



wisely

The Intelligent Cloud Platform for Trusted
Customer Experiences





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 ऑफ बड़ोदा
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 jayo!

TATA AIG
INSURANCE
WITH YOU ALWAYS

IFFCO-TOKIO
GENERAL INSURANCE

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
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
cromā
in-store | online | mobile
D Mart
TRENT
LIMITED
vijaya sales

7/10
Social Media

facebook
Google
in
tinder
TikTok
Snapchat
WhatsApp
Twitter
YouTube
Instagram

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 total market size of CPaaS in 2020
(Source: Gartner)



of people plan to increase their level of investment in CPaaS
(Source: Frost and Sullivan)



of enterprises will adopt CPaaS by 2023
(Source: Gartner)

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

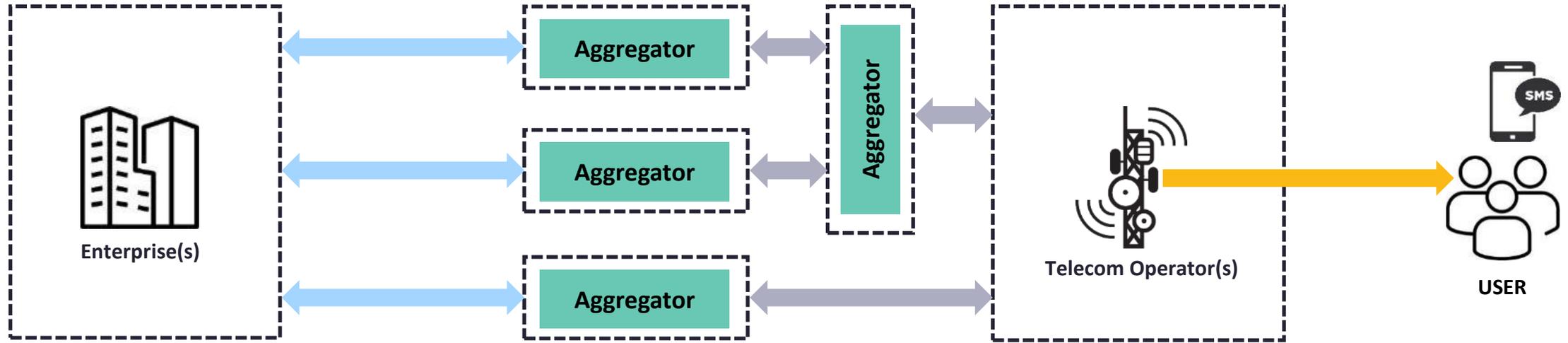
Multiple levels of intermediaries between the enterprises and telcos lead to poor quality of service and hamper customer experience



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



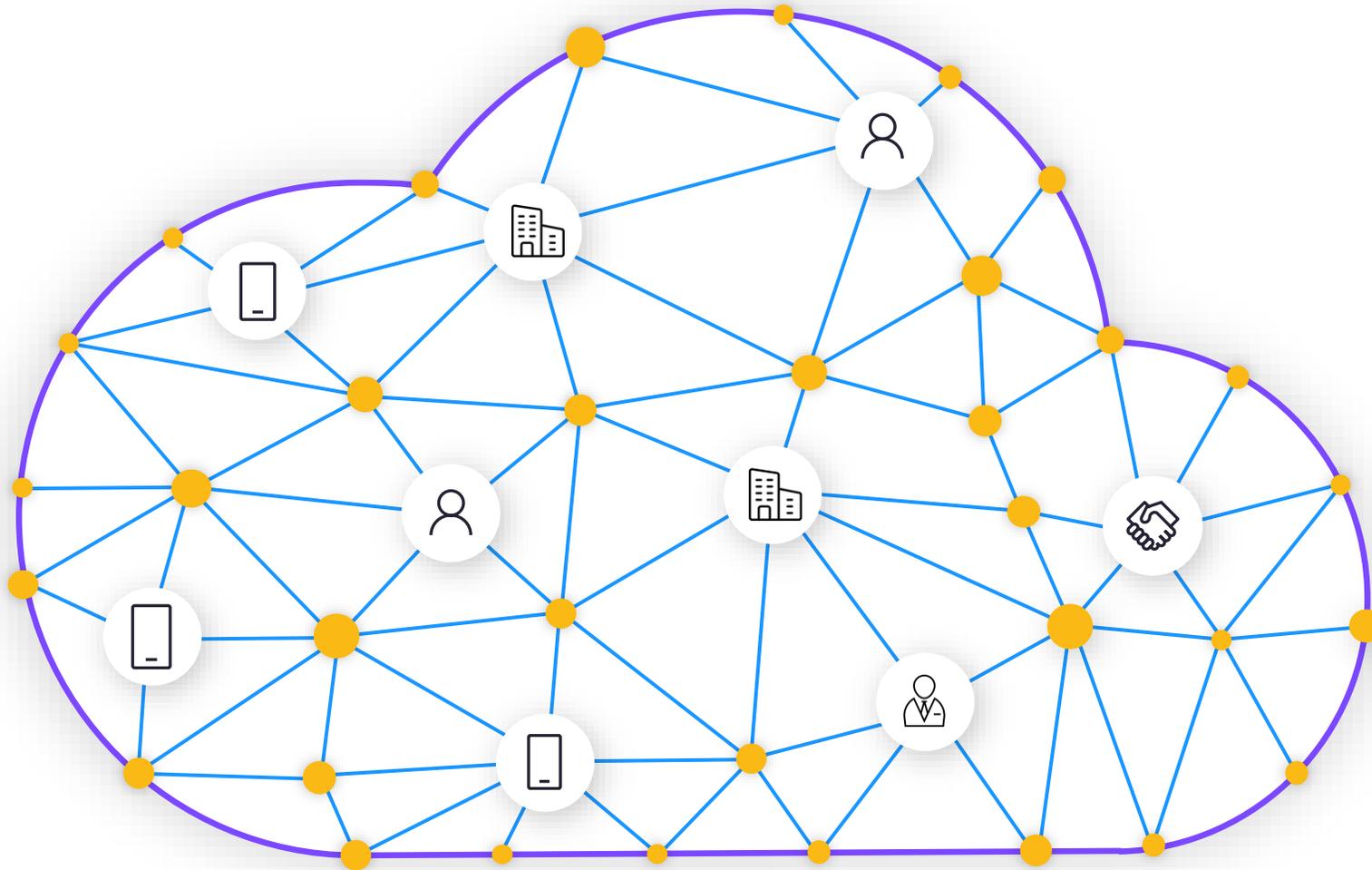
Grey routes and
other fraudulent
activities



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

wisely

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

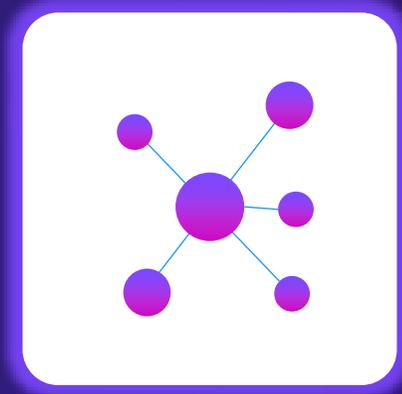
Intelligent

- 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



Network

wisely



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.

wisely 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

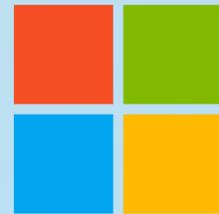


Empowers suppliers by providing access to global enterprises and bringing increased business predictability and sustainability

wisely | Jointly developed and marketed by



tanla



Microsoft

The Microsoft Azure Value



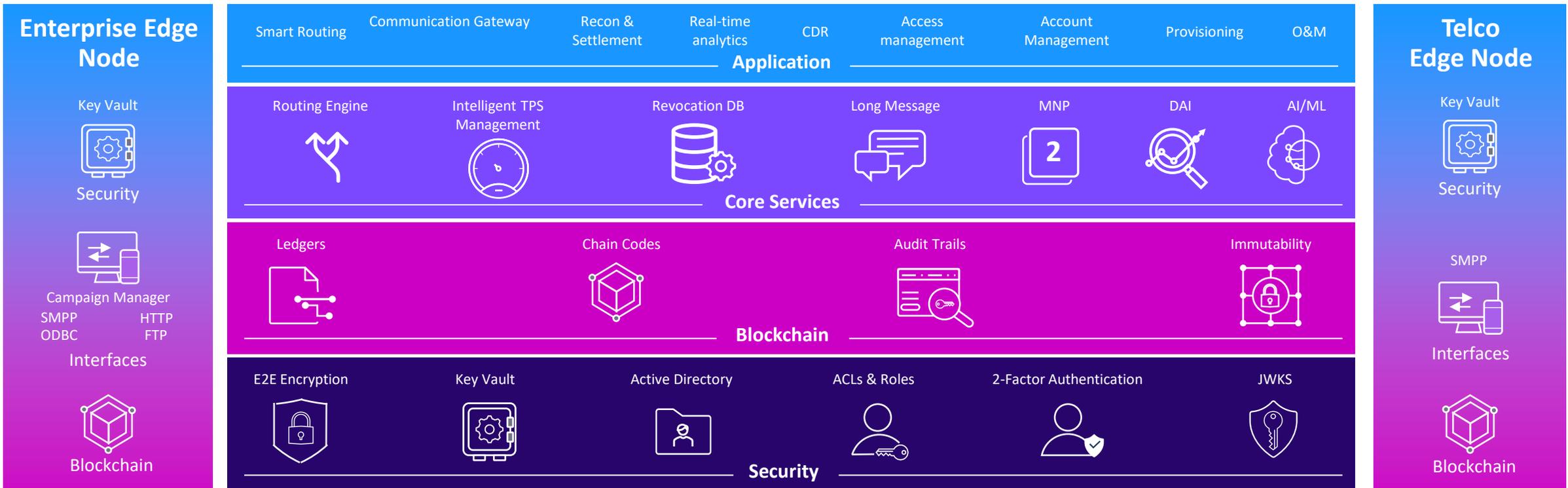
An open, flexible cloud platform that enables you to build, deploy and manage apps across a global network of Microsoft-managed datacenters.

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

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

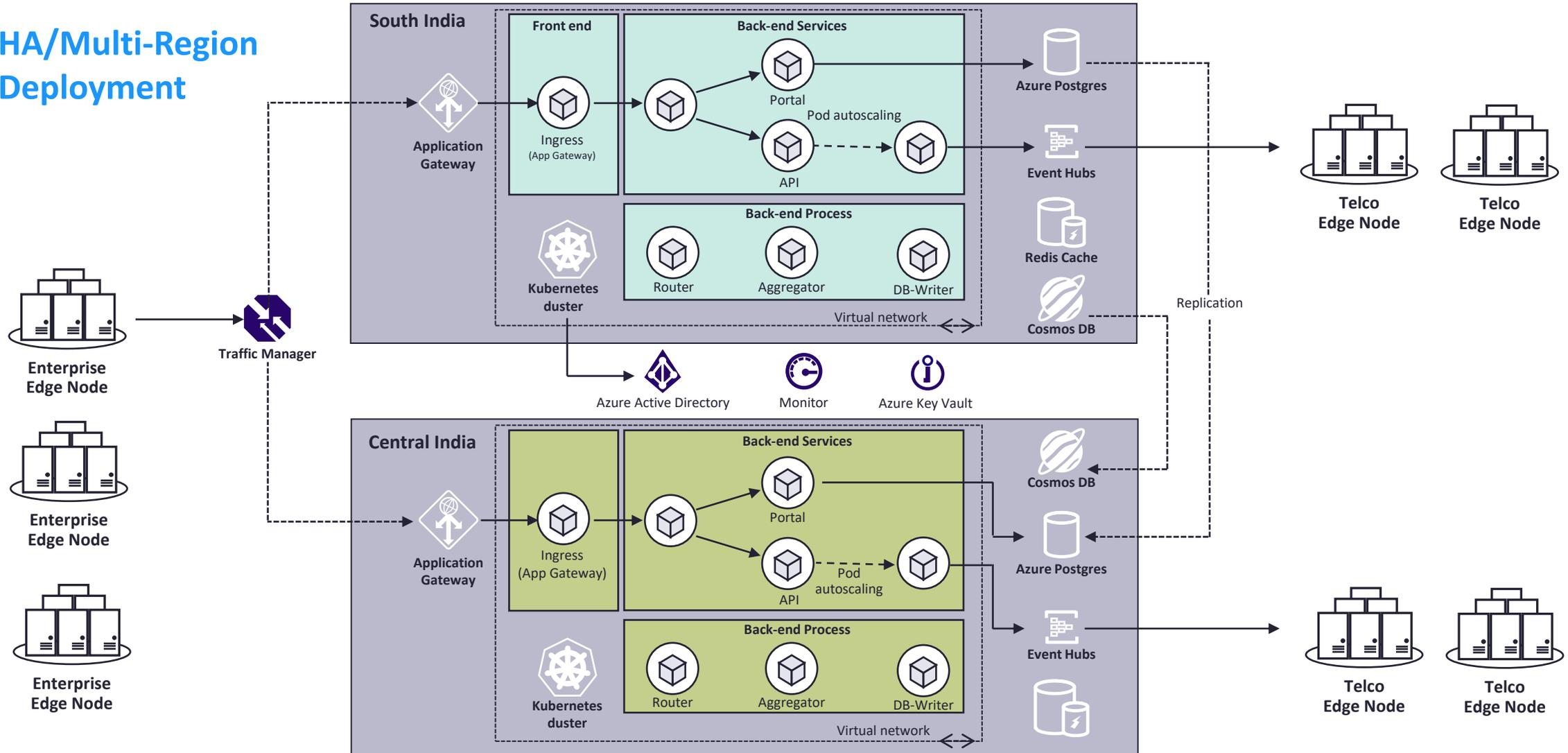
Functional and technical aspects

Platform functional overview

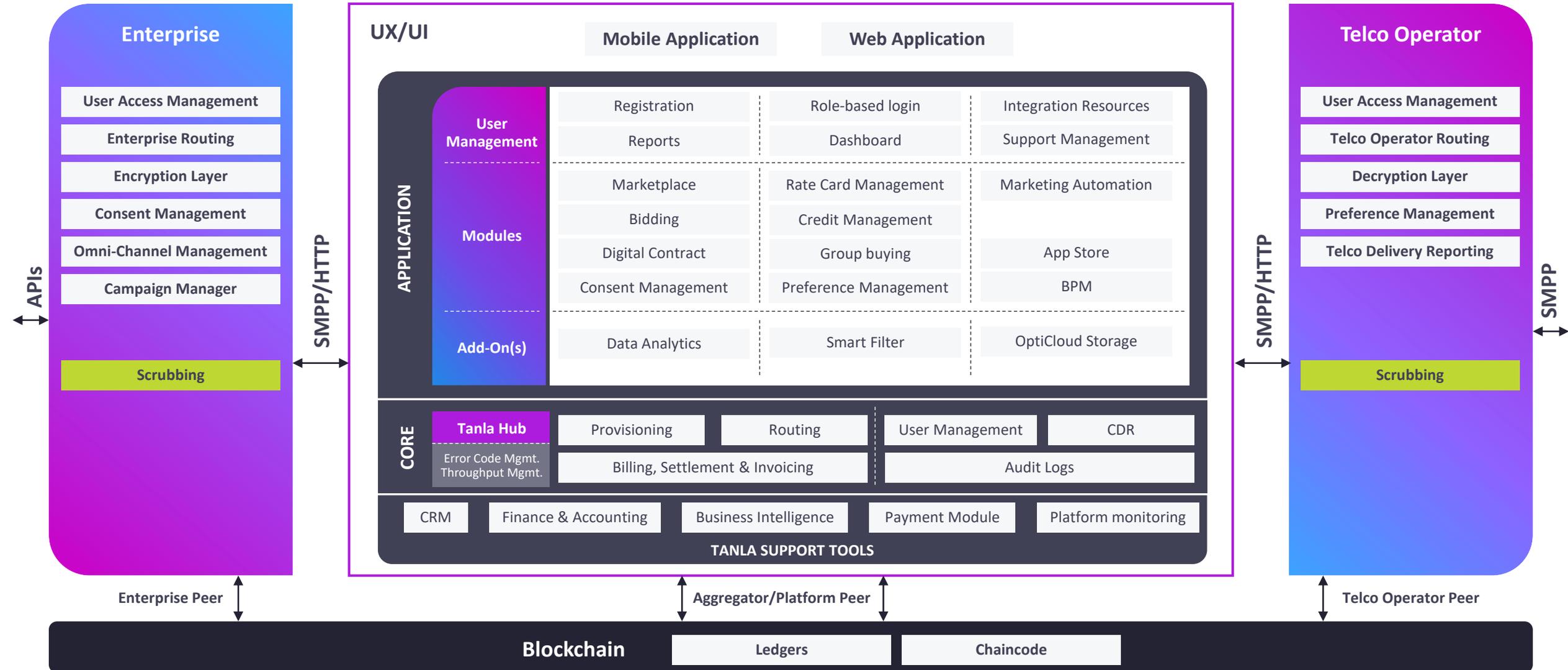


Technical architecture

HA/Multi-Region Deployment

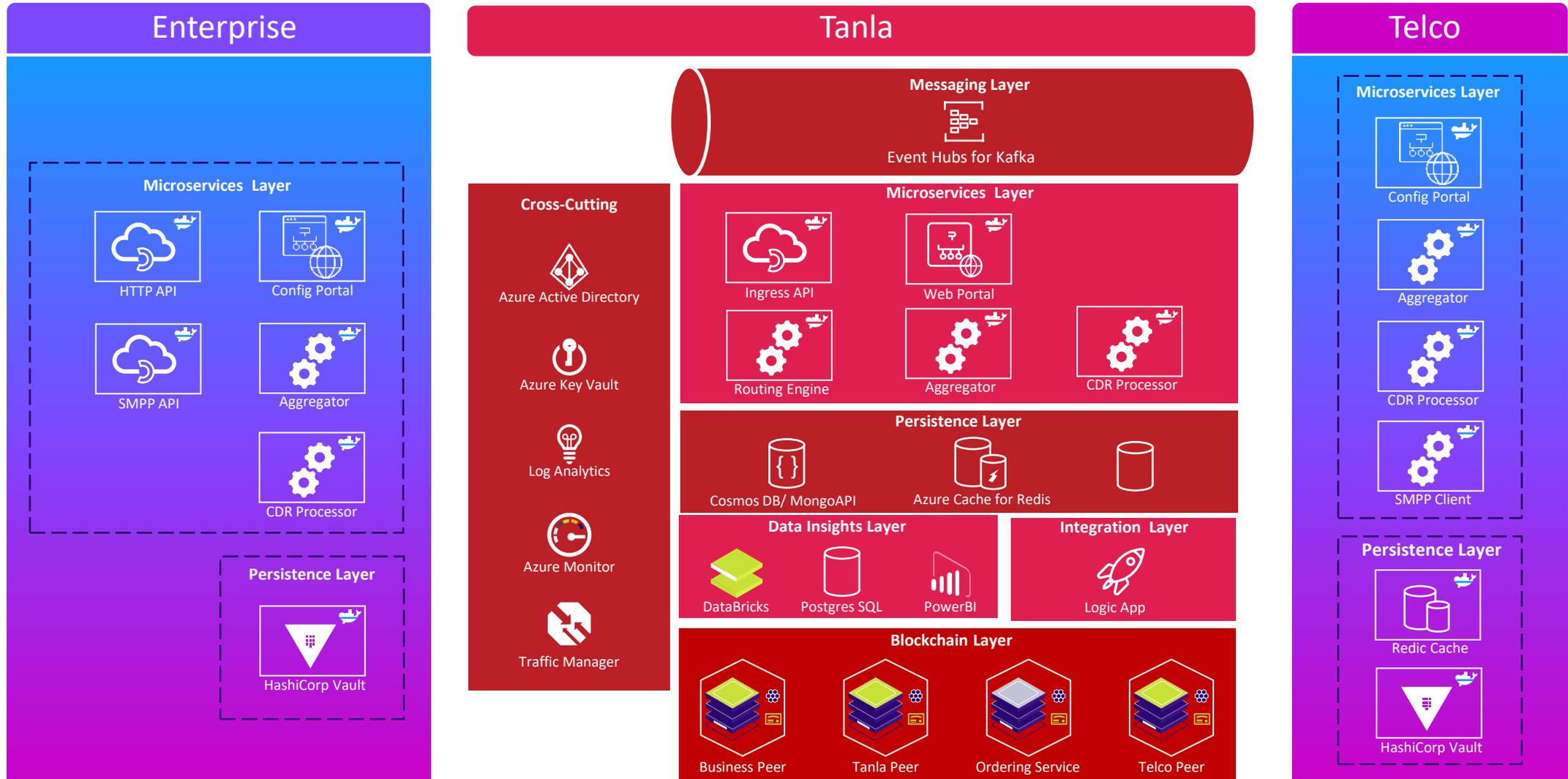


How is it built

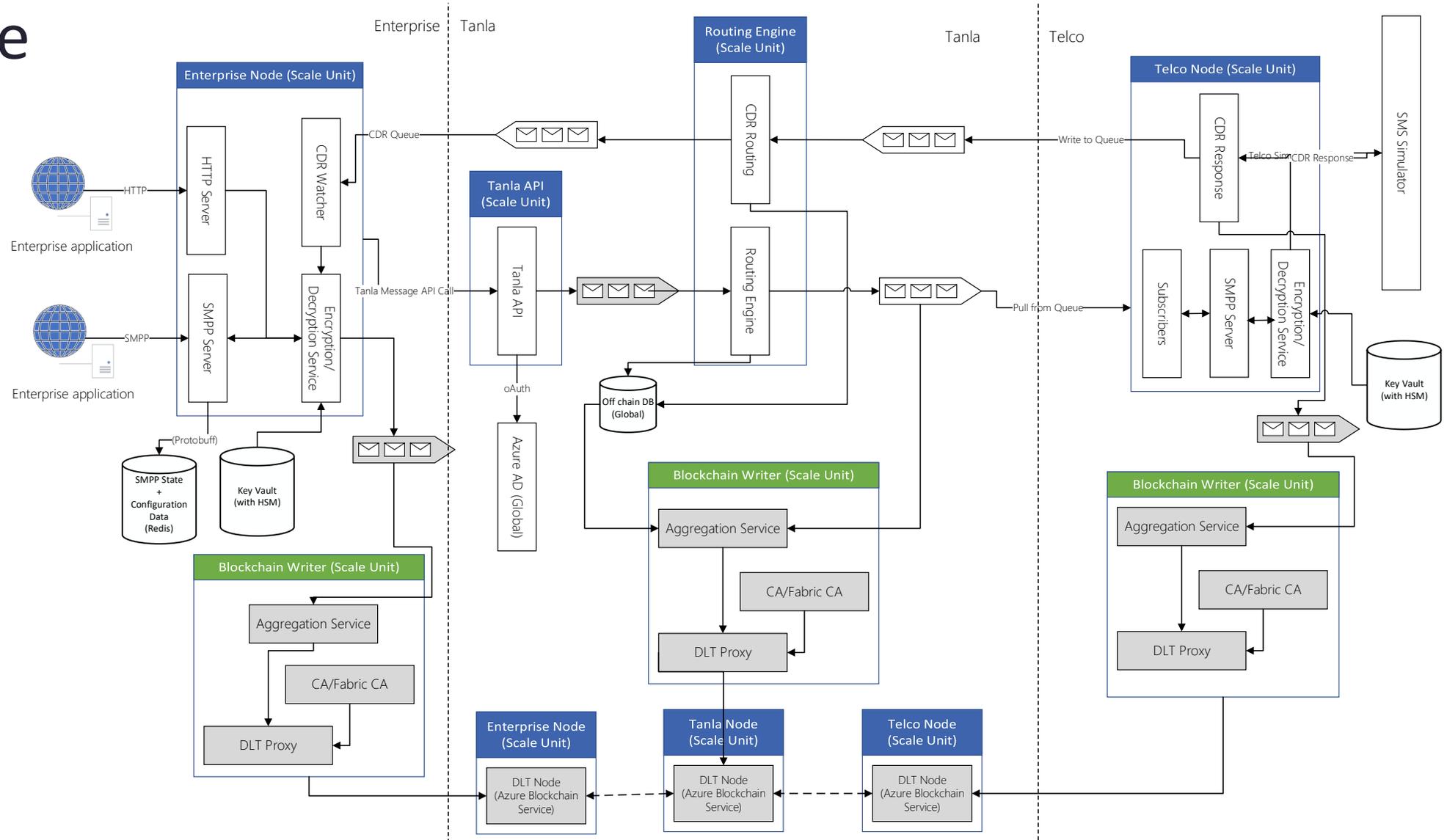


The Tech Stack - layers and components

All microservices developed in Go Lang



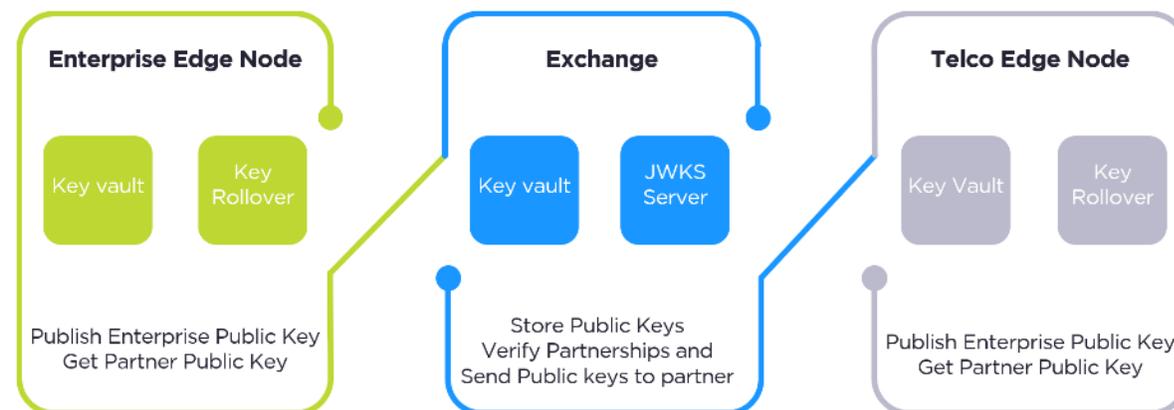
Architecture diagram



Edge Node

The Encryption Process

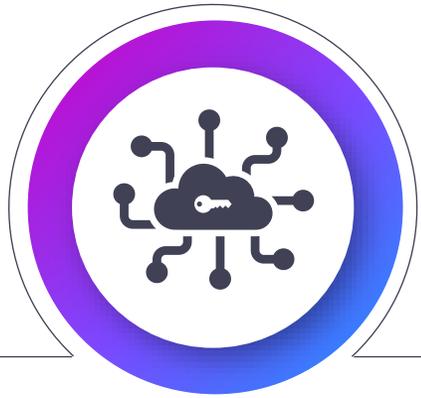
- Enterprise edge node and telco edge node shares public keys to the Exchange. The Exchange then sends the partner public keys to the corresponding edge nodes for encryption.
- All messages from Enterprise edge node are encrypted and decrypted at the telco Edge node.
- The encryption happens on asymmetric 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**

E2E Encryption

Verify Single Source of 1
Node Connected
Last key rotation time: 12:02.01

You are using End- to- End Encryption

Tanla Connect
3 June, 12:54 pm IST
Today 7d 15d 1m

- Dashboard
- ROI
- Performance
- Report

OTP

Delivery: 82%

15.4 M Submitted

3.2 M Failed 18%

12.2 M Delivery 82%

Latency <10 Sec: 58%

>30 10%

21-30 14%

11-20 21%

6-10 21%

0-5 34%

Cost per SMS ₹ 0.650

0.650 0.782 0.970 0.810

Today 7d 15d 1m

Partner Performance

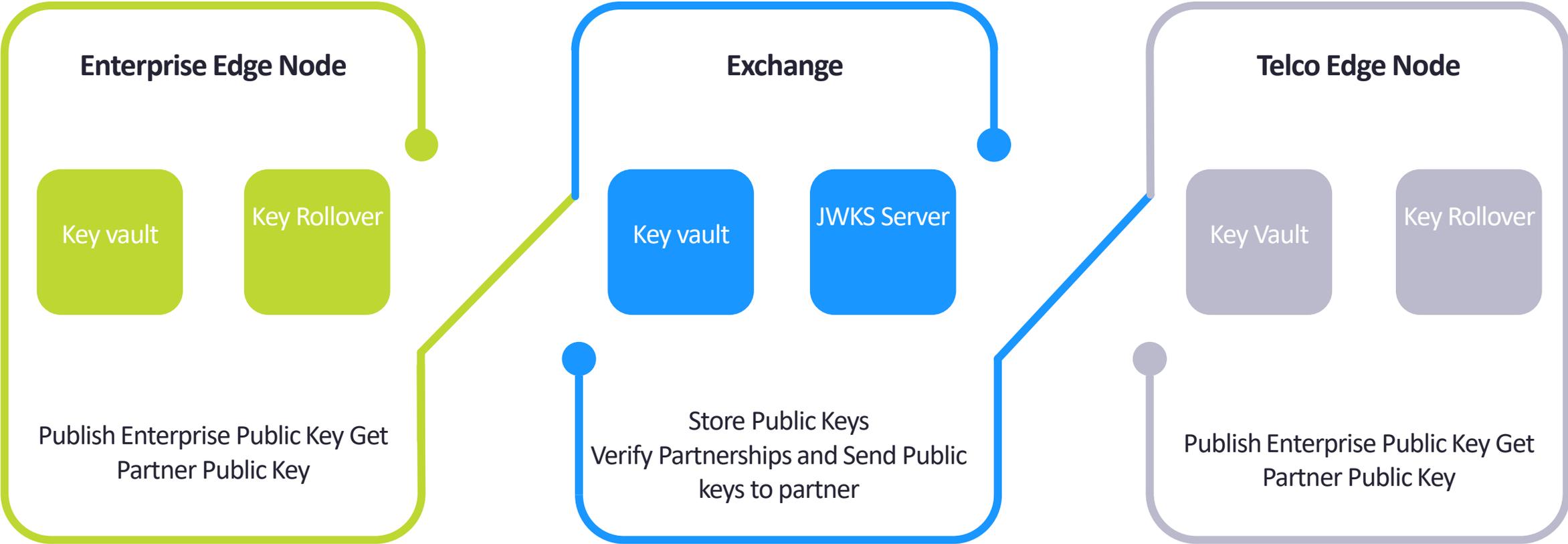
Partner	Submits	Delivery%	Latency <10 Sec	Cost Per SMS
Aggregator 1	3.1	94%	90%	0.095
Aggregator 2	3.6	98%	88%	0.105
Aggregator 3	5.4	95%	78%	0.104
Telco	4.5	97%	80%	0.111

Account	Submits	Delivred	Delivred%	Delivred in 10 Sec	Cost Per SMS	Totals Spend
Transparancy	12M	12M	80%	64%	0.900	0.500K
Loyalty	12M	12M	80%	64%	0.850	0.500K

31 Wisely – An Intelligent Cloud Platform

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

The screenshot displays the 'Readiness Status' page in the Wisely interface. The left sidebar contains a navigation menu with the following items: Manage Local Configurations, Manage Platform Configurations, Blockchain Wallet Setup, Create CSR/SSC, Manage Certificates, Trusted Intermediate Certificates, Trusted Certificate Domains, Vault Details, and Readiness Status (which is currently selected). The main content area shows the 'Readiness Status' header with a 'Logout' link. Below the header, the 'Overall Status' is indicated as failed with a red 'x' icon. A table lists the following steps and their results:

ID	Step	Message	Status
1	Hashicorp Config	Hashicorp config validated successfully	✓
2	Initial Login Setup	Initial Login Step validated successfully	✓
3	Long Term Certificate Upload Check	Long term certificate upload check successful. Active long term certificate key : enterprise85.cert.5vstn2559qd53uhobclrbpk9wyxef9o8	✓
4	Blockchain Setup	Blockchain Setup validated successfully	✓
5	Rollover Test	Error while invoking JWKS endpoint for entity: enterprise85DC18. Http Status Code: 400 Bad Request	✗
6	JWKS Test	Error while invoking JWKS Target Endpoint. Http Status Code: 404 Not Found	✗

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

Message Length: 159	Routing Status: Success	Blockchain ID: 65962c631a4caeb Bcb9cd130a57942 75e706c1f7d43dc 9a8b9d514fa1e56F541
Request Time: 01/06/2020 08:40:20	Partner Name: XYZ Aggregator	Part Details: LM Ref ID 9199146599901892 Part No 1 Total Parts 2
Status: Successfully Accepted	Operator: Vodafone	
Block Chain ID: 741d0814965c095 8a1b5cff39fe3d9 38c4e3c942788eb 6821cf922494fc83507	Circle: Vodafone-Punjab	

❖ Delivery Notification flow

Enterprise Edge Node: DR Decryption Status: Success DR Handover Status: Completed	Core Exchange: DR Received Time: 01/06/2020 08:40:23 DR Routed To Enterprise: 01/06/2020 08:40:24	Telco Node: DR Status: FAILED DR Received Time: 01/06/2020 08:40:21 DR Encryption Status: Completed Blockchain ID: 65962c631a4caeb Bcb9cd130a57942 75e706c1f7d43dc 9a8b9d514fa1e56F541
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Single Source of Truth – zero dispute settlement reports

Verified settlement reports generated from ledgers on the blockchain

Tanla Connect
Report
 Partner: ABC Business Limited | May 2020

SETTLEMENT REPORT
 Original Copy for Recipient

CONTRACT DETAILS
 Contract No: ABE0409344
 Contracting Party: ABC Business & XYZ Agg.
 Contract Validity: 12.02.2019 to 11.02.2022
 Price: 1.00E-120
 Billing model: 204-RFP
 SLA: 90 days
 Penalty Rules (if any): None

Statement Summary
 Billing Period: 01-02-2020 to 31-05-2020
 Volume: 8000000
 Amount: ₹ 100000
 Penalty: ₹ 10000
 Other deductions: 0
 Final Payout: ₹ 99000
 Payout due on: 6-May-2020

Performance Summary

Month	Submitted	Delivered	Delivery%
Current Month	1000000	1000000	88%
Previous Month	2002000	959999	89%

Break up of Payout

Trade Type	Volume	Price	Amount
Transactional	600000	₹ 0.1	₹ 6000
Promotional	200000	₹ 0.1	₹ 2000
Service	200000	₹ 0.1	₹ 2000

Message type wise break up

Message	Submitted	Delivered	Delivery%	Payout	Deduction	Final Payout
Transactional	200000	180000	80%	₹ 1000	₹ 0	₹ 1000
Promotional	200000	180000	80%	₹ 1000	₹ 0	₹ 1000
Service	200000	180000	80%	₹ 1000	₹ 0	₹ 1000

SLA Compliance

Time (Sec)	Volume	SLA Penalty as per contract
0-3	1500000	0-3 0%
3-5	1500000	3-5 0%
5-10	1000000	5-10 0%

DETAILED REPORT

Sub-account Name	Sub-account Type	Partner	Sender ID	Bill Reference	Accepted	Attempted	Delivered	Price	Amount	Currency
ABC Market	OTP	Altel_agr	80ARCD	Credit	22	28	24	22	28	24
ABC Market	OTP	Altel_tel	80ARCD	Credit	22	22	0	22	22	0
ABC Market	OTP	Altel_agr	80ARCD	Credit	13	22	24	18	22	24
ABC Market	OTP	Altel_tel	80ARCD	Credit	13	18	0	18	18	0
ABC Market	OTP	Altel_agr	80ARCD	Credit	15	24	26	15	24	26
ABC Market	OTP	Altel_tel	80ARCD	Credit	13	14	0	13	14	0
ABC Market	INT_TRANS	JIO_agr	Test@Tanla1043	Delivery/Operations	0	0	1	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1051	Delivery/Operations	0	0	1	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1055	Delivery/Operations	1	1	0	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1057	Delivery/Operations	1	1	0	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1097	Delivery/Operations	1	1	0	15	24	26
ABC Market	INT_TRANS	Altel_agr	ABCZLN	Credit	999	0	0	15	24	26
ABC Market	INT_TRANS	Altel_tel	ABCZLN	Credit	3	1998	0	15	24	26
ABC Market	INT_TRANS	Int@bpb	Test@Tanla1011	Credit	0	1	0	15	24	26
ABC Market	INT_TRANS	Altel_agr	Test@Tanla1014	Credit	0	0	1	15	24	26
ABC Market	INT_TRANS	Valid@tan_tel	Test@Tanla1011	Credit	0	1	0	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1031	Credit	1	1	0	15	24	26
ABC Market	INT_TRANS	Round SMS	Test@Tanla1041	Credit	0	0	1	15	24	26
ABC Market	INT_TRANS	Altel_agr	Test@Tanla1048	Credit	0	1	0	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1058	Credit	0	1	0	15	24	26
ABC Market	INT_TRANS	Test Local	Test@Tanla1066	Credit	0	1	0	15	24	26
ABC Market	INT_TRANS	JIO_agr	Test@Tanla1068	Credit	0	0	1	15	24	26
ABC Market	INT_TRANS	Altel_tel	Test@Tanla1085	Credit	1	1	0	15	24	26
ABC Market	OTP	Altel_agr	ABCZLN	Credit	1016	125	214	15	24	26
ABC Market	OTP	Altel_tel	ABCZLN	Credit	1014	1079	0	15	24	26
ABC Market	OTP	Altel_agr	ABCZLN	Credit	15	18	26	15	24	26



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



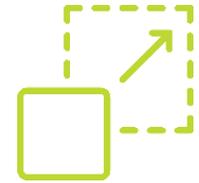
Uptime
99.999%



Performance
800 ms



Connectivity
15 SMSCs



Scalability
40,000



Development
Microsoft



Deployment
Azure



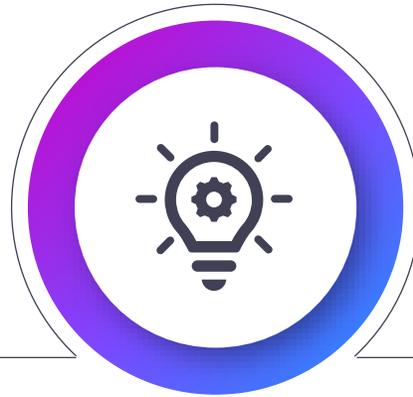
Security
ISO 27001

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



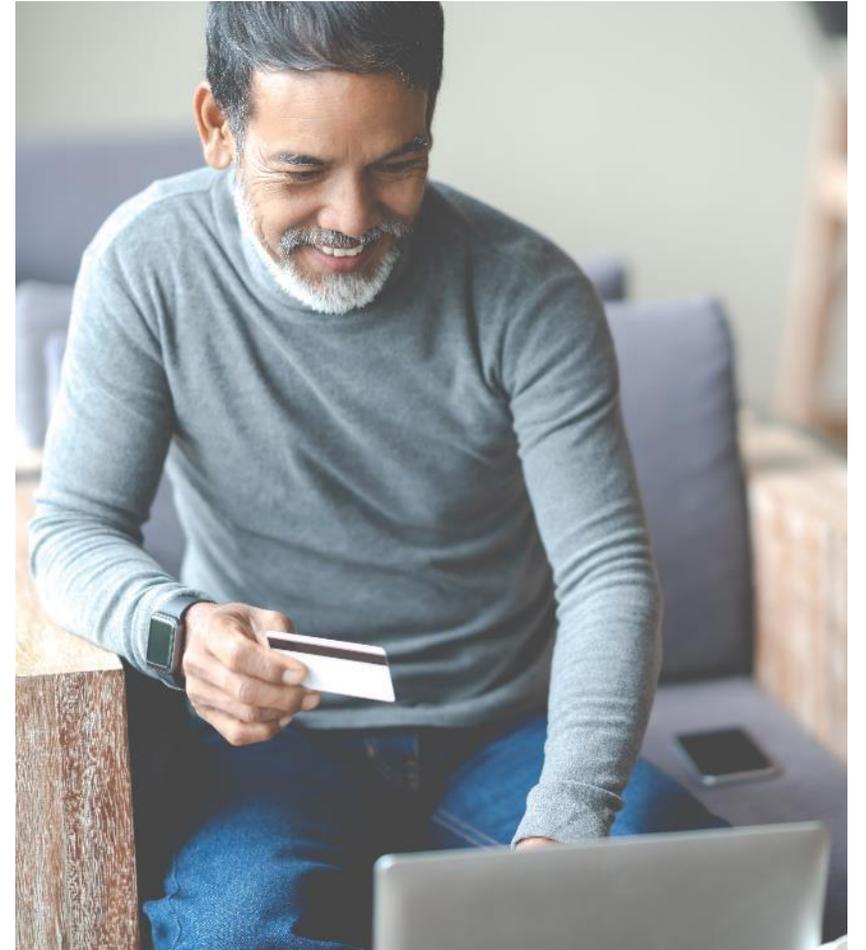


User story demonstration

A photograph of an elderly man with a white beard and hair, wearing a black polo shirt, being embraced by a group of people in a park. The man is smiling broadly, showing his teeth. The people around him are also smiling and hugging him. The background is a blurred green park setting. The text "Success stories" is overlaid in white on the left side of the image.

Success stories

ABC Customer Banking

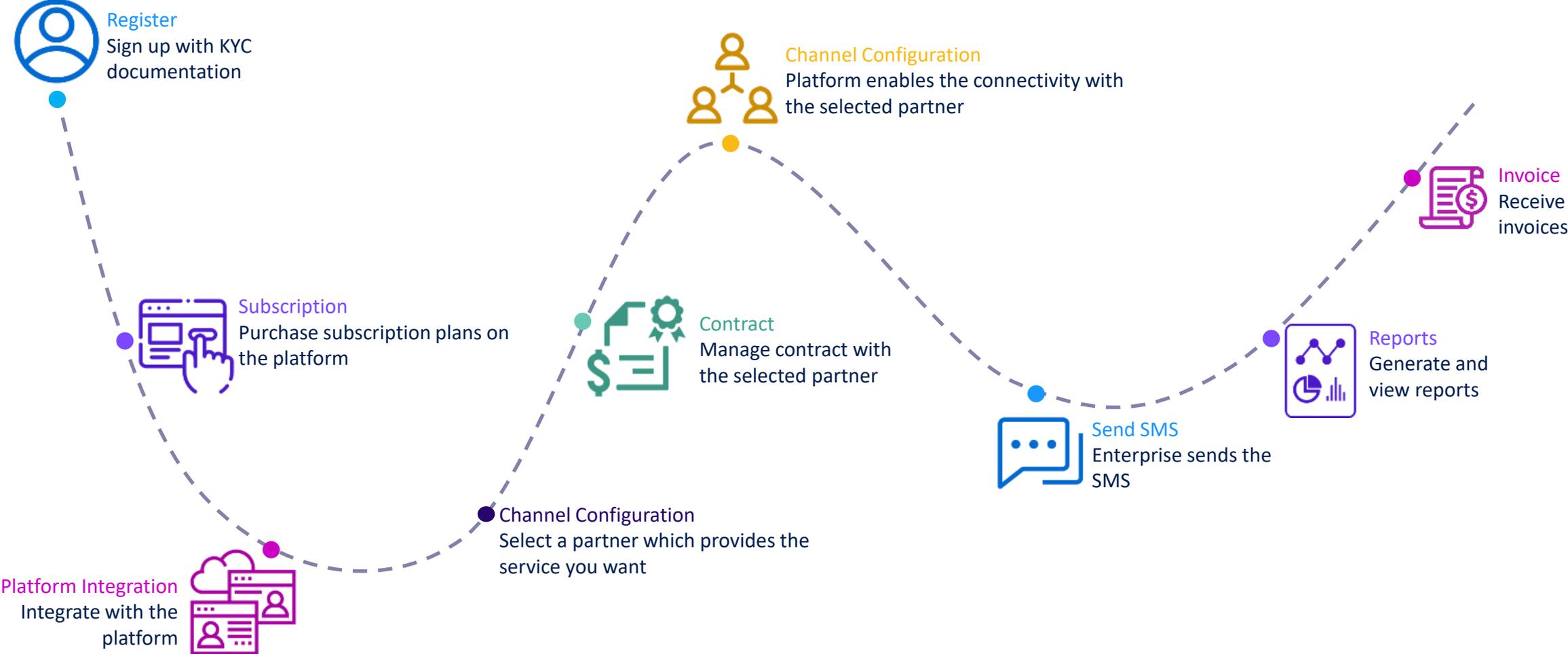


Roadmap

A globe is shown with a complex network of glowing orange and yellow lines and nodes overlaid on it, representing global connectivity and technology. The background is a deep blue gradient with a bright light source on the right side, creating a lens flare effect.

Product Road Map and Upcoming Features (Placeholder)

Business journey map



Next Steps

The Wise Team



Thank you



Appendix