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INNOBUYER IMPACT STORIES:

OPEN CALL FOR SOLVERS



BLOODMANSYS

Advanced Blood Transfusion Management System

Innobuyer collaborated with public institutions (challengers) to identify their unmet innovation needs and select suitable SMEs (solvers) to address them. The matched teams co-created pilot solutions over a 10-month period. Following successful pilots, challengers received support from Innobuyer and experts to design simplified ToR. Each project was backed by €100,000 in financial support—€41,500 for the challenger and €58,500 for the solver.

THE NEED

FundeSalud is a non-profit foundation working under the Regional Ministry of Health and Social Services in Extremadura, Spain. It supports the regional healthcare system (SES) and social care authority (SEPAD) by managing research and training programs. The Extremadura Healthcare Service operates a large and complex network: 14 hospitals, 113 Community Health Centres, 420 Primary Care Centres, and over 18,000 professionals.

Despite advancements in medical safety, human errors still occur during blood transfusions — especially in the critical phase between preparing blood components and transfusing them to patients. This stage involves storage, distribution, and administration, where mistakes can have serious consequences.

To address this, FundeSalud set out to:

- 1. Reduce human errors in the transfusion process.
- 2. Detect incidents related to patient-laboratory mismatches and blood bag management.
- 3. Minimize the use of consumables in blood transfusions.
- 4. Standardize software systems across all healthcare centers."

THE SOLUTION

Tech provider AT Biotech introduced an innovative system that uses RFID (Radio Frequency Identification) technology and advanced IT tools to improve the traceability and safety of blood transfusions. The solution strengthens safety across the entire donation-to-transfusion process, with three main focus areas:

Donation: The donor's health questionnaire is digitized, and each blood bag is tagged with an RFID sensor for accurate tracking.

Blood Center Processing: RFID sensors allow staff to locate and monitor blood bags in real time, even from a distance. New data can be added to the system as needed, improving traceability.

Hospital Transfusion: RFID-tagged bags help ensure strict compliance with transfusion protocols, reducing the chance of errors and improving how blood bags are managed.

The saving time using the BLOODMANSYS technology is to check the transfusion security process, which is reduced by an average of 20% according to pilot experience in Badajoz Hospital.

The patient digital questionnaire has the potential to reduce the use of paper by 100.000 pages per year.

The human error in labelling identification is reduced by 15% according to the first tests and questionnaires.



THE PROGRAM WILL REDUCE ERRORS IN THE BLOOD TRANSFUSION PROCESS IN THE HOSPITAL. IT WILL DIRECTLY IMPACT THE LIVES OF PATIENTS AND THE COMFORT OF HEALTHCARE PROFESSIONALS. ON THE DONATION SIDE, BLOOD IS A CRITICAL RESOURCE FOR THE COMMUNITY. INCREASING THE CAPACITY OF THE DONATION UNITS BY AUTOMATING PROCESSES AND REMOVING PAPERWORK IS HIGHLY SATISFYING FOR DONORS AND TECHNICIANS WHO CAN DEDICATE THEMSELVES TO OBTAINING BLOOD FROM ALTRUIST CITIZENS TO SAVE LIVES.







