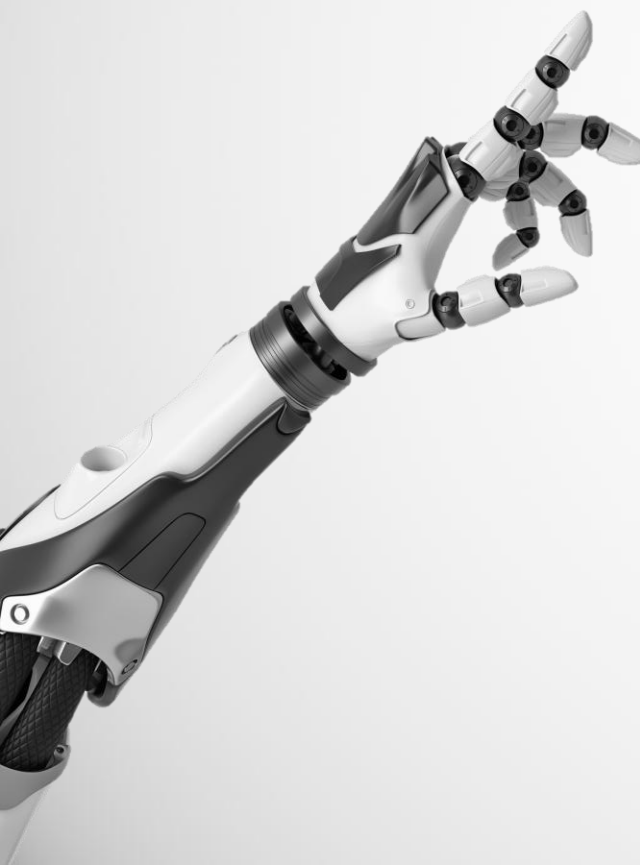




Delivering Business Value through IoT driven Digital Revolution

INVI **X** IBLE

Introduction | Our leadership circle

Dr. Fahad Aijaz

Founder and Chief Executive



Ph.D. M2M / Internet of Things



Ex-Global Head of Vodafone IoT Products and Solutions

Over 20 years of experience in IoT focusing on Telecom and Enterprise from Business, Strategy and Technology.

Rizwan Hassan

Chief Business Officer



Telecom & IoT Business Leader

Ex-Global Head of Vodafone IoT Digital Services Business

Over 22 years of experience in Telecom including IoT, across Ericsson, Lucent, Samsung in leadership roles

Umer Fraz

Head of IoT Products and Solutions



Technical Authority on IoT

Ex-Vodafone IoT Leader for Products and Solution Engineering

Over 20 years of experience in Telecom including IoT, IT, Transformation and Innovation.

Inventor & Author of;

Mobile Server Platform - Architectures and Protocols for Future M2M Ecosystems

ISBN: 3-86130-383-3 | [Download](#)



Vodafone IoT | A decade of successes, failure, and learning has made Vodafone IoT grow to unlock 100 million connections and ~1b EUR IoT business today ...



Vodafone today is aiming to transform into Next Generation TechCo through Centralization

Connectivity Management

100 million connections and growing YoY

M2M Connected Products

Retail, Asset Tracking, Device Management, Energy

Mergers & Acquisitions

Automotive | Energy | Asset Mgt | IoT Platform | Solution Dev

Digital Services Platform

E2E transformation as a platform player for enterprises and developers

Operating Model Transformation

E2E transformation in people, products & processes

Mobile Private Networks & MEC

New IoT LoB bringing 5G, IoT, MEC and Hyperscalers together



Deliver IoT strategy
through products and
solutions for your
business

Technology
Consulting

What is the value of IoT
for your business and
what is your strategy to
adopt and grow it?

Products &
IoT Solutions

What is the technology
strategy that would
work for your IoT
business?

Business
Consulting

About us | Trusted advisors in IoT and a Specialist IoT
Solutions company founded by Vodafone's IoT leadership



INVIXIBLE

Products &
Solutions

Technology
Consulting

Business
Consulting

End to End IoT Solution

DEVICE



CONNECTIVITY



PLATFORM



IOT APPLICATION & ANALYTICS



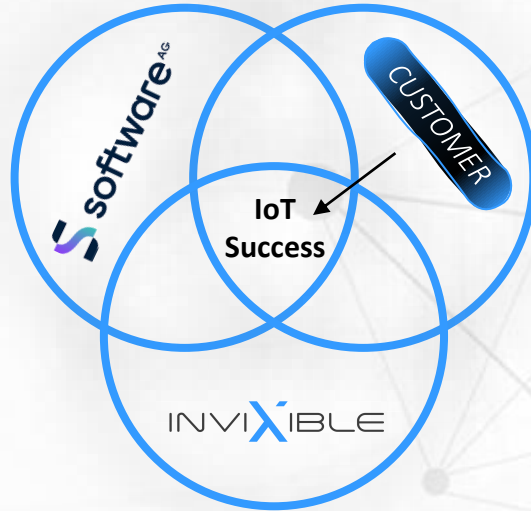
PROF. SERVICES



Expertise | End to End IoT Value Chain

INVI^XIBLE

Premier IoT Partner | We are a Premier Partner of Software AG ...



Growth ambition,
strategy and vision

CUSTOMER

**IOT
GROWTH
MODEL**

Market leading IoT, data
analytics & integration
technology



IoT verticalization products
and e2e IoT solutions
expertise



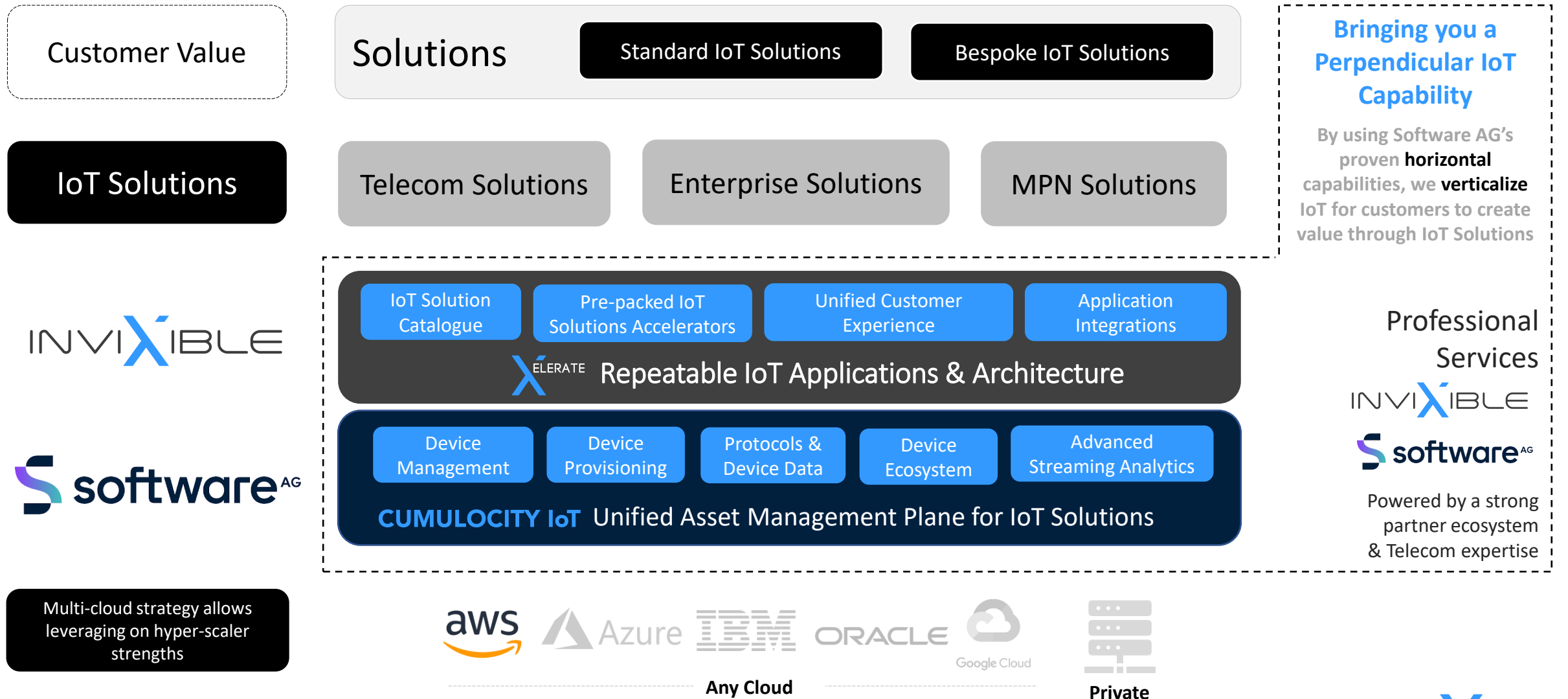
Extensive
Telco IoT
Experience

E2E IoT
Products &
Solutions

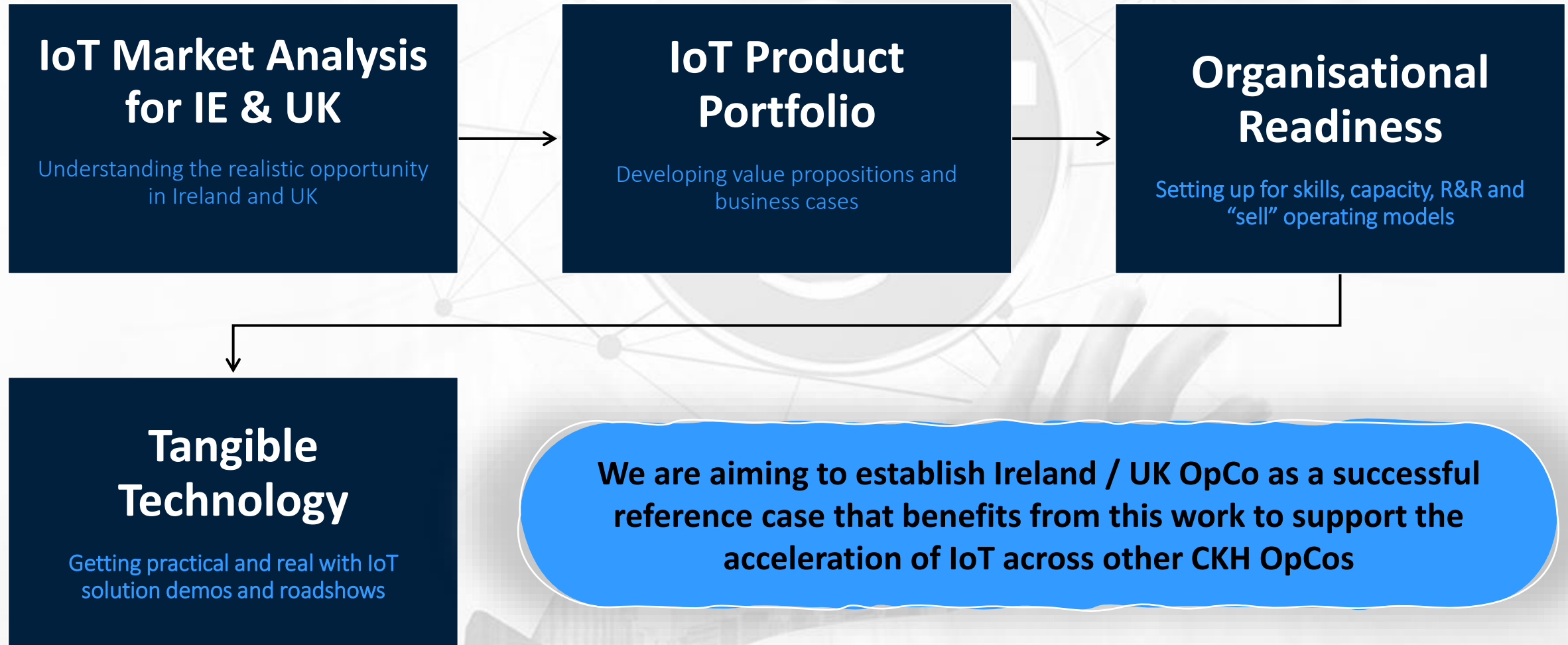
IoT business
& tech
acumen



IoT Solutions | Value Creation Architecture



CKH / Three Engagement | As a first step, we are engaged in 4 focus areas to unlock IoT for Ireland and UK ...



Our Proposition

How can we
help your
business?

1

We deliver customised & managed IoT solutions to enterprises of any size, for any industry, at an attractive cost.

2

As standard, we leverage on the world's best and industry leading IoT Platform and device management from **software AG** [Read more...](#)

3

We can integrate with your device management, managed connectivity and other platforms to deliver a fully bespoke solution for your business.

FORRESTER®

**WAVE
LEADER 2021**

Industrial
Internet-Of-Things
Software Platforms

We Co-create IoT applications specifically for your business

INVI^XIBLE

Our Proposition

WHO ARE WE?



One-stop window for Businesses that are looking for a trusted advisor & partner who understands their business needs and delivers exceptional outcomes.

Business &
Technical
Consulting

Highly
experienced
consultants to
help you digitalise
your business

Managed
Services

24/7 managed
service, proactive
management with
guaranteed SLAs

End to End
IoT Solutions

No matter where you are today, we become your trusted advisors throughout your IoT journey to unlock your business growth

We build E2E Solution for any industry & use case

Our solutions are fully integrated with connectivity

Our ecosystem supports 300+ device protocols with loads of pre-integrated IoT devices

Our Proposition

ONE STOP IOT SHOP
FOR YOUR BUSINESS



No more hassle of dealing with complex IoT solutions. One contract, one price, one single provider with global partner ecosystem.

RAPID SOLUTION
DEVELOPMENT



We develop bespoke solutions quickly & simply reducing time to market and costs, thus making your barrier to entry lower.

FULLY CUSTOMISED
THE WAY YOU WANT



We consultatively co-create solutions to your specific business needs, helping you achieve efficiencies, cost reductions & increased revenues.

FULLY INTEGRATED
WITH YOUR ASSETS



We deliver full integration with your existing infrastructure, so you do not have to rip and replace your projects, assets and investments.

END TO END ULTRA
SECURE SOLUTIONS



Our solutions are fully secured end to end from device to application level using security best practices and network.

FULLY MANAGED
SERVICE



Peace of mind with a highly scalable architecture & global support including people, tools, and processes for 24/7 mission critical SLAs.

TELECOM DOMAIN
EXPERTS



We have extensive experience, expertise and domain understanding in business, strategy and technology for unlocking IoT growth in Telecom.

WHY US | What makes us different?

Our Product



The fastest way to deliver end to end IoT solutions across verticals with a truly seamless customer experience and highly reduced time to market

✓ IoT Connectivity*

✓ Pre-Integrated with **CUMULOCITY IoT**
BY SOFTWARE AG

✓ Pre-configured with **aws**

For Standard IoT Solutions



Suitable for turn key solutions

Rapidly create feature rich & fully functional standard end to end IoT solutions or PoCs in minutes

For Bespoke Customer Solutions



Suitable for large enterprises

Rapidly create ~80% features required by any e2e IoT solution or PoCs in minutes and work on ~20% customisation only via co-creation

For Customer Engagement



For enabling sales & building pipeline

Pre-packed sales demonstrators, ROI calculator, Solution Catalogue and Rapid No-Code creation of feature rich Proof of Values



* We can pre-integrated IoT Managed Connectivity in IoT Solutions to give you a key differentiator

IoT Sales Portal



Perfect for Consultative IoT Selling



PRE-PACKED IOT SOLUTION SALES DEMOS

PROOF OF VALUE CREATION ON THE SPOT

BUILT-IN ROI CALCULATOR FOR SALES TEAMS

UNIFIED IOT SOLUTIONS CATALOGUE

SEAMLESS CROSS-SOLUTION EXPERIENCE

RAPID CUSTOMER BRANDING WITH NO-CODE

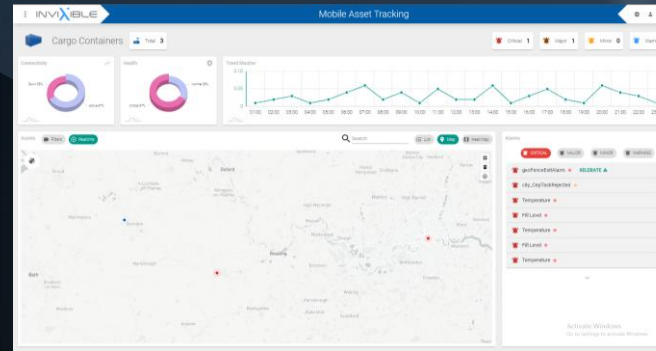
FEATURE RICH AND FULLY MANAGED SERVICE

For Customer Engagement

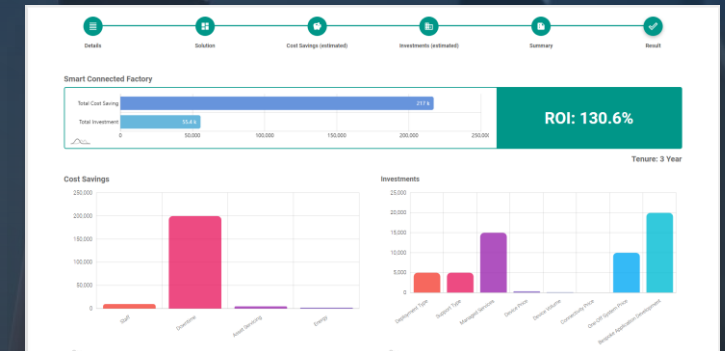


For enabling sales & building pipeline
Pre-packed sales demonstrators, ROI calculator, Solution Catalogue and Rapid No-Code creation of feature rich Proof of Values

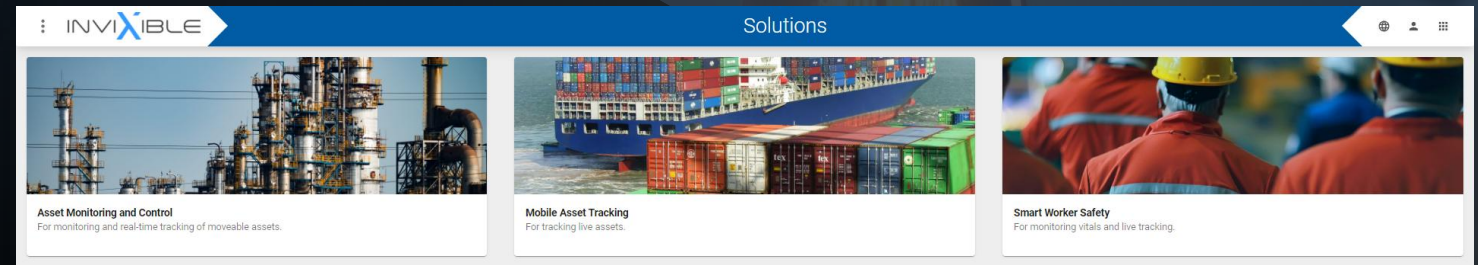
IoT Solutions Sales Demonstrators



ROI Calculator for Sales



IoT Solutions Catalogue



Empower sales with a unique **IoT Sales Demo Portal**

INVIBLE

Our Technology Assets

Facilities

Manufacturing

Utilities

Logistics

Retail

Cities



Media Analytics

Object Detection in Videos and Pictures



Digital Twin

3D Live Models of Physical Assets



Value Insights

Insights into Financial Gains



Self-Service Analytics

Cross-data, cross-solution analytics



Geofence

Polygon and Circular



Playback

Replay Historic Asset Journeys



Inform

Notifications, Alerts & Events



Find

Filters & Spotlight Search



Visualize

Heatmaps & Map Clusters



Automate

Asset Control Scheduling



Analyse

Statistical & Asset Analytics



Manage

Device, Users, Groups, Roles



Track

Realtime Asset Tracking



Monitor

Realtime Data Monitoring



Control

On-demand Asset Control



Prevent

Preventative Rule Engine



IoT Solutions Repeatable Accelerators



Any Cloud



Private

IoT Platform
software AG
CUMULOCITY IoT

Any Vertical

Any Application

Any Deployment

Any Connectivity

Any Device

INVI^XIBLE

Our Technology Assets

Facilities

Manufacturing

Utilities

Logistics

Retail

Cities



Media Analytics

Object Detection in Videos and Pictures



Digital Twin

3D Live Models of Physical Assets



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Asset Control Scheduling



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Manage

Device, Users, Groups, Roles



Track

Realtime Asset Tracking



Monitor

Realtime Data Monitoring



Control

On-demand Asset Control



Prevent

Preventative Rule Engine



Repeatable IoT Accelerators



ORACLE



Google Cloud



Private

Any Cloud

IoT Device Management

Any Vertical

Any Application

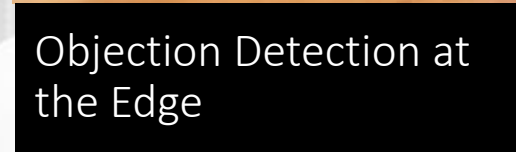
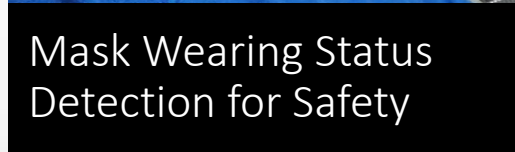
Any Deployment

Any Connectivity

Any Device

INVI^XIBLE

Out of the box integrated with IoT Solutions



Our Technology Assets | Digital Twin

2D or 3D representation of physical assets

Equipment, Machinery, Floor maps, Buildings et. al.

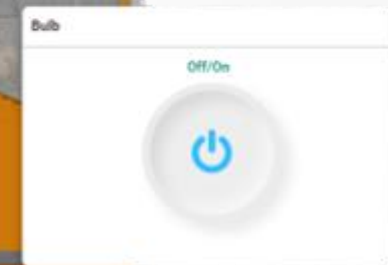
Dynamic, Real-Time and Interactive



Real-time Visual
Monitoring of Asset Data



On-demand
Asset Control
Operations



Our Always Evolving IoT Solutions Catalogue

 Solutions   



Condition Monitoring and Control
For real-time monitoring and control of remote assets and facilities / sites.



Cargo Tracking
For real-time tracking of mobile assets and detecting intrusions and alarms.



Smart Worker Safety
For monitoring health vitals of workforce and to facilitate them with emergency callouts when required.



Energy Monitoring
For monitoring energy on a facility in real-time



Water Monitoring
For monitoring customers water flow and containment assets for leakage and quality



Assisted Living
For monitoring health vitals and surroundings of elderly and vulnerable individuals



Smart Port
For monitoring heavy equipment in a port



Wind Farm Monitoring
For monitoring Customer's Wind Turbines

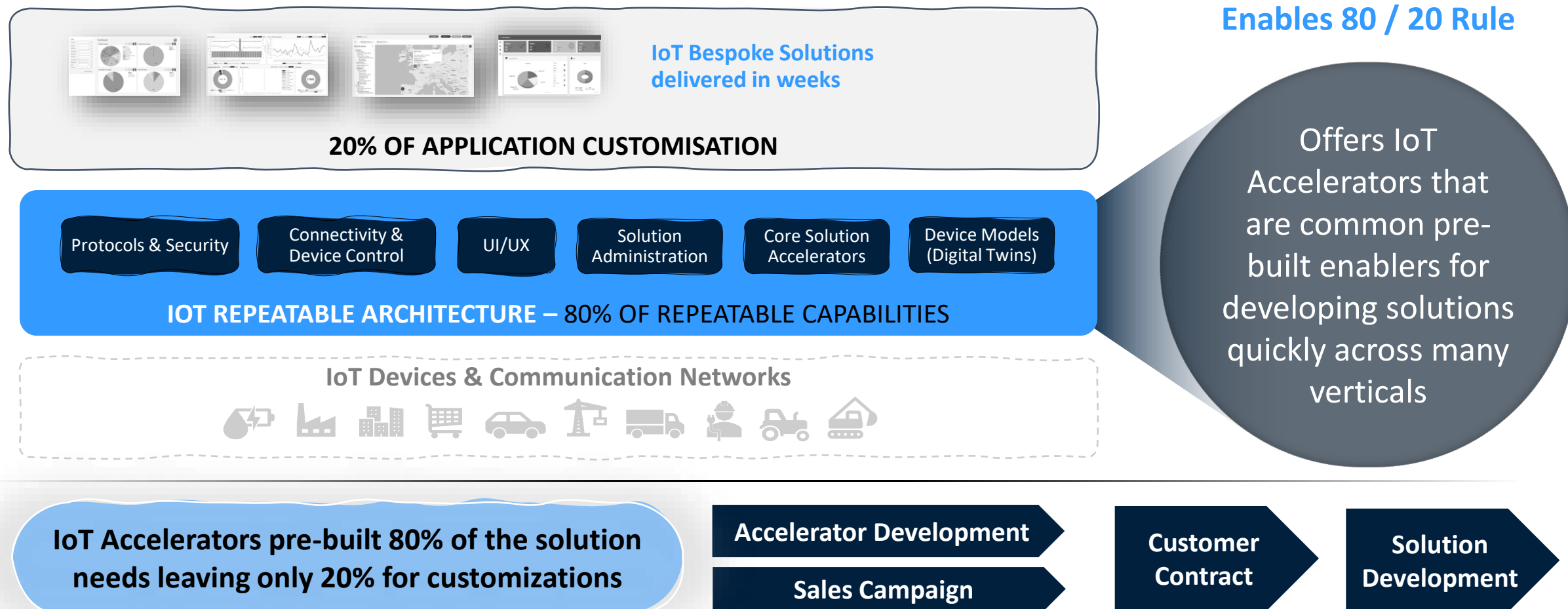


Smart Tanks
Monitor and control the oil tanks

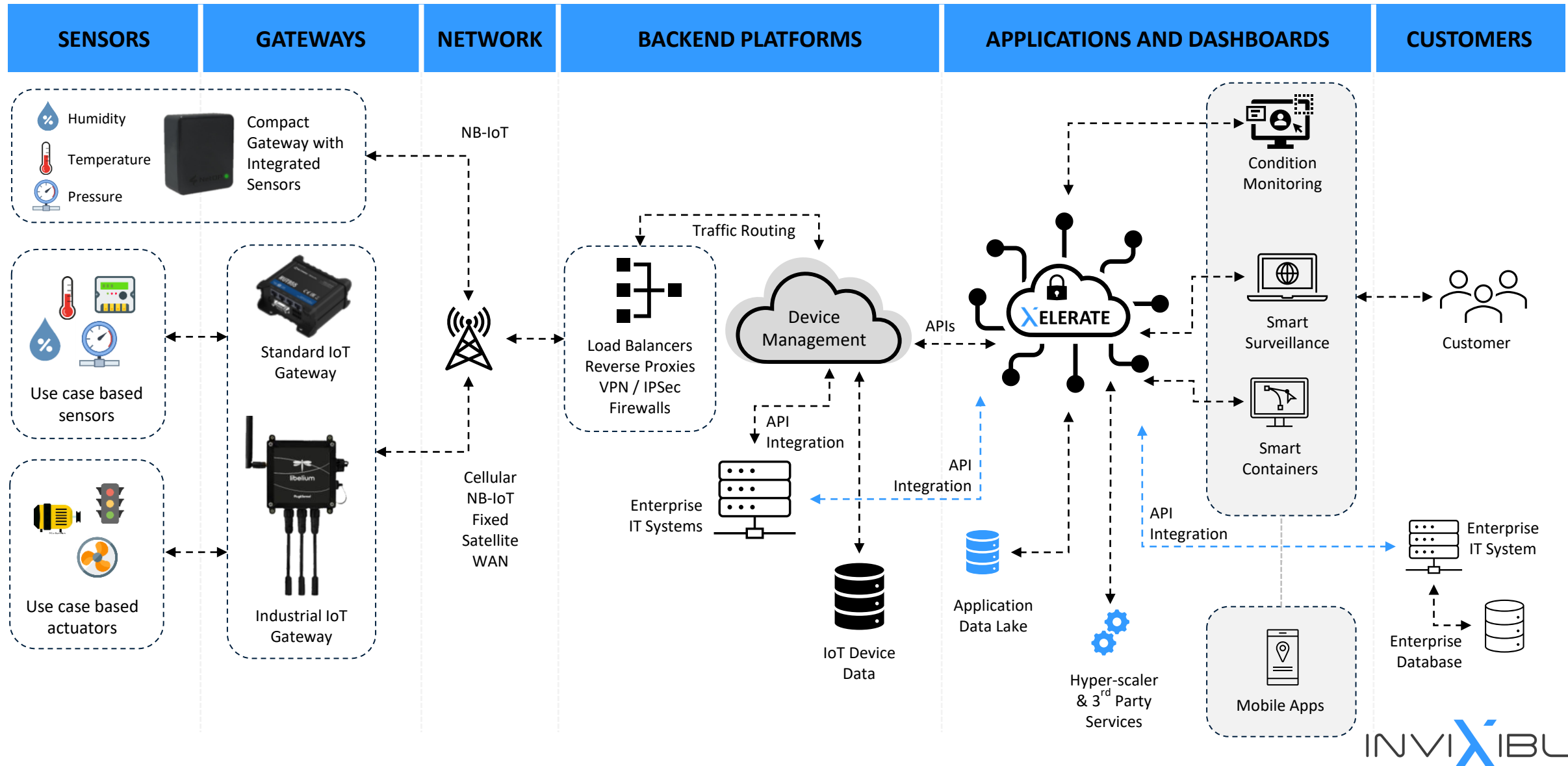
With our globally unique and state of the art Rapid Solution Development capability, we can create IoT solution applications in minutes right in front of the customer

Our IoT solutions offer seamless customer experience across all verticals and can be easily accessed through our IoT solution catalogue.

Repeatability | Develop your technology strategy that ensures repeatable architecture ...

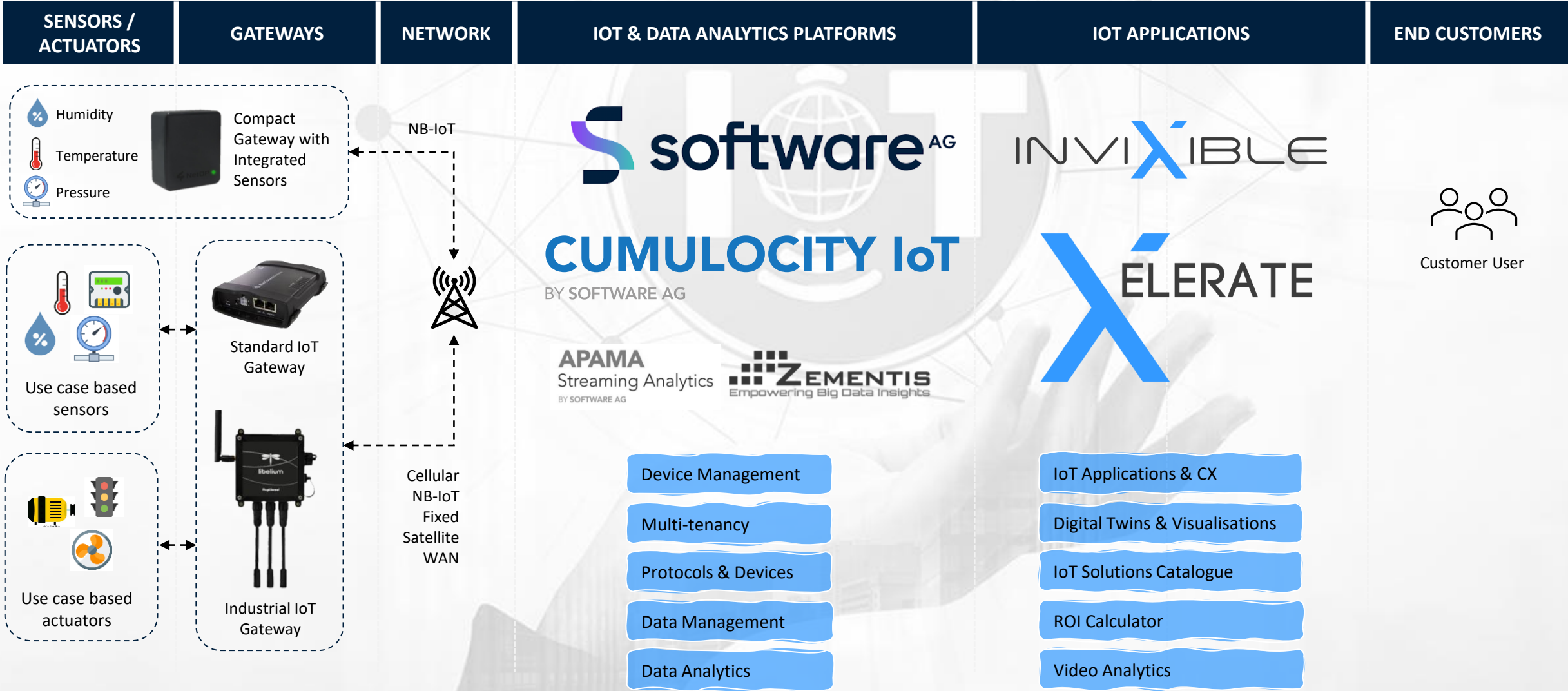


Solution Architecture | End to end IoT Solution Flow

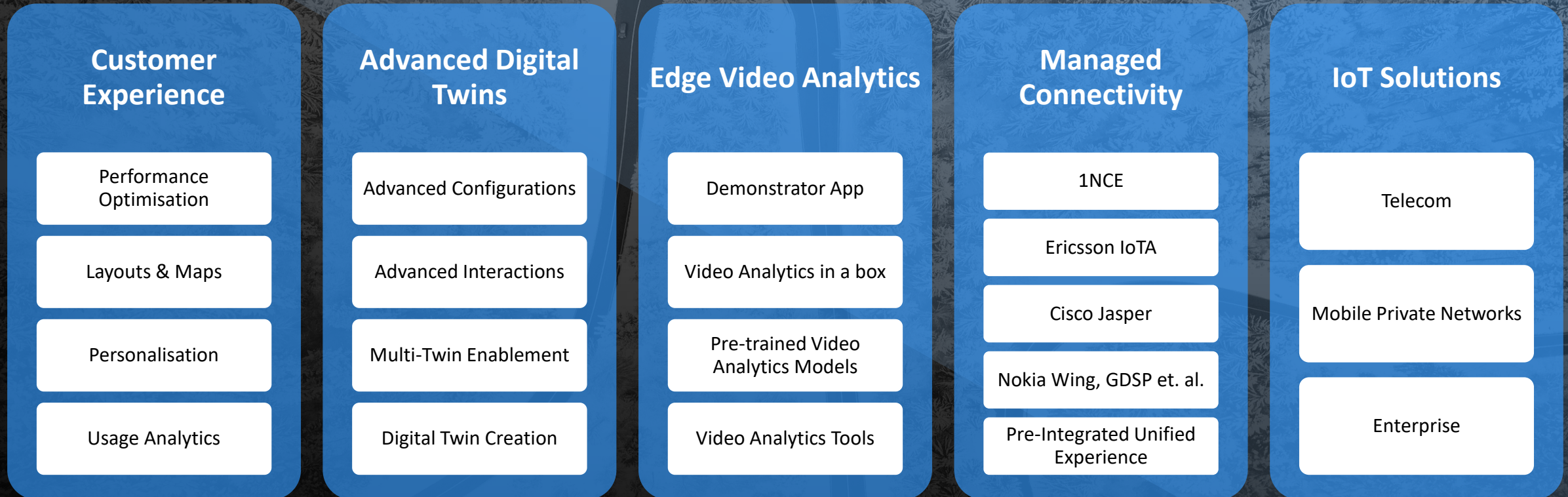




Designed from ground up to bring verticalization to Cumulocity IoT and help position it as an end to end IoT platform of choice ...



Our Always Evolving Roadmap*



New Accelerators | Performance | Architecture

*This roadmap is indicative

Repeatability in Action

LIVE DEMO

INVIXIBLE

Branding

Solutions
Catalogue

Device
Catalogue

Solution
Deep Dive

Service
Creator

ROI
Calculator

XÉLERATE

Our Customers

The world's largest and the best put trust in us to grow their IoT Businesses



SDAIA

الهيئة السعودية للبيانات
والذكاء الاصطناعي
Saudi Data & AI Authority



Three.co.uk



Three.ie



INNOVATIONS.
OPPORTUNITIES
DEVELOPMENT.

TAWAL

software AG



stc

iWire



INVI^XIBLE

We have advised top industry clients in over 30 projects to help them shape their business & investment decisions



McKinsey
& Company

KKR



Third
Bridge

GLG

accenture



EMIRCOM
Inspires Transformation

Tech
Mahindra

COLEMAN

tmforum

stc

software AG

tm TM Forum
@tmforumorg

Is the #IoT opportunity for #telecoms operators real?
Join us for the next Hard Talk tomorrow featuring the below to find out:

- Fahad Aijaz, CEO, Invincible
- Alexandra Rehak, Chief Analyst, @OmdiaHQ
- Angus Ward, CEO, @bearingpoint//Beyond

ow.ly/JcFX50BuDck #TMFHardTalk

HARD TALK
A series of live industry debates

Is the IoT opportunity for telecoms operators real?

29 September 2020 | 2 pm London | 9 am New York | 9 pm Singapore

Series sponsors: ERICSSON BearingPoint Beyond HUAWEI

2:10 PM - Sep 28, 2020 - Hootsuite Inc.

We were invited by TM Forum to share our thoughts on opportunities and challenges of IoT in the Telecom sector

[CLICK HERE TO WATCH THE WEBINAR](#)

INVINCIBLE



CASE STUDIES

How we have helped customers before?

WE ENABLE
INVISIBLE
DRIVERS OF
SUCCESS FOR
BUSINESSES



INNOVATIONS.
OPPORTUNITIES
DEVELOPMENT.

IoT Market
Analysis for IE &
UK

IoT Product
Portfolio

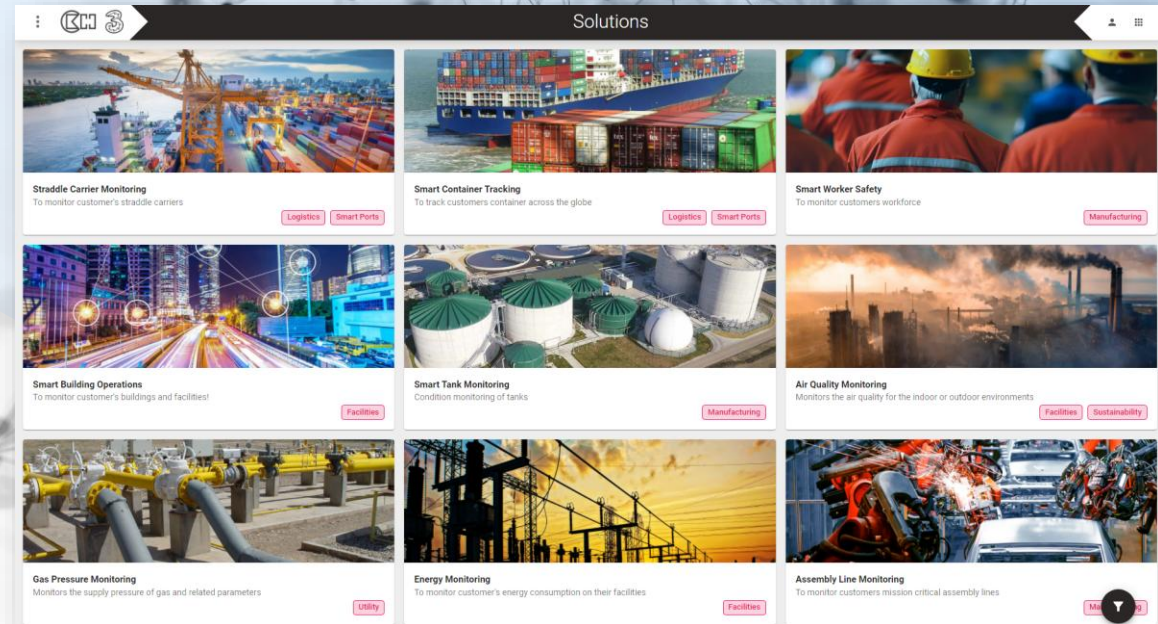
Organisational
Readiness

Tangible
Technology

Key Business Outcomes Delivered

- **170m Business Case**
- **5 Strategic IoT Portfolios**
- **65+ Organisation**
- **22 Product Propositions**
- **13 Solutions Demos**
- **Active Customer Co-creation**
- **11+ Technology Strategy**

Recommendations



Straddle Carrier
Monitoring

Smart
Containers

Gas Pressure
Monitoring

Energy
Monitoring

Air Quality
Monitoring

Tank
Monitoring

Smart Worker
Safety

Assembly Line
Monitoring

Gas Chiller
Monitoring

Conveyor Belt
Monitoring

Retail Cold
Chain

Smart Building
Operations

Smart Security
and Access



IoT Crowd Management Solution

We worked with **Software AG** and delivered an **end to end IoT crowd management solution** trial with **On-Premise deployment** for the customer's control centres in just **5 weeks** to help them manage crowd of thousands of tourists.



Actual Customer Control Centre with our solution shown on the large screens

KEY FEATURES

10K devices & over 350 TPS

Realtime Monitoring,
Alarms & Events

Heat Maps & Cluster Maps

Filtering & Spotlight Search

Broadcast & Targeted
Messaging

... a lot more



SDAIA

الهيئة السعودية للبيانات والذكاء الاصطناعي
Saudi Data & AI Authority

Watch how our customer uses our **end to end IoT asset tracking solution** in their control centres to manage large crowds in a demanding use case.



CLICK TO WATCH



INVI^XIBLE

Business Consulting | Market, Strategy, Products & Propositions

stc

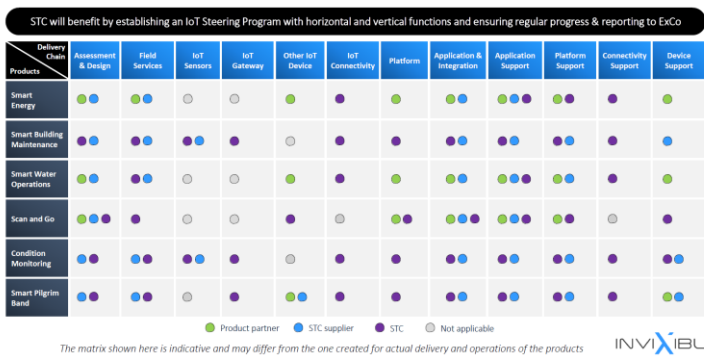
IoT Go-to-Market Strategy

Outlook | This study has produced an insightful all round analysis, key propositions & recommendations for STC to help unlock Go to Market for IoT & digital solutions



Implementation Strategy

Implementation Strategy | For the successful delivery and operations of the products, STC must establish a clear responsibility matrix across partners, suppliers and in-house activities



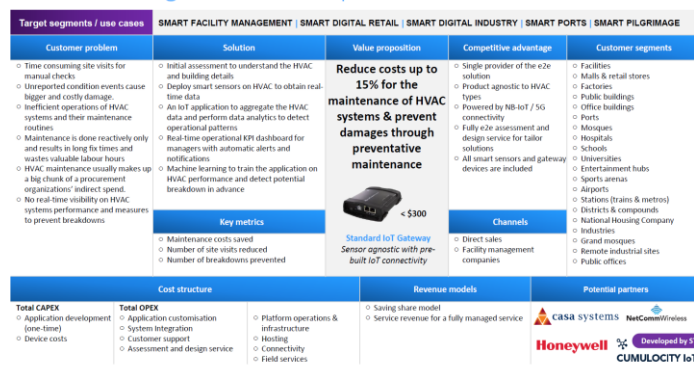
Strategic IoT Portfolios and Products

Market Analysis | STC has an opportunity to tap into 5 key segments and serve them through 6 IoT products and grow its revenue



IoT Products Value Propositions

Smart Building Maintenance | Product canvas



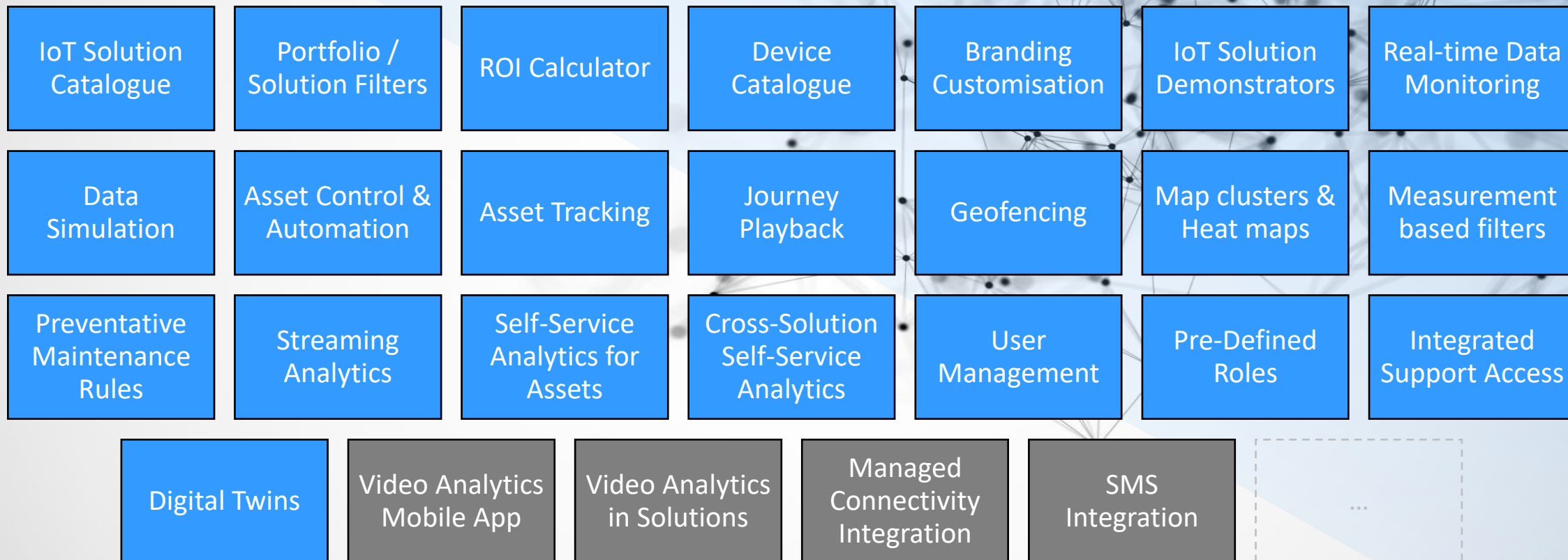
We delivered over 85 page report covering the IoT opportunity in the Saudi Arabian Market for STC Solutions. The report included:

- Market Analysis
- Strategic verticals
- Products & partners
- Value propositions
- Implementation strategy

This list is not exhaustive.

INVIABLE

Key IoT Solutions features are pre-packed into the Sales Demonstrators

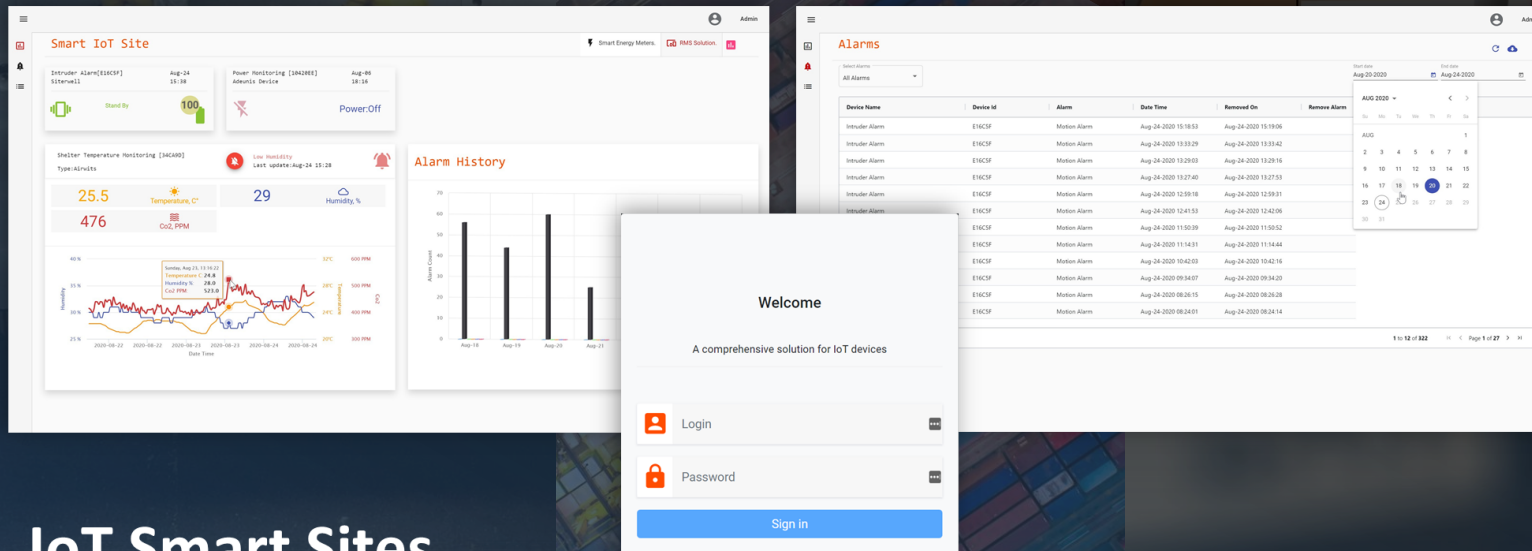


On-demand features



IoT Facilities Management Solution

The solution is designed to reduce costs, downtime and carbon footprint and uses an IoT Gateway to monitor key equipment within the site. By using motion-triggered object detection we were able to use the existing gateway with a standard IP camera to add a sophisticated surveillance capability



IoT Smart Sites

A Large Telco in the Middle East

Energy Optimisation solution for Telco customer

Reduced remote site visits resulting in cost savings

Reduced energy consumption

Reduced equipment failure rate

Smart surveillance avoided break ins and thefts

Live Demo

INVIXIBLE

XÉLERATE

The fastest way to
deliver end to end IoT
solutions across
verticals with a truly
seamless customer
experience and highly
reduced time to market



About US

A background network diagram consisting of numerous small grey dots connected by thin grey lines, forming a complex web-like structure. The dots are more densely packed in the center and become sparser towards the edges. The overall color scheme is light grey and white, with a blue gradient at the bottom.

INVI^XIBLE

InviXible is a trusted advisor and specialist IoT Solutions Company established by top IoT leadership from Vodafone and now serving customers across the globe.

We deliver real business outcomes to enterprises and telecom players by delivering end to end solutions powered by IoT & AI, quickly and cost effectively.

INVI^XIBLE



Contact

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Business Management | CEO Office

natalia.danes@invixible.com

InviXible Limited

20-22 Wenlock Road
N1 7GU London, England
United Kingdom

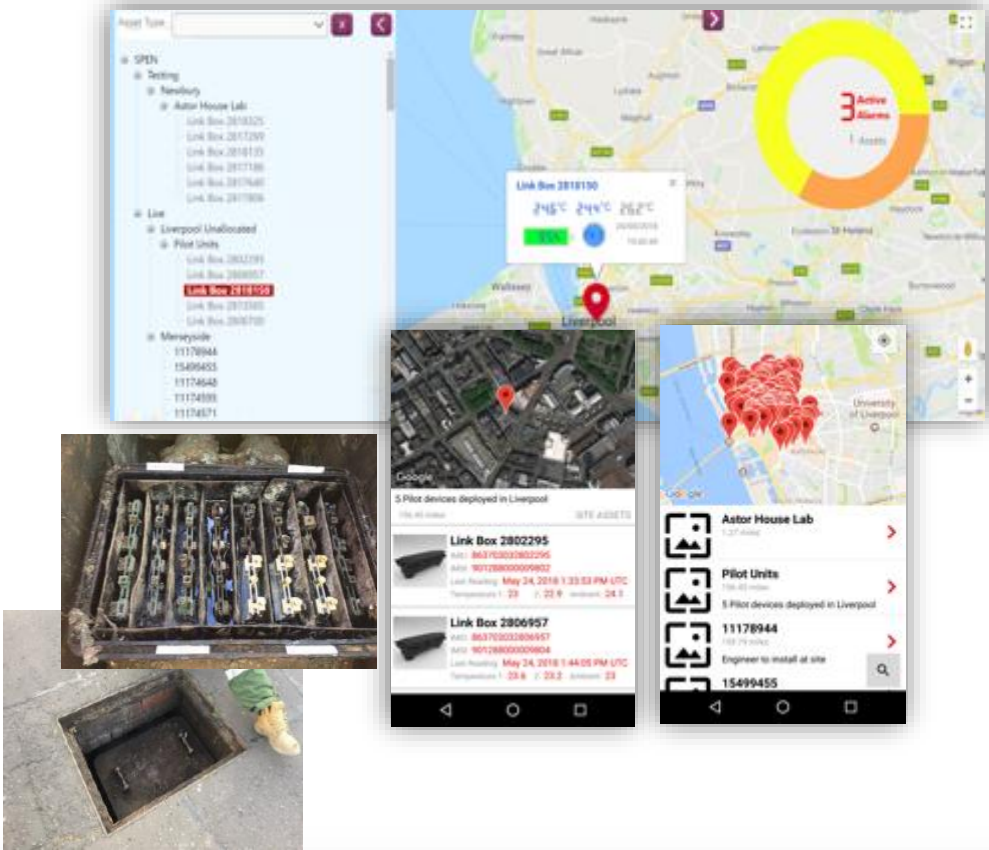
INVI**X**IBLE

Case Study | Utility - We enabled preventative maintenance and hazard avoidance for a leading power company in the UK through IoT Smart Power Line Monitoring solution

Helping prevent Power Line hazards and saving lives.



- Application Dashboard
- NFC based Mobile App
- IoT Connectivity
- Bespoke Device



IMPACT

Serious health & safety hazards were prevented through remote monitoring

Customer could receive alerts in advanced via predictive analytics

Central control portal allowed quicker response to incidents



INVIXIBLE IMPACT
We helped the cities in saving lives of people and its field workers

Case Study | Smart City - We launched Europe's first successful Smart City solution in Spain and delivered a Central Smart City Control Centre

Smart City Solutions – paving the way to Safer & Efficient Cities

Street Lights Mgt.

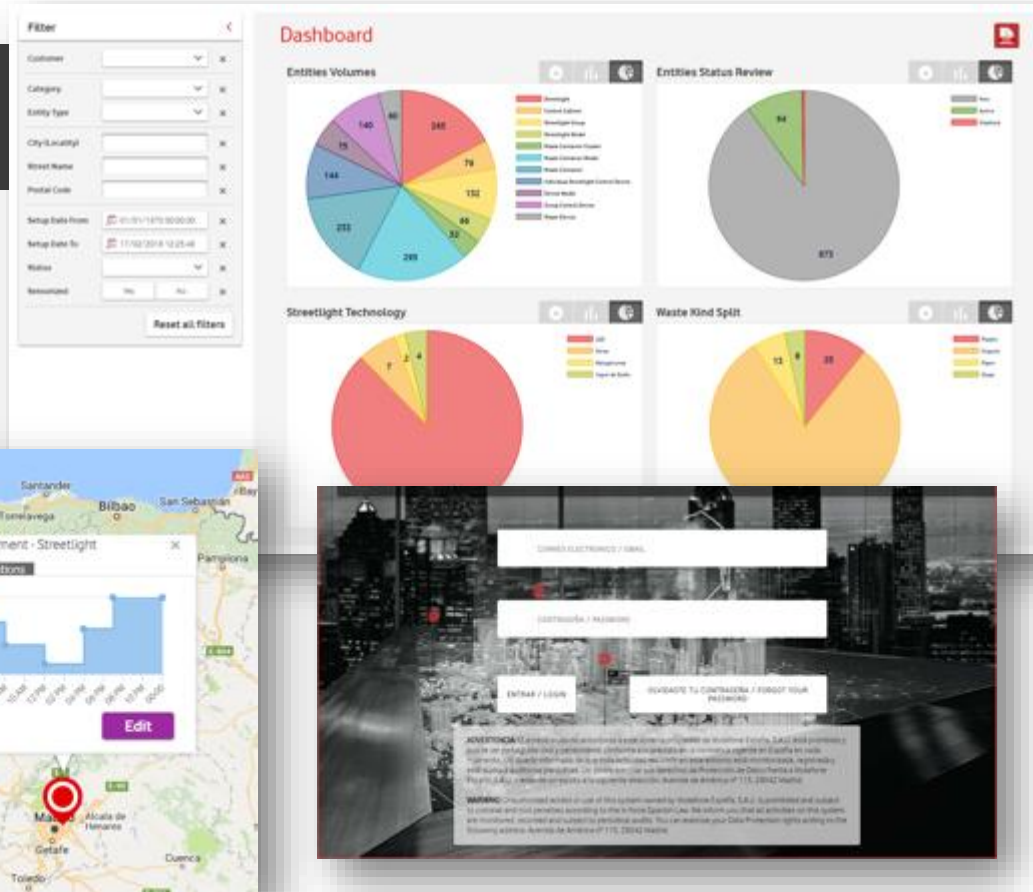
Waste Mgt.

Energy Efficiency

Irrigation

Smart Parking

Air Quality



IMPACT

We helped the cities in Spain in reducing costs, digitally managing their infrastructure and modernization with seamless experience across 6 vertical solutions

Case Study | Asset Management - We developed innovative IoT Smart Sites Monitoring solutions for telecom towers in UK and Middle East



Infrastructure monitoring – We helped a customer through an IoT solution specifically designed to monitor remote sites including environment & energy usage monitoring

IoT application

IoT platform of choice

Remote monitoring enabler

4G IoT connectivity

IoT gateway device

Environmental sensor



Solution built on customer's preferred platform



4G IoT



MODBUS [RS485]



Environmental Sensor (temperature, humidity)

INVI^XIBLE

Case Study | Smart Retail Buildings Control Centre - We delivered smart building solution for a retail customer and provided them with a seamless “single pane of glass” view across their building operations

We worked end to end with the customer in co-creation to identify business challenges, build up the requirements, formulate a solution and deliver it through managed service to help optimise their business operations

Solution Insights

7 Platforms

5 Device Types

3 Connectivity
Types

3 Customer
Partners

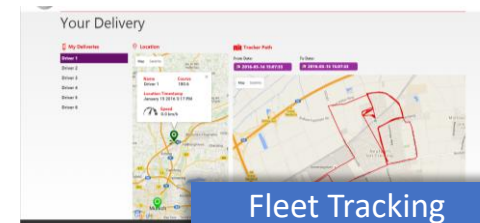
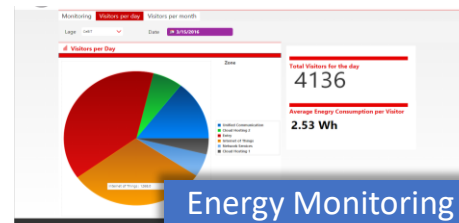
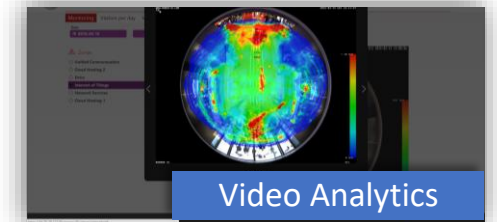
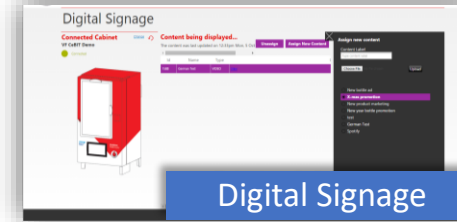
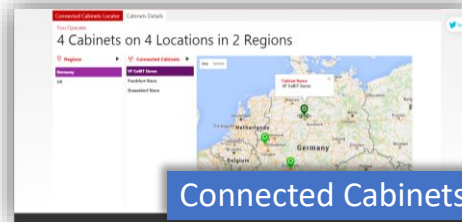
4 Internal
platforms

8 Weeks of
Development



Germany

Smart connected retail demonstrated at CeBIT – the largest IT congress in Europe



HÖRBURGER
Energietechnik mit Zukunft

Schirra IT
intelligent ip video solutions

LEOWORX

IoT

Connected Cabinets

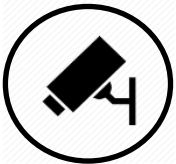
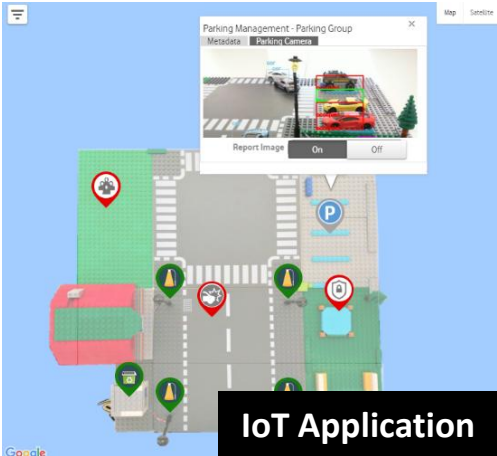
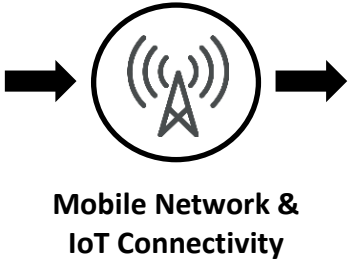
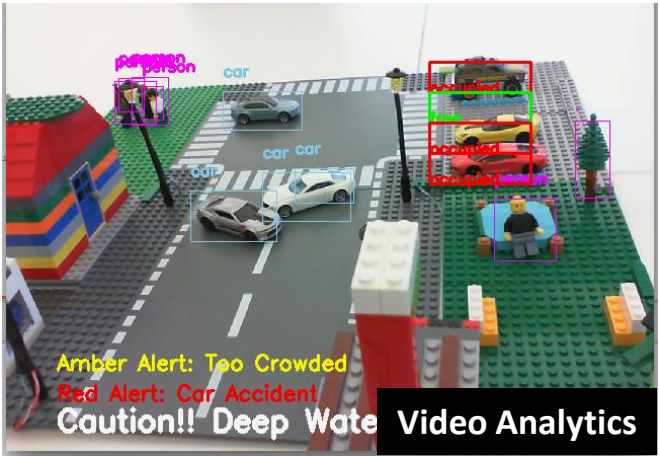
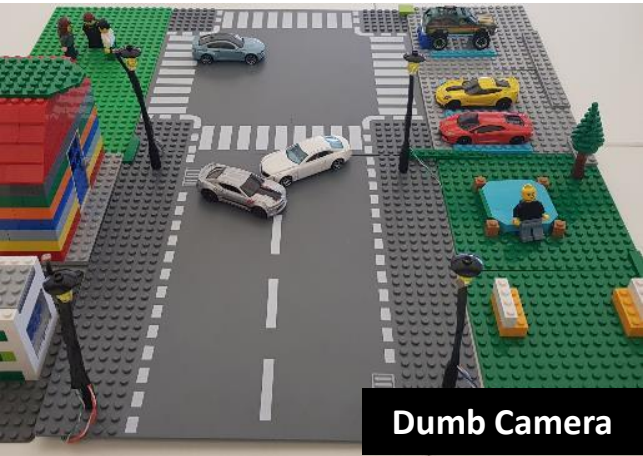
Digital Signage

Device Mgt.

INVI^XIBLE

Case Study | Customer Co-creation Pilot – For a facility use case, we developed a smart parking pilot in co-creation that enabled person detection, queues, parking, objection, presence, emotion detection, limbs detection and occupancy analytics to help them provide advance security and access services to their customer ...

We constructed a demonstrator for the customers using Legos to show case the capability to internal and external stakeholders and also to act as a Proof of Value in their customer experience centres for customers



Camera



Gateway + Edge Analytics

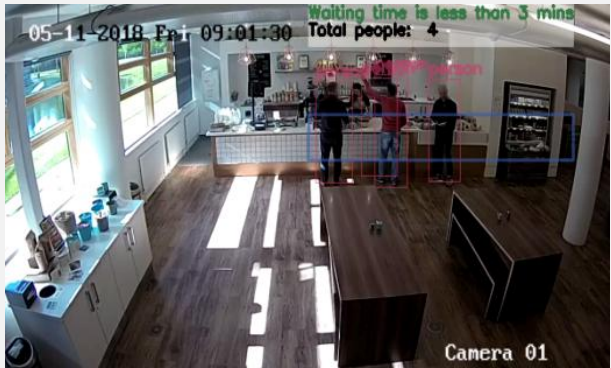


IoT Platform & Application

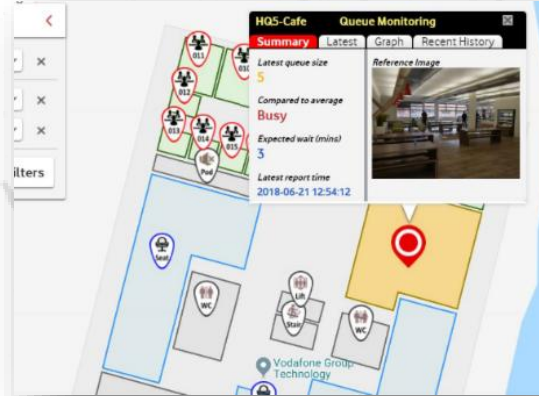
Case Study | Customer Co-creation – We developed Person detection, queues, parking, objection, presence, emotion detection, limbs detection and occupancy analytics working collaboratively with our customers ...



Dumb Camera



Video Analytics



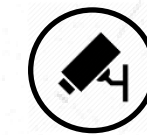
Quantitative metadata



Snapshot from camera



Historical data



Camera



Gateway



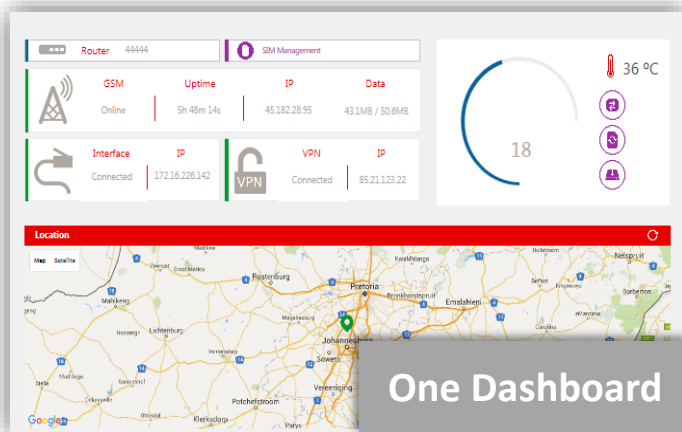
IoT Platform

Case Study | Retail Buildings - We have delivered smart IoT solutions for buildings and retail globally and demonstrated them at global events



South Africa

Connected retail Assets



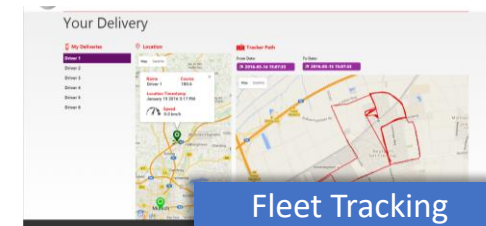
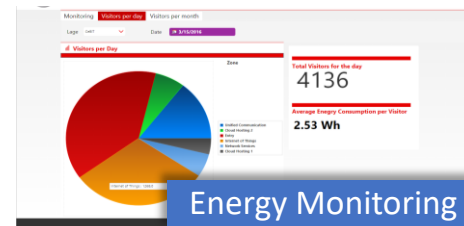
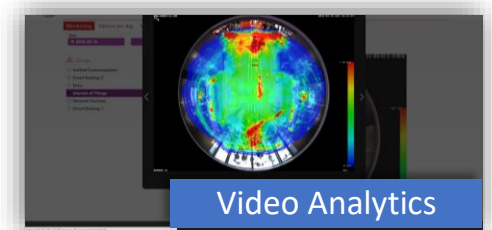
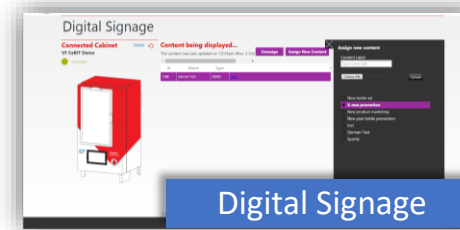
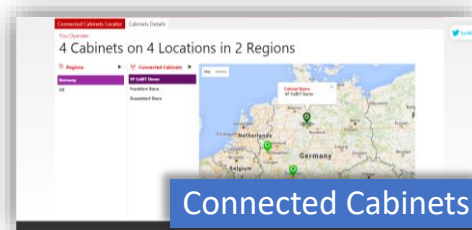
AfriGIS

IoT



Germany

Smart connected retail demonstrated at CeBIT



IoT

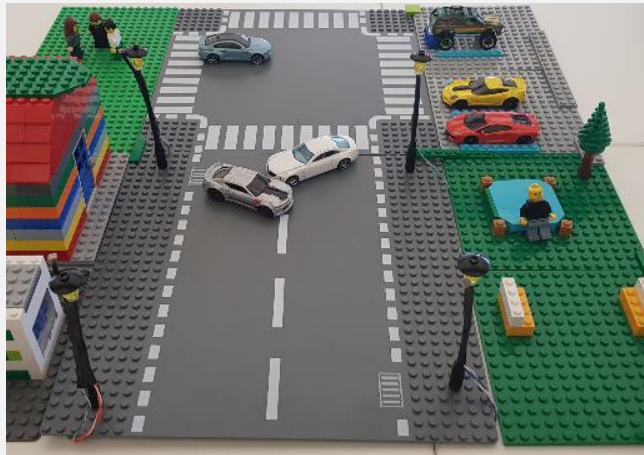
Connected Cabinets

Digital Signage

Device Mgt.

Case Study | Customer Co-creation – We developed Person detection, queues, parking, objection, presence, emotion detection, limbs detection and occupancy analytics working collaboratively with our customers ...

IoT Application



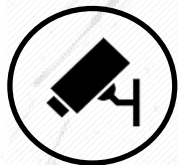
Dumb Camera



Video Analytics



**Smart
Protocol**



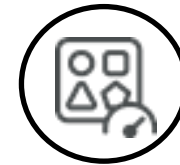
Camera



**AI / Deep Learning
Algorithms**



Gateway

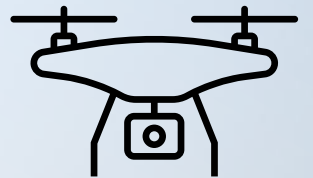


IoT Platform

Take the next step ...

We're ready to bring in the experts

Solution designers, business & technology consultants, integrators, architects, developers, service designers – whoever you need, whenever you need them, wherever you are across the globe. **We're here for you.**



Let's have a conversation focused on your challenges and future goals

An aerial photograph of a dark, winding road that snakes through a dense, light-colored forest. The road has a white line marking and a small car is visible in the distance. The text "There is more ..." is overlaid in white, bold, sans-serif font.

There is more ...

We are targeting Enterprises across several verticals to offer them E2E Solutions

Vertical	Use cases	Examples of Target Customers
Manufacturing 	- Condition monitoring of Machines - Predictive analytics & Augmented Workforce - Factory automation - Digital Transformation	
Utilities 	- Gas pressure monitoring - Water leak detection - Smart metering - Wind farms monitoring	
Buildings / Facilities 	- Facility management - Security & Access - Energy management - HVAC maintenance	
Logistics 	- Ports automation - Asset Tracking - Condition monitoring - Supply chain management	

BUSINESS CONSULTING

How we unlock IoT opportunities for customers?

INVI*X*IBLE

Business Consulting Package | We can help you understand the IoT & Digital Solution opportunities & revenue potential before making key investment decisions

4

Enablement – *Insights & Recommendations*

Market Analysis



Industry Analyst Data



Public and Private
References



Global References
& case studies

INVI^XIBLE

Network, surveys,
experts & experience

1

Market study
backed by
validated data

Data-driven
analysis
methodologies

Addressable
Market Size

Propositions, Products, Technology & Advice

2

Top potential
segments & products

Product propositions
& business cases

Potential partners,
devices & technology

Execution Strategy & Recommendations

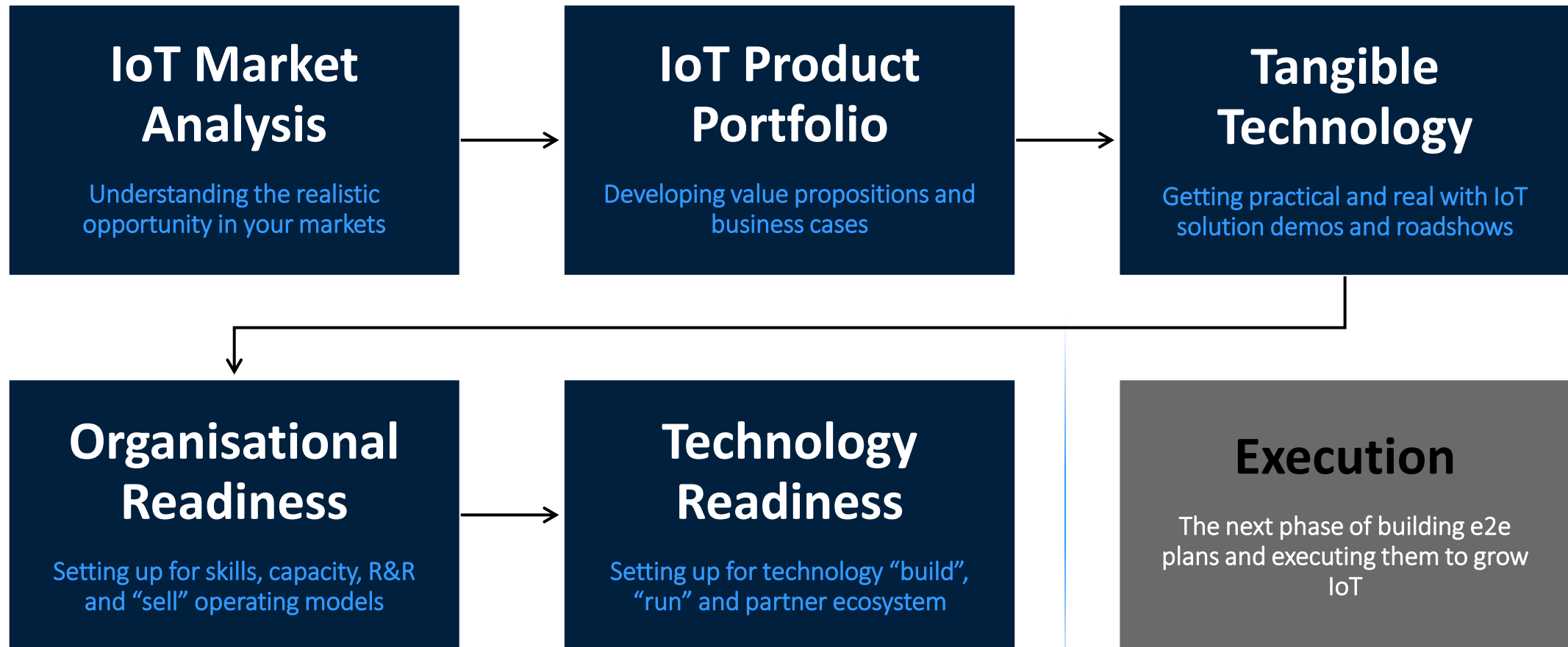
3

Implementation
strategy

Technology landscape
& recommendations

Market gaps &
recommendations

Where to start? | We propose to start with 5 focus areas to build upon to keep things real and tangible in order to grow your IoT business ...



- 
- Channel partners
 - Our presence

Global Footprint



IoT

Leading new technological revolution

→ As the internet and industrial worlds collide, everything is becoming connected

→ It's transforming the way we live, and the way businesses operate.

→ Every industry vertical can benefit from IoT and are making the move towards it, Are you?

IoT

Leading new
technological
revolution

1
Billion

IoT devices to be installed by 2021

127

New IoT devices are connected every second

93%

Enterprises will adopt IoT technology

70%

Companies already have digital transformation strategy

68%

Executives believe the future of business will involve people and AI working collaboratively

IoT solutions are generating big value for businesses in diversified areas

Smart Operations using
Predictive maintenance



Smart Facilities & Buildings



Remote Monitoring &
Control



Leakage & Wastage
Monitoring



IoT solutions deliver value by solving challenges across
multiple verticals spanning variety of use cases



Smart Utilities



Crowd Management



Smart Waste Management



Smart Energy Management



Asset Tracking



Typical business value that IoT is delivering across industries

25%

Reduction in maintenance costs

30%

Reduction in downtime

20%

Increase in productivity & efficiency

25%

Increase in overall equipment utilization

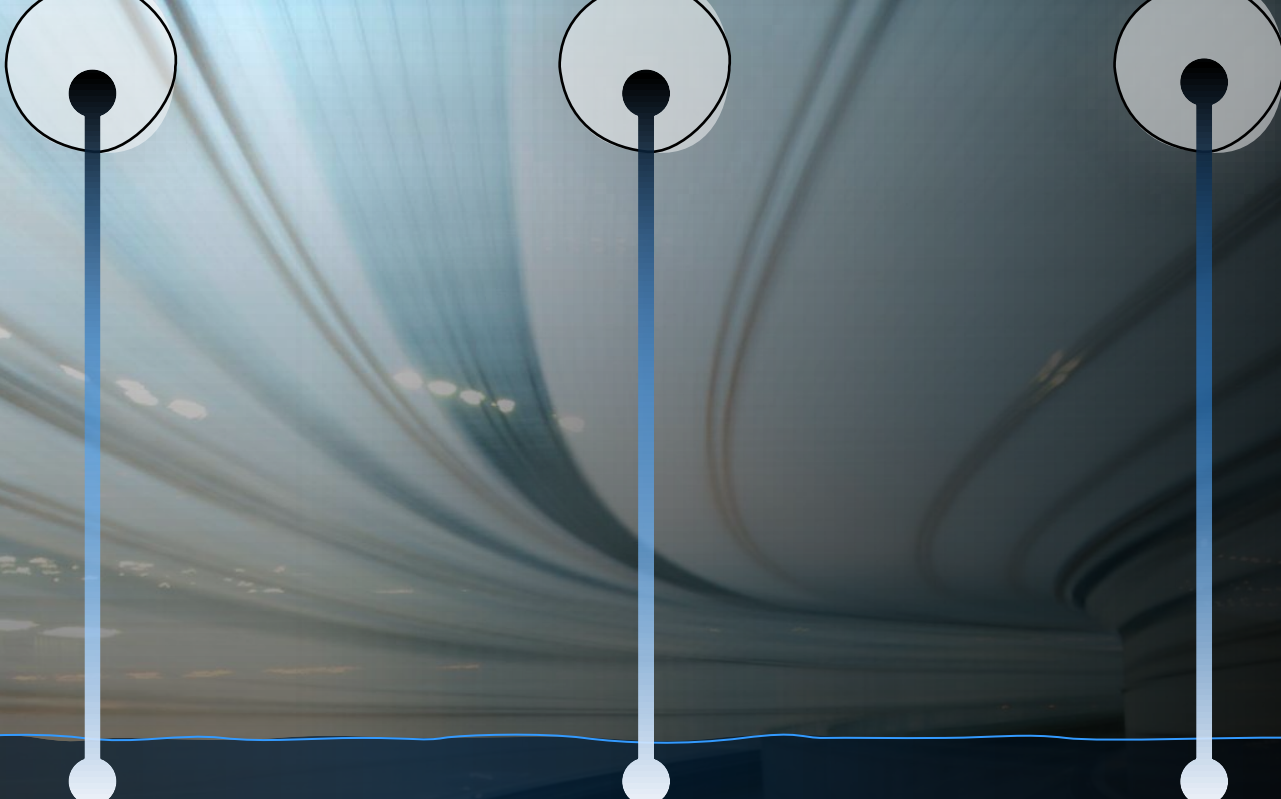
Business needs & challenges you might have right now ?

- ✓ INCREASE EFFICIENCY
- ✓ REDUCING COSTS
- ✓ MAXIMISE REVENUE
- ✓ AGGREGATE DATA
- ✓ MANAGE TALENT
- ✓ MAINTAIN CUSTOMER ENGAGEMENT

Regardless of your business domain, the challenges are very similar across all companies

With over 20 years of experience in Digital Solutions powered by IoT & AI, we can help you overcome these challenges





Contributions to Vodafone's IoT Success

10 years of transformation from Telco to TechCo

INVI*X*IBLE

Vodafone IoT | It has taken major mindset change to bring Vodafone IoT at number 1 position, over 100 million connections and 1 EUR billion revenue ...



Centralization has been key for Vodafone's IoT growth in business and technology

10 years of growing Vodafone IoT business

- From average to No. 1
- Over 100m connections
- 1 billion Euro revenue

E2E IoT solutions & propositions across 20 countries

- Spanning 14 markets
- Addressing full IoT value chain (device, connectivity, applications, services)

IoT GTM strategy that doubled the pipeline

- Within 12 months since launch
- Comprehensive GTM package
- Sales enablement & IoT sales demos

Enabling pre-sales to support sales in building IoT pipeline

- Understanding the business problem
- Establishing a co-creation mindset
- Creating upsell/cross sell opportunity

Enabling IoT sales acceleration through tangible solutions

- Building sales demonstrators
- Delivering customer PoCs & trials
- Reporting outcomes and recommendations

Vodafone IoT | It has taken major mindset change to bring Vodafone IoT at number 1 position, over 100 million connections and 1 EUR billion revenue ...



Centralize the IoT Line of Business and Technology to standardize and scale IoT

Empower OpCos with IoT solutions, technology, partners, and GTM assets to accelerate IoT growth

Establishing an e2e IoT solutions delivery capability

- From 3 to 73 people in 3 years
- E2E agile adoption and scale strategy
- Delivering several e2e IoT solutions
- Reducing TTM by more than 50%

Building a high performing product management function

- IoT solution strategy & vision
- Managing IoT solution portfolio
- Roadmaps, roadshows & plans
- Sales, business & technology operating model

Building ecosystem of partners and solution developers

- Platform partners
- Device partners
- System integration partners
- Solution partners

Addressing communication and engagement gaps

- Building an IoT program steerco methodology
- Setup and execution of IoT steerco
- IoT communication strategy & plan
- Stakeholder engagement plan



Key Learnings from Vodafone's IoT Journey

The crux from the last decade of IoT growth

INVI*X*IBLE

Vodafone IoT | Three key pillars to scale the IoT business ...

Building a future-proof GTM strategy to accelerate IoT growth is necessary for scale

1

GTM Development

Understand the market, deep dive into target verticals, build a use case catalogue, define value propositions and business models

2

Sales Enablement

Establish an enablement program, build pre-sales and sales assets & tools, run trainings, enable co-creation with customers

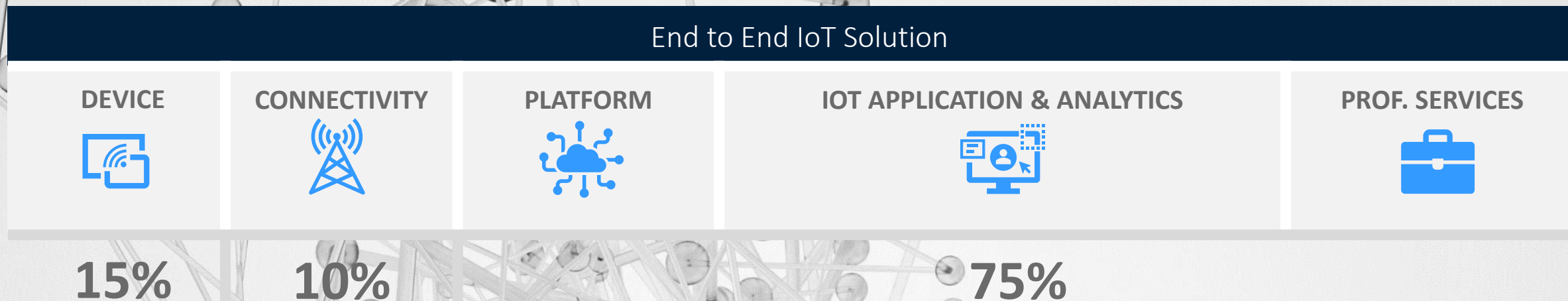
3

Technology Development

Deliver standard & bespoke propositions, build intellectual property, develop scalable & unified architecture, define customer experience

Without strong Sales Enablement, IoT solution sales will very likely fail

Vodafone IoT | Appreciate the complexity of the IoT Value Chain and understand your own IoT GTM model with growth mindset ...



Broadly, there are three approaches that Telcos adopt for IoT GTM

Ecosystem Orchestrator role

Depend upon the broad IoT ecosystem of partners to develop & sell solutions

Vertical Champion role

Develop in-house capabilities to build solutions in targeted verticals

Ecosystem Champion role

Depend upon the IoT ecosystem of partners but also develop in-house capabilities in targeted verticals

Vodafone IoT | Understand your role in IoT and target customer segments

Segment	Typical Customer	Telco Role
Large Enterprises with strong R&D		○ Providers on connectivity only
Large Enterprises with outsourcing model		○ Provider of Bespoke E2E Solutions ○ Consultative approach ○ High value
Small and medium Enterprises	• Tools companies (Tag & Track) • Shop owners (Temperature monitoring) • Hotels & Offices (Smart locks) 	○ Provider of Standard E2E Solution ○ Low touch sale ○ High volume, low cost

Vodafone IoT | For delivering credible end to end IoT solutions, Invested in broad set of skills from devices, application, integration, support to consultancy

