Scaling Smart: How Digital Transformation is Shaping the Future of Tourism

Key Insights from the Resilient Tourism Conference 2026 in Sierre

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Introduction

This report summarizes the main presentations, discussions and insights from the **Resilient Tourism Conference 2026**, held on 26–27 May 2026 at HES-SO Valais-Wallis in Sierre. The conference marked the culmination of the four-year Innosuisse Flagship project **"Resilient Tourism"**, which brought together six academic institutions and more than thirty industry partners to explore how digital technologies, data and innovation can strengthen the resilience and competitiveness of tourism systems.

Under the theme **"Scaling Smart: How Digital is Shaping the Future of Tourism"**, researchers, destination managers, policymakers, technology providers and tourism professionals exchanged perspectives on some of the most pressing challenges facing the sector today. Discussions addressed topics such as data governance, artificial intelligence, digital business models, innovation ecosystems, destination management and simulation-based decision support.

The conference was structured around the presentation of the four Flagship subprojects. Together, these projects explored complementary dimensions of tourism resilience: the development of data infrastructures, the redesign of services and business models, the simulation of tourism systems and innovation diffusion, and the orchestration of knowledge and collaboration across the tourism ecosystem. These presentations were complemented by keynote speeches from leading industry experts and roundtable discussions that connected research findings with practical and policy perspectives.

This report synthesizes the key messages, findings and strategic implications that emerged throughout the two days. It aims to serve as a resource for tourism practitioners, destination organizations, policymakers and researchers interested in understanding how digital transformation can contribute to more adaptive, data-driven and resilient tourism systems.

The report is organized around the major conference sessions and concludes with reflections on the future of tourism in an era increasingly shaped by data, artificial intelligence and systemic change.

National Data Infrastructure for Tourism (NaDIT): Results and Outlook of Subproject 1

Presented by Anna Para and Sandro Suter (Lucerne University of Applied Sciences and Arts – HSLU) at the Resilient Tourism Conference, Sierre, May 2026.

1. Building the Foundations for a National Tourism Data Infrastructure

Subproject 1 (SP1) addressed a central challenge facing Swiss tourism: despite the growing availability of tourism-related data, the landscape remains highly fragmented, with numerous destinations, IT providers, data owners and platforms operating independently. The overarching objective of NaDIT was therefore not merely to collect data, but to create the foundations for a **national tourism data infrastructure** capable of facilitating data sharing, interoperability and data-driven decision-making across the tourism ecosystem.

The project adopted a systemic approach that combined technical architecture, governance mechanisms, data standards, user acceptance research and practical use cases. Rather than developing a single centralized platform, the project sought to understand how existing actors, systems and data sources could be connected through common standards and collaborative governance mechanisms.

A first major outcome was the creation of the portal **tourismdata.ch**, which serves as both a communication platform and a metadata catalogue for tourism data sources in Switzerland. The website documents available datasets, ongoing activities and emerging standards while providing stakeholders with an overview of the tourism data ecosystem. Complementing this effort, the project developed a visualized tourism data landscape that maps the various data sources and actors relevant to Swiss tourism.

2. From Fragmentation to Interoperability: The Charter Mapping Group

One of the most important findings of the project was the extreme fragmentation of Switzerland's tourism data ecosystem. Through workshops, interviews and consultations with destinations, technology providers and tourism organizations, the team discovered that data exchange structures vary significantly across regions and organizations. As a result, the idea of building a single technical infrastructure proved unrealistic. Instead, the project shifted its focus toward creating common standards and governance mechanisms that could facilitate interoperability across existing systems.

This realization led to the creation of the **Charter Mapping Group**, a collaborative initiative bringing together destinations and IT providers to develop a common framework for tourism-relevant, non-personal data. The charter focuses on categories such as points of interest, events and tourism products while explicitly excluding personal data. Participating organizations commit to adopting common standards, promoting awareness among employees and contributing to the continuous evolution of the framework.

Since January 2025, a core group of nine representatives from destinations and IT providers has met regularly to develop a shared tourism taxonomy. More than thirty tourism-specific categories and subcategories have already been added to international standards, including categories such as glaciers, paragliding sites, chocolate factories and cheese factories. These extensions are published in both human-readable (Excel) and machine-readable (JSON) formats

and are being integrated into international initiatives such as the Open Data Tourism Alliance (ODTA).

Perhaps most importantly, the Charter Mapping Group will continue beyond the lifetime of the Flagship project, supported by contributions from participating organizations and Regional Tourism Alliance (RTA) regions. This continuation ensures that the project leaves behind not only technical outputs but also a sustainable governance structure.

3. Understanding Tourists' Willingness to Share Data

Another work package focused on the challenge of visitor tracking and data donation. While destinations increasingly seek behavioral data to improve planning and management, collecting such data depends on tourists' willingness to share information.

To better understand these dynamics, HSLU and the University of St. Gallen conducted a large-scale survey involving more than 3,000 respondents from Switzerland, Germany and the United States. Using the Kano methodology, the study evaluated 28 potential features that could be integrated into destination apps and assessed their influence on users' willingness to share data.

The results show that **functional benefits are the strongest drivers of participation**. Tourists value practical services such as public transport information, hazard warnings and useful local information. By contrast, gamification features can create value for some segments but should be implemented cautiously, as preferences differ significantly across age groups and visitor profiles. The study also found that a moderate number of push notifications is acceptable, while excessive communication can reduce user acceptance. Most importantly, trust emerged as a key condition for data sharing: visitors are significantly more willing to share their data when they clearly understand how the data will be used and what benefits they will receive in return.

These findings provide practical guidance for destinations seeking to develop visitor-tracking applications and highlight the importance of transparency, user value and privacy-conscious design.

4. Demonstrating Value through Use Cases

A central principle of SP1 was that data infrastructures only become meaningful when they generate actionable insights. The project therefore developed several pilot use cases.

The first use case, conducted with Ticino Turismo, combined data from Swisscom, Mastercard, Intervista, Guidle and official statistics to create an integrated data environment for analyzing visitor flows, origins, spending behavior, seasonality and length of stay. The project demonstrated how multiple data sources can be combined to produce richer and more nuanced destination intelligence than any individual dataset alone.

Building on this experience, the second use case focused on the **2025 UCI Mountain Bike World Championships in Valais**. The objective was to complement traditional economic impact studies with real-world behavioral data. Using Swisscom Tourism APIs, Swisscom Heatmaps and Mastercard transaction data, the team analyzed visitor movements and spending patterns before and during the event.

The analysis revealed that while the event had limited observable effects at the cantonal level, significant impacts could be detected in host regions such as Champéry, Zermatt and Crans-Montana. Spending data further showed that the event primarily stimulated the experience

economy, with strong growth in bars, entertainment and general retail spending, while accommodation and grocery expenditures declined. Rather than generating an overall increase in spending, the event appeared to shift consumption toward experiential activities.

5. Key Lessons and Future Outlook

The project identified several critical challenges for the future development of tourism data infrastructures. These include the need for clearly defined objectives, early access to detailed data, robust data governance mechanisms, technical interoperability and harmonized definitions. A recurring theme throughout the project was that connectivity alone is not sufficient. Without common standards, definitions and data structures, tourism data remains fragmented and difficult to combine.

The project concludes that predictive analytics, real-time monitoring, visitor management and advanced AI applications will only become possible if the underlying foundations are in place. In this regard, the Charter Mapping Group represents an important first step toward a future National Data Infrastructure for Tourism. Rather than focusing solely on technology, SP1 demonstrates that governance, collaboration and standardization are equally important prerequisites for unlocking the value of tourism data.

As Anna Para emphasized during the presentation, the next phase is not about building yet another platform, but about continuing to create the common standards, trust and collaborative structures that allow Switzerland's tourism data ecosystem to evolve from fragmented silos into an integrated and interoperable system.

Digitally Supported Services and Business Models in Tourism: Results and Outlook of Subproject 2

Presented by Prof. Dr. Christian Laesser and Dr. Simon Kuster (University of St. Gallen) at the Resilient Tourism Conference, Sierre, May 2026.

1. The Central Question: Why Is Tourism Productivity Lagging Behind?

Subproject 2 (SP2) started from a fundamental economic puzzle. Despite strong tourism demand, labor shortages and increasing digitalization, the tourism and hospitality sector continues to exhibit lower productivity growth and lower wage levels than the Swiss economy as a whole. The presenters illustrated that median salaries in accommodation and food services remain significantly below the average Swiss service sector, while labor productivity growth has also lagged behind other sectors over the long term.

This observation led SP2 to a central question: **How can digital technologies, service design and business model innovation improve productivity in tourism and hospitality?** Unlike many tourism studies that focus primarily on marketing or customer experience, SP2 examined tourism from an operational and economic perspective. The underlying assumption was that digitalization should help solve what economists have long called the *productivity paradox*—the observation that increasing investments in technology do not automatically translate into higher productivity.

To address this challenge, the project combined conceptual work on productivity measurement with extensive mapping of tourism technologies, business processes and innovative business models. The objective was not only to understand how tourism organizations operate today but also to identify how they could create and capture more value in the future.

2. Rethinking Productivity: Designing Tourism Around Scarce Resources

A key argument developed throughout the presentation is that tourism businesses can no longer rely on abundant and inexpensive production factors. Historically, many tourism enterprises benefited from relatively cheap labor, low financing costs and accessible real estate. However, demographic change, labor shortages, increasing wage pressures and rising capital costs have fundamentally altered these conditions. Tourism businesses are now confronted with the need to operate under conditions of scarcity rather than abundance.

Christian Laesser therefore proposed a shift toward what he called **“design to resources.”** Instead of designing services first and then trying to find the required labor, organizations should increasingly design their business models and service processes according to the human and financial resources actually available. Digital technologies become particularly important in this context because they can substitute for labor-intensive activities, automate routine processes and allow employees to focus on interactions that create genuine value for customers.

A central insight concerns the trade-off between human interaction and technology. Not every customer interaction necessarily creates value. The key question is whether customers are willing to pay enough for personal service to justify its costs. Examples include reception services, restaurant operations or room service. In some situations, digital solutions may provide equal or even higher value at lower cost, while in others personal interaction remains

essential. The challenge is therefore not replacing people with technology, but allocating scarce human resources where they create the greatest value.

3. Digitalization as a Driver of Strategic and Operational Productivity

SP2 distinguishes between two dimensions of productivity improvement. First, digitalization can improve **efficiency** by reducing the resources needed to deliver services. Examples include self-service applications, automated check-in systems or digital ordering tools. Second, digitalization can improve **effectiveness** by fundamentally reconfiguring business models and reducing structural costs. Examples include deciding whether to operate a restaurant internally, outsource certain activities or redesign entire service offerings.

The project therefore argues that productivity gains emerge not only from optimizing individual processes but also from rethinking the overall configuration of business models. Tourism organizations need to make conscious decisions regarding what they produce themselves, what they purchase from partners, which tasks are delegated to customers and where technology can effectively replace human intervention. Productivity is ultimately the result of the interaction between business model design, process architecture and resource allocation.

This perspective also led the researchers to propose a more nuanced understanding of service productivity. They distinguish between:

- **Effectiveness**, reflecting the utilization of available capacity;
- **Efficiency**, reflecting the performance of operational processes;
- **Overall productivity**, combining both dimensions into a broader assessment of organizational performance.

4. Major Achievements and Practical Outputs

A distinctive characteristic of SP2 is its strong emphasis on practical applications. Rather than producing only academic outputs, the project generated a series of prototypes, frameworks and decision-support tools aimed directly at tourism practitioners.

Visitor Tracking App Concept

In collaboration with HSLU, SP2 contributed to the design of a national tourism application that combines visitor services with visitor-flow tracking capabilities. The concept addresses the lack of detailed real-time mobility and tourism data in Switzerland while simultaneously providing value to tourists through useful functionalities. The design is supported by market research on visitor acceptance and app features.

Digital Tool Finder

The project developed a prototype “Tool Finder” based on a database containing approximately 400 digital solutions and 60 functionalities relevant to tourism and hospitality. The objective is to help tourism businesses identify appropriate technologies and facilitate digital adoption. This work also provides an unprecedented overview of the Swiss tourism technology landscape.

Productivity Benchmarking Framework

SP2 designed a framework for measuring strategic and operational productivity using real-time industry data and platform integrations. The framework aims to help tourism businesses monitor

productivity performance, identify inefficiencies and evaluate the impact of process innovations.

Hospitality Business Model Morphology

Perhaps the most innovative output is the development of a comprehensive hospitality business model morphology. This framework structures hotel business models across more than 100 domains and numerous possible configurations, allowing organizations to systematically explore new combinations of products, services, technologies, labor configurations and revenue models.

Additional projects explored the bundling of accommodation with public transport and luggage services, as well as new energy business models for mountain railways, illustrating how digitalization and business model innovation can contribute to broader tourism resilience.

5. Mapping the Digital Transformation of Tourism

One of the most substantial empirical contributions of SP2 was the mapping of approximately 400 tourism technology solutions. The analysis reveals that digital applications exist for virtually every business process across tourism and hospitality, from marketing and sales to operations, procurement and customer service.

The findings show that the majority of digital solutions are concentrated in marketing and sales functions, reflecting the industry's longstanding focus on distribution, booking systems and customer acquisition. However, significant opportunities remain in operations, service delivery and back-office processes, where digitalization can generate substantial productivity gains.

The literature review conducted by the team identified four major directions shaping smart tourism and service innovation:

1. Productively co-created experiences.
2. Smart personalization through data and AI.
3. Platform-based and networked business models.
4. Data-driven business ecosystems.

Together, these themes illustrate how digitalization increasingly influences not only individual firms but also the broader structure of tourism ecosystems.

6. Business Models as a Laboratory for Innovation

The second major “snapshot” presented by the team focused on hospitality business models. Rather than viewing hotels as fixed products, SP2 conceptualizes them as configurable systems that can be recombined and redesigned in multiple ways. The team developed a four-level framework that links broad strategic dimensions to increasingly detailed operational choices.

To demonstrate this approach, the presenters showcased contrasting hypothetical concepts such as the **Smart Business Transit Hub**, emphasizing automation, efficiency and convenience for business travelers, and the **Renewable Wellness Eco-Lodge**, focusing on sustainability, wellness and personalized experiences. These examples illustrate how radically different business models can emerge from the same underlying hospitality function.

The morphology is therefore not merely a classification exercise. It serves as a practical innovation tool that allows tourism businesses to experiment with future configurations and identify new opportunities for value creation, differentiation and productivity enhancement.

7. Outlook: From Analysis to Implementation

Looking forward, SP2 identified several areas for future development. These include the continued curation of tourism technology tools, the implementation of accommodation-public transport bundles, the ongoing development of hospitality business model frameworks and the creation of a productivity cockpit for the hospitality sector. Several of these initiatives are expected to seek future support through Innotour and other funding mechanisms.

Overall, SP2 demonstrates that resilience in tourism is not only about crisis management or sustainability. It is equally about improving the industry's ability to create more value with scarce resources. Through digitalization, process innovation and business model redesign, tourism organizations can become more productive, more profitable and ultimately more resilient. The project therefore positions productivity—not merely growth—as a central pillar of the future competitiveness of Swiss tourism.

Analyzing and Designing Resilient Tourism Systems: Results and Outlook of Subproject 3

Presented by Jean-Christophe Loubier and Roland Schegg (HES-SO Valais-Wallis) at the Resilient Tourism Conference, Sierre, May 2026.

1. Why Resilience Matters: Tourism as a Fragile Complex System

Subproject 3 (SP3) started from a simple observation: tourism is often treated as a stable and continuously growing sector, yet recent events have repeatedly demonstrated its fragility. The COVID-19 pandemic, geopolitical tensions, economic crises and climate change have shown that tourism systems can be disrupted suddenly and profoundly. These shocks affect not only visitor demand but also transport systems, local economies, natural resources and destination strategies.

To better understand these dynamics, SP3 conceptualizes tourism as a **complex adaptive socio-ecosystem** composed of interconnected actors, places and flows. Tourism outcomes emerge from the interactions between source markets, destinations, tourism businesses, municipalities, natural resources, digital infrastructures and political environments. Because these components influence one another, even small changes can produce significant and sometimes unexpected consequences across the system.

Rather than focusing solely on past trends, SP3 seeks to develop tools that help destinations anticipate uncertainty and explore future scenarios. The project therefore shifts the perspective from retrospective analysis toward prospective and simulation-based decision support.

2. From Crisis Management to Resilience Thinking

The conceptual foundation of SP3 is resilience theory, particularly Holling's Adaptive Cycle Framework. In this perspective, tourism systems evolve through recurring phases of growth, stability, disruption and reorganization. A destination may experience long periods of expansion and equilibrium, but external shocks can suddenly destabilize the system and force adaptation. Recovery does not necessarily imply returning to the previous state; it may involve transformation, innovation and the emergence of new development trajectories.

The project identifies three major drivers of resilience:

- **External shocks**, such as pandemics, climate change, geopolitical tensions or economic crises.
- **Spatial dependencies**, reflecting the interconnectedness of municipalities, destinations, transport systems and source markets.
- **Adaptability**, defined as the capacity of destinations to learn, innovate and strategically reposition themselves.

A key message emphasized throughout the presentation is that resilient destinations do not simply recover from crises; they adapt and transform. This insight provides the theoretical basis for the simulation models developed within the project.

3. Simulating Tourism Resilience and Future Scenarios

A central achievement of SP3 is the development of a spatial resilience simulation model that helps destinations explore how tourism systems may respond to different shocks and strategic choices. Rather than attempting to predict the future, the model is designed to test alternative scenarios and identify vulnerabilities before crises occur.

The simulation combines three key dimensions: tourism territories (municipalities characterized by accommodation capacity, occupancy and strategic orientation), source markets (with different travel behaviours and economic conditions), and stakeholder strategies (such as marketing, investment or adaptation measures). Using historical tourism data as a baseline, the model simulates future developments up to 2050.

To capture the complexity of tourism systems, SP3 relies on Agent-Based Modeling (ABM). In this approach, municipalities and tourists are represented as autonomous agents whose interactions generate tourism flows and system-wide dynamics. Tourist choices depend on destination attractiveness, while municipalities evolve according to their resources and strategies. This bottom-up approach allows patterns of growth, decline, adaptation and resilience to emerge naturally from the simulation.

The model serves primarily as a decision-support tool. It enables destinations to test the potential impacts of disruptions such as pandemics, climate-related shocks, economic crises, changes in source markets or alternative policy and marketing strategies. By visualizing the consequences of different assumptions through maps, indicators and time-series analyses, the simulator helps decision-makers evaluate options before committing to costly investments in infrastructure, marketing or climate adaptation measures. In this sense, the model functions as a virtual laboratory where destinations can experiment with future scenarios at a fraction of the cost and risk of real-world implementation.

4. Model 2: Diffusion of Innovation in Tourism

The second major modeling framework developed within SP3 addresses a different but equally important question: **How do innovations spread through tourism systems?**

Building on Rogers' Diffusion of Innovation theory and Bass's diffusion model, SP3 examines how technologies, business practices and digital innovations spread across destinations and tourism organizations. Examples include the adoption of Airbnb, booking platforms, social media and AI applications.

The project extends the traditional Bass model by incorporating a spatial dimension. Adoption depends not only on the intrinsic attractiveness of an innovation but also on geography, neighborhood effects and similarities between municipalities. Some destinations act as innovation leaders, while others follow later depending on their local conditions and connections.

To support this work, the project conducted a series of digital maturity studies involving hotels, DMOs and cableway companies. These studies serve both as empirical analyses of digital transformation and as calibration data for future diffusion simulations. The ambition is to use observed adoption patterns to estimate innovation parameters and simulate future diffusion pathways under alternative scenarios.

5. Scientific and Practical Contributions

SP3 delivered several tangible outputs:

- A spatial agent-based resilience simulator.
- A diffusion-of-innovation simulation framework.
- Interactive dashboards and GIS-based visualizations.
- Calibration methodologies based on historical tourism data.
- A set of digital maturity studies across tourism sectors.

The project also contributes methodologically by demonstrating how resilience theory, agent-based modeling and innovation diffusion can be combined into an integrated tourism simulation framework.

8. Outlook: Toward a Digital Twin of Tourism Destinations

The long-term vision emerging from SP3 is the creation of increasingly sophisticated simulation environments capable of supporting strategic destination management. Future developments include faster computation, stronger calibration, comparative analyses between regions, aggregation at cantonal levels and the integration of resilience and innovation diffusion models into a unified framework.

Ultimately, SP3 represents a shift from describing tourism systems to experimenting with them. By creating virtual laboratories for destinations, the project enables policymakers, DMOs and tourism businesses to test strategies, assess vulnerabilities and prepare for uncertainty before real-world crises occur. In this sense, the project lays the foundations for what could eventually become a true **digital twin of tourism destinations**, capable of supporting more resilient, adaptive and evidence-based tourism governance.

Coordination, Orchestration and Communication: Results and Outlook of Subproject 4 (EHL Hospitality Business School)

Presented by Dr. Alessandro Inversini and Amélie Keller (EHL Hospitality Business School) at the Resilient Tourism Conference, Sierre, May 2026.

1. The Connecting Tissue of the Flagship

Unlike the other subprojects, which focused on specific research themes such as data infrastructures, business models or simulation models, Subproject 4 (SP4) played a transversal role within the Resilient Tourism Flagship. Its mission was to ensure that knowledge generated throughout the project did not remain within academic circles but was actively disseminated, discussed and transformed into collective action.

The project was built around three complementary functions: **communication, orchestration and ecosystem development**. The objective was to create bridges between researchers, tourism practitioners, destinations, technology providers and policymakers while fostering a common innovation culture around resilience and digital transformation.

As Alessandro Inversini emphasized, resilience is not only a technical or scientific challenge. It also depends on the capacity of actors to exchange knowledge, collaborate across organizational boundaries and collectively experiment with new ideas. SP4 therefore focused on building and nurturing a community of practice around tourism innovation.

2. Creating Visibility and Knowledge Exchange

One of the main achievements of SP4 was the creation of a comprehensive communication infrastructure supporting the entire Flagship project. This included dedicated websites, project documentation, online content, podcasts, videos and conference activities. The objective was to make research outputs accessible to both academic and professional audiences.

The project maintained and continuously developed the online platforms **resilienttourism.ch** and **resto.ehl.edu**, which served as central repositories for project results, events and resources. Through these platforms, stakeholders could follow project developments, access reports and discover innovation initiatives emerging from the Flagship.

SP4 also monitored website traffic and engagement metrics to evaluate the reach of its dissemination efforts. These analytics demonstrated growing interest in digital transformation and resilience topics among tourism stakeholders throughout the project period.

3. Building a Community through Annual Conferences

A second major pillar of SP4 was the organization of the annual Resilient Tourism conferences. Across four editions, these events became key meeting points for researchers, tourism organizations, public authorities and industry practitioners.

Beyond presenting research findings, the conferences fulfilled a broader role: they created opportunities for dialogue between disciplines, institutions and sectors that do not traditionally

interact. The events allowed participants to discuss emerging technologies, share practical experiences and collectively reflect on the future of tourism.

The 2026 conference in Sierre represented the culmination of this effort, bringing together the results of all four subprojects and highlighting the interdisciplinary nature of the Flagship initiative.

4. Giving a Voice to Digital Transformation

Perhaps the most visible achievement of SP4 was the creation of the **Thought Leaders Platform** and the associated podcast series dedicated to tourism innovation and digital transformation.

Over the course of the project, the team produced:

- Four podcast seasons;
- Approximately sixty podcast episodes;
- Numerous video interviews and expert conversations;
- Several conference papers, online articles and a white paper.

The podcast series explored four major themes:

1. Swiss tourism case studies;
2. Data and digital transformation;
3. High-tech for high-touch hospitality;
4. The future of tourism and hospitality.

The diversity of invited speakers was remarkable, bringing together leading tourism scholars, destination managers, hotel executives, technology entrepreneurs and international experts such as Dimitrios Buhalis, Marianna Sigala, Hannes Werthner, Eduardo Santander and many others. The podcast therefore became a living archive of contemporary debates on tourism innovation and resilience.

Importantly, the podcast was not conceived merely as a dissemination channel but as a platform for collective learning. By documenting experiences from different regions and organizations, it helped create a shared knowledge base for the tourism sector.

5. Supporting Innovation in Practice: The Travel Digital Transformation Hub

A second major contribution of SP4 was its direct support for tourism businesses through the **Travel Digital Transformation Hub** in the Canton of Vaud. This initiative moved beyond communication and focused on concrete innovation projects within tourism SMEs.

The program provided coaching and financial support to tourism organizations seeking to advance their digital transformation. Over four years, the Hub launched four calls for projects and supported twenty-one innovation initiatives, representing approximately CHF 100,000 in funding.

The supported projects covered a wide range of topics, including:

- Digital visitor experiences;

- Smart tourism services;
- Data-driven decision-making;
- Platform development;
- Digital marketing innovations;
- Technology-enabled tourism products.

One particularly significant outcome was the emergence of an **Innotour-funded project**, *Smart Région Touristique*, which received approximately CHF 400,000 in support. This demonstrates how the Flagship acted not only as a research initiative but also as a catalyst for subsequent innovation projects.

6. Mapping the Swiss Tourism Innovation Ecosystem

Another innovative component was the creation of an open digital platform designed to facilitate networking and project development within the tourism technology ecosystem. Through an interactive map of tourism innovation initiatives, stakeholders could identify projects, partners and opportunities for collaboration across Switzerland.

The platform reflects one of the core assumptions of SP4: innovation rarely emerges in isolation. It depends on ecosystems of actors capable of sharing knowledge, building partnerships and experimenting collectively. By increasing the visibility of ongoing projects, the initiative contributed to reducing fragmentation within the tourism innovation landscape.

7. What Comes Next? Maintaining Momentum Beyond the Flagship

The final part of the presentation shifted from achievements to future perspectives and triggered a broader discussion with the audience on the future of tourism innovation after the end of the Flagship.

Alessandro Inversini framed the discussion around a central question: **How can the momentum created by the Flagship be maintained once the project formally ends?** Several themes emerged.

From Project to Community

Participants emphasized that one of the most valuable outcomes of the Flagship is the network itself. The challenge is therefore not only to preserve individual outputs but also to maintain the relationships, exchanges and collaborative culture that have developed over four years. There was broad agreement that the community of practice created by the project should continue beyond its funding period.

Anchoring Innovation in Territories

A second recurring theme concerned the need to move from experimentation toward implementation. Many participants argued that innovation must increasingly be embedded in concrete territorial contexts and destination ecosystems. The future challenge is therefore not generating new ideas, but scaling and institutionalizing successful initiatives.

Adapting to an AI-Powered World

The discussion also highlighted the accelerating pace of technological change, particularly regarding artificial intelligence. While many Flagship activities initially focused on digitalization and data, participants acknowledged that AI is rapidly becoming a transformative force across the tourism value chain. This creates both opportunities and new uncertainties for destinations, businesses and researchers.

Strengthening Academia–Industry Collaboration

Perhaps the strongest consensus emerging from the discussion was the need for deeper and more continuous collaboration between academia and industry. Participants stressed that many of the most promising innovations emerge at the intersection of research, entrepreneurship and practical implementation. Future initiatives should therefore continue to combine scientific rigor with real-world experimentation.

8. Conclusion: From Research Project to Innovation Ecosystem

While SP4 did not develop a simulation model, a data infrastructure or a new business model framework, it played a critical role in ensuring that the knowledge generated by the Flagship reached practitioners and contributed to broader ecosystem development.

The project demonstrates that resilience is not only about technologies, data or organizations. It is also about the ability of a sector to learn collectively, build networks and continuously innovate. Through conferences, podcasts, innovation funding, networking platforms and community-building activities, SP4 transformed the Flagship from a collection of research projects into a genuine tourism innovation ecosystem.

As Alessandro Inversini concluded, the original ambition was to drive systemic innovation with a focus on resilience. The challenge for the coming years will be to maintain this momentum, continue the dialogue and ensure that the community created by the Flagship remains active in shaping the future of tourism.

Roundtable: “So What / Now What?”

Moderator: Prof. Marc Peter
Panelists: Dr. Nicole Stuber-Berries (HSLU), Prof. Christian Laesser (University of St. Gallen), Bruno Huggler (Crans-Montana Tourisme & Congrès)
Resilient Tourism Conference, Sierre – 26 May 2026

From Research Results to Strategic Action

The first roundtable of the conference served as a bridge between the research results presented by HSLU and the University of St. Gallen and the practical realities faced by destinations and tourism businesses. Moderated by Marc Peter, the discussion focused less on technical details and more on the strategic implications of digital transformation for Swiss tourism. The central question was simple: **after four years of research, what should the sector actually do next?**

Several themes emerged repeatedly throughout the discussion: the role of data as a strategic resource, the need to rethink productivity and business models, the balance between technology and human interaction, and the challenge of turning research insights into concrete action.

Data as a Strategic Asset Rather Than a Technical Issue

Building on the NaDIT presentation, Nicole Stuber-Berries emphasized that Switzerland has made significant progress in understanding the tourism data ecosystem and in creating common standards. However, the real challenge is no longer data collection itself. The focus must now shift toward creating value from data.

The discussion highlighted that data should not only support marketing activities but also guide strategic decision-making, product development and destination management. Participants argued that better access to integrated and interoperable data can help destinations understand visitor behaviour, anticipate market changes and support evidence-based decisions.

At the same time, several speakers stressed that data infrastructures only become meaningful if tourism organizations actually use them. Building standards and platforms is important, but the ultimate objective remains better decisions and stronger collaboration across the tourism ecosystem.

Productivity: The Hidden Challenge of Swiss Tourism

A second major topic concerned productivity, a theme that had been central to the presentation by Christian Laesser and Simon Kuster.

Christian Laesser argued that many tourism organizations continue to focus heavily on growth while paying insufficient attention to productivity and value creation. Rising labour costs, staff shortages and increasing operating costs mean that tourism businesses can no longer rely on cheap labour and favourable economic conditions. Instead, they must redesign their processes and business models to make better use of scarce resources.

The discussion suggested that digital technologies should not be viewed as goals in themselves but as tools for improving efficiency and effectiveness. Automation, self-service solutions and

data-driven processes can help organizations operate more productively, but only when they are integrated into a coherent business model.

A recurring message was that tourism businesses need to think more systematically about where human resources create value and where technology can support or replace routine tasks.

Human Interaction Versus Automation: A False Dichotomy?

One of the liveliest parts of the discussion concerned the relationship between digitalization and human interaction.

The panel rejected the simplistic idea that the future of tourism involves choosing between technology and people. Christian Laesser argued that the more relevant question is not whether human interaction is desirable in principle, but **where it actually creates value for guests and where visitors are willing to pay for it**.

Drawing on examples from the hotel industry, he noted that even luxury hotels were among the first adopters of self-check-in technologies. The objective was not to eliminate human service, but to remove interactions that some guests did not value while allowing staff to focus on moments where personal contact genuinely enhances the experience.

The panel therefore advocated a more nuanced approach to digitalization. Technology should not be introduced simply because it is available, nor should human interaction be preserved simply because it is traditional. Instead, organizations should carefully evaluate the contribution of each activity to customer value and organizational performance.

The View from a Destination: Crans-Montana's Perspective

Bruno Huggler brought a destination management perspective to the discussion. From the standpoint of a major Alpine destination, digital transformation is no longer confined to marketing and promotion. Data increasingly influences product development, visitor management, mobility planning and long-term strategic positioning.

The discussion highlighted how destinations face growing uncertainty linked to climate change, changing visitor expectations and global market fluctuations. Data and digital tools can help validate strategic choices and reduce uncertainty, but they cannot replace leadership and vision.

For destinations, digitalization is therefore not primarily a technological challenge but a management challenge: understanding guests better, adapting products accordingly and making informed investment decisions.

From Digitalization to Strategic Transformation

A recurring conclusion throughout the roundtable was that digital transformation should not be understood as an IT project.

The panel repeatedly stressed that many organizations still approach digitalization through isolated tools and technologies rather than through broader strategic thinking. Technology creates value only when it supports clear objectives and contributes to organizational transformation.

This observation also reflects one of the broader lessons emerging from the Flagship project: resilience is not achieved through technology alone. It depends on the ability of organizations to learn, collaborate and adapt.

Key Takeaways

The discussion concluded with several important messages for Swiss tourism:

- Data should evolve from a reporting tool into a strategic decision-support resource.
- Productivity and value creation deserve much greater attention across the tourism sector.
- Human interaction and technology should be viewed as complementary rather than competing approaches.
- Digital transformation is fundamentally a management and business model challenge, not merely a technological one.
- Destinations and businesses need to become more adaptive and evidence-based in their decision-making.

Overall, the roundtable provided a useful synthesis of the first day's presentations. While NaDIT demonstrated the importance of data infrastructures and SP2 highlighted the need for productivity-oriented business model innovation, the discussion emphasized that the ultimate challenge lies in translating these insights into practical organizational change. Swiss tourism does not necessarily need more technologies; it needs a clearer understanding of how technology, data and human capabilities can be combined to create resilient and competitive tourism systems.

Roundtable: Cross-Exchange Discussion

Moderator: Prof. Marc Peter
Panelists: Alessandro Inversini (EHL), Francesco Pugliese (MSC Cruises), Roland Schegg (HES-SO Valais-Wallis), Patrik Zimmerli (SECO)
Resilient Tourism Conference, Sierre – 27 May 2026

Bringing Research, Industry and Policy Together

The final roundtable of the conference brought together representatives from academia, industry and public policy to reflect on the broader implications of digital transformation for tourism. Building on the presentations from the second day—particularly the simulation work of SP3, the orchestration activities of SP4 and the keynote by MSC Cruises—the discussion explored how tourism organizations can remain competitive and resilient in an increasingly uncertain environment.

Rather than focusing on specific technologies, the exchange centred on the strategic capabilities that destinations and tourism businesses will need over the coming decade.

From Destination Marketing to Destination Management

One of the first themes addressed was the evolving role of destination management organizations (DMOs). Participants agreed that tourism organizations are gradually moving beyond their traditional marketing role towards a broader function that includes coordination, data management, strategic planning and ecosystem leadership.

Roland Schegg emphasized that data and simulation tools can support destinations in understanding future risks and opportunities. Rather than relying exclusively on historical trends, destinations can increasingly test alternative futures, evaluate potential shocks and explore the implications of different strategic choices. Data therefore becomes not only a descriptive tool but also a mechanism for supporting long-term planning and resilience.

The discussion highlighted that future destination management will require stronger analytical capabilities and a greater capacity to translate information into strategic action.

Understanding the Guest Through Data

A second important theme concerned the role of data in understanding customer behaviour.

Roland Schegg argued that the real value of data lies in its ability to improve understanding of guests and support better decisions throughout the tourism value chain. Data should not be limited to promotional activities but should inform product development, service design and investment decisions. Better knowledge of visitor needs and behaviours can help destinations and companies create more relevant and resilient tourism offerings.

This perspective resonated strongly with Francesco Pugliese's presentation on MSC Cruises, where real-time data is increasingly used to personalize services, monitor customer satisfaction and continuously improve operations.

Technology as an Enabler of Human Experiences

A central discussion revolved around the relationship between technology and hospitality.

Francesco Pugliese strongly argued that technology should remain largely invisible to guests. Its purpose is not to replace human interaction but to enhance it. According to him, digital systems should work behind the scenes to remove friction, anticipate needs and support employees in delivering better service. Human interaction remains at the heart of hospitality, while technology serves as an enabler rather than a substitute.

Examples from MSC Cruises illustrated this approach. Digital tools help crew members understand guest preferences, collect feedback during the cruise rather than after it, and intervene quickly when issues arise. The objective is not automation for its own sake but the creation of more meaningful and personalized guest experiences.

Alessandro Inversini echoed this view by stressing that future tourism systems should strive to master technology while keeping human connection at the centre of the visitor experience. Technology should increasingly disappear into the background, allowing authentic interactions to become more valuable and visible.

Data, Analytics and Organizational Learning

The panel also discussed the growing importance of analytics capabilities within tourism organizations.

Using MSC Cruises as an example, Francesco Pugliese described how data is now embedded throughout the organization. Large analytical teams support decision-making across departments, while business units increasingly rely on reliable data infrastructures to optimize operations and improve customer experiences. However, he stressed that technical expertise alone is insufficient. Data only creates value when combined with business understanding and clear strategic objectives.

This observation reinforced one of the recurring messages of the conference: the future challenge is not data collection but the ability to transform data into actionable knowledge.

Innovation, Collaboration and Public Support

The discussion then turned to the role of public policy and innovation support.

Patrik Zimmerli highlighted the importance of national programs such as Innotour in helping tourism organizations experiment with new ideas and collaborate across institutional boundaries. He emphasized that public funding should support scalable solutions that generate benefits beyond individual organizations. The objective is not to create isolated pilot projects but to foster innovations that can strengthen the entire tourism ecosystem.

He also reminded participants that future funding opportunities would emerge through upcoming federal innovation programs, encouraging stakeholders to continue developing collaborative initiatives and preparing new projects.

The exchange reflected a broader lesson from the Flagship project: innovation is most effective when academic institutions, public authorities and industry actors work together within shared ecosystems rather than in isolation.

What Capability Does Swiss Tourism Need Most by 2036?

The roundtable concluded with a forward-looking question posed by Marc Peter: *What is the single most important capability Swiss tourism will need by 2036?*

The answers revealed different but complementary perspectives:

- **Alessandro Inversini** emphasized the ability to master technology while keeping it in the background and preserving human connection as the core value of tourism experiences.
- **Patrik Zimmerli** highlighted agility and adaptability, arguing that tourism organizations must be capable of responding quickly to crises, disruptions and changing market conditions.
- **Francesco Pugliese** stressed adaptability to evolving customer expectations, noting that organizations must continuously redesign products and services to remain relevant.
- **Roland Schegg** argued that strategic thinking remains the most critical capability. Tourism organizations must first define clear objectives and then identify the technologies, partnerships and resources required to achieve them. Technology without strategy risks creating activity without direction.

Marc Peter concluded by observing that many organizations still lack even basic strategic roadmaps. In a rapidly changing environment shaped by artificial intelligence, digitalization and new customer expectations, strategic planning remains an essential foundation for resilience and competitiveness.

Conclusion

The final roundtable provided a fitting conclusion to the conference by connecting the research findings of the Flagship project with the practical realities of industry and policy. While perspectives differed, a common message emerged: the future of tourism will depend less on technology itself than on the ability of organizations to use technology strategically, learn from data, adapt to change and collaborate across institutional boundaries.

The discussion ultimately suggested that resilience is not a static condition but a dynamic capability. Destinations and tourism businesses that combine strategic thinking, adaptability, technological competence and human-centred innovation will be best positioned to navigate the uncertainties of the coming decade.

KEYNOTE SESSIONS

Digital Transformation in Action: Insights from Industry

The keynote sessions showcased how some of the world's leading tourism and technology organizations are responding to the rapid evolution of data, artificial intelligence and digital platforms. From responsible AI governance and data privacy to customer experience innovation and organizational transformation, the speakers provided concrete examples of how digital technologies are creating new opportunities while also raising new strategic and ethical questions. These industry perspectives helped connect the research findings of the conference with real-world practices and future developments in the tourism sector.

Building Trust Through Technology: Data Governance for Tourism's Digital Future

Keynote by Connor Harrington-Brandt, Booking.com

In his keynote, Connor Harrington-Brandt, Public Affairs Manager for Privacy, Data and Artificial Intelligence at Booking.com, explored how trust, privacy and responsible AI are becoming critical foundations for the future of digital tourism. Drawing on his experience at Booking.com, Meta and in international regulatory discussions, he argued that data governance should no longer be viewed as a compliance exercise but as a strategic capability that can strengthen competitiveness, customer trust and long-term innovation.

The Evolution of the Digital Economy

Connor began by placing current debates around AI and data governance within a broader historical perspective. Over the past two decades, the digital economy has evolved from online platforms and e-commerce to social media, mobile ecosystems and, more recently, AI-powered services. Each wave of technological innovation has generated significant opportunities but has also raised new concerns regarding privacy, consumer protection, transparency and market power.

This evolution has progressively led to increased regulatory intervention. Major European frameworks such as the General Data Protection Regulation (GDPR), the Digital Services Act (DSA), the Digital Markets Act (DMA) and, more recently, the AI Act reflect society's efforts to balance innovation with the protection of citizens' rights and interests.

A key message of the presentation was that these regulations should not be viewed solely as constraints. Instead, they create the conditions for sustainable digital innovation by establishing trust and accountability within digital ecosystems.

Privacy and Responsible AI as Competitive Advantages

One of the central arguments of the keynote was that privacy and responsible AI are increasingly becoming competitive differentiators rather than regulatory burdens. As consumers become more aware of how their data is collected and used, trust becomes a valuable asset.

Connor explained that organizations which integrate privacy, transparency and responsible AI principles into the design of their products are likely to gain stronger customer confidence and

face fewer regulatory risks. Rather than adding compliance measures after technologies have been developed, companies should adopt a "privacy-by-design" and "responsible AI-by-design" approach from the outset.

According to him, many of the principles required by the European AI Act are already embedded in GDPR practices. Organizations that have developed mature privacy governance frameworks are therefore often better prepared for emerging AI regulations.

Building Trust Through Governance

The presentation highlighted the importance of governance mechanisms that ensure data and AI systems remain transparent, accountable and secure.

At Booking.com, responsible AI development is supported by internal governance processes, risk assessments, privacy reviews and a set of guiding principles that evaluate AI applications before deployment. The objective is not only to comply with regulations but also to ensure that AI systems remain aligned with customer expectations and organizational values.

Connor emphasized that trust is built through consistent practices such as:

- Transparency about data collection and use;
- Clear communication regarding AI-generated outputs;
- Robust data protection measures;
- Human oversight of automated systems;
- Continuous monitoring and evaluation of AI applications.

These governance mechanisms help ensure that technological innovation remains aligned with societal expectations and consumer rights.

AI Literacy as a Strategic Challenge

Beyond technical and regulatory considerations, Connor stressed the growing importance of AI literacy. He argued that organizations, employees and consumers all need a better understanding of how AI systems function, what they can realistically achieve and where their limitations lie.

In the tourism sector, this challenge is particularly relevant for SMEs, which often lack dedicated expertise and resources. Booking.com has therefore invested in awareness and education initiatives designed to help accommodation providers better understand emerging technologies and their implications.

The keynote suggested that AI literacy will become an essential capability for tourism organizations, comparable to digital literacy over the past decade.

A Global Regulatory Landscape

Although much of the discussion focused on Europe, Connor also highlighted the increasingly global nature of digital regulation. Similar debates around privacy, AI governance and platform accountability are emerging across North America, Latin America and other regions.

The European Union continues to play a leading role in shaping global standards through what is often referred to as the "Brussels Effect." Regulations developed in Europe increasingly

influence practices far beyond European borders, meaning that tourism companies operating internationally must navigate an increasingly complex regulatory environment.

For global platforms such as Booking.com, this requires governance frameworks capable of operating across jurisdictions while maintaining consistent standards of trust and responsibility.

Implications for Tourism

The keynote concluded by reflecting on what these developments mean for the tourism sector.

As tourism becomes increasingly data-driven and AI-enabled, trust will become a critical component of digital competitiveness. Destinations, tourism businesses and platforms will need to demonstrate not only that they can use data effectively, but also that they can do so responsibly.

The future success of tourism organizations will therefore depend on their ability to balance innovation with transparency, personalization with privacy, and automation with human oversight. In this context, data governance should not be seen as a defensive necessity but as an enabler of sustainable innovation and stronger customer relationships.

Ultimately, Connor's keynote argued that the tourism industry's digital future will be built not only on data and AI, but on the trust that organizations are able to create around their use.

The Future of Travel: From Search to Sensemaking

Video Keynote by Matias Undurraga, Amazon Web Services (AWS)

Although Matias Undurraga was unable to attend the conference in person, he contributed through a recorded keynote that offered a forward-looking perspective on how artificial intelligence is transforming the travel industry. Drawing on recent market data and developments in generative and agentic AI, he argued that tourism is entering a fundamental transition: moving from a world of **"search and compare"** to one of **"sensemaking and decide."**

Travel Is Back – But the Rules Are Changing

Matias began by highlighting the strong recovery of global tourism. International arrivals in Europe continue to grow, visitor spending has reached record levels, and tourism is once again outperforming many sectors of the global economy. However, he argued that the most important transformation is not the recovery itself, but the changing way travelers discover, evaluate and purchase travel products.

The traditional travel planning process—searching, comparing websites and manually evaluating alternatives—is rapidly being replaced by AI-powered assistance. Travelers increasingly expect immediate, personalized answers rather than long lists of search results. Discovery is shifting from search engines toward conversational interfaces, social media creators, AI assistants and brand-owned digital channels. In this new environment, convenience and reduced effort become major competitive advantages.

AI Is Becoming a New Travel Companion

A central theme of the keynote was the growing role of AI throughout the traveler journey. According to the data presented, AI-assisted travel planning has moved beyond the experimentation phase and is rapidly becoming mainstream. Travelers increasingly use generative AI tools to search for inspiration, compare destinations, build itineraries and make booking decisions.

Importantly, AI is not only changing traveler behavior but also the quality of customer interactions. Visitors arriving through AI-powered channels tend to be better informed, more engaged and more likely to convert than traditional website visitors. This suggests that AI is not simply generating additional traffic but is fundamentally improving the matching process between traveler needs and tourism products.

Matias argued that tourism organizations should therefore stop viewing AI as an experimental technology and start treating it as an emerging distribution channel.

Reimagining the Entire Traveler Journey

The presentation then examined how AI is transforming each stage of the traveler journey.

During the awareness phase, AI increasingly helps travelers move from inspiration to intention. Social media content, destination information and travel recommendations can be connected directly to booking opportunities, shortening the path between discovery and purchase.

In the consideration phase, AI reduces information overload by synthesizing vast amounts of content into a small number of personalized recommendations. Rather than comparing dozens

of alternatives, travelers increasingly expect systems to explain which options best match their preferences and why.

Booking processes are also becoming more integrated and frictionless. The vision presented by AWS is a unified travel experience where flights, accommodation, transportation and ancillary services are seamlessly combined through a single digital interaction.

Perhaps the greatest transformation may occur during the travel experience itself. AI assistants are evolving from reactive customer service tools into proactive travel companions capable of monitoring disruptions, anticipating problems and proposing solutions before travelers even become aware of them. Rather than waiting for customers to contact a call center, future systems may automatically adjust itineraries, rebook services or provide personalized recommendations based on real-time context.

Finally, in the post-trip phase, AI can help organizations strengthen long-term relationships by automating refunds, capturing user-generated content, measuring advocacy and delivering personalized re-engagement campaigns.

The Rise of Agentic Travel

One of the most forward-looking parts of the keynote focused on **agentic AI**. While current AI systems primarily provide recommendations, future systems will increasingly be able to act on behalf of travelers.

These intelligent agents will not only search for information but also compare offers, negotiate options, make reservations and continuously manage travel plans. They will monitor flights, weather conditions, events and operational disruptions while autonomously proposing solutions and taking actions.

According to Matias, this evolution represents a major shift in tourism distribution. AI agents may become a new intermediary layer between travelers and tourism providers, potentially reducing the importance of both traditional search engines and existing online travel agencies. The key strategic question therefore becomes whether tourism organizations are prepared to interact directly with these emerging digital agents.

Trust, Privacy and Governance as Competitive Advantages

While much of the presentation focused on technological innovation, Matias repeatedly emphasized that trust will become increasingly important as AI systems gain greater autonomy.

When AI agents make decisions or transactions on behalf of travelers, issues such as identity verification, data provenance, transparency and accountability become central. Organizations will need to demonstrate not only that their systems work efficiently but also that recommendations are trustworthy, explainable and based on reliable information.

In this future environment, governance is no longer a back-office compliance function. Instead, it becomes an integral part of the customer experience and a source of competitive differentiation.

From SEO to GEO to Agent-Ready Tourism

A particularly relevant message for destinations and tourism businesses concerned digital visibility. Matias described three successive phases of online distribution.

The first phase was dominated by SEO, where success depended on ranking highly in search engines. The second phase, currently emerging, focuses on GEO (Generative Engine Optimization), where organizations seek to become the preferred sources used by AI systems to generate answers.

The next phase, however, goes even further. In an **agent-ready world**, tourism organizations will need structured data, machine-readable content, APIs and protocols that allow AI agents to directly access inventory, policies and booking capabilities. Visibility will no longer depend only on websites but increasingly on the ability of AI systems to discover, understand and interact with tourism products.

This represents a significant challenge for the sector. Matias argued that many tourism businesses remain largely invisible to AI assistants because they lack structured data, machine-readable content and the technical interfaces required by emerging AI ecosystems.

Five Strategic Priorities for Tourism Organizations

The keynote concluded with a practical roadmap for destinations and tourism businesses. Organizations should begin by assessing how AI assistants currently describe their brand and identifying gaps in visibility. They should strengthen structured content and data quality, prepare for future AI integrations through APIs and machine-readable information, develop governance frameworks covering identity, consent and transparency, and experiment with AI-powered service agents that can proactively support travelers.

The overall message was clear: the next decade of tourism will not simply be shaped by better search engines or more sophisticated booking platforms. It will be defined by intelligent systems capable of understanding traveler intent, making decisions and acting autonomously. Organizations that prepare early for this transition will be better positioned to capture future demand, while those that remain invisible to AI ecosystems risk becoming increasingly difficult for travelers—and their digital agents—to discover.

Ultimately, Matias Undurraga's keynote complemented the broader themes of the Resilient Tourism conference by highlighting how data, artificial intelligence and digital infrastructures are converging to create a new paradigm for tourism. In this emerging environment, success will depend not only on attracting travelers, but also on becoming understandable, trustworthy and accessible to the intelligent systems that increasingly guide their decisions.

AI Is Moving Fast: Let's Get the Fundamentals Right

Keynote by Marius Wehrle, Founder of Beecrowdy and Hontolab

In his keynote, Marius Wehrle offered a pragmatic and thought-provoking perspective on artificial intelligence. Rather than focusing on the latest technological breakthroughs or speculative future scenarios, he argued that organizations should first understand the fundamental shifts that AI is introducing into how information is processed, decisions are made and work is organized. His central message was clear: while AI is advancing rapidly, the real challenge lies in understanding its underlying logic and adapting organizations accordingly.

Understanding the Economic Logic of AI

Marius began by introducing the concept of the emerging **"token economy."** Unlike traditional software, where users typically purchase licenses or subscriptions, generative AI operates on a consumption-based model. Every interaction with an AI system consumes computational resources measured in tokens, which effectively become the new unit of value and cost in AI-powered services.

This shift has important implications for organizations. AI is not free, instantaneous or infinitely scalable. It remains computationally expensive, sometimes slow, and inherently probabilistic. Tourism organizations therefore need to move beyond the hype and develop a realistic understanding of both the opportunities and limitations of these technologies.

From Software-as-a-Service to Agents-as-a-Service

One of the most insightful parts of the keynote concerned the transition from traditional software towards AI agents. Marius described this as a move from **Software-as-a-Service (SaaS)** to **Agents-as-a-Service (AaaS)**. While traditional software provides tools that humans actively operate, AI agents increasingly function as digital workers capable of carrying out tasks autonomously once objectives are defined.

In this new model, the role of humans changes fundamentally. Instead of executing every operational step, people increasingly define goals, supervise outcomes and manage exceptions. AI therefore becomes less a tool and more a collaborator that can perform certain forms of cognitive work.

Why AI Matters: Handling Complexity and Unstructured Information

Marius argued that AI solves two fundamental limitations of traditional software. First, it can work with unstructured information such as text, images, audio and conversations. Second, it can make contextual decisions rather than simply following predefined rules.

These capabilities are particularly relevant for tourism, where much of the available information is fragmented, multilingual and difficult to structure. Customer reviews, destination descriptions, weather information, social media content and visitor feedback all contain valuable insights that traditional systems struggle to process. AI makes it possible to transform these diverse data sources into actionable knowledge.

The Shift from Keywords to Meaning

A recurring theme throughout the presentation was the transition from keyword-based systems to meaning-based systems. Traditional search technologies relied on matching specific words,

whereas large language models are able to understand context, intent and semantic relationships. This fundamentally changes how information is discovered and used.

Closely related to this development is the disappearance of language barriers. Marius described language itself as becoming the new interface—or even the new API—through which humans interact with information systems. Rather than learning specialized software interfaces, users can increasingly communicate with digital systems using natural language. This development significantly lowers the barriers to accessing data and analytical capabilities.

Multimodality and the Rise of AI Agents

The keynote also highlighted two major technological trends shaping the future of AI.

The first is **multimodality**. Modern AI systems can increasingly process and generate text, images, audio and video within a single environment. Information can move seamlessly between formats, creating entirely new possibilities for communication and knowledge management.

The second trend is the evolution from conversational AI towards autonomous AI agents. Marius described a progression from the "chat era," where AI primarily answered questions, to the current "orchestrator era," where systems coordinate workflows and information sources, and ultimately towards an "agent era," where AI systems will increasingly execute tasks independently. The role of humans evolves from prompting systems to designing processes and eventually to setting objectives and governance frameworks.

What This Means for Tourism

The second half of the presentation focused on the implications for tourism.

According to Marius, tourism is moving from a world dominated by visual marketing and search-engine optimization towards a world in which AI assistants increasingly mediate the relationship between travelers and destinations. Future travelers will ask AI systems directly for recommendations, and these systems will generate personalized answers based on available information.

This creates a new challenge for tourism organizations: becoming visible and understandable to AI systems. Websites and tourism services must not only be attractive to human visitors but also accessible to AI assistants. Clear descriptions, structured data, FAQs, factual content, pricing information and machine-readable service details become increasingly important. In other words, organizations must evolve from being search-engine friendly to becoming AI-readable.

Marius emphasized that while the exact future behaviour of travelers remains uncertain, the overall direction is clear: discovering, comparing, planning and booking travel will become faster, more conversational and increasingly personalized.

From Data to Decisions

The keynote concluded with a demonstration of Beecrowdy, a location intelligence platform designed to help destinations, municipalities and tourism organizations transform complex datasets into actionable insights. By combining mobility data, tourism statistics, weather information, event data and other sources, the platform seeks to reduce the distance between questions and answers.

A key idea underlying the platform is that organizations do not suffer from a lack of data but from a lack of accessible intelligence. Dashboards, reports and AI-powered conversational interfaces

can help decision-makers obtain relevant insights without requiring advanced analytical skills. The objective is to make data-driven decision-making available to a much broader range of users and organizations.

Key Takeaway

The keynote provided an important counterbalance to more technology-centric discussions during the conference. Rather than focusing exclusively on future AI applications, Marius Wehrle emphasized the structural transformations already underway: the shift from tools to agents, from keywords to meaning, from interfaces to conversations, and from data abundance to actionable intelligence.

For tourism organizations, the message was straightforward: before chasing every new AI trend, it is essential to understand the fundamentals. Those who succeed in organizing their data, making their services AI-readable and adapting their decision-making processes to a world of intelligent agents will be best positioned to benefit from the next phase of digital transformation.

Resilient Digital Guest Journeys: Enhancing Experience, Operational Excellence and Revenue Growth Through Robust Digital Services

Keynote by Francesco Pugliese, Vice President Corporate Business Innovation, MSC Cruises

In the closing keynote of the conference, Francesco Pugliese offered an industry perspective on digital transformation at scale, drawing on the experience of MSC Cruises, one of the world's largest cruise operators. His presentation illustrated how data, digital platforms and artificial intelligence can simultaneously improve customer experience, operational efficiency and revenue generation. More broadly, it demonstrated how digital transformation becomes a strategic capability when integrated across the entire customer journey rather than implemented through isolated technological solutions.

Managing a Floating Smart City

Francesco began by highlighting the unique operational complexity of the cruise industry. A modern cruise ship functions as a floating city, bringing together accommodation, restaurants, entertainment venues, wellness facilities, retail shops, excursion services, transportation systems and safety operations within a single environment. Managing thousands of guests and crew members requires the coordination of a vast range of services and processes.

This complexity makes cruises an ideal environment for digital innovation. Digital technologies not only improve operational performance but also help orchestrate seamless experiences across multiple touchpoints before, during and after the trip.

MSC for Me: A Digital Ecosystem Rather Than an App

At the centre of MSC's strategy lies **MSC for Me**, a digital ecosystem designed to accompany guests throughout their entire journey. Francesco emphasized that the initiative should not be viewed simply as a mobile application but as a comprehensive platform connecting guests with services and information across multiple channels.

The ecosystem starts before departure and continues throughout the cruise experience. Through mobile applications, smart TVs, interactive screens and onboard digital services, guests can access information, complete administrative procedures, communicate with the company and purchase additional services. The platform supports mobile check-in, digital boarding passes, onboard navigation, reservations, messaging, itinerary management and personalized recommendations.

The results presented were impressive. Nearly 80% of guests can now be reached digitally before boarding, while pre-cruise digital sales have grown significantly, making digital channels one of the fastest-growing sources of ancillary revenue.

Digitalization as a Revenue and Experience Driver

A central message of the keynote was that digital transformation should not be understood solely as a cost-saving exercise. At MSC Cruises, digital services are designed to create value simultaneously for guests and the organization.

By interacting with guests before and during the cruise, the company gains a better understanding of customer preferences and can provide more relevant offers. Personalized recommendations for excursions, dining experiences, spa treatments or entertainment activities help improve guest satisfaction while generating additional revenue opportunities.

Francesco repeatedly stressed that the objective is not to maximize technology usage but to reduce friction. Every digital interaction should make the customer journey smoother, simpler and more enjoyable.

Artificial Intelligence as an Invisible Enabler

Building on themes discussed throughout the conference, Francesco described artificial intelligence as an increasingly important component of the guest experience.

MSC has introduced AI-powered concierge services capable of answering frequently asked questions, providing information and supporting customer requests. These systems help reduce queues at service desks while making information available instantly and around the clock. At the same time, they allow staff to focus on more complex or high-value interactions.

Looking ahead, MSC sees AI as the foundation for a truly personalized customer experience. By combining customer data, advanced analytics, machine learning and conversational interfaces, future systems will increasingly anticipate guest needs and deliver tailored recommendations across channels. The long-term vision is a seamless digital companion capable of supporting guests throughout the entire travel journey.

Importantly, Francesco emphasized that technology should remain largely invisible. The goal is not to replace hospitality with automation but to use technology to enhance human service and create more meaningful guest interactions.

Innovation Beyond the Ship

The keynote also demonstrated that digital transformation extends far beyond onboard services.

MSC has invested heavily in terminal infrastructure and passenger flows, including major facilities such as the new Miami Cruise Terminal, currently the largest cruise terminal in North America. Managing up to 36,000 passengers per day requires sophisticated digital systems, including biometric facial recognition, automated luggage handling and advanced passenger flow management.

These investments illustrate how digitalization increasingly spans the entire travel ecosystem. Customer experience no longer begins when guests board a ship but from the moment they start interacting with the travel provider.

Creating Memorable Experiences Through Technology

Beyond operational efficiency, Francesco presented examples of how technology can contribute directly to the customer experience. One notable illustration was the **MSC Starship Club**, featuring one of the world's first robotic bartenders at sea. While technologically impressive, the purpose of the initiative is not automation itself but the creation of unique and memorable experiences that reinforce MSC's innovative brand positioning.

This example reflected a broader theme running throughout the keynote: successful digital innovation is ultimately measured not by the sophistication of the technology but by the value it creates for customers.

Lessons for the Tourism Industry

Several broader lessons emerged from MSC's experience. First, digital transformation is most effective when viewed as an integrated ecosystem rather than a collection of individual technologies. Second, customer data becomes increasingly valuable when it is used to personalize services and support decision-making. Third, artificial intelligence delivers the greatest benefits when it augments rather than replaces human interactions.

Perhaps most importantly, Francesco demonstrated that digitalization should not be separated from business strategy. At MSC Cruises, technology investments are closely linked to customer experience objectives, operational performance and revenue generation. Digital transformation is therefore not an IT initiative but a core component of organizational strategy.

Key Takeaway

Francesco Pugliese's keynote provided a powerful illustration of digital transformation at scale. While many tourism organizations are still experimenting with AI, customer data and digital services, MSC Cruises has already embedded these capabilities across large parts of its customer journey and operations.

The presentation reinforced one of the central messages of the Resilient Tourism Conference: technology creates value when it helps organizations better understand customers, improve decision-making and deliver superior experiences. In this sense, resilience and competitiveness increasingly depend on an organization's ability to combine data, digital platforms, artificial intelligence and human service into a coherent and customer-centric ecosystem.

Overall Synthesis of the Resilient Tourism Conference 2026

Building Resilient Tourism Systems in the Age of Data and Artificial Intelligence

The Resilient Tourism Conference 2026 marked the culmination of four years of research conducted within the Innosuisse Flagship project *Resilient Tourism*. Bringing together researchers, tourism practitioners, technology providers and policymakers, the conference provided a comprehensive overview of how digital transformation is reshaping tourism and how destinations and businesses can become more resilient in an increasingly uncertain environment.

Although the presentations covered a wide range of topics—from data infrastructures and digital business models to AI, simulation and innovation ecosystems—a coherent narrative emerged. Tourism is entering a new phase in which competitiveness will depend less on access to technology itself and more on the ability to organize data, build adaptive organizations, collaborate across ecosystems and make better decisions under uncertainty.

From Digitalization to Strategic Transformation

One of the strongest messages across the conference was that digital transformation should no longer be understood as a technological challenge. While the last two decades have largely focused on adopting websites, booking systems, social media and digital marketing tools, the next phase will be characterized by deeper organizational transformation.

The presentations showed that tourism organizations now possess access to more data, technologies and digital tools than ever before. Yet the real challenge increasingly lies in translating these resources into strategic capabilities. Data only creates value when it informs decisions. Artificial intelligence only creates value when it is embedded into processes and business models. Digital platforms only create value when they support meaningful customer experiences.

This shift was visible throughout the conference. The focus has moved from "Which technology should we adopt?" toward "How should we redesign our organizations and destinations to thrive in a digital world?"

Data as Critical Infrastructure

The work presented by HSLU highlighted the growing importance of data infrastructures as foundational assets for tourism. The conference clearly demonstrated that the future of tourism will depend on the ability to connect fragmented data sources, establish common standards and create trusted mechanisms for data sharing.

However, the discussions also revealed that the challenge is no longer purely technical. Switzerland already possesses significant quantities of tourism data. The real issue is interoperability, governance and the capacity to transform data into actionable intelligence.

Data is increasingly becoming a strategic infrastructure comparable to transportation networks or energy systems. Without reliable data foundations, advanced applications such as AI, predictive analytics, digital twins or personalized visitor experiences will remain difficult to implement.

For Swiss tourism, this implies a continued need to invest in data governance, common standards and collaborative data ecosystems rather than isolated platforms.

Artificial Intelligence: From Experimentation to Integration

Artificial intelligence emerged as a dominant theme throughout the conference. The keynotes from Booking.com, AWS, Beecrowdy and MSC Cruises illustrated different dimensions of this transformation.

A first observation is that AI is rapidly moving from experimentation to operational deployment. AI is increasingly used for customer support, content generation, personalization, forecasting, analytics and decision support. More importantly, emerging AI agents may fundamentally transform how travelers search, compare, plan and book travel experiences.

A second observation concerns visibility. Several speakers highlighted that tourism organizations must increasingly become "AI-readable." Just as search engine optimization became essential during the web era, destinations and tourism businesses will need structured data, machine-readable content and interoperable systems to remain visible within AI-driven ecosystems.

Finally, the conference emphasized that trust, governance and transparency will become central competitive advantages. Organizations that can demonstrate responsible use of data and AI are likely to enjoy stronger customer confidence and greater long-term resilience.

Resilience Through Adaptation Rather Than Recovery

The work of SP3 introduced an important conceptual shift. Traditionally, resilience in tourism has often been understood as the ability to recover after a crisis. The conference proposed a broader perspective inspired by resilience theory: resilient systems do not merely return to their previous state; they learn, adapt and transform.

The simulation models developed within the project illustrated how destinations can use data and modeling to explore alternative futures. Instead of trying to predict the future, destinations can test scenarios, identify vulnerabilities and evaluate strategic options before investing significant resources.

This approach is particularly relevant given the growing uncertainty facing tourism. Climate change, geopolitical instability, economic volatility and technological disruption make traditional forecasting increasingly difficult. Scenario-based planning and simulation may therefore become essential tools for strategic destination management.

Productivity and Business Model Innovation

Another important insight emerged from the work of the University of St. Gallen. The conference repeatedly highlighted that productivity remains one of the tourism sector's most underappreciated challenges.

Labour shortages, demographic change and rising operating costs are forcing tourism organizations to rethink how value is created. Digitalization alone will not solve these challenges. Instead, organizations must redesign processes, allocate human resources more strategically and experiment with new business models.

The discussion suggested that future competitiveness will depend not only on attracting more visitors but also on creating more value with limited resources. This requires a stronger focus on

service design, automation of low-value tasks and the development of business models that effectively combine human interaction and digital technologies.

Collaboration as a Resilience Capability

A final theme running through all presentations was the importance of collaboration. Whether discussing data infrastructures, innovation diffusion, AI adoption or destination management, speakers repeatedly emphasized that no single organization can address these challenges alone.

The Flagship project itself illustrated the value of collaborative ecosystems involving universities, destinations, tourism associations, technology providers and public authorities. The conference highlighted that resilience is not merely an attribute of individual organizations but also of networks and ecosystems.

For Swiss tourism, this implies a growing need for cross-sector partnerships, shared infrastructures and collective innovation mechanisms.

Key Takeaways for Swiss Tourism

Several practical lessons emerge from the conference:

1. **Data must become a strategic asset**, not simply a reporting tool. Investments should focus on interoperability, governance and decision support rather than data collection alone.
2. **AI adoption should move beyond experimentation.** Organizations need clear strategies for integrating AI into operations, customer experiences and decision-making processes.
3. **Destinations must prepare for AI-mediated tourism distribution.** Structured data, APIs and machine-readable content will become increasingly important for visibility.
4. **Scenario planning and simulation should become part of destination management.** The future is becoming too uncertain to rely solely on traditional forecasting methods.
5. **Productivity deserves greater attention.** Future competitiveness will depend on the ability to create more value with scarce resources.
6. **Human interaction remains essential.** The objective is not to replace hospitality with technology but to use technology where it enhances customer experiences and operational performance.
7. **Collaboration is becoming a strategic necessity.** Many future challenges can only be addressed through ecosystem approaches rather than isolated initiatives.

Priorities for Future Research

The conference also identified several promising directions for future research and innovation projects.

- First, there is a need to better understand the impact of **generative and agentic AI on tourism distribution**, destination visibility and customer behaviour. The emergence of AI intermediaries may profoundly alter tourism value chains.

- Second, research should continue exploring **digital twins and simulation environments** capable of supporting strategic planning at destination and regional levels. The integration of resilience, mobility, climate and visitor-flow models represents a particularly promising avenue.
- Third, future projects should investigate **AI adoption and organizational transformation within tourism SMEs**, which continue to face significant resource and capability constraints.
- Fourth, there is growing interest in **human-AI collaboration** and the redesign of tourism jobs, skills and organizational processes. Understanding how employees and AI systems can effectively work together will become increasingly important.
- Fifth, climate adaptation and resilience remain major priorities. Future work should examine how digital technologies, predictive analytics and simulation tools can support adaptation to climate-related risks.
- Finally, the conference highlighted the need for research on **data governance, trust and responsible AI**, particularly in light of evolving European regulations and growing consumer expectations regarding privacy and transparency.

Conclusion

The Resilient Tourism Conference demonstrated that Swiss tourism is entering a new era characterized by the convergence of data, artificial intelligence, digital platforms and increasing uncertainty. The central challenge is no longer digitalization itself, but the capacity to use digital technologies strategically to create more adaptive, intelligent and resilient tourism systems.

The future will likely belong to destinations and organizations that can combine technological innovation with human-centred design, evidence-based decision-making and strong collaborative ecosystems. In that sense, resilience is not a destination but a continuous process of learning, adaptation and transformation.