The endgame for postal networks

How to win in the age of e-commerce
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Executive summary

Time for the next move

State of play: market and incumbents
The decline of the mail business – the long-standing and reliable cash cow of many incumbents – due to electronic communication is structural and irreversible. While mail revenue share remains around 40 percent globally, the global volume ratio of letters to parcels has declined from 13:1 in 2005 to 4:1 in 2015 and is expected to reach 1:1 parity by 2025.

In contrast, the e-commerce megatrend will fuel an EUR 8 trillion retail opportunity by 2025, creating opportunities that no postal player should give up without a fight. Capturing a piece of the resulting parcel volume growth will therefore be crucial for incumbents wishing to protect the unique benefits of their joint mail-parcel operations.

New challenges push incumbents to the tipping point
The entire logistics value chain for parcel handling is up for grabs, as indicated most clearly by the recent and sizable forward integration moves from e-commerce supergiants such as Amazon, Alibaba, and JD.com. These moves include Amazon’s order of 20,000 delivery vans in the US and Alibaba’s move to offer parcel delivery beyond its own needs to the broader market. The three supergiants alone now account for around 40 percent of online purchases globally, and the move to parcel delivery seems an obvious choice.

Most incumbents are still stuck with structurally uncompetitive labor costs 20 to 40 percent higher than those of their new competitors, along with legacy IT systems and risk-averse cultures, even as new competitors erode their primary sources of competitive advantage: strong brands and scale benefits.

Three winning tactics

Earn the right to innovate
Successful postal incumbents have raised productivity by 1 to 2 percent annually over the last decade. This level of continuous improvement, however, is becoming ever harder to maintain, but at the same time, ever more mission-critical in view of current market dynamics. Fashionable technologies such as delivery drones and droids are far too underdeveloped to solve this issue.

Therefore, postal incumbents need to step up their game by further optimizing their current operations, boosting operational excellence in sorting, transport, pickup, and delivery and – often neglected – business support functions. We propose seven key initiatives that can reduce total costs by up to 20 percent. The most impactful levers for many players are advanced ways of production integration, analytics-supported flexible resource planning, and up to 50 percent automation opportunity for operational planning and support activities.

Build the right capacity
Building on a solid operational foundation, incumbents need a long-term plan to establish the additional capacity required to participate in continuous parcel growth.
The long-term plan needs to answer three key questions: How much capacity is needed (and where) in line with evolving e-tailer fulfillment strategies and service expectations? What’s the right kind of automation technology in line with product mix? How can additional capacity be integrated in the best way to protect joint network economics?

With about 75 percent of delivery-speed-related quality issues in today’s postal networks being “structural,” strategic investments into the network offer a unique opportunity to not just create capacity for growth and improve the operating cost base, but also for a real step change in service offering. As such, leading players are already and continuously investing billions of dollars into their networks.

Create an innovation engine
Incumbents should follow a structured approach when innovating products and production systems. With both quality enhancements and cost reductions in mind, they should first create a consumer-centric product strategy before developing a digital and data strategy that sets critical foundations in place, addresses innovation in the core along customer experience and value chain design, and considers attaining new frontiers in the production system or product portfolio (e.g., drones and robotics, artificial intelligence).

Two “must have” priorities should top any postal CXO’s agenda right now. The first is raising end-to-end transparency along the production chain for products and assets via both advanced software and new, increasingly economical hardware like smart sensors. The second is enhancing dynamic tour planning capabilities as the door opener to the biggest potential step changes in cost and customer experience.

Get into action mode

Plan your moves with care
Incumbents should create a shared vision and gain alignment throughout the company. And they should understand customer needs in as much detail as possible in order for those needs to be translated into actionable steps.

Build momentum with early wins
To implement successfully, they should take one step at a time, create momentum, and realize quick early wins. Top priority should be given to crucial initiatives that promise immediate payoff – without hindering bolder moves or investments in cutting-edge technologies.

Know the players
Managing both internal and external stakeholders is crucial. Everyone from staff to leadership to the regulators needs to understand the vision and the roadmap – as well as the benefits the transformation will bring – if they are to understand the necessity for change. Incumbents need to become competitive parcel players if they are to sustain the core business and deliver universal services in the most economical way.
**Time for the next move**

**State of play: the market**

Many postal incumbents have a proud history of decades, and even centuries, as major state institutions. Yet digitization is rapidly changing the way people throughout the world perform the two key activities touched by postal networks: communicating and shopping.

The mail business, once the golden goose of many incumbents, is now declining due to unceasing, fundamental shifts in markets. While mail still accounts for around 40 percent of the global postal revenue pool, volumes of physical mail have dropped by 30 percent or more from their historical peaks across all major markets, according to our calculations.

New opportunities generated by advertising mail and government services, such as identity management, may increase mail revenue in the future, but they are unlikely to reverse the broader volume trend. By 2025, we expect the traditional mail business to shrink by another 25 to 30 percent from 2018 levels.

At the same time, the e-commerce megatrend is bringing rapid and sustained growth to the parcel market. A projected EUR 8 trillion market opportunity in 2025 from a retail perspective, global e-commerce has increased almost twenty-fold since 2000 and is projected to grow at around 10 percent p.a. across developed regions to 2025. A broad range of market dynamics support this growth, as new regions (e.g., sub-Saharan Africa, Eastern Europe), new consumer segments (e.g., the elderly), new product verticals (e.g., furniture), new channels (e.g., social media platforms), and new occasions (e.g., hyperlocal “instant” shopping) are introduced to the online shopping universe at scale. In fact, online retail will outgrow brick-and-mortar retail expansion by five times from 2016 to 2021 and account for 25 to 30 percent of total retail by 2030, vis-à-vis 9 percent today.

The best news is that parcel logistics – from pickup to delivery – are steadily becoming the most crucial enabler of that growth, given that an estimated 70 to 80 percent of all e-commerce purchases are delivered via networks rather than picked up in-store. Growth is particularly dynamic in Asia, where retailers and logistics players are increasingly at the forefront of global service innovation, thanks to massive investments. For instance, Alibaba has pledged to invest north of USD 15 billion in technology research and development from 2019 to 2021.

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1 IPC Global Postal Industry Report, www.ipc.be, November 2018
2 Solving the Inner-City Challenge 2018, Triangle, www.triangle.eu.com, June 2018
3 South China Morning Post, “Alibaba to spend more than US$15bn on technology research with launch of collaborative academy,” July 20, 2018
Huge differences in e-commerce parcel rates among countries, translating into major growth opportunities for less-developed markets

**E-commerce-relevant parcel penetration, 2017**

<table>
<thead>
<tr>
<th>Parcels per capita</th>
<th>Vietnam</th>
<th>India</th>
<th>Malaysia</th>
<th>Thailand</th>
<th>Indonesia</th>
<th>Italy</th>
<th>Sweden</th>
<th>Singapore</th>
<th>Belgium</th>
<th>Switzerland</th>
<th>Netherlands</th>
<th>Austria</th>
<th>Ireland</th>
<th>US</th>
<th>UK</th>
<th>Germany</th>
<th>China (tier 1)</th>
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<tbody>
<tr>
<td></td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>1</td>
<td>1</td>
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<td>6</td>
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<td>9</td>
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<td>12</td>
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<td>15</td>
<td>21</td>
<td>22</td>
<td>24</td>
<td>&gt;70</td>
</tr>
</tbody>
</table>

**Less mature markets**
- ~1 - 2 parcels/capita

**Moderately mature markets**
- ~10 parcels/capita

**Mature markets**
- >20 parcels/capita

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1. "E-commerce-relevant" is defined as domestic B2C parcels, with speed typical for e-commerce shipments in the given country.
2. Shanghai and Beijing, assuming 70% B2C share.

SOURCE: McKinsey
And 3 of the 13 online-commerce-related businesses featured in Fast Company’s “World’s 50 Most Innovative Companies 2019” are based in China or Southeast Asia. By 2021, we estimate that China alone will represent 45 percent of the global e-commerce market, up from 36 percent today.

Less-mature markets also represent a major growth opportunity today, as indicated by the stark differences in e-commerce parcel penetration rates among countries. While mature markets saw 20 or more parcels delivered per capita in 2017, moderately developed markets saw only around 10, and less mature markets only 1 or 2. Catch-up developments generated by significant changes on both the demand and the supply sides are inevitable – in fact, they are already happening (see Exhibit 1).

State of play: the incumbents

The two starkly contrasting trends of mail and parcel market development have forcibly shifted the center of gravity for postal services. The global volume ratio of letters to parcels declined from 13:1 in 2005 to 4:1 in 2015; by 2025, it is expected to reach 1:1 parity (see Exhibit 2).

Incumbents are uniquely exposed to this development: as by far the dominant players in mail today, their usual mail-to-parcel volume ratios, which are higher than the global average, can be expected to drop from close to 10:1 as of 2015 to around 3:1 by 2025.

Exhibit 2

Parcels will grow from a small fraction by volume to 1:1 parity with mail by 2025

Source: Transport Intelligence; UPU; industry experts; McKinsey

How to win in the age of e-commerce
New challenges push incumbents to the tipping point
Postal incumbents have actively dealt with this relentless market shift for years, facing three types of rivals along the way:

— Expanding, formerly B2B-focused parcel specialists and express integrators (e.g., DPD, GLS, Aramex), which are tapping into e-commerce as a new growth vertical and have adapted their original offering to varying degrees, both in terms of convenience features (such as advanced track and trace) and pricing

— Start-ups (e.g., Postmates, Deliveroo, Instacart), which have usually entered the market with a specialized value proposition tailored to specific verticals (such as groceries) or geographies (such as urban areas) on the back of growth financing

— Forward-integrating e-tailers (e.g., Amazon, Alibaba/Cainiao, JD.com) that have taken over aspects of the support logistics beyond fulfillment, including sorting, linehaul, and last-mile delivery.

Their success against these interlopers has been mixed. Looking at the top 20 postal markets globally by volume, around half of the incumbents have managed to transfer their market leadership in mail to parcel, while the other half have lagged behind their new rivals.

Challenges ahead
Irrespective of incumbents’ success to date, the market is changing quickly, even as incumbents remain burdened by legacy costs and traditional ways of doing business. And their competitors are not going to wait. Three components of the market in particular are leading the changes: consumers, retailers, and new B2C parcel competitors.

Consumers
Consumers today expect ever-faster, more transparent, and more convenient delivery of their parcels, at constant or falling prices. Despite the proliferation of higher-value delivery forms, including same-day delivery, around 70 percent of consumers expect e-commerce deliveries to be free. And they are continually expanding the product categories for which they will shop online, including furniture and groceries.

Retailers
Simultaneously, the online retail market is becoming more concentrated. E-commerce supergiants Amazon, Alibaba, and JD.com alone now account for approximately 40 percent of online purchases globally, dominating seven of the world’s ten largest e-commerce markets. Their counterparts in most of the remaining markets are equally large, including Flipkart in India and eBay in South Korea. Only Russia has yet to reveal a dominant market leader. These retail leaders expect to be able to offer a broad and fast-growing spectrum of delivery options to their customers, including innovations such as time window delivery, advanced track and trace, in-flight redirection, pickup at home, and new access options such as parcel lockers and smart locks. In fact, many of these innovations have, in just a few years, already become market standards.

New B2C parcel competitors
It is increasingly difficult for incumbents to cover the cost of these innovations, given that transforming B2B- and express-parcel players and VC-funded start-ups (think Postmates, DoorDash, and Instacart, which have raised USD 3.9 billion in funding since 2011 and are now eyeing the non-food retail market) are willing and able to burn through significant amounts of cash to secure a slice of the B2C parcels market. They are doing so by forgoing short-term profits in return for revenue growth or by undercharging customers for shipping, as they benefit from cross-selling other services. As consumer expectations continue to rise, they are increasingly unwilling to assume the additional costs themselves. E-tailers, in particular, are pressuring their logistics partners to cover the costs in order to compensate for the e-tailers’ lost shipping fees and keep their unit economics intact. The increasing size and sophistication of these online retailers vis-à-vis their logistics partners means they can gain the concessions they desire – if only via the implicit and growing threat that they will either insource their logistics or take on multiple third-party logistics.

Universal truths
These trends will be visible to a different degree in different parts of the world, but there are at least four universal truths faced by postal incumbents today (see Exhibit 3). Two of these we discussed earlier: increasingly demanding consumers and steadily growing competition.

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5 E.g., Pitney Bowes Global Ecommerce Study 2018, www.pitneybowes.com, March 17, 2019
In addition, we find that incumbents everywhere face legacy costs that undermine their competitiveness. While decades of doing business the same way may be the basis of deep and lasting trust from consumers and shippers, these legacy behaviors also give rise to structural cost disadvantages. In fact, postal incumbents’ labor costs are often some 20 to 40 percent higher than those of non-unionized rivals, such as DPD or Hermes in Europe, driven by wage and benefit commitments as well as rigid workforce models that restrict flexibility, undermining productivity.

Often among the largest domestic corporate employers, postal companies also face understandably high public scrutiny and find it hard to cut costs. Their agility is further impeded by regulations concerning the universal service obligation (USO), which often still require them to provide extensive and frequent coverage across the whole country at a regulated price point.

And finally, incumbents’ digital capabilities lag behind those of their new e-commerce rivals. Postal incumbents are not “digital-first” players. Often stuck with expensive and complex legacy IT systems, incumbents’ speed and agility in introducing digital innovations is limited. Rigid corporate cultures that are often slow moving and risk averse add to the challenge. In addition, incumbents frequently lack a rigorous and focused digitization plan that goes beyond innovating for the sake of innovating. This is true even in regions where they can watch the new kids on the block erode their former primary sources of competitive advantage.

As much as these truths pose challenges, they also offer catalysts for change, laying out the future battlegrounds that postal incumbents must, and can, win – if they play the right way.

Exhibit 3

Postal incumbents face 4 universal truths today

<table>
<thead>
<tr>
<th>E-commerce consumer: shoppers are demanding, especially regarding price</th>
<th>Competition: the growing products face fierce competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>70% of consumers prefer the cheapest delivery form, which is usually free</td>
<td>Incumbents’ parcel market share¹</td>
</tr>
<tr>
<td>TNS, Pitney Bowes shopper studies</td>
<td>McKinsey estimate based on EU countries’ regulatory publications</td>
</tr>
<tr>
<td>[40] Others [60] 100%</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs: legacy costs are a high burden for incumbents</th>
<th>Capabilities: incumbents are not digital natives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit costs for parcels – urban areas</td>
<td>Forbes top 100 digital companies 2018</td>
</tr>
<tr>
<td>McKinsey estimate based on operators’ investors presentations and press articles</td>
<td>Forbes</td>
</tr>
<tr>
<td>+ 30 - 40%</td>
<td>1 Amazon</td>
</tr>
<tr>
<td>Competitor Incumbent</td>
<td>42 Alibaba</td>
</tr>
<tr>
<td>46 JD.com</td>
<td></td>
</tr>
<tr>
<td>74 Zalando</td>
<td></td>
</tr>
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</table>

¹ Incumbents’ parcel market share varies between countries, typically in the range of 20 - 40% $

SOURCE: Kantar TNS E-shopper barometer report 2017; Pitney Bowes Global Ecommerce Study 2018; IPC Global Postal Industry Report 2018; Forbes; McKinsey
The tipping point
The tipping point for incumbents is therefore here and now. We can look for analogies in other industries, such as video rentals, travel agencies, and taxi services for some understanding. More importantly, however, we can see recent and sizable forward integration moves by e-commerce giants across the globe that show that the logistics value chain is, to some extent, “up for grabs.”

In fact, once these giants reach a certain level of traction and maturity, their advantages in consumer insight and access, product delivery, digital operations, and organizational agility will trump the incumbent benefits of network scale and experience. Forward integration of these supergiants’ own volumes alone, barring the launch of offerings to the broader market, can place a large chunk of the e-commerce logistics market out of reach for postal incumbents, putting their current average market share of 20 to 40 percent at significant risk. We estimate that up to 60 percent of global B2C parcel volumes could be captive to e-commerce giants by as early as 2025.

Amazon is likely the most prominent example to Western readers. The company long appeared to insource its parcel logistics only in the absence of a strong and reliable partner, such as an incumbent or a parcel specialist. More recently, Amazon Logistics, Amazon’s in-house shipping service, has assumed operations in several countries with highly developed logistics markets, including Germany and the US, at significant scale. In the US, for instance, Amazon now offers free same-day delivery for its Prime members across more than 8,000 cities and towns, primarily on the back of its own Amazon Flex logistics network, which hires delivery drivers and subcontractors to third-party courier companies on an as-needed basis. This offer goes hand in hand with a heavy investment in assets, including a bulk order of 20,000 delivery vans for the US market in September 2018, a four-fold increase over the planned purchase volume of 4,500 vans announced only three months prior. In addition, the company has formed partnerships and made several acquisitions, including that of local parcel delivery companies such as Yodel in the UK and Colis Privé in France.

Amazon is insourcing the last mile of deliveries as well as merchandise returns at scale to support its own transactions. However, Chinese supergiants JD.com and Alibaba (via its logistics arm Cainiao) are already one step ahead: they have expanded to also offer last-mile and return solutions to the broader market. With first tests started in Los Angeles in early 2018, Amazon may soon follow. The supergiants would then be challenging postal incumbents worldwide for a B2C parcel logistics revenue pool worth around USD 270 billion in 2017 (see Exhibit 4).

Postal incumbents must heed these warning signs. Even as the e-commerce supergiants are taking steps to meet an increasing share of their logistics needs in-house, they are laying a foundation to serve the market more broadly. The rationale behind this trend is a combination of cost savings by providing in-house rather than external logistics, including cherry-picking an increasing number of high-density zip codes, and more direct access to the end customer, including better control of the end-to-end customer journey.

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7 “Amazon tests delivery in Los Angeles, shipping shares sink,” Reuters, www.reuters.com, February 9, 2018
E-commerce supergiants are entering the battle for B2C logistics, a revenue pool worth ~ USD 270 billion in 2017

<table>
<thead>
<tr>
<th>Value pool</th>
<th>Size of the global e-commerce revenue pool¹ USD billions</th>
<th>Supergiant activity</th>
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<tbody>
<tr>
<td></td>
<td>Amazon</td>
<td>Alibaba,</td>
</tr>
<tr>
<td>Enabling (web) services</td>
<td></td>
<td>Cainiao</td>
</tr>
<tr>
<td>Web services</td>
<td>~ 55</td>
<td>‣</td>
</tr>
<tr>
<td>Payment/fraud</td>
<td>~ 30</td>
<td>‣</td>
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<td></td>
<td></td>
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<tr>
<td>Outbound B2C logistics (incl. cross-border)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-fulfillment</td>
<td>~ 90</td>
<td>‣</td>
</tr>
<tr>
<td>Linehaul domestic</td>
<td>~ 15</td>
<td>‣</td>
</tr>
<tr>
<td>Linehaul international</td>
<td>~ 10</td>
<td>‣</td>
</tr>
<tr>
<td>Last mile</td>
<td>~ 115</td>
<td>‣</td>
</tr>
<tr>
<td>Returns</td>
<td>~ 40</td>
<td>‣</td>
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<tr>
<td>Σ</td>
<td>~ 270</td>
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</tbody>
</table>

¹ Total costs of e-commerce merchants, both in- and outsourced

SOURCE: Industry experts; McKinsey
To turn the tables, postal incumbents should begin by following a simple mantra: grow in parcel or go. Only by capturing a significant share of parcel market growth will the champions of yesterday become the champions of tomorrow. Their past success has, after all, been built on scale, which has fed their unrivalled brand images, long-standing shipper relations, and network synergies — all of which have, in turn, served as generators of both top-line and bottom-line success.

To grow in an increasingly competitive market, they need to step up their game significantly. And this is not a matter of timing or perspective: postal incumbents around the globe need to embark on, or accelerate, the necessary transformation right now. As e-commerce supergiants and other forces change the way the game is played, three winning tactics will be the postal incumbents’ lifelines. They must first earn the right to innovate, then build the right capacity, and, finally, create an innovation engine.

Earn the right to innovate
Continuous efficiency improvement has been a routine business activity for postal incumbents for the last 10 to 15 years, and it has yielded a consistent 1 to 2 percent improvement p.a. for most. This level of improvement, however, is becoming ever harder to achieve, and at the same time, ever more mission-critical in view of current market dynamics. So, what can be done to achieve a real step change in efficiency? Rather than immediately jump at futuristic fantasies of drones and delivery droids, incumbents must go where it hurts to further optimize their current operations, working to improve operational excellence in processing, transport and delivery, and pickup. There are seven levers at the foundation of this effort. These seven levers call for a sizable end-to-end optimization effort within current operations across frontline as well as overhead activities (back-office and operations support). As such, incumbents can drive a 20-percent reduction in total costs and earn “the right to innovate” (see Exhibit 5, following page).

1. Processing: continue to drive automation and standardization
A mix of lean optimization, second-wave automation, and product redesign can significantly cut operating costs and increase productivity. Through a combination of these measures, in fact, some incumbents have managed to increase processing capacity by as much as 60 percent within their existing infrastructure.

Lean optimization
Lean optimization maximizes value while minimizing waste and should be used to establish standardized processes, improve resource planning and allocation, and create a companywide performance tracking system.
Second-wave automation
Second-wave automation, which expands the scope of existing automation or extends automation to new activities, can be an optimal response to changing market conditions such as rising labor costs in emerging markets. Mail can be processed with higher degrees of efficiency, enabling a higher degree of centralized walk sequencing (up to 100 percent of letters and flats) and reducing the cost of last-mile preparatory work. Indeed, some postal incumbents have long deferred additional investments in what appears to be a declining business. Yet in many countries, even after digitization fully kicks in, incumbents will have significant volumes of mail, such as official documents, direct-marketing mail, and prints that they need to produce with the highest possible efficiency: the reductions achievable through automated and centralized mail walk sequencing often produce a positive business case. In parcel production, automation can increasingly be used in bulk unloading and loading, intralogistics, and the handling of bulky items. For incumbents, staying on top of this question is especially important in the face of today’s rising competitive standards, as greater automation can make up for limited past investments and automation rates that are not currently best in class.

Product redesign
Product redesign is an area many postal firms have not touched in recent years, at least not with a focus on costs. The following three product-related initiatives can provide quick wins:

— Adjusting the dimensions of small parcel products to fit the mail stream and use the sorting capacity left idle by the mail decline

— Reducing the promised delivery speed on some products to use sorting capacity throughout the day or to balance workloads between days

— Giving customers the incentives to change product delivery conditions or revising product specifications to enhance machine-sortable rates; alternatively, simply raising the price of shipments that predictably require manual sorting interventions, such as with bulk parcel surcharges.

2. Transport: use smart planning and asset ownership
In linehaul transportation – the movement of freight between distant cities – asset utilization represents a key challenge; postal incumbents should therefore review their transport planning and asset ownership carefully.

Transport demand in many networks primarily occurs during short peak periods, typically in the late evenings and early mornings. As a result, individual trucks can sit idly for as much as 60 to 80 percent of the time. Given that 50 to 60 percent of transport costs are fixed (e.g., truck capital costs, maintenance, and even driver wages), money is wasted when trucks sit idly. Through more agile network planning, however, incumbents can increase their vehicle utilization rates. One postal incumbent identified savings potential as high as 10 percent of total transport costs by moving from regional to central transport planning and reorganizing dispatch times slightly to allow a combination of multiple tours on the same vehicle.

In terms of asset strategy, many postal services have taken steps to centralize their transport operations, allowing capacity to be shared either between business units or with external customers. And outsourcing will likely be a preferred option for many, in particular for smaller postal services, especially in an increasingly tight labor market, given that the reduced overcapacity more than compensates for the higher cost per kilometer. In fact, in some cases, outsourcing has yielded savings of 10 to 20 percent of overall transportation costs. And while the world’s leading postal services may have superior recruiting access due to their brand names and may decide to keep or even bring certain activities in-house, especially in times of driver scarcity, small postal services will most likely lack such advantages over their prospective outsourcing partners.

Less obvious opportunities also exist in fleet management and transport operations to optimize both material and labor efficiency. A standardized fleet and docks, for one, allows for easier vehicle swaps and enables more flexible transport planning. Additionally, improved lifecycle management aims to reduce the fleet buffer through streamlined maintenance and higher availability and to optimize replacement cycles to cut repair costs. In another example, a preventative maintenance program at Royal Mail has delivered a reported 25 percent improve-
### 7 short-term key initiatives in operational excellence can enable up to 20% cost reduction

<table>
<thead>
<tr>
<th>Total costs Indexed to 100</th>
<th>Direct levers</th>
<th>Overarching levers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>After</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>-20%</td>
<td>-10</td>
<td>-17</td>
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#### 7 key initiatives

- **Processing**
  - Continue to drive automation and standardization

- **Transport**
  - Use smart planning and asset ownership

- **Delivery and pickup**
  - Optimize delivery and pickup economics

- **Overhead**
  - Revamp support and planning process rigorously

- **Footprint**
  - Drive rigorous network redesign

- **Labor model**
  - Overhaul wages and flexibility

- **New operating models**
  - Use radical operating model changes

Source: McKinsey
7 short-term key initiatives in operational excellence can enable up to 20% cost reduction

**Examples**

- Apply lean approach and standardized letter and flats sorting machines/processes
- Product-related redesign (e.g., fit small parcels into mail stream, incentivize clients to change product conditions or increase price)
- Optimize coding and reading of handwritten addresses
- Use daytime processing and idle mail capacity for small parcels
- Increase rate of automation (e.g., up to 100% walk sequencing letters/flats, separation of letter/flat streams)
- Use 2nd-wave automation of parcels (e.g., bulk unloading/loading, intralogistics, bulky parcel automation)

<table>
<thead>
<tr>
<th>Direct levers</th>
<th>Overarching levers</th>
<th>Key enablers: regulatory management, labor flexibility, data and digital strategy</th>
</tr>
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<tbody>
<tr>
<td>~ 17</td>
<td>~ 14</td>
<td>~ 9</td>
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<td>~ 10</td>
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**Processing**

- Move from regional to central transport planning
- Apply static and dynamic transportation schedule planning
- Optimize asset strategy (in- vs. outsource, shared capacity)
- Improve fleet and transport operations (e.g., streamline loading/unloading to increase driving time, standardize fleet/docks)

**Transport**

- Leverage joint delivery of mail and parcels where possible
- Drive frequent delivery route redesign (e.g., varying delivery district cuts throughout the week, move towards a continuous performance-based and local approach)
- Introduce new delivery methods (e.g., e-bikes, e-trikes, motorbikes, park and loop)
- Apply new outsourcing of parcel delivery (e.g., for peak season)

**Delivery and pickup**

- Increase rate of automation (e.g., robotic process automation, artificial intelligence for process automation, smart workflow) and apply process standardization in general overhead functions (e.g., HR, Finance, Legal)
- Overhaul and digitize operational planning processes (e.g., workforce planning, route and district redesign, vehicle administration)

**Labor model**

- Optimize special networks (e.g., cancellation of air network)
- Consolidate mail sorting centers/depots as well as access and delivery points

**Overhead**

- Reduce the cost per FTE without changing the number of FTEs, e.g., no mail distribution on a fixed bank holiday, optimize FTE mix (e.g., students vs. temps), reduce absenteeism and increase retention rate
- Change structure of delivery workforce (e.g., part-time, shorter hours)
- Overhaul negotiation strategy with unions
- Increase typical operational KPIs from Collect to Distribution (e.g., volume sorted per man-hour)
- Outsource certain parts of the operation (e.g., national distribution, counters and collections, based on strategic make-buy framework)

**Footprint**

- Change service levels (e.g., 2- to 3-day delivery, XY model, adjust speed or local quality levels)
- Optimize resource utilization across the network (e.g., mail flow control, dynamically move product between networks)
The endgame for postal networks

1. The endgame for postal networks

2. The endgame for postal networks

3. Delivery and pickup: optimize delivery and pickup economics

With around 60 percent of operational costs in delivery and pickup, incumbents need to push the boundaries of joint delivery and look for continuous system-led improvements.

The synergies created by joint delivery of mail and parcels are a key competitive advantage for postal incumbents today. Postal companies therefore need to continually evolve their analytical understanding of how to integrate these product streams in a flexible way. As mail volumes decline and distances between mail delivery stops increase, today’s foot and bicycle routes gradually move to other transport modes that are more suited for joint delivery. Flexibility thus becomes a key success factor. For example, joint delivery may or may not make sense depending on the time of year or the day of the week. Mondays often see significantly lower delivery volumes than other weekdays and could benefit from an expanded joint delivery strategy. In our experience, using such synergies to their fullest can reduce delivery costs by up to 10 percent. Moreover, new delivery methods such as e-bikes and e-trikes can increase the capacity of the mail round significantly and as such, expand the scope for joint economics.

Postal services should frequently resize their delivery districts and redesign their routes to address structural changes in last-mile work composition. These changes can include, for example, decreasing the stop factor as letter mail continues to decline, or increasing the number of attendance calls for small parcels delivered through the mail network. New planning solutions can help reduce the time and energy required to review and improve routes. Several players have begun to build foundations for dynamic routing systems, for example. These systems should provide significant cost savings once they reach maturity, albeit after substantial initial investments.

Indoor preparation of parcel delivery takes up less than 20 percent of the total delivery time (indoor and outdoor) for best-in-class players. However, for some incumbents, this process is inefficient and takes away productive time the delivery driver could spend outdoors to deliver parcels. Applying rigorous standardization, lean processes, and automation across the key activities (e.g., unloading, sorting, loading) helps to reduce the indoor preparation time and as such, helps to increase the time outdoors to deliver more parcels per day. For some incumbents, streamlining indoor preparation has led to savings of 5 percent on total delivery costs.

4. Overhead: revamp support and planning processes rigorously

So far, many postal incumbents have focused on the reduction of frontline labor cost, but often there is significant room for improvement in overhead functions as well. Overhead costs typically make up around 20 percent of the total cost base, driven primarily by labor costs for both traditional support functions (e.g., HR, Finance, IT) and operational planning (e.g., workforce management, route and district design, vehicle administration, payroll). Labor costs usually account for 50 to 60 percent of the total overhead cost.

There are many inefficiencies in the way labor planning is usually done today: poor, unreliable forecasts, fragmented legacy system landscape (uncoordinated systems, heavy reliance on manual, Excel-based work), inefficient checking and approval for new data, or overlapping task profiles (e.g., similar planning work is done centrally and in the field). Robotic process automation (RPA) and cognitive technology (e.g., smart workflows, character recognition, machine learning, natural language tools) can help to automate many of these tasks, e.g., there are often significant automation opportunities (sometimes up to 50 percent) in individual planning tasks, especially in activities related to data collection and processing (e.g., real-time forecasting of workload, granular work schedule optimization, vehicle administration or payroll management).

Applicability is by no means limited to administrative or back-office activities (e.g., Finance and HR management), but also extends into frontline-related overhead (analyze production data, clean and prepare product data, etc.). The postal industry can learn from leading industries in deploying automation. Leading finance players, for example, are conducting robotic transformations across all functions. Some postal
incumbents have already started down this path, with one reducing actual workforce planning activities by 50 percent by using more digitization and process improvements.

This automation journey will be about much more than just cost reduction: it targets complexity (e.g., simplification through automation), quality (e.g., from spot checking to 100 percent quality control), and flexibility (e.g., ability to operate 24/7 and scale with demand) and labor shortage.

5. Footprint: drive rigorous network redesign

Joint operations should not stop at delivery. As mail volumes decline, leading players have begun to integrate the handling of letters, flats, packets, parcels, and pallets across other production steps. For example, most leading incumbents, even when operating fully separate mail and parcel linehaul networks, are trying to process small parcels in the mail network. This releases processing capacity for larger and heavier items and helps to protect existing economies of mail processing and transport. Several incumbents are even running dedicated small-parcel automation projects within their existing mail infrastructure to realize this kind of benefit.

Postal operations can also use excess capacity on the mail side left behind by declining volumes to consolidate their network and closely select mail sorting centers, depots, and access points—or, as noted earlier, to further centralize and automate the sequencing of mail and flats in order to reduce delivery preparation costs. For some American and European players, such targeted network reductions have led to savings of 1 to 2 percent on total operating costs, which translates into a substantial profit increase in a traditionally low-margin business.

6. Labor model: overhaul wages and flexibility

Incumbents’ legacy-driven 20- to 40-percent labor cost disadvantage cannot be erased by optimization and rationalization alone, as powerful as they are. Active management is also required.

Relative wage levels can likely improve only slowly and indirectly, in close collaboration with union partners, whether through a rejuvenation of the workforce, partial outsourcing, or even advocacy on behalf of specific regulations, such as for higher minimum wages in tight labor markets. Productivity, in contrast, is a matter of resource utilization and agility. Here, recruiting flexible part-time workers, at least for peak load buffering, is worth scrutinizing, both in terms of systems, such as for digital and advanced analytics in workforce management, and in terms of productivity-based KPIs.

By taking such steps, best-in-class incumbents have been able to reduce their labor cost disadvantage vis-à-vis low-cost attackers by more than half. Between 2010 and 2017, for example, PostNL realized corporate staff cost reductions of 25 percent through different measures, according to company reports, of which a large part was the introduction of a part-time model for all mail delivery staff.

7. New operating models: use radical operating model changes

Postal incumbents are universal service providers and remain subject to firm regulation. This, in many cases, limits them to streamlining themselves within their current operating model—taking the steps detailed in the previous five sections.

However, regulators are starting to show signs of a response to plummeting mail volumes and rising competitive dynamics, which may open the door to more radical operating model changes. If we take the example of Denmark, a front-runner in mail digitization, we see that physical mail volumes have dropped more than 80 percent from their historical peak. In response, Danish regulators have not only granted the local incumbent, Post Nord, headroom for repeated mail price increases, but have also been lenient about service levels. Until 2009, Post Nord had been delivering USO mail five days a week. This decreased, first to three (from 2009 to 2018) and since 2018, to one. At the same time, the promised maximum delivery time has risen—from D+1 to D+3 and, ultimately, to five days.

As other markets from Italy to New Zealand follow the same path, postal incumbents should be prepared to capitalize on favorable regulations by, for example, adapting their operations across the network to utilize newly available off-peak sorting capacity or to pool resources with the parcel stream in transport and delivery. This is an opportunity for postal players to think about their ideal network setup, which does not necessarily mean lower service levels for mail products, but certainly means more operational flexibility.

Build the right capacity

The demand for parcel sorting capacity is rising quickly as volume demand continues to grow, delivery standards rise, and both daily and seasonal
production volumes become more volatile than ever – with e-tailers far less tolerant to service failures (see Exhibit 6). With an internal optimization effort complete, the next consideration for incumbents is therefore that of building the appropriate capacity, including optimizing the geographic network, as well as moving to the right type and level of automation.

Participating fully in e-commerce growth and enjoying the economies of scale that result from running large parcel volumes through a fully automated production pipeline will require building this capacity at scale – and mean a major and continuous investment effort for many incumbents.

The benefits, on the other hand, in terms of both operating costs and quality can be profound. Successful players have managed to reduce their overall cost base by another 5 percent on top of streamlining existing production. In addition, a fundamental network redesign provides the opportunity to improve service quality substantially. In fact, in typical cases, 75 percent of the delivery-speed-related quality issues found in today’s networks, such as insufficient national next-day coverage, are structural in nature and hard to resolve through purely operational measures.

With parcel volumes growing at an annual rate of up to 10 percent, postal incumbents at this point need an ambitious long-term plan as much as a solid production base for the here and now. This plan needs to allow for sufficient flexibility to adapt quickly to changing market trends and volume development, as well as make a conscious trade-off between costs and quality in line with the overall business and product strategy.

Leading postal and parcel players have all embarked on this journey, and the levels of investment make clear that they mean it. DHL invested EUR 750 million in its parcel network in Germany between 2010 and 2016, increasing sorting capacity by around 70 percent, and has since announced additional major investments in, for instance, opening of further “megahubs” scheduled to open in 2019 and 2020. The US Postal Service also

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* Deutsche Post business profile; press releases

**Product, automation, and integration strategies as the 3 key elements of network strategy**

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<td>Protecting joint last-mile economics by utilizing shared infrastructure and routes where possible</td>
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E-commerce growth, rising delivery time standards, and seasonality as drivers of parcel capacity demand

Amazon founded in 1994

> 9 days

Introduction of Amazon Prime ~ 8 days

Decentralization of warehouse/fulfillment capacity ~ 5 days

Prime Now: free same-day delivery for Prime members ≤ 2 days

US e-commerce market size
Index (2,000 = 100)

Source: Forrester; McKinsey

Seasonal pattern of parcel volumes
Daily parcel volume, indexed, median Jan - Oct 2009 = 100

Source: McKinsey analysis
announced network and infrastructure investments and projects average annual capital cash outlays of USD 2.4 billion between 2018 and 2028, against USD 1.4 billion yearly average in the past decade.9

To get these significant, long-term investment decisions right, postal companies need to answer three questions: What capacity is really needed when and where? What level of automation is right? And what’s the best way to integrate parcel capacity into the existing network if we are to protect joint production economies?

What capacity is needed where?
The starting point of any capacity extension project should be to ask how much capacity will really be required and how it should be distributed geographically. The answer will depend on the projected volume growth, of course, but more specifically, on detailed projections of market and customer demand.

Incumbents should therefore begin by generating a highly detailed understanding of the ways in which demand is moving, including delivery speeds and trade lanes. The split between same-day, next-day, and deferred parcel volumes, for example, is a major determinant of capacity needs. Countries such as Germany, with predominantly next-day volumes (approximately 84 percent of total volumes) have much higher capacity requirements than countries such as the UK, with approximately 40 percent next-day, because all sortation activity has to be performed in a narrow overnight time window. E-tailers’ fulfillment strategies and service expectations are another key driver of capacity needs and, more importantly, the ideal geographic distribution of sort capacity. Providing next-day or even same-day service for most of the country from central national fulfillment centers, as is common in the UK, creates the need for highly concentrated processing capacity. Distributed and regional models, as seen in the US and Germany (e-tailers with distributed fulfillment networks, same-day delivery provided only within a limited radius of the drop-off point) generate much more distributed capacity needs. Service level agreements – in particular for peak days – determine the buffer capacity that needs to be built into the network and can drive capacity requirements up further.

As a second step, incumbents should connect their findings to their product strategy, using them to decide where they want to engage. If they wish to leave the same-day delivery market to more specialized players, for example, they have no need to build dedicated capacity near large markets. A clear-cut product strategy is essential to ensure that market requirements are met and all network implications are understood (see also sidebar, following page).

What level of automation is right?
Automation will play a central role in all postal incumbents’ efforts to extend parcel capacity. A key reason is that in many regions, annual growth rates will simply push parcel volumes up to levels that a purely manual sorting process cannot handle reliably. Another is that automated processing helps reduce sorting and handling costs to a level unachievable with a manual setup. This is especially important for postal incumbents burdened with an inherent labor cost disadvantage or facing a local labor shortage.

Incumbents should not only determine when parcel volumes justify automation, but also the type of automation, which is linked to other aspects of network design. For example, handling large and small parcels costs effectively requires very different sorting setups. Running a letter-sized parcel through a large-scale sorter that handles parcels of up to 30 kilograms will easily cost three times what sorting it manually might cost. Incumbents will also require different automation setups for loose-loaded and cage-loaded transportation, a decision that depends on many factors, including distances and volumes in linehaul transport, average parcel sizes, and the need to share transport capacity with other product streams.

Automation is not necessarily limited to the core sorting process. Even in today’s state-of-the-art parcel hubs, there is still typically room for improvement through the extension of automation to ancillary processes. These include unloading, loading, and intralogistics, all of which remain predominantly manual, typically accounting for up to 70 percent of production costs. Technology for unloading, in particular, such as automated cage or swap-body tipping and 3D-singulation of items onto the main sorter, is becoming increasingly mature, which calls for parcel players to redefine their target automation levels and corresponding technology roadmap.

The optimal rate of automation will differ between

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9 United States Postal Service, congressional report

The endgame for postal networks
markets. In high-wage regions, investments in standardized sorting technology will typically be amortized in less than five years, while the math may not yet work in developing countries, where labor is still relatively cheap.

With the growing demand for same-day and instant delivery, automation will also gradually move into delivery offices, turning them into de facto “mini parcel hubs.” In fact, DHL has already extended its local same-day delivery to about 35 million inhabitants in Germany as a result.\(^\text{10}\)

If a large-scale automation effort is the right way forward, incumbents should standardize the approach and the technology in each of their facilities to keep down investment costs and simplify their network operations. In best-practice setups, players base most of their facilities on a standard blueprint, while tests of new technologies in just one or two dedicated facilities in the network inform the broader technology rollout plan. This approach reduces planning and implementation costs and allows the sharing of engineering capacity and expertise across sites, even as it encourages experimentation.

**What is the best way to integrate parcel capacity?**

Setting up an entirely new parcel facility with state-of-the-art automation is a multimillion dollar investment. To control costs, players should seek opportunities whenever possible to increase capacity without investing in new facilities – making targeted investments to increase the capacity of existing installations. Brownfield optimization always trumps greenfield investment.

Incumbents can often increase the throughput of existing facilities by identifying process bottlenecks, such as in unloading, infeed, loading, or intralogistics, and by addressing these bottlenecks with relatively small investments. One postal player was able to increase capacity by over 60 percent in its existing network due to such investments. In addition, incumbents can use some of the capacity freed up by declining mail volumes or during off-peak times by load balancing between mail and parcel networks. They can, for example, send small parcels through the mail network or steer as much volume as possible – through pricing, for instance – into a later-than-next-day product.

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\(^{10}\) Deutsche Post website, Capital Markets Day presentation 2018

**Integrated network planning**

The best way to gain a comprehensive understanding of future capacity requirements is through a model-based integrated network optimization. Conducted in a best-practice manner, this will entail three key elements:

- Multiple volume scenarios (around overall growth, mix between mail and parcel, split between different parcel sizes and service levels) are aligned between commercial and operational functions. Modeling is done at a sufficient level of granularity to ensure full buy-in of operational functions, ensuring concerns about the feasibility of a network design and achievable cost and quality don’t become a roadblock.
- The whole strategic planning process, including evaluation of alternatives, is made a top-management responsibility, ensuring full cross-functional collaboration and alignment behind the crucial decisions being taken.

Several postal services have successfully followed this approach. In one case, a European incumbent used advanced modeling to understand the ideal location for standardized sorting centers in a new parallel parcel network, taking into account transportation and sorting activities in this new network as well as the ability to stream parcels back into joint delivery facilities in less-active, rural parts of the country.

In another case, a different European player used network modeling to understand which mail centers could reduce their operations in line with mail-volume declines as well as the best way to integrate the remaining production into the parcels network.

In a third case, a Southeast Asian incumbent used modeling to understand the optimal locations for new automated parcel facilities, looking specifically into an achievable ground-based next-day service, given the challenging traffic situations in some major metropolitan areas.

And in a fourth case, a North American postal operator built an end-to-end model of its joint production network that allowed it to continuously test the efficiency of its design against emerging market and volume scenarios.
As mail volumes continue to decline, postal players should also establish or maintain shared operations between mail and parcel whenever possible. On the transport side, sharing assets in collection and distribution is the most obvious and readily available opportunity. Players faced with larger and more challenging geographic conditions can also share long-distance linehaul capacity between product streams, sometimes even incorporating further business lines, such as less-than-truckload shipping, or the transportation of relatively small freight.

The most important synergies are typically seen in operating joint last-mile operations, in which mail and parcels are delivered from the same route in less densely populated rural areas, and mail and smaller parcels are delivered from the same route in the denser mail delivery networks whenever possible. In fact, joint delivery economics are often the single most important advantage a postal incumbent has over its competitors; this advantage is therefore worth protecting at all costs. Thus, parcel capacity and automation should always be integrated into the network in a way that allows continued joint last-mile operations. This will entail, for instance, syncing the timing of parcel and mail networks, creating flow-control systems to dynamically stream parcels into different modes of delivery, and evolving joint last-mile operations to allow for the convenience features required in parcel delivery, such as arrival time forecast and dynamic rerouting.

Create an innovation engine

As consumer and shipper expectations continue to change at a rapid pace, incumbents need to be faster and bolder to innovate than their competitors. Innovation is the key to upholding and increasing their relevance vis-à-vis B2B and B2C customers and raising the bar on value creation. When incumbents can create synergies with existing core operations and assets, innovation can also form the basis for a new and defendable competitive advantage.

From discussions with C-level postal executives around the globe, we understand that awareness is not an issue. The need to innovate, and in particular to get automation right, is widely understood. Yet a lot of postal companies struggle to get the innovation engine going. The transportation sector has ranked for years as one of the least digitally advanced industries in various studies, including McKinsey Global Institute’s Industry Digitization Index.11 As referenced earlier, a lack of “digital DNA” along with legacy infrastructure and rigid processes are often to blame.12 To set clear targets and achieve them with maximum quality and speed, we propose the following iterative three-step innovation process: start with a consumer-centric product strategy; then craft a digital and data strategy that pushes foundations, the core, and new frontiers; and, finally, initiate change based on new structures and processes.

Create a consumer-centric product strategy

To create an innovation engine, postal companies need to decide where to start – and what to avoid. This decision-making process should start with a consumer assessment. What are the key consumer journeys and currently unmet or emerging needs that the incumbent’s innovation roadmap must support? What are the crucial services of the future, both existing and new, and what are their volume and price point outlooks?

Answering these questions will help to create and test a clear product strategy for mail, parcel, and adjacencies. As far as even the most developed products go today, such as standard letters or next-day parcels, incumbents should explicitly discuss how innovation can make them better – whether in terms of customer experience, reliability, or cost. For new products, from hybrid mail and same-day parcel delivery to two-man handling and cross-border logistics, the question of what it will take to succeed will be even broader and more open-ended.

The results of these efforts will include a shared understanding of priorities among existing and new products; a first, long list of possible innovation use cases; and a starting point for discussing interdependencies, both in the sense of synergies and of conflicts among possible investment targets.

In one innovation example, USPS successfully integrated digital tools into its mail service to create Informed Delivery. Piloted in 2014, 

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11 “Digital America: A tale of the haves and have-mores,” McKinsey Global Institute, December 2015
Informed Delivery allows customers to see scanned images of their mail before it is delivered. The service had already reached nearly 8 million users by the first quarter of 2018. In another example, Posti, the Finnish incumbent, was among the first postal companies in the world to begin developing a digital tracking system for letters and other addressed deliveries. The company’s goal is to expand the lifecycle of paper communications by converting letters into a digital consumer communications channel.

Craft a digital and data strategy that pushes foundations, the core, and new frontiers

Once their product strategy is clear, incumbents should determine how best to achieve their goals. With various potential use cases, technologies, and systems to trade off, incumbents should have a rigorous debate to inform an underlying digital and data strategy — one that encapsulates foundations, the core, and new frontiers (see Exhibit 7, following page). Topics of discussion should include how best to support the chosen products or help new offerings grow, where the company should place its biggest bets, and where it needs more time to test and learn.

Foundations

Digital innovations require solid groundwork. Like other long-established companies, postal incumbents often struggle to capitalize on their existing data, which is stored in a fragmented and complex system landscape. We understand that migration to a state-of-the-art data architecture can be a necessary enabler for innovations such as dynamic volume forecasting. At the same time, even in today’s heyday of cloud-based infrastructure, incumbents will need to maintain and gradually enhance their legacy systems — not least to meet data security requirements. They should therefore design and deliver a “two-speed IT concept.”

Core

To unlock the potential value of enhanced data access, postal players will certainly need to invest in advanced analytics and optimization systems. They can do so through external purchase, such as for basic route optimization algorithms, or via in-house development, such as for customized tour planning software.

Use cases can be clustered into two broad buckets, each of which should feature prominently in discussions and in the final innovation roadmap: customer experience design and value chain design.

Customer experience design focuses on customer-facing, digitally enabled features that improve the immediacy, personalization, or general look and feel of the offered services. For example, DPDgroup has supported its push into the European B2C parcel markets with the continuous enhancement of its track-and-trace capabilities. With its DPD Precise service, launched in 2016, customers of participating retailers receive a delivery prenotification text or e-mail from DPD that allows them to actively select a specific one-hour delivery slot on the day of their choosing. A former B2B specialist, DPD managed to grow its B2C revenue contribution from 28 percent in 2014 to 37 percent only three years later.

Value chain design, in contrast, looks at the digitization or automation of underlying processes. Digital operations are essential to creating transparency around product and equipment flows and manipulating them in real time. To enable end-to-end estimated time of arrival (ETA) transparency, for instance, incumbents need both smart assets (which track delivery vans and, increasingly, other equipment, such as roller cages) and track and trace (which tracks parcels and mail). Scans at every processing step feed into a central information platform to create a real-time picture of product flows across the network. Information on shipments is played back to sorting systems and sorting center personnel in real time through smartphone apps or head-mounted displays, informs the loading of delivery vans, and assists the delivery person in dynamic tour planning to meet target time windows.

Two key priorities also hold the twofold promise of boosting customer experience and digitally enhancing underlying processes along the value chain, and they should top any postal CXO’s agenda right now. The first is raising end-to-end transparency via both advanced software and new, increasingly economical hardware like smart sensors. The second is enhancing dynamic tour

La Poste Group annual reports
planning capabilities as the door opener to the biggest potential step changes in cost and customer experience.

Exhibit 7

A digital and data strategy is a key element of the innovation engine
New frontiers

“New frontiers” is a collective term for many of the hot topics in logistics innovation today, from drones and robotics to block chain and artificial intelligence in logistics. Postal incumbents need to establish and frequently update their understanding of these innovative fields.

The major incumbents often pilot new technologies in meaningful ways. They use investments and partnerships, even setting up dedicated innovation facilities to test and learn. Examples include Hermes’ recent partnership with Starship Technologies to test delivery robots in London or FedEx’s research partnership with Peloton Technology to test platooning, in which a convoy of driverless trucks essentially follows a single driver-operated vehicle.

All postal incumbents, big and small, should have new frontier opportunities in their innovation portfolio to prepare themselves for tomorrow – while balancing these opportunities with the foundations and core innovations that enable success today.

Emerging theme worlds

- Drones and robotics
- Smart sensors

Customer experience design

- Digital front-end processes
- Integrated physical and digital CX
- CRM (cross-selling, upselling, retention)
- Digital marketing and social media
- Call center matching

Value chain

- Automation of back-end processes
- Digital workforce planning and HR analytics
- Route optimization

Technology

- System and data architecture (2-speed IT)
- Big data and advanced analytics
- Devices

- Connectivity
- Data security
- Data sources

How to win in the age of e-commerce
Parcel and postal markets have clearly reached the point at which incumbents have no choice but to transform their operations and networks. At the same time, these incumbents are also at the start of an exciting transformation journey – one that can help them win the B2C e-commerce race.

Of course, major transformations touching on the operational core of the business are not easy to get underway. With so many options to consider, it can be very difficult to come up with a comprehensive plan that feels execution-ready. In our experience, three guidelines can help the business move into action mode: plan your moves with care, build momentum with early wins, and know the players.

Plan your moves with care
To move the entire organization to action, postal incumbents should, as noted earlier, create a shared vision for the future of the company. With that shared vision in mind, they should gain alignment on clear, tangible initiatives that will move the company forward.

They should begin with informed discussions on operations and network transformation, first establishing some ground truths about the here and now. Otherwise, there is a risk that discussions will end in debates on common beliefs rather than in fact-based arguments. These truths can be supported by market research on topics such as current volume trends and emerging customer requirements. As we know, customer needs in particular are essential to understand in as much detail as possible if the business is to translate these needs into operational requirements.

Benchmarks against international peers can then help to quickly identify areas for improvement. Lessons learned from other relevant industries, such as airlines, port operators, and infrastructure companies, can bring additional inspiration. And taking an 80:20 approach – focusing on the most important 20 percent of the company’s goals – will help to prioritize these areas without getting lost in the details. The chosen top initiatives should then be analyzed in detail to understand cost, efficiency, and quality trade-offs along the value chain.

When turning the identified initiatives into a roadmap for transformation, incumbents should begin with a short-term focus that can create momentum. Longer-range forecasts tend to become blurry, making it much more difficult to derive implications for the optimal operational setup. And as the transformation progresses, the market will evolve in unpredictable ways; any transformation roadmap will have to evolve with it. All executives should therefore agree on a top-down, fact-based change story that can be cascaded down through
the organization. At the same time, retaining flexibility will be essential. Incumbents should therefore consider likely scenarios at the outset and test the short-term roadmap against them to ensure that the options they have chosen are sufficiently scalable and adaptable.

In the spirit of “form follows function,” incumbents should overhaul their existing organizational structure and processes to support the new strategic roadmap. They should approach this overhaul with cross-functional teams, rather than in functional silos. In addition, they should appoint clear project owners; these project owners should then define rough quantitative targets for both operational and business KPIs, although they should not necessarily elaborate on business cases. Also, budgets should be linked to intermediate targets rather than allocated in one big chunk, enabling an agile “try fast, fail fast” culture.

The abovementioned two-speed IT principle should help protect legacy IT that holds sensitive data while the business establishes agile capabilities, rather than allowing one system to be prioritized over the other.

In addition, incumbents should split longer-term projects into stages, establish a “challenger board” to review progress at relevant decision points, and continuously recalibrate priorities.

Build momentum with early wins

An operational transformation is among the most resource-intensive endeavors any company can undertake. It is crucial to know the limits of the organization and not overburden it by pushing for too much change at the same time. All prioritized initiatives should therefore be executed one – or a few – at a time. And it will be paramount to build momentum with critical wins early on; these wins can provide the financial space necessary to continue investing as well as building credibility and generating stakeholder engagement.

Assessing the value and feasibility of individual initiatives will be helpful; however, knowing whether an idea will really work in practice is hard. Ideas such as a new approach to delivery operations may promise a significant unit-cost reduction on paper, but operational constraints or a lack of labor flexibility can diminish the effect in the field. Learning from peers and competitors – or leading players in other relevant industries – will be important in order to set the bar high and define implementable change.

Investments should be staged and priority given to those most crucial to the overall network, in particular those that promise immediate payoff. This approach should not be a hinderance to making bolder moves and investing in cutting-edge technologies, however. Best-in-class players follow a test-and-learn methodology and continuously pilot new technologies in selected experimental sites, giving them the operational experience they need when it is time to roll out these technologies at scale.

Know the players

Any successful transformation will require superior stakeholder management across functions and regions if the entire organization is to be brought along for the ride. To support this effort, postal players should start the transformation with a few smaller pilots to establish a nucleus of operational excellence and give the organization confidence that a larger transformation is possible. In addition, they should communicate the vision and roadmap to the entire organization, ensuring that everyone in the workforce understands the benefits the transformation will bring to the company and to every employee. Maintaining internal transparency will help; companies should therefore surface any issues sooner rather than later.

In addition to managing its internal stakeholders, incumbents will also need to work closely with the regulator, as it needs to understand both the immediate necessity for change and the long-term vision for the company if it is to be fully supportive. Turning a postal incumbent into a competitive parcel player is not just a “grab for new revenues” move, but an important step in sustaining universal services and ensuring they are delivered in the most economical way.
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