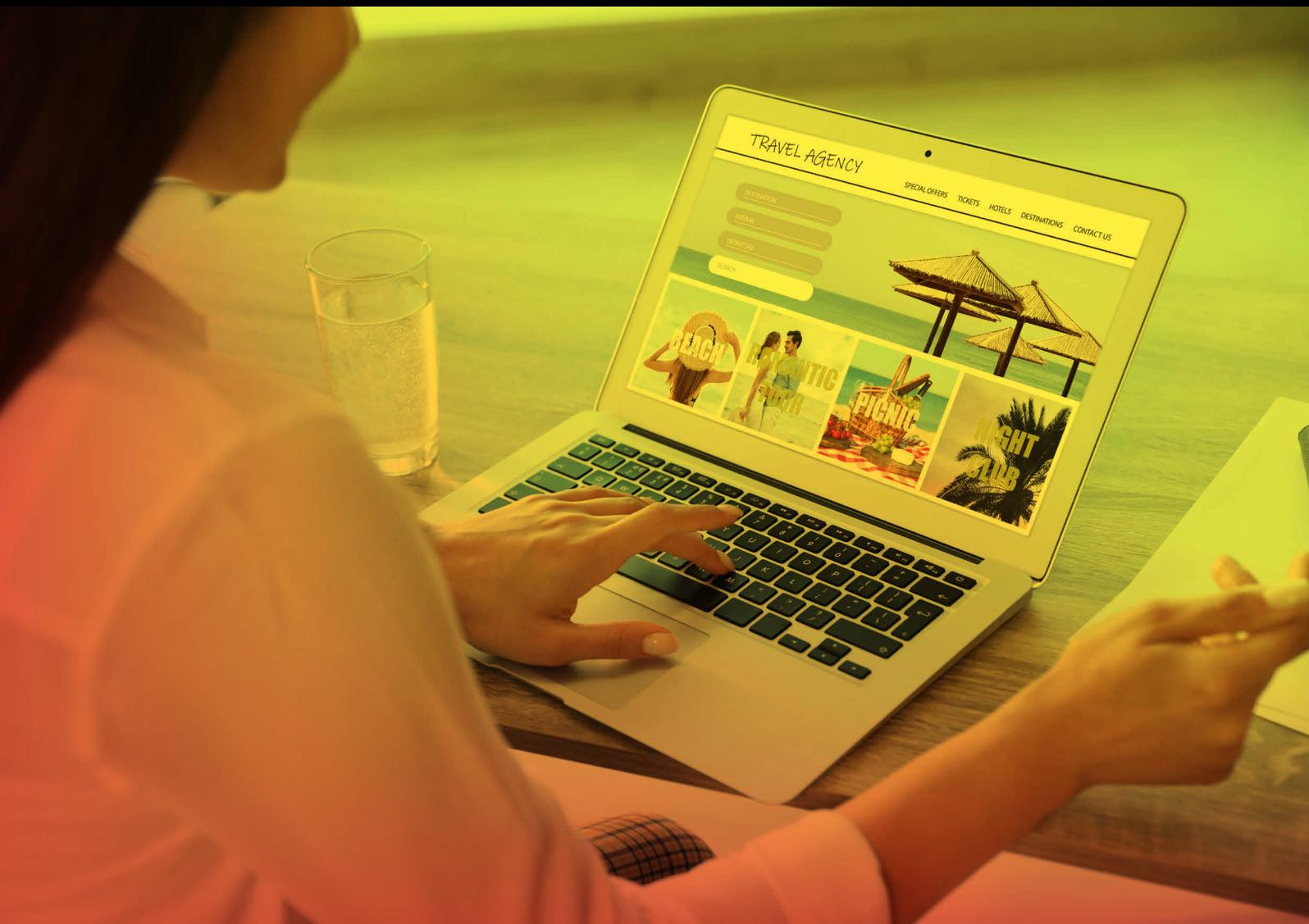


Build resilient, sustainable travel value chain with harmonious ecosystems



Abstract

The travel industry is preparing for a comeback from the shock caused by COVID as countries get aggressive with vaccination and travelers yearn for the sense of relaxation, rejuvenation and freedom travel provides.

The industry has faced a tumultuous time with organizations and workforce impacted alike. Some businesses have acted swiftly, forging partnerships that seemed unlikely in the past, finding innovative ways to improve customer trust, tapping into new avenues underpinned by digital transformations. For example, Singapore Airlines set up a task force to look at the customer journey and identified 100 different touchpoints where there is scope to enhance the health and safety of customers and employees to bring back customer confidence in flying.¹ While such initiatives help businesses stay afloat and pivot to emerging needs, shaping a resilient and sustainable travel value chain, that transcends current industry barriers will become a collective priority for all key stakeholders. There are some key digital avenues that can help orchestrate harmony within and across travel ecosystems, enabling new business and operating models to power resilience and sustainability.

Current challenges

Many travel suppliers are focusing on immediate priorities such as health, safety, and resilient operations. However, they are faced with numerous challenges in this endeavor such as:

- The decades-old, siloed way of working in the industry, with each business/functional unit within the enterprise optimizing individual capabilities, processes, and outcomes rather than having global optima as a goal
- Legacy processes and systems that enforce round-about ways of working, paper-based workflow, and restrictive data-sharing policies
- Limited real-time systemic decision support systems that hamper data-driven, informed decision-making by front-line employees

As a result, travelers face friction at multiple touch points during their journey, unable to enjoy a seamless experience; travel suppliers face detrimental impact on operational efficiency and cost; and the stress levels of front-line employees are elevated.

The pandemic has introduced a new set of challenges and imperatives, lending urgency to build a travel industry that is more resilient and sustainable. But the question is: How can the travel value chain pivot to new operating models for resilience and adaptability through harmonious ecosystems and what key digital avenues can enable it?

[1] Singapore Airlines And Scoot Awarded Skytrax 5-Star Health And Safety Rating
https://www.singaporeair.com/fr_FR/fr/media-centre/press-release/article/?q=en_UK/2021/July-September/jr0621-210810

Harmonious ecosystems will play a pivotal role

In this connected world, the travel value chain remains largely disconnected especially in providing travelers a seamless experience. Even within an enterprise, individual portfolios operate as disjointed siloes with many weak links in information exchange, unified views, and digital collaboration. Rapidly evolving traveler behaviors and the need to embrace nimble operations will force major travel businesses to rethink how they operate, collaborate and the services/products they offer. For instance, an airport, a last-mile logistics startup and airlines can come together to offer seamless, door-to-door pickup and delivery of bags and high-value cargo. New business entities will become a part of the value chain. The future travel value chain will be underpinned by a network of ecosystems comprising of travel suppliers, facilitators, intermediaries, original equipment manufacturers (OEMs), healthcare, wellness, and other experience providers. The list will keep growing as new partnerships are forged.

The travel industry thrives on its human centricity through, for instance, front-line employees handling customer experiences and operational tasks, helping connect minds and cultures. Hence, digital intervention and enablement should be crafted with empathy, powered by a human-centered and inclusive design at every touchpoint and interaction. For instance, a digital companion for the cabin crew would benefit from considering the crew's working conditions. Lighting conditions may need the app design experience to account for readability in dim-lit conditions and yet ensure it is not too hard on eyes. A healthy and happy crew will ensure elevated experience for travelers on board. Such human-centric designs to power the digital interactions between the mobile app used by the traveler and the digital companion used by the crew can also ensure personalized experience delivery with minimal physical interactions. These design interventions enhance customer experience and help cabin crew optimize movements between the galley and travelers' seat.

Harmonizing every aspect—from planning, shopping, purchasing to operations and fulfilment—through 'empathetic orchestration' will become the bedrock of future travel. Harmonious ecosystems will lend themselves effectively towards evolving new business and operating models that, in turn, can power resilience and sustainability. For instance, airports can liberate their kitchen/food and beverage capacity to serve customers in the neighborhood and enable customers at the airport have food from restaurants outside delivered at their boarding area. Ecosystems play between OEMs, maintain, repair and overhaul (MROs) and airlines underpinned by harmonious operations can lead to efficient, predictive maintenance and improved aircraft utilization.

Three key digital avenues for orchestrating the harmony

Building harmonious operations and ecosystems requires the industry to navigate three key digital avenues: i) Connectedness, ii) Collaboration and iii) Convergence.

i. Connectedness:

Connecting silos within an enterprise and across enterprises is at the very heart of digital enablement—this unification is the most critical building block of the whole exercise. As an example, an airline's operations team, ground handling teams, airports and air traffic control

(ATC) will significantly benefit from a unified platform—the digital spine— built on collaborative decision-making principles. The platform will connect various siloed data and business events, automatically detecting anomalies and surfacing cross-domain intelligence for effective utilization of resources at the airport and enhancing the predictability of aircraft departure. The platform can, for example, bring unified situational awareness about flight delay and its consequences by offering insights to the front-line staff and providing artificial intelligence-machine learning (AI-ML)-based recommendations. It can suggest, for instance, whether to hold the departure of a connecting flight and the preparedness required of every team to operate the revised flight schedule to mitigate passenger inconvenience due to the delayed inbound flight. This harmonious way of working will enhance customer experience as the connecting flight is not missed, and result in potential cost savings for the airline. More importantly, the front-line staff feel empowered to take informed decisions based on real-time insights.

Leveraging the power of connectedness puts businesses in a better position to innovate on superior customer and employee experiences as well as productivity gains. Singapore Airlines Engineering Company, for instance, has streamlined MRO operations with a one-stop mobile app that provides history of defects of an aircraft, the maintenance manuals for the model and the servicing tools needed—all in one place, reducing the time workers spend on each aircraft. The planes can be put back to use faster, reducing passenger wait times.

ii. Collaboration

With connected data and insights, organizations can bring in a collaborative environment for all stakeholders in the ecosystem using digital tools and applications. Some key considerations must be taken into account to attain this:

- **Inclusive by design:** Business users should be involved in design thinking workshops to ensure the digital collaboration systems are aligned to their needs and preferences and the tools are viewed as an enabler and not as an overhead.
- **Contextual:** Placing the connected real-time context at the center of collaboration tools not only simplifies interactions but also boosts the confidence and productivity of users. The cabin crew can, for example, share a picture or a video of an inflight defect (damaged seat or a faulty inflight entertainment system), along with the context (traveler who occupied the seat, his/her travel history, and preferences), making collaboration between the crew, the service and customer experience teams easier and more effective to facilitate proactive initiation of service recovery for the traveler. -.
- **Intuitive and simple:** Right information and insights presented in an intuitive manner can help the frontline staff, responsible for critical operational processes, make effective decisions without being overloaded by information.
- **Change management and governance:** The success of digital collaboration initiatives depends on their adoption by the workforce. Organizations with clear mechanisms to disseminate their vision and strategy to all levels reap maximum benefits from digital investments.

Enhanced collaboration within an enterprise leads to enriched customer and employee experience and productivity gains, while extended collaboration across businesses helps create new business and operating models. Digital collaboration between OEMs, equipment/part manufacturers and airlines can lead to many 'as-a-service' business models instead of the traditional purchase-maintain-retire models for parts. Leading rideshare platform Lyft, for example, partnered with Sixt, a car rental provider, for mutual benefit. Lyft gets a ready supply of vehicles and Sixt benefits by becoming less dependent on and paying less commissions to online travel agents (OTAs).

iii. Convergence

The future of travel will be shaped by the ability of individual travel businesses and ecosystems to converge on a larger purpose by building on connectedness and collaboration. This will help unleash exponential value by harnessing the collective power at the intersections of previously unconnected and disjointed value chain; Composite processes transcending individual businesses, supported by robust handshake mechanisms across various technology layers, will become a fundamental construct towards enabling convergence. For example, OEMs and airline engineering portfolio working together can address pain points impacting each other's KPIs, giving rise to newer business and operating models between these entities. The OEMs can understand the usage statistics of aircraft they are responsible for and provide a solution to improve serviceability, optimize resource utilization and improve operational efficiencies for all entities involved. Bookings.com, a global digital travel platform, has partnered with Tripadvisor's Viator, a leading experiences marketplace, to provide travelers with around 40,000 bookable attractions, tours, and activities. This provides an expansive choice of destination experiences for Booking.com customers, expanding its experience business while also creating value for Viator's global community of tour operators and providers.

The travel industry will witness more such convergence, serving larger purposes such as seamless customer experience across modes/phases of trips, green travel, community development, improved cash flow and sustainable financials.

Now is the time for the industry to act

Travel has been second nature for human beings to explore the new. With so much pent-up demand and new expectations in the wake of the pandemic, the timing is right for the industry to lay the foundations for a resilient and sustainable travel value chain in which every stakeholder and ecosystem operates in harmony.

Welcome to the era of purpose-led convergence.

About the authors



Balaji Jagannathan

Global head – strategic initiatives (travel and hospitality)

Balaji Jagannathan heads the strategic initiatives group of travel and hospitality at Tata Consultancy Services (TCS), orchestrating digital transformation, IT strategy, innovation and consulting across travel and hospitality businesses, working closely with senior executives in the industry.

Awards and accolades



**TOP 3
IT SERVICES
BRAND**



**FASTEST GROWING
IT SERVICES BRAND
FOR THE DECADE
2010 - 2020**



Contact

Visit [Travel, Transportation & Hospitality](https://www.tcs.com) or <https://www.tcs.com>

Email: marketing.tth@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 500,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

Visit www.tcs.com and follow TCS news [@TCS](https://twitter.com/TCS).

All content/information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content/information contained here is correct at the time of publishing. No material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed in any form without prior written permission from TCS. Unauthorized use of the content/information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties.

Copyright © 2021 Tata Consultancy Services Limited