tanla

wisely

The Intelligent Cloud Platform for Trusted Customer Experiences

tanla
karix
connect • interact
GAMOOGA
wisely
TRUBLOQ

Tanla at a glance

Our mission is to transform how businesses engage with their customers.

1999

Tanla was founded. Sustained excellence of 21 years in telecom, managed by seasoned industry executives

1st First

Company to develop and deploy A2P SMSC in India. Got listed on BSE and NSC in the year 2007

800 Bn

Interactions processed annually. Tanla touches over a billion lives carrying mission critical messages for enterprises globally.

~550

World class engineers, developers, sales, and process champions with expertise in communication services

₹1943 Cr

In revenues generated in financial year 2020 and ₹654 Cr in Q3-FY'21

We are the choice for leaders across industries

9/10 Banking

- HDFC BANK
- भारतीय स्टेट बैंक State Bank of India हर भारतीय का बैंक THE BANKER TO EVERY INDIAN
- ICICI Bank
- AXIS BANK
- kotak
- Union Bank of India
- punjab national bank ...the name you can BANK upon!
- IndusInd Bank
- Canara Bank
- बैंक ऑफ़ बड़ौदा Bank of Baroda

7/10 Insurance

- BAJAJ Allianz
- ICICI PRUDENTIAL LIFE INSURANCE
- ICICI Lombard GENERAL INSURANCE
- SBI Life INSURANCE With Us, You're Sure
- HDFC Life Sar utha ke jiyo!
- TATA AIG INSURANCE WITH YOU ALWAYS
- IFFCO-TOKIO GENERAL INSURANC
- Oriental insurance (A Govt. of India Undertaking)
- LIC भारतीय जीवन बीमा निगम LIFE INSURANCE CORPORATION OF INDIA

8/10 Financial Services

- paytm
- HDFC securities
- PayU
- PhonePe
- sbicap securities A Tradition of Trust
- freecharge
- policybazaar.com Compare. Buy. Save.
- mswipe
- KARVY STOCK BROKING
- MobiKwik

We are the choice for leaders across industries

9/10 E-commerce

amazon
Flipkart
firstcry.com
NYKAA
snapdeal
bookmyshow
Myntra
SWIGGY
JioMart
bigbasket

7/10 Retail

Shoppers Stop
START SOMETHING NEW
FUTURE RETAIL
Reliance RETAIL
LANDMARK GROUP
ADITYA BIRLA FASHION & RETAIL
V MART
croma
in-store | online | mobile
DMart
TRENT LIMITED
vijay sales

7/10 Social Media

facebook
Google
in
tinder
TikTok
YouTube

6/6 Telecom

airtel
VI
etisalat
BSNL
du
Jio

Overview

Defining CPaaS

Communications Platform as a Service (CPaaS) offers APIs that simplify the integration of communications capabilities (for example, voice, messaging and video) into any app, service or business process. (Gartner)

CPaaS helps businesses take an omnichannel approach to their communications

Use CPaaS for messages such as appointment confirmations and reminders, order confirmations, and delivery tracking.

Add a layer of security for your customers with CPaaS by enabling two-factor authentication, OTPs, secure mobile payment information.

Communicate privately with customers and securely share sensitive information like credit card delivery notification, policy renewals, claim updates.

The era of CPaaS

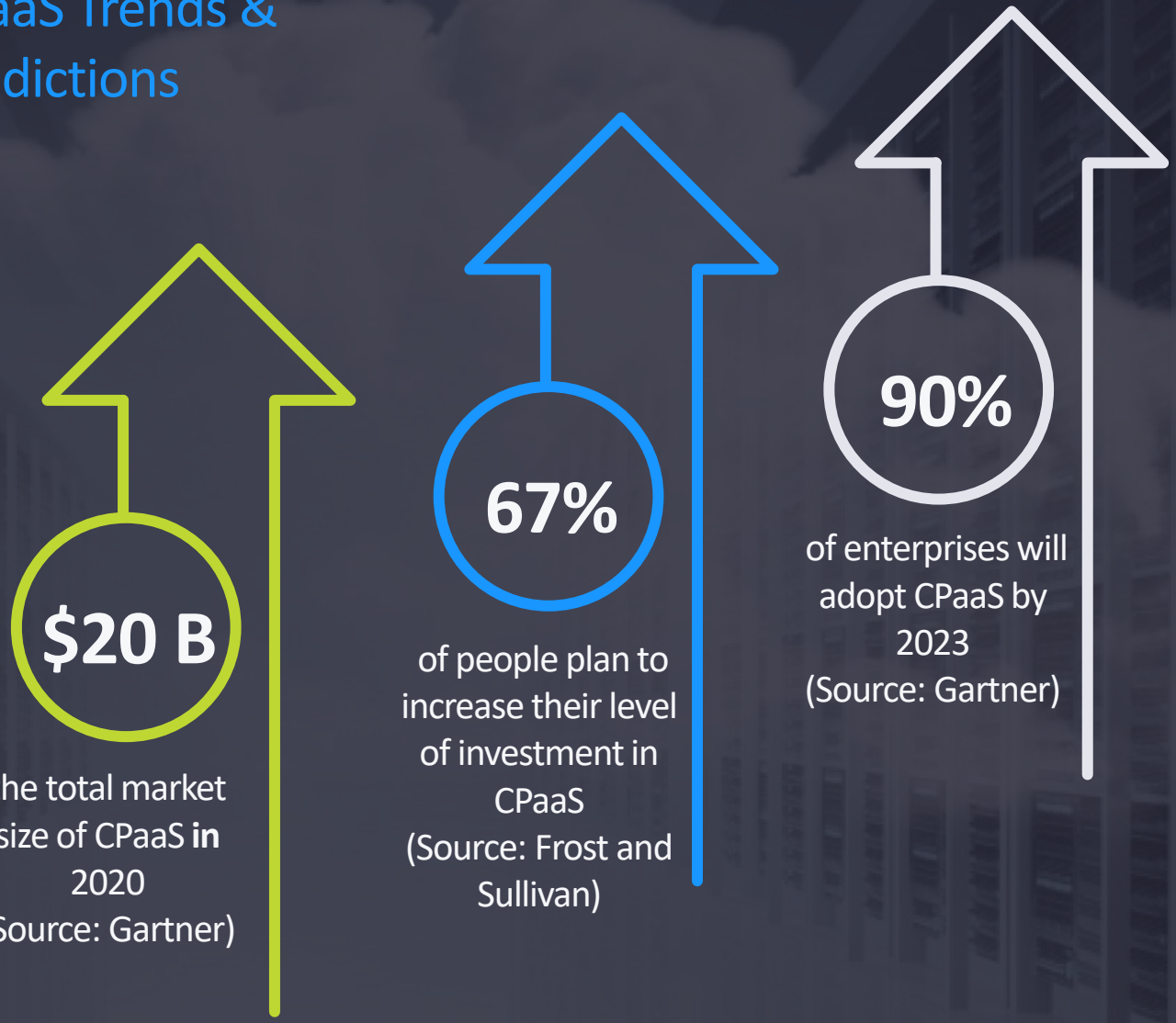
More than 65% of marketers think SMS is an effective tool when compared to other modes of outreach.

The CPaaS market has been growing in the ~33% range when factoring in global expansion, new CPaaS entrants, emerging communications modules and accelerated user adoption.

Globally more than 1 trillion messages are being sent by businesses to their customers every month

Source: Gartner

CPaaS Trends & Predictions



The era of flux and transformation

Challenges with the existing ecosystem

Data Security

The lack of strong data security controls and protocols allow man-in-the-middle attacks from fraudsters

Data Privacy

Data breaches are common even at the largest enterprises, resulting in loss of revenue and brand reputation

Counterfeits

Regulatory non-compliance and leakage of revenue due to counterfeiting and grey routes

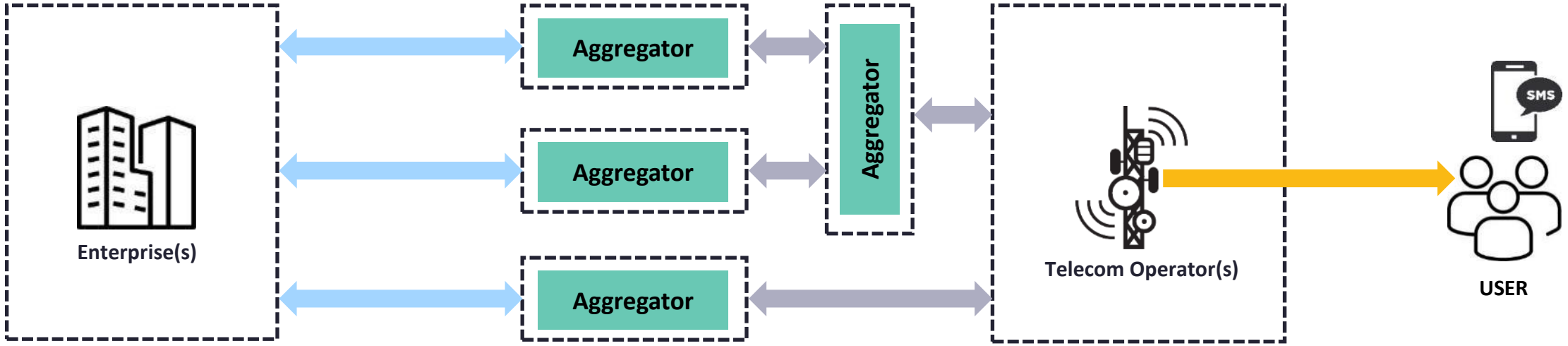
Intermediaries

Multiple levels of intermediaries between the enterprises and telcos lead to poor quality of service and hamper customer experience

Reconciliations

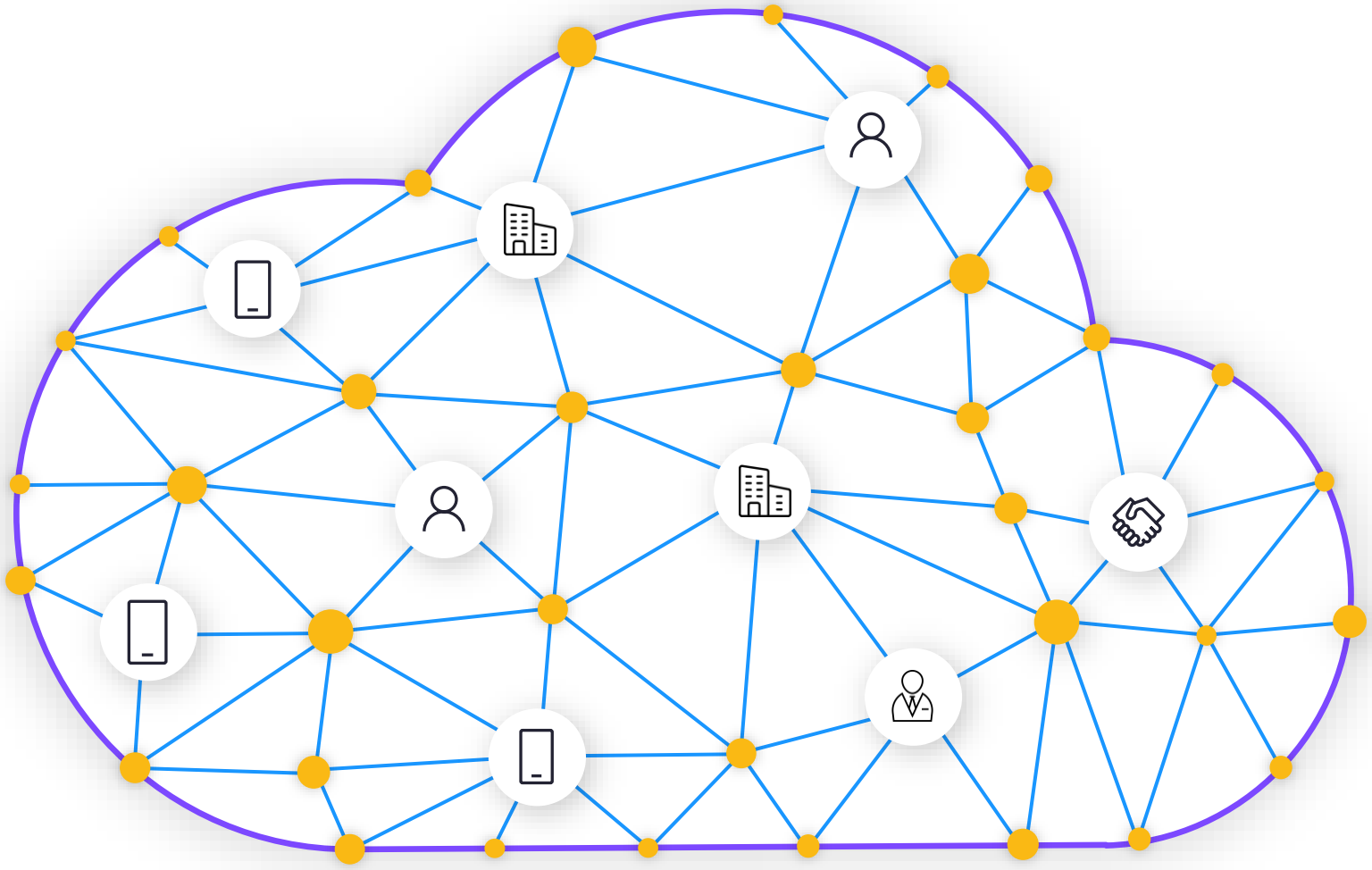
Data silos and manual processes give rise to billing disputes and lengthen reconciliation cycles

Challenges in the current message flow



- Lack of data privacy and security
- No delivery assurance
- Absence of trustworthy ecosystem
- Grey routes and other fraudulent activities
- Limited reach and fixed pricing

Telcos, **enterprises,** and **service providers** are scattered in the current landscape



Wisely—The intelligent cloud platform for trusted customer experiences

Our Solution

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The world's first blockchain-enabled Communications Platform as a Service (or CPaaS), offering a unique marketplace for businesses and suppliers, with a global edge-to-edge network delivering private, secure, and trusted experiences

Secured

- E2E message encryption
- No intermediaries
- Cryptographic Algorithms
- Privacy by design

Transparent

- End to end auditability
- Single Source of Truth
- Verified, Zero disputes
- No Counterfeits

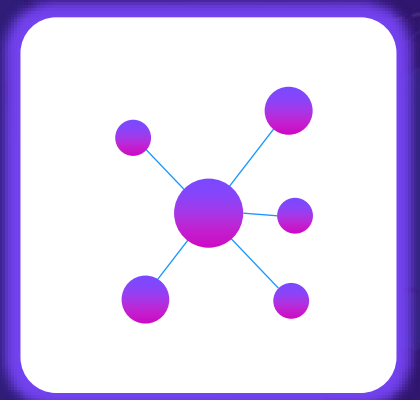
Intelligent

- Rapid deployment, onboarding, and quicker time to value
- Best in class data insights
- AI-ML Analytics

Adaptable

- “As-a-Service” Model
- Cloud agnostic
- Highly scalable
- High availability & redundancy

An edge-to-edge network and a global marketplace



wisely

Network

Marketplace

wisely Network

The Wisely Network comes integrated with global service providers for omnichannel communication – including SMS, email, voice, RCS, OTT apps, and push notifications – that can be accessed using a single API.

With Wisely Network:

- Communications are no longer transmitted in clear text: users' personal data stays personal.
- Users' personal data is not vulnerable, ensuring protection from fraud.
- Unsolicited communication is never delivered, meaning freedom from spam.
- All communications are received and on-time; be confident that no communication will be dropped or delayed.

Marketplace

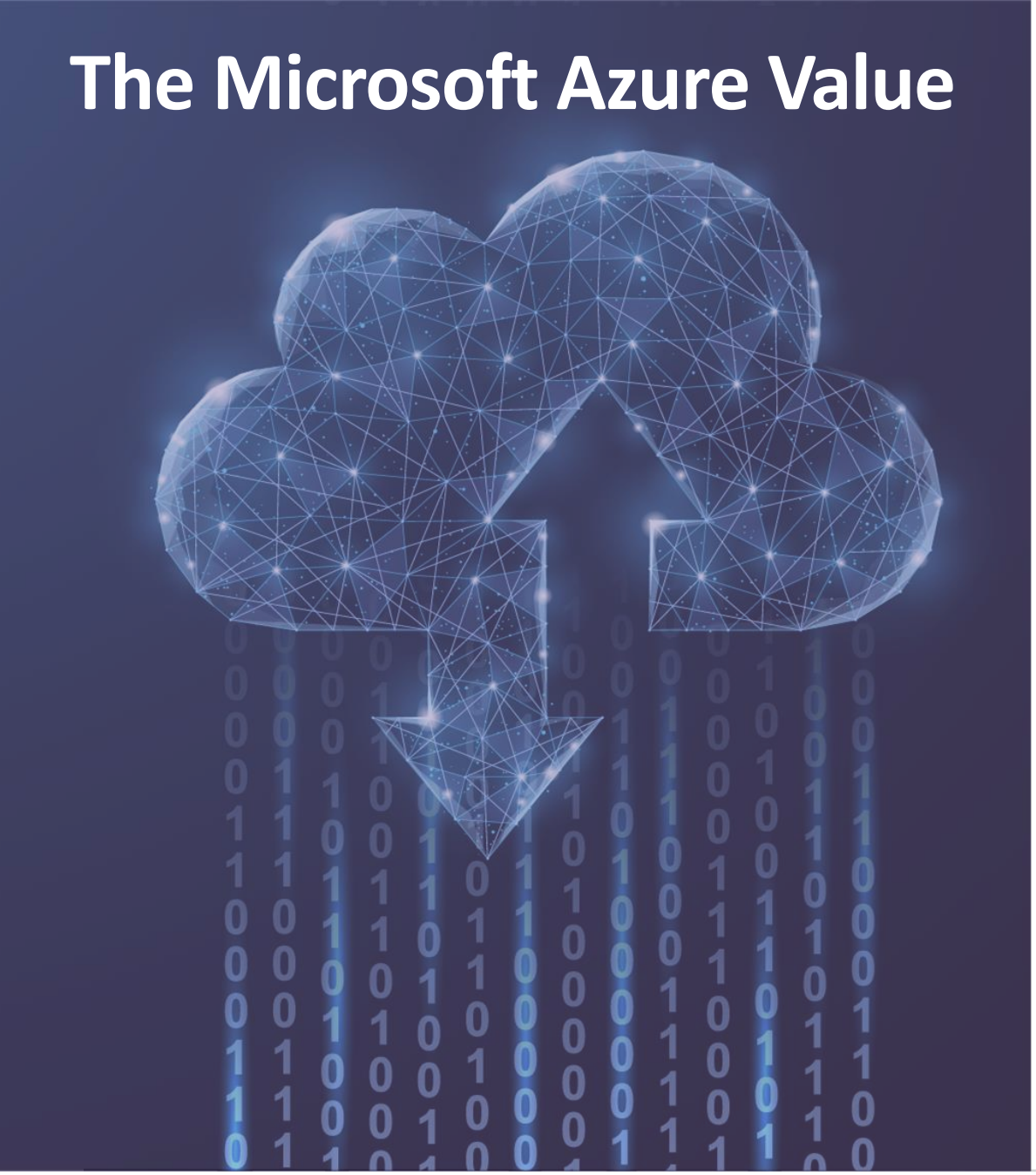
A modern digital platform for commerce where businesses can discover & collaborate with global suppliers for their evolving communication requirements.

The Wisely Marketplace:

- With verified buyers and sellers creates an ecosystem of trust.
- Uses blockchain to generate zero dispute settlement reports
- Empowers suppliers by providing access to global enterprises and bringing increased business predictability and sustainability

wisely | Jointly developed and marketed by

The Microsoft Azure Value



Azure

An open, flexible cloud platform that enables you to build, deploy and manage apps across a global network of Microsoft-managed datacenters.

The Azure approach to trust is based on the following foundational principles

- Security
- Privacy
- Compliance
- Resiliency
- Intellectual Property (IP) Protection

Functional and technical aspects

Platform functional overview

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Enterprise Edge Node

Key Vault

Security

Campaign Manager

SMPP HTTP ODBC FTP

Interfaces

Blockchain

Application

Smart Routing | Communication Gateway | Recon & Settlement | Real-time analytics | CDR | Access management | Account Management | Provisioning | O&M

Core Services

Routing Engine | Intelligent TPS Management | Revocation DB | Long Message | MNP | DAI | AI/ML

Blockchain

Ledgers | Chain Codes | Audit Trails | Immutability

Security

E2E Encryption | Key Vault | Active Directory | ACLs & Roles | 2-Factor Authentication | JWKS

Telco Edge Node

Key Vault

Security

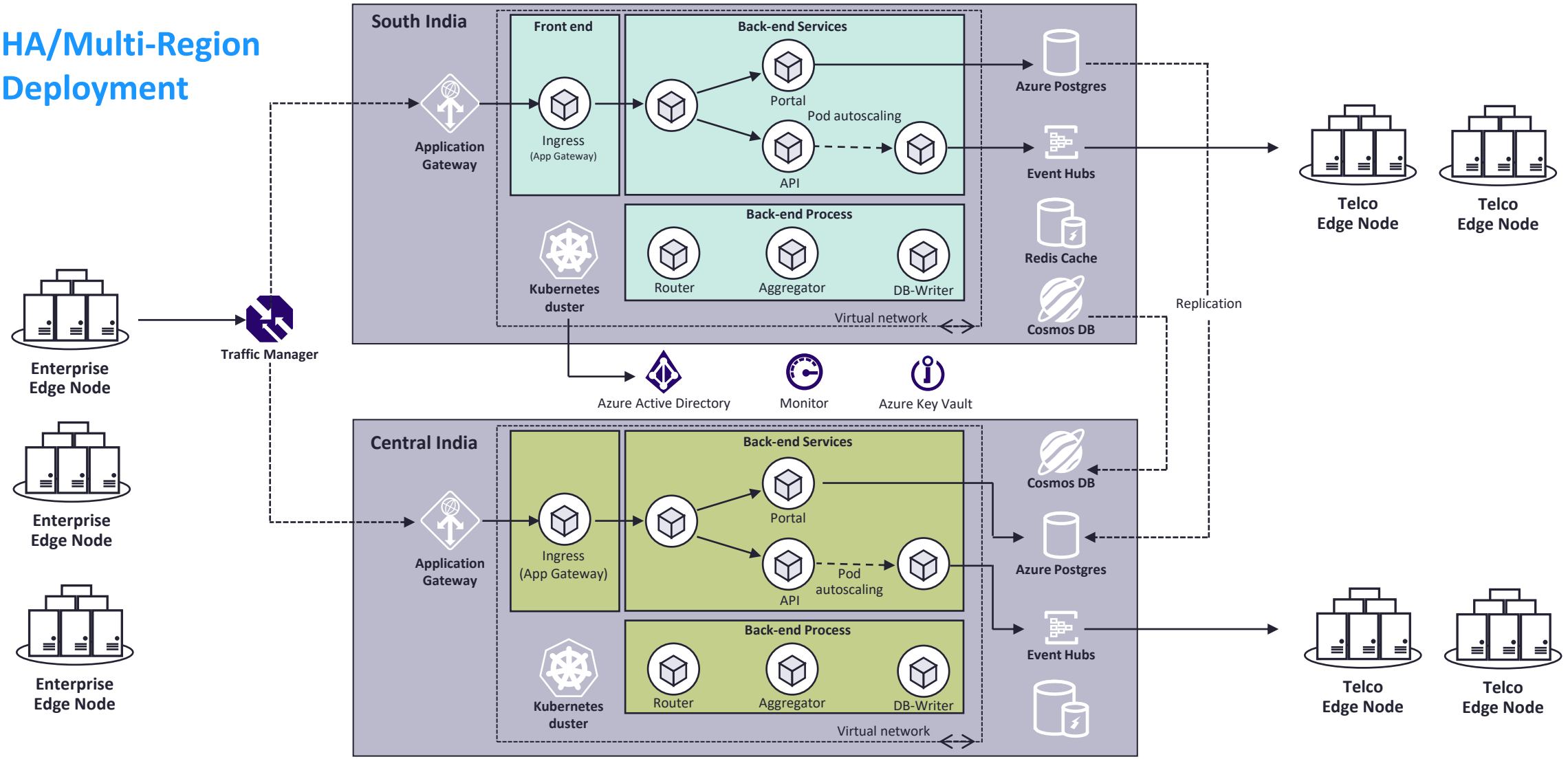
SMPP

Interfaces

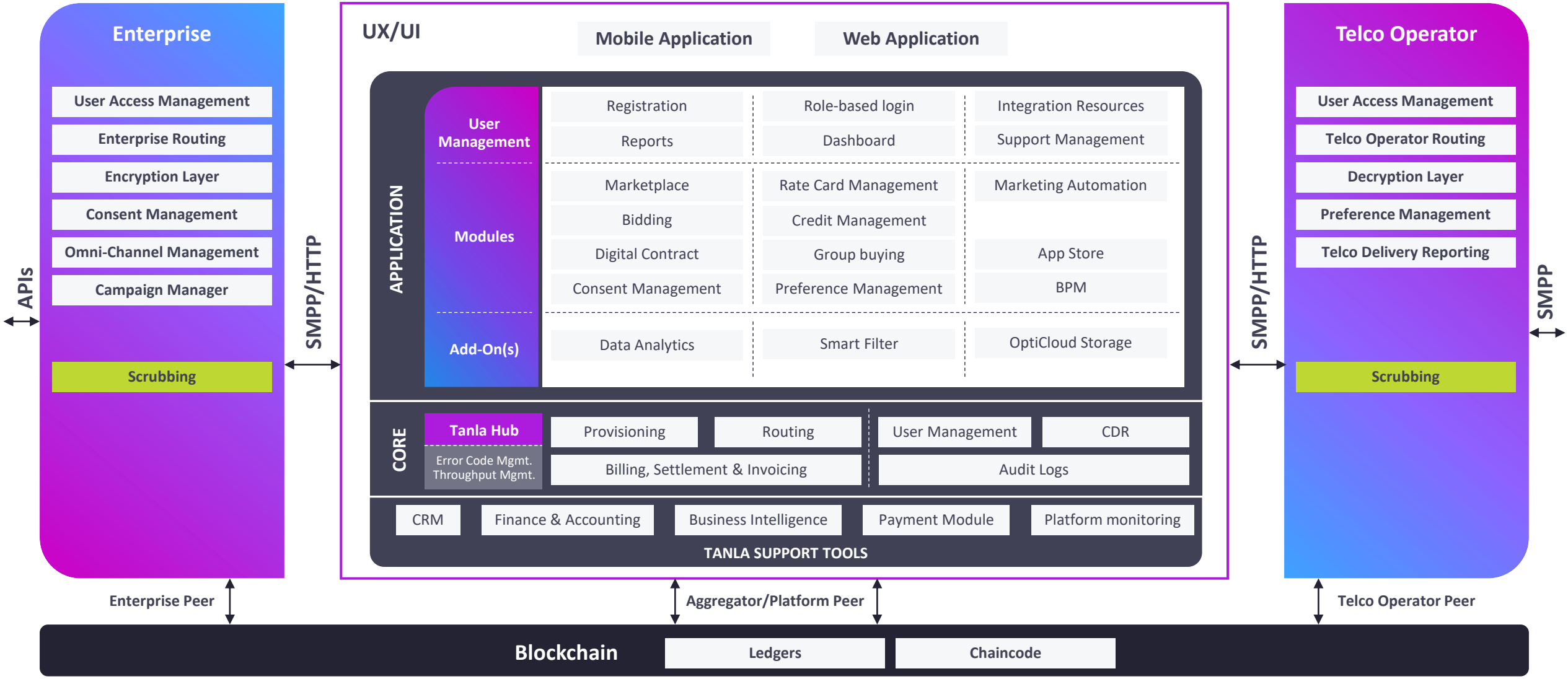
Blockchain

Technical architecture

HA/Multi-Region Deployment

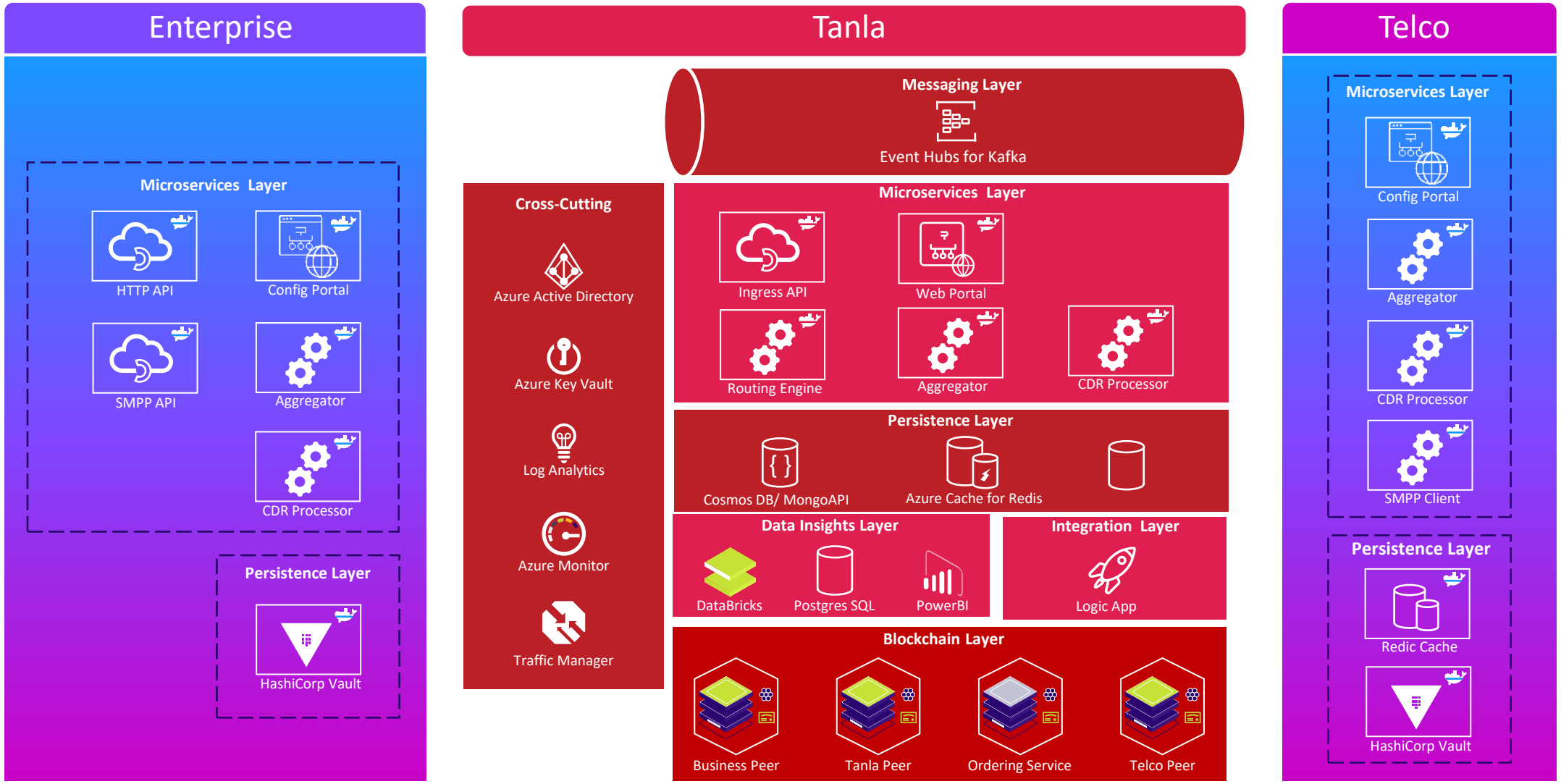


How is it built

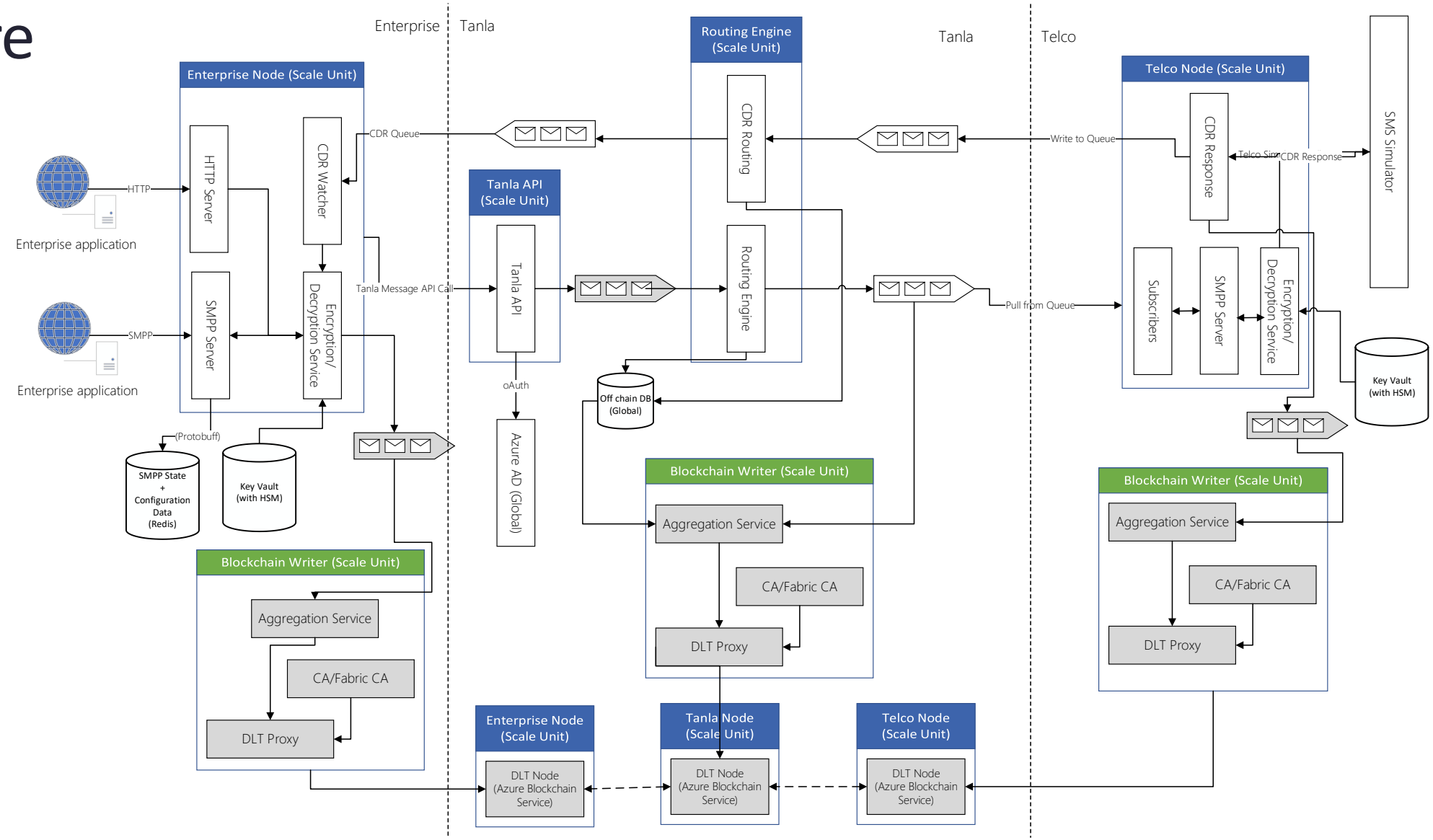


The Tech Stack - layers and components

All microservices developed in Go Lang



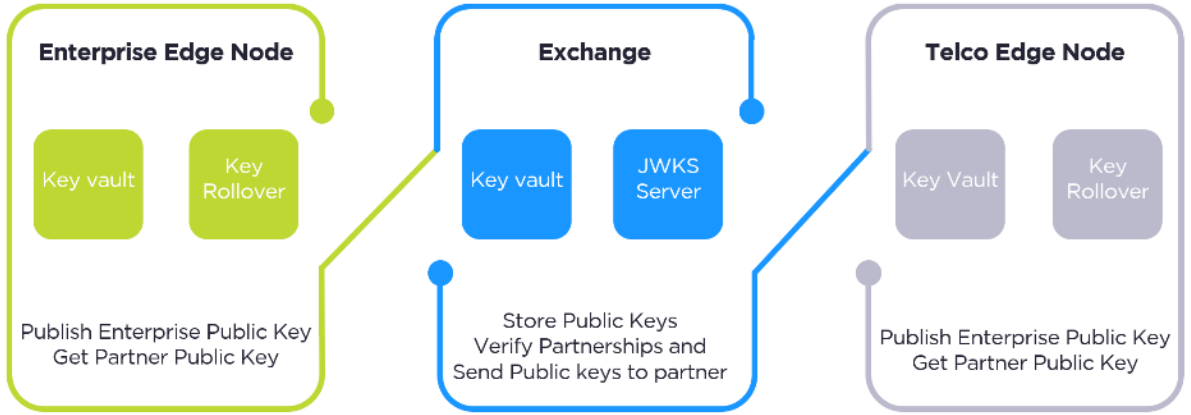
Architecture diagram



Edge Node

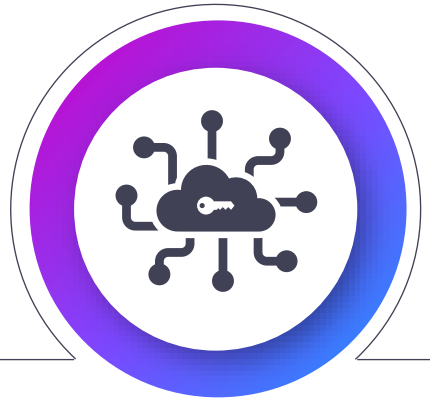
The Encryption Process

- Enterprise edge node and telco edge node shares public keys to the Exchange. The Exchange then sends the partner public keys to the corresponding edge nodes for encryption.
- All messages from Enterprise edge node are encrypted and decrypted at the telco Edge node.
- The encryption happens on asymmetric public and private key pairs that rollover based on time configured
- The key length is AES 128 with RSA 2048 encryption technique
- The data at rest does not include message content however meta data is stored, therefore ensuring highest level of privacy of information.
- The encryption method also factors forward and future secrecy since the keys are rotational.



Benefits

Secured with end-to-end encryption



End-to-end encryption

The platform provides fully managed end-to-end secured network with state-of-the-art encryption powered by patented cryptographic algorithms to prevent fraud.

Data privacy

Privacy is built into the core architecture and functionality. Platform ensures data privacy by allowing direct connectivity with no intermediaries and using cryptographic algorithms.

Data security

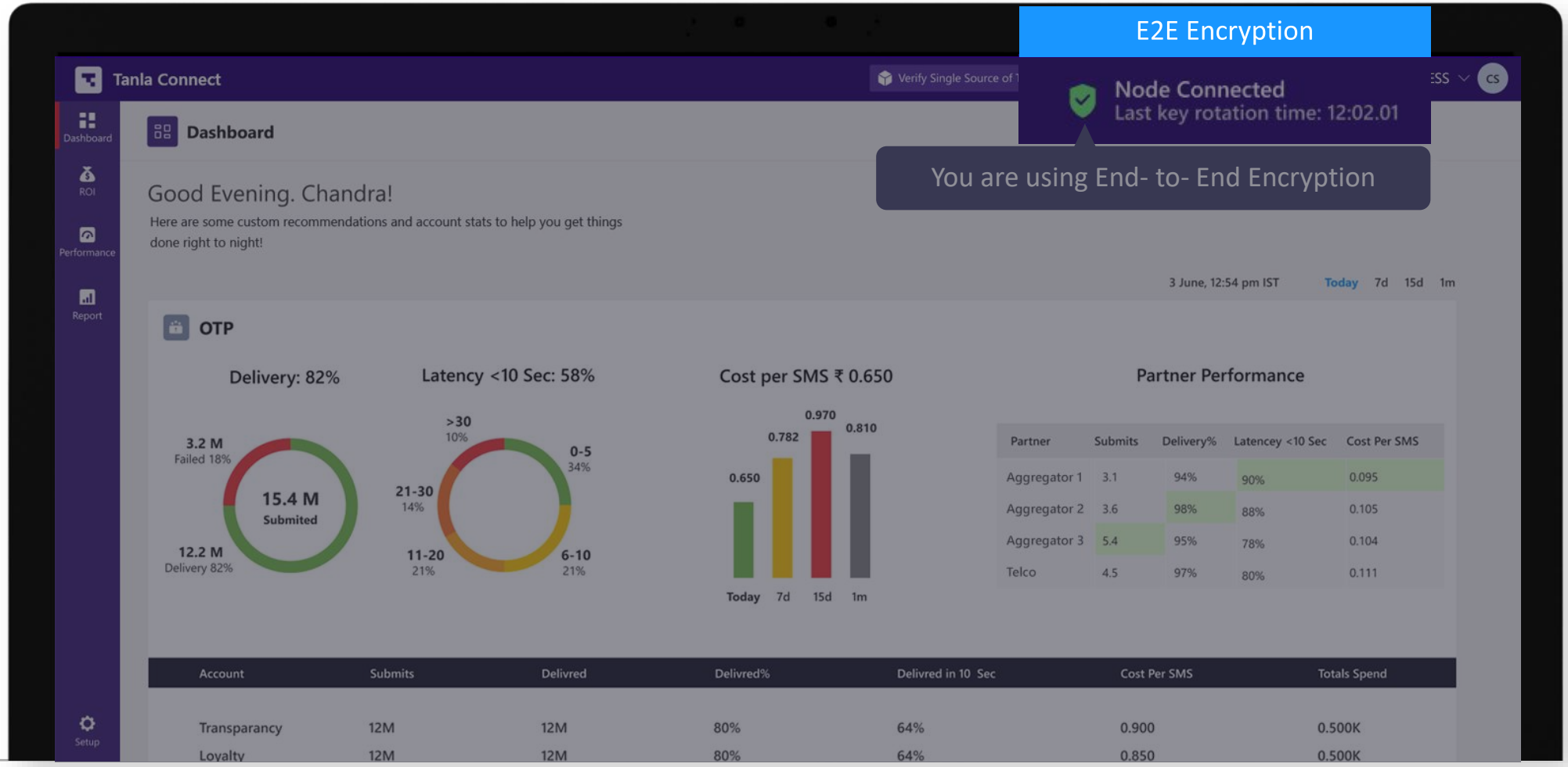
Wisely provides secure communication through forward secrecy, future secrecy, sender validation, message replay and certificate revocation list management that allows only authorized users to access data.

No access to message content

Wisely does not have access to message content as the message is encrypted. The platform uses meta data for processing and reporting.

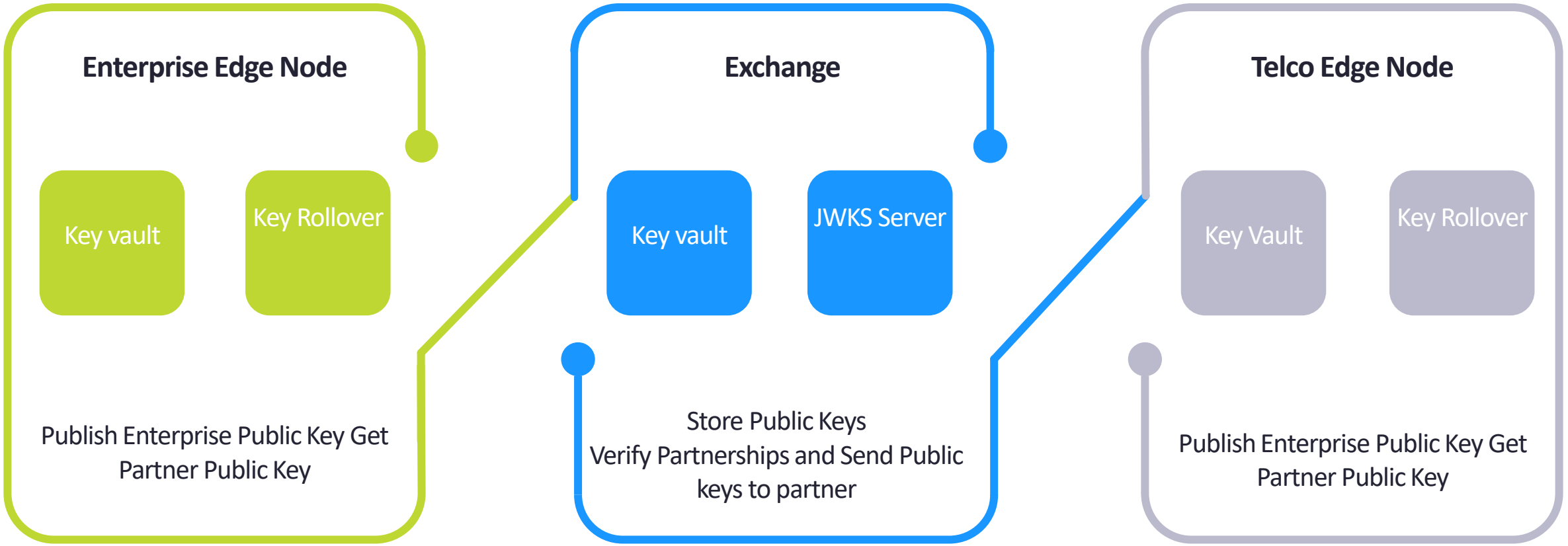
End-to-end encryption using Cryptographic Algorithms

Audited by World's leading Cryptographic company, nccgroup



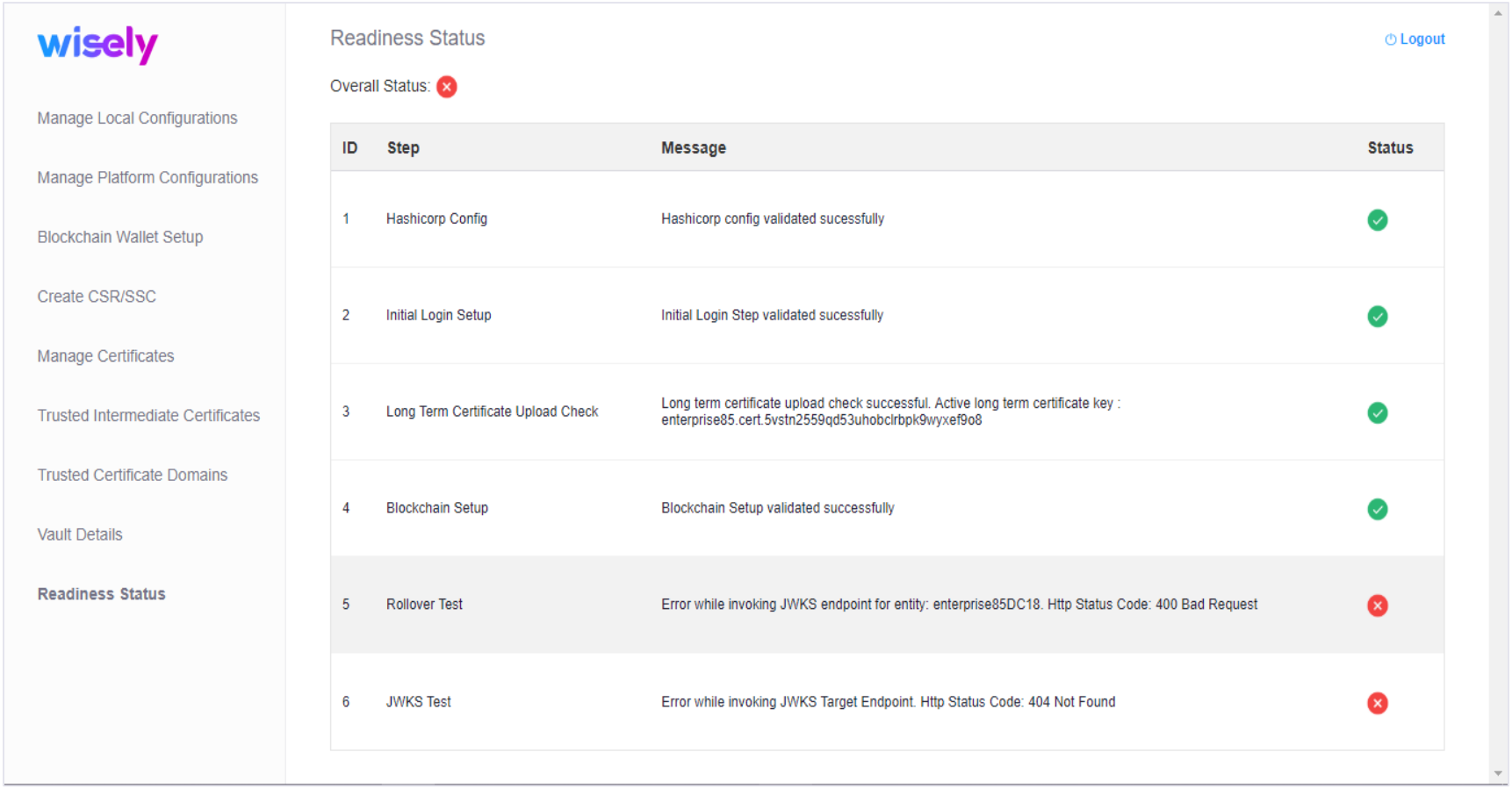
Data security and privacy

Encryption process



Data security and privacy

- ✓ Secure connectivity via Edge node
- ✓ Configuration of TTL for your Key
- ✓ Setup blockchain traces for audit
- ✓ Manage certificates on JWKS
- ✓ Verify partner key fetch



Powered by Blockchain

Single source of truth

"Centrally Available" communication records written into Blockchain by stakeholders which provides accurate information about the status of the communication.

Eliminates counterfeit

Wisely enables a trusted network ensuring no counterfeit call data records/DNs are generated by intermediaries as all records are written into the blockchain by telcos bringing immutable recording and complete transparency.

Zero dispute reports

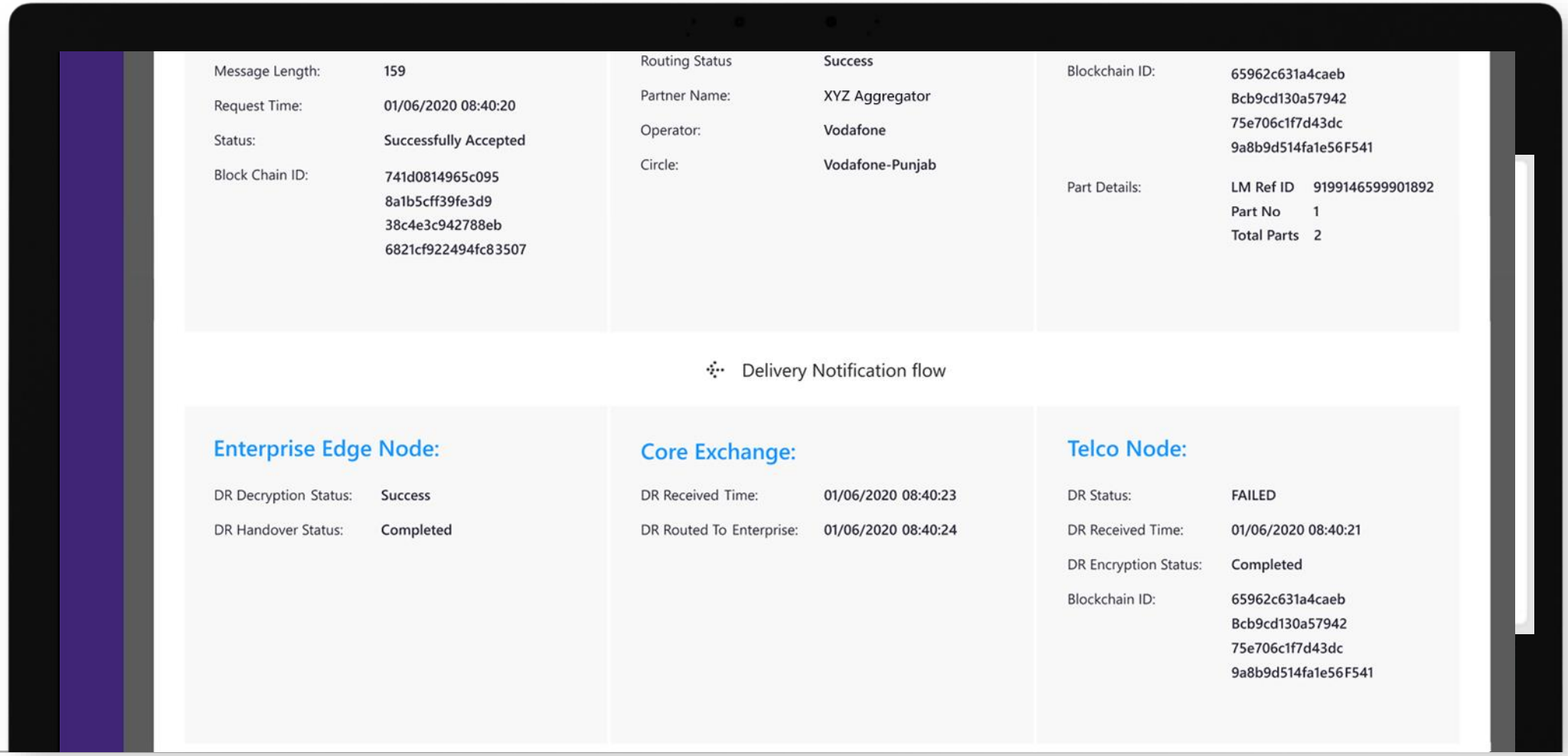
Wisely verified, zero dispute settlement reports generated from blockchain ledgers to enable settlement with your partners/suppliers.

Compliance

Designed to be fully compliant with your local telecom regulations and data protection laws. Ensuring your communications comply with legal obligations.

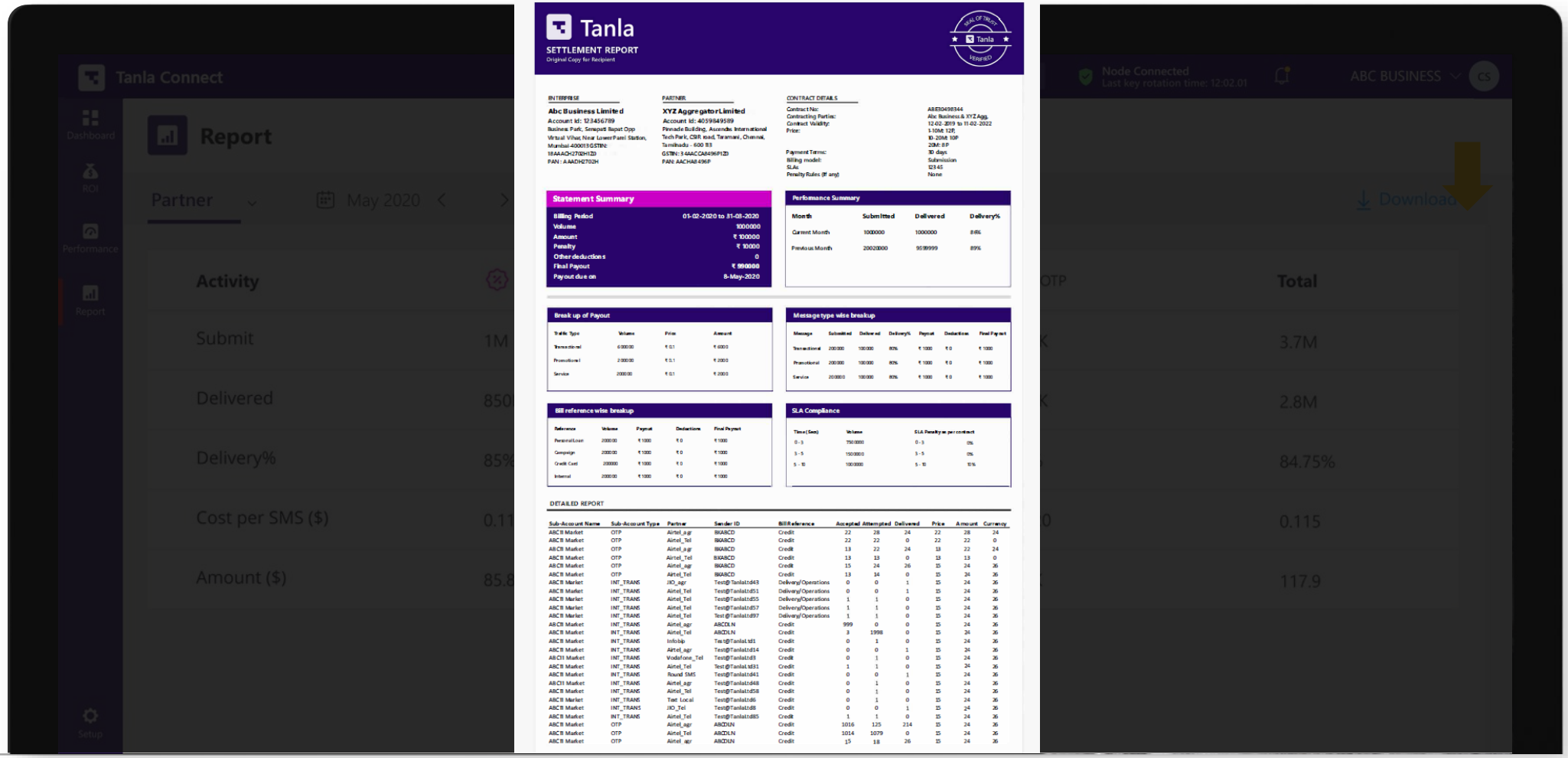
Single Source of Truth

Every transaction is recorded on blockchain and available to participants in real-time



Single Source of Truth – zero dispute settlement reports

Verified settlement reports generated from ledgers on the blockchain



Built for the Cloud

Cloud-platform agnostic

Wisely can be deployed over any public or private cloud platform. A flexible deployment model ensures you can use Wisely on the Cloud, or on-premise with an option for a fully managed model using our DevOps expertise.

Elasticity and scalability

Wisely uses multiple platform as a service components over the cloud to ensure core services are highly elastic and capable of scaling horizontally for any size of workload.

High availability

Wisely has been engineered to be a multi-region, multi-cloud setup geared for high availability and redundancy.

Best in Class QoS

Uptime
99.999%

Performance
800 ms

Connectivity
15 SMSCs

Scalability
40,000

Development
Microsoft

Deployment
Azure

Security
ISO 27001

Cutting-edge analytics

Advanced analytics capabilities

Packed with next-gen technology, Wisely comes equipped with advanced analytics that provides value-additive recommendations and predictions that reduce costs and improve Quality of Service.

Intelligent insights

Powered by Power BI, the best-in-class data visualization tool, Wisely dashboards make it easier for you to find the needle of insight in the haystack of data.

Real-time dashboards

Get access to deep network analytics, insights on traffic trends, ROI, campaign performance, and more, all in real-time.

Reporting & advanced analytics

Key performance indicators, value-based recommendations to reduce cost and improve QoS

Analytics & Storage as a Service

Storage as a Service

- ✓ Unlimited SSOT records
- ✓ Unlimited CDR storage
- ✓ Unlimited Summaries
- ✓ Build your own reports

Out-of-the-box

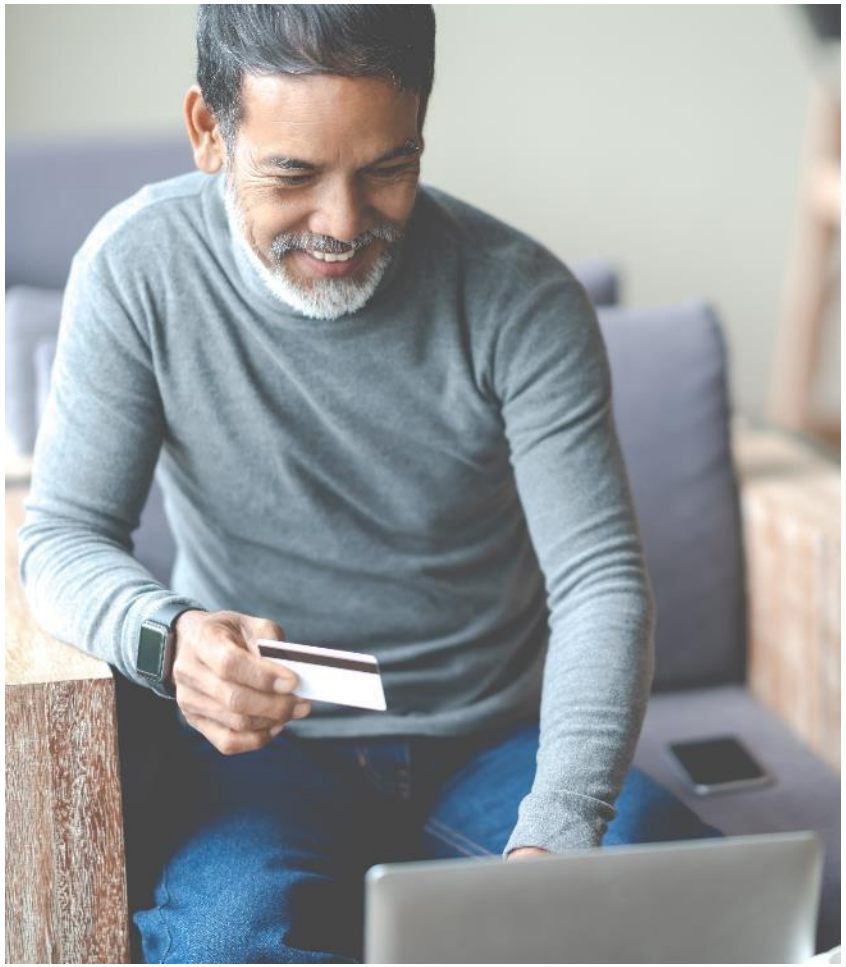
- ✓ SSOT available for 65 Days
- ✓ CDR data available for 65 days
- ✓ Summaries for 6 months

Customer references

User story demonstration

Success stories

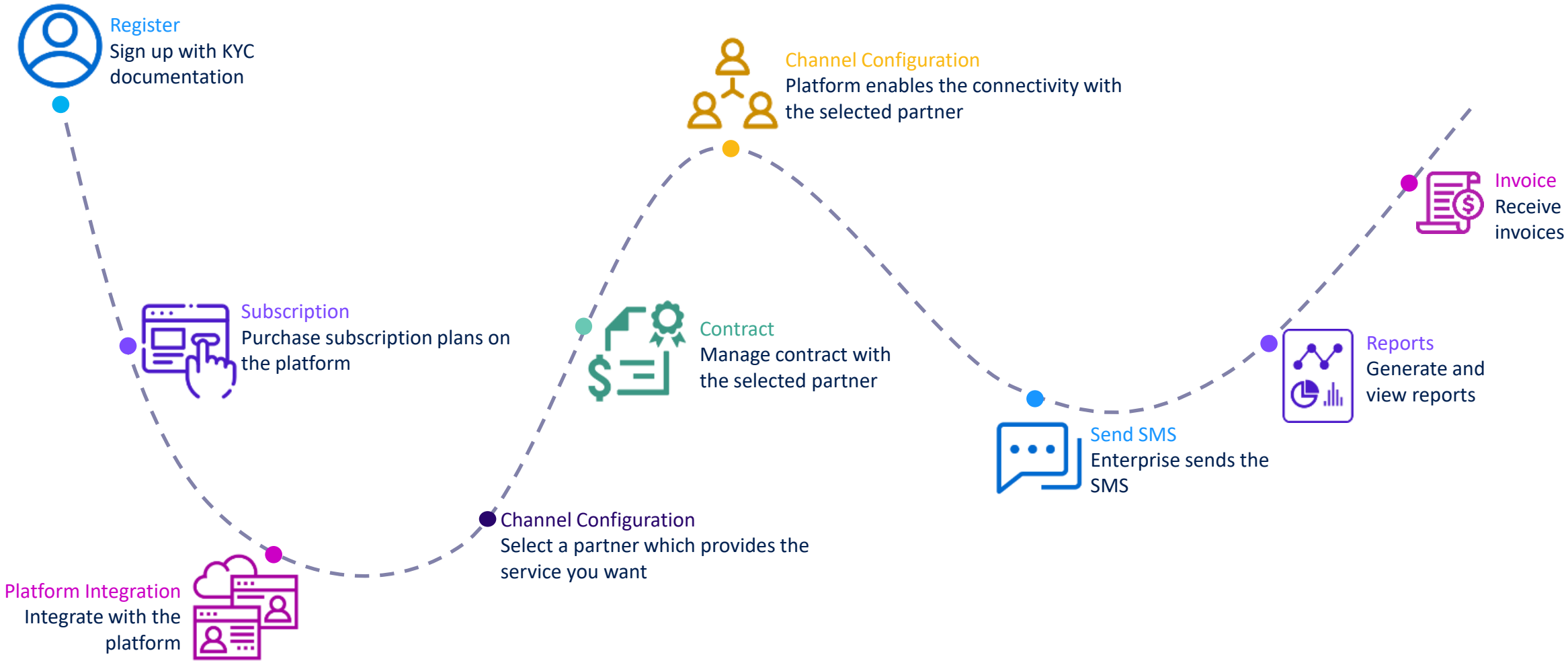
ABC Customer Banking



Roadmap

Product Road Map and Upcoming Features (Placeholder)

Business journey map



Next Steps

The Wise Team

Thank you

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Appendix