

IEEE i50
*A Virtual Celebration of
50 Years of the Internet*

50th
Anniversary
of the Internet




AI USE CASES of Bangladesh

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#IEEE #IEEEI50
#ZeroDigitalDivide
#GlobalDigitalCompact





▶▶▶
National
Helpline
333



With **AI automated conversation, query capture, and information retrieval**, callers can now receive necessary Government service-related procedure information and govt. staff-related contact information.

365 Days
24x7



**A UNIQUE
HELPLINE
FOR EVERYONE**



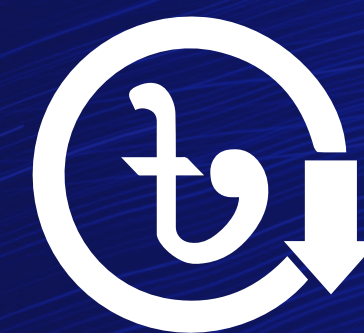


Target



CALL TIME
REDUCTION

4 Minutes > 30 Seconds



DAILY COST
REDUCTION

3.2 Million > 0.4 Million
BDT BDT

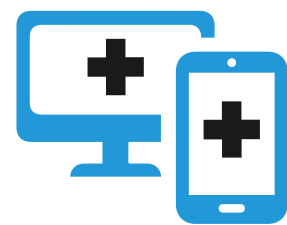
AI-based Pregnancy Monitoring System



This initiative, in collaboration with various health organizations such as a2i, DGHS, DGFP, OGSB, and ICDDR,B aims to enhance maternal and neonatal healthcare through the use of AI. The system establishes a two-way communication platform allowing pregnant women from various backgrounds to access timely health information and services. Key components include:

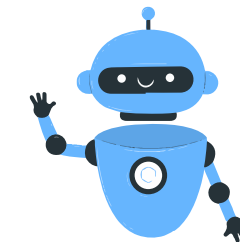
Behavior Change Communication

Dissemination of targeted messages and collection of vital health data through a digital ecosystem.



Interactive Systems

Use of phone-based, internet-based, IVR, chatbot and wearable devices to provide emergency support and lifestyle guidance.



AI Integration

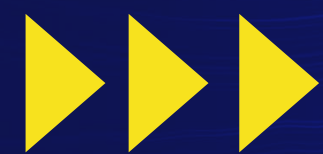
Identification of high-risk pregnancies through advanced data analytics, enabling timely and personalized interventions.




This approach not only improves healthcare delivery but also empowers women by providing them with knowledge and tools to manage their health proactively. It demonstrates the potential of AI to personalize healthcare, making it more accessible and effective



Use of **PHONE-BASED, INTERNET-BASED, IVR, CHATBOT & WEARABLE DEVICES** to provide emergency support and lifestyle guidance.



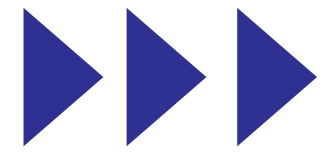


AI-based Poverty Mapping Tool for Beneficiary Selection



Beneficiaries' selection using Mobile Data through Machine Learning (ML) model: The MobileAid model employs an innovative methodology called CIDER to target individuals living in poverty.

CIDER utilizes phone metadata (Call Detail Records) and machine learning to accurately predict the poverty status of individual mobile phone users based on their patterns of phone usage. This allows for the identification of individuals in need of aid.



With the support of GiveDirectly, a2i is currently implementing a pilot project that reaches

22,600 RECIPIENTS

in the **Cox's Bazar and/or Bandarban districts** of Bangladesh with **direct cash transfers**. The program is designed to target community members impacted by poverty in the most impoverished areas of Cox's Bazar and/or Bandarban districts, with a specific focus on women.





Muktopaath
LMS
Platform
offers
AI-based course
recommendations



MuktoPaath, one of the flagship innovations of a2i now offers personalized learning to 2.2 million learners from all walks of life via AI-based course recommendations.

Over 600K teachers on Teacher's Portal can offer their knowledge, skills and expertise to their peers, while Konnect has 2.7 million enrolled learners as we speak.

2.2 million
Learners

MUKTOPAATH AI-based
course recommendations



2.7 million
Learners

Konnect has enrolled



600k Teachers

Of Teacher's Portal can offer their knowledge, skills and expertise to their peers



These initiatives, in collaboration with various government organizations such as a2i, Ministry of Education, Ministry of Primary and Mass Education, education directorates, and UN agencies, aim to enhance quality access to education and skills development through the use of AI. The government of Bangladesh set a purpose to create a Smart Bangladesh by 2041 through an educational transformation by the implementation of the revised National Curriculum.

AI Flood Forecasting Initiative



Based on cross-country border-based river data (ebbs & tides anomalies), Google and a2i have developed an AI Flood Forecasting Initiative **a.k.a. FloodHub**. It can **notify 24-72 hours early** to local authorities, covering 40 million people, and **alert for** prompt action-collective **evacuation**, disaster management, and further protection of water resources.

COVERING

40 million
people

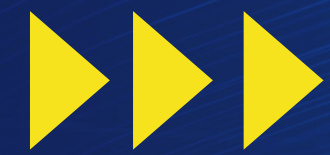
Flood Forecasting Initiative
a.k.a. FloodHub



IoT-based Smart Fish Farm Management



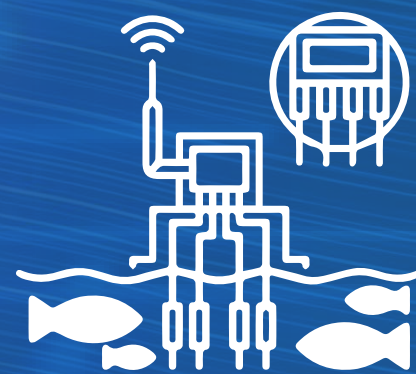
Remarkable progress has been made in the priority sectors of Bangladesh such as Agriculture, Fisheries, and Livestock Management, etc. through various initiatives such as agricultural market insights, harvest optimization, smart farming, fish feeder, temperature maintenance, optimum incubation ecosystem metrics, etc.



The Department of Fisheries (DoF) has piloted an initiative to revolutionize fish farming in Bangladesh through the power of Internet of Things (IoT). This innovative solution, called the IoT-based Smart Fish Farm Management System, empowers fish farmers with real-time data, automated controls, and improved decision-making tools.

Interactive Systems

The DoF utilized user-friendly interactive IoT based system to ensure easy access and control to:



Monitor real-time
water quality data (DO,
temperature, pH)



Control automated
systems like feeding,
water management,
and aeration



Receive alerts and
notifications for any
water quality deviations



AI Integration

Integration of Artificial Intelligence (AI) to enhance the system's capabilities to **analyse fish growth and disease** to recommend optimal feeding schedules to **minimize waste and maximize efficiency.**

Impact

The IoT-based Smart Fish Farm Management System aim to **revolutionize aquaculture in Bangladesh** through improved farm management practices leading to higher yields and greater profitability.

THANK YOU!

