

**LIFE LINE – DONOR MANAGEMENT AND BLOOD  
INVENTORY SYSTEM FOR NBTS – SRILANKA**

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## **Abstract**

Life is a precious element from all the belongings we have. Blood is an asset for survival from different circumstances. Therefore, donation of blood is an essential criterion for the human beings to save the lives of their beings.

The National Blood Transfusion Service of Sri Lanka is the only authorized institute that responsible for the collection, processing, storage and distribution of whole blood and blood products in a manner that ensures all blood-related demands are met. In addition to this primary goal, also concerned with the minimization of wastages through outdates and spoilage and reduction of shortages as much as possible.

The proposed system intends to computerize the donor management and blood inventory system in the blood banks in order to improve efficiency and effectiveness of keeping records and meeting the goals of the National Blood Transfusion.

In this report background to the problem was clearly demonstrated with the aid of literatures and various researches. Further scope of the project was narrow downed in order to overcome the above problems by managing the units of blood needed by hospital per day and number of blood units need to collect per day in order to balance the demand and supply by checking with the available blood units through the use of effective inventory and donor management module proposed in this system.

Further project requirements were collected using interviews, industrial survey and observation, and collected requirements were designed in order to address the stated problems considering project management and Software development methodologies following by the requirement modelling diagrams. Prototype was developed and tested according to the test plan, further evaluated by the IT experts as well as by the user. Feedback received from the evaluators were recorded and will be incorporated in future enhancements.

**Key words:** Blood bank management system, Donor management system, Blood inventory management, donor retention system, automated blood bank system in Srilanka