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How **Data-Driven, Customer-Centric Leaders** are Changing the travel & Transport Industry

The travel, transport and logistics sectors are facing huge challenges, **and innovative leaders are using data and intelligence to deliver powerful, customer-centric services**

Contents

Introduction

In a turbulent world, the travel, transport and logistics industries are either battling for survival or coping with additional demand resulting from the crisis.

The global pandemic brought travel and associated industries to a halt, at a time when the sector was already facing huge competition from Internet-based start-ups with agile technology and fast, personalised customer service. There are of course some notable exceptions to this based on a rise in demand in sectors such as technology, food retail, and the supply of medical equipment and consumables.

During 2020, Mindtree interviewed senior IT leaders from across the travel, transport and logistics sectors. In this research paper, we share expertise from executives who are meeting these challenges head-on. They urge the industry to re-centre their business, people and technology investments around a customer-centric culture. Before the pandemic, customer-centric was an idea that was built on customer delight. Now, the priority has shifted slightly to making customers feel safe while living their lives and accessing travel services. Radical change has become necessary for organisations in the travel, transport and logistics industries to survive and even thrive.

As we begin to see a more optimistic outlook developing and new demands for customer centricity growing, the industry must make better use of customer data to fully understand every stage in the customer journey.

This study brings together insight into the best practices employed by senior industry executives around creating a customer-centred strategy, and the role that technology especially around data and intelligence can play in driving this transformation.

Elaine Stewart
Leader, Transport and Hospitality Europe at Mindtree.

Executive Summary

The travel, transport and logistics sectors faced unprecedented upheaval and challenges in 2020 and early 2021. Even with the vaccination programme gathering momentum it could still be several years before these sectors return to profitability, and radical change is needed to make better use of resources and manage demands, sometimes changing with very short notice.

So, what can we expect over the coming years? Domestic travel could take up to two years to bounce back, while business and long-haul travel may take many years to return to pre-pandemic levels. The pandemic has wreaked havoc on international supply chains, causing knock-on challenges for the transportation and logistics arena although this part of the industry has shown resilience and strong demand in some sectors.

Organisations hoping to emerge from this period with a thriving business must develop a laser focus on their customers. Recent research published by T2RL, in association with Amadeus, argues that there is a broad shift in the aviation industry from a product-oriented business model to a more customer-centric model focused on personalised experiences. This shift has also been seen across the travel industry, as noted in this article by Manuel Brachet, Head of Customer Success at Egencia.

Driving customer satisfaction and loyalty is critical to success.

Effective use of customer data is critical in building engagement, brand loyalty, ancillary sales and partner revenue. However, it is not always straightforward, especially where companies have legacy IT systems that were not necessarily built with a customer-centric strategy in mind.

Many organisations in the travel, transport and logistics sectors have massive volumes of data, but struggle to understand what data they hold, and how to use it in a complex IT infrastructure, to provide differentiation through service, while aligning with wider corporate needs around strategy, governance and privacy.

The good news is that early adopters report positive returns from investments in technology to utilise newly integrated data, from customers, suppliers and partners. AI and ML tools are transforming customer service with chatbots, personalised booking journeys and the ability to recognise and speed up transactions and troubleshooting.

Chapter 1:
The New, Customer-Centric Landscape

Modern customers expect businesses to treat them as individuals, with real-time access, personalised offers and 24/7 service. All this should be delivered via platforms as intuitive as those offered by Amazon and Uber, which have set the standard.

Stuart Birrell, Chief Data and Information Officer, easyJet shares emphatically "The world is shifting, and customers have very different expectations-generic doesn't cut it anymore".

"Every client wants a bespoke product," says Robert Ogilvie. To enable this, he argues that businesses need to mass-produce an operating model and environment that is lean and automated. **- Robert Ogilvie, Data Director at The AA**

What does Customer-Centric Service Look Like?

With effective use of data, travel companies can recognise returning customers, and automatically tailor booking options to create a great experience. By using data to offer things the customer perceives as valuable, the chances are greater that the customer will make a booking and have a positive experience.

This might include offering flights and seats that match the customer's preferences or highlighting add-on services. A logistics company might recognise which months are peak season for customers, and proactively offer services at preferential rates during this time, encouraging early transactions to help customers spread their workload.

The New, Customer-Centric Landscape

Why Service as a Differentiator is Challenging

Travel and transport organisations may have large, complex IT infrastructures, especially when compared to the systems of travel tech companies like Uber or Airbnb.

These systems were not typically built with customer service in mind, and in many cases can't talk to each other, with information stored in silos across multiple parts of the business. It's hard to treat customers as individuals when you can't access a complete, 360-degree view of the customer.

This complex infrastructure can lead to poor customer experiences in many cases, says **Stephan Hong, Senior Vice-President of eCommerce at SIXT.**

"Everyone who has travelled knows that there are breaks in the service you experience. You communicate with one department then get passed to another, who doesn't know what the first team is doing. All those little breaks add up and it can feel very disjointed," he says.

**Stephan Hong, Senior Vice-President of eCommerce at SIXT**

The New, Customer-Centric Landscape

Examples from Early Adopters

Some early adopters are reporting positive results from investment in customer-centric strategies.

AirFranceKLM Cityhopper is seeing benefits from better use of customer data in email marketing. For example, the airline can identify the most loyal and highest spending customers and offer them targeted special offers or packages at specific points of their journey, giving them more choice and control. "If you like water skiing or mountain climbing, then we can email you at specific points in the week to give you a special offer or package," **says Boet Kreiken, Managing Director at KLM Cityhopper.**
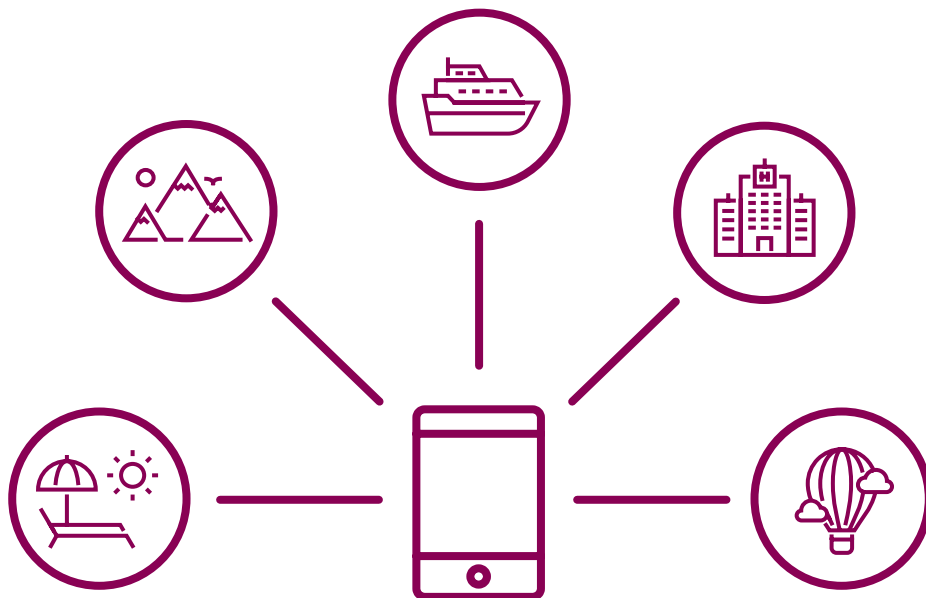
Chapter 2:
Developing a Strategy for Big Data

Achieving these results means that the transport and travel industries need to get to grips with data strategies, and bring together separate, large silos of information. It is essential for organisations to make data and intelligence a key element in the customer-centric strategy. This means understanding:

- What data do we hold about customers and how can it be integrated?
- What policies and processes are needed to provide useful access and analysis of this information?
- What technology changes will support this strategy, and how can these investments be aligned with wider strategy and policies?

We believe there are four key elements that must be part of this data strategy:

1. Privacy, Security and Data Governance

Data has become the basis of competitive advantage. And, as organisations become even more dependent on outside market behaviour and competitive forces, they must align to break any confusion that users face when leveraging data. Organisations must institutionalise enterprise data management methods and practices to ensure that customers are informed if the way their data is stored or accessed has changed and interlace it into the fabric of the organisation. GDPR, CCPA and other such regulation and compliance frameworks demand that customers know what data is collected, how it is used, and over what time period.
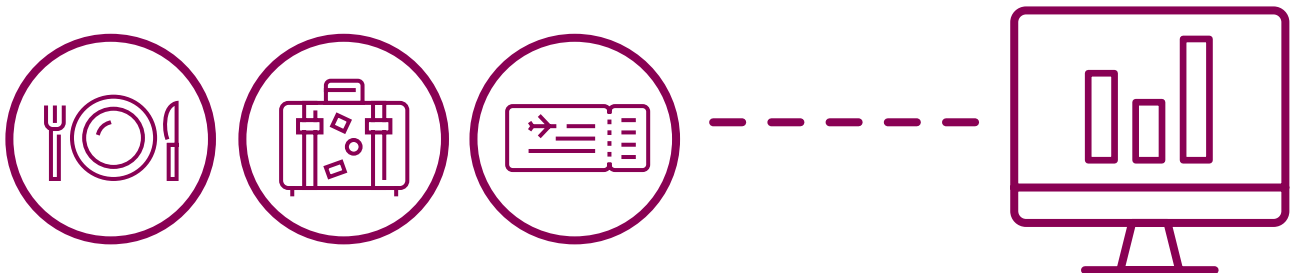
Developing a Strategy for Big Data

"Privacy is the number one priority for KLM Cityhopper, says Boet Kreiken, because the company must adhere to the very strict data protection laws in Europe. "We can register data like seat preference, but we can only use that for a certain purpose. This is a positive because the more we are trusted, the more we can share and the better service we can provide."

2. Alignment with Corporate Strategy

The second question to ask before building any customer-centric service is whether data fits the wider corporate strategy. Accelerating such strategy initiatives could be time consuming and expensive and require leaders to take a step back and reassess their initiatives. What does the company want to achieve with this information, and is there a business case to support using this data for that purpose?

Securing buy-in from senior leaders means you can be confident that the investments in new data integration, tools or platforms to deliver customer-centric services are in line with broader strategy. The business case for data integration should be revisited regularly, as the benefits of data can change over time.

Developing a Strategy for Big Data

3. Building a Business Case for Technology

As mentioned, delivering customer-centric services that rely on customer data may involve investing in new technology such as integration and analytics tools. The adoption of these tools must be carefully assessed in the same way as the underlying data – does it match governance and privacy requirements? What work will be required to prepare data to be interrogated by a new tool, or hosted on a new platform? Is there a good business case for using this tool rather than another platform or data set? How can cognitive technologies and techniques bring about significant improvements to my product or service offerings? How to speed up, simplify and manage complex calculations, routine tasks, and pattern recognitions using AI and ML?

There are many use cases that have merit. One area for proactive investment is to make journeys smoother for passengers. Stuart Birrell says It's really important to reduce the stress of travelling, especially now. By understanding more deeply what passengers find stressful, with better use of data the passenger experience can be enhanced much more proactively.

Information integration is still a huge challenge for many businesses aiming to join up the travel ecosystem. Bringing together data from disparate sources across a complex set of stakeholders is no easy task and it requires a high degree of collaboration across the travel ecosystem and the logistics supply chain.

4. Don't Forget the User Experience

In the world of Uber and Amazon, it is critical to provide users with seamless, convenient services, regardless of the technical complexity behind the scenes. Similarly, internal customers will make better use of integrated data if it is presented in a format that makes it easier for them to make decisions. Data must be detailed enough to support a decision, but not so specific that it overwhelms them with detail. It is information visualisation in the form of storytelling, from the view of persona and narratives to uncover insights, by creating high impact data visualisation and presenting information in interactive graphs, charts, and maps.

For example, the industry is seeing increasing demand for information around sustainability, including the carbon footprint of potential travel bookings. Personalised service means that your system should recognise customer preferences and respond differently based on understanding whether a customer wants to see just a topline insight into the carbon generated by a flight, or more detailed analytics based on the specific route, plane and engine involved.

Chapter 3:
Transforming the Travel & Transport Industries through Modernisation

Modernisation typically combines cultural change and technical advancement. In the travel and transport sectors, the most painful aspect may well be technology, since many established players have large technology systems developed over decades.

At Stena Line, the company has worked with the same systems and data for many years – and not all of these things are in good shape, **says Mattias Gereny, the company's Manager of Digital Transformation.** Working with huge numbers of systems across multiple countries makes data quality a huge issue, and without data quality management, the strategy falls apart.

For the past year, Stena has been implementing company-wide governance policies around customer and partner data and is now turning its attention to underlying infrastructure. "A lot of companies start with infrastructure, data lakes and BI solutions, but you end up having to redo a lot of it afterwards, if you're not doing it in a controlled way and getting your data into good shape," **says Mattias Gereny.**

The Customer-Centric Technologies Transforming Travel

As travel and transport organisations adopt a more people-centric view of business, the demand for data services will grow exponentially. One of the most exciting ways this data is being utilised is through AI and ML programmes.

Stena Line has rolled out a program called Fuel Pilots that collects data from sensors tracking weather, tonnage and core ferry systems.
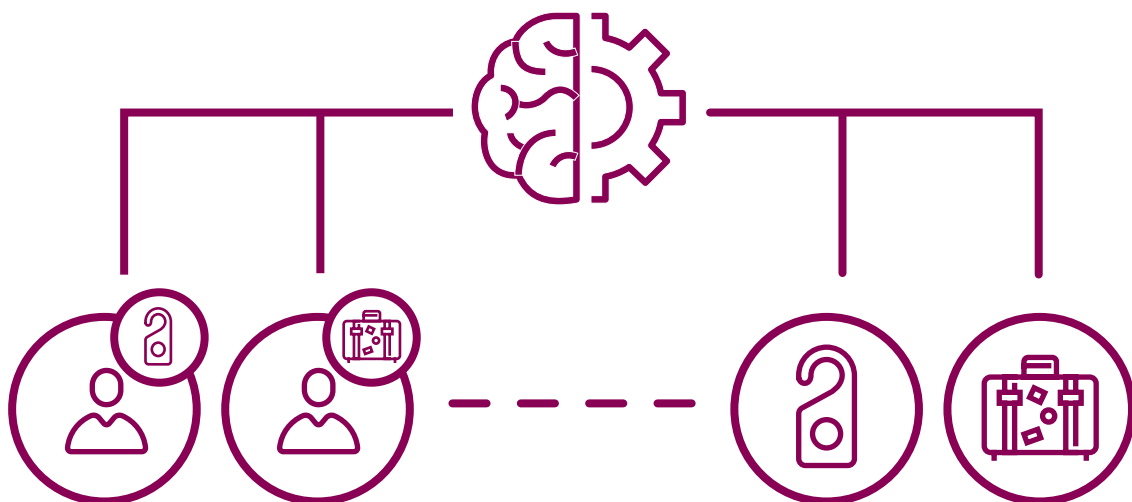
Transforming the Travel and Transport Industries through Modernisation

"The application provides recommendations for the captains to operate the ships, including the optimal route and speed, thereby saving a lot of fuel"

says Mattias Gereny, Director of Digital Transformation, Stena Line

Looking forward, the company is also working on a proof of concept for AI in marketing. "We would like to determine patterns between different customers, segments and categories, to get recommendations on what kind of offer to send to which customers," he adds.

Marketing represents a rich opportunity for AI technology in driving customer bookings, ancillary purchases and partner cross-sales. Many airlines are using AI to guide marketing interactions. For example, if a Silver status customer visits the site but fails to book, AI could be used to retarget the customer with the type of content they usually engage with, for example a video ad or customised banner. Once a booking is made, the AI can also note that the customer previously booked a hotel through the airline and offer appropriate information.

Transforming the Travel and Transport Industries through Modernisation

Machine learning takes this a step further by improving a customer's journey based on the experience of other, similar customers. Telematics also has potential to drive transformation.

"At The AA, the company launched a "Smart Breakdown" service that relies on automation and telematics to provide a better customer experience. "We have a little plug-in device that you can stick into the car and resolve all the telematics data from your car," says Robert Ogilvie, Director of Data with The AA. "It will tell you a lot of the electronic faults, although obviously it won't tell you if your exhaust has fallen off!"

Over time the hope is that this technology could evolve to the point where a telematics device could perform checks on cars, and give customers visibility of their vehicle's health, and any potential issues. "We'd like to get to the stage where the customer is able to see they are likely to break down, and we can give them the learnings to ensure they go and charge their battery, for example," **says Robert Ogilvie**

Modernising Data Ecosystems

Organisations looking to deliver this kind of insight need to reimagine their data platform to be a secure, flexible, scalable and future-ready to process the massive volumes of standardised, integrated data. According to a research and markets report, the market for data lakes is expected to grow at a rate of 27.4% over the period 2019-2024.

These centralised data repositories allow organisations to store vast amounts of structured and unstructured data, then use analytics and machine learning to deliver insights and guide better and faster decision making.

Data lakes have transformed the way CMA CGM uses data. "Years ago, our databases were how we accessed past data, and produced static reporting, but now our data lake is supporting a more dynamic strategy, and we can get into predictive analytics," says **Emilie Alba, Head of Finance Organisation & Information Systems, CMA** with the transportation firm.

Transforming the Travel and Transport Industries through Modernisation

The vision of modern data platforms promises endless visibility, but organisations must not overlook the human element.

Often, these platforms can be so vast and contain so much information, that it is essential for skilled humans to have oversight and make judgements about what should be analysed and for what purpose. "I can see huge amounts of pretty graphs, pretty pictures, lots and lots of data. But what is it telling me?" **says Tim Standen, International Supply Chain Director at global logistics and transport company Kuehne + Nagel.**

"The complexity of what you're doing is so great you can end up with data paralysis. I want to know how this helps me improve my service, my value or reduce my risk."

The advice from the IT leaders interviewed for this eBook with regard to modernising data platform is:

- Ensure platforms are well-structured, well-architected and well-maintained. You will also need to institutionalise robust enterprise data management methods, implemented from the start.
- To avoid an expensive 'swamp' where data is dumped but cannot be retrieved or remains unused, organisations must have a business case to design for scale.
- Have data governance centralised for compliance, federated for self-service. This means they ensure the quality of data and the appropriate use of that data.

Anand Rao, Consulting Director for Data & Intelligence highlights the need for really strong storytelling within your organisations:

Transforming the Travel and Transport Industries through Modernisation

"This can really help to unleash the power of your data by having the right conversations on people skills, applied AI techniques, tools and technologies to bring the findings to life. Once you have got to the point of gaining valuable insights then it's important to evangelise with enthusiasm what can be achieved for your organisation through better use of your data assets."

Anand Rao, Consulting Director for Data & Intelligence

The Potential of Cloud in Delivering Customer-Centric Strategies

According to McKinsey, spending on cloud specific technology is expected to grow at six times the rate of general IT spending during 2020. This indicates that most organisations are moving at least some systems into cloud environments.

Cloud platforms and applications offer scalability and a faster pace of change in many cases. It's certainly not just a cost-effective alternative to old-school hosting and network type activities. Many organisations have increased the pace of cloud transformation in light of the recent pandemic, with the need to support remote workers and collaboration in virtual environments.

Cloud can be invaluable in helping organisations drive innovation and better services, **says Brian Hogg, Head of Strategic Technology, Post Office Ltd.**

"The ability to potentially release change and drive value more frequently, at a better managed cost and with scale on demand is hugely important," he says. "What cloud is doing is making the ability to deliver change more efficient, but the innovation still has to come from within an organisation."

Transforming the Travel and Transport Industries through Modernisation

At Network Rail, the company is taking a slow and steady approach to cloud, reviewing and putting tactical, non-critical systems into the cloud while monitoring total cost of ownership.

"Cloud does offer agility, but if you start looking at whole lifetime costs, it's not so easy to decipher. We're looking at whether it makes sense, from a business benefit and also cost perspective."

Emon Khan, Head of Digital Business Platform with Network Rail

Chapter 4:
People and Processes: Fostering a Customer-Centric Culture

The experts we spoke to for this study all agreed that the most important element in delivering enhanced service through data isn't integration, governance or even innovation. It's a strong digital leadership culture, that drives collaboration and ensures alignment between business and technology, while fostering innovation.

Technology leaders should understand that a customer-centred culture will necessarily involve more complexity. It will involve bringing more people together, more collaboration between competencies, and supporting them to work together in new ways. At **SIXT, Stephan Hong** has built new product and customer divisions.

"Within each division, we have a business owner, a product owner and a technical owner. They have to work very closely together, and are responsible for executing the service," **Stephan Hong**

Organisations must invest in training to ensure this new culture is adopted, because it often involves a complete change to the way IT operates within the wider business. "There's no point putting in all this digital, data-driven decision making if the workforce is not data literate, not comfortable with technology or comfortable with the decision-makers," says **Stuart Birrell, CDIO, easyJet.** "This isn't an IT skills issue. It's about what technologies do you need, what skills do you need, and how are you going to help them?"

A recent success at easyJet has been in establishing a community of interest for analysts across the organisation. This has brought people together from really diverse backgrounds with a wide variety of technical capabilities to support each other in developing their skills in analysing and using data. We are seeing people develop from using Excel to learning Python, from running pre-canned reports to using professional tools and creating their own reports from different datasets to develop insight and real business value. We have had two analysts promoted into the data science team working on ML and AI projects.

Conclusion
A Long Journey for the Travel, Transport & Logistics Sector

During the crisis, there have been moments where the travel and hospitality industries almost came to a sudden stop. Meanwhile, the logistics & distribution sector saw demand increase in areas such as medical equipment, cleaning equipment and supplies, and food. With huge populations staying home, ecommerce sales boomed, and customers were supported by their logistics partners.

The crisis is becoming more manageable as we move into a new normal, and this is no time for any organisation to put the brakes on. Raising customer confidence must be top priority and there are a number of key elements to this. Organisations must consider the below key issues over the next 12 months to ensure they are in a *good position to trade as restrictions are lifted*, and in the difficult years ahead.

It's all about the Strategy

The customer-centric strategy must be driven from the top of the organisation and be supported by all divisions and teams within the organisation. This is essential when aiming to track and improve a customer's journey, during which they may engage with multiple, traditionally siloed parts of an organisation. It is particularly important to revisit the difficult questions of what it means to be customer-centric today and tomorrow, given the ramifications of the pandemic. What would customers value most in the current environment and tomorrow?

Planning, Planning, Planning

The industry experts we interviewed agreed that it is foolhardy to invest in technology to deliver customer-centricity before investing time in understanding what information an organisation holds, what it could be used for, and what needs to be done to ensure privacy, security, compliance and data quality. Once understood, these elements can be used to build a robust business case for any technology investment. Managing data effectively will have a significant impact on demand management, while schedules for people and goods may need to change dynamically.

How Data-Driven, Customer-Centric Leaders are Changing the Travel & Transportation Industry

A Long Journey for the Travel, Transport & Logistics Sector

Automation

Early adopters report that investments in AI and ML technologies, often supported by modern data platforms, are delivering strong benefits. Organisations should begin with small, fast trials of these technologies to ensure they aren't left behind. Fewer people will be available to make the necessary changes needed and a few well-placed, effective investments here could make a tangible difference in the overall experience for customers.

Communication

With the opening and closing of borders, seaports and airports with as little as 24 hours' notice, it is critical that organisations in the travel, transport and logistics business have a very human way of communicating with travellers in real time. For logistics and distribution companies, being able to make meticulous use of data in order to raise visibility and resilience across the supply chain is vital as schedules become further disrupted.

Speed

Organisations must prepare for an escalating pace of digital transformation as the global economy rebounds from the crisis in 2020. This speed of change must be balanced with rigorous safety and governance to ensure that customers are given the best possible experience. Processes must be simplified to facilitate faster decision making and smoother transitions.

Customer experience will remain a priority with more emphasis on, "Keep me safe and well while getting me or my deliveries to the right destination". Turning data into wisdom and employing it intelligently has never been more important for you and your customers. And it is only going to grow.

Featured Participants

Stuart Birrell
Chief Data and Information Officer, easyJet

Stuart Birrell is an Executive Director, supported by an MBA, with extensive CIO experience across several industries sectors and a history of successfully merging, separating, and transforming leading UK and international businesses.

Robert Ogilvie
Data Director, AA

Currently based in London, England, Robert is highly experienced in commercial analytics, data, financial services and marketing. His previous experience contains responsibility for line-managing a multi-location team with the remit of delivering the design, targeting and evaluation of all direct customer communication across UK Retail.

Stephan Hong
Senior Vice President, eCommerce, SIXT

For the last 8 years, Stephan Hong has been responsible for the global e-commerce and Online Marketing at SIXT. His current focus is further international growth and establishing new digital mobility services.

Boet Kreiken
Managing Director, KLM Cityhopper

Since 2009, Boet Kreiken has been the Managing Director of KLM Cityhopper BV where he managed the replacement of the Fokker fleet to Embraer successfully. Before becoming director of KLM Cityhopper, Boet Kreiken occupied a number of executive positions at KLM, including at Commercial, as a CIO and at Pricing & Revenue Management.

How Data-Driven, Customer-Centric Leaders are Changing the Travel & Transportation Industry

Featured Participants

Mattias Gereny
Digital Transformation Leader, Stena Line Transformation

Mattias Gereny is a Digital Transformer with more than 20 years of experience in information technology. As Head of Technology for Stena Line Transformation, his challenge is to lead the change of a traditional company to become the world's first cognitive ferry company.

Emilie Alba
Head of Finance Organisation & Information Systems, CMA

Emilie currently leads the Group Finance transformation team, the Finance MOA & Data Digital team and the Finance expertise centre in KL (FiCOM). Her current focus is on the continuing development of the Finance function with a focus on Digital and support to the Group strategic challenges, as well as change facilitation.

Tim Standen
International Supply Chain Director, Kuehne + Nagel

Tim has wide ranging experience in the supply chain at Strategic, Tactical and Operational levels from the perspective of both service providing and service receipt. He specialises in international supply chain experience, multiple retailer supply chain mapping, project management, change management and advanced supply chain analysis.

Brian Hogg
Head of Strategic Technology, Post Office Ltd

Brian Hogg is an experienced commercial, digital, and technology leader with over 25 years of travel industry experience working for some of the world's biggest airlines and holiday companies, leading teams, adopting agile practices and delivering major change on sites such as ba.com, thomascook.com, and easyJet.com.

Featured Participants

Emon Khan
Head of Digital Business Platform, Network Rail Limited

Emon Khan is an IT evangelist leading digital technology adaptation in large organisations with 20+ years in data driven architectures for business performance improvement. He is focused on delivering business value to major organisations such as Network Rail, Affinion International, Accenture, IBM, Atos, PwC, and NCR internationally and in the UK.

Anand Sridhar Rao
Director of Mindtree Consulting

Anand Rao is a Director with Mindtree's EMEA Consulting Practice, where he works with Inspiring Minds, a team of experienced design & advanced analytics practitioners and helps senior executives in ideating and accelerating the execution of digital transformation initiatives using strategy, design, cognitive technology and data.

Elaine Stewart
Travel, Transport and Hospitality Europe, Mindtree

Elaine has been a leader in the Travel, Transport and Hospitality sector for over 20 years and has always focused on helping people and businesses reach their true potential. She feels privileged to be working in such a diverse and challenging sector and is full of gratitude to all of the leaders who have contributed to this research paper.

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Chris Berry	HCT Group	Director of Operations
Eric Tyree	Blue Prism	Head of AI & Research
Jeremy Axe	EY	Director Technology Transformation
Michal Seal	Elior UK	Marketing & Corporate Communications Director
Nicolas Mailhos	PRO BTP Groupe	Projects, Internal Control and Activity Monitoring
Zigi Fibert	Arm	Principal Portfolio Manager

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