

Luottamuksellinen -
Confidential (3Y)

Trainer's Guide

MODULE 5 Emerging Technologies

Session 1: Emerging Technologies

1. INTRODUCTION TO THE TOPIC

Emerging Technologies in Tourism and Hospitality

Recent advances in digital technologies, such as artificial intelligence (AI), have fundamentally transformed digital practices in tourism and hospitality companies. AI is seen as a technology that can recognise, analyse, act, learn, and indicate advanced features of intelligence for problem-solving. Machine learning and large language models have opened new opportunities for AI in marketing and sales operations.

The forms of transactions are transforming alongside the technical development from traditional online bookings toward a comprehensive digital transformation. In eTourism (electronic tourism) the search engines are central to searching, booking, and reviewing in a transaction-based economy. Smart Tourism presents the evolution to the smartphone era, which leverages AI, big data, and platforms to enhance mobility and navigate the travel experience throughout customer journeys in co-creation with technology. Metaverse Tourism introduces immersive simulations, creating new types of experiences and parasocial interactions with avatars, for example.

A central theme in this transformation is the rise of "Never-Ending Tourism," where travel is no longer a separate event but an integrated part of every daily life. This is facilitated by Multimodal AI: Acting as a travel companion that understands images, video, and text to provide rich, contextual support, and Ultra-Realistic "Digital Humans" tools like MetaHuman create lifelike avatars for immersive virtual encounters and simulations.

The ultimate purpose of the study is to demonstrate how technological advancement shifts tourism from a series of separate transactions into a holistic experience and a metaverse creative economy.

Come along to learn the basics of emerging technologies in tourism and hospitality.

Key concepts:

- Digital tourism transformation
- Framing eTourism, Smart tourism & Smart Tourism 2.0 (Metaverse)
- Human nexus nonhuman agencies in tourism
- Empathic phygital tourism experiences
- Emerging AI technologies



This session introduces how digitalisation and emerging technologies, particularly artificial intelligence, are reshaping the creation of experiences in tourism and hospitality.

2. LEARNING OUTCOMES

LEARNING OUTCOMES	
	Participant
1	Identifies the digital transformation foundations: eTourism, Smart Tourism and Smart Tourism 2.0 (Metaverse tourism)
2	Understands human nexus nonhuman approaches of digital tourism
3	Gains insights in emerging technologies and their implications to organisation's strategy and operations.
4	Can apply technological frameworks into tourism service development and organisational reflection.

3. INTRODUCTION TO THE MODULE

a. Sessions

This module consists of one session as follows:

- 1) Emerging technologies

b. Content

This module consists of the following contents:

- 1) Pre-material orientation
- 2) Framing Digital Tourism Transformation
- 3) eTourism, Smart tourism & Smart Tourism 2.0 (Metaverse)
- 4) Human nexus nonhuman agencies in tourism
- 5) Empathic phygital tourism experiences
- 6) Emerging Technologies - Technical Perspective
- 7) Applying AI in Tourism

This module contains the following activities:

- 1) Pre-reading materials with three session-based articles and a video summary prepared with the NotebookLM (AI solution).
- 2) Comments and reflections of the pre-material on a Padlet.

- 3) Reflection and discussion: How do emerging technologies relate to your organisation's current or future operations?

c. Additional reading material and other sources

1. An article: **Balancing Artificial Intelligence and Nature in Lapland Tourism**

The article examines the "triangle" of tourism with AI and nature, exploring how digitalisation can support tourism marketing and sales while maintaining ethical responsibility.

Link to article: <http://bit.ly/4khIvc7>

2. Digital Travel Companion Chatbase to Support Traveler Awareness

The blog post describes practices of a digitalised tourism project where the use of a **Chatbase AI solution** was used to enhance a personalised customer journey.

Link to the blog post: <https://bit.ly/4qcttWr>

3. Towards More Realistic Human Models – MetaHuman and Marvelous Designer in Character Creation

This article explains the technical effort to create a "Virtual Elf" for Santa Claus Village in Rovaniemi, Finland, focusing on the pursuit of photorealism.

Link to the webpage: <https://bit.ly/4rttXbR>

Supplementary material

- **INSPIRES Padlet of Emerging Technologies:** This platform is generated for comments and reflections concerning the pre-material of the study. Link to the Padlet: <https://bit.ly/4qc7nDx>
- **Lapland's AI Paradox:** NotebookLM generated summary video of the reading material. Link to the video: <https://bit.ly/4avX4Wc>
- **AI Adoption in Practical Experiments in Tourism Companies:** The ENTER26 eTourism conference presentation slides of practical tourism-tech Artificial Intelligence experiments, solutions and findings at tourism customer journey touchpoints. Link to the presentation slides: <https://bit.ly/4rAgaR4>

d. Other remarks

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