



Mobile360
Digital Societies

APAC IoT INNOVATION SUMMIT

Kuala Lumpur 24-26 Sept 2019



#MOBILE360

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Session 1: Mobile IoT Latest Developments

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Dr Indika Samarakoon

Head of M2M/IoT Strategy Development
& Partner Management

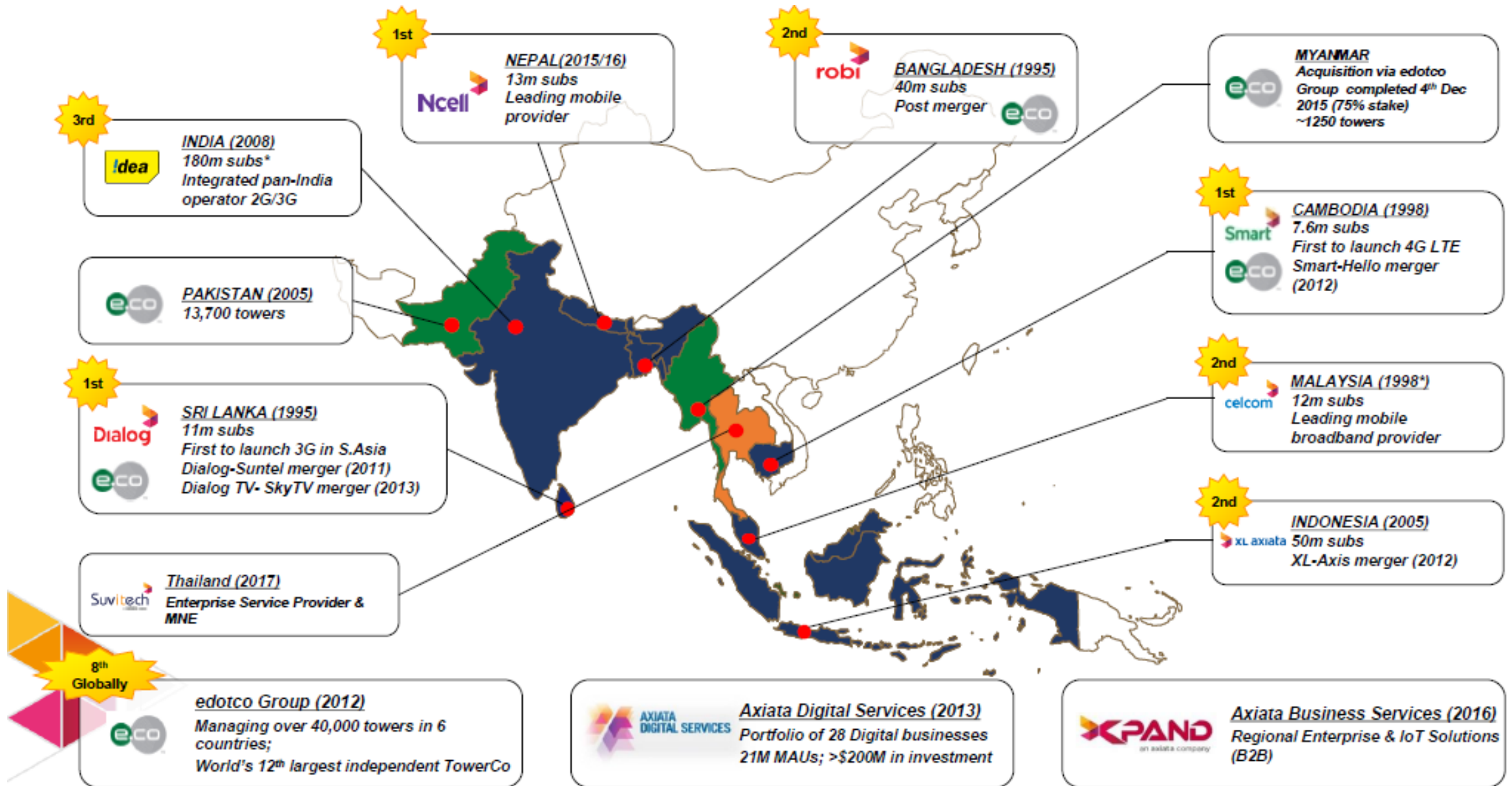
Dialog Axiata
Axiata Group

Session 1:
Mobile IoT Latest Developments

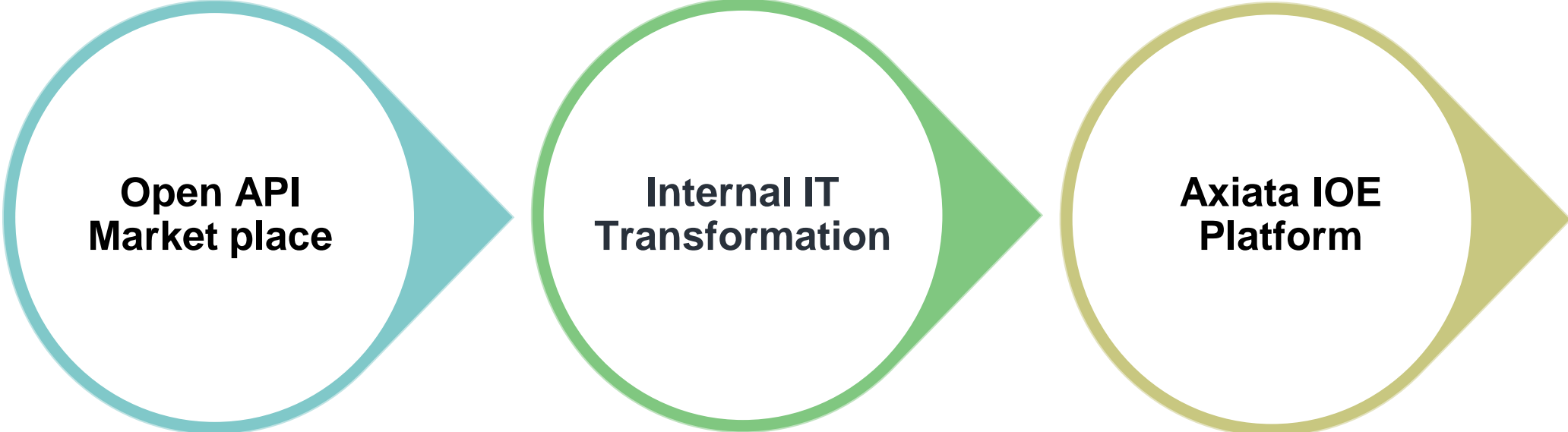


Axiata's IOE Platform Play

Axiata Group is one of the leading telco groups in Asia, with 150 Million subscribers (ex India) and presence across 11 countries..



Axiata's Internet Of Everything (IOE) approach was founded on learnings from an external API market place and internal IT transformation



Innovation @Community



Innovation @Enterprise



IOE Platform Strategy

Open API Market place: Opening APIs and co-innovating via community



Accelerate innovation relevant to the local community by 10x – Solve local problems!



Partner with community and developers to co-innovate @scale



Extract more value from the underutilized telco assets/plumbing via Open APIs

Axiata's Open API platforms and Internal IT re-architecture is the backdrop for developing a platform for IOE!

Internal IT Transformation

Partnering to build ecosystem

Open API Market place

API, Micro services and Single Data Lake based IT stack,



Smart HUTCH, etisalat, airtel, axiata, ooredoo, celcom

Long & Short tail API Market



Everything to have an API!
Over 2600 APIs exposed across Internal IT stacks

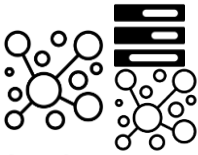



LEGO LIKE: Mind sift form building Individual Systems Ground-up to Developing Reusable Components






100 Telco + Other API's


Over 1000+ Micro services powering Digital/IT stacks

16,000+ Apps

10,000+ Apps



ADL with 500+ developers & Dev Partners



12000 Developers



200+ Partners



3000 developers



50+ Partners

Business Focus

API Market

Apps

Developers & Partners

API platform business evolution

Key principles driving Axiata's IOE platform approach

Every API is part of "IOT"



Telco network, IT/BSS, physical, logical assets are API'd and is part of the Internet of Everything

Horizontal Platform Play



Innovation on IOT will be localized - solving specific problems at City/Village/Community level, by the Community/developers/Enterprise

Partner & Joint Wins



Partner with device, platform players and other Telcos to create the best possible ecosystem for local innovators

Key architectural principles of the IOE platform



Cloud Native Platform

Platform designed and built on cloud, open API and Micro services based - ready to extend & scale on demand



Double sided market place

Platform is 100% open API based towards north bound developers and connectivity to south bound to partners/devices



Connection Super easy

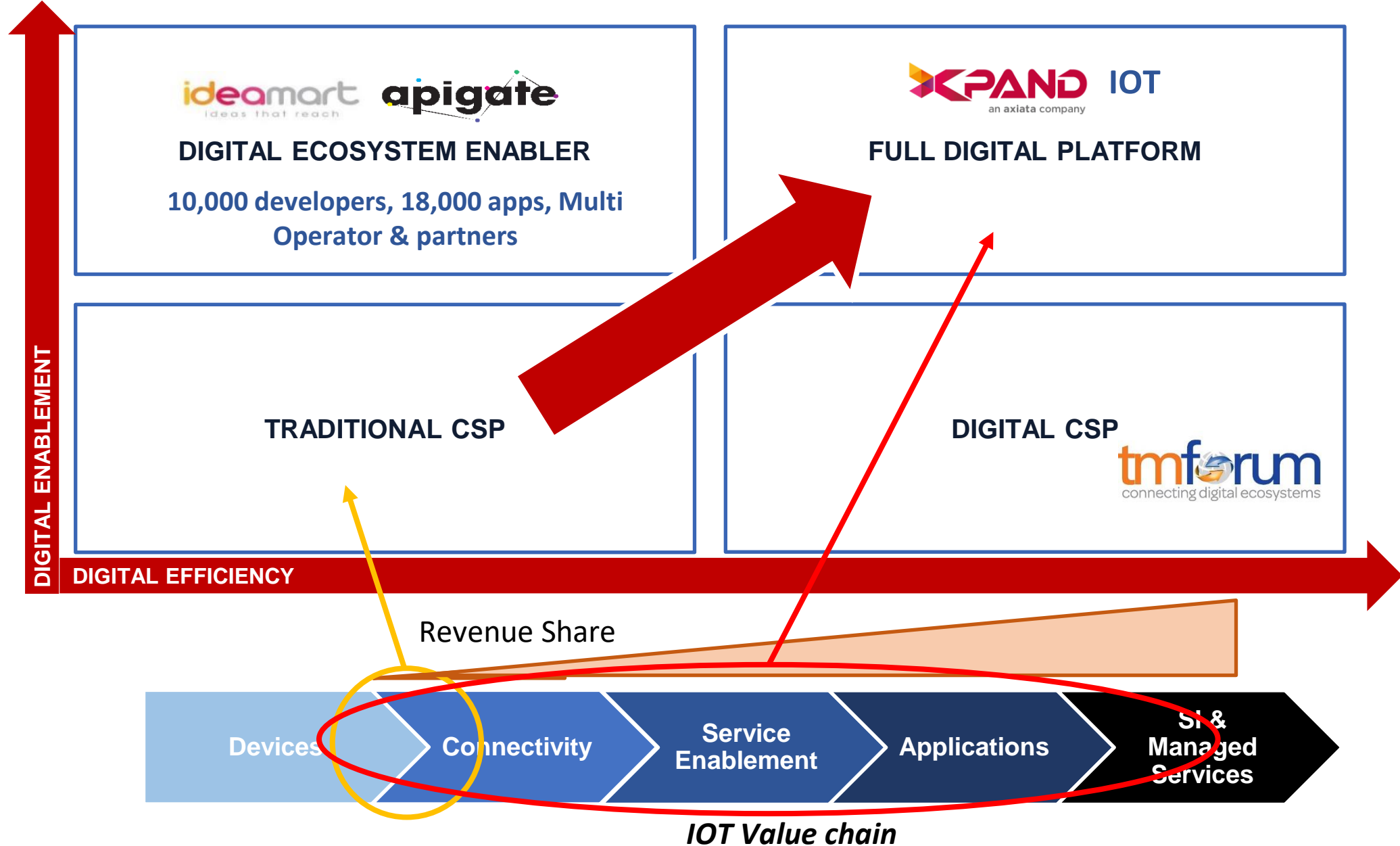
Connect all physical, logical and internet “things” or to any partner or device on demand and DIY



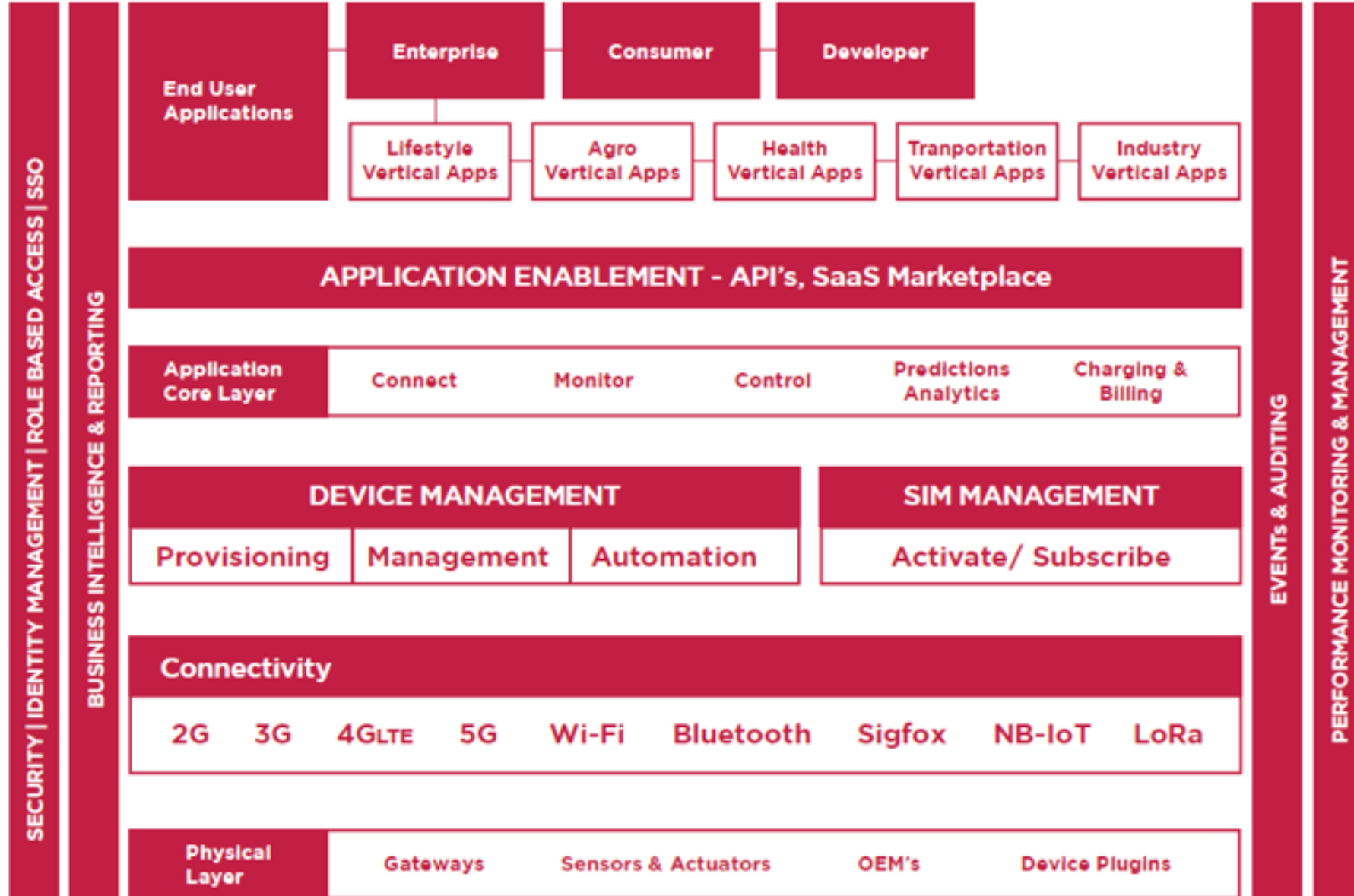
Data and AI @ Core

Data management, security and AI embedded in to every component of the platform architecture

Axiata is extending the digital ecosystem enabler status to a full digital platform play by adding the "IOT" dimension to platform play



IOT Platform snapshot



Collaboration/Partnerships to co-develop IOE “things” and solutions



University of Moratuwa Mobile Comms Research Lab (Sri Lanka)



Orange Electric Smart Socket



XL IOT Lab (Indonesia)

Solid foundation for sustainable IOE platform through Engagement and partner ecosystem development

School-level Engagements to Stimulate IoT Innovation at a young age.



12,000+ Active Developers on our Platforms



Specific Engagements for Women in Tech



Hands-on Knowledge on Platforms



Engaging developers beyond boards to empower IOT development in the region



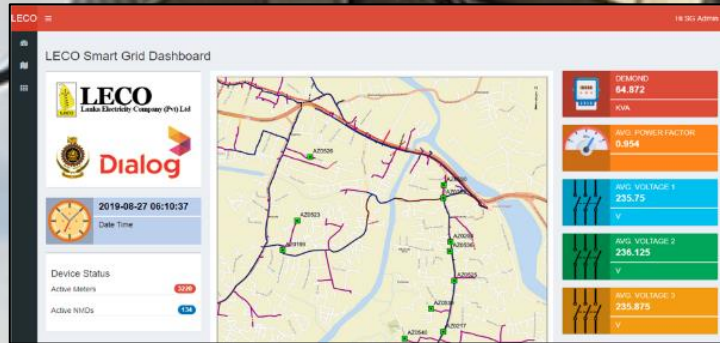
Largest Google I/O Extended Events in 2016/17/18



IoT Specific Hacks on Hardware Device development



Use case : Smart Metering and Network Automation (Smart Grid)



IOT Based Smart grid Solution

- Affordable purpose built hardware with E2E solution from smart device to IOE platform and Utility Dashboards
- Smart Metering with Prepaid facility, remote meter reading & remote disconnection/reconnection
- Smart Grid management with Network Automation, Realtime power quality monitoring & Utility Analytics

Smart Meter



NMD



GPRS/NBIOT Smart Modems

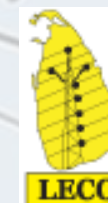


Pilot Deployment by LECO

- 3200 Smart Meters
- 150 Network Monitoring Devices

Introduced Prepaid Electricity Metering to Sri Lanka

A GSMA Funded Project
Dialog - Recognized as a
Champion in GSMA M4D
Utilities Program

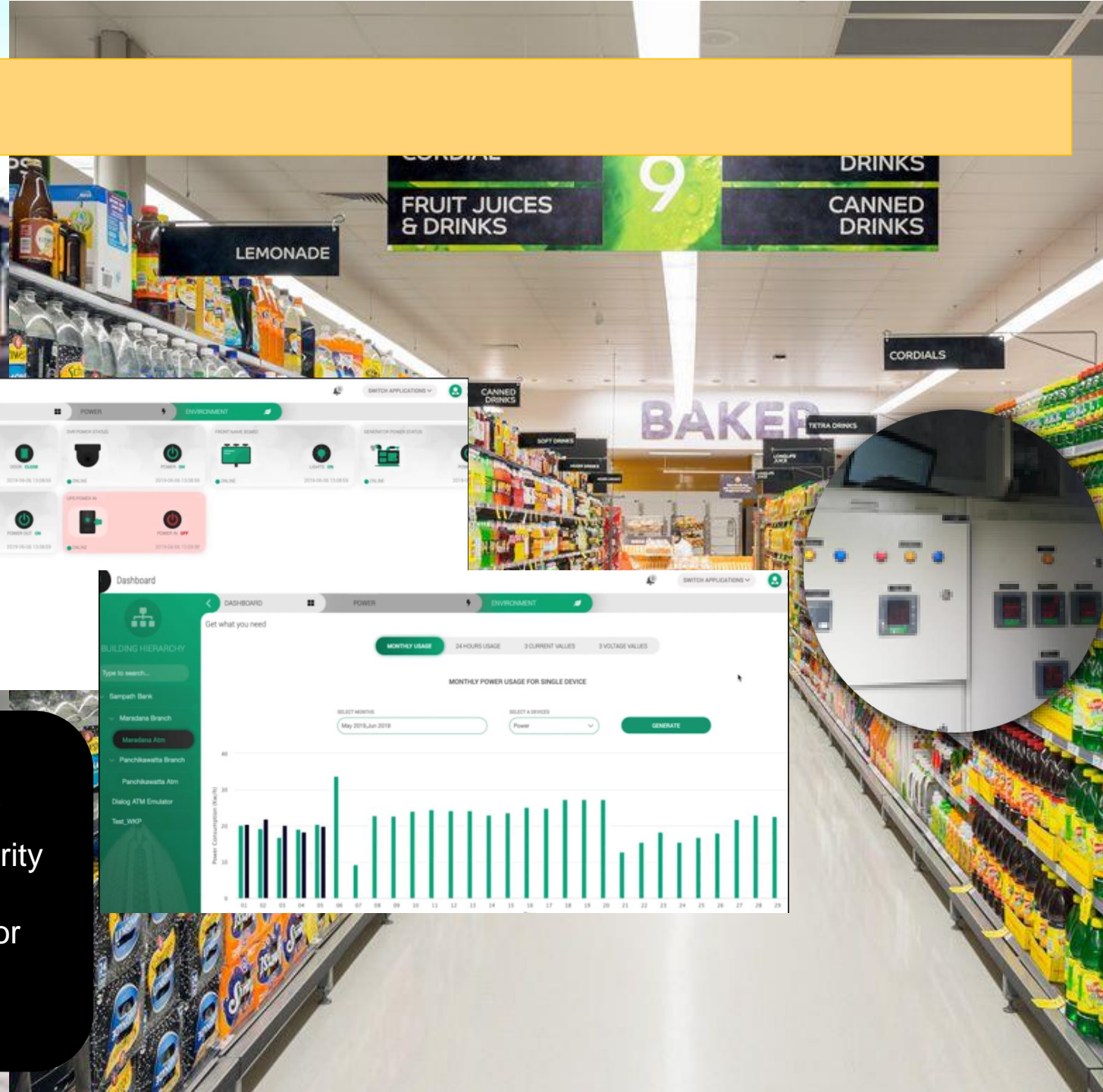
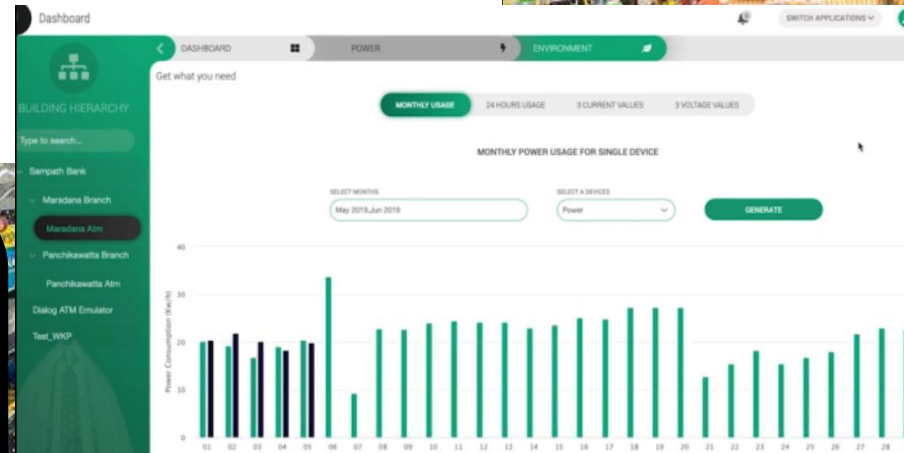
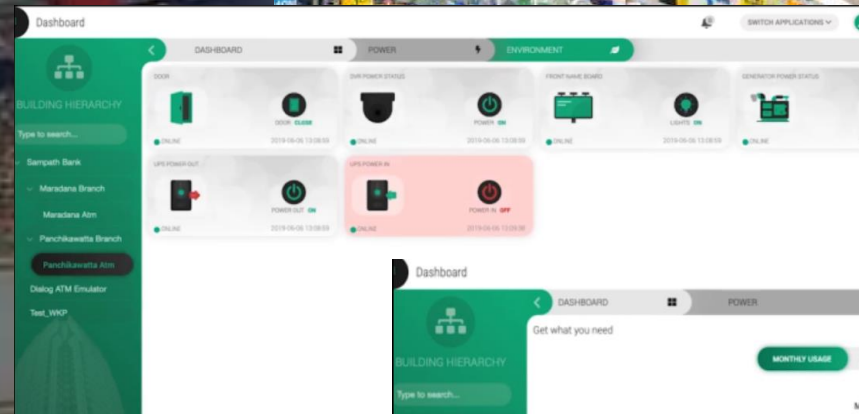


Use case : Banking and Retail Chains



Banking & Enterprise solutions to provide Security & Energy Efficiency

- Banks using IOE platform for monitoring and Security of ATMs
- IOE platform for Energy consumption monitoring for retail stores and plants



Use case : Smart mAgri Solutions

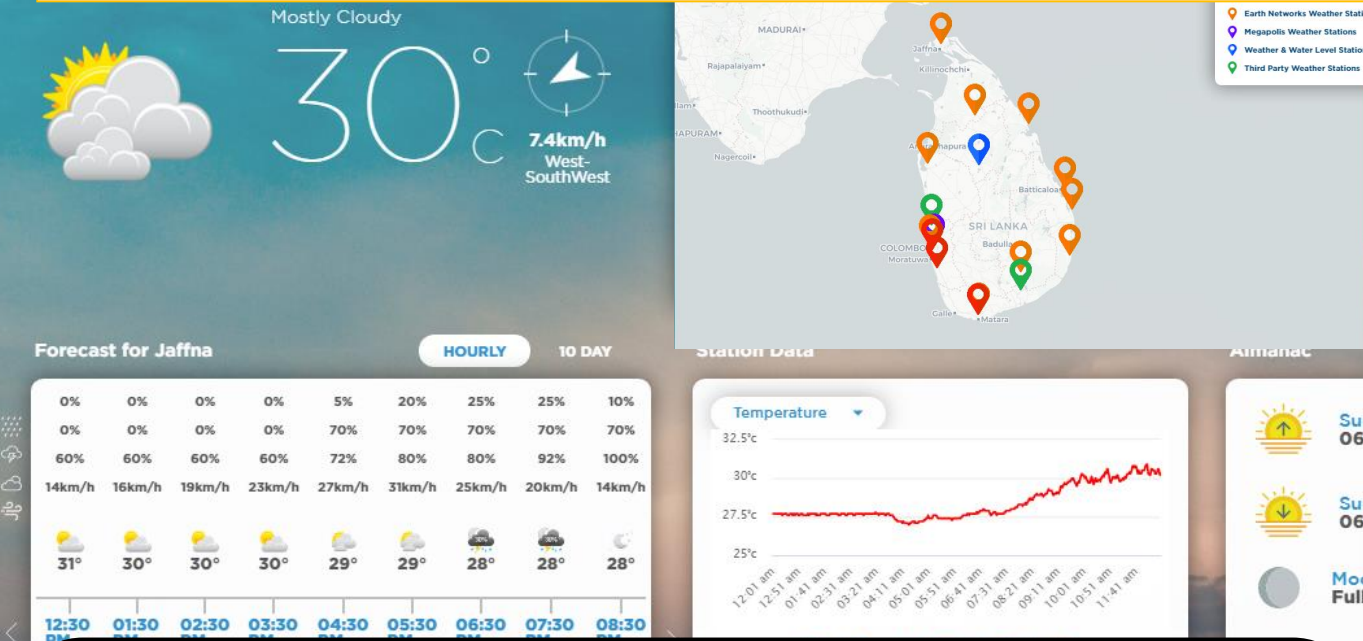


Smart Greenhouses that Increase Yield in Controlled Environments

- System development through Local University Partnerships
- Monitoring Environmental Factors such as Temperature, Humidity and Soil Moisture Levels
- Controlling exhaust fans and sprinklers



Use case : Smart Weather

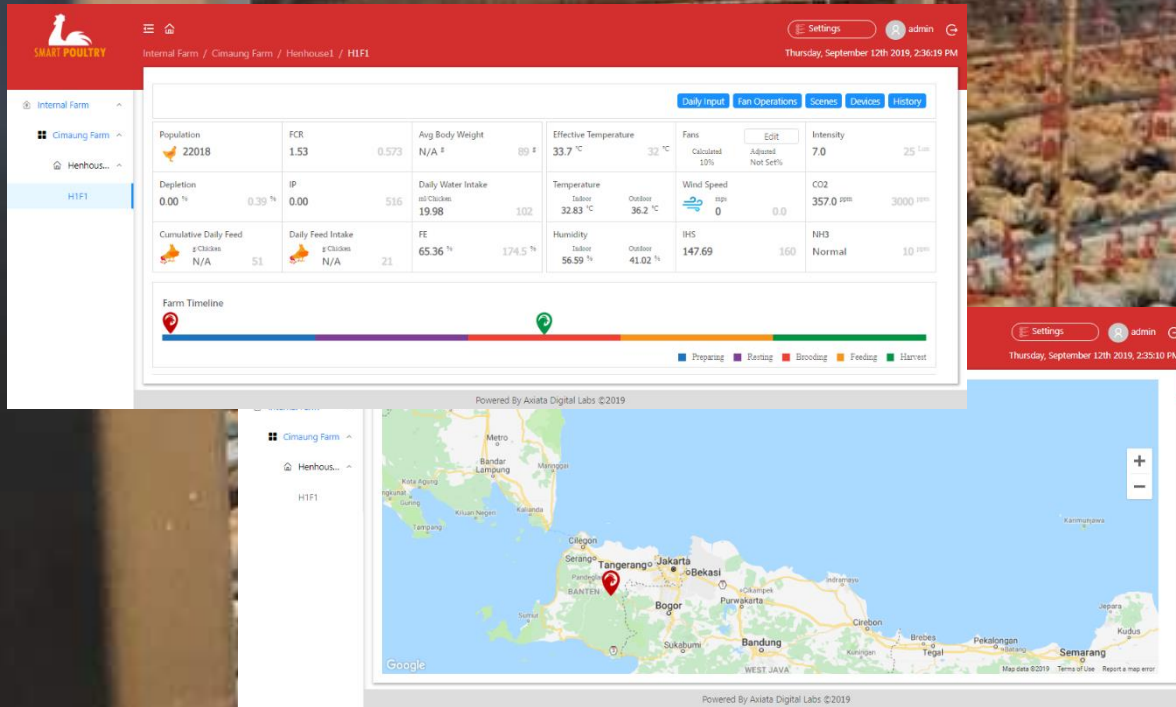


Dialog own Weather Network to Increase the Accuracy on Weather Prediction

- Partnering with Experienced Weather Networks for more Accurate Predictions
- Actionable weather data to Farmers to minimize crop damage
- Severe Weather Warnings to Coastal Communities and Fisheries Harbors
- Whether API for developer community



Use case : Smart Farm/ Livestock Solutions



Smart Poultry Farming to increase productivity and efficacy

- Environmental monitoring and control
- Poultry Feeder control



Use case : Video Analytics

car 0.95
motorcycle 0.61
motorcycle 0.78
threewheel 0.65

Plate No: CAR1687
Vehicle Color: white
Vehicle Brand: TOYOTA

104 VISITOR VEHICLES
62 STAFF VEHICLES

STAFF
GEETHAN SAMARAWIKRAMA
50242
SENIOR MANAGER
CAPTURED TIME
06-06-2019 13:17:53

Guest 0.0% Staff Sudhe
Staff Pathima
Staff Supun Wee
Staff Dr Rainer Deut
Guest 0.0%

Sudheera Vithanage 87.3%
Guest 0.0%
Staff
Dr Rainer Deutschmann 84.0%
Guest 0.0%

Employee Recognition

Dialoq

07-17-2019 Wed 09:06:32

Dialoq Entrance

IN 89 OUT GUESTS 422

Latest Recognition

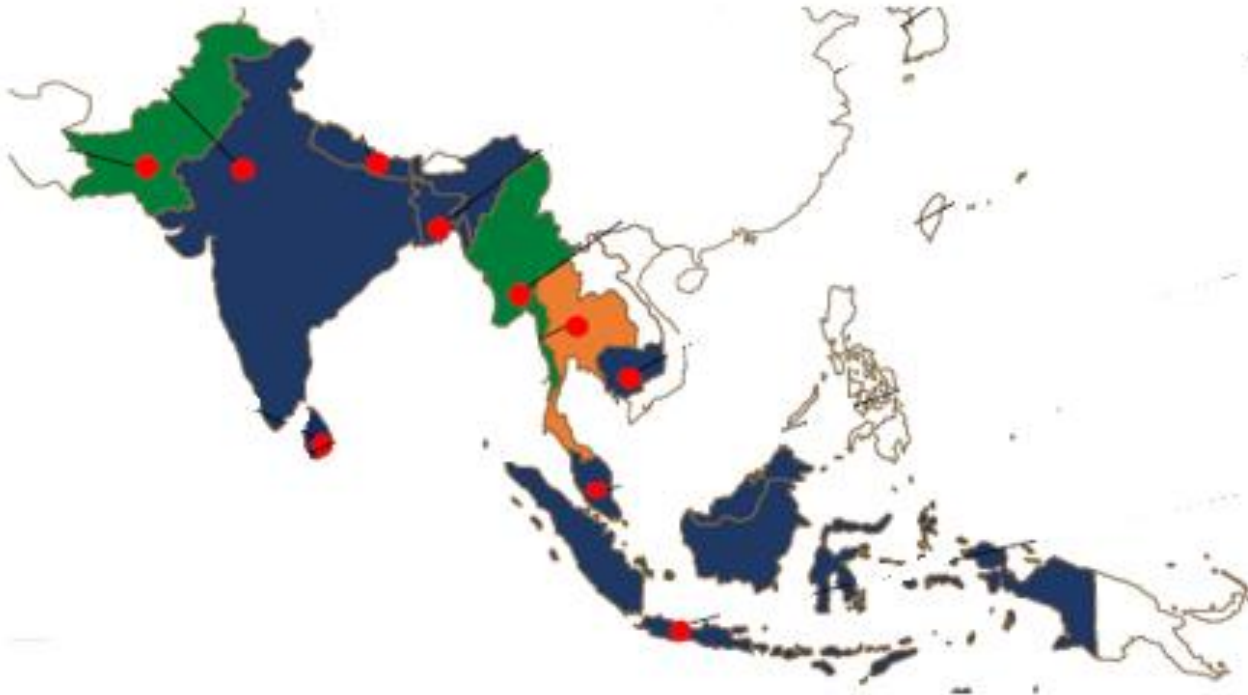
- Rekha Weerasooriya 2019-07-17 09:06:29
- Chathurika Liyanage 2019-07-17 09:06:24
- Muhammed Zulfar Fathima Amara 2019-07-17 09:06:23
- Chamath Gunasekera 2019-07-17 09:06:15
- Shamali Perera 2019-07-17 09:06:12

Video Analytics with Facial & Vehicle detection

- True Detection with Facial Recognition Model
- At Distance, Side Facing, With Phone, With Scarf and Spectacles
- Vehicle and number plate recognition model

Mobile IoT (NB-IoT/LTE-M) strategy in Axiata

- Axiata Opcos are NBIOT/LTE-M ready
- We are exploring use cases with our network partners Huawei & Ericsson
- Dialog Axiata (Sri Lanka) Already deployed & the efforts have been recognized by Glotel



A solid foundation for sustainable IOE platform play is engagement and partner ecosystem development

Build out of an IOE ecosystem via many partnerships at device and platform level

- P2P integrations to jointly develop ecosystem with other IOT platform players
- Open APIs both south and north bound to connect with device and solution partners
- Open to work on rev share and federation across multiple operators

We welcome partners to join hands with us to enrich the IoT Ecosystem in the region



IOT Value chain

Thank you

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