DYNAMIC PRICING

Mobility in the New
Rail transport is reinventing for the digital age. New players with disruptive technologies are gaining traction. As the pace of commercial decision-making gathers speed, dynamic pricing is rapidly becoming the norm to compete. So, the race is on for freight and passenger operators to optimize pricing models to drive profits.

TRANSPORT IN TRANSITION
THE CHALLENGES OF THE NEW RAIL LANDSCAPE

From intermodal freight lines for free-flowing global trade to busy urban transit systems that keep cities moving, transport is in transition. Market volatility is creating rapid swings in volume and the business mix.

Boundaries are blurring and competition is fierce.

Liberalization is opening up markets to new entrants, with alternatives like independent buses, low-cost airlines and carpool services, with self-driving vehicles in hot pursuit. With significant investment in infrastructure for many public transit agencies, the pressure’s on to control capacity and optimize revenue. Many transit agencies already operate at near full capacity at peak times, so how can they adapt their services to both manage rush-hour congestion while also attracting occasional riders, tourists and maximizing off-peak demand?

New entrants often have disproportionately lower start-up and operating costs, more labor flexibility and fewer constraints than public or government-backed organizations. And new analytically driven entrants, like Amazon, are changing industry dynamics and raising customer expectations.
Customers taking control

Customers live in an integrated, anytime, anywhere, app-driven marketplace. To meet their mobility requirements, they want fast, frictionless end-to-end experiences. Whether it’s fare integration across multiple transit agencies, tailored products or specialized services, they increasingly expect the entire experience to be hyper-personalized to their needs—while being able to shop around for the best deals.

Digital has made price comparison at the point of purchase more prevalent than ever, so rail companies need more detail about transactions to optimize pricing. This calls for a better understanding of customer behavior and predictive analytic tools based on real-time intelligence to drive up demand and improve customer service. Knowing when and how to respond to competitor changes—and when not to—is also critical. But to achieve this, traditional barriers need breaking down. So, what are the key issues?

Pricing on the rails

Rail incumbents typically face a range of pricing constraints. Pricing often remains highly manual or spreadsheet based, with no centralized, accurate, structured data to support decisions—or the tools and agility to flex fast to change. Delayed upgrades to legacy system can jeopardize the ability to meet customer expectations, respond fast to competitor threats and capitalize on new opportunities, such as merchandizing, promotions or ancillary bundling. Furthermore, broad-based discounting in response to new entrants can lead to a spiral-down effect that may drive up short-term ridership at the expense of long-term margins.

About 80 percent of transportation carriers still use spreadsheets to manage rates and charges. This often results in rate discrepancies with forwarders and direct shippers (our experience shows discrepancies can occur on up to 21 percent of shipments).

And in the interests of maintaining supplier-customer relationships, the carrier usually backs down when disputes occur.¹
In the freight sector, the wrong mix between contract and spot capacity allocations may “close out” revenue opportunities, filling capacity with lower-margin contract business while leaving no room for more lucrative spot cargo. And, a lack of integrated data prevents an accurate assessment of contract utilization, i.e., to evaluate what was promised and priced versus what was actually fulfilled.

For any rail operator, the lack of a statistically robust, data-driven approach or segmented pricing strategy based on measuring customer price sensitivity, makes it near impossible to accurately gauge the difference between opportunities to drive volume or margin in specific markets. Forecasting may be little more than a volume or revenue target based on last year’s budgets or internal data, rather than statistically driven with a trend function. And key decisions like contract pricing may default to intuitive negotiation, relying on the experience of the sales team.

Given all this, it’s easy to see how sales incentives (volume) and centralized pricing objectives (margin) can end up misaligned—with missed opportunities to translate potential into profit.

**Clearly, it’s time for a new approach.**

**REINVENTING RAIL PRICING STRATEGIES**

**THE OPPORTUNITY**

While there are specific challenges, companies in both the passenger and freight sectors share the following multiple opportunities to accelerate the shift to modern pricing capabilities.
**Improve customer segmentation**

Few companies have a good handle on customer segmentation. Typically, it isn’t data-derived or evidence based—at least not to the granularity needed to design effective pricing strategies. And if they do, it’s likely to be operationally or geographically driven—few are measuring behavioral segmentation.

For example, an occasional rider may be more likely to change their schedule as a result of a rate discount compared to an everyday business rider.

**Adopt sophisticated forecasting**

Many companies rely on only one forecast or forecast model, rather than a segmented application with multiple models to verify accuracy. They also tend to use internal data rather than also incorporating external and competitive data sources, so can struggle to scale forecasting for complex business needs.

**Reverse spiral-down discounting**

Without data analysis, customer segmentation and forecasting precision, untargeted spiral-down discounting can lead to margin loss, industry-wide price erosions, complete price transparency, annual price-shopping on long-term contracts and a race to the bottom—without driving incremental demand.

**Accelerate digitization**

Today’s rail businesses require new data sets and advanced analytics. But while legacy technology and lack of modernization erode incumbents’ competitive posture, new entrants are gaining ground by deploying the sales and merchandizing tools customers and passengers increasingly expect.

**Embrace personalization**

Rail companies have been late to personalization. Even in freight, they have struggled to dynamically design a tailored “product”. With base pricing becoming completely transparent, personalization around bundling and ancillary sales—plus curated loyalty offers—open up new routes to drive revenue.

With rail companies like Amtrak in the US and several rail companies in the UK already using loyalty points to reward customers and encourage loyalty, there’s an opportunity for the rail industry to create more sophisticated loyalty programs that offer more personalized benefits.
DYNAMIC PRICING APPLIED

Degrees of difference

Dynamic pricing is about optimizing a key business outcome—typically revenue-related, but it could also be focused on customer service and satisfaction, capacity control, or other factors. Just as each company has its own competitive strategy, each has its own unique pricing strategy. The drivers used to determine price will vary for each company—even within the same sector—and be applied to differing degrees depending on the specific needs of the business. And while there is endless research, thousands of data scientists and tools such as machine learning to help determine optimal pricing, there's still an art to ensuring that broad pricing decisions are closely aligned to business outcomes.

Drive differentiation

WHEN YOU THINK OF A BASIC COMMUTER TRAIN TICKET, THERE ARE MANY DIFFERENTIATORS:

- When it was sold—weeks, days or minutes before departure
- How it was sold—online, kiosk, mobile, on board
- How much of it was sold—one-way, return, monthly, weekly, annual
- Class of service
- Validity—time of day, day of week, valid through
- Ridership—point-of-origin, destination
- Demographic—senior, student, customers who need special assistance

NOW ADD POSSIBLE ANCILLARY SERVICES:

- Guaranteed parking
- Connected transportation
- Quiet seating
- Wifi

Armed with this type of data, you can start to create differentiated customer products that vary based not only on current capacity, but on forecasting different customer needs.
Focus on ancillaries

According to recent estimates, the top 10 airlines earn more than US$28 billion in ancillary revenue annually.² There’s an equally compelling opportunity in rail to generate incremental revenues by leveraging ancillary services and dynamic bundling. Beyond some of the differentiating base ticket sale characteristics described above, passenger rail—especially long-haul—offers great potential for marketing ancillary extras as add-ons, such as:

- Baggage and oversized baggage
- Food service, e.g., café, reserved, pre-ordering
- Reserved seating, e.g., class, type, window, single, powered
- At-station services with access to lounge, concierge, baggage handling
- Station transfers, from point-of-origin to destination
- Pets
- Pets
- Pets

Single itinerary services—as pioneered by some airlines—could be enabled by code shares and interline agreements, for example, to create seamless end-to-end journeys combining multiple services, e.g., taxi + train + hotel.

Rather than changing the base fare of the ticket, dynamic bundling works by dynamically generating individual offers (think personalization) with a tailored package of ancillary extras based on known customer behaviors. And with today’s predictive analytics and market segmentation, you can generate offers like this in milliseconds.

For instance, rail and transit companies can leverage digital ticketing to create highly personalized offers to help customers manage the first and last mile of their journey. Local transit apps, for example, are starting to give riders real-time information about the best potential routes, including bike and ride-sharing alternatives.

$28BN

The top 10 airlines earn more than US$28 billion in ancillary revenue annually.² There’s an equally compelling opportunity in rail to generate incremental revenues by leveraging ancillary services and dynamic bundling.
CORE PRICING PRINCIPLES

FOCUS ON CUSTOMER-CENTRICITY

- Understand the customer rather than the transaction
- Align opportunities to the end-to-end customer experience

CREATE AN ENTERPRISE APPROACH

- Do not silo pricing and revenue strategies—create holistic, coordinated business processes
- Integrate pricing and revenue strategies across all customer segments

DRIVE VALUE WITH ELEGANT SIMPLICITY

- Embed new capabilities to deploy advanced pricing systems
- Constantly balance the desirable and do-able to maximize impact
RAIL AND TRANSIT | DYNAMIC PRICING
Mobility in the New
THE SHIFT TO MODERN DYNAMIC PRICING

The shift to today’s customer-focused pricing is part of a transformation approach designed to systematically manage massive amounts of complex, real-time data to enable accurate forecasting, improved recommendations and dynamic capabilities, optimized to drive up profits.
TAKE ADVANTAGE OF COMPLEX AND REAL-TIME DATA TO ENHANCE FORECASTING

LEVERAGE MACHINE LEARNING AND AI TO INSTILL A DATA-DRIVEN, ANALYTICS-BASED APPROACH TO DECISION MAKING

CONSCIOUSLY ALIGN PRICING WITH BRAND STRATEGY AND ALL MARKETING DECISIONS

EXTEND ANALYTICS TO SUPPORT THE ENTIRE ORGANIZATION
THREE STEPS TO FAST-TRACK SUCCESS

As transport reinvents, disruptive digital tech—the Internet of Things (IoT), smart products, real-time intelligence and connectivity plus artificial intelligence and data analytics—will form the backbone of rail and transit travel.

To compete successfully, our three-step approach enables rail and transit companies to create an agile and effective revenue optimization strategy and dynamic pricing infrastructure.
**IMPLEMENT A DATA ANALYTICS INFRASTRUCTURE**

In today’s world, third-party and external data is key. So you need to build a model integrating big data from all relevant sources such as: transactions, costs, pricing, channel, contracts, competitors, markets, clickstream, marketing, loyalty and products.

**DETERMINE YOUR CUSTOMER SEGMENTATION**

Valuable intelligence about customer buying behavior is often hidden in the data—such as win-loss ratios on freight contracts or passenger preferences for train versus bus on certain routes. This data analysis provides the basis for leveraging future pricing strategies. Using advanced capabilities like machine learning to analyze massive data sets, you can systematically group customers according to like-buying behaviors.

**DELIVER PRESCRIPTIVE RECOMMENDATIONS**

Prescriptive capabilities, like dynamic pricing, rely on advanced analytics and technology to ensure a seamless customer experience. With a solid understanding of the relevant like-buying behaviors, the goal is then to present the right set of offers to your customers at any given times to optimize outcomes in line with your business goals—be it to increase revenue, control capacity or drive customer satisfaction.
DYNAMIC PRICING
IN ACTION

Across the transport sector, as in industry more widely, organizations are embracing the shift to customer-focused pricing as part of a transformation approach designed to manage increasingly complex operations more efficiently, effectively and profitably.

REVENUE RISE FOR AIRLINES

In airlines, effective use of revenue management algorithms for overbooking and fare class booking limits have been estimated to generate revenue increases of as much as 4 to 6 percent.

The benefits of advanced network revenue management methods have been estimated to be about 1 to 2 percent in incremental revenue gains, in addition to the 4 to 6 percent gains realized from conventional leg-based fare class control.3

CHINA RAILWAY INTRODUCES DEMAND-BASED PRICING

The national railway operator will introduce varying ticket prices on certain high-speed rail lines in 2018 depending on the season, time, seat, and number of stations in the itinerary of the traveler.

Furthermore, pricing will consider market need, railway construction cost, and passenger demand.4

INCREASE IN REVENUE FOR INDIAN RAILWAYS

Indian Railways earned an additional revenue of INR 540 crore (USD 81 mn.) in less than a year (September 2016-June 30, 2017) through the dynamic pricing (flexi fare) scheme.

The scheme applicable in Rajdhani, Shatabdi and Duronto trains, allows 10 percent of the seats to be sold at normal fare and thereafter increasing it by 10 percent with every 10 percent of berths sold with a ceiling of 50 percent.5
With deep end-to-end transport industry expertise and experience, Accenture provides tried-and-trusted revenue management, dynamic pricing and profit optimization solutions.

In addition, we deliver the critical digital, merchandising, mobility, organizational, and governance support necessary to execute these programs in any rail transport environment, including passenger travel, transit, freight and logistics.

REFERENCES


ARE YOU READY TO DRIVE DYNAMIC PRICING WITH US?

WWW.LINKEDIN.COM/SHOWCASE/ACCENTURE-INDUSTRIAL/

@ACCENTUREIND

CONTACTS

ALDEN CUDDIHEY
Rail and Transit Global
alden.cuddihey@accenture.com

PIERRE-OLIVIER DESMURS
Rail and Transit EALA
p-oliver.desmurs@accenture.com

MICHAEL ENGLISH
Rail and Transit NA
michael.english@accenture.com

GREGORY PESIK
Applied Intelligence
gregory.j.pesik@accenture.com

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 459,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

This document makes descriptive reference to trademarks that may be owned by others. The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.

Copyright © 2018 Accenture
All rights reserved.