

Future of Post

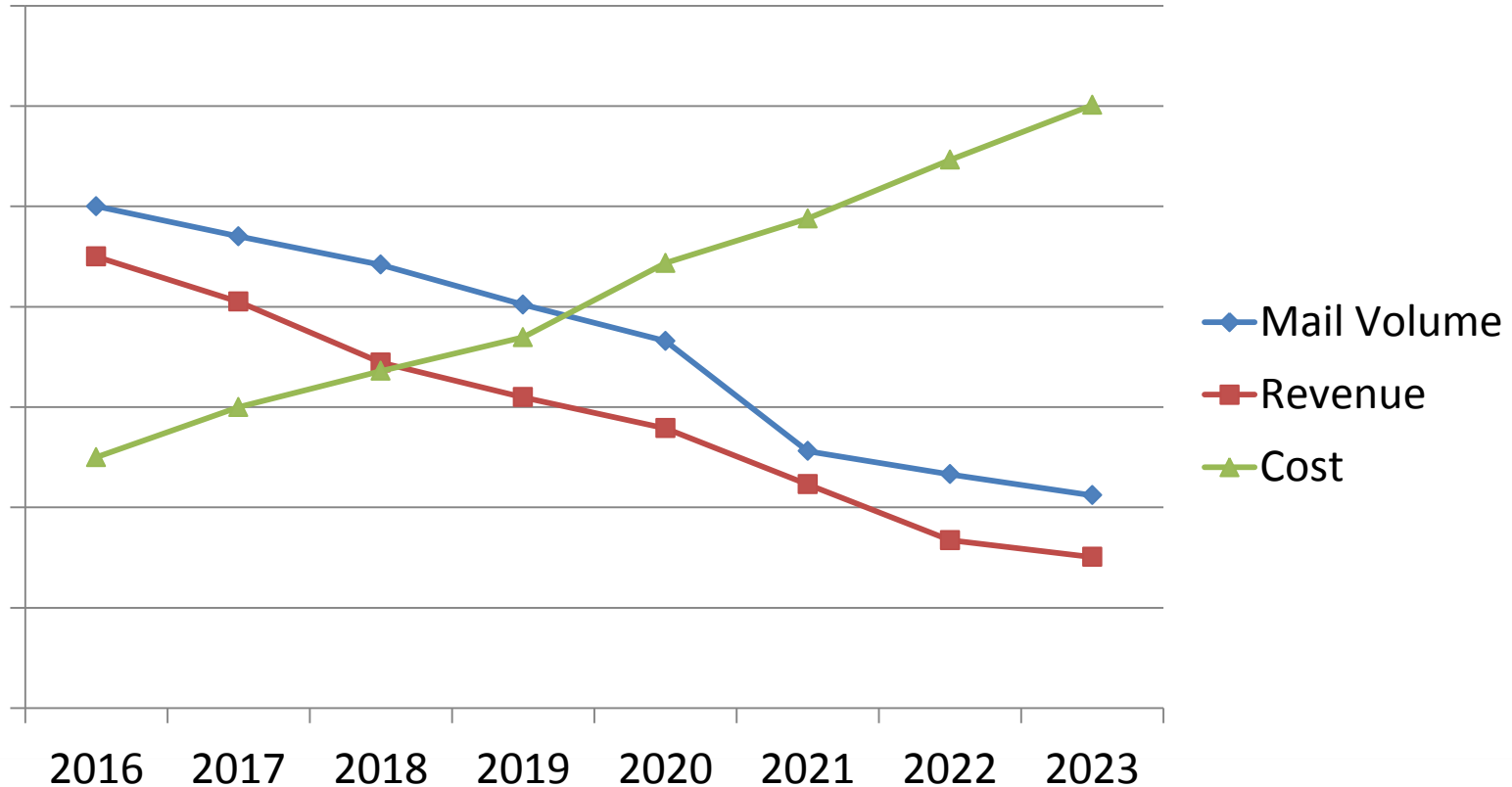
Presentation to APPU Forum on | 5 Sep 2019
Innovation of Postal Networks

Agenda

- Current Situation
- Customer Expectations
- Reimagining Post

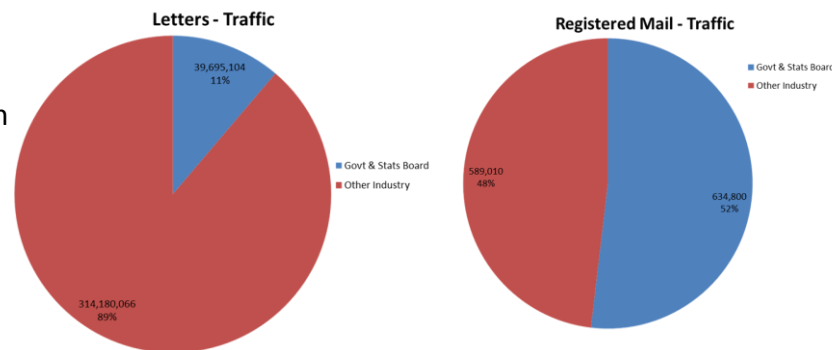
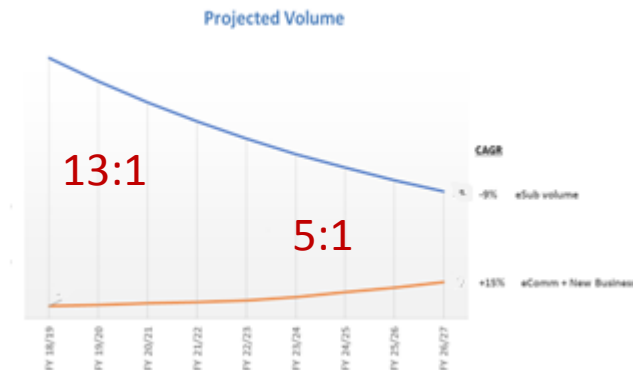


Current Situation – Is This Familiar?



Current Situation

- Changing Postal Landscape
 - Annualized decline of physical mail volume 6% ~ 8%
 - Increasing cost pressures due to intensive labour and fleet
- Challenges in e-Commerce Deliveries
 - Largely doorstep delivery; too big for letterbox
 - Customers want low cost mail price with full parcel courier service
 - Seasonal spikes in e-Commerce
- Business Performance
 - Labour intensive for doorstep deliveries
 - Negative margin for doorstep deliveries with mail pricing
- Ongoing challenges
 - Unsustainable high dependency of labour; aging postal crew
 - Adverse impact on operational productivity, efficiency and cost with increasing e-Commerce delivery volumes
- Customer Expectations
 - Convenience is king! (Need to be at every block!)
 - Followed by precision, notification, trackability and traceability
 - Vast majority of e-Commerce deliveries at “shoe box sized”



Today's letterboxes



Pros

- Intensity! At every high rise building
- Pick up at recipient's convenience
- Deliver "anytime"

Cons

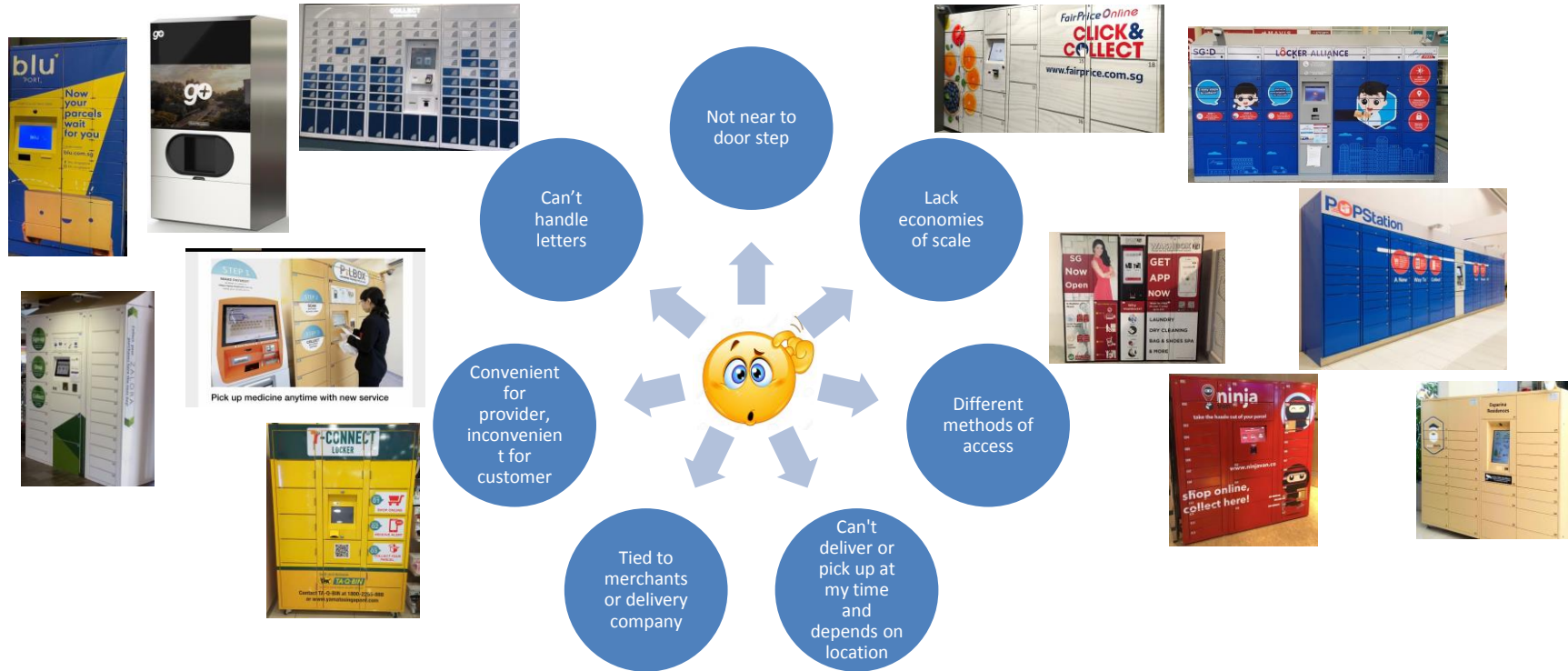
- Cater only to letters, flats or small packets
- No intelligence to notify recipient
- Prone to errors
- No authentication

Productivity Factor	Doorstep	Locker	Letterbox	Proposed Smart Letterbox Dispenser
Deliveries	1x	10x	30x	>30x
Time	6min	30sec	10sec	<10 sec

Customer baseline expectations are constantly evolving



Assessment of Alternatives to Letterbox



What are the wants?

What does
Singapore
need?

- Security
- Less traffic congestion
- Meet Service Level
- Less labour dependency
- Space efficient solution
- Smart Nation Initiatives to improve quality of life

What do
service
providers
want?

- Avoid door-step delivery to keep costs low
- Deliver anytime to anywhere
- No need coordination with receiver for delivery
- Status of delivery
- Increase productivity

What do customers
want?

- Pick up near door-step
- Pick up at anytime
- Notifications for pick up
- Receive anything ordered online or offline
- Receive and send items
- Standardised access method

“How does SingPost, facing declining mail deliveries, continue to sustain this critical national service going forward?”

“What assets and capabilities of SingPost can we build upon to develop a sustainable business for post and parcel, and beyond, for Singapore?”

“How do we re-imagine the future of post and parcel in Singapore?”

SingPost's Response – Reimagining the Future of Post



Future of Post Concept

Delivery Control Tower

Customer Touch Points

- Merge street posting boxes into PS
- New gen unique ID stamps with barcode/QR
- User friendly trackable posting
- Bulk mail posting w/ unique mail ID & rec info
- Immediate notifications and tracking
- Offer wide range of community/municipal svcs

Processing

- Measure/weigh & automated digital payments for postage shortfalls
- Automated labeling and sort to sequence

Pre-sort

- End-to-end trackability
- Pre-sort @ Delivery Base
- Dispatch preparation for automated sorting at PS - drop & go delivery concept

Collection

- Authorisation and Authentication via SingPass (NDI/MyInfo)/Keycard/NFC/OTP
- Notification to recipients or nominated household members
- Single collection point for all size items (e.g. letters/magazines/packets/parcels stamps/pharmaceuticals, etc)

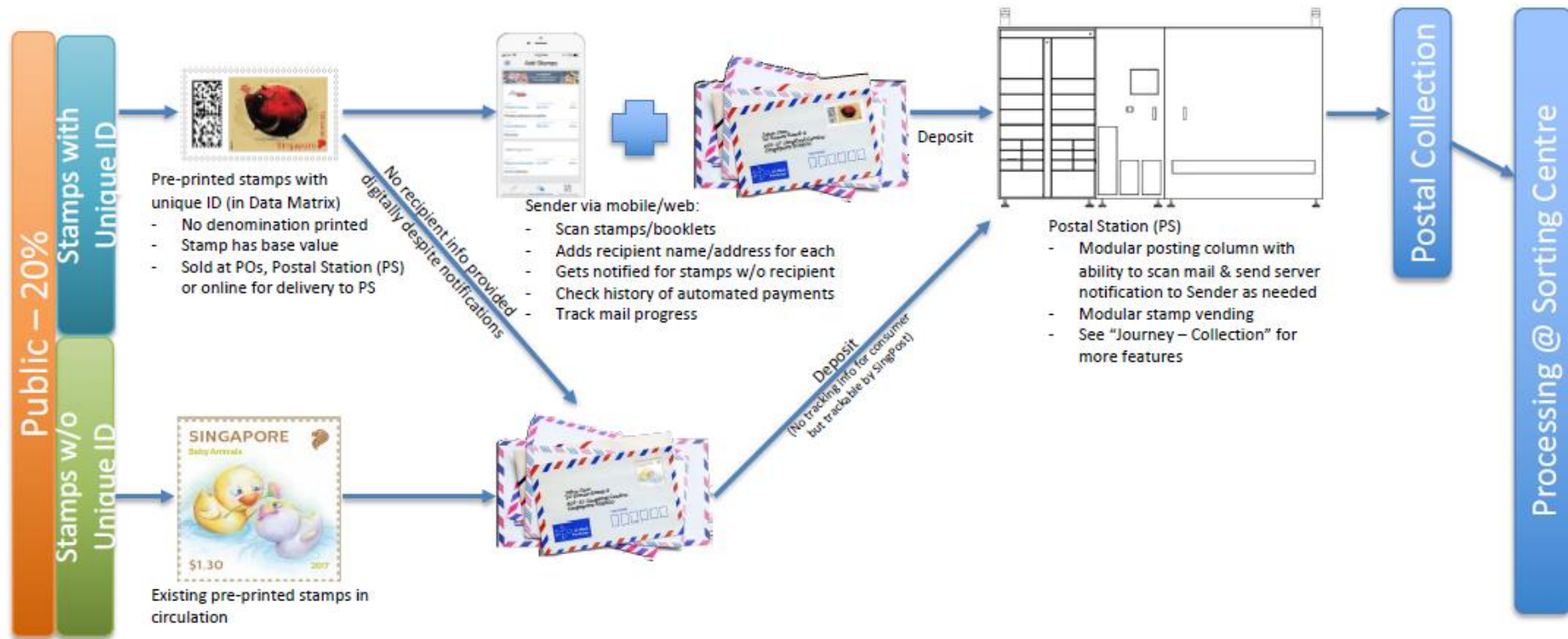


Future proof solution

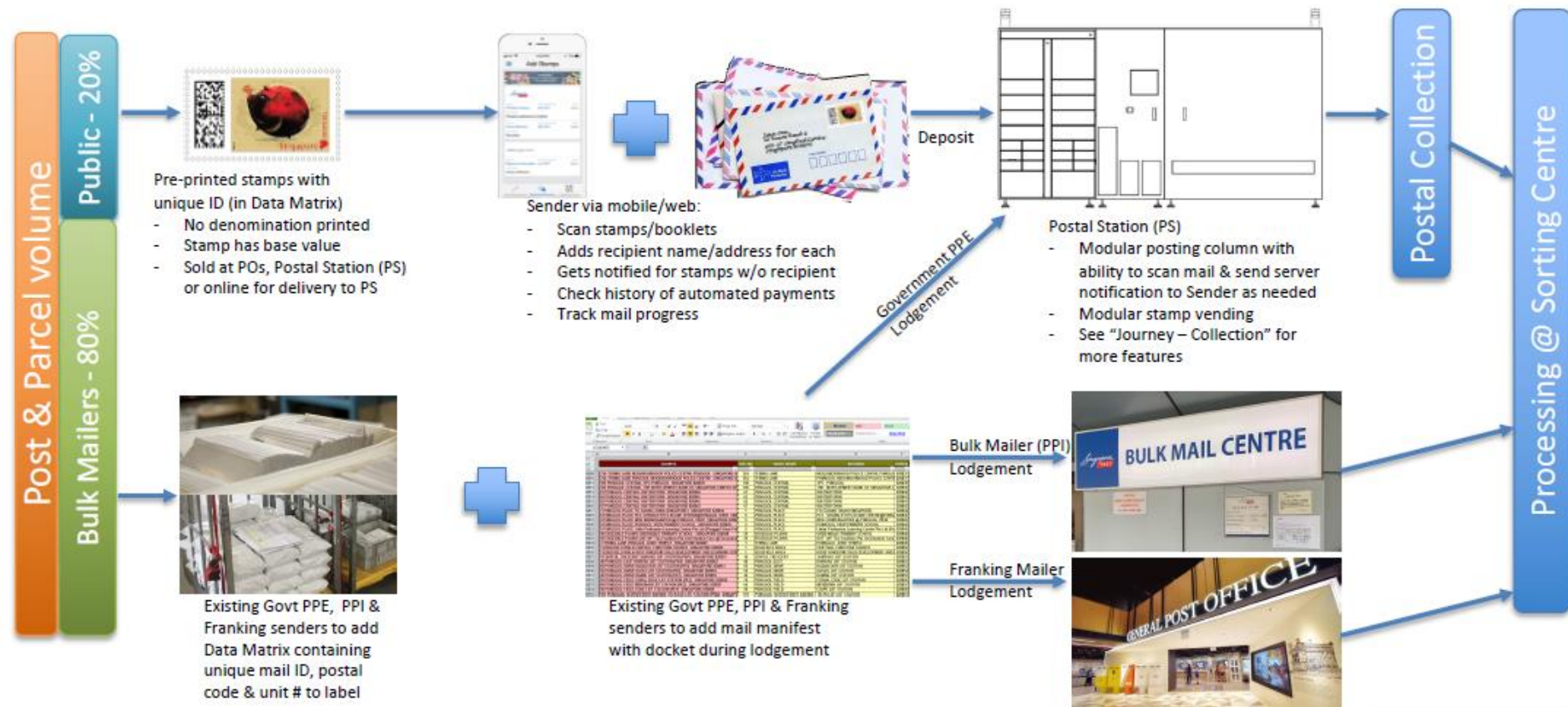
- **Automate** and be less **labour intensive**
- **Track and Trace** capability for all mail and packets
- To collect all sizes items from a **single point**

- ✓ **Security** due to consistent delivery protocols
- ✓ **Assurance** through real-time parcel visibility
- ✓ **Convenience** to consumer

Journey - Post



Journey – Post



Journey – Processing Centre

VISA **mastercard** **AMERICAN EXPRESS**
+ Other Digital Payment Methods

Any digital payment method that supports Merchant initiated payments should be made available



Weigh and measure dimensions of Public Post & Parcels and update server



Incoming **Public Post & Parcel** to Sorting Centre
Update tracking info to server



Automated labelling of Public Post & Parcels using adhesive label or spray on printing



Incoming **International Inbound**
Update tracking info to server



Sort to postman walking sequence
Suitably packed for dispatch
Update tracking info to server



Automated OCR & data matrix labelling as needed

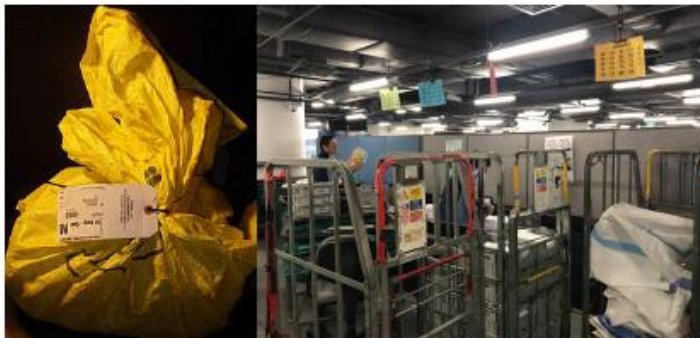


Incoming **Govt PPE, PPI and Franking Post & Parcel** to Sorting Centre
Update tracking info to server

Dispatch

Processing @ Regional Base

Journey – Processing (Regional Base)



Post & Parcel sorted to regions arrive at regional bases
Update tracking info into server

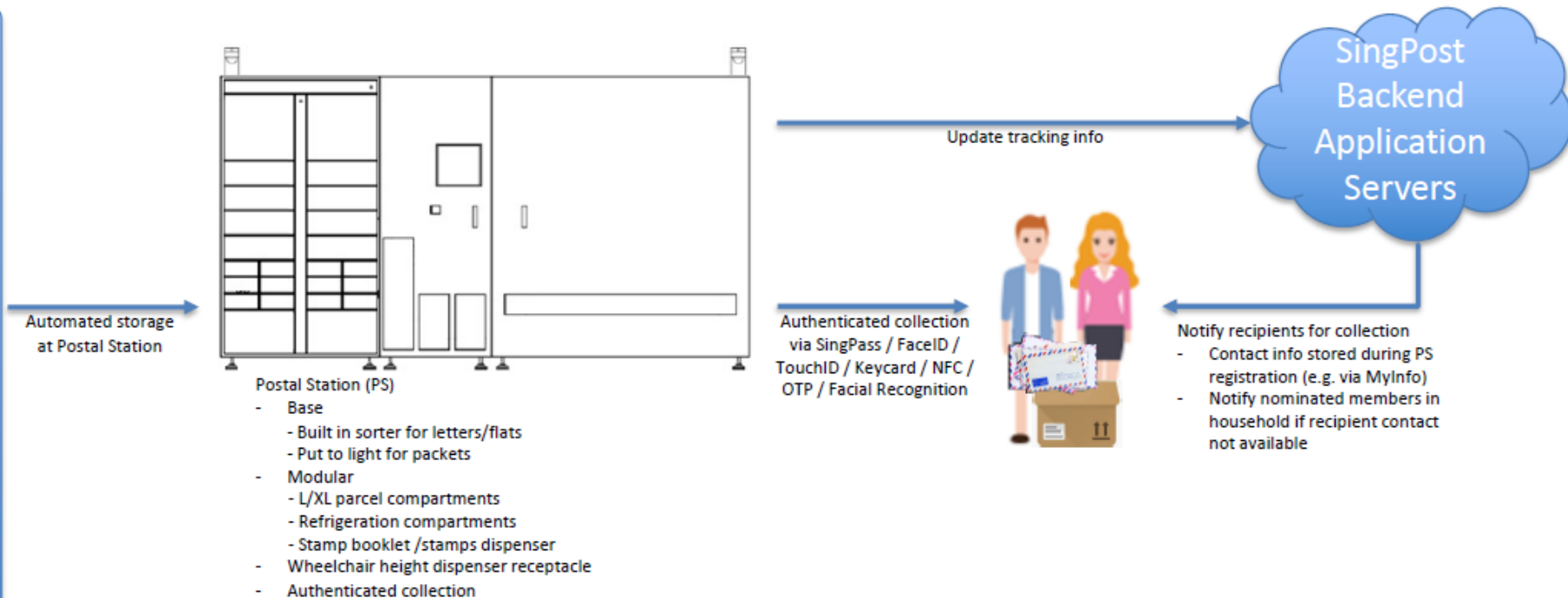


Fine Sort

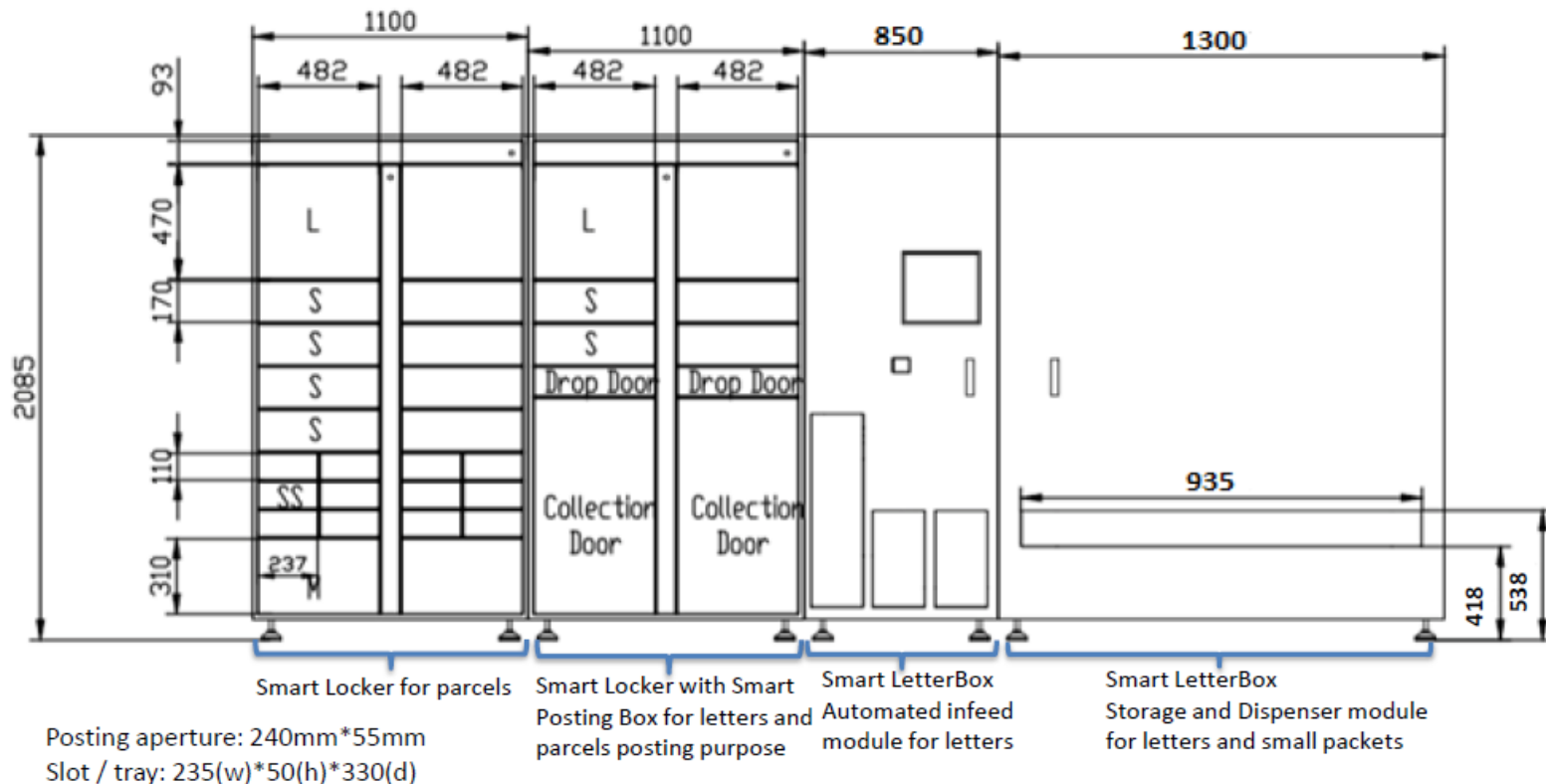
QC Sampling

Dispatch to Postal Stations

Journey - Collection



Next Generation Letterbox (Smart Letterbox + Smart Locker)



Key Features of National Delivery System

Infrastructure Enhancement

- Expand on the current **letterbox infrastructure** to cater to both letters and parcels for customer convenience
- Posting and Retrieval of items from next generation letterbox through **authenticated identification**
- Offer **space optimization** to reduce the traditional assignment of letterbox space to each household

Productivity Enhancement

- Fully automated sortation to the final details to remove the manual sorting currently employed by postmen, improving **productivity, experience and ergonomics** for an ageing workforce
- Eliminate the need for the postman to sort and deposit into individual units as well as to deliver parcels at doorsteps, addressing a critical operational challenge. Channelling **doorstep deliveries to letterbox**

Landscape Enhancement

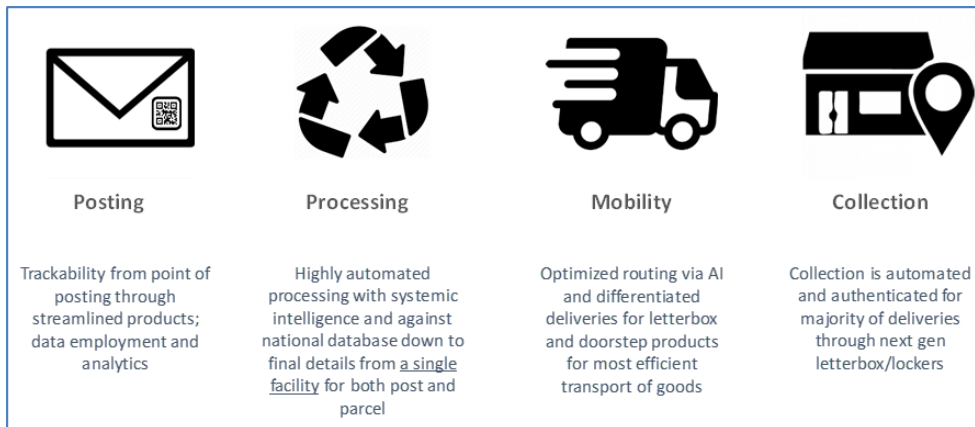
- Synergized last mile delivery by increasing intensity to the letterbox, hence **minimizing traffic**
- Be the **national emergency infrastructure** as we reach to every household and consumer
- Enhance and **transform jobs** and offer upskill opportunities to workforce

Customer Experience Enhancement

- Provide **convenience**; “anytime, anything”
- Offer a **lowest cost-to-serve** solution to continue to keep pricing low for customers/residents
- Enhance customer experience with smart **digital** solutions for post and parcel deliveries

Future Benefits of National Delivery System

- Explore usage of emerging digital technologies such as autonomous vehicles and delivery robots
- Lay the foundation for the provision of community and municipal services, allowing us to reimagine the role of the Void Deck, of the Post Office
- Daily necessities such as groceries and consumables, and even healthcare essentials like medical supplies can be delivered through this system with customisation



The National Delivery System will have the following design consideration:

- a) Full end-to-end traceability from point of collection to point of delivery pick-up.
- b) Mistake-proof process throughout the delivery process.
- c) Reuse the existing letterbox space at HDB void deck.
- d) Receive letters, parcels and daily consumable and commodity items.
- e) Sending and receive items.
- f) Process returns from on-line / off-line purchase.
- g) Easily configurable compartment sizes on the fly.
- h) Intelligence to inform receiver when items received.
- i) Highly secured authentication features to access the system including card-free/device-free facial recognition as an option.
- j) Modular design to add on variety of items to be handled as technology is available.
- k) Provision to include ergonomic-friendly transportation trolleys to complete the last mile experience to the doorstep.

What Happens Next?

- Prototype of Postal Station will be launched in late Sep 2019
- Roll Out Plan – over next 4 to 5 years
- Update in next APPU meeting on the progress

Thank You