

**SELECTION OUTCOMES OF INNOVATIVE PROJECTS APPLICATION FOR IOT  
INCUBATION HUB 2024**

**Table 1. List of projects applied for admission in AI and IoT incubation Hub**

No	Title Of The Business Concept	Industry Or Sector
1	Tekana Stove	Energy
2	Iot Based Smart Public Toilet Access Management System	Healthcare
3	Affordable Solar-Eletric(Hybrid) Food Dehydrator	The Agriculture Industry
4	MINETECH	Healthcare
5	Development And Integration Of CNN-Based AI Models For Brain Tumor Detection From MRI Images And Pneumonia Detection From X-Ray Images In Web-Based Healthcare Applications In Rwanda	Healthcare
6	Precision Crop Preservation With Energy-Efficiency And Affordable Solutions	The Agriculture Industry
7	SAS-Sprayer (Smart Solar Fertilizer And Pesticide Sprayer)	The Agriculture Industry
8	Revolutionizing Fish Farming With Iot And AI	Farming
9	Community Soil Analysis	The Agriculture Industry
10	Gate Guard Visitor Notification System: Enhancing Security And Convenience In Gated Communities	Other
11	Design Of Sustainable Horticulture Cold Room	The Agriculture Industry
12	Iot-Enabled Precision Farming	The Agriculture Industry
13	Ec card - Transforming From Plastic ID Cards To Digital/Electronic ID Cards	Manufacturing Or Production
14	Aquatech: Smart Fish Feeders For Rwandan Aquaculture	Farming
15	Using Interactive Visuals Enhances Smoking Awareness Among Rwandan Youth For Better Health Promotion.	Healthcare
16	Aesc Light	Manufacturing Or Production
17	Ecological Bins With Artificial Intelligence(Ecobins Ai)	Environment
18	Leveraging Smart Technology For Academic Excellence: The Role Of Iot And AI At The University Of Rwanda	Other
19	A Flood Detection And Prediction Platform With Early Warning Approach Using Internet Of Things And Machine Learning Techniques, Case Study SEBEYA River, Rubavu	Environment
20	Machine Learning Integrated Industrial Process Control Systems	Manufacturing Or Production
21	Cropwise	The Agriculture Industry
22	Automated EEG Analysis For Early Detection Of Neurological Disorders	Healthcare



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23	An Iot-Based System For Motorcycle With A Real-Time Fare Metering And Theft Prevention	Transport
24	Green Techno Agriculture Hub	The Agriculture Industry
25	Smart Quality Control Solutions For The Rwandan Food Processing Industry	Food Processing
26	Rindadust	Environment
27	An Iot-Enabled Edge AI Device For Early Detection Of Grain Weevil Infestations	The Agriculture Industry
28	Creating Traditional Decorative Artifacts ( Amanshwende Vases) From Upcycling Fabric Waste Materials	Other
29	Concept Note On Agriculture Innovation	The Agriculture Industry
30	Recycling Of Fabric Off Cuts Wastes (Remnants) Into Eco-Friendly Wall Hanging	Other
31	Green Farms Initiative	Climate Change
32	Home And Public Electric Disposal Bins(Haped Bins)	Environment
33	Ikiraro: Revolutionizing Rwandan Agriculture Through Collaborative Intelligence	The Agriculture Industry
34	AI-Driven Pest And Disease Control System	The Agriculture Industry
35	Space (Mars) Rover Explorer	Manufacturing Or Production
36	A Smart Wheelchair (AI Navigation)	Healthcare
37	Smart Irrigation	The Agriculture Industry
38	ECO ENV: BIODEGRADABLE ENVELOPES FROM SAWDUST	Manufacturing Or Production
39	Agri Organic Inputs: Sustainable Frass Fertilizer And Frass Tea From Black Soldier Fly	The Agriculture Industry
40	Blockchain-AI-Based Cybersecurity Attacks Defense (CAD) For Smart Grid Cyber-Physical Energy System.	Energy
41	Agriinfo-Ring	The Agriculture Industry
42	Green Mobility Solution	Transport
43	Kiswahili Inclusive Nursery School In Bugesera	Service Industry
44	Mylamina.Com	Manufacturing Or Production
45	Proactive Maintenance System For Industrial Electric Motors	Service Industry
46	Ecoguard Pesticides	The Agriculture Industry
47	Advancing Possibilities In Prosthetics And Orthotics	Healthcare
48	Smart Room Ventilation System	Healthcare
49	Edusmart: Intelligent Classroom Monitoring And Management System	Other
50	Smart Cleaning Mobile Robotic Arm	Healthcare
51	Inspired Robotics	Farming
52	Empowered Sexual Health (ESH-Life)	Healthcare
53	Workplace Alcohol Detection System With SMS Reporting	Service Industry
54	W Pond ( Introducing Ponds Monitoring System )	Farming
55	Digital Money Transferring System (DMTS)	Service Industry

56	IMBUMBE App	The Agriculture Industry
57	Medical Informatics Innovates Ltd	Healthcare
58	Agriconnect	The Agriculture Industry
59	Empowering Sustainable Agriculture Using Solar Irrigated System	The Agriculture Industry
60	Smart Milk Can	Food Processing
61	Damson Mushroom Monitoring System (DMMS)	Farming
62	Rideready Connect	Transport
63	Developing An FPGA-Powered Robot To Classify Tuberculosis In Chest X-Ray Images	Healthcare
64	Hamwe Heselth	Healthcare

The received projects have been screened for call application compliance and only 49 projects have been shortlisted for the next steps.

**Table 2: List of shortlisted projects for presentation**

No	Name of the project
1	IoT Based Smart Public Toilet Access Management System
2	Minetec
3	Development And Integration Of Cnn-Based Ai Models For Brain Tumor Detection From Mri Images And Pneumonia Detection From X-Ray Images In Web-Based Healthcare Applications In Rwanda
4	Precision Crop Preservation With Energy-Efficiency And Affordable Solutions
5	Sas-Sprayer (Smart Solar Fertilizer And Pesticide Sprayer)
6	Revolutionizing Fish Farming With Iot And Ai
7	Design Of Sustainable Horticulture Cold Room
8	Iot-Enabled Precision Farming
9	Aquatech: Smart Fish Feeders For Rwandan Aquaculture
10	Using Interactive Visuals Enhances Smoking Awareness Among Rwandan Youth For Better Health Promotion
11	Ecological Bins With Artificial Intelligence(Ecobins Ai)
12	Leveraging Smart Technology For Academic Excellence: The Role Of Iot And Ai At The University Of Rwanda
13	A Flood Detection And Prediction Platform With Early Warning Approach Using Internet Of Things And Machine Learning Techniques, Case Study Sebeya River, Rubavu
14	Machine Learning Integrated Industrial Process Control Systems
15	Cropwise
16	Automated Eeg Analysis For Early Detection Of Neurological Disorders
17	An Iot-Based System For Motorcycle With A Real-Time Fare Metering And Theft Prevention
18	Green Techno Agriculture Hub



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19	Smart Quality Control Solutions For The Rwandan Food Processing Industry
20	An Iot-Enabled Edge Ai Device For Early Detection Of Grain Weevil Infestations
21	Ikiraro: Revolutionizing Rwandan Agriculture Through Collaborative Intelligence
22	Ai-Driven Pest And Disease Control System
23	Space (Mars) Rover Explorer
24	A Smart Wheelchair (Ai Navigation)
25	Smart Irrigation
26	Blockchain-Ai-Based Cybersecurity Attacks Defense (Cad) For Smart Grid Cyber-Physical Energy System
27	Agrinfo-Ring
28	Green Mobility Solution
29	Mylamina.Com
30	Proactive Maintenance System For Industrial Electric Motors
31	Advancing Possibilities In Prosthetics And Orthotics
32	Smart Room Ventilation System
33	Edusmart: Intelligent Classroom Monitoring And Management System
34	Smart Cleaning Mobile Robotic Arm
35	Inspired Robotics
36	Empowered Sexual Health (Esh-Life) Done
37	Workplace Alcohol Detection System With Sms Reporting
38	W Pond ( Introducing Ponds Monitoring System )
39	Digital Money Transferring System (Dmts)
40	Imbumbwe App
41	Medical Informatics Innovates Ltd
42	Agriconnect
43	Empowering Sustainable Agriculture Using Solar Irrigated System
44	Smart Milk Can
45	Damson Mushroom Monitoring System (Dmms)
47	Developing An FPGA-Powered Robot To Classify Tuberculosis In Chest X-Ray Images
48	Hamwe Health
49	Ecard - Transforming from Plastic ID Cards to Digital/Electronic ID Cards

Out of 49 shortlisted projects, only 37 projects responded to the invitation to present their projects to the project evaluation committee on 2nd July 2024.

**Table 3. List of Project's presentation and results**

No	Name of the project	Marks/100
1	Advancing Possibilities In Prosthetics And Orthotics	98%
2	Developing An FPGA-Powered Robot To Classify Tuberculosis In Chest X-Ray Images	95%
3	Minetech	93%



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4	Ecological Bins With Artificial Intelligence(Ecobins Ai)	90%
5	Using Interactive Visuals Enhances Smoking Awareness Among Rwandan Youth For Better Health Promotion	90%
6	Ikiraro: Revolutionizing Rwandan Agriculture Through Collaborative Intelligence	90%
7	Hamwe Heshlth	90%
8	IoT Based Smart Public Toilet Access Management System	88%
9	An Iot-Enabled Edge Ai Device For Early Detection Of Grain Weevil Infestations	88%
10	A Flood Detection And Prediction Platform With Early Warning Approach Using Internet Of Things And Machine Learning Techniques, Case Study Sebeya River, Rubavu	85%
11	Damson Mushroom Monitoring System (Dmms)	83%
12	Precision Crop Preservation With Energy-Efficiency And Affordable Solutions	80%
13	Sas-Sprayer (Smart Solar Fertilizer And Pesticide Sprayer)	80%
14	An Iot-Based System For Motorcycle With A Real-Time Fare Metering And Theft Prevention	78%
15	Development And Integration Of Cnn-Based Ai Models For Brain Tumor Detection From Mri Images And Pneumonia Detection From X-Ray Images In Web-Based Healthcare Applications In Rwanda	78%
16	Green Mobility Solution	78%
17	Proactive Maintenance System For Industrial Electric Motors	78%
18	Smart Room Ventilation System	75%
19	Edusmart: Intelligent Classroom Monitoring And Management System	75%
20	Smart Irrigation	74%
21	Design Of Sustainable Horticulture Cold Room	73%
22	Workplace Alcohol Detection System With Sms Reporting	72%
23	W Pond ( Introducing Ponds Monitoring System )	71%
23	Green Techno Agriculture Hub	70%
25	Cropwise	65%
26	Mylamina.Com	65%
27	Agriconnect	63%
28	Empowering Sustainable Agriculture Using Solar Irrigated System	63%
29	IoT-Enabled Precision Farming	63%
30	Imbumbe App	53%
31	Ecard - Transforming from Plastic ID Cards to Digital/Electronic ID Cards	50%
32	Revolutionizing Fish Farming With Iot And AI	48%
33	Space (Mars) Rover Explorer	45%
34	Medical Informatics Innovates Ltd	38%
35	Digital Money Transferring System (Dmts)	35%
36	Agrinfo-Ring	33%



37	Blockchain-Ai-Based Cybersecurity Attacks Defense (Cad) For Smart Grid Cyber-Physical Energy System	33%
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The following criteria has been used to assess the quality of the innovative projects

Components	Criteria
1. Business potential /4 Marks	<ul style="list-style-type: none"> <li>Value proposition is strong and addresses a clearly identified need/pain</li> <li>Customer niches are clearly identified</li> <li>Solution is well articulated (includes features &amp; benefits) and holds substantial &amp; lasting appeal to customers</li> <li>The business holds a competitive advantage that ensures a strong position /differentiation against competition</li> </ul>
2. Economic sustainability / 4 Marks	<ul style="list-style-type: none"> <li>Clearly shows the revenue model/models</li> </ul>
3. Implementation capacity/ 4 Marks	<ul style="list-style-type: none"> <li>The team has a strong commitment and good expertise in the relevant sector</li> <li>The strategies are in place (or identified)</li> </ul>
4. Social impact potential/ 4 Marks	<ul style="list-style-type: none"> <li>The business has a clearly – identified social value proposition</li> </ul>
5. Gender equality and Social Inclusion (GESI)/ 4 Marks	<ul style="list-style-type: none"> <li>Check if the team member included all categories without exclusion like Gender ,People with disability ,etc...</li> </ul>

The projects were ranked according to the project presentation results and according to the available budget and number of projects to be incubated in the incubation hub , only the first top 20 projects were selected.

**Table 5. Best project recommended for admission in AI and IoT incubation Hub**

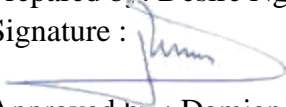
No	Name of the project	Marks/100
1	Advancing Possibilities In Prosthetics And Orthotics	98%
2	Developing An FPGA-Powered Robot To Classify Tuberculosis In Chest X-Ray Images	95%
3	Minetech	93%
4	Ecological Bins With Artificial Intelligence(Ecobins Ai)	90%
5	Using Interactive Visuals Enhances Smoking Awareness Among Rwandan Youth For Better Health Promotion	90%
6	Ikiraro: Revolutionizing Rwandan Agriculture Through Collaborative Intelligence	90%
7	Hamwe Health	90%
8	IoT Based Smart Public Toilet Access Management System	88%



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20	Smart Irrigation	74%

Prepared by: Desire Ngabo, Head of Incubation and training Coordinator

Signature :



Approved by : Damien Hanyurwimfura, Principal Investigator

Signature: