Computing for Human Services

Chief Editor

Shihab Ahmed Hameed

Electrical and Computer Engineering-IIUM University

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Chapter 12

Hajj and Information Technologies: Analytical Study

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12.1. Introduction

The Hajj (pilgrimage) is the fifth pillar of Islam. It is an obligation that must be carried out at least once in lifetime by every able-bodied Muslim who can afford to do so. Hajj is performed based on predetermined dates, times, and places. It is a demonstration of the solidarity of the Muslim people, and their submission to Allah (God). Hajj is an important event in Muslims' life, which offers religious, educational, scientific, social, economical, political and other benefits that are rewarded by Allah to Muslims. Historically Muslims choose different routes to travel to Mecca to perform Hajj, consequently many cities developed along these routes. Within time such cities grew and become scientific or commercial centers. One and half billion Muslims are separated in many countries around the world, where two to three millions of them performed Hajj annually. Time and place limitations related to Hajj as well as different languages, cultures, and level of education and ages leads to several difficulties that require suitable solutions.

ICT can offers huge capabilities in this regard which include: data storage, processing, retrieval, and Multimedia representation; designing and developing simulations using virtual and augmented reality, data communications, representations and transmissions locally and internationally. From literature, survey, and analysis for Hajj's difficulties and problems, we can summarize problems into three main categories as: Managerial and organizational problems; Misunderstanding and lack of information about Hajj by pilgrims; different languages spoken by people and pilgrims beside difficulties in dialogue with organizational committees. This chapter summarizes Hajj difficulties and proposes suitable solution to solve it using the powerful capabilities of information and communication technologies (ICT).