Intelligent Automation for Tomorrow’s Tourism

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TURITEC Conference
Agenda

Digital Transformation

Intelligent Automation

Smart Travel and Smart Destination

Creating a Sustainable Future
Digital Transformation
Digital Transformation

Innovation

Business Processes: Efficiency

Tourist Experiences

Access and Inclusion
Key Technology Enablers

AI and Robotics
Blockchain
IoT
LBS
AR/VR
Artificial Intelligence

“Ascription of human qualities to machines...”

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<tr>
<th>Thought Process or Reasoning</th>
<th>Human Performance</th>
<th>Rationality</th>
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Russell & Norvig, 2003
Artificial Intelligence

Natural Language Processing
Knowledge Representation
Automated Reasoning
Machine Learning
Computer Vision
Robotics

Russell & Norvig, 2003
Robotics
AI & Robotics Applications

Self-Driving Vehicles

Chatbots

Service Robotics

AI-powered Systems for Business Operations
http://houseofbots.com/news-detail/3110-1-travel-bot-or-travel-apps-which-one-is-better
AI & Robotics Applications

• Starwood’s “Project Jetson” (Siri-powered rooms)
• Edwardian Hotels’ “Edward” (Chatbot)
• Skype Translate (real-time translation)
• EasyJet’s Revenue Management AI
• WayBlazer: Watson-powered travel recommendation
• Robot Concierge
Intelligent Automation

Self-service

Real-time, on-the-spot, response

Powerful predictive analytics and personalization
Self-Service
Self-Service

Welcome to the first 360 smart hotel of the World

INVENTED FOR THE TRAVELLER OF TOMORROW, WHERE EVERYTHING IS CONTROLLED BY YOUR SMARTPHONE.
Implications

Service Quality

Service Personnel

Human – Computer Interaction (HCI)

User Experience (UX)
Implications

Quality of Experiences

Control, Liabilities

Disuse, Misuse, Abuse

Inclusion?
Tourism Encounter

- Company
  - Efficiency vs. Autonomy
  - Efficiency vs. Satisfaction

- Contact Personnel
  - Service Delivery

- Customer
Tourism Encounter
Tourism Encounter
Implications

Roles of Employees
Substitution vs Augmentation
Provision of Decent Work
Predictive/Prescriptive Analytics

Personalization

16:59
Happy Friday John. Here’s a coupon for half-price beers at your local from 5pm. Enjoy!
Implications

Business: From Start-Up to Scale-Up

Personal data management
Tomorrow’s Tourism

A sustainable future: a possibility?
AI: Key Priorities

Economic and social impacts of AI
Ethical and legal issues around AI
Verification and validation
Control (human-in-the-loop)

Russell, Dewey, & Tegmark, 2015
AI: Key Priorities

- Privacy
- Fairness
- Security
- Abuse
- Transparency
- Policy

Google: “Concrete Problems with AI Safety”
Smart Destination

- Technology
- Innovation
- Sustainability
- Accessibility
- Inclusivity
Thank You!

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