

TABLE OF CONTENTS

Executive Summary	3		
Executive Letter	4		
Introduction	6		
Skift's 2020 Digital Transformation Report	9		
The Current State of Digital Transformation in Travel and Hospitality	11		
Use of Analytics and Data Strategy	16		
Evolution of the Tech Stack and Cloud Computing			
Training Talent and Designing the Organization	25		
Conclusion	28		

ABOUT SKIFT

Skift is the largest industry intelligence platform providing media, insights, and marketing to key sectors of travel. Skift deciphers and defines trends for global CEOs and CMOs across the travel industry through a combination of news, research, conferences, and marketing services.

ABOUT SKIFTX

SkiftX is Skift's in-house content studio. SkiftX produced this report in partnership with Amazon Web Services.

MASTHEAD

Vice President, SkiftX / Katherine Townsend Editorial Director, SkiftX / Lisa Omagari Research Editor, SkiftX / Jeremy Kressmann Designer / Joanna Gonzalez

EXECUTIVE SUMMARY

Today's business world is digital. This is true of virtually any aspect of modern organizations, whether that's digital savvy consumers, the importance of digital tools and systems in helping companies run more efficiently and effectively, or in the increasingly data-driven philosophies being used to help companies uncover insights and develop new strategies.

And there is no industry better positioned to capitalize on the benefits of digital-first processes than the travel and hospitality industry. Travel and hospitality in 2020 has capitalized on any number of digital innovations to make its products more appealing to consumers and business partners alike. But due to the outbreak of Covid-19, the need for smart digital transformation strategies is no longer just a nice to have feature. Instead it is becoming essential.

The integration of digital tools and systems into a company's business cultures and processes, often referred to as "digital transformation" is a process that has any number of benefits. At a time when many consumers are not traveling, companies face difficult decisions about staffing and remote work, and new competitive challenges loom, digital transformation offers an increasingly attractive proposition. It can make these organizations more resilient in the face of unexpected business challenges, help them be more nimble in responding to shifts in demand, provide new insights into company operations and consumers, and even allow them to run more efficiently and save money in the process.

But achieving these digital transformation benefits also requires plenty of work. How can travel businesses ensure they attract and train talent that is fluent in using digital tools and analytical strategies? Which teams or leaders should be tasked with making sure the company is making progress using digital strategies and tools? And what technology and systems, like cloud computing or machine learning, should they adopt in order to make their company more digital ready?

It was with these questions in mind that Skift partnered with Amazon Web Services on a survey investigating the opinions of travel industry executives worldwide on the topic of digital transformation. Close to 1,000 respondents participated in the research, answering a range of questions about the state of their digital transformation plans, budgets invested, digital capabilities, and talent, staffing, training. The responses were then supplemented with executive interviews and case studies gathered from some of the leading companies in the industry today.

In the report that follows, Skift and Amazon Web Services explore the state of digital transformation in the travel and hospitality sector, providing a benchmark for executives to follow as they gauge their own progress with this critical discipline.



EXECUTIVE LETTER

Digital transformation remains an essential agenda item for travel and hospitality leaders, despite the level of disruption currently faced by the industry. With demands for instant gratification, together with expectations from travelers and guests continually evolving, companies are finding that integrating digital experiences into all areas of their business enables them to transform into more agile and resilient organizations. And over time, so many touch-points have gone digital, from how customers choose and book experiences to how companies manage their daily operations, people, and resources.

Agility and resiliency have never been more important for travel and hospitality companies. We've seen that agile



David Peller,Global Head, AWS Travel & Hospitality

companies are better prepared to adapt to market changes – and thrive. The good news is, any company can learn to be agile. We've been inspired by how the industry has responded to these challenging times with incredible initiatives and game-changing innovations that will likely impact and improve the way we fly, stay, eat, and more well in to the future.

At <u>Amazon Web Services</u> (AWS), the world's most comprehensive and broadly adopted cloud platform, we work with global travel and hospitality leaders of every size and segment help transform their business and become more agile and resilient. These companies are increasingly focused on enhancing customer experiences and increasing operational efficiencies in order to stand out.

AWS is a customer obsessed organization and we are always looking to learn more about the needs of the industry and our customers. That's why we partnered with Skift for an in-depth study that has become the 2020 Digital Transformation Report. We hope the critical insights garnered from global executives across all segments will help you evaluate what digital transformation means to your business and which initiatives to prioritize.

This is an unprecedented time for travel and hospitality companies. Yet as challenges evolve, we look forward to seeing and supporting the innovative solutions that enable the industry to rebuild, recover, and thrive.

Sincerely,

David Peller Global Head, AWS Travel & Hospitality





Travel and hospitality companies inspire us every day with their resilience and innovation.





avis budget group









DUNKIN'









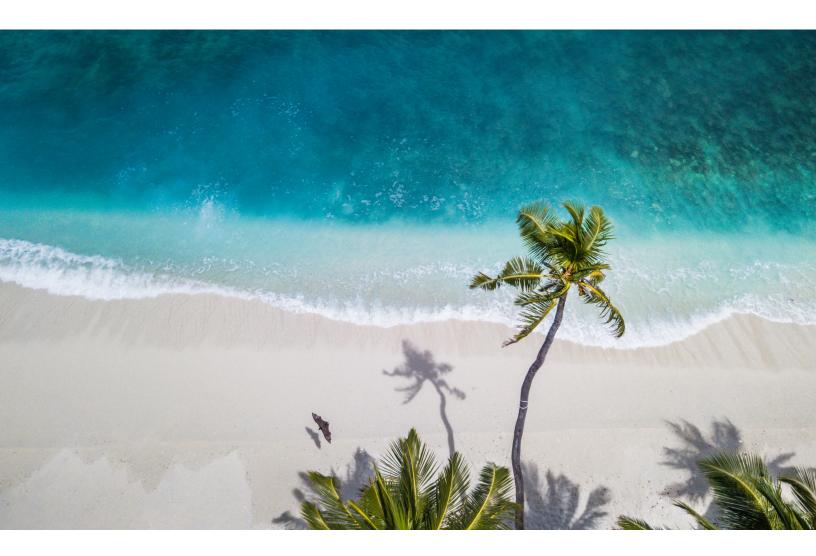






Learn how AWS is helping these and other leading travel and hospitality companies transform at **aws.com/travel**

INTRODUCTION



It's been nearly a decade since Marc Andreessen's influential essay, "Why Software is Eating the World" was published in 2011. As Andreessen explained, "...we are in the middle of a dramatic and broad technological and economic shift in which software companies are poised to take over large swaths of the economy."

At the heart of the argument is a widely accepted business truth: no matter the industry or company, digital processes offer companies an unbeatable opportunity to transform the way they run their organization and interact with customers. In 2020, the "software is eating the world" mantra is often referred to as "digital transformation," a philosophy

summarized in <u>a recent CIO article</u> as the "radical rethinking of how an organization uses technology, people, and processes to fundamentally change business performance."

This concept of digital transformation has special relevance for travel and hospitality. After all, the industry was among the first to sell its products online back in the 1990s. That trend continues today, when a significant share of the industry's products and services are purchased via e-commerce. A 2019 report from Skift Research cited data from the United States Census Bureau, noting that 46 percent of travel and hospitality agency bookings, and 44 percent of airplane bookings in the U.S., were made online.

"Today, as travelers, as guests, as passengers, our first interaction with travel and hospitality is probably through digital means," confirmed David Peller, Global Head, AWS Travel & Hospitality.

"It's not just about digital transformation; it's about transformation," said Jason Birnbaum, senior vice president of digital technology for United Airlines. "You can't imagine a customer transformation without a massive part of it being digital, or an operational revolution to provide reliability without a digital component."

But putting aside past success, travel and hospitality's pace of transformation across its various business functions like marketing, operations, customer service, revenue management, and sales is inconsistent. In fact, compared to other industry verticals, travel and hospitality businesses are not always optimized to take advantage of the emerging consensus around digital transformation. Four of the most important areas for improvement are:

- Handling business data The vast amounts of data generated by increasingly digital business operations and customer interactions must be collected, organized, and analyzed in ways that aid proactive decision making. The information needs to be available to all company decision-makers in real time. It must also be used to support efforts to create superior customer experiences personalized to adapt to each traveler's constantly evolving needs.
- Training and hiring talent Industry employees must be adept at understanding the information gathered from digital sources and trained to collaborate across traditional industry business silos. Travel and hospitality industry businesses must also compete with other industries to hire the most skilled workers to achieve their digital transformation goals.

- Building long-term customer relationships Companies need to understand how to effectively interact with customers, adapt based on their constantly changing desires and behaviors, and make those relationships sustainable over the long term.
- Implementing the most efficient business systems and tools New types of software, systems, and digital tools offer new capabilities and advantages, whether connected to marketing, revenue management, e-commerce, operations, sales, or beyond. Companies that rely on outdated systems and technology risk being out-maneuvered by more agile competitors.

The travel and hospitality companies that complete the hard work of auditing their digital-readiness across these four functions, and where necessary, overhauling processes that no longer serve them, will be in the best position to survive and thrive. The stakes have never been higher: huge financial investment and intra-industry competition will be dedicated to digital transformation efforts over the coming years. Even before Covid-19, research firm IDC predicted digital transformation investment would reach \$7.4 trillion between 2020 and 2023.



Digital goes to the core of any business today...when you think about transformation, it's an executive priority across the [travel] industry.

— David Peller, Global Head,AWS Travel & Hospitality

On top of all this, in 2020 the travel and hospitality industry's digital transformation efforts must reckon with the unexpected setbacks created by Covid-19. In this uncertain moment, when consumer travel and hospitality demand has decreased, company budgets are being cut, and employees are furloughed, some travel and hospitality companies may be tempted to cut back on digital transformation, or choose to view it as a distraction. However, many travel and hospitality organizations are recognizing that digital transformation is essential to their business, helping ensure they are:

- Resilient able to weather unexpected shocks to business like Covid-19. This can also help organizations handle the strain currently facing more analog communication channels from customers and from an increasingly remote workforce
- Agile able to make quick adaptations and scale a business in response to shifts in competition, emerging market opportunities, or changing economic conditions.

- **Efficient** able to identify how to use existing resources (physical or digital) more efficiently, thereby generating more value for customers, employees, and owners.
- Insightful able to generate actionable information about the state of the business and customers, thereby improving competitiveness, efficiency, resilience, and agility.

"[Covid-19] is stimulating a tremendous amount of innovation," said Peller. "We're seeing companies modify their approach ... [and] make service adjustments to the way they go about their business."

The importance of using digital transformation to accelerate and strengthen the travel and hospitality industry's response to Covid-19 is further emphasized by the findings of a 2020 survey by Gartner. In the study, 30 percent of marketing leaders noted that their current lack of flexibility and agility may be hurting them as they work to respond to the Covid-19 crisis. \spadesuit



SKIFT'S 2020 DIGITAL TRANSFORMATION REPORT



The benefits of digital transformation to the industry, especially during a period of significant change brought on by Covid-19, are increasingly clear. But are companies in the industry taking the lessons to heart? How far along are they in the process of digital transformation? And what digital tools, strategies, and techniques are they finding most valuable?

To answer these questions, Skift partnered with AWS in mid-2020 to launch an investigation of digital transformation in travel and hospitality. A digital transformation survey was distributed to nearly 1,000 industry leaders across the world. At a broad level, the survey sought to understand the industry's progress across four themes.

- The state of digital transformation understanding how far along companies are with their digital transformation efforts, where it falls in the business priorities of decisionmaking of travel and hospitality industry executives, and whether they believed they were making progress.
- Budget investment examining spending on business functions connected to digital transformation processes, be they investment in technology, staff training, new software, or beyond.
- Digital capabilities priorities with regards to creating and analyzing information generated by digital processes. This includes data analytics, and investment in physical and virtual infrastructure (example software or hardware) to support these processes.
- Talent and training in addition to great technology, successful digital transformation requires investment in training to ensure employees can compete in a digital-first marketplace

Survey respondents came from a variety of sectors within the industry, highlighting travel's diverse ecosystem. This includes executive representation

Which of the following best describes your involvement in technology decisions at your company?

I make the investment decisions about software and technology

I recommend the use of specific technologies, applications and/or technology service providers

I have some influence on software and technology investment decisions

I advise and provide research on investment decisions

Other (please specify)

1%

Key industry sectors that participated in this year's survey

ONLINE TRAVEL AGENCIES











TOURISM BOARDS





from the hotel sector, restaurants, tourism boards, airlines, online travel agencies (OTAs), and casinos, among others.

The geographic distribution of respondents aligned with the regional centers of the travel and hospitality industry and world economy, with the largest percentage of survey participants coming from Europe, North America, and the Asia-Pacific region. Most respondents were in executive level positions as either managers, directors, or vice presidents. A significant minority hold C-level positions at their organizations.

This year's digital transformation respondents have significant influence over their organizations' digital transformation strategy and investment decisions. Thirty-six percent said they make the investment decisions for their organization, while another 26 percent said they make recommendations to their company about the use of specific technologies, applications, or technology service providers (see chart, left). ◆

THE CURRENT STATE OF DIGITAL TRANSFORMATION IN TRAVEL AND HOSPITALITY



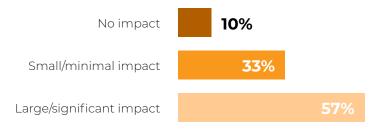
How far along is the travel and hospitality industry in its process of digital transformation? And what do the current levels of financial investment and training tell us about industry priorities? In this section, we take a closer look at progress toward achieving digital transformation goals in travel and hospitality.

There is perhaps no more pressing topic in 2020 connected to digital transformation than the industry's reaction to the Covid-19 pandemic. The worldwide measures put in place to fight the virus have contributed to a decline in consumer demand for travel and hospitality products and services,

coupled with a rapid shift in internal company operations, staffing, and use of technology by businesses. This year's survey sought to understand how Covid-19 might lead to changes in existing digital transformation plans.

In the short term, survey respondents say that the Covid-19 outbreak is significantly impacting their companies' digital transformation plans. Fifty-seven percent said it was having a large or significant impact, with these companies noting they were delaying related spending or activity (next page, top left).

In the short term (next 2-3 months) how do you expect the COVID-19 crisis will impact your digital transformation plans?

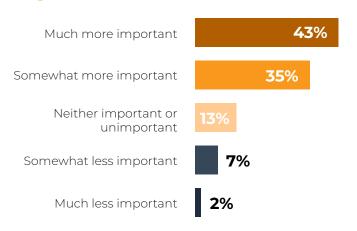


This is not all that surprising given the size and scale of the downturn caused by Covid-19. Companies across all sectors, including airlines, hotels, tours and activities, and ground transportation, have announced plans to cut back spending and conserve cash until travel and hospitality demand stabilizes.

However, even if the immediate shock of Covid-19 is substantial, it is reinforcing the importance of the tools and strategies associated with digital transformation. For those organizations that already have integrated digital processes into their business culture, Covid-19 is offering an opportunity to react more quickly, using their digital capabilities and culture to react to the challenge more quickly.

"With Covid, I think the questions we're asking are different, but the capabilities that we built are still good," said United's Birnbaum.

How important is it for your travel organization to proceed with its pre-existing digital transformation activities in light of COVID-19?



This aligns with the findings of this year's survey. Close to 80 percent said that, even in light of Covid-19, it was much more important or somewhat more important that they proceed with their digital transformation plans today.

Industry leaders' comments echoed this sentiment. "Digitalization is a top priority for us, second only to safety," said Kenny Chang, chief marketing officer (and former CIO) at Korean Airlines.

Covid-19 is also accelerating the implementation of digitally driven customer tools designed to assist travelers. Many travel and hospitality brands were already launching these low-touch and self-service amenities prior to the outbreak, and the need to minimize virus risk and physical contact is speeding up their deployment.

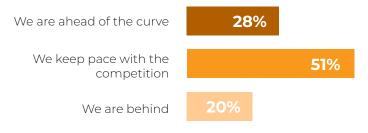
"Hyatt hotels are working to roll out enhanced digital amenities through hyatt.com and the World of Hyatt app that will give guests more control over how they connect with Hyatt, minimizing contact while maximizing care," said Julia Vander Ploeg, SVP, global head of digital and technology for Hyatt. This will allow guests to "...manage preferences like housekeeping frequency, choosing between pickup or knock-and-go food orders, mobile key entry, contactless check-in and checkout, and more."

Another example is United Airlines, which has accelerated the roll-out of hundreds of "touchless" airport kiosks. "Covid-19 has enabled us to do things that from a change perspective maybe would have taken a little longer," confirmed United's Birnbaum. "It has forced us to rethink a lot of things. And I think it has proven that the investments that we've made in the past have been able to be leveraged in amazing and innovative ways."

Looking beyond the immediate impact of the virus, this year's survey also tried to understand how executives rated their progress with digital transformation. For many, digital transformation efforts are never really finished, even if it feels

at times as if a company is only doing the bare minimum to keep up with competitors. Just over half of respondents said they "keep pace" with the competition, while only a just over a quarter said they were "ahead of the curve."

Overall, how do you feel about your organization's ability to compete in a digital world?



To help further understand the pace of progress, respondents were also asked to elaborate on their ratings in the chart above. The responses reveal three challenges facing the travel and hospitality industry as it proceeds with digital transformation:

1.

Scalability takes time — One survey respondent mentioned the complexity involved with scaling new digital processes across various teams within large organizations. "We are a very large hospitality company that has to ensure digital transformation works at scale globally," the respondent said. "This takes some time."

2

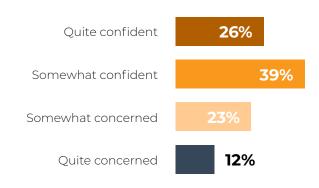
Keeping up with innovation is challenging

— Another respondent mentioned the headspinning rate at which new technology and digital systems are being developed for travel and hospitality industry businesses. "The single biggest challenge to the industry is keeping abreast of technology," the industry participant said. "It's fast changing, and we need to keep innovating." 3

Legacy systems get in the way — Meanwhile, another respondent noted the challenges related to updating and maintaining legacy systems. Trying to keep these systems running, and find ways to link them, can be complicated. "Currently, we have too many unconnected systems," the respondent said. "That makes things inefficient."

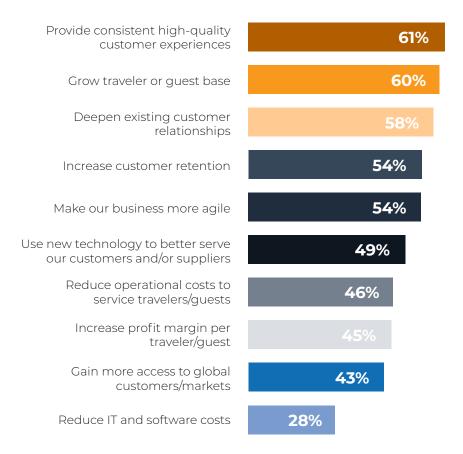
Another leading indicator of progress with digital transformation is company spending. Where and how organizations spend their money reveals a great deal about the importance of digital transformation to the sector. On the topic of budgets, money did not appear to be a barrier to achieving digital transformation objectives, another sign of the discipline's growing importance to long-term strategic goals. Over 60 percent of respondents were somewhat or quite confident they had the necessary budget.

How confident do you feel about the following statement?: "We have the necessary budget to deliver on our 2020 digital objectives."



Looking ahead to their priorities for the rest of 2020 and into 2021, travel and hospitality businesses said their main focus was on customers. Sixty-one percent said consistent, high-quality customer

What are your organization's top business priorities for 2020? (select your top 5)



experiences were most important, while another 60 percent said growing their customer base was key. Meanwhile, 58 percent said they wanted to deepen their customer relationships (top).

This focus on customer-centric business strategies will need to be linked to digital transformation tools and processes. The integration of digital into the customer experience is critical because of the growing expectations of today's digitally savvy travel and hospitality clientele.

"From a customer experience perspective, we're serving customers who are more digital than anyone else, probably in the world," confirmed Korean Air's Chang. This, he says, makes it essential to deliver a high-quality digital experience to passengers. "Unless the experience on the flight is equivalent to

or better than what they experience on the ground, we could end up losing the business to low-cost carriers with cheaper pricing."

According to the survey results, travel and hospitality organizations are prioritizing digital systems and tools that will help them gather better insights about customers and use that information to better satisfy their needs. Among the top three priority areas of digital mentioned by respondents (next page) were digital analytics (43 percent), front-end customer experience (42 percent), and e-commerce (41 percent).

It's not all that surprising to hear that executives in the travel and hospitality industry are focusing their digital strategies in 2020 on better customer experiences. Nevertheless, it's worth highlighting the surprisingly small number of executives (23 percent)

who mentioned the potential of emerging digital strategies like machine learning and artificial intelligence (AI).

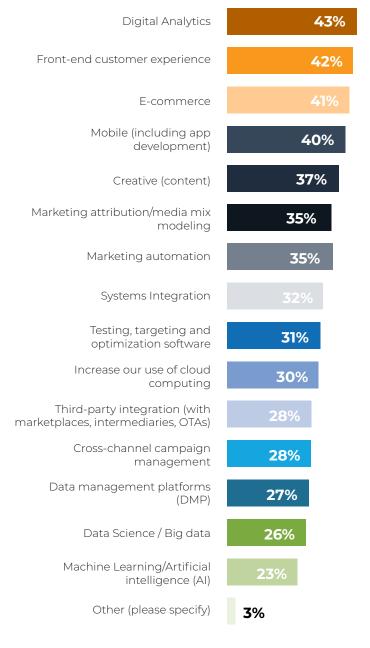
Even if these technologies are not as widely understood, companies that deploy techniques inspired by machine learning will see significant impact on business outcomes. Consider the example of Qantas, which utilized a cloud-based software simulation to predict the potential impact of various flight paths on the company's jet fuel expenditures. "From a business point of view, that's going to save us \$40m [AUD] in costs each year by a one or two per cent improvement on these flight plans," said Qantas CEO Alan Joyce in a 2019 interview. As more travel and hospitality industry businesses recognize the value of this type of datadriven analysis, machine learning's role is likely to grow in popularity.

Another example of machine learning techniques in travel and hospitality is from Choice Hotels. Choice is working with partners like AWS to glean new insights from their customer and business data to empower better decision making.



"[Choice Hotels] have a large amount of data at their disposal that they realized they were struggling to make use of in real time," said Amazon's Peller. "They use machine learning to look for insights in their own data to think how to better position and market themselves to customers, recognize and reward their most loyal guests, and...drive fundamental change through the entire organization." •

Thinking about your overall digital strategy, which of the following areas will you be focusing on most over the 12 months?



USE OF ANALYTICS AND DATA STRATEGY



Digital-first businesses live and die based on their access to good data. But how that data is gathered, shared among different cross-functional teams, and then applied to the business plays a critical role in the success of a digital transformation strategy. In this section, we explore the travel and hospitality industry's current position in terms of its use of data as part of its digital strategy.

Before reviewing the survey results, it's worth explaining why implementation of a digital-focused data strategy is so important. The ability of data to help improve the customer experience is primary. A smart data strategy lets travel and hospitality organizations deliver personalized customer

experiences, optimize customer service, and engage customers seamlessly across different channels and touchpoints in the buying journey.

Hyatt offers one example of how the smart use of this data can deliver more personalized marketing content. Due to the Covid-19 outbreak, many consumers will travel closer to home in 2020. Because of this, Hyatt is adapting its personalization efforts to selectively target the most likely travelers.

"We are launching our Stay Like a Local campaign and are leveraging consumer insights and data from a variety of sources including Google search data," said Hyatt's Vander Ploeg. "We target markets that appear primed for recovery and the feeder markets that are within a five-hour-drive radius...Once a user clicks into this experience, they will land on the target markets search results page highlighting all properties in that area."

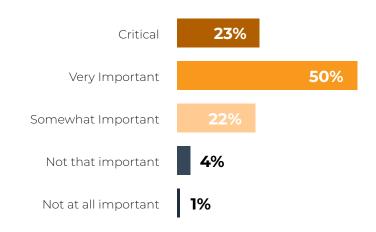
There's also growing value in centralizing the storage and access to data generated by travel and hospitality businesses, making it easier to access across teams. Centralization also powers initiatives like machine learning, automation, and business forecasting, and it enables increased transparency, a key feature at a time when there are growing demands for better customer privacy protections and transparent supply chain initiatives.

Furthermore, better data strategy leads to better business insights. It enables travel and hospitality businesses to move beyond analyzing what has already happened and instead make decisions about the future.

According to survey responses, those in travel and hospitality already recognize the importance of having high-quality, actionable digital information to drive their business. Seventy-three percent said using and applying customer data analytics was critical or very important to the success of their company (above, right).

Many in the industry also believe they are doing a good job of making use of their business data. Eighty percent of travel and hospitality respondents rated their firm's data strategy as average, better than average, or excellent (below).

How important are customer data analytics to the business success of your company?



But the need to link all the information together in ways that help create smart business strategies is also recognized. Consider the fact that over 40 percent of respondents had concerns about the current state of their data analytics programs, saying they either had "minimal visibility" or "holes" in their ability to use data to drive their decision-making (next page, top).

Many travel and hospitality industry executives also have trouble gaining a clear picture of their customers and their behavior. Even when more information is being generated by businesses and customers than ever before, synthesizing that data to generate broader insights into traveler behavior is getting more difficult. Over half of respondents said they were only "somewhat effective" at creating a single view of their customers (next page, bottom left).

	Very Poor	Below Average	Average	Better than Average	Excellent
Data Strategy: We are able to use data about our company performance and customer habits to make strategic business decisions that set us up for future success	4%	16%	35%	32%	13%

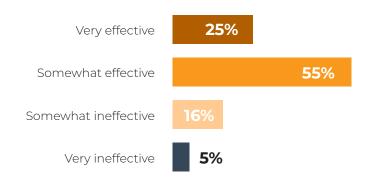
How do you feel about the current state of your customer data analytics program?



As more travel and hospitality companies explore methods to gain this single customer view, the use of "data lakes" is likely to become more widespread. The term refers to a centralized repository of all a company's data from its various business operations, making it easier to perform analysis and make smarter business decisions as a result.

The gaps in data knowledge and gathering mentioned above also complicate efforts to deliver more tailored products, services, and interactions to travelers. Forty-six percent said they were only "somewhat confident" about their ability to deliver personalized experiences to customers (next page, top right).

How effective is your organization at creating a single view of your customers and your operations, and turning that information into actionable insights?



How are companies in the travel industry using their data at scale to provide best-in-class personalization? A few examples from the hospitality industry help illustrate the available opportunities.

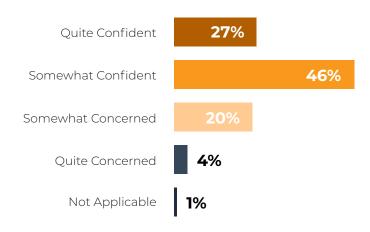
One example is Hyatt. In a recent presentation, Srihari Thotapalli, global head of analytics for the hospitality brand, recently explained how the company partnered with AWS to use data to deliver more customized experiences to guests. This included a more personalized upsell process for guests, resulting in \$40 million in incremental revenue in the first six months of 2019, a bespoke property recommendation tool for loyalty members, and a 3D "heatmap" to help property staff to quickly identify potential maintenance issues.

Another great example is Yanolja, a Korean-based hospitality platform that works with more than 26,000 properties. According to company CEO Jong Yoon Kim, Yanolja is trying to create more frictionless experiences for hotel guests.

Kim cites the company's creation of a single database containing all the organization's online and offline customer transactions, coupled with new data analysis, to help executives more efficiently allocate in-room amenities like cosmetics, towels, or snacks where they're needed.



How confident do you feel about the following statement?: "My organization can effectively deliver personalized experiences and messaging to our customers."



Many hotels provide these items by default, but that can be wasteful: many guests end up not using them, leading to extra inventory costs and wasted manpower replenishing rooms. Now, with the help of sophisticated data analysis, the company has transitioned to a model where guests order amenities before they arrive. "We let the customers choose their amenities in advance," said Kim. "Through the data we can understand [and predict] the type of amenities they prefer." The company has also installed amenity vending machines at each property to help automate requests for anything they might have missed. \spadesuit

EVOLUTION OF THE TECH STACK AND CLOUD COMPUTING



Connected to the topic of data strategy and personalization is the topic of technology, software, and hardware investment. What is the current state of technology implementation and investment as it relates to the travel and hopsitality industry's digital transformation?

Any analysis of the state of technology investment in travel and hospitality must start by addressing the growing importance of cloud computing. The term typically refers to the on-demand delivery of information technology resources over the Internet with pay-as-you-go pricing, allowing companies to

access technology services, raw computing power, storage, and databases on an as-needed basis.

In the past, travel and hospitality companies needed to purchase and maintain costly hardware and software for company functions related to operations, distribution, e-commerce, customer relationship management (CRM) and marketing. However, there is now a growing focus in all industries on supplementing or replacing these systems with cloud-based solutions. The WSJ reports that companies world-wide spent \$31 billion on cloud services between January and March 2020, up 34 percent from the same period last year.

Using cloud-based infrastructure has numerous benefits. One extremely important benefit is cost reduction. Consider the example of European travel company TUI, which was able to rapidly reduce technology costs in the face of Covid-19 by scaling down its cloud usage. Thanks to the shift, TUI Destination Experiences was able to create a cost savings of more than 55 percent.

"It took just days to see the first results and weeks to see impressive cost-savings. As a result, we are now more cost and performance conscious than we were before. That culture shift is something we will take with us long after this unprecedented situation has passed," said Miguel Angel Coll Alonso, head of technology domain at TUI Destination Experiences.

Cloud computing makes it possible to quickly adapt an organization's storage and computing capacity on demand. "Think of it just like you would the electricity utility," said Peller of AWS. "If you put lights on in your room, you are running the meter. And as soon as you leave the room, you can dial that back."

According to travel and hospitality industry executives, cloud-based computing companies like Amazon Web Services (AWS) are growing in favor as platforms work to scale up or down as conditions require. "Initially, the appeal of AWS was the ease of managing and customizing the stack," said Nathan Blecharczyk, co-founder and chief technology officer at Airbnb. "It was great to be able to ramp up more servers without having to contact anyone and without having minimum usage commitments."

Yet another benefit of cloud-based infrastructure is agility: decreasing the time to deploy new solutions, products, or applications to customers and employees. "One of our metrics for success is the reduction of time to deploy within our teams," said Murari Gopalan, technology director at Expedia. "We use this method to launch applications pretty quickly compared to a traditional deployment. Moreover, reducing the cost of a rollback to zero means we can be fearless with deployments."

What are the benefits of cloud computing? A sector-by-sector breakout

TRAVEL TECH SOFTWARE/ ONLINE TRAVEL AGENCIES



66% Better data security/privacy

54% Makes it easier to scale

50% More flexible/agile business

HOTELS



54% More flexible/agile business

53% Enhance customer experience

51% Makes it easier to scale

AIRLINES



57% More flexible/agile business

57% Makes it easier to scale

57% Lets us only pay for the tech/software we need

RESTAURANTS



61% More flexible/agile business

57% Enhance customer experience

54% Makes it easier to scale

What are the benefits of cloud computing? A breakout by region

NORTH AMERICA



66% More flexible/agile business

61% Makes it easier to scale

54% Enhance customer experience

EUROPE



56% More flexible/agile business

54% Makes it easier to scale

48% Lets us only pay for the tech/software we need

ASIA PACIFIC



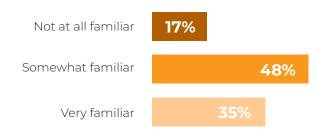
59% Better data security/privacy

56% More flexible/agile business

56% Enhance customer experience

Today, there is growing recognition of the power and benefits of cloud computing in the travel and hospitality industry. More than 80 percent of respondents said they were either somewhat or very familiar with the concept.

How familiar is your organization with the idea of "cloud computing?"



The growing adoption of cloud-based computing reflects the strategy's increasing range of business benefits. Fifty-eight percent of travel and hospitality industry respondents chose cloud computing because it offers them a more flexible and agile business, 54 percent because it makes it easier to scale their business, and nearly half (49 percent) because it enhanced the customer experience (next page, top).

In spite of these benefits, most travel and hospitality executives said their companies were still in the early- to mid-stage of implementing cloud solutions. Thirty percent said they were currently investigating cloud solutions but hadn't settled on a provider yet. Meanwhile, another 33 percent have moved some, but not all, of their operations to the cloud.

How far along is your organization in regards to shifting its digital operations to the cloud?

We don't intend to move our software to the cloud at this time

Early stages - we are investigating cloud solutions but haven't decided yet

30%

Middle stages - we have moved some, but not all of our operations to the cloud

33%

Late stages - we have migrated most of our operations to the cloud

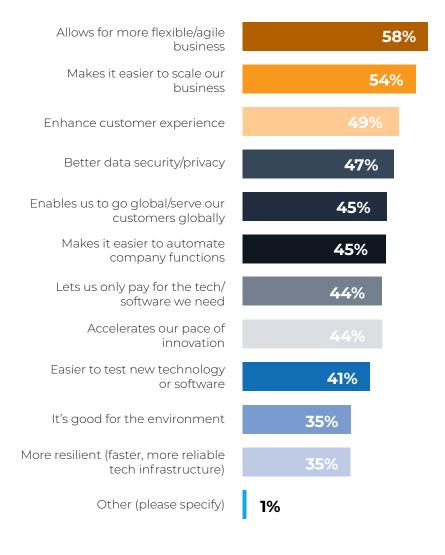
16%

Complete - our digital operations run more than 90% in the cloud

9%

This growing recognition of, and decision to embrace, cloud-based solutions is repeated in comments made by industry executives. "About three years ago, we started to standardize on cloud platforms," Scott Strickland, chief information officer for Wyndham Hotels & Resorts, said in a recent interview. "As we started that migration, we realized we were leaving a lot of work in our data centers. So we took a step back and said, how do we migrate the platforms that remain in our data centers out into a cloud environment? And that's what led us to AWS."

Which, if any, of the following do you think are the biggest benefits of switching to cloud-based IT and software solutions?



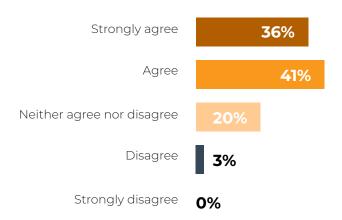
Others mention the increased accessibility cloud computing provides to staff. "There was concern about [features like] data security, latency, and does it really save money? Does it provide scalability and faster time to market framework?" said Korean Air's Chang, speaking about the company's evaluation of cloud-based software solutions. "We realized we could provide a lot more digital accessibility and digital transformation opportunity to employees, versus what we were able to do before."

Due to Covid-19, there are also growing signs that cloud-based technology will become a more

important focus for travel and hospitality. As more employees work remotely, cloud solutions make it easier to access critical information, while also helping to more efficiently (and safely) serve customers. Seventy-seven percent of survey respondents either strongly agreed or agreed that cloud technology can help improve the customer experience and optimize operations (next page, bottom left).

Global travel and hospitality businesses agree that cloud solutions have helped them streamline their operations, especially when it comes to growing business opportunities in new regions. "This emphasis on cloud solutions is also relevant for Hyatt in emerging markets like the Asia-Pacific region," said Hyatt's Vander Ploeg. She sees cloud as a solution for the increasing use of "data residency" rules, requiring companies to store data in the location of their business operations. "Leveraging the cloud in lieu of building out more traditional co-location infrastructure in those regions can position Hyatt to respond to evolving data residency regulations." \spadesuit

Agree or Disagree: "Cloud technology can help improve the customer experience and optimize our operations."





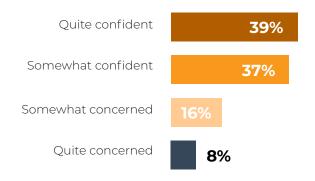
TRAINING TALENT AND DESIGNING THE ORGANIZATION



Digital transformation isn't just about software, data, and technology. It's also about people and culture. No matter how much money is spent on the latest digital tools and processes, companies must also invest in employees who have the necessary digital skills and provide training on how to use new tools effectively. At a time when the pace of change is accelerating, how prepared are travel and hospitality organizations when it comes to having the right people and organizational structure?

According to the Skift and AWS survey, most organizations in the travel and hospitality industry believe they have the necessary employee talent and training regimens in place, suggesting the industry is fairly advanced in its transformation toward digital processes and procedures. Over 70 percent of respondents said they were quite or somewhat confident they had the necessary talent to deliver on their 2020 objectives (next page, top left).

How confident do you feel about the following statement?: "We have the necessary TALENT to deliver on our 2020 digital objectives."



Thinking beyond the basic questions of employee preparedness and training, it's also worth investigating how businesses in the travel and hospitality industry organize and orient their teams around digital processes.

A great example is Choice Hotels, which made the decision to rebuild its global reservations system from the ground up using a cloud based-solution. The switch required the company to not only redesign software but also the team tasked with creating and maintaining it.

"We spent a lot of time planning, driving culture change, and restructuring our organization to make sure that we were set up for 'cloud' success," Brian Kirkland, chief technology officer of Choice Hotels, said in a recent presentation. "Things are just different in the cloud."

According to Kirkland, this involved a new startup-driven culture, as well as a new team structure. "We completely separated the team and created a startup within [the company]," he said. "Let's put everybody we need to make this team successful into one place...and let's create a culture and process that brings the right people together."

Another part of the digital talent equation is leadership. In some companies, digital transformation initiatives are directed by a cross-functional team. Meanwhile, in other companies, a single individual leads the process. Which approach is more popular?

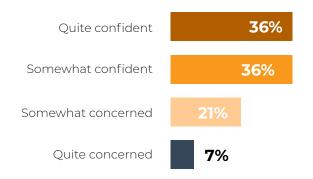
In the survey, 27 percent of companies have a cross-functional team, while another 24 percent have a central integrated person who manages the process, a more or less equal split between the two approaches (next page, top).

Yet another aspect of digital transformation is who is actually leading the process within the company. Fifty-nine percent of organizations said their C-level employees were actively involved in their digital transformation planning, which highlights its importance (next page, bottom).

Each response above suggests a strong consensus within travel and hospitality about the importance of providing the right organizational training, leadership, and team structure in order to support digital transformation goals.

Still, there will be challenges ahead. Some executives worry about how the responsibility for managing new digital technology will be delegated. "Most [travel] CIOs/CTOs are very concerned about going to cloud," said Korean Air's Chang. "Not because they're taking risks, but because they believe they'll need

How confident do you feel about the following statement? "Our employees have the necessary TRAINING to support our 2020 digital objectives"



Does your organization have an individual or team directly responsible for digital transformation?

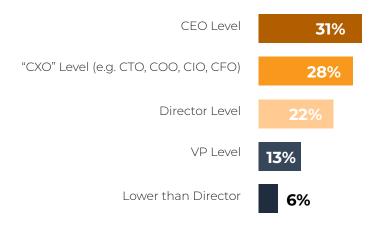


to rebuild their teams, maybe reduce some of their responsibilities, and staffing will be jumbled."

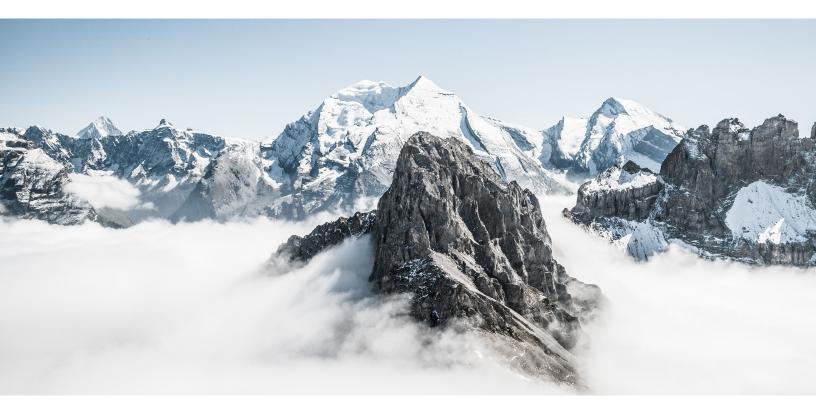
Another potential roadblock is recruiting and retaining talented staff. As one survey respondent noted, retaining digitally native talent can be difficult, especially competitive locations like the San Francisco Bay Area with high concentrations of technology business. "The industry is in high demand of these employees," said the respondent. "To get the right person, we need the right salary and benefits."

Looking to the future, those in the industry will also need to think about how to most effectively use the "down time" created by Covid-19 quarantines. A large number of industry employees are currently furloughed or working remotely, complicating efforts to communicate digital process changes and continue to educate employees on new skills. This highlights the need to find ways to deliver digital training curriculums and help employees learn and build new capabilities for the uncertain time ahead. •

What is the top level of the organization that is involved in active planning and is responsible for digital transformation?



CONCLUSION



Over the past two decades, the travel and hospitality industry has undergone a fundamental transformation. Driven by new business innovations powered by new digital technologies, the nature of the customer experience itself has become increasingly digital, both for customers and companies alike. But alongside the opportunities created by this transformation, there are also growing challenges.

Today's digital-savvy customers expect much more from their favorite brands, forcing an reexamination of the role that digital plays in learning from customer habits, nurturing customer interactions, and developing more personalized experiences. Digital is also revolutionizing the internal operations of travel and hospitality companies from all sectors as they look for ways to be more efficient, make better business decisions based on data, and better serve their customers.

Amidst these business challenges, the industry has been hard hit by the economic shock of Covid-19, making decisions related to digital transformation strategies more relevant — but also more urgent — than ever. Should travel and hospitality businesses prioritize stability? Growth? Innovation? And where will their investments make the biggest impact?

No matter which business priority or strategy they choose, whether it's focusing on the customer experience or streamlining internal operations, it's clear that digital processes and tools play an important role in the process, one that will accelerate in the future.

"Technology is the glue that enables all of those components," said Peller of AWS. "Digital transformation and technology goes to the heart of the industry for those very reasons." •

ABOUT SKIFT

Skift is the largest intelligence platform in travel, providing media, insights, marketing to key sectors of the industry. Through daily news, research, podcasts, and Skift Global Forum conferences, Skift deciphers and defines the trends that matter to the marketers, strategists, and technologists shaping the industry.

SkiftX is Skift's in-house content marketing studio, working collaboratively with partners like Adobe, Airbnb, Hyatt, Lyft, Mastercard, and many more on custom projects to engage the world's largest audience of travel influencers and decision makers.

Visit skiftx.com to learn more or email skiftx@skift.com.



AMAZON WEB SERVICES

AWS Travel and Hospitality is the global industry practice for Amazon Web Services (AWS), with a charter to support customers as they accelerate cloud adoption. Companies around the world, across every segment of the travel and hospitality industry - and of every size - run on AWS. This includes industry leaders like Airbnb, Avis Budget Group, Best Western, Choice Hotels, DoorDash, Dunkin' Brands, Expedia Group, Korean Air, McDonald's, Ryanair, SiteMinder, Sysco, Toast, United Airlines and Wyndham Hotels. These companies and many others are transforming their business by leveraging technology to enhance customer experiences and increase operational efficiency.

For more information about AWS Travel and Hospitality, please visit aws.com/travel.

