



# **Dual-Track Transformation**

遊客中心 **Visitor Center Translation** 번역 서비스

# 智慧景區 價值升級

Smart Scenic Sites, Enhancing Value



# 觀光產業數位轉型 Digital Transformation of the Tourism Industry

為推動觀光產業數位轉型,觀光署推動辦理「2024觀光產業數 位博覽會」、「玩轉科技交流站」及「觀光盃 Open Data 黑客松」 透過產、官、學界力量,持續引領觀光產業朝「永續韌性 X 數位 創新」轉型。

To accelerate digital transformation across the tourism sector, the Tourism Administration organized the 2024 Digital Transformation Expo for the Tourism Industry, the Fun Tech Jam, and the Tourism Open Data Hackathon. Harnessing the combined strengths of industry, government, and academia, these initiatives continued to steer the sector toward the twin goals of "Sustainability and Resilience × Digital Innovation."



「觀光盃 Open Data 黑客松」校園競賽 Tourism Open Data Hackathon-Campus Competition

#### 「2024 觀光產業數位博覽會」

2024 Digital Transformation Expo for the Tourism Industry

於 113 年 12 月 3 日至 4 日辦理「2024 觀光產業數位博覽會」,包含「主題論壇」、「觀光產業數位媒合轉型」及「智慧科技體驗 展區」引領觀光產業朝「永續韌性 X 數位創新」轉型。展場以 AI 虚實整合沉浸式體驗展開台灣環島之旅,呈現觀光與科技跨域結合 的魅力;「主題論壇」邀集產、官、學界共同探討觀光產業數位化之政策推動,強化觀光發展共識;「智慧科技體驗展區」展示包括 AI 備品自動販賣機、自助入住系統與送餐機器人和提高服務接待品質之 AI 智慧多語導覽系統等智慧科技應用等;「觀光產業數位媒 合轉型」依據觀光產業的多元需求,提供業者探訪觀光科技產品、轉型諮詢及了解前瞻趨勢。共計吸引 41 家企業參與展覽,展示 65 項科技應用產品及近70項創新解決方案,兩日參與人流達5,603人次。

Held on December 3-4, 2024, the Expo featured a Thematic Forum, Digital Matchmaking for Industry Transformation, and a Smart Tech Experience Zone, steering the tourism industry toward "Sustainable Resilience × Digital Innovation." The show floor offered an Al-powered, immersive mixed-reality journey around Taiwan to showcase the appeal of cross-sector convergence between tourism and technology. The Thematic Forum brought together leaders from industry, government, and academia to discuss policies for sector-wide digitalization and build consensus for tourism development. The Smart Tech Experience Zone presented applications such as AI amenity vending machines, self check-in systems, food delivery robots, and AI multilingual guide systems that enhance guest services. The Digital Matchmaking and Transformation program addressed diverse industry needs, enabling operators to explore tourism tech products, receive guidance on transforming operations, and track emerging trends. The event drew 41 participating companies, with 65 technology applications and nearly 70 innovative solutions on display and 5,603 visits over two days.



#### 玩轉科技交流站 Fun Tech Jam



以「觀光場域出題,科技創意解題」的機制,透過訪談聚焦 三大觀光產業數位轉型痛點,再由科技業者提出解方。例如 科技公司設計碳足跡計算管理平台助力旅行業者管理與推廣 永續旅遊、旅館公會協力資訊廠商,針對地震災害頻傳之地 區提出以 PMS 系統 (飯店物業管理系統) 為基底之旅客即時 回報系統,供救災單位決策參考提升災害應變能量。



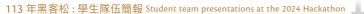
Under a "solving tourism challenges with tech innovation" model, this event identified three major pain points in the tourism digital transformation process through stakeholder interviews. Technology providers were invited to propose targeted solutions, such as a carbon-footprint calculation and management platform to help tour operators run and market sustainable travel, and a property management system (PMS) based real-time guest status reporting module for hotels in quake-prone areas to support emergency decision-making and strengthen disaster response.

#### 「觀光盃 Open Data 黑客松」 **Tourism Open Data Hackathon**

113 年首度舉辦「觀光盃 Open Data 黑客松」校園競賽 邀請全國大專校院學生運用運用觀光署開放資料(Open Data) ,結合 AI、大數據、適地性 (LBS)、視覺辨識等技術 提出涵蓋智慧旅遊、低碳永續與各式數位服務包括旅遊醫療 保健、郵輪登陸行程等創新提案。活動吸引 46 隊大專院校 學生報名,18 隊參賽隊伍進入決選,展現學生對數位創新與 實務應用的優秀能力,為觀光產業注入新動能。



Launched in 2024, the inaugural Tourism Open Data Hackathon was a campus competition inviting teams from universities across Taiwan to use the Tourism Administration's open datasets with AI, big data, location-based services (LBS), and computer vision to pitch innovations spanning smart travel, low-carbon sustainability, and new digital services—from travel health to cruise shore excursions. Forty-six teams registered, with 18 advancing to the finals, demonstrating strengths in digital innovation and practical application and injecting fresh momentum into the tourism sector.







# 智慧景區數位轉型 Digital Transformation of Smart Scenic Areas

智慧景區轉型:打造觀光數據治理服務新模式 Transforming Smart Scenic Areas: A New Model for Tourism

因應全球觀光發展趨勢與國內產業升級需求,觀光署積極推動「智慧景區轉型」策略,以實現《Taiwan Tourism 2030 臺灣觀光政策白皮書》所倡議的永續、創新與智慧治理目標。113 年 5 月正式設立「智慧景 區專案辦公室」,全面啟動景區數位轉型工程,以「數據整合、技術導入、服務創新」為主軸,聚焦「智慧 管理」、「智慧服務」、「智慧行銷」三大構面,帶動全臺風景區數據治理與服務進化。

In step with global trends and industry upgrading in Taiwan, the Tourism Administration advanced a "Smart Scenic Area Transformation" strategy to realize the sustainability, innovation, and smart governance goals set out in the Taiwan Tourism 2030 White Paper. In May 2024, a dedicated Project Management Office (PMO) was established to drive site-wide digital transformation centered on data integration, technology adoption, and service innovation—across smart management, smart services, and smart marketing—propelling data governance and service upgrades at scenic areas nationwide.



東海岸 PWA 行動旅服 East Coast PWA mobile visitor services



#### 智慧管理 Smart Management

**Data Governance and Service** 

強化數據整合與預警系統,提升治理效能。例如北海岸白沙灣遊 憩區海邊導入高解析度即時影像監控器,透過 AI 影像辨識協助 判斷遊客位置及提升安全管理告警;情人湖吊橋即時人流承載 AI 監控,電子看板亦可提醒遊客已上橋人數。

#### 智慧服務 Smart Services

推動 PWA 行動旅服與 AI 導覽,提供即時資訊與行程建議。如 透過 PWA 行動旅服平台,提供遊玩東部海岸個人化即時語音導 覽與推薦景點路線,以及於日月潭車埕遊客中心打造「列車視 角」的實境車廂體驗,強化旅遊沉浸感與趣味性。

#### 智慧行銷 Smart Marketing

發展影音銀行,支援地方創生與觀光圈推廣,如阿里山管理處推 出「EASY GO」觀光電商平台,促進在地商品與票券一站式消 費、離島推出「潮澎遊」品牌,結合永續旅遊理念與數位預購服 務,帶動觀光圈整合與國際化。

Strengthen data integration and early-warning systems to improve governance: For example, high-resolution live cameras with AI vision at Baishawan Beach (North Coast) help identify visitor locations and support safety alerts; real-time AI people-flow monitoring on the Lovers Lake Suspension Bridge informs digital signage to manage capacity and visitor

Roll out PWA-based mobile travel services and Al-guided tours to deliver real-time information and travel suggestions: The East Coast PWA provides personalized, real-time audio guides and route recommendations. At the Checheng Visitor Center in the Sun Moon Lake area, a "train-view" immersive carriage experience enhances engagement and immersion.

Develop a media bank to support place-based revitalization and tourismcircle promotion. The Alishan National Scenic Area Administration (NSA) launched the Easy Go tourism e-commerce platform for one-stop purchases of local goods and passes. In Taiwan's outlying island areas, the "Wave Penghu" brand integrates sustainable travel concepts with digital pre-purchase services to strengthen tourism-circle integration and international reach.



北海岸白沙灣高解析度即時影像 High-resolution live feed at Baishawan Beach, North Coast



車埕遊客中心實境車廂體驗 mmersive train carriage experience at the Checheng Visitor Center



澎湖觀光圈打造數位觀光品牌:潮澎遊 Digital brand of the Penghu Tourism Circle: Wave Penghu

#### 自行車元宇宙體驗台灣之美

#### **Experiencing Taiwan's Beauty through Virtual Cycling**

113年首度於日月潭舉辦的「環法自行車挑戰賽」於全球知名 虛擬騎乘平台推出環法賽路線的線上體驗與競賽活動,藉由線 上線下整合行銷,強化了騎乘者的沉浸式體驗,以及提升台灣 自行車路線的國際曝光度與話題性,拓展台灣自行車觀光的國 際影響力。截至 113 年,完成 16 條多元特色路線的高品質影像 拍攝,並率先上架其中 10條,供全球用戶實際體驗台灣的自然 風光與多元地貌。透過平台精準導流與話題營造,吸引國際騎 乘社群目光,擴大台灣於全球虛擬騎乘市場中的品牌聲量。



Since debuting at Sun Moon Lake in 2024, L'Étape by Tour de France offered online experiences and competitions of its certified routes via a worldrenowned virtual cycling platform. The integrated on-site/online campaign deepened rider immersion and heightened international visibility and buzz for Taiwan's cycling routes, expanding Taiwan's influence in global cycling tourism. By the end of 2024, high-quality footage had been completed for 16 distinctive routes, with 10 published for users worldwide to virtually experience Taiwan's diverse landscapes. Through precise audience targeting and storytelling, the initiative is drawing the international cycling community's attention and amplifying Taiwan's brand presence in the global virtual-cycling market.

#### 友善升級! 113 年臺灣觀光重點發展 AI 即時翻譯服務 Friendlier and Faster: Expanding AI Real-time Translation in 2024

自 112 年起率先於臺北松山機場及桃園國際機場啟用 AI 智慧翻 譯服務,113年再擴展至高雄國際機場,另為回應不同國家旅 客的需求,於原有的四種語言基礎上再新增了印尼語及越南語 等兩種語言,打造創新友善旅遊諮詢服務。

Following the initial deployment at Taipei Songshan Airport and Taiwan Taoyuan International Airport in 2023, Al translation services were expanded to Kaohsiung International Airport in 2024. To better serve diverse visitors, Indonesian and Vietnamese were added to the original four languages served, enhancing friendly and accessible travel consultation for international arrivals.



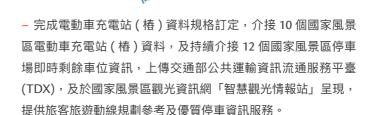
高雄機場智慧翻譯櫃台 AI Smart Translation Counter at Kaohsiung International Airport

#### 增加大數據平台資訊,掌握觀光產業輪廓 **Enriching the Tourism Big Data Platform**

- 優化及持續提升大數據平台各項分析功能,113年增加匯入亞 洲競爭市場國家之入出境旅客數據、韓國市場旅遊需求數據, 合計匯入及介接 28 項內外部數據資料、236 個資料集,約 1 億 3,000 萬筆資料, 開發 280 個業務統計分析服務。
- 以旅宿業營運大數據為核心,整合平臺現有之觀光產業指標運 算系統,完成旅宿業大數據指標運算模組開發,作為監控觀光 與旅宿產業景氣、決策輔助與產業分析報告等數據應用之基礎。
- records, supporting 280 business analytics services.
- module for accommodation industry indicators was developed and integrated with existing tourism indicator systems—forming a foundation for monitoring tourism and lodging market conditions, decision support, and industry analysis.

#### - Continued optimization and enhancement of analytics: In 2024, the platform added data on inbound/outbound travelers for peer Asian markets and Korean market demand. In total, 28 internal/external data categories were integrated, covering 236 datasets and about 130 million

- Centering on accommodation operations big data, a computation



- Completion of specifications for EV charging station data: Data for charging stations in 10 National Scenic Areas and real-time parking availability for 12 National Scenic Areas are being integrated and uploaded to the MOTC Public Transport Data eXchange (TDX) platform, and presented on the National Scenic Area website's Smart Tourism Information Station—supporting visitor route planning and providing high-quality parking information.

#### 數據共享,共創價值:觀光署「觀光雲」平台助力智慧旅遊發展

Sharing Data, Creating Value: The "Tourism Cloud" Platform

建置「觀光雲」平台,整合數據銀行與影音銀行資源,提供開放 式API與多元內容素材,促進政府機關、企業與創作者共同參與, 推動智慧應用創新與數位內容生產,強化整體旅遊體驗價值。

The Tourism Cloud platform integrates a data bank and media bank with open APIs and rich content assets. The platform engages public agencies, enterprises, and creators to foster innovation in smart applications and digital content production, enhancing overall visitor experience value.

#### 跟隨人工智慧的腳步—AI 智慧翻譯櫃台

**Keeping Pace with AI: Smart Translation Counters** 

為提升國家風景區外語接待能力,有效地服務外籍旅客,於松山 機場旅遊服務中心及北海岸及觀音山國家風景區內野柳遊客中心 安裝「AI 智慧翻譯服務」,採用先進的 AI 即時翻譯資料庫,透 過雙面透明螢幕結合 5G 網路,提供流利的英語、日語和韓語即

時語音翻譯服務,實現與旅客面對面無縫溝通的效果。

#### 導入非接觸式人機互動推動知性觀光

**Advancing Contactless Interaction for Discovery-led Tourism** 

於北海岸及觀音山國家風景區導入非接觸式人機互動新技術(裸 視 3D) 及透過沉浸式 3D 虛擬實境,配合手勢追蹤人機互動之數 位科技整合應用,提供和平島地質景觀互動平台《3D探索號》(3D EXPLORER),遊客可藉由數位科技旅遊,近距離 360°探索基隆體 驗和平島地質公園世界級地景,欣賞全球最美日出阿拉寶灣風光。



To strengthen foreign-language reception and better serve international visitors, AI Smart Translation services were installed at the Songshan Airport Visitor Service Center and at the Yeliu Visitor Center in the North Coast and Guanyinshan NSA. Powered by an advanced real-time translation engine and a two-sided transparent display over 5G, the service delivers seamless, face-to-



face voice translation in English, Japanese, and Korean.





The North Coast and Guanyinshan National Scenic Area introduced contactless interaction with glasses-free 3D and immersive VR, combined with gesture-tracking interfaces. The "3D Explorer" platform allows visitors to digitally discover the world-class landforms of Heping Island Geopark in 360 degrees, including the sunrise views at Alabao Bay, acclaimed as one of the world's most beautiful sunrise spots.



#### 雙軸轉型 CO

### 

- 113 年 6 月 1 日辦理「2024 世界自行車日全台環騎暨響應活動」,推廣自行車旅遊;「臺灣騎跡-全國自行車單一總入口網」提供全臺自行車活動資訊、補給站、周邊景點、旅宿、餐飲、臺灣好行及氣象資訊,以一站式方式方便民眾規劃自行車遊程。並輔導超過 5,028 家旅宿業業者加入「自行車友善旅宿」強化自行車旅遊配套服務。
- 113 年 10 月 25 日至 11 月 24 日於華山 1914 文化創意產業園區辦理 4 場「2024 觀光區市集日」活動,以 1 周 1 區域主題,展現全臺 7 個區域觀光圈的品牌特色及經營成果。
- 113 年 11 月 29 日至 12 月 1 日共 3 天,於華山 1914 文化創 意產業園區辦理「2024 年臺灣部落觀光嘉年華」活動,展現近 年推動部落觀光成果,以及臺灣原住民 16 個族群各自獨特的人 文風采。



2024 觀光區市集日活動 2024 Tourism Zone Market Days at Huashan 1914 Creative Park

#### 推廣旅行業永續旅遊

**Advancing Sustainability in the Travel Trade** 

- 因應永續旅遊趨勢,促進旅行業者對永續經營策略及國際認證 的認識,針對旅行業主管階層或經營者培訓相關知能,113 年度 辦理 4 場次教育訓練及 2 場域企業參訪,共計 100 家旅行業者, 320 人次參與。
- 113 年度輔導 3 家旅行業者取得 GTS 綠色旅行標章,並於輔 導認證申請期間拍攝輔導紀錄片以利後續擴大推廣,鼓勵旅行 業者加入永續行列。



- On June 1, 2024, World Bicycle Day rides were held around Taiwan to promote cycling tourism. The Taiwan Cycling Trail—Taiwan Bike Portal provides one-stop access to events, rest stops, nearby attractions, lodging and dining, Taiwan Tourist Shuttle connections, and weather, making ride planning easy. More than 5,028 accommodation providers joined the Bicycle-Friendly Lodging program to strengthen cycling-support services.
- From October 25 to November 24, 2024, four Tourism Zone Market Days took place at Huashan 1914 Creative Park. Each week highlighted one regional theme, showcasing the brand strengths and operational achievements of Taiwan's seven regional tourism circles.
- The Taiwan Indigenous Tourism Festival was held from November 29 to December 1, 2024, at Huashan 1914 Creative Park. The event highlighted recent progress in indigenous tourism and the distinctive culture of Taiwan's 16 Indigenous peoples.



2024 年臺灣部落觀光嘉年華 2024 Taiwan Indigenous Tourism Carnival

- To align with sustainable tourism trends and deepen understanding of sustainable management strategies and international certification, four training sessions and two site visits were conducted in 2024 for executives and owners. A total of 100 travel agencies and 320 participants took part.
- Three travel agencies were assisted in earning the Good Travel Seal (GTS) in 2024. A documentary of the counseling and certification process was produced to support broader promotion and encourage more agencies to join the sustainability effort.

#### 辦理觀光遊樂業優質化計畫補助

**Quality Enhancement Subsidies** for Amusement Operators

為輔導觀光遊樂業朝創新、永續方向發展,依據「交通部觀光署補助觀光遊樂業優質化實施要點」及「113 年度觀光遊樂業優質化計畫補助申請注意事項」規定,113 年度以「永續發展」為政策目標,呼應全球淨零趨勢及「臺灣 2050 淨零排放」產業轉型,補助觀光遊樂業者辦理申請永續認證、環境保護(E,environment)、社會責任(S,social)和公司治理(G,governance)等事項,引導業者朝永續發展,創造市場藍海與附加價值。113 年計 17 家業者提出 ESG 永續發展項目補助申請,核定補助經費 4,886 萬元,補助項目計有溫室氣體盤查報告書、風光雙軌儲能式 LED 燈、小火車柴油改電動引擎、能源監控系統(智慧電錶)、中水及雨水回收再利用處理系統等,帶動整體投資金額約新臺幣 1 億 2,595 萬元。



補助帝動整體投資金額約新量幣 1 億 2,595 禺 5 Subsidies catalyzed approximately NT\$125.95 million in total investment



優質化計畫補助 - 左:小叮噹科學主題樂園風光雙軌儲能式 LED 路燈 右:九族文化村小火車柴油引擎電動化 Quality Enhancement Subsidies - Left: Dual-track wind-solar energy-storage LED streetlights at Little Ding-Dong Science Theme Park; Right: diesel-to-electric conversion of the miniature train at the Formosan Aboriginal Culture Village

To steer the amusement park industry toward innovation and sustainability, subsidies in 2024 prioritized "sustainable development," aligning with global netzero trends and Taiwan's 2050 net-zero pathway. The program subsidized projects such as pursuing sustainability certifications; environmental (E), social (S), and governance (G) initiatives; greenhouse gas inventory reports; solar—wind dual-mode energy-storing LED lighting; conversion of mini-train engines from diesel to electric; energy-monitoring systems (smart meters); and graywater/rainwater recycling systems. In 2024, 17 enterprises applied for ESG-related subsidies. Approved subsidies totaled NT\$48.86 million, catalyzing approximately NT\$125.95 million in overall investment.

# Promoting Innovative i-Center Services

馬修單車加入臺北市借問站行列 MatthewBike joins Taipei City's Information Station network

輔導地方政府、觀光署所屬國家風景區管理處於全國各地主要交通場站及國家風景區內重要遊憩據點建置「i」標誌之i-center旅遊服務體系,協助國內外旅客能便捷取得各類觀光旅遊資訊。

依區位特性及服務性質,各提供不同服務,第1層級為設置於桃園、高雄、松山國際機場等3處旅客服務中心;第2層級為輔導地方政府設置於國內重要交通節點,如火車站、高鐵站、航空站、捷運車站等55處旅遊服務中心;第3層級為觀光署所屬管理處設置於國家風景區內重要遊憩據點等,共計59處游客中心。

為營造優質友善旅遊環境並發揚「相借問」的臺式熱情,以產業 跨域合作機制,擇優輔導民間產業及公私立單位設置「借問站」 服務,提供當地旅遊資訊及諮詢服務,截至 113 年全臺完成 653 處借問站建置。

The Tourism Administration supported local governments and national scenic area administrations in expanding the "i"-branded i-Center Travel Service System at major transport hubs and key recreation nodes within national scenic areas. The service system provides convenient access to travel information for domestic and international visitors.



Services are tiered by location and function: Tier 1: Three airport visitor service centers at Taiwan Taoyuan, Kaohsiung, and Taipei Songshan; Tier 2: 55 local-government visitor information centers at key nodes (rail, THSR, airports, metro); Tier 3: 59 visitor centers at important recreation points within national scenic areas under the Tourism Administration.

To foster a welcoming travel environment that embodies Taiwan's "Ask Me" spirit, the administration has also formed cross-sector partnerships to selectively support Information Stations operated by private enterprises and public or private institutions to provide local tourism information and onsite consultation. As of 2024, a total of 653 Information Stations had been established across Taiwan.

05