

Enabling Process Automation for Service Delivery Excellence and Growth in the Sri Lankan Healthcare Industry

Nishanie Pereira
Department of Computing
Informatics Institute of Technology
Colombo, Sri Lanka
n.pereira@iics.ac.lk

Dr. Sanath Jayasena
Department of Computer Science and Engineering
University of Moratuwa
Moratuwa, Sri Lanka
sanath@cse.mrt.ac.lk

Abstract—Process Automation concentrates on automating structured processes of an organization in order to achieve excellent service delivery by enabling the employees to pay more attention to semi structured or unstructured processes. Achieving service delivery excellence adds value to an organization, increases the customer retention and provides opportunity for strategic growth. 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. This paper examines service delivery issues in the healthcare institutions in the Western province and suggests mechanisms for automating standard processes in order to achieve strategic growth.

Keywords—Process Automation, Healthcare Processes, Service Delivery

I. INTRODUCTION

The healthcare sector in Sri Lanka has received considerable attention in terms of automating transactions during this decade. The use of technology in the Sri Lankan healthcare sector has been discussed in terms of diagnosis [1], delivery of service to rural areas [2], [3] and in maintaining electronic patient records[4]. Despite the positive nature in these discussions only a few initiatives had become a practicality [5]. Although the state is a prominent player in the industry, private sector healthcare facilities provide curative out patient care to approximately 60% of the population in the country [6]. Due to an increased number of complaints by patients who seek treatment from the private sector healthcare institutions, the government decided to regulate the sector. The Institute of Policy and Institute for Health Policy have conducted numerous studies in order to discuss the necessity of improved service delivery excellence in private sector healthcare. Studies conducted by the Institute for Health Policy [7] state the significance of the private sector in the healthcare industry and places emphasis on improved care to

patients and improved automation in the sector in order to provide efficient services.

II. BACKGROUND

The private sector healthcare facilities consists of private hospitals, nursing homes, maternity homes, medical laboratories, blood banks, dental surgeries, dispensaries, consultation rooms and other establishments which provide health screening. The significance of the private sector institutions are evident as the private establishments accounted for 57% of the expenditure in the healthcare sector and the number of private health institutions have increased to 190 in 2005 from 174 in 2004. Of the total healthcare expenditure which amounted to 3.5 percent of GDP in 2004, contribution of the private sector had been 2.0 per cent [8].

In addition to an ageing population with an average growth rate of 1.1 [9] which necessitates healthcare facilities, Sri Lanka is also facing an exponential increase in non communicable diseases and hospitalisation [10] thus further increasing pressure on the healthcare sector. Therefore the necessity to introduce process automation to the healthcare sector has been a focal point for the last decade. The World Health Organization strategic agenda [11] and Strategic Framework for Health Development in Sri Lanka [12] highlighted the necessity of Information Systems and quality in delivery of services as priorities for the next five years.

As an increasing majority of people have opted to pay for their own healthcare in Sri Lanka [13] coordination and the involvement of the insurance companies have recently emerged as a significant trend.

The attempts to automate the processes in the healthcare sector have been limited to the use of traditional methods for data capture and primarily the use of computers. Wireless connectivity and use of mobile devices, that has offered more freedom and acceleration [14] in terms of automating the processes have not been considered in Sri Lanka, currently. Despite the comparatively high mobile penetration of 17.3