Travel loyalty: Cognitive connections

Enhancing loyalty programs to connect with all travelers, not just million-mile mavens

Executive Report

Travel and Transportation

How IBM can help

To succeed in today's hyper-competitive world, travel and transportation companies need to solve increasingly complex problems and seize new and exciting opportunities faster than their competitors. They must continue to drive operational excellence and enable collaboration across enterprise functions and between members of emerging ecosystems. Above all, industry leaders must run the business well amidst constant change. The IBM Travel and Transportation practice understands these challenges and brings its extensive industry experience, business insight and technical prowess to bear on these challenges.

Building a cognitive approach to travel loyalty

In the first installment of the travel loyalty series, "Discount discontents: How loyalty programs can deepen engagement, improve profits and drive brand allegiance," we concluded travel providers should balance popular loyalty rewards with specific enhancements to engage travelers.[1] In this report, we extend the concept by asserting that leading-edge, cognitive-computing tools can be used to increase intimacy with both the most frequent travelers and oft-overlooked occasional travelers. Our recent survey reveals travelers — even loyalty-program members — often feel estranged from a travel provider's brand. In response, providers should focus on building loyalty programs that facilitate a cognitive version of travel self-service. This can be accomplished by harvesting data from a wider variety of sources, assessing the collected data to generate specific insights about traveler preferences and patterns, and delivering these insights to all relevant touchpoints. This cognitive approach to loyalty can lead to more personalized interactions and help travel brands form meaningful relationships with more loyal travelers.

Executive summary

Most travel providers have placed an outsized share of attention and investment on top-tier travelers for decades, lavishing them with everything from well-stocked private lounges to service by more highly trained and available employees. Since top travelers drive a disproportionate share of both revenue and profit, such strategies seemed sensible. This concerted focus, however, left the larger group of relatively infrequent travelers to suffer the countless indignities of cost-reduction efforts. While travel got better for the loyal elite, service, comfort and convenience deteriorated for everyone else.

The advent and success of travel loyalty programs, and the subsequent emergence and growth of travel self-service, allowed providers, in theory, to counter-balance the service and experience inequities between so-called "elite travelers" and "the masses." Self-service solutions for everything from booking to check-in were designed to be the great equalizer by providing infrequent travelers access to the same tools and processes as those enjoyed by the elite. Loyalty programs ,with their non-travel spend rewards, offered occasional travelers the opportunity to earn some of the perks and privileges enjoyed by the most seasoned travelers, who use frequent travel to gain access to airport lounges and executive floors.

Unfortunately, neither of these programs worked. Top-tier travelers ended up sharing "their" privileges, and infrequent travelers were still reduced to sitting in the backs of crowded planes or trying to sleep in hotel rooms next to noisy elevators. The result? Loyalty programs have failed to improve traveler allegiance, and self-service has deepened the rift between travelers and brands.

82 percent of travel loyalty program members say ease of use shapes their perception of programs

96 percent of travel loyalty program advocates say a program's responsiveness to their needs shapes their perceptions of the program

75 percent of travel loyalty program advocates — but only 55 percent of program antagonists — say they would switch travel loyalty programs if they found a better deal elsewhere.

Fortunately, both travel self-service and loyalty programs can be modified to enhance the travel experience and increase customer affinity for each segment. By taking advantage of available cognitive technologies, loyalty programs can fundamentally alter interactions with travelers across all touchpoints. Travel providers can use their loyalty programs to initiate a cognitive-computing revolution, which can lead to both better, more personalized travel experiences for all segments of the travel population and more meaningful interactions with genuinely loyal travelers.
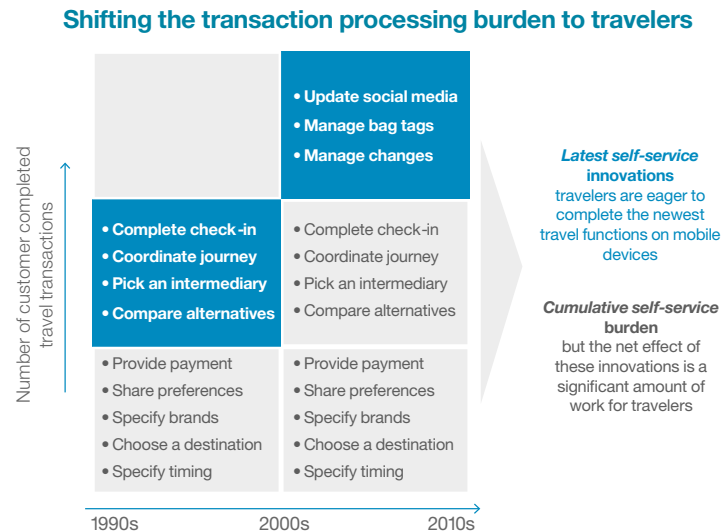
Critical need: Put more emphasis on "service" than "self"

For travel industry veterans, self-service has been revolutionary. It gave customers more control over their travel experiences and, when dramatic cost-cutting became necessary, it helped many providers stay in business. Self-service will likely continue to play an important role in the travel industry, but it is becoming increasingly clear that the pendulum has swung too far in many companies. In these instances, travel self-service has become more about travelers doing work themselves and less about services being performed to improve their experiences. Of more concern, many self-service transactions do not provide feedback about customer habits and preferences.

Self-service is vitally important, but has gone too far

What makes self-service so attractive to providers is that it shifts the burden of work to customers. Much of the transaction-processing support that airline, rental car and hotel employees once performed has been shifted to the customer through kiosks, computer terminals and mobile devices. In the early days of travel self-service, for example, customers were given control over key elements of the shopping and booking processes. Later airlines, rental car companies and hotels allowed them the privilege of checking-in on their own. Now, customers have access to an increasing variety of both simple and complex transactions (see Figure 1).
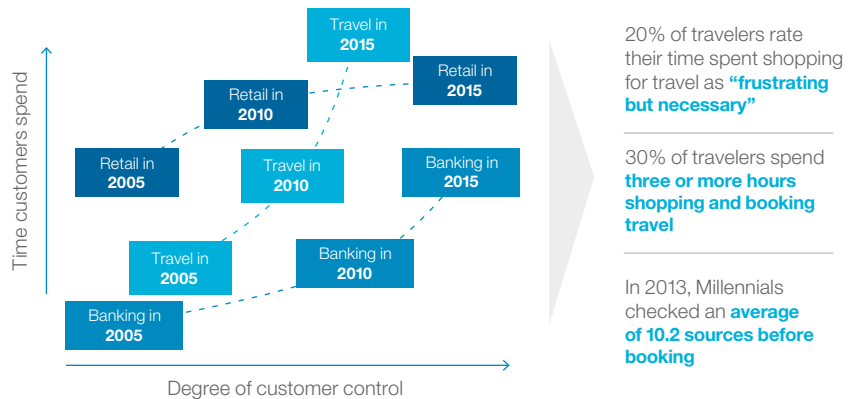
Figure 1

Quietly shifting the transaction processing burden to travelers

Shifting the transaction processing burden to travelers

		• **Update social media** • **Manage bag tags** • **Manage changes**	*Latest self-service innovations* travelers are eager to complete the newest travel functions on mobile devices
• **Complete check-in** • **Coordinate journey** • **Pick an intermediary** • **Compare alternatives**	• Complete check-in • Coordinate journey • Pick an intermediary • Compare alternatives		*Cumulative self-service burden* but the net effect of these innovations is a significant amount of work for travelers
• Provide payment • Share preferences • Specify brands • Choose a destination • Specify timing	• Provide payment • Share preferences • Specify brands • Choose a destination • Specify timing		
1990s	2000s	2010s	

Number of customer completed travel transactions

Source: IBM Institute for Business Value

Taken in isolation, it can be argued that each self-service transaction represents an improvement for travelers. But, in the aggregate, they translate into an increasingly heavy burden. Travelers, who once interacted with friendly and competent employees at each step in the travel process, now have to rely upon their mobile devices to see what sets of buttons, codes and apps the next step in the process requires. While the travel experience today is fully within their control, it is also their responsibility to manage.

Travel executives could easily brush these self-service deficiencies aside by focusing on how many travelers avail themselves of self-service solutions each day. Popularity, however, does not account for the fact that the aggregate impact on individual customers is growing. In "*Shadow Work: the unpaid, unseen jobs that fill your day,*" author Craig Lambert explores the impacts of and possible reactions to the growing cumulative self-service burden. Lambert argues that self-service may have been taken too far, and that many consumers may be fed up with much of the work they are now expected to perform.[2]

Figure 2
Compared to other self-service industries, travel may be creating more burden with less benefit

Time customers spend

Travel in **2015**

Retail in **2015**

Retail in **2010**

Retail in **2005**

Travel in **2010**

Banking in **2015**

Travel in **2005**

Banking in **2010**

Banking in **2005**

Degree of customer control

20% of travelers rate their time spent shopping for travel as **"frustrating but necessary"**

30% of travelers spend **three or more hours shopping and booking travel**

In 2013, Millennials checked an **average of 10.2 sources before booking**

Source: IBM Institute for Business Value

What is cognitive computing?

Cognitive computing is a new computation paradigm that:

- Learns and builds knowledge from various structured and unstructured sources of information
- Understands natural language and interacts more naturally with humans
- Captures the expertise of top performers and accelerates the development of expertise in others
- Enhances the cognitive processes of professionals to help improve decision-making
- Elevates the quality and consistency of decision-making across an organization.[3]

The travel industry is ill-prepared, compared to other industries, for even a modest self-service backlash. With the growth of retail self-check-out and mobile banking, consumers had more options in transaction processing in 2015 than 2005, before such solutions were widespread (see Figure 2). But as a relatively early convert to the self-service revolution, the travel industry has introduced near total process automation, which requires a lot more time from customers while conferring only slightly more control over the process. As a result, the travel industry is likely to be among the first to feel the impact in the event of a customer "self-service revolt."

Customer interactions: Opportunities to learn and connect, not just transact

Travel providers should stop pushing self-service to reduce costs and, instead, view it as an opportunity to learn about their customers and provide more personalized services. Today, most online travel shopping and booking interactions begin as anonymous interactions in which prices and availability are provided in response to specific requests (see Figure 3). But if more intimate knowledge of customers could be gained through their self-service bookings of rooms, seats or cars, more targeted recommendations could be offered. More important, if such recommendations closely aligned with what customers wanted, the resulting transactions could deepen the bond between the customer and the travel brand.

Figure 3

Loyalty programs should replace anonymous transactions with personalized interactions
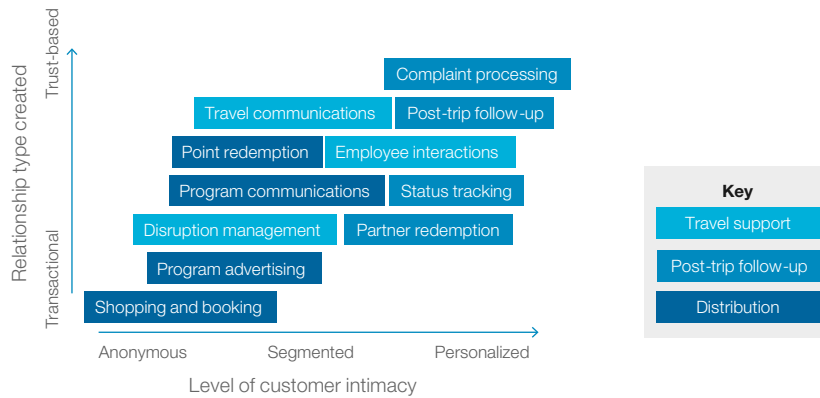
Source: IBM Institute for Business Value

At first glance, the relationship between loyalty and self-service may seem insignificant since they were designed for divergent purposes. But, from the perspective of what each could do to improve the other, they are nearly perfect complements. To become less anonymous and more service-oriented, self-service needs to incorporate personalized traveler insights into every customer interaction. Similarly, loyalty programs need to ingest more data about customers to feed the cognitive insight engines. Data, once analyzed, will enable travel loyalty programs to become the centerpiece of a travel service revolution. Gaining cognitive insights about the traveler can motivate executives to harvest more information from a wider variety of sources and fuel continued success of travel loyalty programs. In this way, the fate of these two programs, if well-managed, is inexorably linked.

Loyalty: The perfect starting point for cognitive-enabled personalization

For most travel providers, a cognitive insight revolution could be started by any part of the enterprise and could begin in any department. Decisions about where to start should be influenced by those departments that have the largest share of customer and operations data, as well as those that will be required to play leading roles in future customer interactions. Both factors make travel loyalty programs the logical starting point for an enterprise-wide cognitive revolution.

Personalized insights should become the primary objective for cognitive investments
Cognitive computing thrives on rich and diverse datasets, and loyalty programs are well positioned to capitalize on these capabilities. To do so, however, travel loyalty programs need two things:

1. More sources of data about customers, their preferences and their reactions to the conditions that impact their travel

2. Travel touchpoints that are set-up to make use of the personalization suggestions generated for each traveler.

The benefits a cognitively enabled travel loyalty program could bring to the overall travel experience are both revolutionary and well understood. Airlines, hotels, rental car companies and travel agencies have long touted the benefits of improving customer intimacy. However, because they have been unable to apply cognitive tools to their enterprise data, providers do not yet truly know or serve customers in a personalized way.

Fortunately, cognitive loyalty systems could be used to assess individual travel records, shopping activities and social media contributions to formulate a robust profile of each customer. Using these profiles, travel providers could customize what they offer and how they serve each traveler. Cognitive systems would then digest and analyze the results of these more personalized services to further improve and customize each subsequent traveler/brand interaction. IBM has developed a simple-but-useful framework to understand and manage this cognitive lifecycle, depicted in Figure 4.

Figure 4
A thriving cognitive program is built around three core capabilities

Engage	**Discover**	**Decide**
Provide better collaboration between with suppliers, partners and customers and enables seamless experience across channels	Provide ability to digest vast amounts of data to identify new avenues and implement new ideas	Provide contextual, evidence-backed recommendations, with changing business models, cost structures and customer behavior

Source: The IBM Institute for Business Value Cognitive Computing Survey, 2015.

Travel loyalty programs can become the central repository of knowledge about customers. To do so will require tighter connections with other departments, travel partners and, even, partners beyond the travel domain. These vital sources of structured data should be combined with streams of unstructured data from social media sources and travel touchpoints. Most touchpoints that require travelers to follow the provider's processes will need to be recast to allow insights to each traveler's individual preferences and unique way of thinking.

Powerful cognitive engines can analyze these growing confederations of data and formulate personalized suggestions about how to interact with each traveler. Each touchpoint must apply these personalization suggestions and feed data about how travelers respond back into the cognitive engines. Feedback loops of this sort will enable cognitive systems to learn from not only the data that can be assembled today, but also from the countless experiments with personalization they will enable. For example, the Austin Convention & Visitors Bureau uses Wayblazer, an IBM Watson-powered discovery and intelligence platform that delivers contextual, personalized advice and insights for travelers across all phases of their trips. [4] By intercepting a natural-language query made on the site by a traveler and using information from Austin's database, Wayblazer makes it easy for travelers to find the right itinerary or advice based on their unique trip criteria, such as price, location or amenities.

Initially, non-digital touchpoints (the ones with people), may be better positioned to apply and evaluate personalization suggestions, but, eventually, even the purely digital ones, such as mobile apps, kiosks and websites, will incorporate things like targeted recommendations, personalized prices and dynamic, highly customized package offers.

These changes may seem like a distant dream for many travel providers, but emerging examples from leading companies prove the near-term viability of this lofty vision. The myTrafalgar app, for example, demonstrates a social platform that can establish a link between the traveler and the brand to enable new forms of digital customer engagement, personalized data collection and, perhaps most important, a subsequent travel experience personalized based on what the system can learn about the traveler. Customers who use the myTrafalgar app can chat with other travelers about the upcoming trip, which fosters engagement, while Trafalgar can assess these exchanges between customers to find ways to personalize all future travel experiences.[5]

Cognitive has the power to reinvent travel, not just improve it
Cognitive holds great promise for the travel industry, and the best uses of these technologies will be to reinvent how interactions take place — not just improve what is currently in place. For example, airlines have made a precise science of predicting how many passengers will not show up for a given flight (their no-show forecasts). But an airline that applies cognitive to improve this will be significantly underusing these new tools. The bigger, cognitive-enabled opportunity would be for airlines to personalize the options they give to travelers impacted by overbooking. The same could be said for hotels that use such solutions to predict seasonality, or rental car companies that use them to allocate staff across their networks. Cognitive systems can help identify the best responses to these common scenarios, even as better data and analysis make them less likely to occur.

Figure 5

Cognitive enablement is dependent on a robust range of data inputs

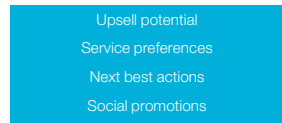### What potential could be unlocked with data-driven insights on core customers?

Using the following operational and traveler data…

…loyalty programs can use cognitive analysis to predict…

Basic demographics
Purchase history
Shopping history
Experience history
Future bookings
Partner reservations
Retail spend patterns
Channel preferences
Network contacts

…what customers really want

Upsell potential
Service preferences
Next best actions
Social promotions

Source: IBM Institute for Business Value

Cognitive has the potential make profound impacts in areas that have never been systematically analyzed. It can yield noticeable improvements to problems for which not only the answers are unknown, but for which the questions are not yet clear. Airlines could consider using cognitive to help establish and adjust operating schedules, for example. Hotels might unleash cognitive to enable guests to select from a wide array of personalized room configurations. A concern here is that disruptive third parties may quickly and aggressively use these technologies to solve disruption management or travel shopping problems and threaten the relationships current providers have with their customers.

More generally, travel providers may wish to consider ways deeper insights could be used to augment shopping and booking processes. Twenty percent of travelers see current shopping and booking processes as "frustrating but necessary," which makes sense considering that 30 percent spend three or more hours engaged in this activity.[6] Indeed, as depicted in Figure 6, the application of cognitive has the potential to improve the entire process of travel. By using richer and more personal insights about travelers, their preferences, patterns and context, cognitive can help providers present personal prices, packages and offers to each traveler, customize the interactions travelers have with touchpoints, and offer unique packages of rewards and incentives to each customer. The travel providers that execute this transition to a cognitive future most effectively are likely to generate higher levels of customer satisfaction and more meaningful traveler loyalty.

Figure 6

Use cognitive to unlock the potential of diverse traveler data

Loyalty derived analytics could change the entire travel experience

- Preferences-driven interactions
- Tailored rewards
- Partner redemption

Engagement

Awareness

- Personalized packages
- Recommended destinations
- Tailoring trips by purpose

Customer Service

Booking

- Context aware
- Proactive support

- Optimal pricing
- Value-add offers
- Network trip sharing
- Journey management

Experience
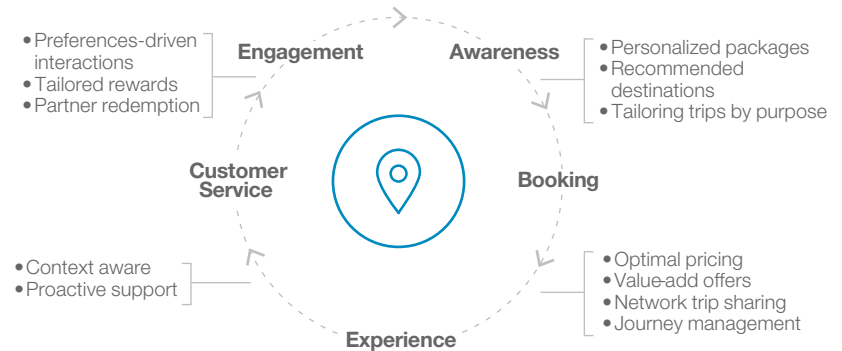
Source: IBM Institute for Business Value

Don't let your ambitious loyalty program objectives delay immediate action

Travel providers that have not made loyalty the centerpieces of their cognitive transformations should not despair, nor should they delay. Knowing that a cognitive future is the eventual destination will help shape the decisions they make about how and when their loyalty programs will evolve. Recommendations to help bring travel loyalty programs closer to this ambitious and potentially profitable future state include:

Harvest as much diverse data as possible — Because data is the lifeblood of cognitive, and because travel loyalty programs have more of it than most other departments, the loyalty program should become the central repository of knowledge for the enterprise. Unfortunately, the data currently on hand will likely be insufficient for the task of true cognitive transformation, so loyalty programs should broker relationships to share data and insights with other departments. They should also eventually be willing to share data with relevant players outside the enterprise. In this way, the loyalty program can engage with the broader travel ecosystem to bring benefit to both loyalty program members and companies.

Take small steps toward cognitive-enabled loyalty — For most travel loyalty programs, the cognitive journey will be continuous, so small steps should be taken whenever possible. If financial conditions allow only incremental investments to improve existing analytics capabilities, companies should embrace these opportunities and see them as a means to begin learning to apply cognitive capabilities within their enterprises. Once travel loyalty programs have collected a critical mass of experts in data analytics, the scope and scale of cognitive capabilities should be expanded to bring analytic insight to the rest of the company. When it comes to cognitive enablement, travel providers should not let the perfect become the enemy of the good; by initiating the journey to a more cognitively enabled future, loyalty programs can lead the enterprise into a more data-informed future.

Re-tool traveler touchpoints to make effective use of personalized traveler insights — Greater traveler engagement with the loyalty program can generate volumes of new data about traveler preferences and usage patterns. Travel loyalty program leaders should give their best data scientists the best available data analytic tools to turn this data into meaningful travel insights. Leaders can then use these insights to personalize subsequent traveler-loyalty-program interactions at every customer touchpoint. These insights should also form the basis of a loyalty-led transformation of the entire travel experience. Success will require loyalty program employees to work closely with both customers and other departments within the enterprise to find ways to personalize each customer's experience across the entire journey.

Developing a cognitive roadmap requires a frank challenge assessment

Travel executives convinced their current loyalty programs are not fulfilling their full potential would do well to work with their teams to ask and answer the following probing questions:

- How are we taking full advantage of the data we have about customers and our travel operation?

- How are all current customer interactions opportunities being used to learn about customer preferences?

- What data might our partners from inside and outside the travel industry have that we could use to formulate better, more meaningful traveler insights?

- How well is the loyalty program delivering customer insights to customer touchpoints?

- What leading-edge cognitive computing solutions are we using to identify customer preferences?

Methodology: How we conducted our research

To better understand that potential and to identify the specific ways travel loyalty programs can be improved, the IBM Institute for Business Value (IBV) and the Economist Intelligence Unit (EIU) surveyed 3,833 travelers from 13 countries between May and August of 2015. Analysis of survey responses enables us to see past the success of travel loyalty programs and to explore steps travel providers can take to bring a revolution to these critical corporate engines of customer insight and engagement. To fire up these powerful engines of insight, travel providers should harvest customer data from a wide variety of internal and external sources, analyze the accumulated data using leading-edge cognitive computing tools, and apply the derived insights on each customer to the touchpoints that shape the traveler's journey.

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Notes and sources

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