Network **Data Monetization**
Get there **Faster with AI**

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www.sterlitetech.com

Agenda

- Data is the nucleus of Digital

- Data Centric Organizations

- Introducing Intellza

    - Customer's Network Experience and its impact on NPS

    - Spectrum Utilization with Edge Analytics

    - Artificial Intelligence for Perimeter Security and Network Ops

- Recap

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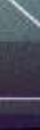- Recap

Data has always been there..
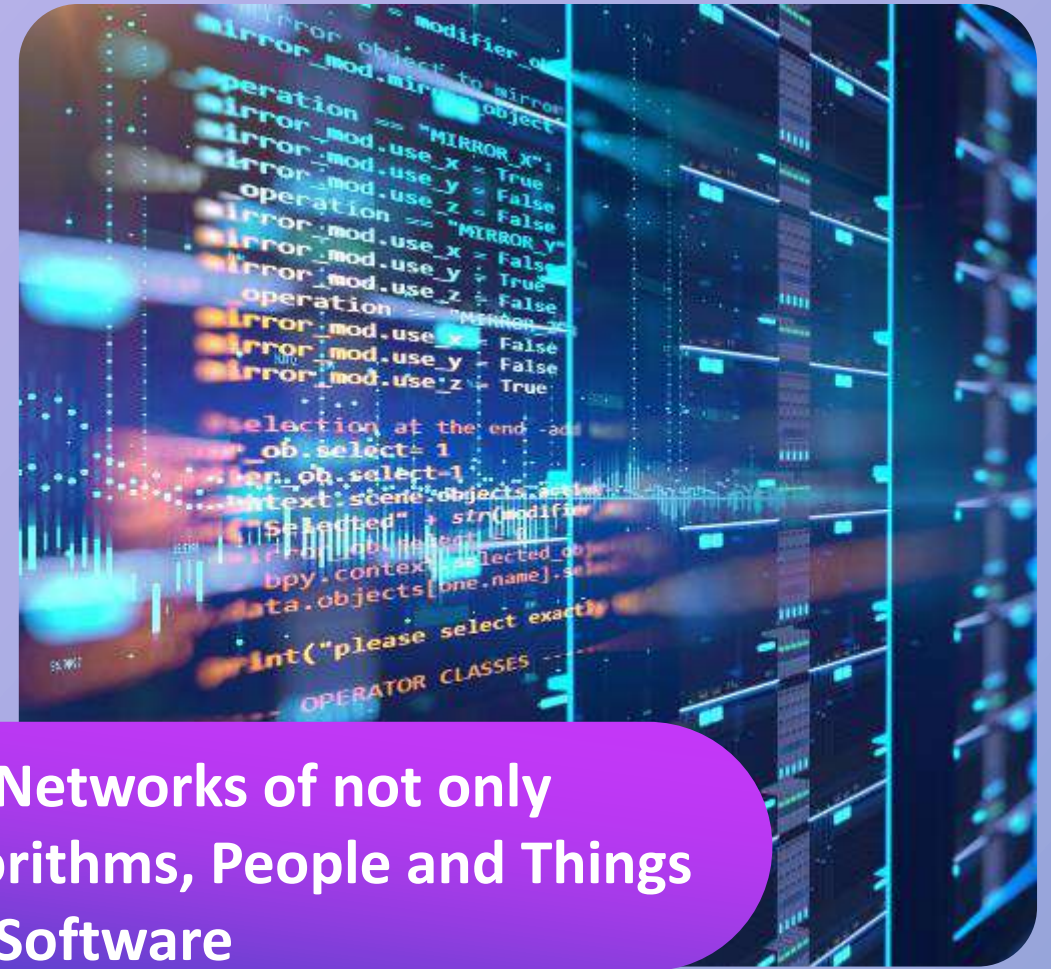
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What has changed is ...
Our Ability to

- **Capture**
- **Process**
- **Analyze**

- **Store**
- **Distribute**
- **Synthesize**
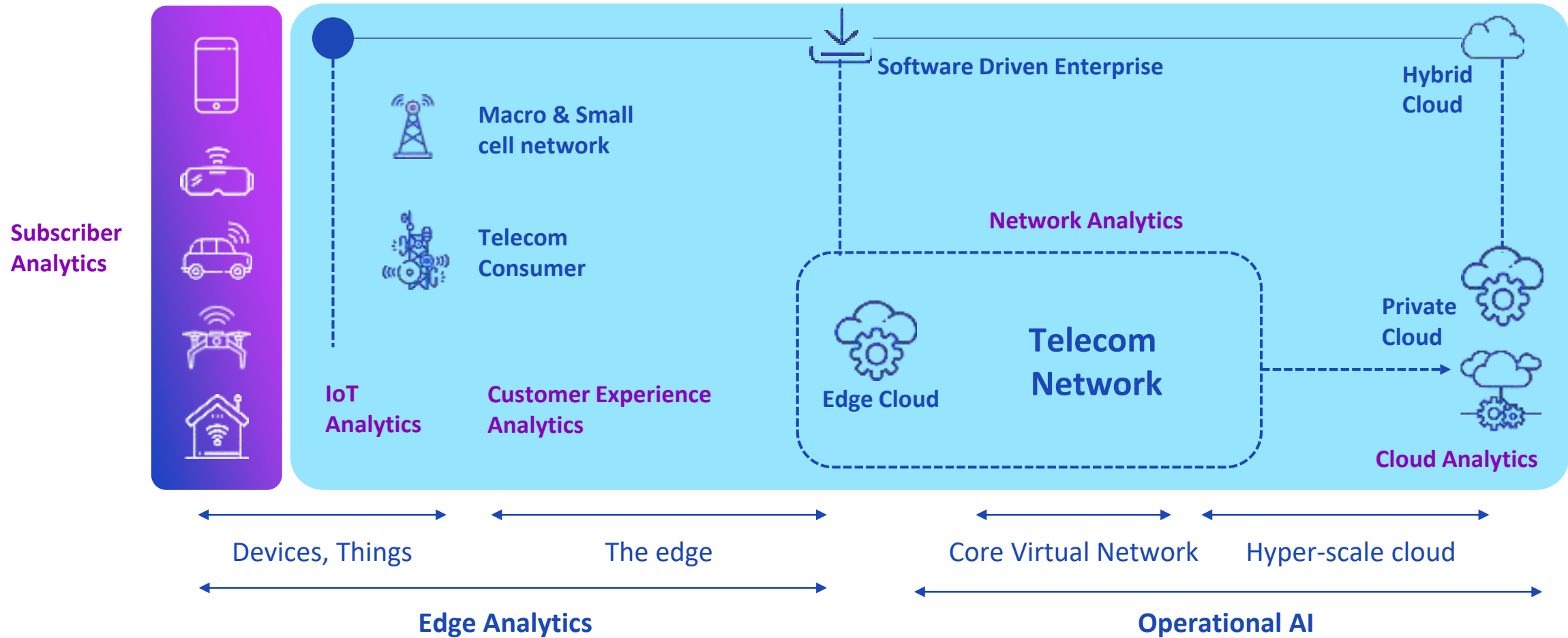
Has Improved Exponentially !

Networks have always been there

They have evolved into Digital Networks of not only Computers but also of Vehicles, Algorithms, People and Things interconnected by Software

And with everywhere analytics an opportunity to monetize them is there too..

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Subscriber Analytics

Software Driven Enterprise

Hybrid Cloud

Macro & Small cell network

Telecom Consumer

Network Analytics

Private Cloud

IoT Analytics

Customer Experience Analytics

Edge Cloud

Telecom Network

Cloud Analytics

Devices, Things | The edge | Core Virtual Network | Hyper-scale cloud

Edge Analytics

Operational AI

And now is the perfect time as Data storm is brewing...

Virtualized Networks

Data Platforms

Edge Computing

Real Time Streaming

Audience question poll 1

Which is the greatest challenge to network data monetization in your organization?

- Lack of industry vertical expertise outside of telecom

- Uncertain RoI of data analytics projects

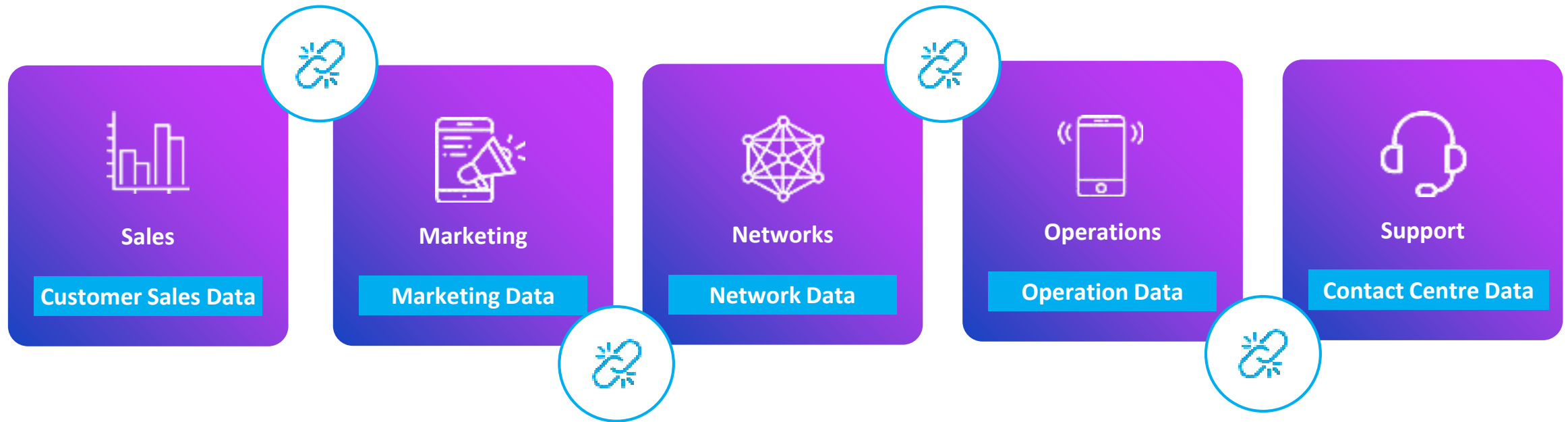- Lack of internal data analytics expertise

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Today most of the Telco are organized around functions..

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Sales
Customer Sales Data

Marketing
Marketing Data

Networks
Network Data

Operations
Operation Data

Support
Contact Centre Data

Departmental, Functional Alignment results in Data Silos

Now, The need of the hour is to move to a DATA Centric ORG

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Relevant Insights for Various Functions

Marketing   Sales   Networks   Operations   Support/Care

Common Data Platform

Data Ingestion from Various network elements

Social Networking

Real Time Gaming

Autonomous Driving

3D Printing

Personal Cloud

Video Streaming

Virtual Reality Augmented Reality

Data centric organizations are towards..

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~23X
More customers Acquisition

~6X
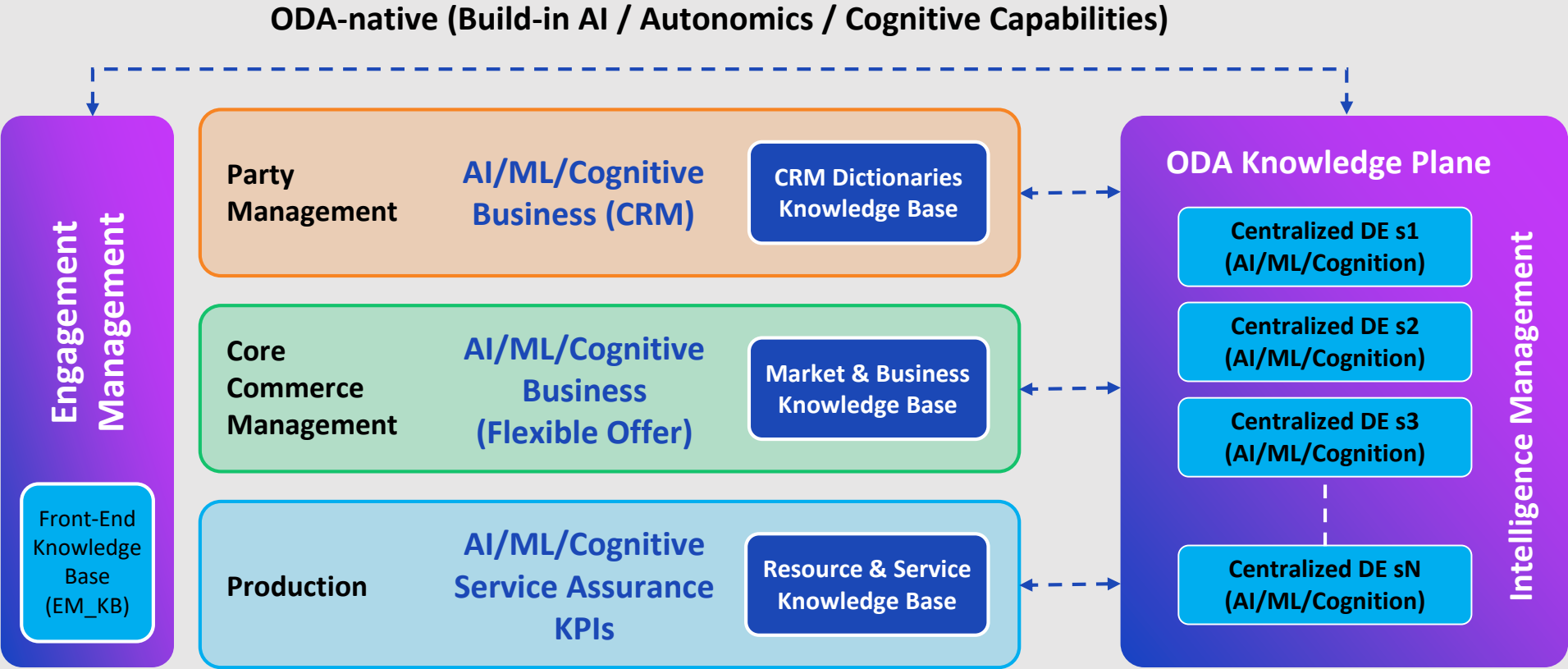likely to retain customers

~19X
likely to be profitable

IDC predicts that **31.5% of the telecommunication organizations are mainly focusing on utilizing current infrastructure** and **63.5% are committing investments on AI systems**.

Source: Mckinsey report
IDC report

Telcos are reinventing using AI across O/BSS Systems to become data centric

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ODA-native (Build-in AI / Autonomics / Cognitive Capabilities)

Engagement Management

Front-End Knowledge Base (EM_KB)

| Party Management | AI/ML/Cognitive Business (CRM) | CRM Dictionaries Knowledge Base |

| Core Commerce Management | AI/ML/Cognitive Business (Flexible Offer) | Market & Business Knowledge Base |

| Production | AI/ML/Cognitive Service Assurance KPIs | Resource & Service Knowledge Base |

ODA Knowledge Plane

Centralized DE s1 (AI/ML/Cognition)

Centralized DE s2 (AI/ML/Cognition)

Centralized DE s3 (AI/ML/Cognition)

Centralized DE sN (AI/ML/Cognition)

Intelligence Management

Data is the common fabric that enables all the functions and is the Real World Vibranium

TM Forum Open Digital Architecture

Data and Analytics delivering Value to the Business

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- Volatility
- Velocity
- Volume
- Validity
- Variety

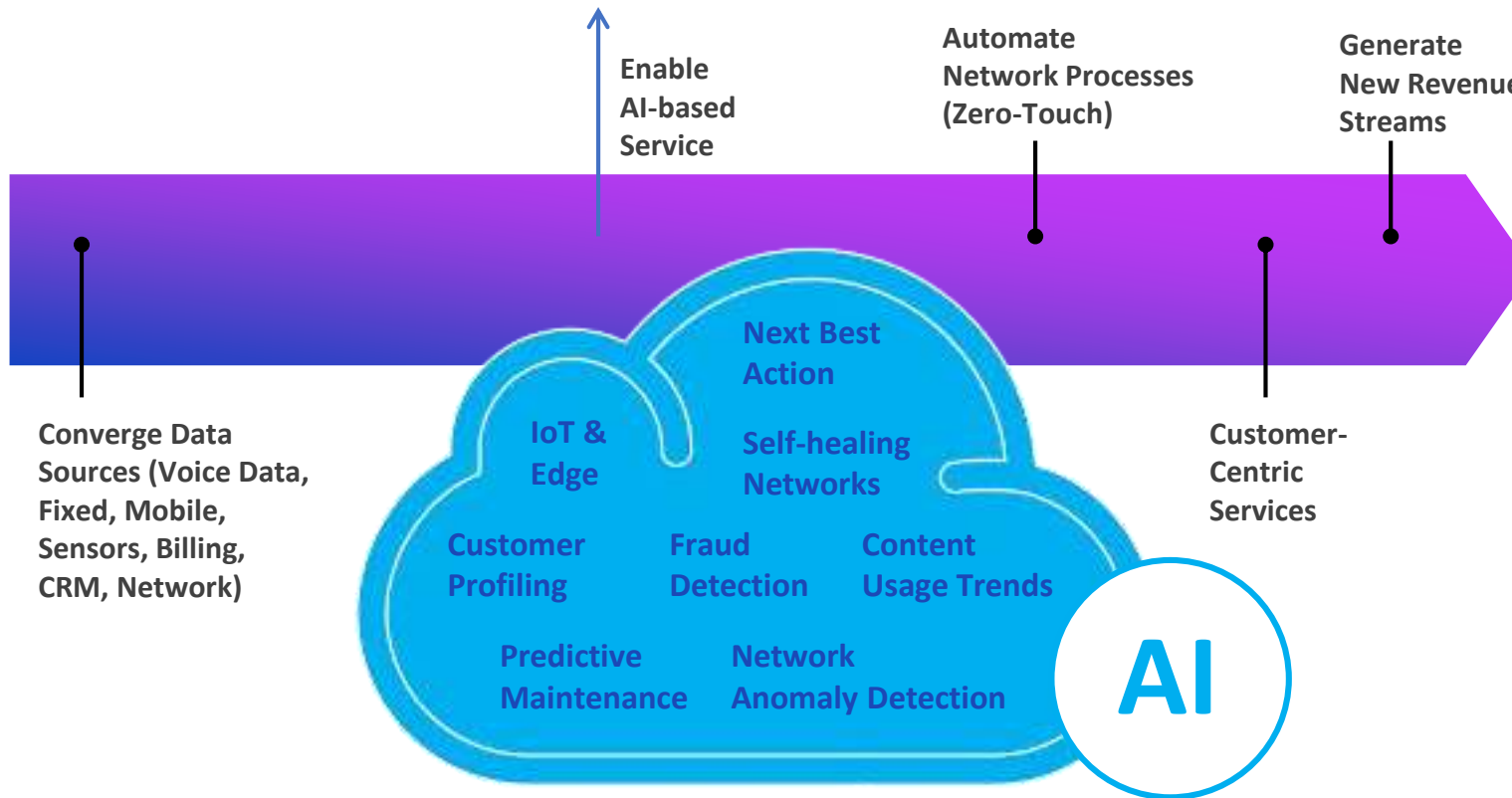Customer Analytics

Personalized Offerings

Network optimization

Data Forecasting

Actionable Business Insights (Value)

And how with AI we could derive value faster

Towards a subscriber-centric paradigm

Enable
AI-based
Service

Automate
Network Processes
(Zero-Touch)

Generate
New Revenue
Streams

Converge Data
Sources (Voice Data,
Fixed, Mobile,
Sensors, Billing,
CRM, Network)

Next Best
Action

IoT &
Edge

Self-healing
Networks

Customer
Profiling

Fraud
Detection

Content
Usage Trends

Predictive
Maintenance

Network
Anomaly Detection

Customer-
Centric
Services

AI

- Complex decisions based on detecting a large number of hidden or hierarchical influencers
- Self-learning
- Self-healing
- Autonomous decision making
- Delivering an enhanced CX

Audience question poll 2

Which analytics use case do you see as most attractive in the networking domain?

1. Customer Experience
2. Operations and Support
3. Network Optimization
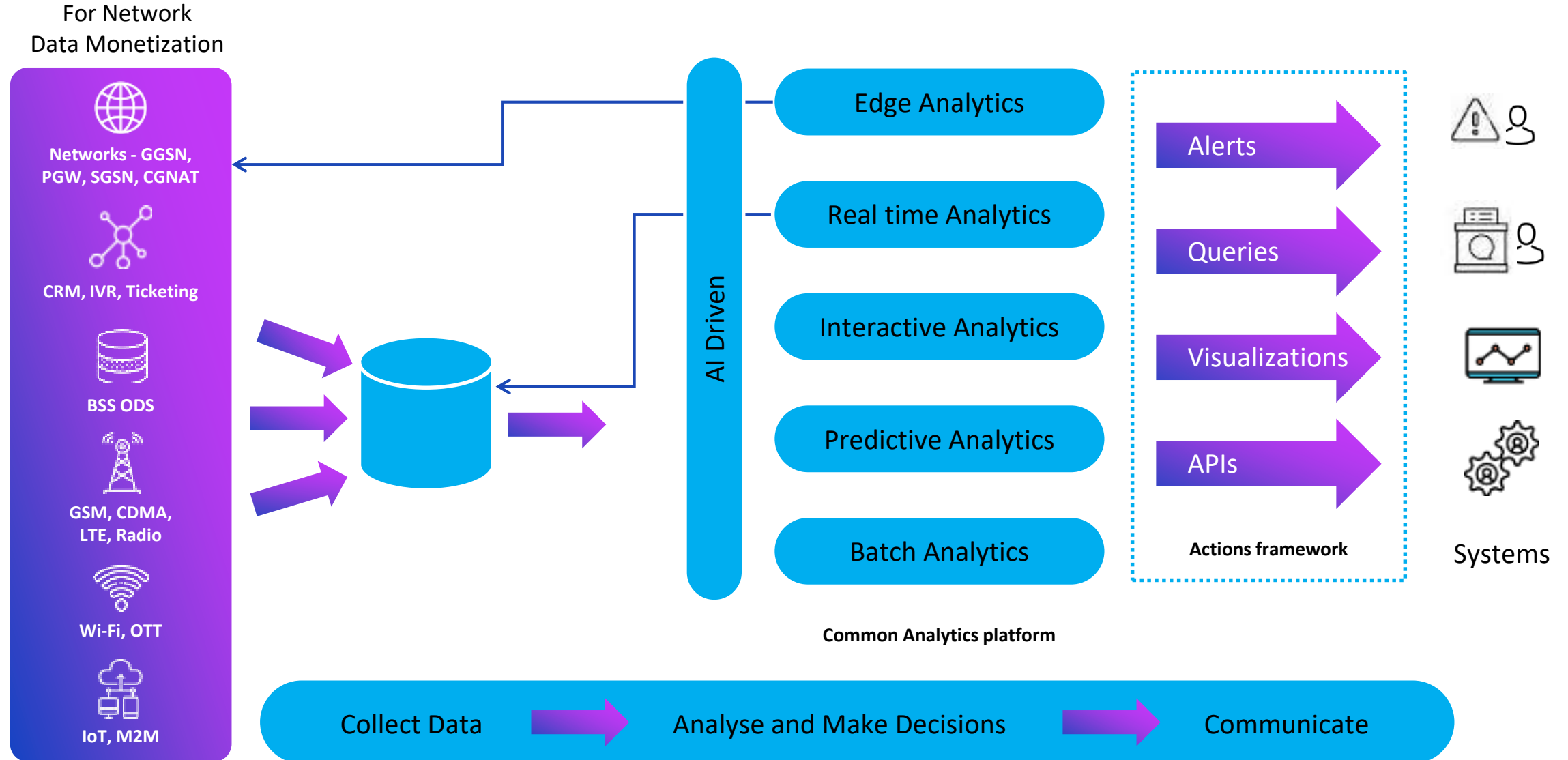4. All of the Above
5. None of the Above / Other

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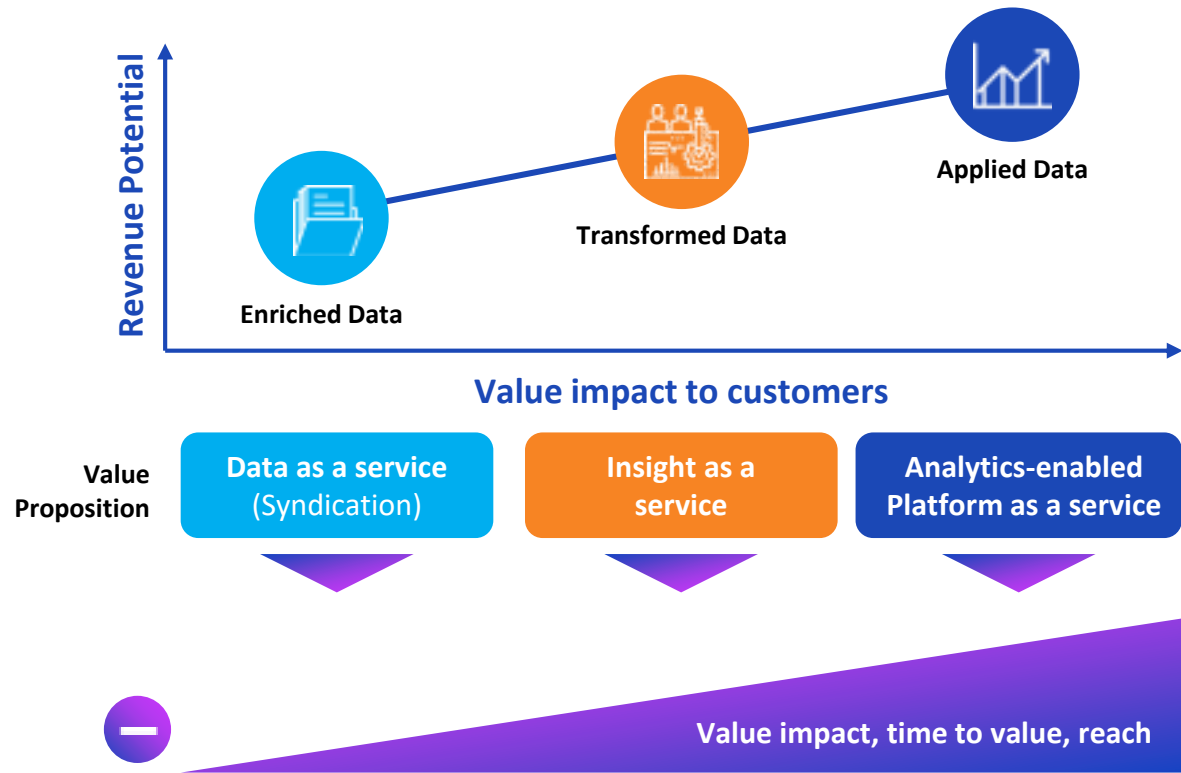- Recap

AI Driven Data Intelligence Platform ~ Intellza

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For Network Data Monetization

- Networks - GGSN, PGW, SGSN, CGNAT
- CRM, IVR, Ticketing
- BSS ODS
- GSM, CDMA, LTE, Radio
- Wi-Fi, OTT
- IoT, M2M

AI Driven

- Edge Analytics
- Real time Analytics
- Interactive Analytics
- Predictive Analytics
- Batch Analytics

Common Analytics platform

Actions framework
- Alerts
- Queries
- Visualizations
- APIs

Systems

Collect Data → Analyse and Make Decisions → Communicate

AI driven Network Data Platform

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Sterlite Intellza

Revenue Potential

- Applied Data
- Transformed Data
- Enriched Data

Value impact to customers

Value Proposition

| Data as a service (Syndication) | Insight as a service | Analytics-enabled Platform as a service |

Value impact, time to value, reach

Common Network Data Platform to enable

- Customer Experience
- Network Experience
- Predictive Capacity
- Fibre Optic Network Fence

Audience question poll 3

Where are you applying AI today?

1. Customer Experience
2. Customer Support
3. Billing and Operations
4. All of the Above
5. None of the Above

Intellza in Action
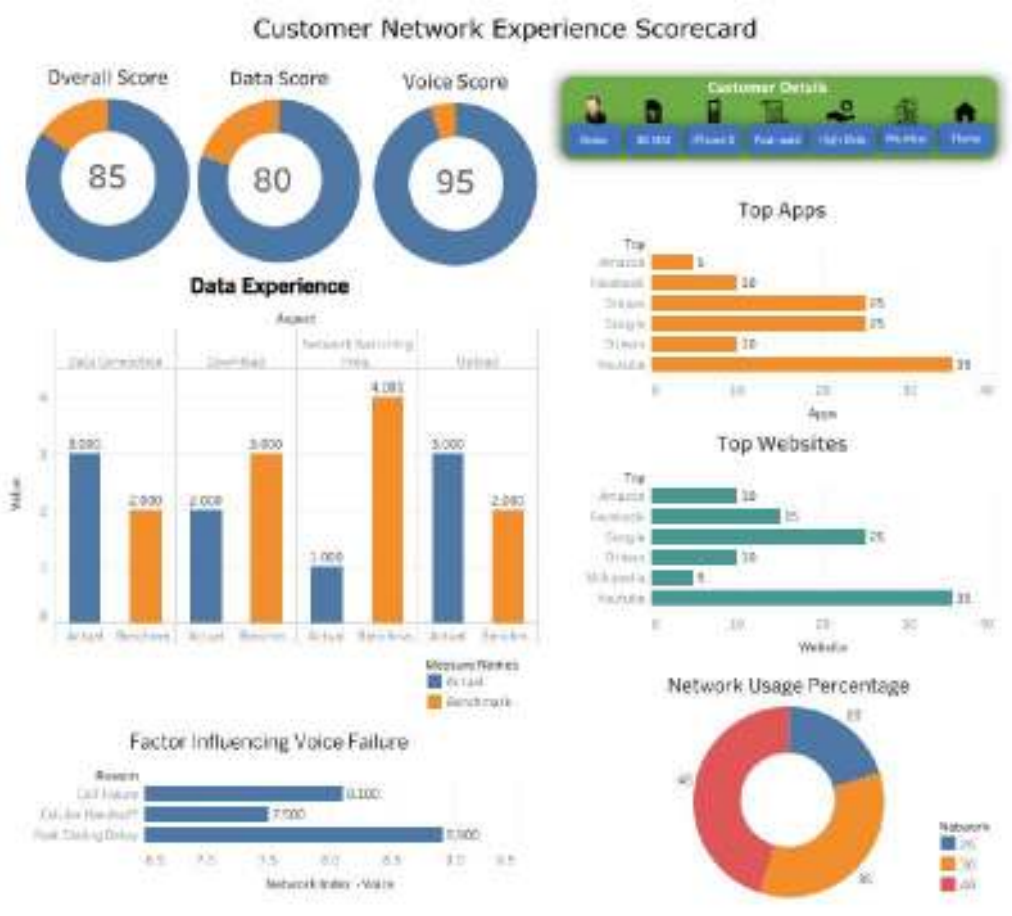
User App for Network Experience

Supervised Learning

Network Optimization Algorithms

Improved Customer Experience

Network Customer Experience Scorecard
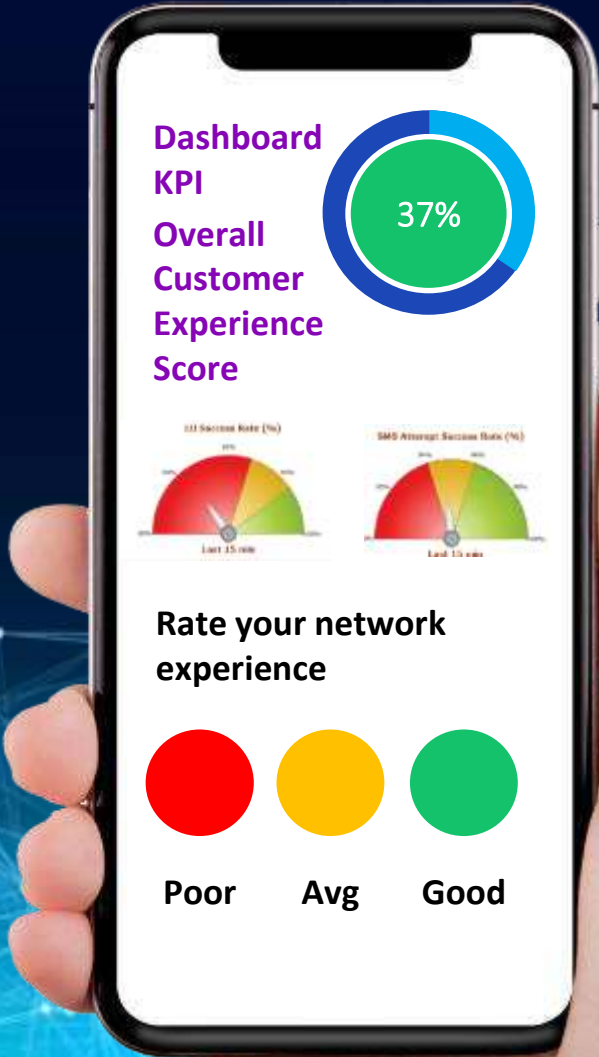
Intellza Use Case 3
Online Journey Analytics
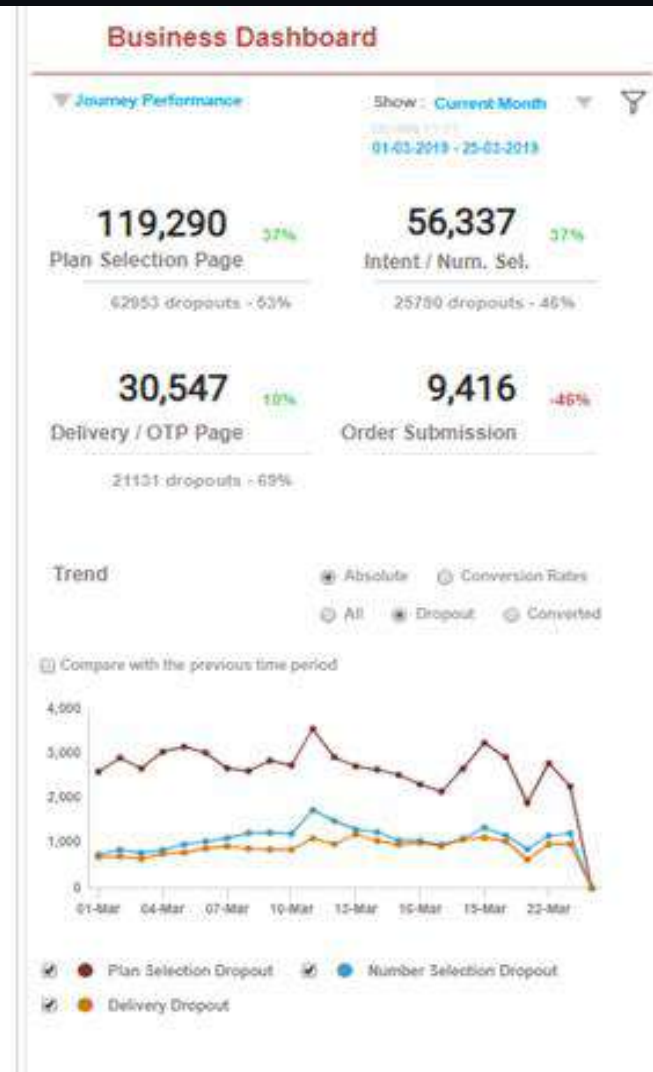
Increase in lead to conversion ratio and ARPU

Optimize and personalize the customer's path to purchase

Agile and at scale Deployment and adoption of new customer journeys

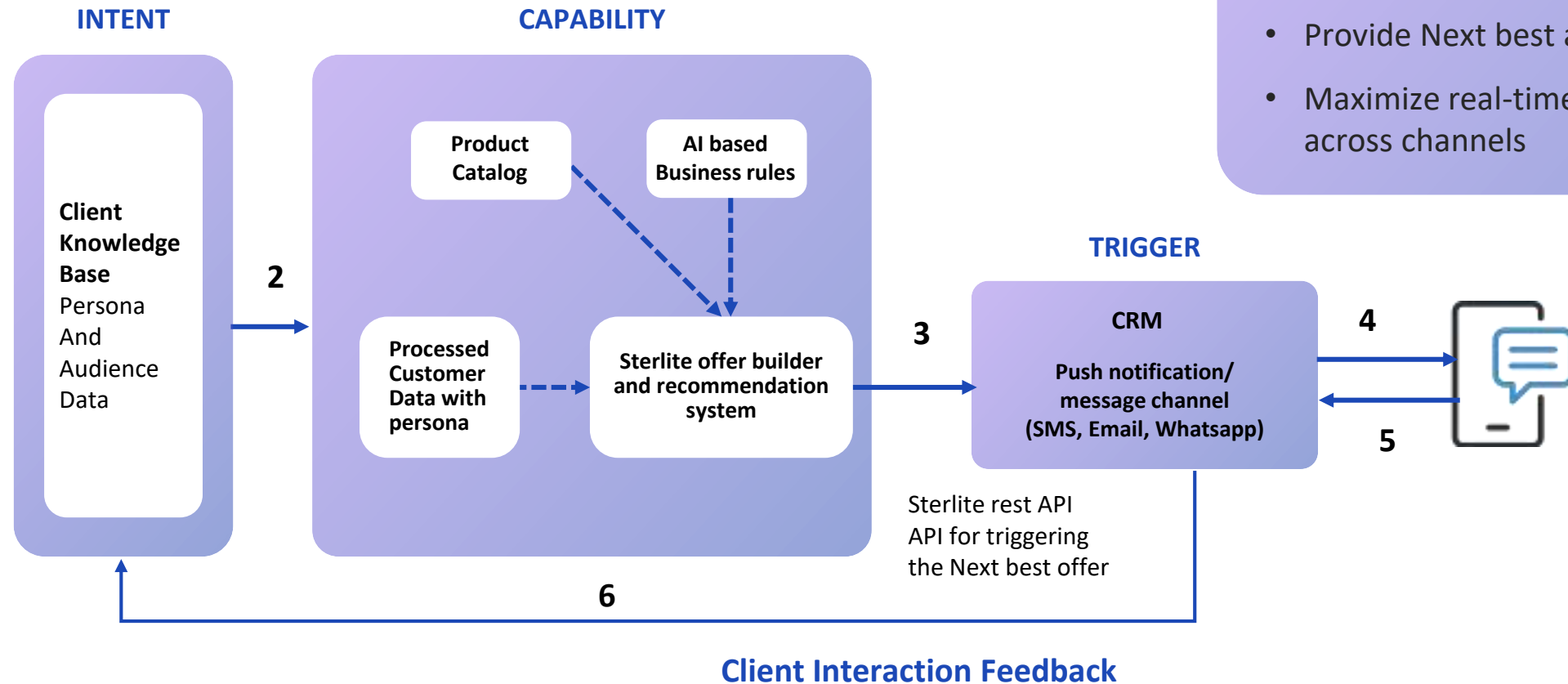**Self-service Customer experience aligned to preferences and behaviour**

Online Journey Analytics Dashboard

Intellza Usecase 4
AI driven Next Best Engagement

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Sterlite AI System - Intellza

- Multidimensional data view for successful personalization strategies
- Provide Next best actions
- Maximize real-time engagement across channels

INTENT

CAPABILITY

Client Knowledge Base Persona And Audience Data

2

Product Catalog

AI based Business rules

Processed Customer Data with persona

Sterlite offer builder and recommendation system

3

TRIGGER

CRM

Push notification/ message channel (SMS, Email, Whatsapp)

4

5

Sterlite rest API
API for triggering the Next best offer

6

Client Interaction Feedback

ANOMALY DETECTION

PATTERN RECOGNITION

How AI enabled alarm in real time ?

MACHINE LEARNING
ANOMALY DETECTION

DEEP LEARNING
PATTERN RECOGNITION

Summing it Up..

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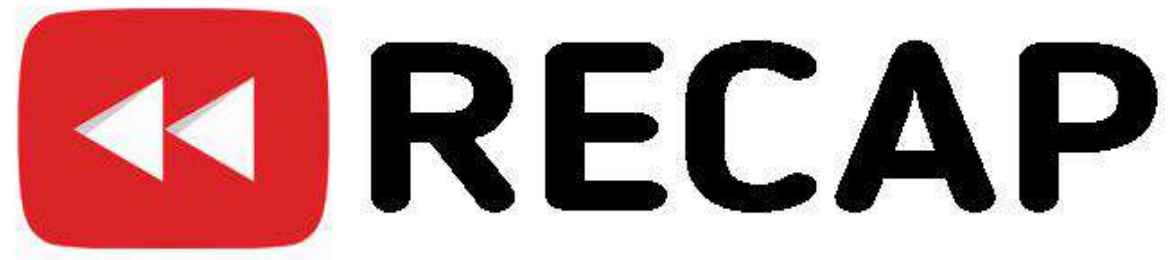
- Data is everywhere and the same Data can give functional insights to business functions to make better decisions

- With help of AI and being Data driven, Telcos will be in the league of Software Platform Companies

- Artificial Intelligence leads to various new revenue streams and cost reductions

- Intellza Platform from Sterlite helps Telcos to take advantage of the Data Monetization Opportunity

Please send in your questions and comments on Twitter/ LinkedIn

STL | beyond tomorrow

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