GS1 x HSBC x Li & Fung

The development of check out technologies
結帳技術的發展趨勢

Ms. Isabel Tsui
GS1 Hong Kong
Senior Manager,
Business Development

Mr. Teddy Chiu
HSBC
Senior Vice President,
Regional Sales, Global Liquidity &
Cash Management

Mr. Marco Chen
Fung Academy
General Manager,
Innovation & Experimentation

2019 / 11 / 07 (Thursday)

3:30pm - 5:30pm (Registration starts at 3:00 pm)

Diamond Room, CUHK Business School Town Centre
Unit B, 1/F, Bank of America Tower
12 Harcourt Road, Central

Language: English

Organiser
HKEBA

Funded by SME Development Fund
工業貿易署
Trade and Industry Department

Any opinions, findings, conclusions or recommendations expressed in this material/event (or by members of the Project team) do not reflect the views of the Government of the Hong Kong Special Administrative Region, Trade and Industry Department or the Vetting Committee of the SME Development Fund and the Dedicated Fund on Branding, Upgrading and Domestic Sales (Organisation Support Programme).

Event Organizer
主辦機辦

HKEBA
香港電子商務業協會

HKEBA
Hong Kong E-Commerce Business Association

Elton Chan

Chairman, HKEBA

Matt Li

Vice-Chairman, HKEBA

Trade and Industry Department
工業貿易署

Supporting Organizations
合作機構

CUHK Business School
香港中文大學商學院

工業貿易署
Trade and Industry Department

CUHK
BUSINESS SCHOOL

Past Seminars
過往講座

1. Introduction to Omnichannel Sales & Commerce

2. Applications of Platform and Enterprise Data Analytics

Lane Crawford

3. Boosting your brands in China

4. Accelerating your e-commerce business

5. Growing crossborder e-commerce for brands in South East Asia

6. General Managers' view on crossborder e-commerce from Hong Kong

7. Data & Privacy in a Digital Age

Past Event
過往活動

Taiwan Delegation Tour 2019

Taiwan Startup Stadium

AppWorks

Startup Terrace

OpenCart x Stripe

How to build an effective online store?
如何創立成功的網上商店？

Mr. Andy Tsang
OpenCart
Director - Head of Marketing & Partnership

2019 / 12 / 19 (Thursday)

TBC: 5:00pm - 7:00pm (Registration starts at 4:30 pm)

TBC: Rm 3439, 34/F, Tower 1, Times Square, 1 Matheson Street, Causeway Bay

Language: English

Ms. Satya Tammareddy
Stripe
Business Sales Manager - South East Asia and Hong Kong

Organiser
HKEBA

Funded by SME Development Fund
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Trade and Industry Department

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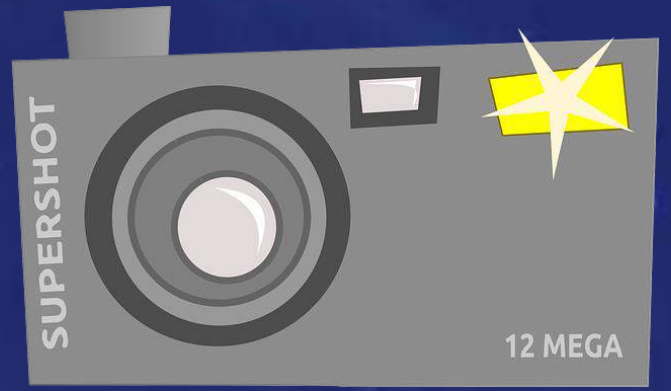
Photo Taking
拍照



Speakers
演講者

Ms. Isabel Tsui
GS1 Hong Kong
Senior Manager,
Business Development

Mr. Teddy Chiu
HSBC
Senior Vice President,
Regional Sales, Global Liquidity &
Cash Management

Mr. Marco Chen
Fung Academy
General Manager,
Innovation & Experimentation

GS1 Hong Kong

Ms. Isabel Tsui

GS1 Hong Kong
Senior Manager,
Business Development

GS1 Hong Kong

GS1 Hong Kong

The Global Language of Business

GS1 HK Smart Retail Experience Sharing -

A New Way to Expedite the Check-out Process

Isabel Tsui
isabeltsui@gs1hk.org, GS1 HK

Nov 5th 2019

Offline Vs Online Shopping Behavior

© GS1 2019

Consumers' Omni-channel Shopping Behavior

Omni-channel shopping behavior makes the check-out process very long!

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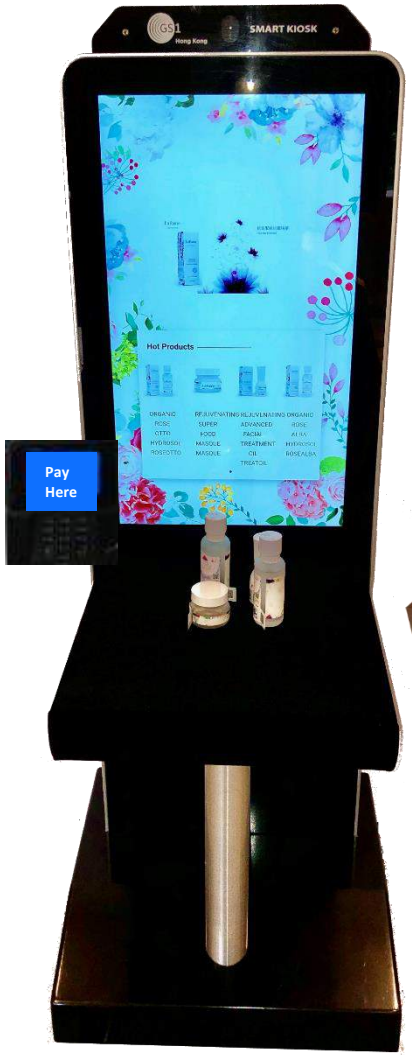
A New Way to Facilitate Customers' Check-out Process

McDonald's self order kiosk:
product display + self check-out

self checkout kiosk for apparel industry



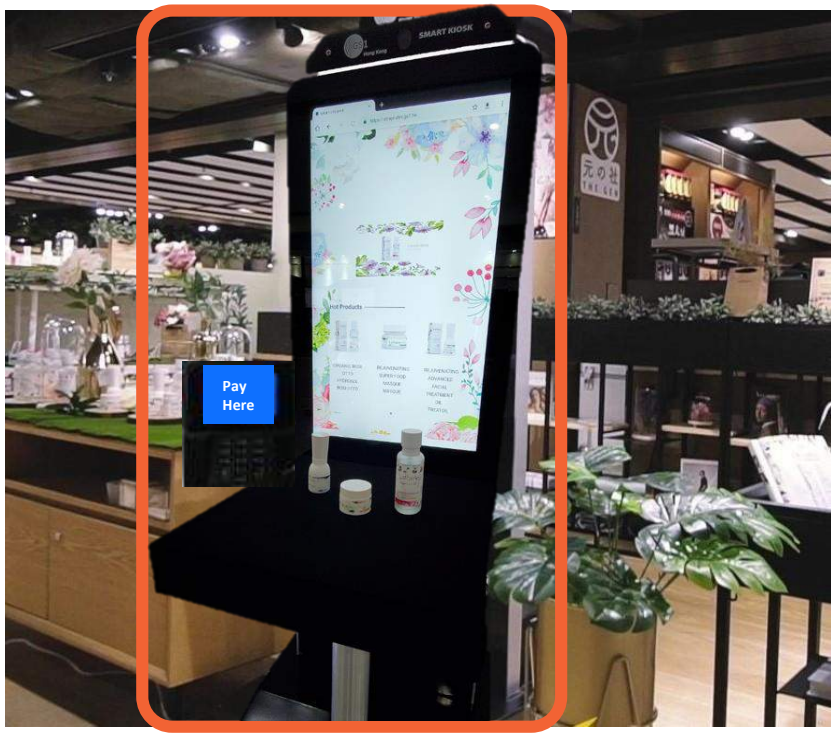
GS1 HK's Smart Kiosk
/ Smart Tray

CDC's self checkout kiosk

© GS1 2019

Case Sharing – A New Way to Expedite the Check-out Process

A New Sales and Marketing Way to Connect Consumers and Facilitate Check-out



- **CONNECT**
  PRODUCT INTRODUCTION
- **ENGAGE**
  SHOPPERS
- **COMMERCE**
  RECOMMENDATIONS & SALES
- **GAIN INSIGHT**
  SHOPPER PROFILE
- **Check-out**
  FASTER

© GS1 2019

Different Outlook of Smart Kiosk Can Be Provided

© GS1 2019

Smart Kiosk/Tray Packed with Advanced IoT Technologies

Real-Time Video Analytics

- Camera to collect customer gender, age & emotion
- Counts traffic to the kiosk and staying duration
- On-the-spot identify return shoppers

Touch Screen Display

- Displays product details and promotion video
- Allows customer to choose more in-depth product information
- Captures customer browsing trends

RFID Antenna

- Detects product being picked up and duration
- Auto-Triggers on-screen product introduction

© GS1 2019

Network of Smart Touch Points

Support multiple GS1 Smart Kiosks and GS1 Smart Trays

- Real-time identifying repeated shoppers at same or different store locations
- Knowing browsing history to promote personalized products and offers

Gather more precise shopping trends and gain more in-depth insights

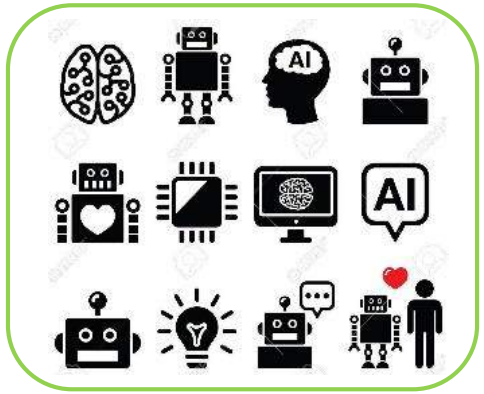
- Combine data from different locations to derive more accurate market trends
- Understand more shopper visit behavior

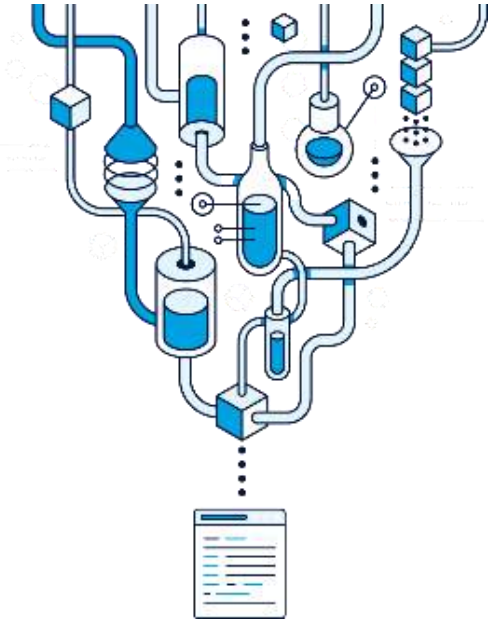
Facilitate Brand Owner / Retailer Inventory Management

- Stock popular items according to gathered insights
- Put right promotional items and offers

© GS1 2019

At Heart – Advanced AI & Data Analytics for Sales & Marketing





In-Deep Understanding Shopper Profile

- Know Your Shopper: Gender, Age, Emotion,…
- Know What Shopper Likes: Product browsed and duration

Motivate Buying Decision

- Present personalized product information and promotional offers
- Immediate online purchase with discount offers

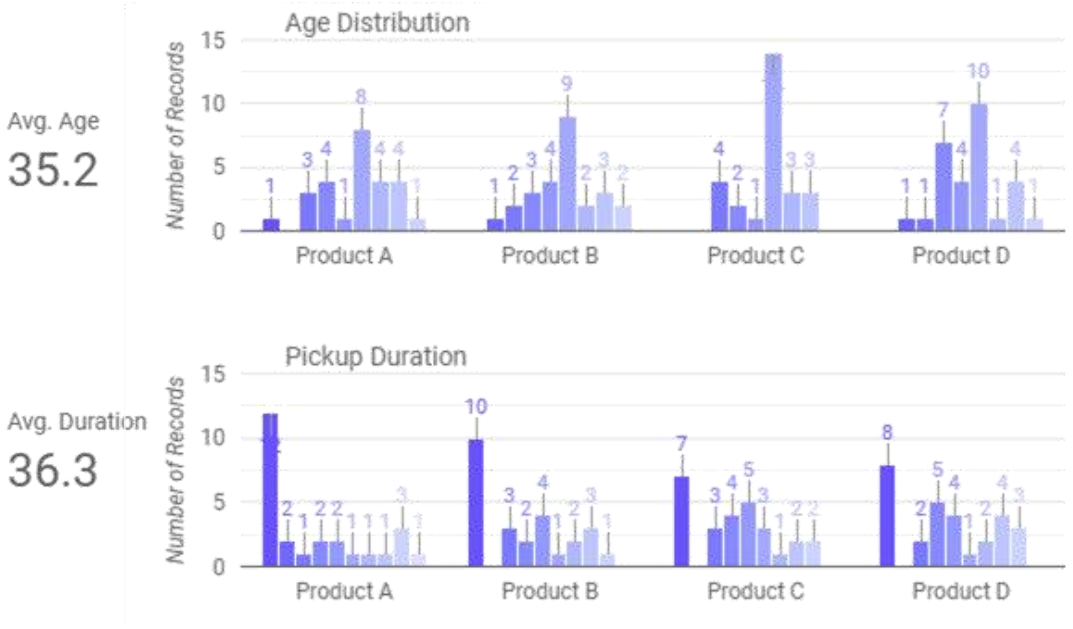
Enhance Consumer Purchase Experience

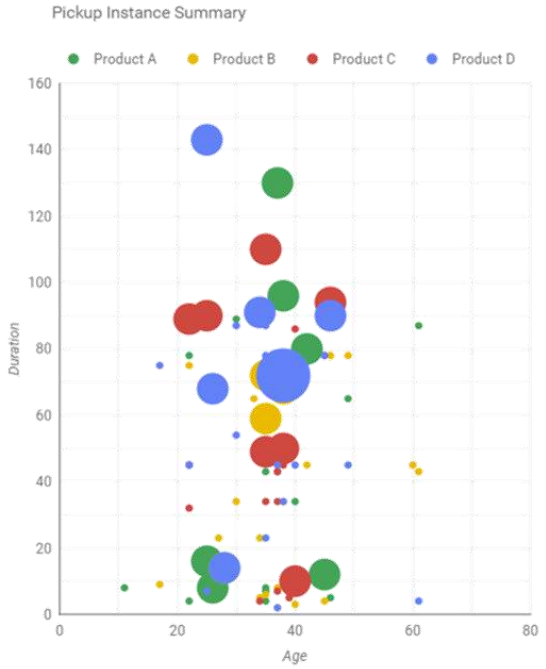
- New revenue stream with Cashless Payment support
- Fast lane counter on promotional items

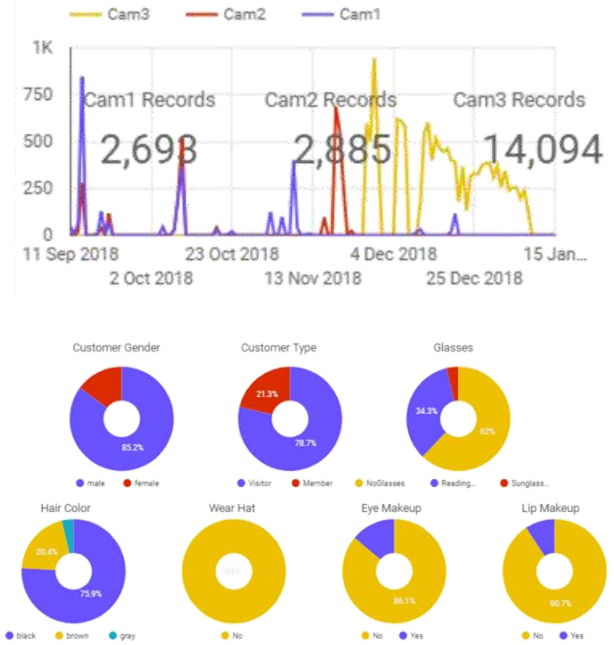
© GS1 2019

In-Return with Deep Insights on Shopper Activities

- Comprehensive insights on consumer and product analytics
- Special coupon or direct purchase discount can be offered according to the number of times the same customer interested to the same product







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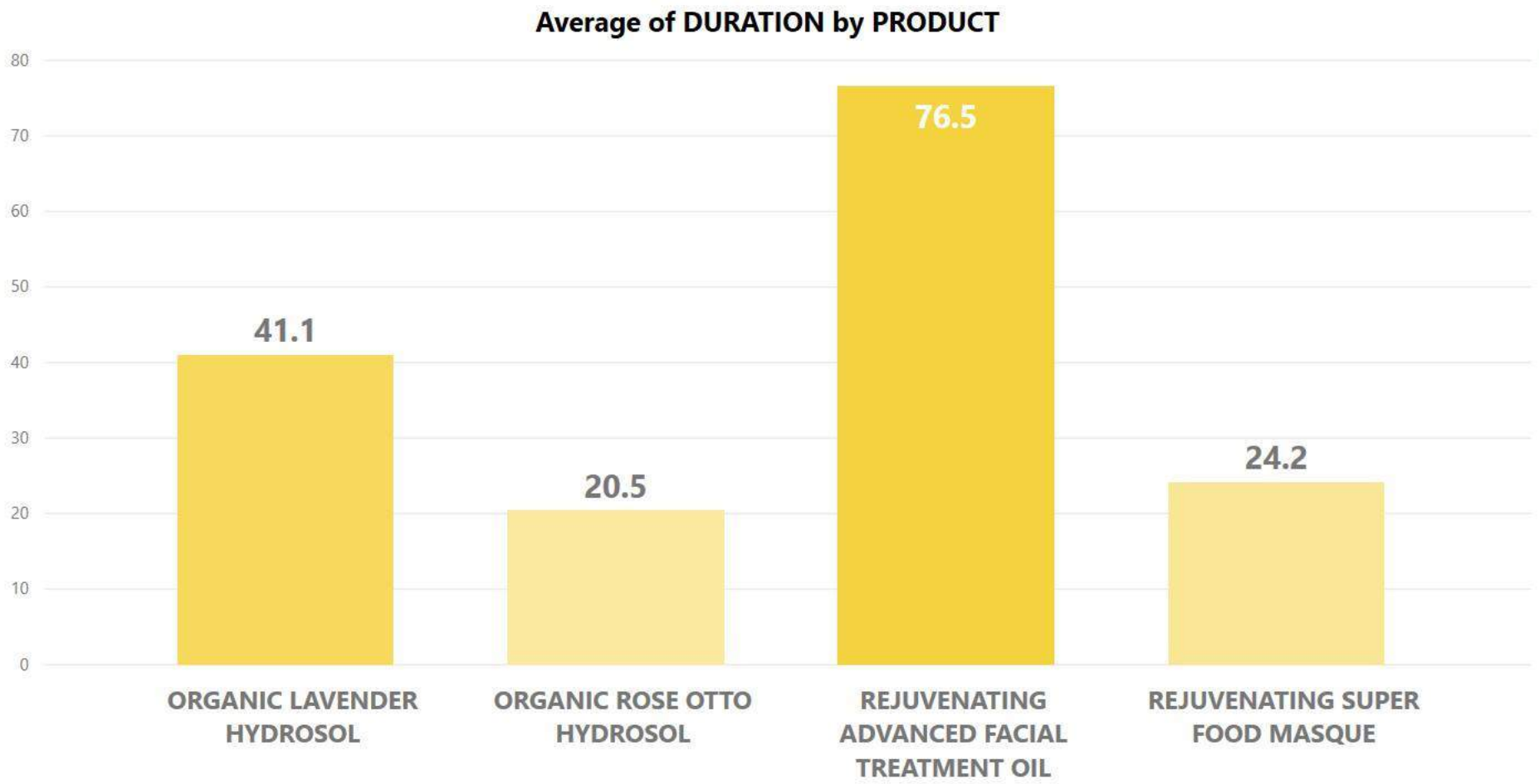
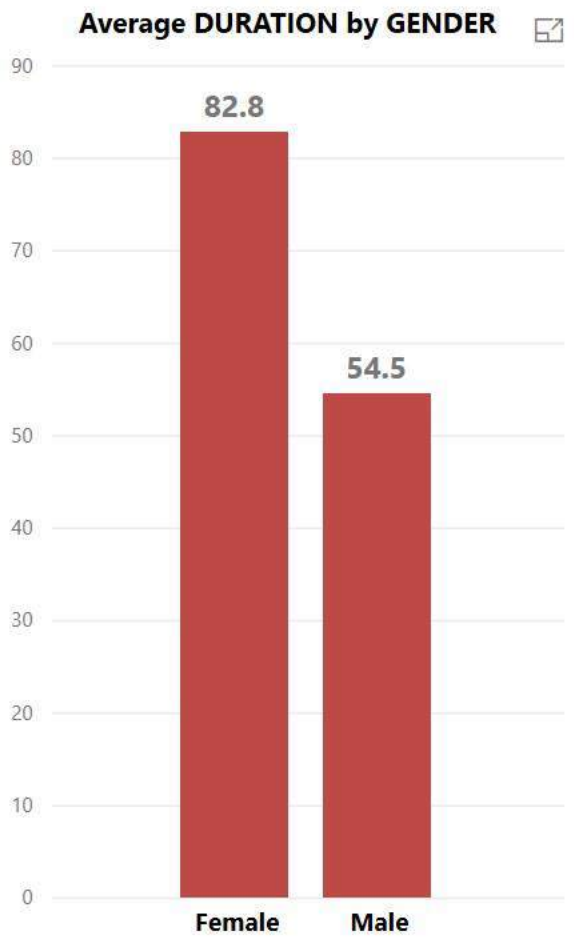
Average duration of interaction for Facial Treatment Oil seems to be the highest among the 4 products

Average duration is derived by the sum of all duration of the products divided by the number of sessions where the product is being interacted with.

Facial Treatment Oil has the highest average interaction time of 76.5 seconds, and Lavender Hydrosol comes in second at 41.1 seconds.

Females are also interacting with the products longer than males.

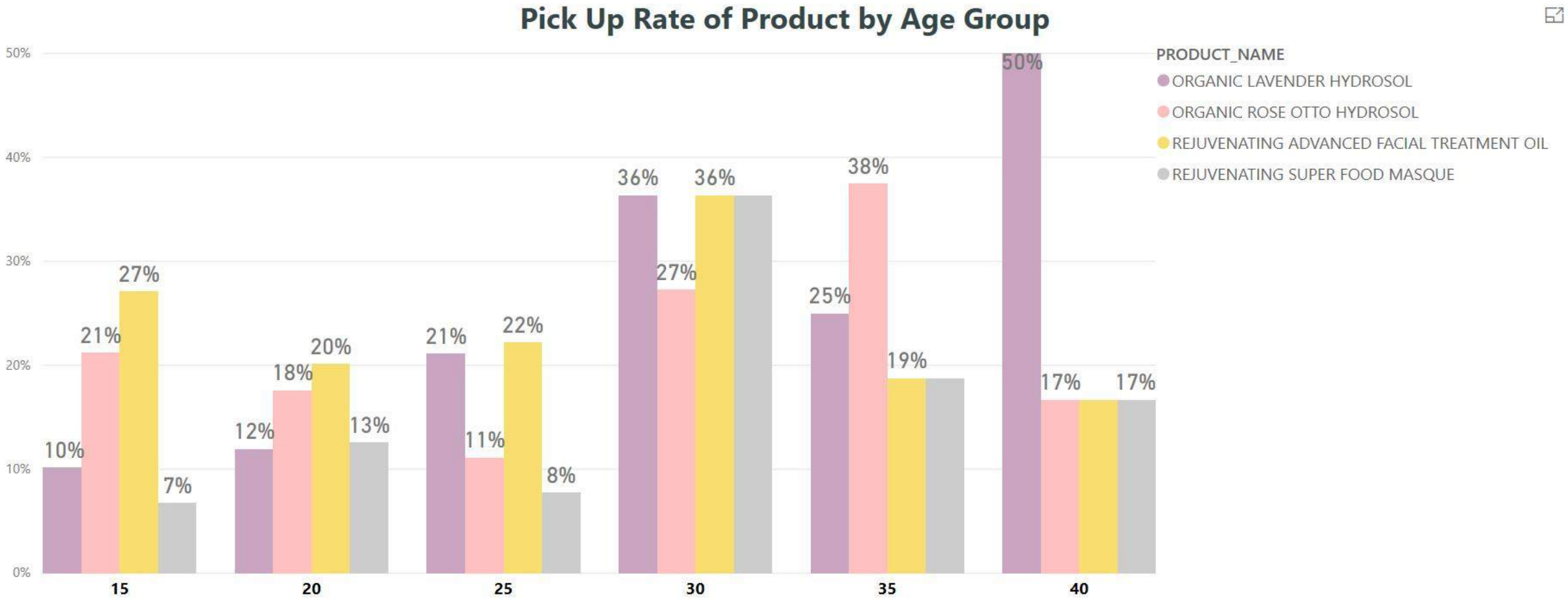




Pick up rate for products are higher for consumers in their 30s

Consumers in their 30s has a higher pick up rate across all products, it also shows that they are picking up more than one item in a session, as compared to consumers in their 20s.

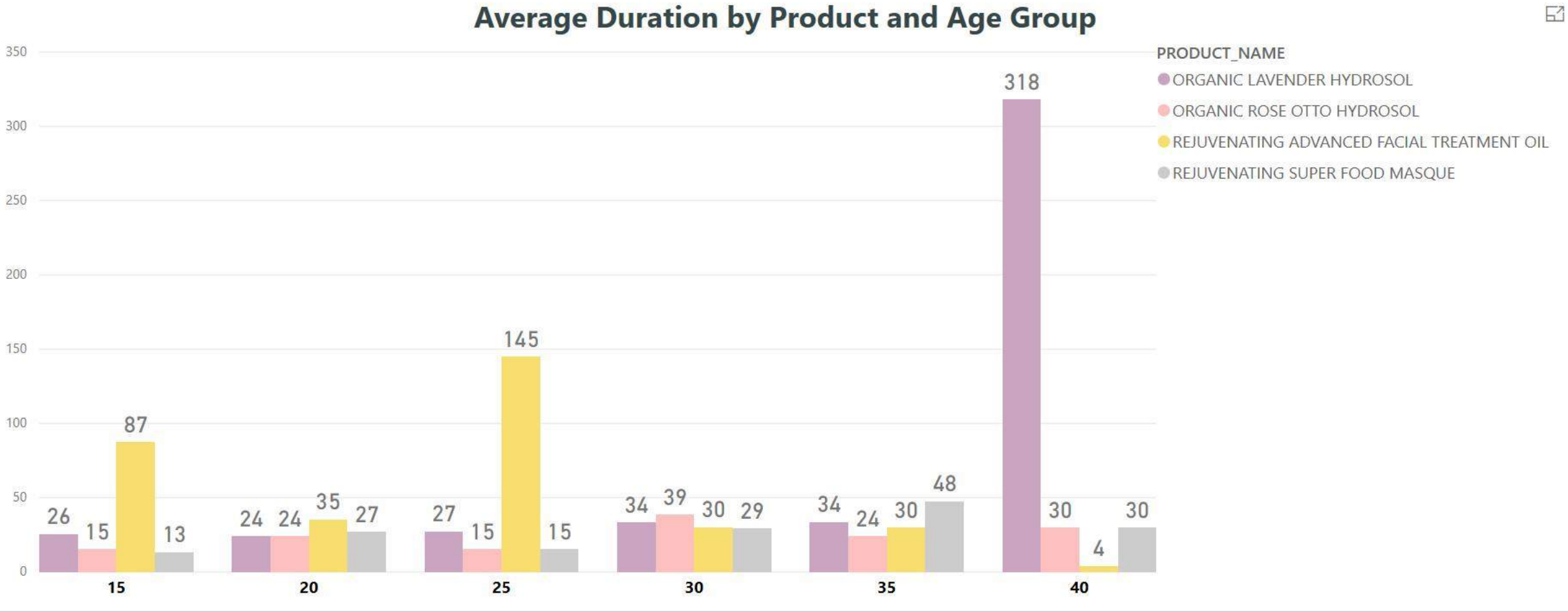
Note : Consumers can pick up several products per session.



Consumers below 30 interact with Facial Treatment Oil longer, and consumers in their 40s interact with Lavender Hydrosol significantly longer than other products

The average duration of pick up for all products are is about 25 to 40 seconds, and we can see some significantly higher durations for Facial Treatment Oil for the younger age groups and Lavender Hydrosol for people in their 40s.

Note : Consumers can pick up several products per session.



Analytics Reports for Product Marketer for Better Insights

- Shopper profile analysis such as age group, gender, visit duration, etc.
- Product preference by age group, gender, browsed duration, etc.
- Product preference by new or repeated shoppers
- Product browsed by age, gender, etc.
- Responsiveness to marketing offers by age, gender
- Shopper traffic heat map

© GS1 2019

Other Questions of Retailers - Strategic Marketing Planning

Support
Mass Locations

Unlimited Kiosk
Expansion

User Define
Subscription Period

© GS1 2019

Any Questions?

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HSBC
匯豐

Mr. Teddy Chiu
HSBC
Senior Vice President,
Regional Sales, Global Liquidity &
Cash Management

HSBC

FASTER PAYMENT SYSTEM
「轉數快」支付系統

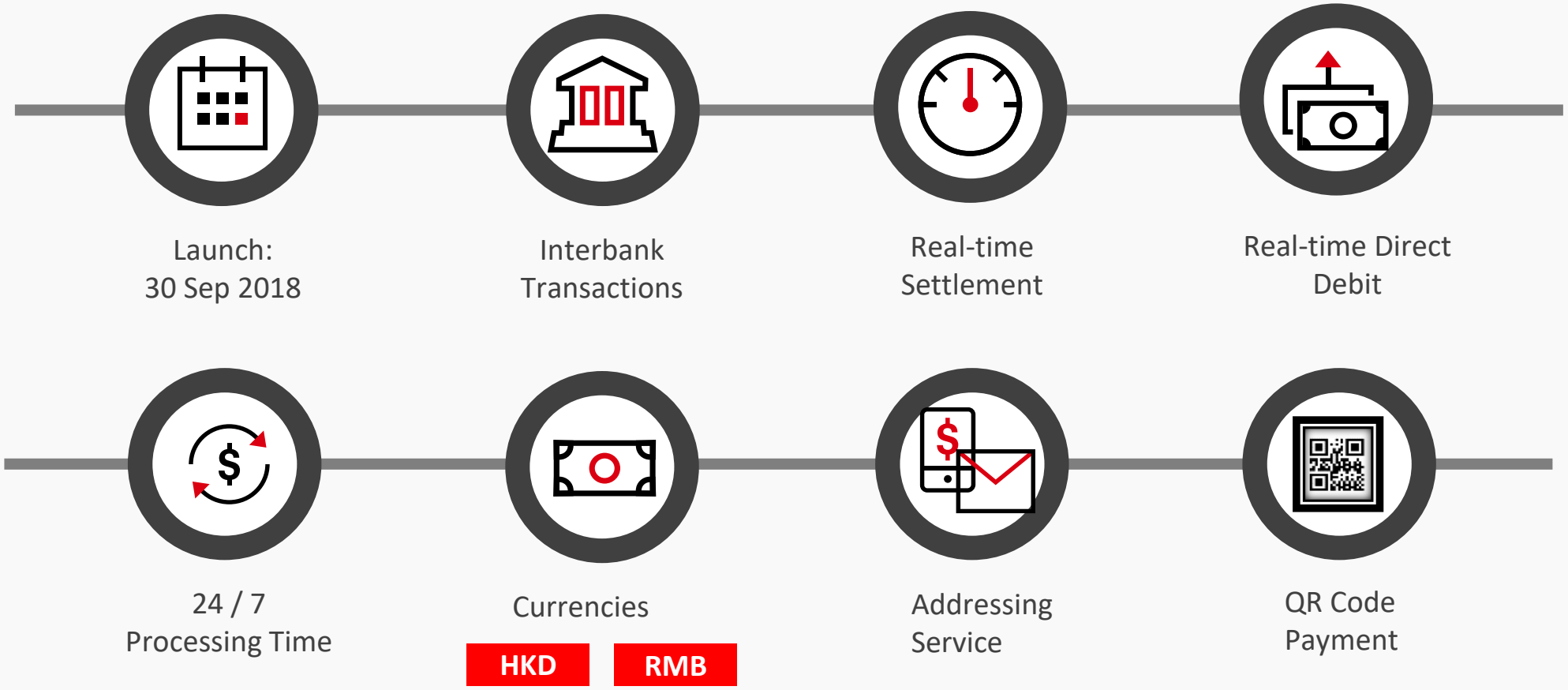
Date : 29 Aug 2019

FPS Video – by HKMA

PUBLIC

FASTER PAYMENT SYSTEM

An Enhanced Domestic Payment Infrastructure



PUBLIC

HSBC BUSINESS COLLECT

A seamless, secure collection service for mobile payment

滙豐「智豐收」

E-Commerce

M-Commerce

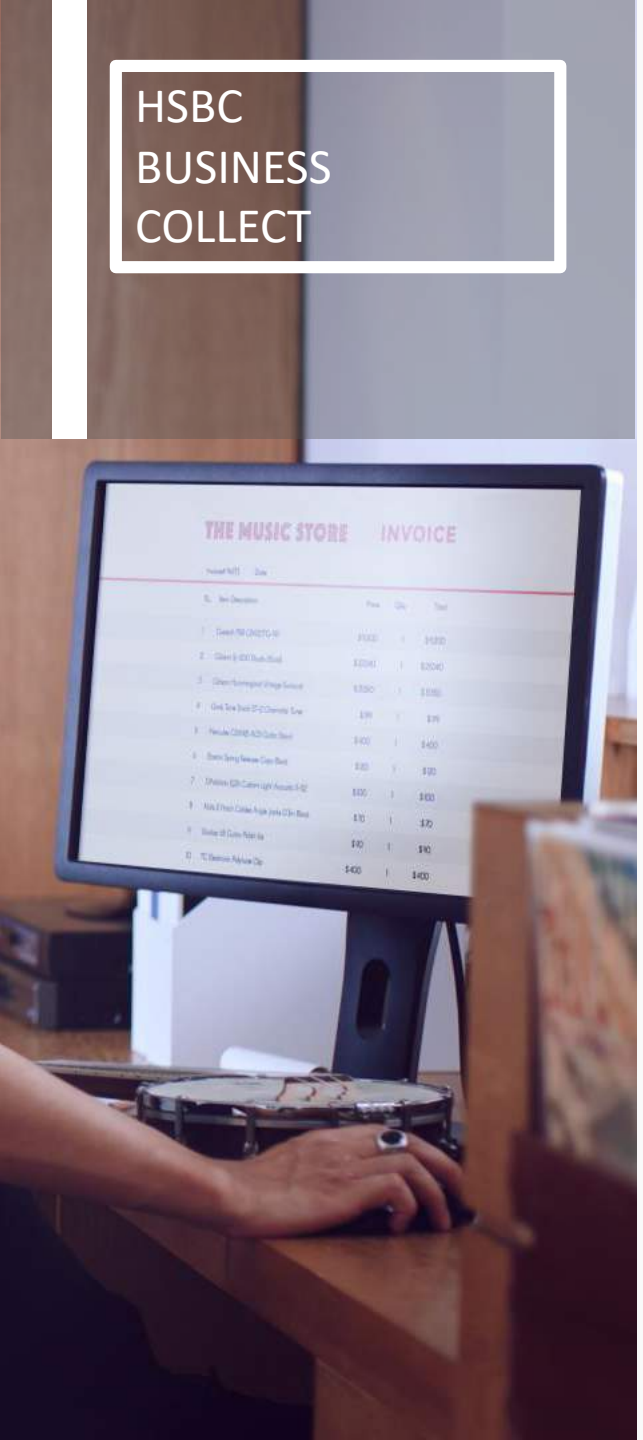
Point of Sale

Bill Payment

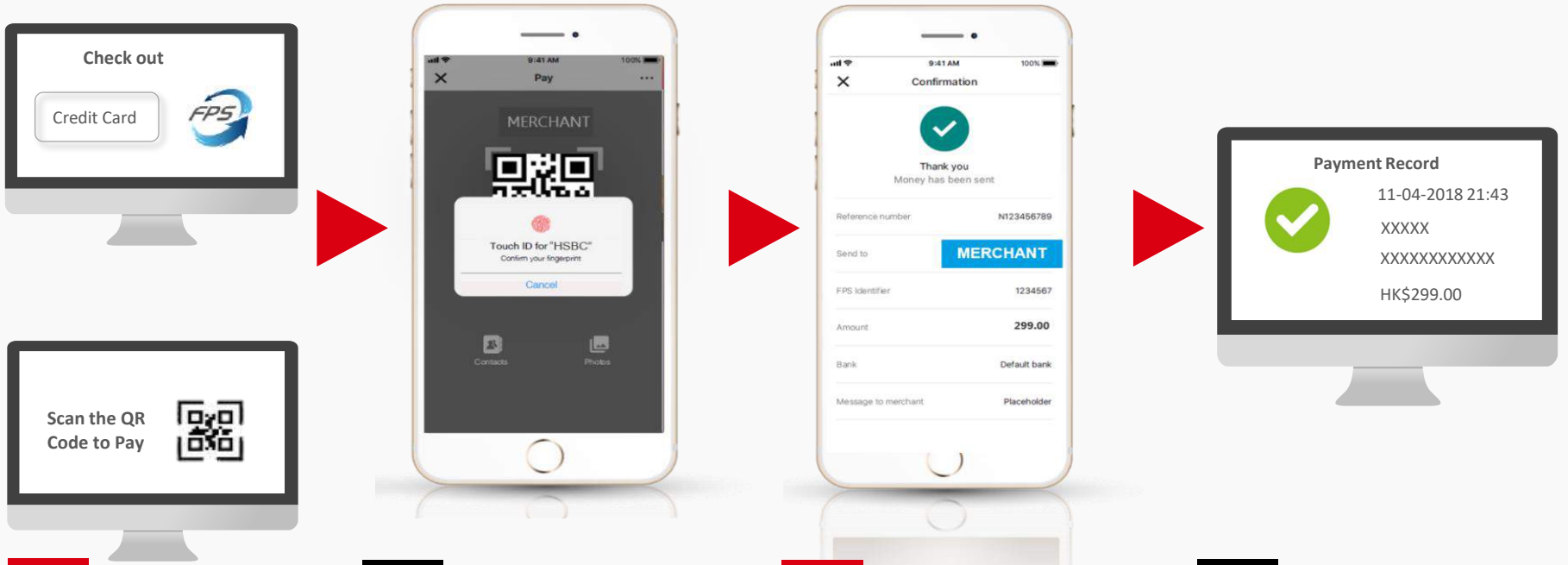
PUBLIC

HSBC BUSINESS COLLECT

PUBLIC



E-COMMERCE



01 Check-Out

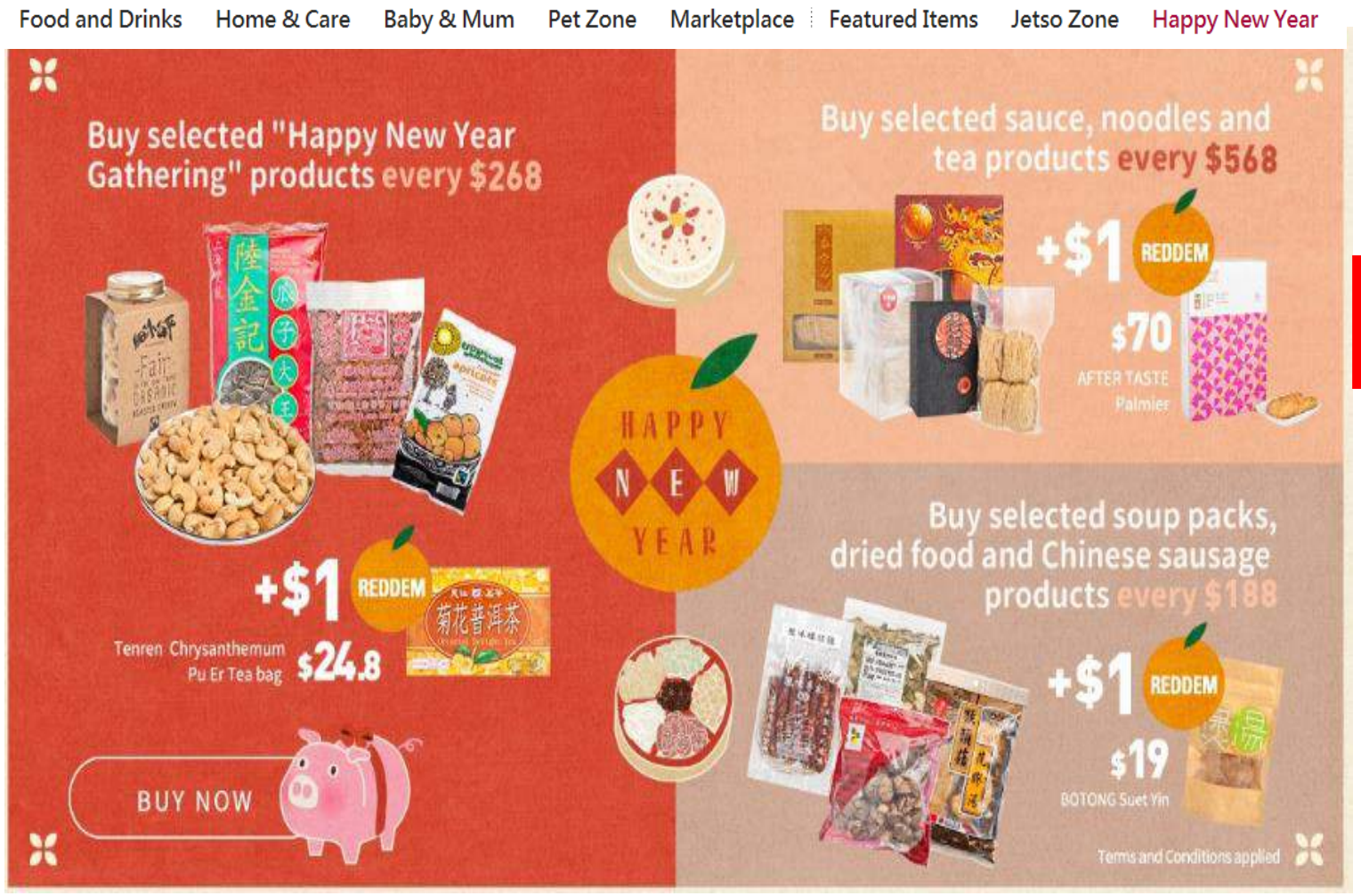
02 Customer launch Banking apps / e wallet

03 Customer confirm transaction

04 Merchant payment confirmation

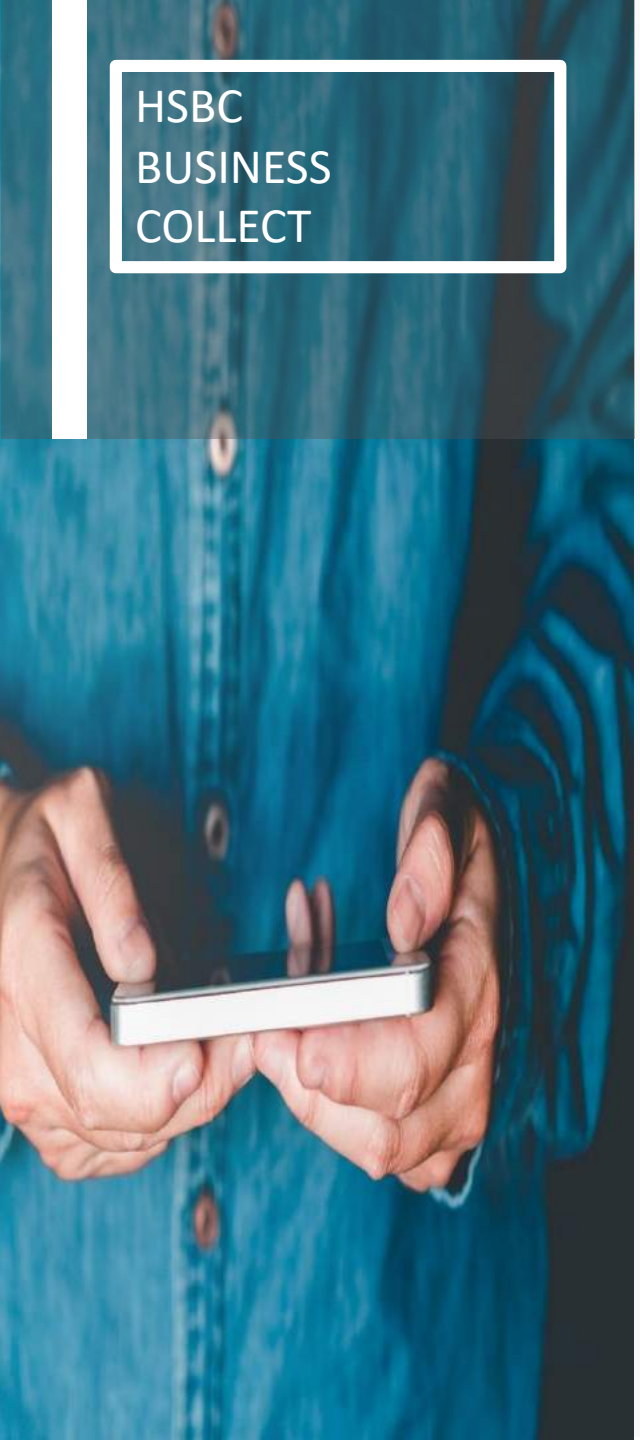
E-COMMERCE – FPS Example

士多 ZTORE



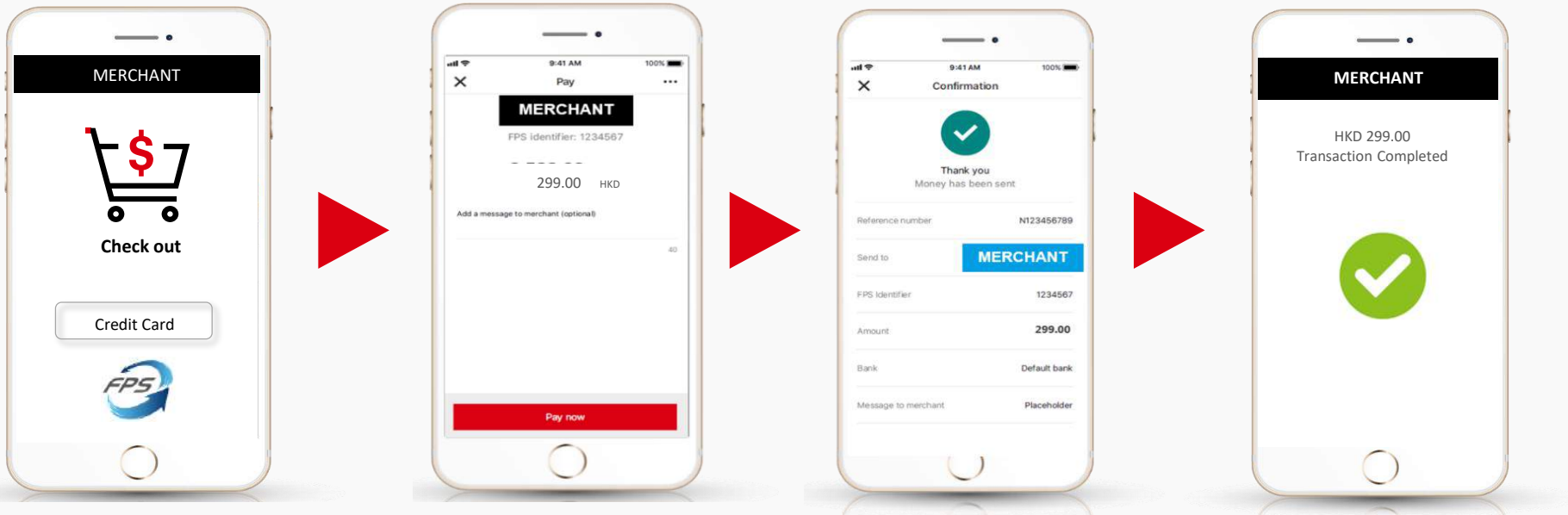
E-COMMERCE – Business Partnership

Please complete the transaction within 10 minutes, else the QR code will expire.



HSBC
BUSINESS
COLLECT

M-COMMERCE



01 Check-Out

02 Customer launch Banking apps / e wallet

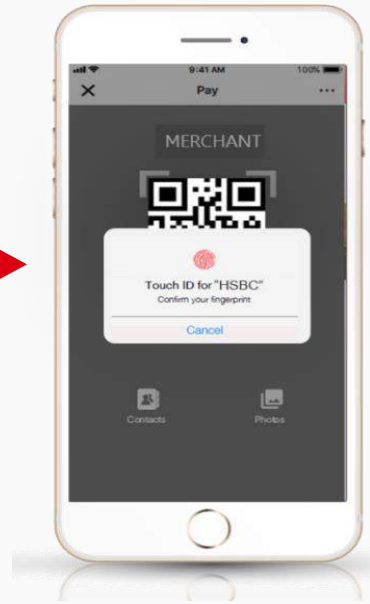
03 Customer confirm transaction

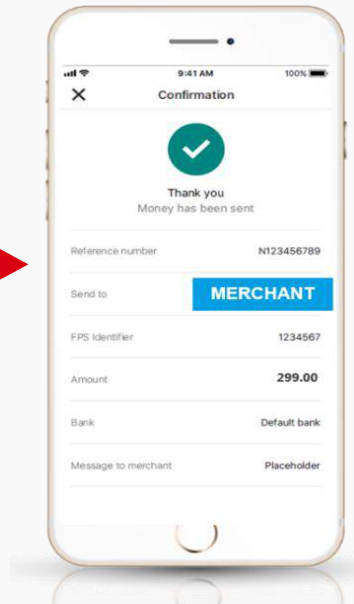
04 Merchant payment confirmation

HSBC
BUSINESS
COLLECT

POINT OF SALE

mPOS machine





mPOS machine

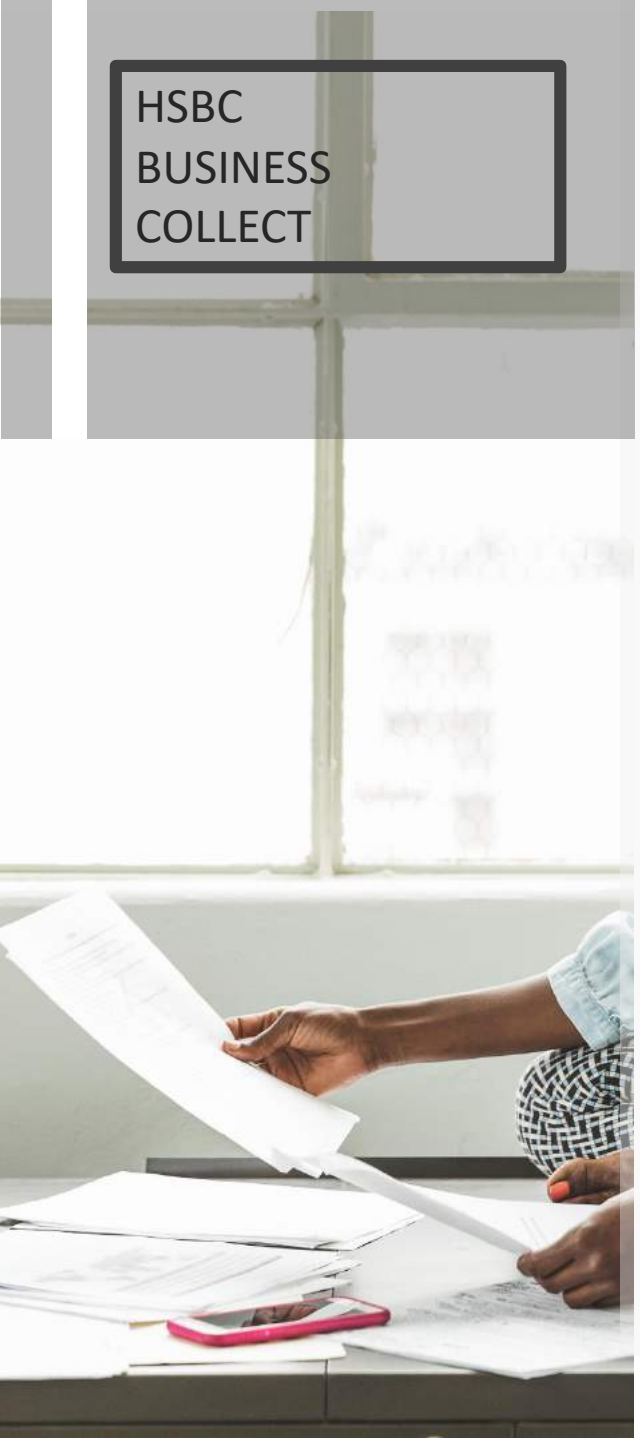
01 Check-Out

02 Customer launch Banking apps / e wallet

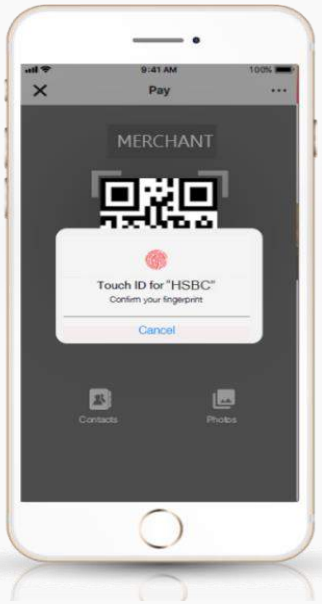
03 Customer confirm transaction

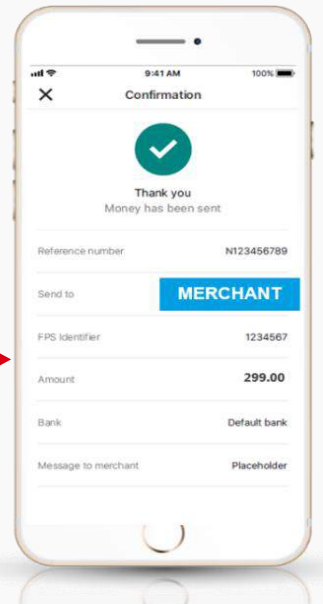
04 Merchant payment confirmation

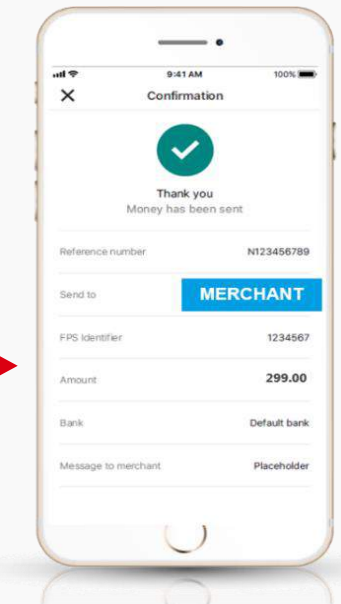
HSBC
BUSINESS
COLLECT



BILL PAYMENT







01 Customer receive invoice

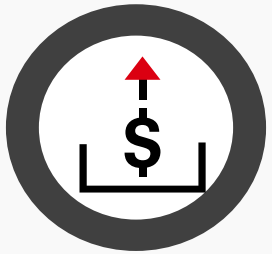
02 Customer launch Banking apps / e wallet

03 Customer confirm transaction

04 Merchant payment confirmation

HSBC BUSINESS COLLECT - BENEFITS

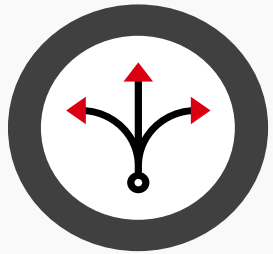
COST Saving



CASH FLOW
Enhancement

STREAMLINED
Reconciliation

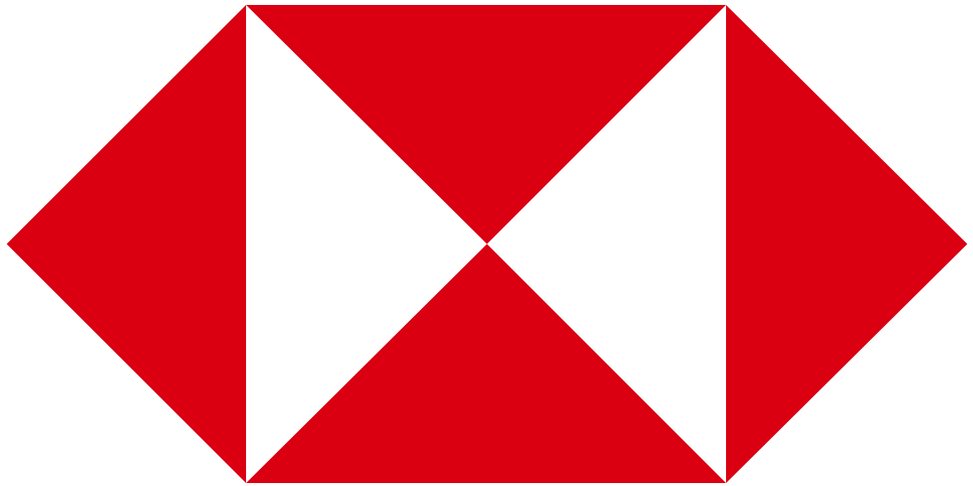
SECURE & SEAMLESS
Experience



COMPREHENSIVE
Applications

EASY Integration
& Implementation

PUBLIC



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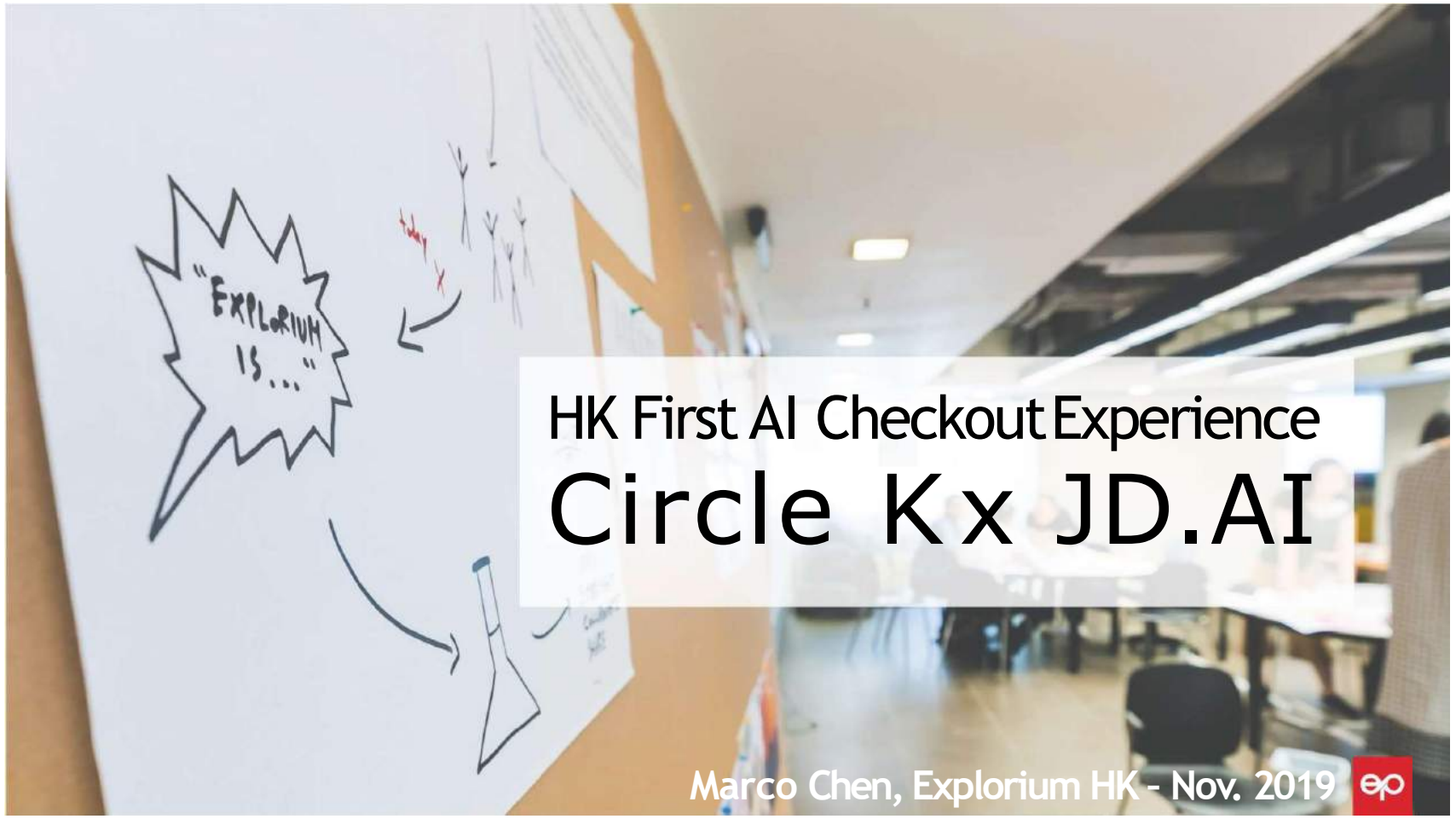
Explorium Hong Kong
利程坊

Mr. Marco Chen

Fung Academy
General Manager,
Innovation & Experimentation

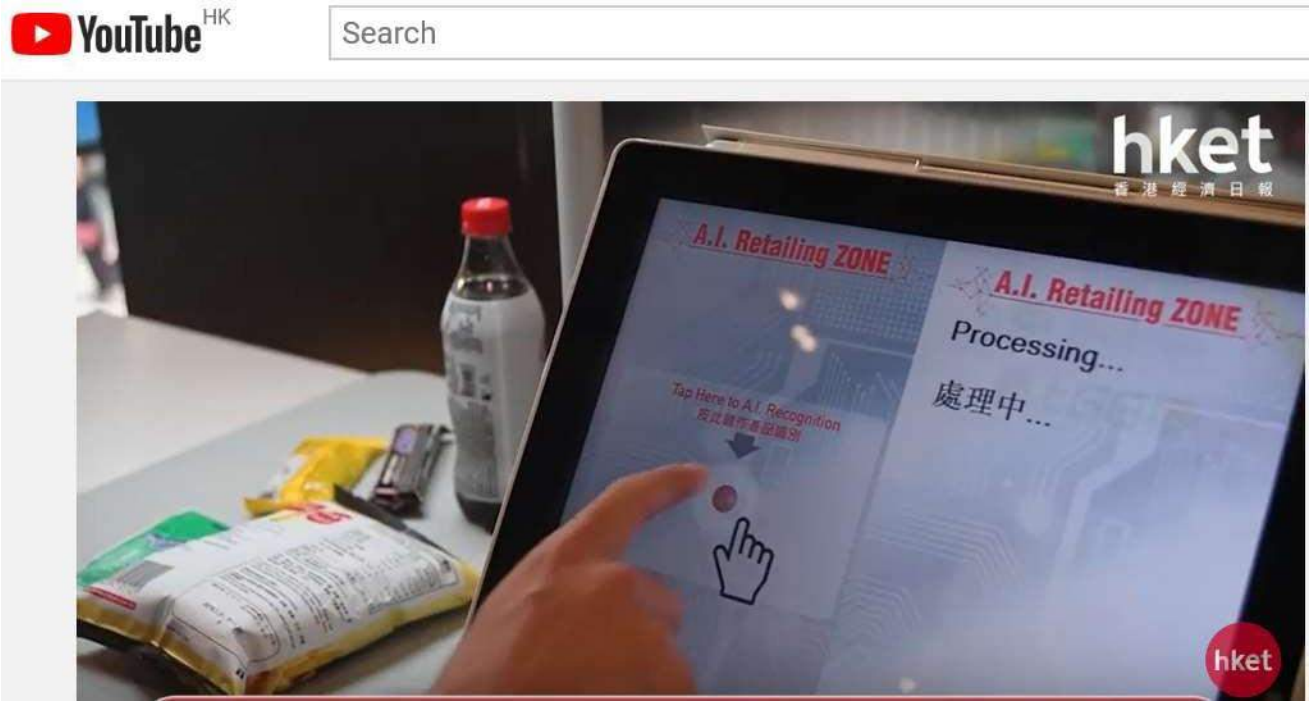
EXPLORIUM
HONG KONG
A FUNG GROUP INITIATIVE



HK First AI Checkout Experience

Circle Kx JD.AI

Marco Chen, Explorium HK - Nov. 2019



https://youtu.be/Efl4cnlQt14

FUNG GROUP AT A GLANCE

Hong Kong
Headquartered multinational group with
3 companies listed on the Hong Kong Stock Exchange

Over **2,700** retail outlets in Asia, including across 95 cities in China

Leaders in sourcing, logistics, distribution and retail

A global network of over **350** offices and distribution centers

Some **42,000+** employees

50 export markets

113+ years of history & evolution

US$22.7 billion
Group turnover in 2017

Lai Chi Kok

Around the world,
industries & businesses
are being disrupted by
the rapid advancement
of technology…

EXPLORIUM Believes in
'Growth through collaboration'

MAP

How we know each other.
Connect. Engage. Bridge.

LEARN

How we learn from each other.
Host. Facilitate. Share.

DO

How we do things.
Solve. Experiment. Invest.

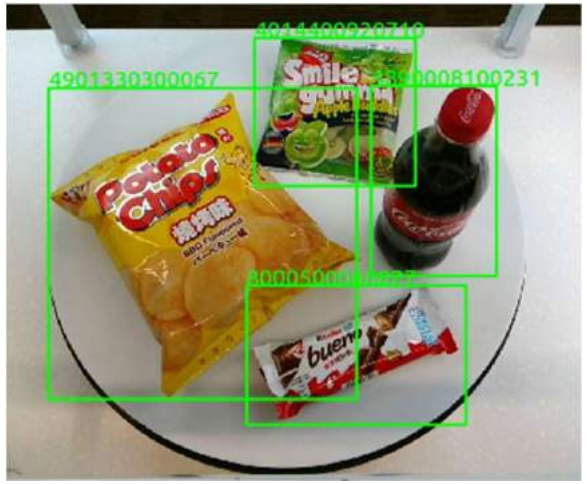
Explorium in numbers
2000
Community members
4
Sandbox projects in Pipeline
7
Pilots
(AI+AR product development, 3D configurator, Chatbot, AI training)
4
Go-lives
(LF Logistics, SCS 6, Cobalt)
25
In-Residents Start-ups
7
Parallel ecosystems interacted with
(New York, Israel, Shenzhen, Shanghai, Thailand, Taiwan, Singapore)
9
Tech Safaris
#sustainability
#futureofwork
#futureofconsumption
#ai #blockchain
#IoT #AR/VR

Back to Circle K…

Pain Point: **Queuing at Counter**

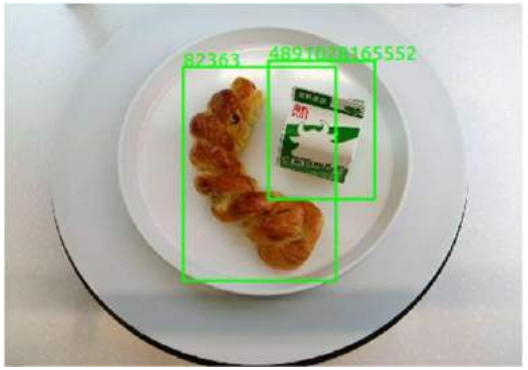
The Technology

- Image recognition technology
- 97% accuracy - machine learning
- Takes < 1 second
- Batch processing
- Higher accuracy with more data



Benefits

- An easy and hassle-free checkout experience
- Barcode and RFID not necessary
- Faster check out
- Time & Cost benefits
- Diverse product category
- Overall in-store checkout time is reduced by 30%



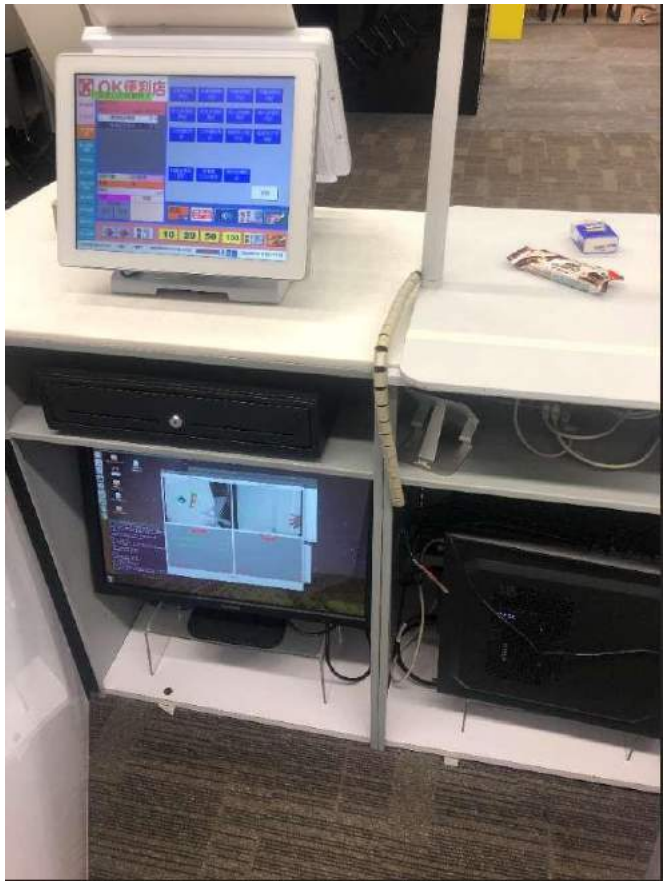
Improvement

- Maintenance
- Increase SKU count
- Overlapping
- Retraining

The Partnership

JD AI × Fung Retailing

Different Iteration & the Future



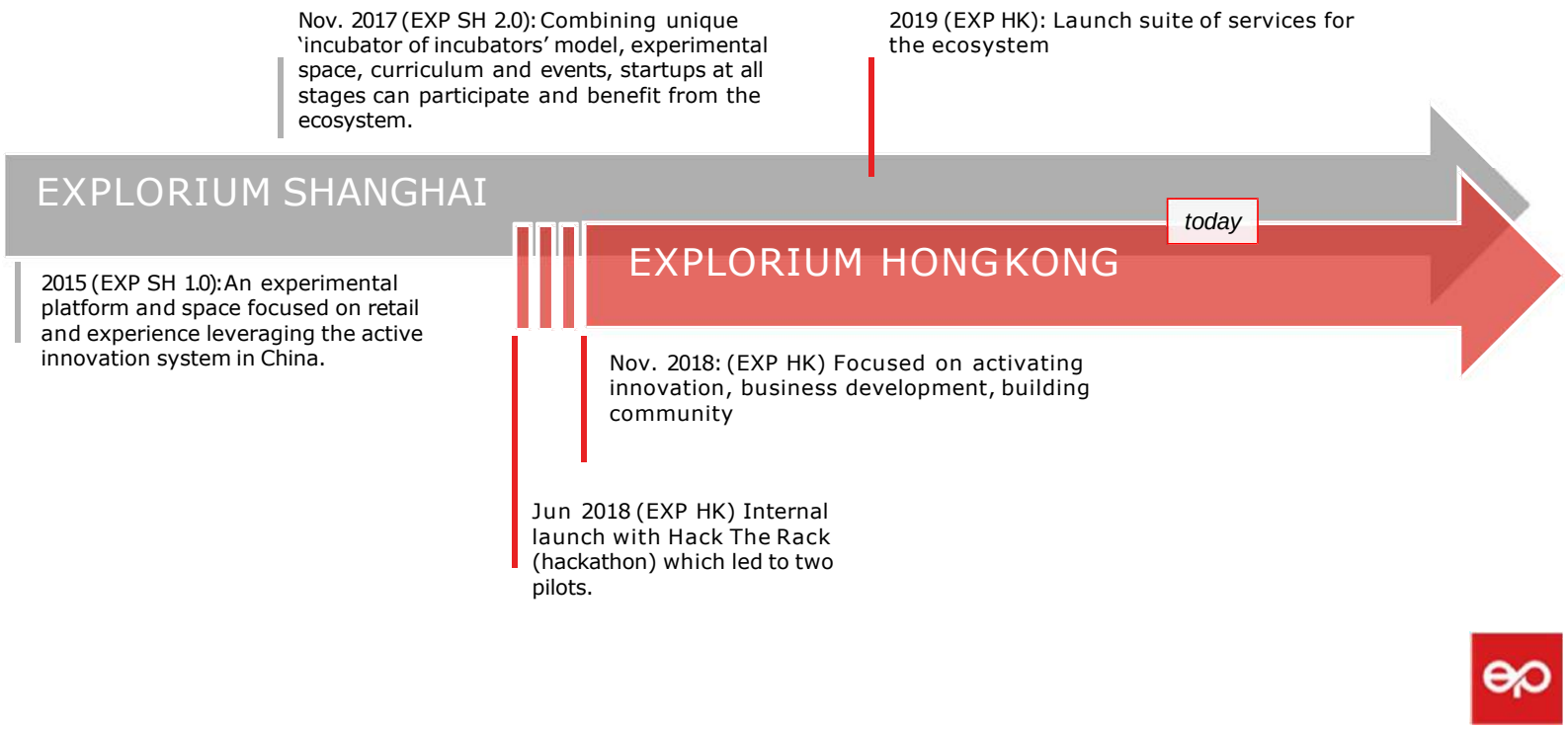
Themes / Learning Concepts:
- Balance of Automation vs. Human
- Question of Ethics
- Partnership and Growth
- Win/Win Partnership
- Product to Market Fit
- Experimentation & Differentiation

利 EXP
程 LOR
坊 IUM

Let’s Connect!
WeChat Below
Growth through
COLLABORATION
@EXPLORIUM_HK

Appendix
It’s modular. Not every slide in every presentation… but all should be ready.

The Explorium Story — NETWORK EFFECTS

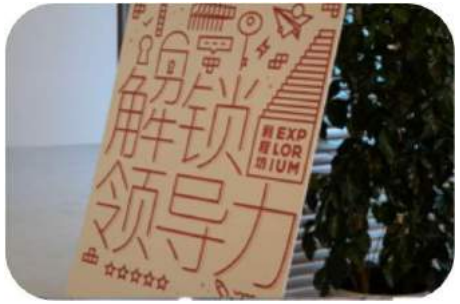


上海利程坊
Shanghai Explorium

Community
Co-Hosted Events to
Build Influence
and Drive
Innovation in China

Hello Future
A Series of Thought
Leadership Events to
Bring Together
Collaborators

Start Up & Meet Up
Nurturing an
Innovative Culture
Through Sharing from
Startups



Curriculum
Helping startups
Identify opportunities
In supply chain
and retail

Explorium HK

An innovation ecosystem

GS1 x HSBC x Li & Fung

The development of check out technologies
結帳技術的發展趨勢

Ms. Isabel Tsui
GS1 Hong Kong
Senior Manager,
Business Development

Mr. Teddy Chiu
HSBC
Senior Vice President,
Regional Sales, Global Liquidity &
Cash Management

Mr. Marco Chen
Fung Academy
General Manager,
Innovation & Experimentation

2019 / 11 / 07 (Thursday)

3:30pm - 5:30pm (Registration starts at 3:00 pm)

Diamond Room, CUHK Business School Town Centre
Unit B, 1/F, Bank of America Tower
12 Harcourt Road, Central

Language: English

Organiser
HKEBA

Funded by SME Development Fund
工業貿易署
Trade and Industry Department

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