How AI can revolutionize sustainability and tourism workforce strategies

Franklin Carpenter
Tourism Advisory Horwath HTL Spain
Tourism is at a crossroads
5.3% Carbon emissions by 2030

1.8B Tourists by 2030

10% World destinations receive 80% of tourists
The Tourism Industry:

Should move towards: A regenerative, collaborative and interconnected Model

This means we have to foster:

- Renewable Energy
- Technological transformation
- Digitalización
- Intelligent Infrastructure
- Circular Economy
- Glocals
AI could help us towards Regeneration... ¿how?
FRAMEWORK FOR A:
SUSTAINABLE TOURISM STRATEGY POWERED BY AI

DATA CENTRALIZATION STRATEGY
- Develop a plan to consolidate siloed data into open portals to empower AI, prioritizing big data in real time

SUSTAINABILITY DASHBOARDS
- Create customized dashboards that monitor tourist sentiment, perceptions and volumes to guide policies and social indicators in real time

DYNAMIC PRICING ENGINE
- Enable a tool that allows prices to be adjusted to balance demand and sustainability

CHANGE MANAGEMENT
- Supporting implementation through education and training of interested parties enables participatory design

AI OPPORTUNITIES AUDIT
- Assess target data assets, infrastructure, and stakeholders to identify high-potential AI use cases. Identify data gaps that limit current AI adoption.

GENERATIVE AI TOOLKIT
- Provide access to pre-trained AI models of natural language, voice and vision to drive their use by destination agents for sustainability purposes

PREDICTIVE ANALYSIS
- Apply machine learning to forecast demand and optimize recommendations while minimizing destination saturation

AI ETHICS FRAMEWORK
- Facilitate resident surveys and workshops to integrate ethical practices and oversight into AI systems.

IMPACT EVALUATION
- Continuously evaluate the effectiveness of AI based on key tourism and community health parameters, improvement of systems as needed
Empowering Sustainable Tourism Growth through AI-Driven Talent Development

- AI for strategic workforce planning and identifying talent needs
- Targeted upskilling programs for sustainability competencies
- Personalized learning solutions to accelerate capability building
- Collaboration with partners to align training with demands
Building a Thriving and Resilient Tourism Workforce for Long-Term Sustainability

• Inclusive community participation to benefit from sustainable growth
• Data-driven insights on workforce sentiment, skills gaps, and training effectiveness
• Continuous impact evaluation to drive measurable sustainability outcomes
• Knowledge sharing across networks to innovate and scale AI solutions
¡Thank you!

Franklin Carpenter F.
tourismopinions  fcarpenter@horwathhtl.com

The Generative Traveller Newsletter
www.linkedin.com/in/franklincarpenter