

# Transportation

## Incumbents Strike Back

Global C-suite Study  
19th edition

IBM Institute for  
Business Value



The IBM Institute for Business Value, in cooperation with Oxford Economics, interviewed 523 CxOs from the Transportation industry. These conversations included both quantitative and qualitative responses. The analytical basis for this Transportation industry report uses 500 valid responses from the total data sample collected.

More than 12,800 CxOs, representing six C-suite roles, 20 industries and 112 countries, contributed to our latest research. We used the IBM Watson Natural Language Classifier to analyze their contextual responses and ascertain overarching themes. We also used various statistical methods, including cluster analysis and discriminant analysis, to scrutinize the millions of data points we collected.

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## Which way to the future?

The signals are utterly bewildering. As digital technologies transform the world, monopolies are winning big-time. Yet collaborative systems are also flourishing, and even in industries where the competition is shrinking there's still plenty of creativity. Little wonder top executives are puzzled.

Transportation CxOs are no exception. They're divided as to whether new or established markets will provide the best opportunities for growth (46 percent versus 39 percent). They're equally unsure whether to put their money on open innovation or proprietary research. But there are two points on which they broadly agree. Seventy-two percent expect more emphasis on customer experiences than products over the next few years. And 64 percent anticipate that most organizations will partner more widely.

Transportation CxOs also report that there's been a significant shift in the external factors most likely to affect their organizations in the near future. Market forces still top their agendas, but people skills have soared to second place: 67 percent of respondents say talent will be one of the biggest influences on their enterprises – recognizing, perhaps, how new transportation technologies and rising customer expectations are both driving up demand for digitally competent employees. Autonomous big-rigs and other such advances will ultimately reduce the labor required to handle the physical movement of goods, but they won't mitigate the need for capable customer-facing staff.

## Reinventors race ahead

In the course of our research, we identified three distinct organizational “archetypes,” each at a different stage on the road to Digital Reinvention™ (see Figure 1).

Reinventors focus on developing breakthrough products, services and business models; excel at extracting value from their ecosystems; and actively experiment. Their IT strategies are aligned with their commercial goals, and they’re superb at managing change – all of which helps them stand out both financially and as innovators.

Practitioners are ambitious but haven’t yet acquired the capabilities required to realize their ambitions. They’re neither as focused nor as agile as Reinventors.

Aspirationals have even further to travel. They still need to devise a clear strategy, put the right processes and resources in place, and develop the agility to seize new opportunities.

## Reading the road signs

So what’s actually going on? Four topics stand out from our conversations with CxOs and our work with academics:

Dancing with disruption

The path to personalization

The pull of platforms

Innovation in motion.

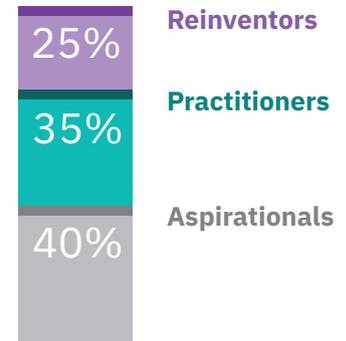
“I believe that blockchain will revolutionize the way we do business. Its applications are endless.”

Chief Information Officer, Transportation, United States

Figure 1

### Transportation split

Industry archetypes have distinct characteristics that lead to differing vantage points



## Dancing with disruption

Two years ago, CxOs told us they were deeply worried about digital giants and ankle-biters from other sectors invading their territory. Now, it's not outsiders they're most concerned about; the *real* disruption, they state, is coming from innovative industry incumbents. The majority of Transportation CxOs concur: 71 percent attribute the turmoil in their sector to once unwieldy companies that have reinvented themselves to thrive in the digital age. But they're still nervous about other sources of competition, as online titans like Amazon build their own fleets and even pitch for a share of the delivery market.<sup>1</sup>

Transportation CxOs aim to fend off these threats by making fundamental organizational changes – primarily, by offering more differentiated services and becoming more efficient. Many also recognize that the process of shopping, booking and paying for freight services needs a major overhaul, as do the mechanisms for tracking the movement of goods and collaborating with other service providers.

The Reinventors in our Transportation sample are in the vanguard of the drive for reform. They expect to make greater changes than Practitioners or Aspirationalists, and they're placing particular emphasis on the quality of the services they provide: 88 percent plan to make alterations in this area (versus 70 percent of Practitioners and 66 percent of Aspirationalists). Whether the Reinventors have different strategic intentions or a different take on customers' preferences isn't clear, but one thing is obvious: the *status quo* won't prevail in the transportation industry for very much longer.

## The path to personalization

Connecting with the customer on a personal level is vital these days, but designing compelling personalized experiences is extremely difficult; it takes a profound understanding of what makes different people tick. Again, Transportation Reinventors are ahead of the curve. They're particularly skilled at using data to identify unmet customer needs (see Figure 2).

However, Transportation Reinventors don't just trawl through yottabytes of data. They approach problems like design thinkers – by engaging directly with customers, consulting their partners to get a better picture of the customer experience and using cognitive solutions to unearth deeply buried insights. They're also more proficient than Practitioners or Aspirationalists at acting on the insights they uncover both to meet customers' expectations and to develop innovative new products and services.

“We're taking advantage of new technologies to get better customer insights, optimize our processes and lower our costs.”

Chief Information Officer, Transportation, China

## The pull of platforms

One of the most exciting recent trends is the emergence of the platform business model, which connects producers directly with end users, enabling organizations to grow faster and generate greater profits. While only 4 percent of Transportation CxOs currently operate platforms, 25 percent are experimenting with the concept and 19 percent intend to reallocate capital for this purpose.

The industry as a whole has been slow to leverage the power of platforms, but new freight exchanges that match customers with carriers to boost payload efficiency have already seized a slice of the market. Uber, the arch-disruptor of the ride-hailing universe,

has also entered the arena.<sup>2</sup> And Swiss logistics giant Kuehne + Nagle recently launched the world's first digital exchange for sea cargo services.<sup>3</sup> Many more such opportunities exist.

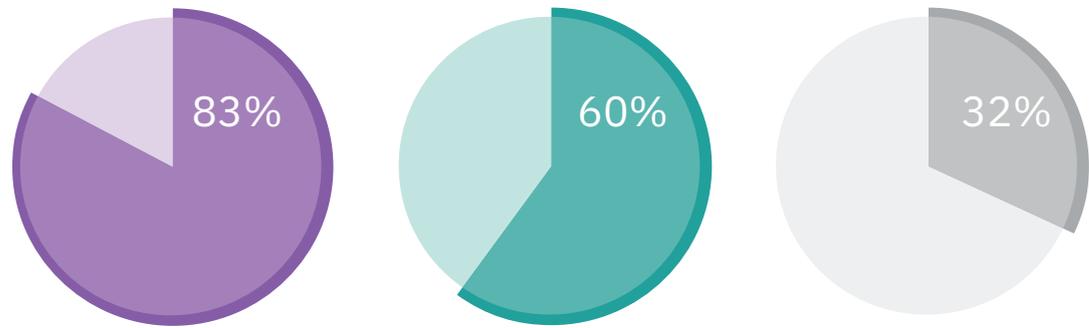
So what makes a platform work? One key feature is commitment to innovation – and, here, Transportation Reinventors enjoy a head start: 76 percent use rapid prototyping to test and refine their business strategies (versus only 45 percent of Practitioners and 24 percent of Aspirationalists). Reinventors also invest more heavily in cloud computing, the Internet of Things (IoT) and artificial intelligence (AI) – all technologies required to bridge the digital-physical divide.

Figure 2

### Know now

Transportation Reinventors excel at using data to identify unmet customer needs

**Reinventors**  
**Practitioners**  
**Aspirationalists**



*Q: How effective is your enterprise at using data to identify undefined and unmet customer needs? (Percentage of respondents choosing "effective" or "highly effective.")*

## Innovation in motion

The organization of work is altering dramatically as enterprises collaborate to innovate and ecosystems replace go-it-alone entities. Transportation Reinventors are especially well placed to adapt: 84 percent have C-suites with a strong grasp of how the industry is evolving (versus 67 percent of Practitioners and 42 percent of Aspirationalists). The CxOs who head these companies are also much better at communicating their strategies and encouraging open, ongoing dialogue.

There's more. The majority of Transportation Reinventors are creating nimble enterprises that learn on the fly. They place more weight on knowledge-sharing than Practitioners or Aspirationalists (see Figure 3). They're also more proactive about soliciting employee input to develop new approaches and empowering people to decide on the best course of action.

“To give customers greater flexibility, we've invested in creating an online platform and making our business digital.”

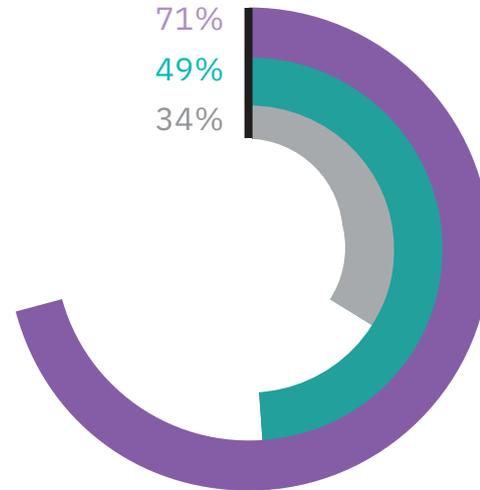
Chief Finance Officer, Transportation, Mexico

Figure 3

**Reinventors**  
**Practitioners**  
**Aspirationalists**

## Pools of wisdom

Transportation Reinventors encourage the sharing of knowledge across the business



*Q: To what extent does your leadership team promote and support collaboration and knowledge sharing? (Percentage of respondents choosing "to a large extent.")*

In addition, Transportation Reinventors are more adept at building the right networks of partners, suppliers and distributors. And they treat training as a top priority: 70 percent invest in upgrading employees' skills on a continuous basis, whereas only 56 percent of Practitioners and 37 percent of Aspirationals do the same. In short, Transportation Reinventors combine a dynamic vision with an open culture and agile operations – and these, as our research shows, are the three stepping stones to organizational dexterity.

## Strengthening advantage: Actions to take now

*Alleviate customer pain points.* Use technology to shield customers from the complexities of the transportation process. Eliminate persistent problems, such as cumbersome quote-generation activities, unreliable tracking systems and inefficient payment procedures. Give customers the information they want, not information they don't need.

*Collaborate beyond your comfort zone to transform.* Focus on the customer experience, not just your own operations. Partner with transportation companies to coordinate shipping processes, extend your reach and increase asset utilization. Build a platform that offers both carriers and customers accurate real-time data on capacity, demand and shipment status.

*Innovate with speed and focus.* Foster an open, collaborative culture with employees at the core. Listen to your people; they're a prime source of insights into customer concerns, and they're often the first to hear about disruptive innovations.

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### **For more information**

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#### Notes and sources

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