THE STATE OF COURIER, EXPRESS AND PARCEL - 2020 AND BEYOND: CHALLENGES AND PERSPECTIVES
The surge in e-commerce is continuing to fuel a growth in parcels in the Courier, Express and Parcel (CEP) sector and significantly transform the industry. Changing patterns of customer behaviour and expectations call for those providing parcel sortation and delivery services to make adjustments to meet these demands. On top of the growth, the global COVID-19 pandemic is now acting as an accelerant of the transformation. As such, these combined forces of e-commerce growth and pandemic impacts can be seen as major catalysts for innovation in the CEP industry.

It is therefore imperative that the CEP sector steps further into the new digital age. In adopting digital tools and processes that go beyond sortation optimisation, CEP businesses can transform their operations and significantly improve their platforms. With the assistance of data analytics, machine learning, data sharing and collaborative efforts with their customers, startups and sortation suppliers, CEP companies can bring about the transformation required to meet evolving e-commerce demands and expectations.

In this report, we explore the ways e-commerce has transformed the CEP business and how the global COVID-19 pandemic has accelerated this transformation. We take a look at what the postal operator, PostNord, has learned from this hastened transformation, the importance of digital technologies to PostNord and how it plans to lock in profitability in the future. We discover ways in which CEP companies can adapt to this e-commerce landscape and deliver effective transformation. Finally, we look at the role of innovation and startups in providing the digital assistance that the CEP industry needs to handle these shifts in e-commerce.
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CHAPTER 1: E-commerce trends, consumer expectations and the impact of the pandemic
Transformation of e-commerce

Before the events of 2020, the CEP industry had been undergoing a significant transformation. In fact, it had already been in a state of disruption and uncertainty for several years. The key factor driving this transformation has been the surge in e-commerce and changing customer expectations - both B2B and B2C. Customers, both end-consumers and industrial, have come to expect to receive shipments faster, with more flexibility and at a lower price. Source: Accenture.

On the B2C side, new consumer shopping behaviour has been emerging. It has become apparent that online consumers don’t care who delivers their goods, as long as they receive them quickly, cheaply and reliably. Consumers have been increasingly seeking flexible delivery in terms of when and where they get their shopping items. Most have come to expect it free of charge and are only prepared to pay a premium for faster delivery and high-value items. Dynamic pricing for parcels has been deemed unacceptable – customers have expected to pay the same for shipping expenses, regardless of the season. Source: PwC.

The B2B side has been no different. Industrial customers have been under strain in terms of operational efficiency, profitability and performance. They too have expected faster time-to-market, lower defect rates and customised products. Indeed, in some manufacturing industries, the pace of changing customer expectations has been even faster than that of the private end-consumer.

This has been due to the so-called ‘Industry 4.0’ and the arrival of the industrial Internet of Things. Whether it has been producers of consumer goods, cars, planes or industrial equipment, B2B customers have been forced to redefine how they interact with their customers and how they organise their supply chains. Source: PwC.
What has all this meant for the CEP industry? For most hubs and distribution centres, this increase in e-commerce has led to significant growth in the last six consecutive years. The jump in the share of parcel and logistics in total revenue for most hubs reflects this growth.

As the UPU reports, the share of letter post in the total revenues of postal operators dropped in the years 2008 to 2018, to the benefit of parcels and logistics, which jumped over the same period (see Figure 1). Source: UPU

So, while CEP has represented a smaller segment in the larger logistics industry, it has been a fast-growing segment, with the major part of its market being linked to B2B transactions and a third of its revenues attributed to B2C. Source: PwC

**Growth of the CEP industry**

Figure 1 - Source: UPU official statistics. (Notes: Simple average by year at the global level.)
Healthy long-term projections

As a result of this growth, the CEP market is expected to reach USD 422.07 billion by 2024. Indeed, in July 2020, Businesswire reported that the CEP market is poised to grow by USD 100.19 billion during 2020-2024, progressing at a CAGR of about 6% during the forecast period.

The value of the market was USD 321.88 billion in 2019.

Stephan Heessels, Divisional Director of the Centre of Competence Logistics Systems at BEUMER Group, agrees with these figures. He has seen substantial growth over the last six years for both B2B and B2C and considers the projected growth figures to be sustainable, noting that the pandemic has had a big effect.

Even when Covid is brought under control, the change of attitude on the part of consumers and the pattern of consumer behaviour will be sustainable.

Stephan Heessels, Divisional Director of the Centre of Competence Logistics Systems at BEUMER Group

Figure 2 - Source: Technavio
The State of Courier, Express and Parcel - 2020 and Beyond: Challenges and Perspectives

The pandemic as a disruptive accelerant

Clearly, the transformation of the CEP industry had been well underway before the impacts of the pandemic started to show. However, there can be no doubt that the pandemic has accelerated this transformation. Indeed, some experts say that the crisis has accelerated the development of online purchasing activity by nearly three years.

Where the consumer once had been averse to buying goods online, the pandemic’s impact has left consumers no other choice. Accenture’s Freight and Logistics division has predicted that even when events return to normal, such changes will be permanent. Customers will continue to buy more online and those who rarely bought online will make it a common channel.

What has surprised me the most has been the complete explosion of the entire online business. Experts say that this crisis has accelerated the development of online by nearly three years, which is really massive.

Katja Busch,
Chief Commercial Officer at DHL
GLOBAL VS REGIONAL VARIATIONS
The impact of the pandemic on the CEP industry, however, has not been uniform. Experts, such as Stephan Heessels of BEUMER Group, suggest that while the projected growth figures are global, e-commerce growth will vary on a regional level. Heessels believes that those regions hit less severely, economically, will continue to experience success in their e-commerce development. However, some regions will be more fragile; protectionism and weak financial situations will damage this e-commerce expansion.

As different countries have different mixes across these segments and are subject to different macroeconomic and social contexts, the effects of the crisis may vary geographically.

THE SHIFT FROM B2B TO B2C
The sustainability of the offset brought on by the pandemic may also vary according to market segments. While B2C shipment volumes have been very high (pre-Christmas peaks were felt in March, April and May 2020), B2B shipment volumes have declined significantly due to the slowdown in the economy. Early in the crisis, for example, Royal Mail UK experienced significant falls in B2B volume in some markets. These falls were not offset by higher consumer volumes.
Hence, those CEP providers serving B2B businesses may continue to see significant decreases in traffic whereas businesses with many B2C customers will not. Brian Hansen, Systems and Proposal Director, Logistic Systems at BEUMER Group, believes that as many providers service both sectors within their businesses, they may witness further growth on one level but decline on another. Accordingly, even though overall e-commerce remains stable, there may be many internal fluctuations within different companies.

Directors of CEP companies are going to have difficult decisions to make in how they reorganise their organisations.

Brian Hansen, Systems and Proposal Director, Logistic Systems at BEUMER Group
VARIATIONS IN DOMESTIC ONLINE ACTIVITY

It’s clear that the global pandemic has impacted domestic parcel flows in various ways. This can be seen in evolving online retail orders which correlate to the demand for parcel post. As the UPU reports, some countries have seen a strong increase in domestic online orders, while others have seen the same variable drop dramatically. Although the figure shows the trend for only ten countries, it would appear that e-commerce sales have increased in higher income countries, while stabilising or even dropping elsewhere. Source: UPU

Figure 3 – Source: UPU
Continued growth despite the pandemic

Despite the pandemic and its variant impacts, CEP shipment volumes continue to rise. Take Germany, for example, where CEP shipment volumes are expected to rise to around 4.5 billion shipments by 2024. Source: BIEK

For the CEP sector, this means that market vendors will be focusing more on growth prospects in fast-growing segments while maintaining their positions in slow-growing segments. Source: Technavio Research

Businesses will be watching for patterns and changes and how they should shape strategies moving forward.

“What this means for the CEP market is that certain players will want to grab this opportunity of growth. If they have the power to invest, these service providers will want to aim for volume. In turn, suppliers, such as BEUMER Group, will be in a strong position to harvest this demand for high capacity,” says Brian Hansen of BEUMER Group.
CHAPTER 2: How PostNord handled the e-commerce tsunami
Over the last six consecutive years, CEP businesses have felt the significant impacts of the e-commerce tsunami at both the B2B and B2C levels. The arrival of the Covid-19 pandemic has accelerated this transformation in e-commerce.

PostNord, a national postal organisation that services the Nordic region, has certainly witnessed the surge in e-commerce. Christian Østergaard, Senior Group Strategist IT-production/IoT/AI at PostNord, talks to BEUMER Group about how PostNord has responded to this transformation.

**BEUMER GROUP:** Firstly, can you describe how PostNord experienced the impact of the pandemic?

**ØSTERGAARD:** The pandemic impacted the different countries of the Nordic region differently so there were some regional variations, but overall, we experienced an increase in volumes as end-consumers moved their shopping activities online. As a result, we’ve essentially been running in Christmas mode continuously since March. But we had the production capacity to deal with these high volumes.

We’d already been working a lot with AI to help forecast increased e-commerce volumes, but the pandemic broke all our models when lockdowns around the world came into effect. It was difficult to get a grip on the forecast models with changing end-consumer preferences and the breakdown of the international supply chains. We were forced to figure out how the models should work, which segments were moving and which were not. In addition, we had to meet end-consumer demands for Covid appropriate practices such as contactless delivery.

**BEUMER GROUP:** How has the e-commerce surge, accelerated by the pandemic, highlighted the importance of digital technologies for PostNord?

**ØSTERGAARD:** Digital transformation has become more accepted. Take, for example, the end-consumers’ demands for contactless delivery. Meeting this demand has meant streamlining this part of the process and providing digital modes of delivery. Technology is clearly of utmost importance now. Computers are now capable of utilising the data we’ve been...
collecting for years and this surge has actually given us even more data which gives us greater possibilities.

BEUMER GROUP: What are the possibilities or opportunities for digital transformation for PostNord?

ØSTERGAARD: The connectivity we now have across the supply chain, from end to end, presents a real opportunity. It enables integration with our big shipper customers so that we’re even starting to enter into their production plans. For example, using their data, we can arrange for our shipper customers to pre-sort their parcels which cuts out a step in our sortation process. In this respect, we’re becoming more and more like a manufacturing company and I think this principle will be an opportunity more and more in the future. Connectivity provides possibilities for complete digital change.

Another possibility comes from all the data we capture from mobile phones, tags, trailers and distribution vehicles. We can connect all the parts of our process, rather than each operating as separate silos. We think this will benefit not only our operations but the operations of our shippers and end-consumers also.

BEUMER GROUP: How will PostNord ramp-up its transformation timelines to successfully realise these opportunities?

ØSTERGAARD: We’re going to utilise AI tools more and more in the future and seek to enhance the data. We’ll be looking for better information and data certainty. Our technologies are increasingly able to connect and evaluate the data, so the forecasts of in-coming volu-
processes by actually cleaning the data all the way through the process to ensure we have the best possible vision of what’s going to happen. This is what we are working on.

**BEUMER GROUP:** How does PostNord see itself being able to improve upon the end-customer experience through digital transformation?

**ØSTERGAARD:** Being able to integrate with our shippers’ production plans will make for timely collaboration so that we can achieve better delivery to the end-consumer. Digital connectivity also gives the end-consumer the possibility to alter their needs, such as preferred speed, time and place of delivery. And increasingly, the data actually allows us to anticipate our end-customers’ needs before they know it themselves. For example, we have already done a proof of concept that we can make predictions about which end-customers will be home or not.

**BEUMER GROUP:** What do you consider to be best practices for PostNord when it comes to meeting the future with digital technologies?

**ØSTERGAARD:** Best practice definitely involves the utilisation of AI, the ability to analyse data and forecast modelling. With AI we have been able to analyse shipper customers at a very detailed level and create forecasts down to a distribution centre level. Another best practice is the use of technology and data for planning and security purposes. We can monitor the transport of high-value items, for example, and provide security with dongles and geofencing.

**BEUMER GROUP:** Which digital services and solutions will help drive success for PostNord?

**ØSTERGAARD:** Pushing decisions to the edge - a new computing paradigm where algorithms enable edge devices to communicate autonomously and deliver information seamlessly to decision-makers - will definitely drive success and it’s already happening. With geofencing, for example, we can notify an end-consumer when a vehicle is approaching its delivery destination, rather than rely on a driver. In the same vein, it is the sortation system itself, such as BEUMER Group’s systems, that alerts operators that machine parts are soon due for maintenance.

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**GEOFENCING**

A geofence is a virtual perimeter for a real-world geographic area. A geofence can be dynamically generated - such as a radius around a point location - or can be a predefined set of boundaries (such as a school zone or neighbourhood boundary). If a vehicle or person equipped with a device crosses a geofence, a warning is sent to the user or operator via SMS or email. The use of a geofence is called geofencing.
Another solution that will drive success is working on wasted capacity. We tend to always work on theoretical and operational capacity but wasted capacity is becoming more and more important. We need to be using digital tools to better utilise capacity and sweat our assets.

**BEUMER GROUP:** What are some quick wins for PostNord on how to grow operational capacity or effect potential process improvements?

**ØSTERGAARD:** The quick wins will be working with wasted capacity, as mentioned, but also enhancing the last mile orchestration because that’s where most of our costs lie. We need to be using data to predict how to sort the parcel volumes, how to transport them and how to distribute them. This means capturing the data as early as possible so that forecasts can be made and solutions for the last mile will be in sync with the incoming volumes.

**BEUMER GROUP:** Let’s talk about strategies for the future. How will PostNord work to protect itself and lock in profitability during uncertain economic times ahead?

**EDGE RULE-BASED DECISION-MAKING**

The edge could be a device, such as a dongle mounted on a distribution vehicle, which makes the vehicle take a rule-based decision by passing into a defined range from an end-consumer, let’s say 300 metres.

As soon as the distribution vehicle enters within 300 metres of the end-customer, the dongle sends a signal that triggers a message (SMS or email) to the end-customer that the vehicle is close to making a delivery.

This type of “edge rule-based decision-making” will reduce delivery time; the end-consumer will be ready for the delivery and could even meet the delivery vehicle instead of waiting until the driver rings the door.
ØSTERGAARD: Even though this is a low-margin industry, there’s incredible growth. But that growth also provides plenty of opportunities for new players to disrupt the sector. We need to protect ourselves through constantly developing the way we work. This means embracing disruption - you can’t fight it, it’s going to happen. And this applies to our suppliers also. If they are fighting disruption, they’re going to be providing us with a worse product. It also means maintaining good communications with the end-customers and the shippers because we need to be on top of both of them. And of course, we have to remember convenience is king and this has increased even more during the pandemic.

BEUMER GROUP: Does PostNord use a particular framework or methodology to stay ahead?

ØSTERGAARD: Although we’re a national provider, we’re big and we’re leveraging this, as well as the direct contact we have with the end-consumer. We’re also working on standardising operations across the Nordics. Whenever we look at developing technology now, we only consider developments that can be utilised by all across the Nordics. Close to 40% of our parcels are cross-border, so obviously, this is very important. It’s also a matter of clearly defining our core businesses and being much clearer on our priorities.

BEUMER GROUP: What is it that PostNord would like to see from its suppliers going forward?

ØSTERGAARD: The most important thing is data sharing - our suppliers should be able to incorporate new technology that involves utilising and sharing data. Data will power the future so data sharing will be beneficial for both of us. We each have an interest in knowing in advance, for example, that a sorter part needs to be maintained. Also, we like suppliers to push our boundaries. To be asking us ‘have you thought about this?’, ‘what about that?’ - asking us questions we hadn’t thought about.
CHAPTER 3:
How can CEP adapt to the changing e-commerce landscape?
The accelerated e-commerce landscape brings with it both challenges and opportunities for the CEP sector. So, what are the particular challenges confronting CEP businesses around the world in meeting these accelerated changes in e-commerce? What are the solutions CEP businesses could develop to meet these challenges?

**Challenges in adjusting to current e-commerce drives**

To meet the transformation that e-commerce surges have brought upon them, CEP businesses are being forced to keep up with developments. Christopher Kernhan is the Managing Partner at the global management consulting firm, Pacific Consulting Group, and he is a leading consultant to the logistics sector. Of the e-commerce transformation, he says:

"It is no longer enough to focus on small optimisation gains on a network designed for stable, almost static, operations when operating in a dynamic world, both structurally and in terms of the pace of growth."

E-commerce changes not just year to year, but month to month, Kernahan says.

> Online operators with new product offerings are looking at new modes of contracting and executing delivery. The delivery of fresh food during the pandemic is a case in point - legacy postal parcel operators do not ordinarily have capabilities to manage cold chain but are now having to adjust on the fly.

Christopher Kernahan,
Managing Partner at Pacific Consulting Group

At the same time, CEP businesses are facing competition from startups and dynamic businesses who want to push the boundaries of what innovations in technology can offer, simply because customers are demanding it and don’t understand why legacy players can’t deliver it. The transformation involves a huge change of mindset for CEP companies.
SHIFTING GEOGRAPHICAL DYNAMICS
A further challenge is the geographical impact that e-commerce has had on distribution, and how distribution centres and hubs should respond. Brian Hansen of BEUMER Group explains:

"Whereas in the past, big cities with dense populations were driving e-commerce growth, the pandemic has spread the e-commerce transformation more widely, geographically. This forces CEP businesses to rethink not just their capacity but how to build their infrastructure to meet this demand."

Whether this trend is sustained in all countries is uncertain but it is certainly a development that could be challenging for the CEP companies in the coming years. Not least because many towns do not welcome the idea of large diesel-driven trucks to transit through.

OBSTACLES FOR NATIONAL POST AND PARCEL HOUSES
These challenges can be particularly hard to overcome for national postal and parcel houses. While digital transformation has become a strategic priority, adapting their organisational culture and strategy to the needs of the digital economy can be more difficult. This is because national postal and parcel businesses tend to exhibit different postal infrastructure, as well as different skills and patterns of employment.

But while commercial hubs have the advantage of being able to make changes faster, national postal houses do have the significant advantage of already having the last mile in place - their contact with the end-consumer is well established. National organisations will be able to leverage this advantage in this most important phase of production and the question remains which entity is going to move fastest or best to cover it all.
Opportunities for business development and advancement

If these are the challenges facing the CEP industry, where are the opportunities to stay ahead of the game? According to Pacific Consulting Group Managing Partner, Christopher Kernahan, the e-commerce growth (in particular, the demand for “time definite” or “next day” deliveries), has allowed CEP businesses to make the crucial transition from letter-heavy to parcel-heavy operations financially viable and realise a real future for their businesses.

All CEP players can seize these types of opportunities enabled by technology, says Kernahan. They can capture more of the e-commerce growth, giving customers easy access while also giving their workforces roadmaps for the future.
CHAPTER 4: The keys to a successful digital transformation
So how do CEP companies deliver effective transformation in this new and ever-changing landscape? How can they exploit these opportunities, remain relevant and not be left behind?

To seize the opportunities that are now presented to them, says Christopher Kernahan, Partner of Pacific Consulting Group, CEP companies need to establish their burning platform, initiate changes through technology, change their mindsets and bring their underutilised workforce with them.

The role of data in effective transformation

The best way that CEP operators can deliver effective transformation is utilising the data they have from their operations. To put it simply, says Kernahan, they must be ‘good at data’ to meet minimum customer expectations.

Data will give CEP operators the ability to understand demographics and where they need to place their sites. It will also help identify traffic patterns and the growth and changes in demand for particular products. Those providers that really utilise their data will have real time management capabilities at their fingertips, achieving more effective network planning functions and day to day management, as well as achieving optimisations far beyond what has been available in the past.

Data analytics also enable CEP providers to embark upon making ‘digital twins’ - digital copies of physical systems to perform real-time optimisation. Frank Yu, a consultant also with Pacific Consulting Group, explains it this way: Replicating operations in a digital environment, such as routes, sortation and collection, allows operators to plan network changes and broader transformations more effectively. Digital twins can also be used to course-correct
operations, both in real-time and for predictive purposes. By using digital twins, operators can understand options and scenarios and the likely impact of hundreds of millions of dollars worth of CAPEX decisions before commencing the investment.

Making systems a lot smarter for such purposes as predictive maintenance will be invaluable for both CEP providers and their customers. But here, the use case becomes very important. There is little utility in investing in and building an entire digital tool without first defining the exact purpose for which the data is to be used.

**HOW MACHINE LEARNING CAN BRING ABOUT TRANSFORMATION**

A corollary of big data is the machine learning capabilities that it provides. CEP operators are well placed to develop effective machine learning tools, given the data that comes out of their operations, assets, vehicles and people. Although, operators tend to realise more benefit from expanding the availability of data across operations and assets than from tweaking assumptions and models.
Partnering with customers

One of the biggest challenges for CEP firms being effective service providers is that they are working with limited data or at least significantly less data than their customers. For example, e-commerce providers may experience massive sales spikes over the weekend but their CEP providers will not have any visibility into this until a surge of parcels arrive in their facilities on Monday morning.

One way that CEP can be adding value here is by becoming more of a partner with their e-commerce customers. Through data-sharing partnerships, CEP providers can gain insights into their volumes and are better able to prepare and plan in response. The partnership will be beneficial to both the CEP and e-commerce providers in enabling dynamic responses to consumer demands and consumer changes, and ultimately driving improved service performance.

CEP companies could further add value by packaging their data and providing insights back to their customers. Australia Post, for example, publishes an annual e-commerce report that provides insight into the state of e-commerce in Australia - what people are buying, where they are spending and so on.

Christopher Kernahan,
Managing Partner at Pacific Consulting Group

Other CEP operators can be providing similar insights to their customers or perhaps provide deeper insights to particular customers.
Servicing the trend for decentralisation

E-commerce partnerships will be more important as delivery becomes more and more decentralised. E-commerce providers are increasingly looking to build local inventories, closer to delivery points, to achieve the next-day delivery consumers have come to expect. CEP providers must collaborate closely with their customers if they are to meet these demands.

CEP industry players are already forming alliances with e-commerce providers. A simple example, explains Kernahan, is when operators establish extra line hauls in response to significant growth spikes from certain customers and the facility in place is not able to process that growth. Putting in dedicated line hauls for particular CEP customers to route around network problems is a proactive solution until the CEP provider can later invest in additional capacity. With these types of solutions, Kernahan says, CEP providers can use dynamic network solutions to work around processing capacity constraints and provide better overall service performance to all their customers.

Another example is CEP providers working with their customers to pre-sort their parcels according to a geographic location before lodgment. This enables the operator to predict and plan capacities so that some parcels bypass several of unnecessary touchpoints.
Avoiding the real risks of removing the 'middle person'

It is crucial that in retaining a place in last-mile delivery, postal and parcel houses leverage the established contacts they have with their end-consumers. CEP players need to remain relevant to the end-consumer, and working out how to operate effectively in the last mile is now key. They must work to avoid the removal of the 'middle person', which can result from outside players entering the market and dealing with CEP customers directly through smart technological solutions. The risk inherent in this removal of the 'middle person', is that CEP operators will lose their valuable direct contact with their customers and end up merely serving as utilities for these new solutions.

There is also a significant risk that the big customers of CEP providers will start to take ownership of the system themselves and in-source their sortation and delivery processes. Kernahan points to two major customers, Amazon and Alibaba, that have already started to do this.
CHAPTER 5: Innovation and collaboration
The CEP sector needs to think about new technology and how it can transform its businesses to meet the demands of this evolving e-commerce landscape. Automation has significant potential to reinvent the parcel industry and solutions such as autonomous delivery vehicles and robotic dogs will become crucial enablers in increasing efficiency and reaching consumer expectations.

Unfortunately, the lack of proper infrastructure and technology leading to inefficiency is one of the factors hindering the growth of the market.

30% of CEP investment went into other business fields such as banking, real estate, healthcare, and a variety of different sectors and only 5% went to new technology and that’s between 2014-2017.

McKinsey & Company report

Of the external investments made by CEP players over the last three years, only 5% targeted new technology.

![Share of external equity investments and M&A deals by top 20 CEP players, 2014 - 17](Figure 4 - Source Capital IQ, CB Insights, McKinsey)
Why is the sector so unwilling to invest in technology?

For some CEP players, the lack of ‘digital culture’ and training explain the reluctance to invest in the technological leap required. But even more, developing tools such as robot-delivery technology is extremely costly. In a low margin industry such as CEP, it is inevitable then that rates of investment in technology are low.

As Christian Østergaard, Senior Group Strategist IT-production/IoT/AI at PostNord put it, it takes time for an operator making multiple infrastructure investments to realise the payback.

However, at a time when new and innovative players are moving into their domain, CEP companies have to start planning to invest more of their annual revenues in technology. If they don’t, they will soon risk being left behind permanently by innovative thinking and leaner and smarter processes. A string of startups have already entered the business, promising lower costs and greater efficiency through the use of technology. This is especially occurring in the costly last mile where availability is matched with delivery through use of the shared economy. Even industry customers are entering the market and using technology to find ways to improve efficiency better than their service providers can.

It propels the operator into operational mode - focussing only on what’s just around the corner and how to achieve the next three months’ KPIs.

Christian Østergaard,
Senior Group Strategist IT-production/IoT/AI at PostNord
Redefining collaboration - going horizontal

CEP businesses need to use their peers. While traditionally, businesses were only interested in seeing their own environments working, we are witnessing a push away from this outdated model. In terms of data analytics and AI, industry players are in active conversations with each other, says Østergaard, about what is working, what is not and what is being sampled.

This is already happening, says PostNord’s Østergaard, especially in last-mile delivery. Companies such as FedEx and DHL have been partnering with national postal companies and small local players for many years. With increased connectivity, it is now possible for CEP operators to communicate across the supply chain and to collaborate more effectively with each other.

Market players operating collaboratively, rather than as stand-alone operations, can achieve huge savings if they are all connected. As Østergaard says, however, certain conditions will need to be put in place, including: some form of standard interfaces and protocols; synchronisation of hubs and networks across transport systems; and IT applications that operate interconnectedly.
**Collaboration with startups**

To compete, CEP companies need to partner with innovators to reimagine their role in the ecosystem. Christopher Kernahan of Pacific Consulting Group believes CEP operators need to be incubating the next generation of companies and learning from them. Rather than reactively adapting to these potential disruptors, he says, CEP operators would be better off taking control. This means implementing structured programmes of incubation where startups would get access to parts of CEP operators’ datasets and networks. In return, the collaboration would help build the CEP platforms to make them more valuable.
Manufacturing and innovation

When it comes to innovation, mindset counts for everything, says Christian Østergaard from PostNord. For the CEP industry, this means moving to a manufacturing mindset. Today’s parcel production and delivery is less about providing logistics than operating as a manufacturer.

Industry 4.0 and its wave of digital transformation is reshaping all manufacturing industries and is going to change the CEP industry considerably over the coming years. It represents an intersection of machine automation, processes driven by real-time data and technology-enabled workforces - brought together with enterprise-wide connectivity.

If you think of car manufacturing plants today, one no longer expects to see people. One expects to see robots. Sortation processing should be no different.  

Christian Østergaard,  
Senior Group Strategist IT-production/IoT/AI at PostNord
Massive changes in consumer behaviour, e-commerce trends and e-commerce explosions brought about by Covid-19 give CEP businesses reason to pause, learn and adapt their processes to meet the environment they now face.

Modern sorting centre optimisation takes CEP companies some way in meeting this heightened demand. However, this alone will not keep CEP operators ahead of disruptive players who are looking to capture market share - particularly in last-mile delivery - through innovative technological solutions. CEP businesses must bring about digital transformation in their operations, processes and solutions in order to remain relevant. This can be in collaboration with startups in the sector who may be able to improve upon their platforms or with their own customers in the form of data sharing and gaining access to their production plans.

CEP companies hold immense power in the vast amount of data they have or can gather. With the assistance of data analytics, machine learning, cloud solutions and a preparedness to work together with their customers, start-ups and their sortation system suppliers, CEP businesses are actually very well equipped to bring about the transformation required to meet evolving e-commerce demands and expectations.