Rethinking the mailbox:
Postal e-commerce opportunities by adding intelligent delivery to direct and data driven marketing

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Personal: Tracking the evolution of Marketing and DM, from Communications to Commerce over 35 years

Posts Enable And Enrich Communications <u>& Commerce</u>

<u>Postal Customers (Mailers)</u>

<u>Consumers</u>

Communications
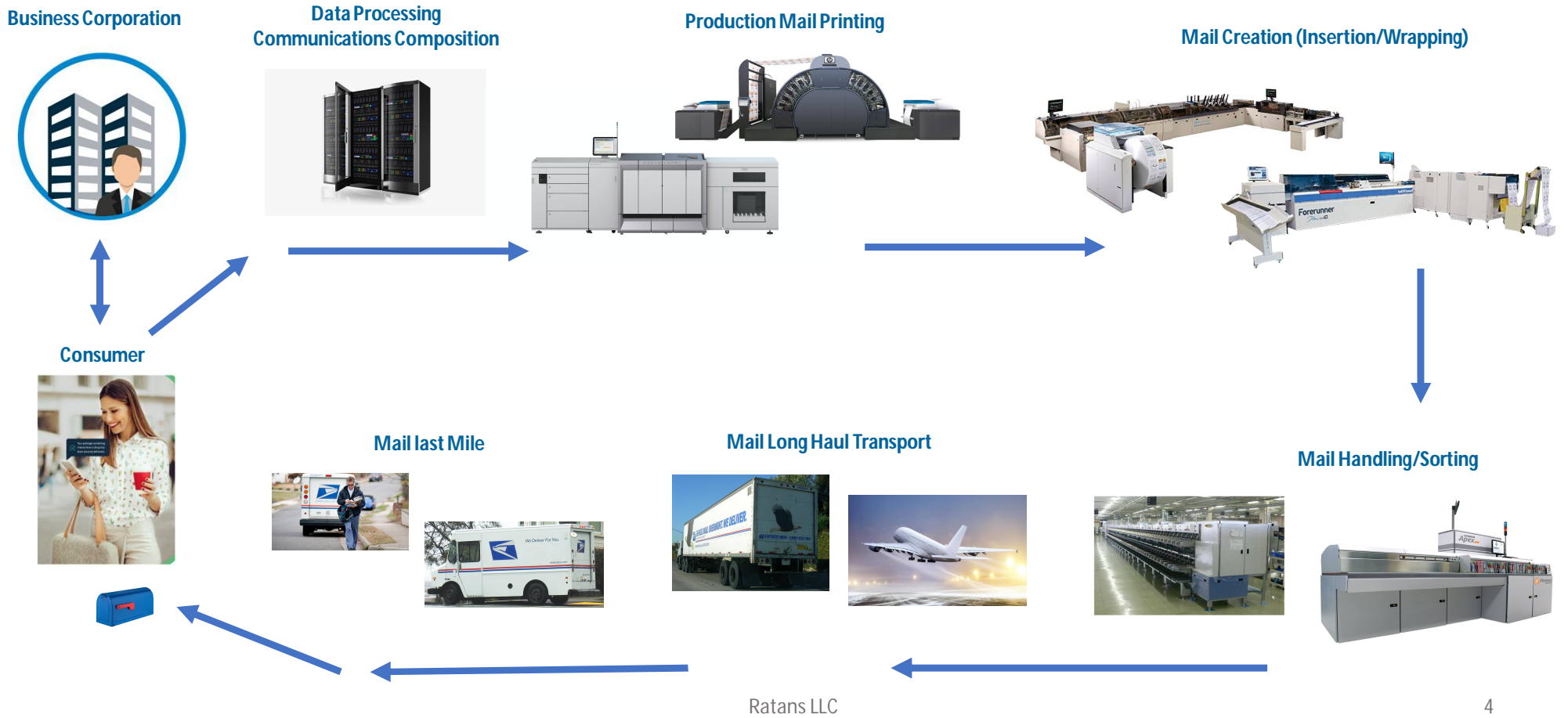
Transactions: Bills, Statements
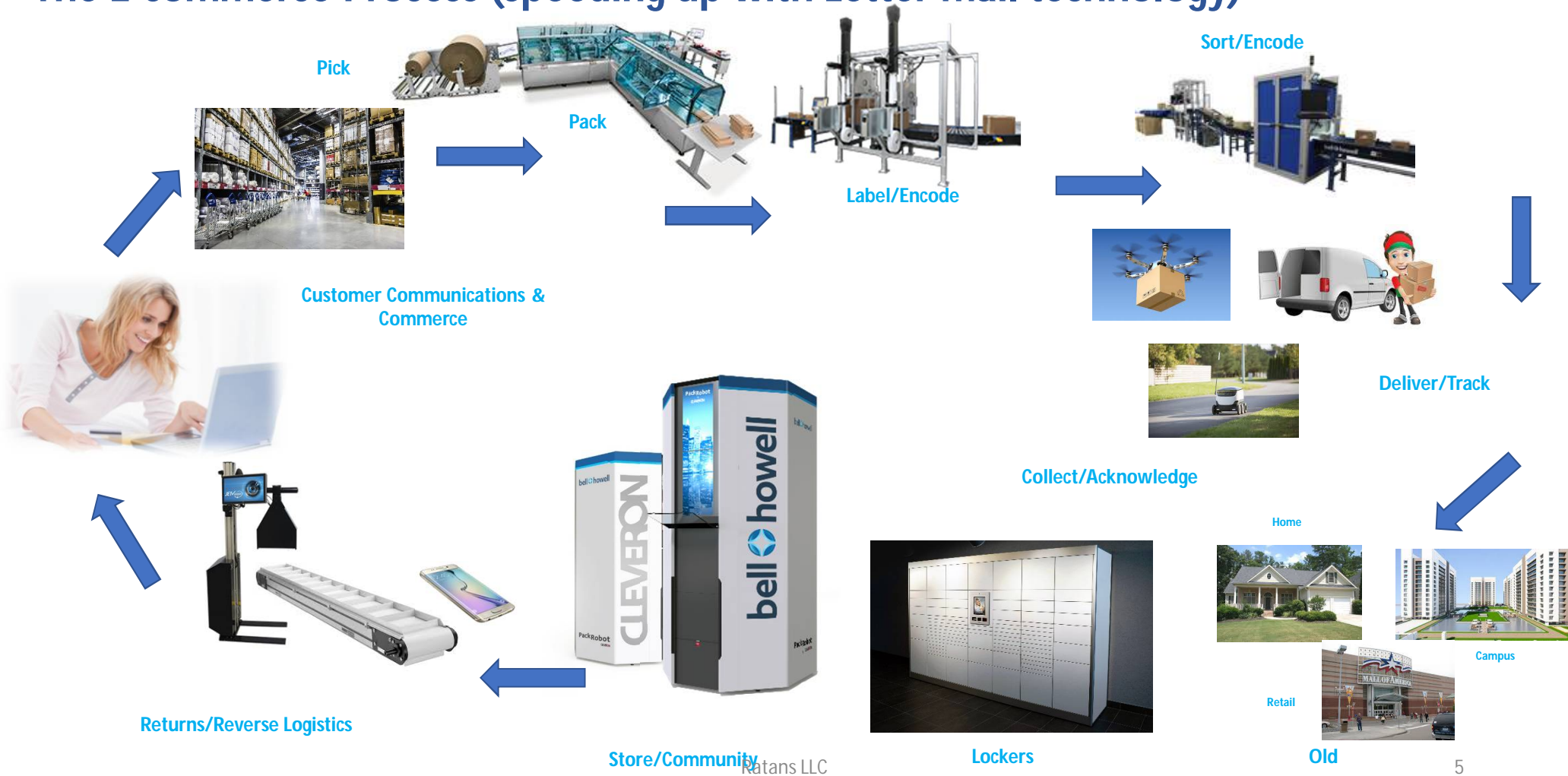*Promotions:* Coupons, Inserts

Physical – Digital

Commerce

Payments, Remittances, Package, Labeling, Sorting, Tracking, Delivery

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The Direct Mail Communications Process

Business Corporation

Data Processing
Communications Composition

Production Mail Printing

Mail Creation (Insertion/Wrapping)

Consumer

Mail last Mile

Mail Long Haul Transport

Mail Handling/Sorting

The E-commerce Process (speeding up with Letter mail technology)

Pick

Pack

Label/Encode

Sort/Encode

Customer Communications & Commerce

Deliver/Track

Collect/Acknowledge

Home

Campus

Retail

Returns/Reverse Logistics

Store/Community

Lockers

Old

Retail Click-and-Collect Bell & Howell Success Story

Walmart

5 PackRobots in 2016

Customer Experience – +500 bps in NPS
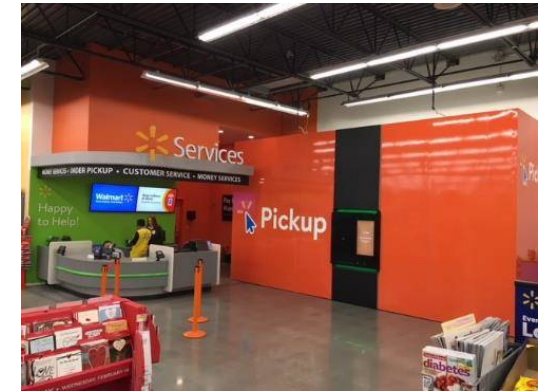
Associate Experience - ++

107 PackRobots/Combos in 2017

500+ PackRobots/Combos in 2018
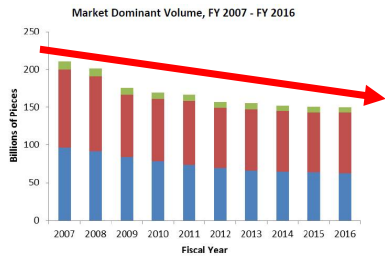
1000+ PackRobots/Combos in 2019

Groceries Pickup

PackRobot Combo

CleverFlex

Groceries

*Artist Rendering

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New Opportunities for Posts

The Opportunity is shifting

Market Dominant Volume, FY 2007 - FY 2016

From Mail

Driven by Retail

US Retail Sales, 2016-2021
trillions and % change

$4.863 — $5.048 — $5.214 — $5.376 — $5.537 — $5.698
2.9% — 3.8% — 3.3% — 3.1% — 3.0% — 2.9%
2016 2017 2018 2019 2020 2021

Retail sales | % change
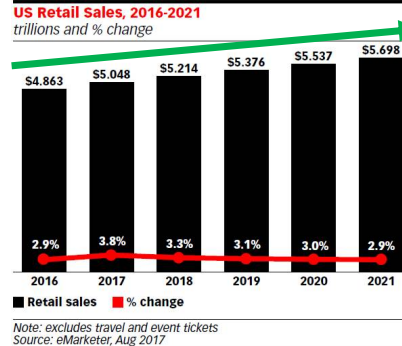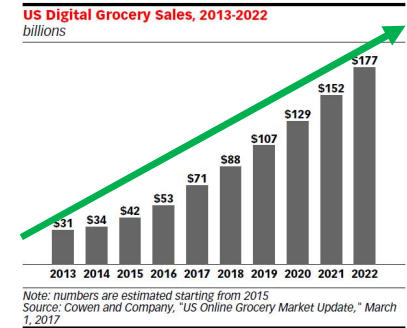
Note: excludes travel and event tickets
Source: eMarketer, Aug 2017

With some non-traditional categories still emerging

US Digital Grocery Sales, 2013-2022
billions

$31 $34 $42 $53 $71 $88 $107 $129 $152 $177
2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

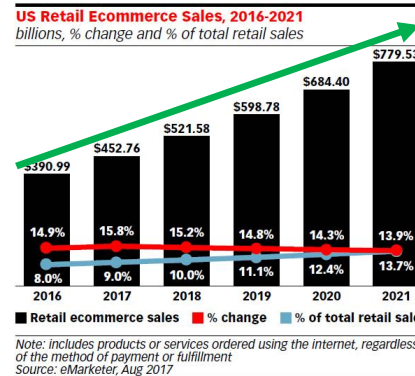*Note: numbers are estimated starting from 2015*
Source: Cowen and Company, "US Online Grocery Market Update," March 1, 2017

To Parcels & Packages
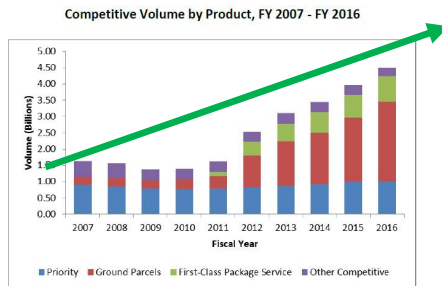
Competitive Volume by Product, FY 2007 - FY 2016

Especially On-Line

US Retail Ecommerce Sales, 2016-2021
billions, % change and % of total retail sales

$390.99 — $452.76 — $521.58 — $598.78 — $684.40 — $779.53
14.9% — 15.8% — 15.2% — 14.8% — 14.3% — 13.9%
8.0% — 9.0% — 10.0% — 11.1% — 12.4% — 13.7%
2016 2017 2018 2019 2020 2021

Retail ecommerce sales | % change | % of total retail sales

Note: includes products or services ordered using the internet, regardless of the method of payment or fulfillment
Source: eMarketer, Aug 2017

Groceries!!
Prepared Meals?
Prescriptions?
Alcohol?
Other?

Posts – Innovation in the last mile

- Differentiate Mail and Packages business strategies for Last Mile

    - Mail – Protect the Monopoly and enrich where possible
    - Packages – Leverage exponential growth and Emerging IoT technologies
        - key subsegments growing faster (groceries, perishables)
    - Postal Operator has the best economics for last mile delivery in either case

- Posts can be <u>The</u> Key Platform in the physical delivery Ecosystem
    - Leveraging IoT technology to unbundle feature functionality in last mile delivery systems and infrastructure

- Posts can leverage the convergence of IoT based automation, AI and Data Analytics, to set the pace for the next generation National Communications and Commerce infrastructure

Home Delivery Issues

Home delivery of packages is a significant problem for all parts of the ecosystem.

Consumers

- 30% just don't buy certain products online

- 71% are concerned about package theft and damage

- 73% would prefer HomeValet to the status quo

Retailers

- Retailers lose billions replacing stolen or "lost" packages

- They also lose billions because consumers don't buy as much online

- Customer experience is impacted, so retailers also spend extensively on customer service

Carriers

- Carriers spend billions on inefficient delivery schedules

- Multiple delivery attempts and "signature required" adds significantly to cost

- Customer service problem-solving is costly and time-consuming

Home Delivery Issues

Goods delivered to most homes are left outside, unattended.

11MM U.S. households had a package stolen in the past year.

Over 50% of Americans know someone who had a package stolen.

Delivery issues impact consumer satisfaction & online shopping use.

Current "Solutions"

Current solutions only fit a small portion of the market.

Courier Home Entry

Amazon and Walmart have partnerships with smart lock companies that allow couriers to unlock the home doors and deliver packages inside.

Very few consumers have adopted this solution. People don't want to sacrifice the security of their home for their packages. This method is also limited to consumers who don't have pets or an active alarm system.

Video Doorbells & Security Cameras

Ring, Nest, and other companies have had commercial success at marketing video doorbells and security cameras.

Although these are often marketed as a solution to package theft, they haven't had any effect on the rates of package theft. Generally, package theft is not investigated, even when reported, because the value of the package is rarely very large.

Delivery to Car

Amazon is testing delivery to cars, but has had little success.

It's currently limited to certain automotive brands built after 2015-1028, depending on the make/model.

Lockers

Centralized locker-based systems are being tested by larger, existing companies. These lockers address a portion of the market willing to drive to a locker to pick up a package or for those who live in a multi-tenant building. These approaches leave the single-family home unserved.

SmartLocks

SmartLocks for outside receptacles are trying to position themselves as solutions, but this solution is limited. Most do not have integration with couriers, so consumers must provide instructions to the courier for every delivery.

Saturday Delivery

Amazon will now allow consumers to schedule Saturday deliveries. While this solves a small problem for some consumers, if it's used heavily, couriers are burdened with inefficient stacking of their deliveries on Saturday.

This also requires that consumers sacrifice the convenience of Amazon Prime's fast delivery. Saturday delivery is a trade-off, not a solution.

Current "Solutions" and Market Validation

Single-family home owners don't have a solution that doesn't require a sacrifice of privacy/security or cause schedule compression for couriers. While these don't exactly solve the problem, they do serve as market validation of the need for a solution. They also validate a consumers willingness to pay for a solution to the problem.

Single-Family Home

Courier Home Entry
No way. Don't come into my home.

Video Doorbells & Security Cameras
Great, you caught a thief on camera. Now what?

Saturday Delivery
Couriers hate this model which stacks their schedule one day of the week.

Multi-Tenant and Pick-Up

Lockers
Principally for apartment buildings. In the suburbs, they really just serve to cut delivery cost for retailer and not provide convenience for the consumer.
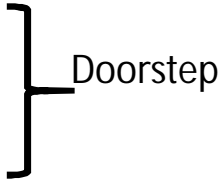
Other

Delivery to Car
This will never be an actual solution to e-comm delivery.

The Physical Delivery Last Mile Ecosystem

Mail

USPS – Mailbox Protected Monopoly
UPS
FeDex   Doorstep
DHL
....

General Merchandise	Groceries	Meals	Other (Pharma, Alcohol, etc.)

Packages

General Merchandise	Groceries	Meals	Other (Pharma, Alcohol, etc.)
USPS	Jet/Walmart	Blue Apron	...
UPS	Amazon Fresh	Home Chef	...
FeDex	Google Express	Hello Fresh	...
DHL	UberEATS	Freshly	...
Amazon	GrubHub	Plated	...
	DoorDash		
	Postmates		
	Instacart		

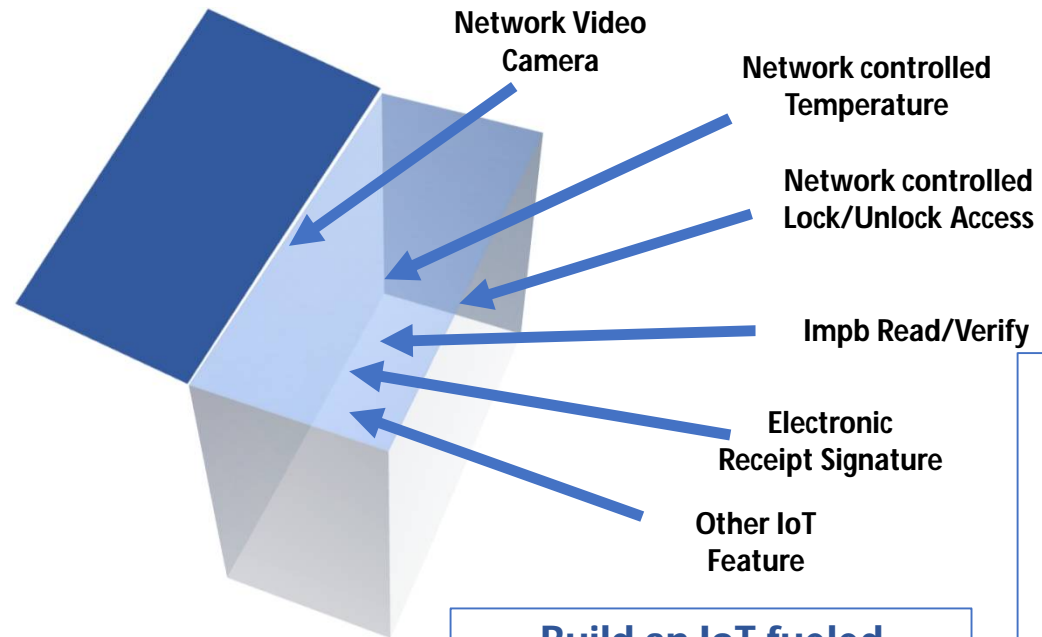# Differentiated Strategies for Mail and Packages (Protect Monopoly v/s Become The Industry Platform)

Mail

Packages

Network Video Camera

Network controlled Temperature

Network controlled Lock/Unlock Access

Impb Read/Verify

Electronic Receipt Signature

Other IoT Feature

Become IPhone-ITunes like platform to enable "Parcels Apps" industry

Protect and Enrich the Monopoly

Build an IoT fueled Feature Rich Platform

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HomeValet Hardware

- Locking mechanism
- Climate Control (Micro-Compressor or Peltier)
- Thermistors
- Fan Modules
- LED Lighting

- Child Safety Release
- Camera
- Insulated panels
- Movable and Removable Partitions
- Interchangeable Exterior Trim Panels
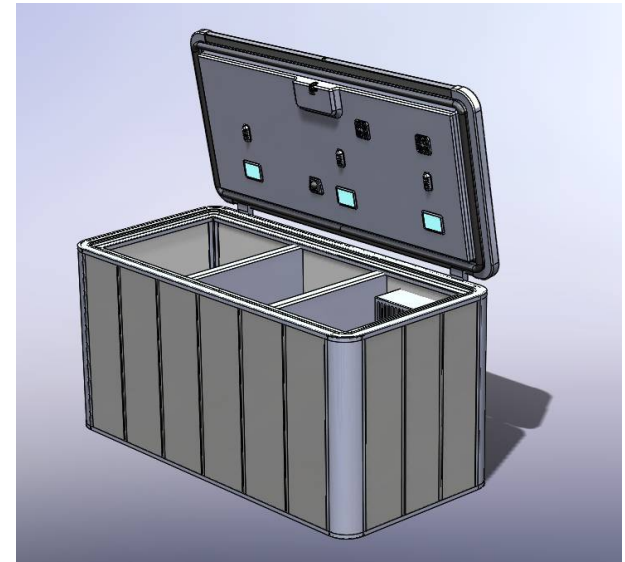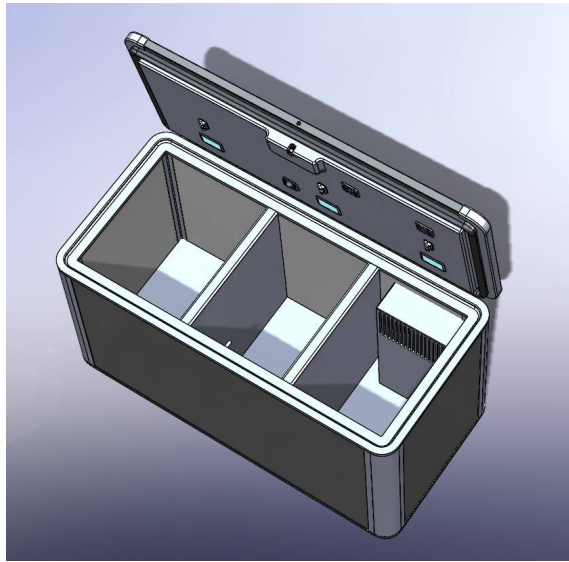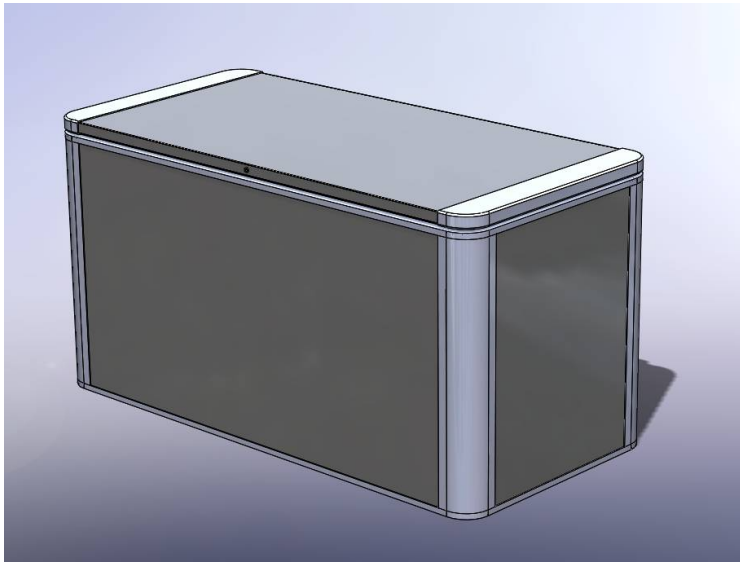
Differentiated Strategies for Mail and Packages (driven by IoT, ML, AI – modular system architecture)

Homes

Community/Neighborhood

Mail

Packages

Temperature controlled, secure package delivery to homes

Automated, Volume Optimizing, Self-service Pick-up and drop-off Towers and Linear Systems

Next Gen Post Office

Vision for Posts

- Become <u>The</u> Platform for Next Generation Communications and Commerce
- Ultimate "Direct" connection for communications and commerce fulfillment to end-consumers