

**A PROCESS ORIENTED APPROACH TO  
ALLEVIATE SERVICE DELIVERY ISSUES IN  
THE SRI LANKAN PRIVATE SECTOR  
HOSPITALS: AN INFORMATION SYSTEMS  
PERSPECTIVE**

UNIVERSITY OF MORATUWA

**MASTER OF BUSINESS ADMINISTRATION  
IN**



**INFORMATION TECHNOLOGY**

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December 2006

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By

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The Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration in Information Technology.

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Department of Computer Science & Engineering

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## DECLARATION

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## ABSTRACT

The growth of the Sri Lankan healthcare sector is a necessity at this stage due to an increasingly ageing community and a significant increase in non-communicable diseases. Despite many regulations that govern the sector, it continues to be inundated with many problems in relation to delivery of healthcare services.

Although the state is a prominent player in the industry, private sector healthcare facilities provide curative out patient care to 60% of the population in the country. The World Health Organisation strategic agenda, Strategic Framework for Health Development in Sri Lanka as well as the Health Master Plan had highlighted the necessity of Information Systems for improved service delivery in the sector.

The existing Information Systems with its administrative and financial bias has failed to add value in the interaction between the healthcare worker and the patient. The study investigates the possible evolution of the existing Healthcare Information Systems by analyzing the process orientation of the organization, IT investment, IT infrastructure and the external environment of the healthcare institute.

This qualitative study provides a framework as well as a set of recommendations for a process oriented approach to alleviate service delivery issues in the Sri Lankan private sector hospitals.

Key words – Business Processes, Process oriented Information Systems.



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## Definitions

- Business Process –Related group of steps or activities in which people use information and other resources to create value for internal or external customers.
- Horizontally Integrated Care – A facility, which provided healthcare to patients who are chronic invalids, with diseases, old patients with several diagnosis, children, families with children and persons who need rehabilitation.
- Vertically integrated care - A facility which provides treatment for one specialised ailment, from preventative to curative care.
- Non-communicable diseases – A disease that is not infectious. Eg/ Diabetes, Hypertension, Cardiovascular diseases
- Communicable diseases – An infectious disease. Eg/ Dengue, Malaria, HIV
- Process Oriented Information Systems – An Information Systems, which delivers value to both internal and external stakeholders by providing a view of every task that is encompassed with in each business process.
- Emergent Strategies – Emergent Strategies of an organisation are formulated at the bottom of the organisational structure as a solution to an on going problem or as a new product or service. These are practical strategies that emerge from the employees and are not deliberately enforced by the top management.
- Customer Profile- Information maintained on the care episode of the patient either manually or in electronic form.

- Internal Environment - The internal environment of the healthcare organisation includes the doctors, nurses, IT staff and the administrative staff of the organisation.
- External Environment - The external environment of the organisation includes the regulatory authority, suppliers, civil society and the software vendors who provide healthcare information systems to the organisation.



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## Abbreviation

- EAI – Enterprise Application Integration
- JICA – Japan International Corporation Agency
- HCO – Healthcare Organization
- HCIS- Healthcare Information Systems
- HIPAA- Health Insurance Portability and Accountability Act
- HL7- Health Level 7
- JCIA – Joint Commission on International Accreditation
- IPS – Institute of Policy Studies
- IHP – Institute of Health Policy
- PMPR- People’s Movement for Patient’s Rights



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