

PROPOSAL REFERENCE NO. : BT/TEMP16301/AGCJC-01/22

FACE SHEET

Name Of The Organization
Manikanda Devarajan
Title Of Proposal
IoT Based Saline Bottle for HealthCare
At what stage is your proposed Innovation
Ideation and Testing: Idea to Proof-of- Concept, Testing and standardisation as per product standards and Pilot validation
Duration (In Months)
6
Proposed Budget (in Months)
10.00
Type of Organization
Individual Researcher

PRINCIPAL KEY INVESTIGATOR DETAILS

Principal Key Investigator Details	
Title	Dr.
First Name	Manikanda Devarajan
Last Name	N
Designation	Associate Professor
DOB	05-12-1980
Gender	Male
Highest Qualification	Ph.D
Email	nmdeva@gmail.com
Address1	Malla Reddy Engineering College
Address2	
Street/Village	Maisammaguda Post
City/Town	Secunderabad
Pin / Zip Code	500100
State	TELANGANA
Country	India
Landline	--
Mobile	91-9345799777
Upload Resume	View File
Upload Organization's Authorisation Letter To For Submission Of Proposal	View File

INDIVIDUAL DETAILS

Applicant Details	
Name of the Applicant	Manikanda Devarajan
Contact Details	
Address 1	Malla Reddy Engineering College
Address 2	Maisammaguda
Street/Village	
City/Town	Secunderabad
State	TELANGANA
Country	India
Pin / Zip Code	500100
Landline	+91-0427-3554368
Fax	--
Website	www.mrec.ac.in
Country	

Individual	
Name of the Primary applicant acting as the Project leader	Dr.N.Manikanda Devarajan
Designation	Associate Professor
Highest Educational Qualification of the Project Leader	Ph.D
Please upload the necessary document proof for the same	View File
Please share a copy of your Passport/Aadhaar Card/Pan Card in the manner of availability of these documents	View File
Please select whether formally employed (or registered as a student) with a non-profit academic/research organization or with a for-profit company	Yes
Please select whether you are a promoter shareholder of any company or one of the partners in any LLP	No
Email Id	Nmdeva@gmail.com
Contact Number	9345799777
Alternate Contact Number	
Address	31/12, Lakshmiapuram Chinnathirupathi PO
City	Salem
State	TAMIL NADU
Country	India
Pincode	636008

Team Structure					
Name	Designation	Affiliation	Email Id	Contact No.	Skills & Competencies
Kusuma Soumya	student	Malla Reddy Engineering college	soumyakusuma2@gmail.com	9390672152	leadership
Amaravadi Mounika	student	Malla Reddy Engineering college	amaravadimounika19@gmail.com	7396345643	critical thinking and problem solving

Dagada Shivaram Reddy	student	Malla Reddy Engineering college	shivarammrec102@gmail.com	8247610969	communication skills
Devarasetty Tejaswi	student	Malla Reddy Engineering college	tejaswidevarasetty001@gmail.com	8688942413	good presentation skills
Kishtampalli Harichandana	student	Malla Reddy Engineering college	kishtampallichandana@gmail.com	9390051943	risk management

Advisors & Mentors					
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Name	Designation	Organization	Email Id	Contact No.	Skills & Competencies
Dr.M.Jagadeesh Chandra Prasad	Professor	Malla Reddy Engineering College	jagadishmatta@gmail.com	9493131864	Communication & Electronics

ABOUT THE INNOVATION

Describe the proposed Idea, Value proposition and novelty of the proposed solution
Traditional system for saline monitoring in hospitals involve a nurse to take care of levels of saline bottle and it is very difficult for a nurse to take care of each patient. So we came up with our idea IOT based saline bottle for health care. It uses a weight sensor to measure weight of saline bottle if the weight of saline bottle is less than the threshold level it will send a message to respective nurse and gives a buzzer. When the nurse did not attend the patient immediately, it will send one more message when it reaches the second threshold level. It will give a continuous buzzer and it will automatically turn off the pipe of saline bottle using solenoid valve to stop the reverse flow of blood.
Explain the healthcare gap, your innovation is trying to solve? Explain its unique features differentiating it from the available products/services in the market
Traditional saline monitoring require a nurse to take care of levels of saline bottle.so in order to avoid these problems, our innovation is useful. There is no need of any nurse to take care of levels of saline bottle. Our device automatically checks the status of the saline bottle and sends a message to the respective nurse and gives a continuous buzzer so that the family members can respond to the situation. if no one respond on time, our device close the pipe of saline bottle. It is unique and very useful in all the hospitals and even it is easy to use at our home.
Provide the details of the stakeholders involved and map them w.r.t implementation. Describe the challenges envisaged in implementation of the idea and bringing the various stakeholders together
we target the hospitals as our stakeholders. our team members include 1 k.soumya,2 A.mounika3 D.Shivaram reddy4 D.tejaswi,5 k.Harichandana,6 y.vishwaja . we will bring the awareness about our idea by showing the present situation in hospitals and how we solve these problems in hospitals using our idea.
Please comment on the Preliminary work carried out till date
we have prototype of our idea and we are just in beginning level.
Please upload relevant information
No File
What is the strategy for testing/piloting your Innovation. Include the study design, protocol and related documents
Our idea is to save life of the patients in hospitals by sending a message and alters care taker with a buzzer sound.
Please upload relevant information
No File
Validation & Tests carried out till now; test reports from certified labs, agencies on performance & efficiency
Please upload relevant information
No File
Please summarise results of any Clinical or Pre-clinical studies
Please upload relevant information
No File
Please upload documents regarding the Regulatory Approvals, product certification and Licenses obtained till date in relevance to your innovation
Please upload relevant information
No File
Please upload details for actual deployments done for existing Customers or Government agencies. Also, preferably upload the feedback of clinicians, hospitals or end user
Please upload relevant information
No File
To which area in healthtech, you associate your innovations with (can choose more than one)
Digital Health,
What healthcare dimension your solution is aimed at? (can choose more than one)
Access to primary healthcare in tier-2, tier-3 cities and rural settings,

Please provide high resolution images/schematic diagram to illustrate the solution

[View File](#)

No File

Is your innovation aligned with Ayushman Bharat or National Digital Health Mission (NDHM) programs of GoI? Explain the benefits of integrating proposed solution with national programs

No. Our idea is not assigned with any program

How this Innovation Challenge could help you/your organization in scaling up of your solution

This Innovation challenge really helpful for us to implement our idea so that our idea comes to market and useful in hospitals and it will also helpful in saving life of people. we can also bring our product to market so that we can prepare more ideas and we can modify what we can add to the product so it is better useful.

Objectives Details

Objectives	Timeline
PCB Board Design, Circuit Design, assembly of components and Testing	3 months
Program Coding	1 month
Implementation and Testing	2 months

Intellectual Property-Patent details

Planning to apply

If the Patent is already granted or applied for, please provide the details of the same

Not Applicable

Other IP details-Copyright, Design, Trademark details applied for or registered. Please capture

Not Applicable

Please mention below, if you are using IP/Patents/Trademarks/Designs/Copyrights of other organizations

Not Applicable

YOUR BUSINESS MODEL AND PRICING DETAILS

Please enclose your go-to-market strategy, please upload a single document mentioning details for the following headings separately

[View File](#)

Please mention the pricing model for your solution

Capex Model-Description

charges for purchasing equipment and electricity charges and to get the information and permission from hospitals related to our idea and other expenses to develop to our idea-4 Lakhs

Opex Model-Description

charges for monitoring and supporting mentor team-3 Lakhs and travelling expenses and other expenses for implementing our idea-3 Lakhs

Capex+Opex- Description

total expenses-4lakhs+3lakhs+3lakhs

As applicable, please mention the deployment Capacity of your innovation in 6 months to 1 year? Please mention none if not applicable

The deployment Capacity of our innovation is 6 months

As applicable, please upload a document detailing the list of services and the associated pricing. For example, the list of diagnostic tests performed by your innovation and the unit cost of each test. Please select none if not applicable

No File

Please provide the budget required for the project implementation (Include manpower, capital investment, operational expenses, travel, outsourcing, contingency etc

charges for purchasing equipment and electricity charges and to get the information and permission from hospitals related to our idea and other expenses to develop to our idea-4 Lakhs

charges for monitoring and supporting mentor team-3 Lakhs and travelling expenses and other expenses for implementing our idea-3 Lakhs

Total - 10 Lakhs

SECTION D - ADDITIONAL DETAILS FOR PARTICIPATION IN THIS INNOVATION CHALLENGE

Section D - Additional Details For Participation in this Innovation Challenge
Have you met the eligibility criteria detailed in our website?
Yes
Have you been funded by BIRAC earlier
No
Are you currently being incubated/supported by an organization/agency/institution?
No
Where did you first learn about the BIRAC-NASSCOM award programme?
Others
Through College
Any other relevant information you would like to furnish?
No