Introduction

The **accelerating** and **synergistic interaction** between technology and tourism in recent times has transformed the nature of tourism products, processes, businesses and competition

ICTs are **reshaping** the fundamental structure of the industry and society

The Internet is rapidly becoming the **number one information source** for travel and tourism

ICTs thus play a critical role in the **competitiveness** of **tourism organizations** and **destinations** as well as in the entire industry as a whole

Introduction

DMOs use ICTs in order to **facilitate** the tourist experience before, during and after the visit, as well as for coordinating all partners involved in the production and delivery of tourism

To attempt **to provide information** and accept reservations

To utilize ICTs **to promote** their tourism policy, coordinate their operational functions, increase the expenditure of tourists and boost the multiplier effects in the local economy

Consumer and demand dimensions

Technological innovation

Industry functions

Consumer and Demand Dimensions

eTourism enables prospective travellers to access a much greater wealth of reliable and accurate information provided by tourism organizations, private enterprises and, more and more, by other users/consumers

- New
- Experienced Sophisticated
- Demanding travellers require

ICTs offer a wide range of tools to facilitate and improve the process

| 1. Need recognition | 2. Information search | 3. Evaluation of alternatives | 4. Purchase decision | 5. Post-purchase behaviour |

Need recognition

The **quick identification** of consumer needs

Reaching potential clients with comprehensive, personalized and up-to-date products and services

ICT can help industrial managers to **develop**, **optimize** and **customize** their websites to meet the needs of their customers

Information search

To **interact better** with local resources and cultures

To **find products and services** that meet his/her requirements

To **take advantage** of special offers and reduced prices

i) the **composition** of vacation groups

ii) the **presence** of families and friends at the destination

iii) **earlier visits** to the destination

iv) the **degree of novelty** associated with the destination

Evaluation of alternatives

Travellers can now use the Inter-net extensively to evaluate **alternative opportunities** and to **compare and contrast offerings**

The Internet has enabled consumers to **engage directly** with suppliers and challenge the role of intermediaries

Tourism organizations and destinations have to manage their **online reputation** and to project a **desirable image**

To allow consumers to **interact dynamically** with sup-pliers and destinations

Purchase decision

More customers now **purchase tourism products** through **websites**, and perceive that a **website's image** and u**sability** directly affect their purchase intention

A **recommender system** can provide **valuable information** to assist in the consumer decision-making process

- ❑ …by identifying better customer requirements

- ❑ …by correlating those with the requirements of other consumers and their preferences

Post-purchase behaviour

When travellers returned at home, they often like **to share** and **exchange** their travel experience.

Tourism organizations should have an **e-complaint handling** section on their websites so that there is **a proper channel of communication** between **management** and **unsatisfied customers**

Electronic WOM is a useful tool to **disseminate** complaints about brands via websites, chat rooms and consumer forums

The **review sites**, **virtual communities** are gradually becoming incredibly influential in tourism as consumers increasingly trust their peers better, rather than marketing messages.

Risk management

Business organizations must therefore pay more attention **to protect themselves** and **their customers** from losses due to cybercrimes.

There is also an increasing concern among consumers about **privacy**

Research findings have shown that **privacy issues** also play a significant role in **inhibiting the purchase** of travel-related products online

Implications

Customer satisfaction depends to a great extent on the accuracy and **comprehensiveness of specific tourism information** and the **ability of organizations** to react instantly to consumer requests.

Tourism organizations and destinations need to recognize this **change** and to **develop personalized services** to address individual needs.

Technological Innovation

An **'info-structure'** of an organization that supports the entire range of internal and external communications and processes

eTourism is spreading rapidly as a **holistic** and **integrated system** of networked equipment and software, which enables **effective data processing** and **communication** for tourism organizations and destinations

interoperability   **website design**   **modelling**

Interoperability

interoperability → The provision of a **well-defined** and **end-to-end service** which is in a consistent and predictable way

- Interoperability enables partners to **interact electronically** with each other by the most convenient method, and to deliver the right information at the right time to the right user at the right cost.

- Interoperability is a major technical issue offering a **realistic alternative to standardization**.

- Interactivity can be further **enhanced by using multi-media**.

- Interacting with multimedia-enhanced websites can pro-duce **telepresence** and allow people to **'experience' products and destinations** without actually visiting a place

Website design and analysis

Wide range of content

Usability

Navigation

Interactivity issues

Modelling

Various **modelling methods** have been presented for analysing **tourist data**.

Neural network applications be used to track the **changing behaviour** of tourists within and between market segments

Basic Structural Method (BSM) maintained a higher accuracy in **forecasting tourism demand**

Text mining is another good choice for analysing tourist data

Implications

➢ The technical complexity of modern systems based on **ICTs demands** that all aspects of the i**nnovation chain** integrate their efforts.

➢ Industry practitioners should apply **well-developed data exchange formats** to achieve better intersystem communications, and should use **centralized knowledge** bases for tourists to use as a one-stop channel

➢ Professionals could **collect, organize, and retrieve up-to-date and relevant technology information** from the technical area and relay this information to managers.

Online marketing

Tourism organizations have also gained some distinct advantages in **cost reduction**, **revenue growth**, **marketing research** and **database development**, and **customer retention**

A successful web marketing strategy requires the **integration** and **coordination** of **website features**, **promotion techniques** and **customer relationship management** programmes

Integrating technologies with relationship marketing could help tourism organizations and destinations **to maintain competitiveness** and **improve the management of business relationships** with customers

Conclusions

❑ The impacts of ICTs are becoming clearer, as **networking**, **dynamic interfaces** with consumers and partners, and the **ability to redevelop** the tourism product **proactively** and **reactively** are critical for the **competitiveness** of tourism organizations and destinations.

❑ ICTs will provide the **'info-structure'** for the entire industry and will overtake all mechanistic aspects of **tourism transactions**.

❑ The future of **eTourism** will be focused on **consumer-centric** technologies.

❑ Powerful ICT applications empowers both suppliers and destinations to enhance their **efficiency** and to **re-engineer** their **communications strategies**.

❑ DMSs will need to combine both **technological** and **management innovation** and to develop suitable tools for satisfying the entire range of stakeholders.