



## End-User Empowering in Decision-Making

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### Abstract:

The lack of end-user participation in project development and implementation has been shown to be a major factor in project failure. This is of importance in Saudi health care where there has been a large investment in health information technology. One such technology is Picture Archiving and Communication Systems (PACS) which should be understood as a network of devices and software working together simultaneously. PACS captures images, stores them, shares them, and makes them available for retrieval in different locations. The major users of PACS are radiologists whose role in health care is to interpret the images and assist physicians making diagnosis and decisions.

This thesis reports a study in which radiologists in Riyadh, Saudi Arabia, were first asked to define quality criteria of PACS, using five focus groups. These criteria, together with criteria identified in the literature, were then used as the basis for a survey by questionnaire of 240 radiologists from 15 hospitals representing the five major sectors of health care in Saudi Arabia.

In the survey, radiologists divided the criteria into “basic”, “performance”, and “delight”, following the Kano model of end-user expectations. Quality can refer to system quality, information quality, and service quality, according to the Delone & McLean model, and in this survey radiologists attached particular importance to quality criteria relating to service quality, rather than system quality and information quality. It also showed that radiologists were not satisfied with the extent of their participation in the selection and implementation of PACS. Whilst satisfied that system criteria were met, they were less satisfied that



service quality criteria had been met. They also judged that their productivity and job satisfaction were higher where their participation had been higher.

### Biography:

Dr Ismaeel Almakrami is a Health Informatics Consultant who works with the Vision Realization Office (VRO) to plan, execute, supervise, and analyze Ministry of Health (MoH) National Transformation Program. Dr Almakrami believes that Technology is one of the key solutions to achieve national promised goals of transformation program. Dr Almakrami has worked to expand technology uses in different of healthcare institutions at Najran region since he came back from the UK. Dr Almakrami is a PhD certified, well-trained and has published couple of scientific papers in a number of national and global magazines.

### Publication of speakers:

1. Ismaeel M Almakrami, The Importance of End-User Involvement in Decision-Making: PACS Quality in Saudi Arabia, Healthcare IT 2020, 3<sup>rd</sup> International Conference on Healthcare Informatics and Wellness; Munich, Germany - May 11-12, 2020