BHOS411 ICT for Hospitality

ECTS Value: 4 ECTS

Overall Objectives and Outcomes

Information and Communication Technology is a core component in the Hospitality Industry and without it, the industry cannot perform its function in the contemporary, digital society. This course is intended to provide students with an understanding of the main functions of computer hardware and software in the hospitality industry, how it is applied in both local international contexts, and acquire the basic competencies to analyse and design systems implementation. This is done from a business and managerial perspective, though the technological perspective will be constantly taken into account. This course also includes methods and techniques pertaining to the teaching of ICT for Hospitality – discussion will centre around the effectiveness of pedagogical techniques in this specific area of study and the syllabus provided by the local education authority.

By the end of this module, the learner will be able to:

Competences

a. critically review the main issues underlying the role of ICT in (today's) hospitality environment and the corresponding opportunities and challenges posed by ICT within the Hospitality industry;

b. develop a comprehensive understanding of the potential of current web-based technologies (Web 2.0 and Web 3.0) and ones that will be available in the near future (Web 4.0) and analyse the effects these may have on the design and the development of information and communication strategies in Hospitality organisations;

c. critically analyse how the use of various ICT applications can contribute towards more structured organisations within the Hospitality industry and explain how operators within this sector can monitor changes in technology that might affect a hospitality organisation.

Knowledge

a. develop a comprehensive understanding of ICT related application for reservation, room management, accounting and human resources and critically evaluate the benefits of each within the Hospitality sector;

Indicative content:
   i. knowledge of Property Management Systems (PMS) (e.g. Micros Opera);
   ii. introduction to Point of Sales Systems; - eCommerce as applied to the Hospitality Industry;
   iii. knowledge of e-Distributions Systems (e.g. Amadeus);

b. critically review the role of online applications with regard to guest interfaces and assess how these can contribute toward an increase in revenue of a Hospitality organization and better management of its resources;

Indicative content:
   i.   interfaces with guests such a websites, online applications, social media and mobile applications;
   ii.   introduction to Management Information Systems
   iii. adequate knowledge of hardware, software, cloud;
   iv.   management Information Applications;

c. demonstrate a comprehensive understanding of Hospitality Business Applications and guest relation-oriented applications and explain how such technology can enhance the client's experience while contributing toward the financial sustainability of a Hospitality organization;

Indicative content:
   i.   business Intelligence (BI), Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Supply Chain Management (SCM) and Knowledge Management Systems (KMS);
   ii.   systems Security and Management;
   iii. technology changes and impact on the Hospitality Industry e.g. 3D Printing, Artificial Intelligence, Augmented Reality, Internet of Things (IoT), Big Data.

Skills

a. apply good understanding of the basic functions of the relevant Hospitality ICT applications;
b. show an understanding of the design of the various ICT application systems and their strengths/weaknesses from a business and managerial perspective;
c. apply the knowledge obtained in this course to teach students the necessary material according to the relevant syllabus;
d. propose the necessary ICT applications and design their integration to satisfy the hospitality business and the respective managerial needs;
e. suggest key hospitality ICT application for a given situation;
f. identify trends in the development of the relevant ICT applications;
g. identify threats to ICT systems;
h. analyse the design of various ICT;
i. propose functional improvements to ICT application systems from a business and managerial perspective;
j. review the business and managerial needs of an organisation in the hospitality industry;
k. examine the decision-making process within the procurement and management of ICT applications;
l. carry out online research on hospitality ICT applications and keep abreast with prospective ICE developments in the same field.

Assessment Methods

This module will be assessed through: Practical Assignment and Report

Suggested Readings

Core Reading List:

1. Buhalis, D., Leung, D. and Law, R. 2011. eTourism: critical information and communication technologies for tourism destinations. *Destination marketing and management: Theories and applications*, pp.205-224.
2. Buhalis, D. and Wagner, R. 2013. E-destinations: Global best practice in tourism technologies and applications. In *Information and Communication Technologies in Tourism* (2013) (pp. 119-130). Springer Berlin Heidelberg.
3. Turban. E., King. D., Lee. J. K., Liang, T. P., and Turban, D.C. 2015. 8th Ed. *Electronic Commerce: A Managerial and Social Networks Perspective*.
4. Viglia, G., Werthner, H. & Buhalis, D. 2016. *Disruptive innovations, Information Technologies for Tourism*, doi:10.1007/s40558-016-0072-1
5. Viglia, G., Pelloia, M. and Buhalis, D. 2018. Information Technology in Hospitality Education. In *Innovation in Hospitality Education* (pp. 87-100). Springer, Cham.
6. World Economic Forum. 2017. Digital Transformation Initiative Aviation, Travel and Tourism Industry. [online] Geneva: *World Economic Forum*. Available at: http://reports.weforum.org/digital-transformation/wpcontent/blogs.dir/94/mp/files/pages/files/wef-dti-aviationtravel-and-tourism-white-paper.pdf [Accessed 14 Feb. 2017].