

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 3, March 2025

## **Smart Blood Donation Response Web**

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Abstract: Blood donation plays a vital role in saving lives and maintaining a stable healthcare system. This project aims to promote awareness about voluntary blood donation, encourage participation, and facilitate organized blood donation drives. Through collaboration with hospitals, blood banks, and volunteers, the project seeks to create a sustainable donor network that ensures an adequate blood supply during emergencies. The study includes planning and executing awareness campaigns, organizing blood donation camps, and analysing donor engagement trends. The findings highlight the effectiveness of educational initiatives in increasing donor participation and identify challenges such as misconceptions and logistical constraints. Recommendations focus on continuous awareness efforts, donor recognition programs, and enhanced partnerships with medical institutions to further improve the blood donation ecosystem.

**Keywords:** Blood donation, Awareness, Voluntary blood donation, Participation, Blood donation drives, Collaboration, Hospitals, Blood banks, Volunteers, Sustainable donor network, Adequate blood supply, Emergencies, Awareness campaigns, Blood donation camps, Donor engagement trends, educational initiatives, Donor participation, Misconception, Logistical constraints, Donor recognition programs, Partnerships, Medical institutions, Blood donation ecosystem

