



# CASE STUDY

**How Assam Power Distribution Company Limited  
controlled its rising AT&C losses with immediate effect?**



**Kimbāl**<sup>®</sup>  
Efficient Energy Everywhere

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# 1. EXECUTIVE SUMMARY

Assam Power Distribution Company Limited chose Samaksha - an Artificial Intelligence-enabled meter reader to control their rising AT&C losses and billing inefficiency with immediate effect.

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## 2. INTRODUCTION

Assam Power Distribution Company Limited (APDCL) experienced a staggering 23% AT&C losses in 2019-20. 2000 meter readers of Assam Power Distribution Company Limited (APDCL) manually took readings of +6 Million meters every month. APDCL, as one of the most pro-technology Indian utilities, launched the AMI rollout with some of the most reputed and trusted Indian AMISPs, including us, to counter the situation. However, state-wide AMI implementation is a time-taking process.



## 3. PROBLEM STATEMENT

APDCL was in dire need of an immediate solution that could help them amplify their billing efficiency, boost revenue, and reduce their AT&C losses.



## 4. KEY CHALLENGES TACKLED

- Loss of Revenue
  - High scope of error due to manual entry
  - Wilful meter reading errors
  - Meter tampering
  - Electricity theft
  - Escalating AT&C losses
  - Customer dissatisfaction due to inconsistent and inefficient billing
- 

## 5. HOW WE HELPED (STEP-BY-STEP)

001) In January 2021, we integrated Samaksha, our AI-enabled meter reader, with APDCL's billing app, E-Suvidha.

002) APDCL kickstarted using Samaksha for the first 10 lakh meters in the first phase.

003) Instead of taking manual readings, now the meter readers would click the photo of the meter and upload it. Meter readers found the process quick and efficient.

004) The integration of Smaksha with the E-Suvidha app led to the immediate issue of an accurate bill.

005) Reduced human interference led to a reduced scope of error and also boosted customer confidence.

006) By 2022, Samaksha was being used statewide.

007) **By the end of July 2023, Samaksha has already made 8.5 Crore readings with +95% accuracy in the State of Assam.**



## 6. OUTCOME

- Contributed to the reduction of AT&C losses from 23.39% in 2019-20 to 18.09% in 2022-23.
- Significantly improved issues of inaccurate meter reading in the rural areas, effecting immediate boost in revenue.
- Reduced human error at meter reading
- Instant bill generation leading to improved billing efficiency
- Reduced operational expenses and time-taken
- APDCL Received the 'Adoption of Emerging Technology by a Utility' award in March 2021



## 7. MEDIA MENTIONS

**“It is expected that the implementation of AI-based meter-reading solution will bring financial turnaround for the APDCL.” ~ Rakesh Agarwala, Managing Director, APDCL on winning the *‘Adoption of Emerging Technology by a Utility’ award***

[Read The Full Article](#)



# 8. LETTER OF APPRECIATION



ASSAM POWER DISTRIBUTION COMPANY LTD.  
OFFICE OF THE CHIEF GENERAL MANAGER (PP&D)  
6<sup>th</sup> Floor, Bijulee Bhawan, Paltanbazar, Guwahati-781001  
CIN: U40109AS2003SGC007242

Ref: APDCL/IPDS/e-suidha/2021/ 14

Date: 03.09.2021

## TO WHOM SO EVER IT MAY CONCERN

It is to certify that **M/s Sinhal Udyog**, Kh No. 82/1/4, Mundka, Udyog Nagar, New Delhi which had been awarded the work for **implementation of Artificial Intelligence based Meter reading solution in APDCL** against ERP PO No. 4400003381, letter ref- APDCL/IPDS/e-suidha/2020/12 dated 28.11.2020 is providing technology since 1<sup>st</sup> Jan 2021. Till July'21 more than 1 (One) crore images have been processed by AI with an SLA of more than 95.5%. It has resulted in higher customer satisfaction, reduction in AT&C losses and higher revenue realisation.

*Dorab*  
03.09.2021  
Chief General Manager (PP&D),  
APDCL, Bijulee Bhawan, Ghy-1,  
PP&D, APDCL,  
Bijulee Bhawan, Guwahati.

# TOP 10 REASONS APDCL FOUND ITS IMMEDIATE SOLUTION IN SAMAKSHA OVER OTHER ALTERNATIVES

**#10 Seamless implementation**

**#9 No upfront investment**

**#8 Pay-as-you-go model**

**#7 Simple to train**

**#6 Easy to use**

**#5 Quick integration to any billing application**

**#4 Automatically scalable**

**#3 Allows GIS Integration and Asset Mapping**

**#2 AI-Computer Vision as the underlying technology.**

**#1 Field-proven to give accurate results irrespective of poor meter display due to dust, dirt, weather effects, and/or meter age.**



# OUR MOTIVATION

Looking at the current scenario in the utility industry, it became apparent to us that rising AT&C losses were the most primary concern and pressing challenges for Indian utilities. ***Therefore, we specifically designed Samaksha with the intention to bring to market a robust, cost-effective, and scalable application that can help utilities control their rising AT&C losses with immediate effect.***



**AI-Enabled Meter Reader - Know More**



# CONNECT WITH US

TO LEARN MORE, PLEASE INBOX YOUR  
QUERIES TO  
[HAPPYTOHELP@CRYSTALPOWER.IN](mailto:HAPPYTOHELP@CRYSTALPOWER.IN)

