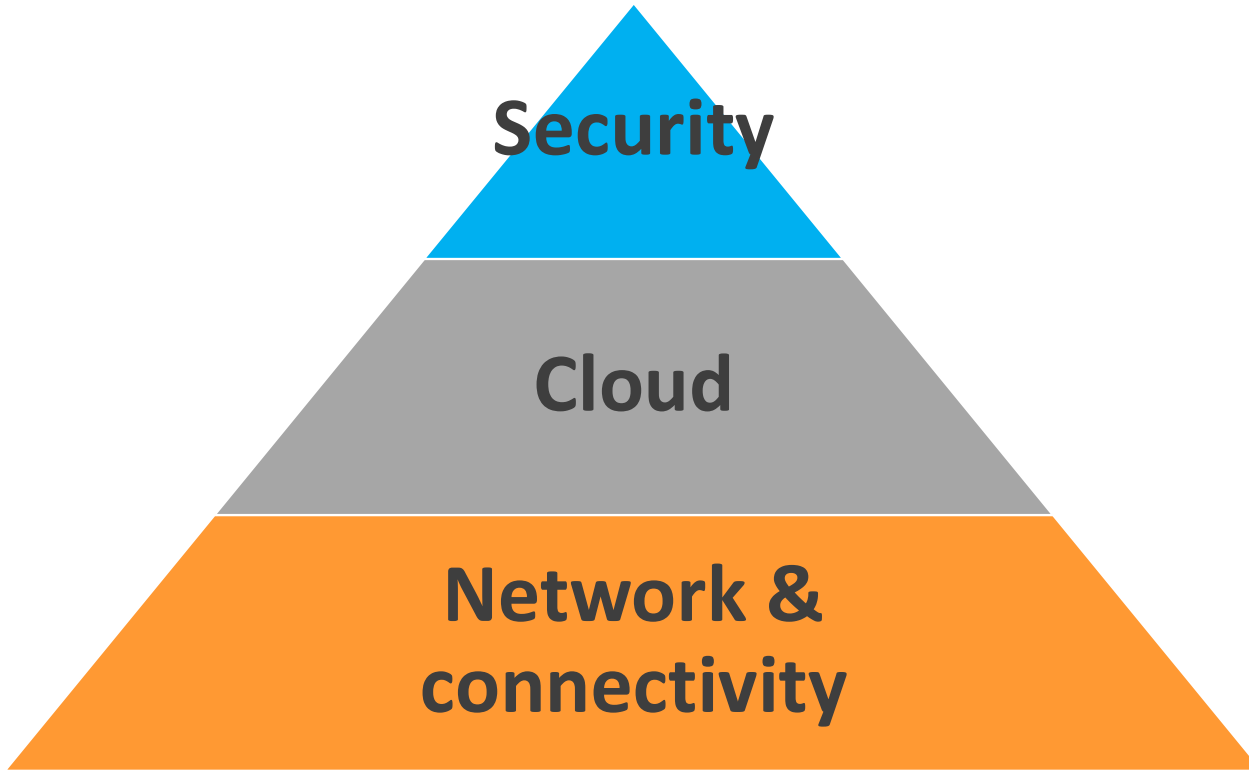
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Legal and Nationwide Licenses

DYXnet's operating company in Mainland China - Shenzhen Diyixian Telecom Company Limited

- **Awarded the "SD-WAN Ready" certificate**

- **Became the first official members of the China Cross-border Data Telecommunications Industry Alliance**

- **Became the SD-WAN service standard drafting unit**

Business Licenses for Value-added Telecommunications Business

DYXnet possesses nationwide/inter-province value-added telecommunications licenses including IP VPN, IDC, ISP, and Cloud Service

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ACCREDITATION

International Certifications Partnership

International Certifications

- **ISO/IEC 20000-1:2018**

- **ISO 9001:2015**

- **ISO/IEC 27001:2013**

Partnership

- **Cisco Registered Partner**
- **VEEAM CSP Silver Partner**
- **AWS Select Consulting Partner**

- **Zoom Authorized Reseller**
- **VMware Partner**
- **Microsoft SPLA Approved**
- **Google Cloud Partner**

- **Microsoft Gold Partner**
- **Check Point Stars Partner**
- **Equinix Silver Partner**

互聯一線 賦能未來 Together We Empower The Future

DYXnet Cloud Solutions

DYXnet provides professional services on cloud infrastructures (Data Centre Co-Location, Private Cloud, Public Cloud & Hybrid Cloud) and implementation of SaaS application with our partner eco-system.

Managed Cloud Services

- ONE Cloud Director

Dedicated Leaded Line

Cloud Connection

HQ/Branch Office

ONE Cloud Director Platform

Cloud Connect

Video Conferencing Solutions

Cloud Backup as a Service

Backup for
- Microsoft Office 365
- Backup Azure to On-Prem
- Backup VM to Cloud
- Backup Physical/VM to Cloud

Cloud Shield Solution

- Firewall
- DLP
- IPS
- App. Control, IPsec VPN
- Antivirus and Anti-Bot

Industry Solution- Healthcare

Remote Patient Monitoring Solution
- Remote & Continuous Tracking
- Real Time Data & Alert
- Dashboard for Consolidated Data
- Historical Data for Analysis

Ensure our customers to enjoy stable and secure cloud services via DYXnet's quality network solutions

Multi-Cloud Connectivity Platform

◆ MPLS VPN

◆ SD-WAN

◆ Smart WAN

◆ Private Cloud

◆ DC Co-Location

◆ Smart DNS

互聯一線 賦能未來 Together We Empower The Future

DYXnet Network POPs

- With network POPs in nearly **50** cities, covering more than **700** cities worldwide

- Guaranteed Service Level Agreement (SLA)

- **7x24** network monitoring, management, and reporting

- Backbone network resilience: backbone trunks provided by 2 or more telecom operators

- Local network resilience: circuits provided by 2 or more telecom operators

- Operating with industry best practices and international standards

ISO/IEC27001, ISO/IEC 20000-1 and **ISO 9001**

Harbin
Changchun
Shenyang
Beijing
Tianjin
Dalian
Qingdao
Tokyo
Jinan
Zhengzhou
Nanjing
Shanghai
Xian
Wuxi
Hefei
Suzhou
Chengdu
Hangzhou
Wuhan
Ningbo
Chongqing
Changsha
Fuzhou
Xiamen
Taoyuan
Taipei
Guangzhou
Huizhou
Hsinchu
Jiangmen
Foshan
Dongguan
Taichung
Zhongshan
Tainan
Zhuhai
Shenzhen
Hanoi
Hong Kong
Kaohsiung
Vietnam
Singapore

Frankfurt

Silicon Valley

⬤ Network POPs

Customer Services & Network Operation

We provide individualized services guarantee for each customer with 24/7 and all-year-round customer services, DYXnet's experienced technical customer service team is able to communicate in Mandarin, English and Cantonese. In addition, our Network Operation Centers (NOC) set up in major cities in the Greater China region provides customers with effective network management and real-time detection of any network issue or security crisis that may occur.

24/7 Customer Service Department

- *front ine e desk*
- *To free for reater ina re ion*
- *au ts and in and monitorin*
- *Ticket mana ement*
- *ne sto contact oint*

24/7 Network Operation Centre

- *network service o erators*
- *Proactive detection for customers' network issues*
- *Professiona tec nica su ort*

如對第一線的雲網方案感興趣，可**按此連結**或**scan右邊的 QR Code 填寫問卷**，讓我們可以進一步了解您們的需求。

填寫問卷後，更有機會獲得小禮品或咖啡禮券。

Contact us
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E-mail: joel.choi@dyxnet.com
Cell: +852 9269 0448
Tel: +852 3152 5027

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