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## Case study

## Information and communication technology adoption for business benefits: A case analysis of an integrated paperless system

Mário Caldeira<sup>a,\*</sup>, António Serrano<sup>b</sup>, Rui Quaresma<sup>b</sup>, Cristiane Pedron<sup>a</sup>, Mário Romão<sup>c</sup>

<sup>a</sup> ISEG – Technical University of Lisbon, Lisbon, Portugal

<sup>b</sup> Évora University, Portugal <sup>c</sup> ISCTE, Portugal

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## ABSTRACT

This case study analyses the benefits of implementing a paperless software solution (Alert<sup>®</sup>pfh–Alert Paperfree Hospital, developed by Alert Life Sciences Computing) in a Portuguese Hospital, the Espírito Santo Hospital, in the city of Évora. Alert<sup>®</sup>pfh is a complete hospital clinical information system with real time clinical information input. It was implemented in emergency medical services, inpatient and outpatient services, and operating room services. Data were collected between 2006 and 2011 prior to, during and after the system's implementation. The case analysis demonstrates that paperless software systems have a significant potential when applied in healthcare organization services. Besides financial benefits, other important organizational features were identified, namely higher levels of patient and professional satisfaction; an increase in efficiency in hospital operations; improvement in the quality of information for management decision-making; and a reduction in medical errors. Lessons learned are noted and conclusions drawn for both theoretical and practical ICT benefits analysis.

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