



BIAN Webinar; “ABSAs BANK – BIAN API Adoption”

December 1st 2020



A laptop screen is the central focus, displaying a dark blue background with a white network diagram of interconnected nodes and lines. In the center of the screen, a white rectangular box contains the word "WEBINAR" in bold, white, uppercase letters. The laptop is on a desk, and a white coffee cup is visible in the foreground to the left. The background is a blurred office setting with windows and other people.

WEBINAR

A Warm Welcome to YOU –
Dialing in From all around the globe!

Absa Regional Operations – BIAN API Adoption

In this webinar, Absa will share details of their BIAN API adoption journey in partnership with TCS to achieve their goal of becoming 'The Digital Bank of Choice'. You will hear about :

- Absa's Digital Transformation journey using modular architecture
- Strangulation Strategy for existing services
- Level of BIAN API alignment and benefits realized
- Assets & Enablers accelerating the journey



Speakers

Manoj Puri

CIO - Absa Regional Operations
Absa



Tebogo Rabuthu

Chief Architect - Absa Regional Operations
Absa



Reshma Lall

Enterprise Architect & BIAN Consultant
BFSI Technology Advisory Group.
TCS



Hans Tesselaar

Executive Director
BIAN e.V.

BIAN's Mission

To provide the world with the best banking architecture. To be the banking technology standard.

The Central objective is to support the banking business/clients with high performance and security.

One of the key objectives for IT in the banking industry are to lower the IT and operational costs of the bank and help banks mitigate the risks associated with technology innovation.

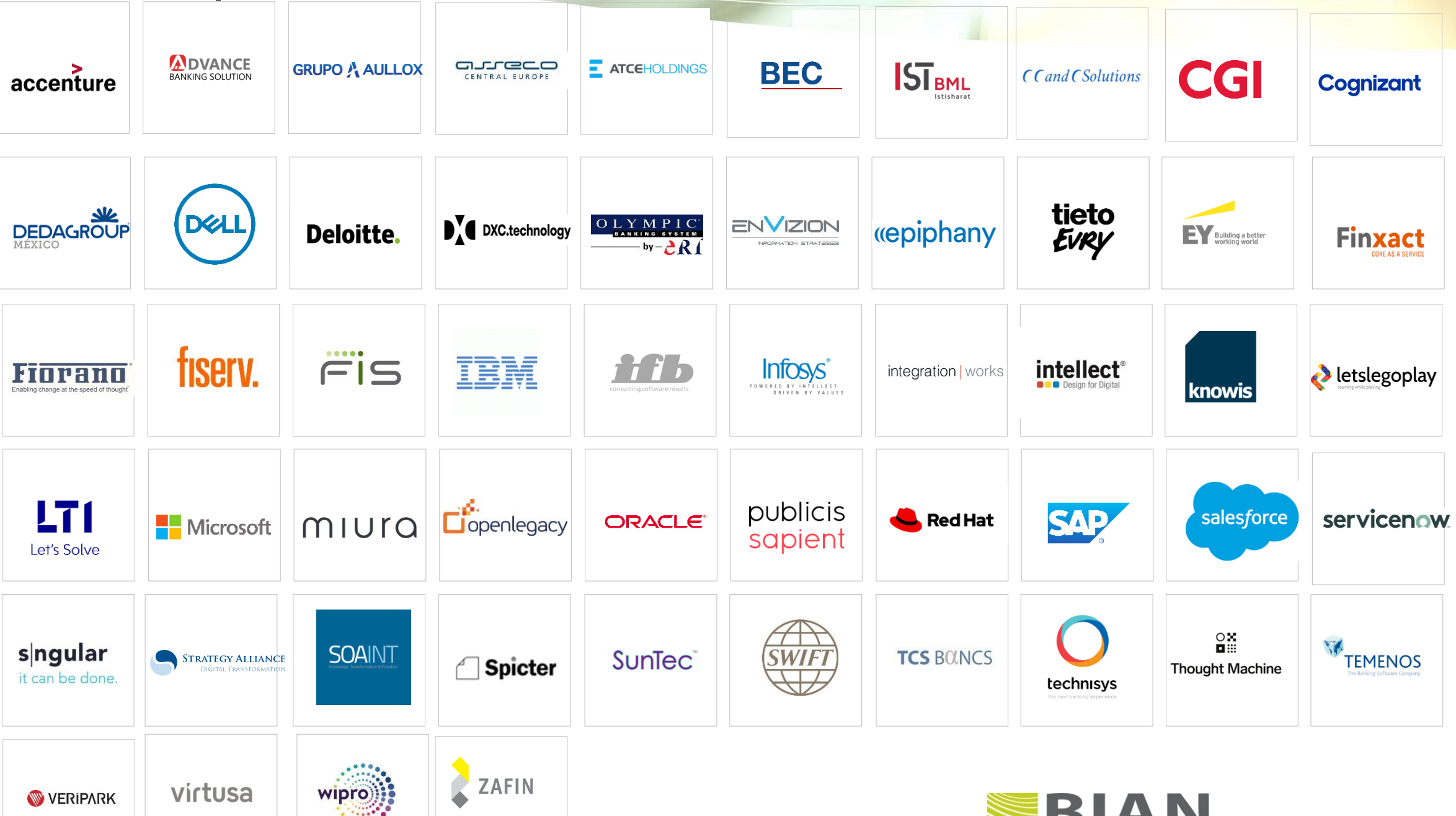
To provide a trusted roadmap for constant innovation. We create best practice architecture that the world's banks can rely upon 100%. To gather the best minds in banking architecture for the world to share in an open way.

By collaborating and sharing in an open way, the best expertise across our global ecosystem of **leading banks, technology providers, FinTech players, academics and consultants** to define a revolutionary banking technology framework that standardizes and simplifies the overall banking architecture.





Introduction | BIAN & Financial Institutions



Introduction | BIAN & Partners



Introduction | BIAN & Academic, Standard Bodies and Training Partners



Absa – BIAN ADOPTION

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Absa Existing Architecture

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Value Delivered

Context

About Absa

Absa is a truly African brand committed to finding local solutions for uniquely local challenges and everything they do is focused on adding value. To this end Absa offer all clients across the continent a range of retail, business, corporate and investment, and wealth management solutions as well as ensure a positive impact in all the countries where it operates in.

Vision : To become digital bank of choice.

Primary Drivers for BIAN Adoption

- The aim of the bank is to become the digital bank of choice across the African continent with customer centricity at the core. Absa wanted to achieve this by ensuring the faster launch of digital products and features for its customers. The bank had a vision to Lego-fy its banking services by repackaging services into reusable building blocks which would guarantee them success in their digital transformation journey.
- Decompose existing legacy middleware into API, Microservices.
- Introduce new age digital channels and establish DevOps, CI/CD for faster Time To Market.

Our new Microservices/API platform - Way Forward - Principles

The new platform is not a like-for-like replacement for existing ESB middleware

- Service will not be built to retrofit existing channels.
- Not just a protocol change i.e. SOAP to REST.

The new platform is more than a “gateway”, it provides :-

- Decoupling and abstraction from the core banking and other backend services.
- Standardization and governance via its use of the BIAN Framework.
- Orchestration where it is required.

Vendor applications and in-house developed solutions needs to comply with the BIAN-based Absa standards that have been adopted when competing for business.

Designed with a Microservices architectural style to :-

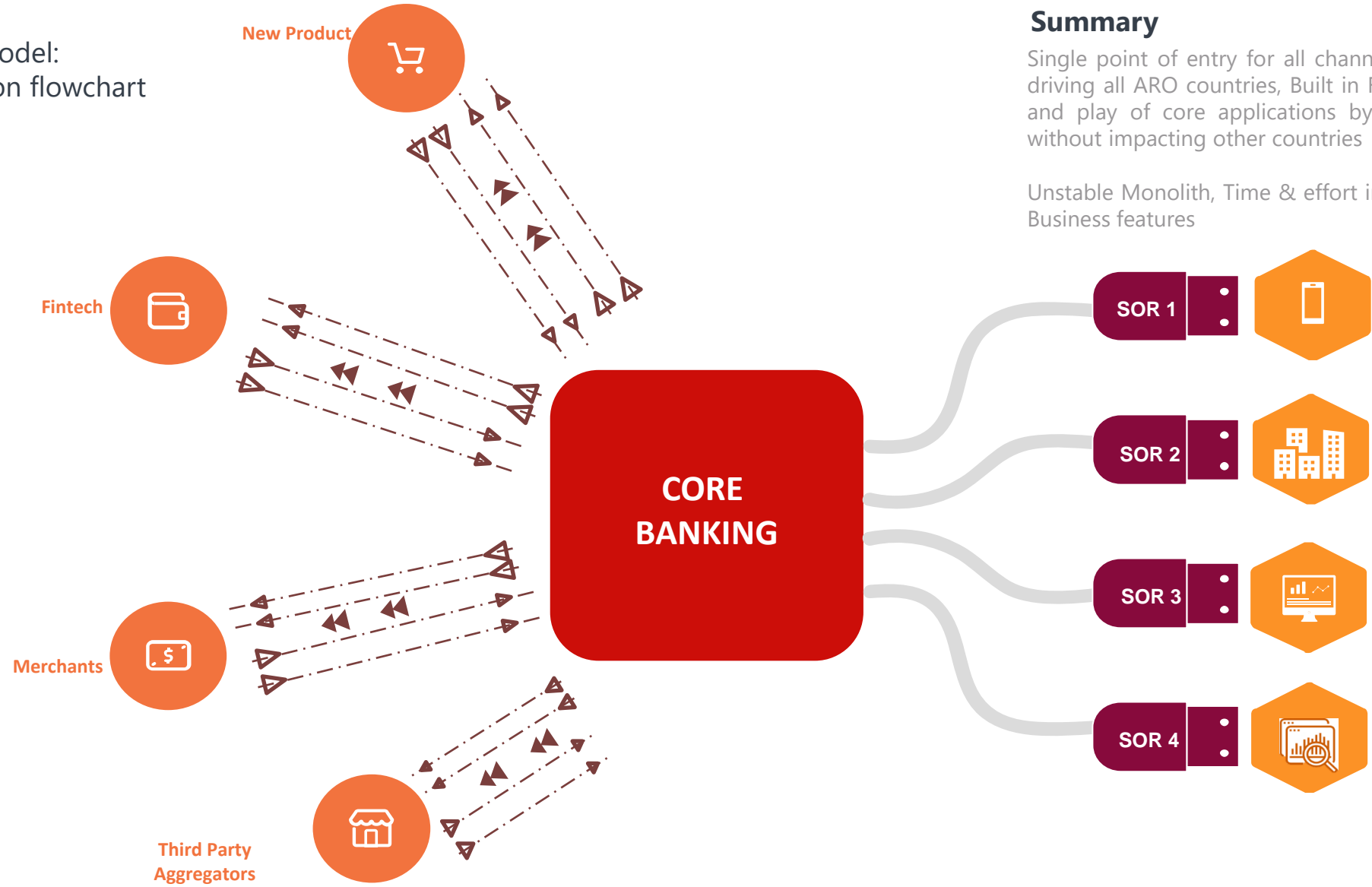
- Decouple complex systems from business functions like with SOA (Service-oriented Architecture) but with more service independence and more resilience.
- Leverage of AGILE and best practice principles coming out of our industry.

The new platform seeks to adopt a standardized approach by implementing ‘common’ architecture principles across the Absa Regional Operations landscape.

The new platform is designed to decouple back-end solutions so that that a “plug-n-play” approach can be adopted to replacing back-end applications.

Existing Architecture

Core banking model:
Single transaction flowchart



Summary

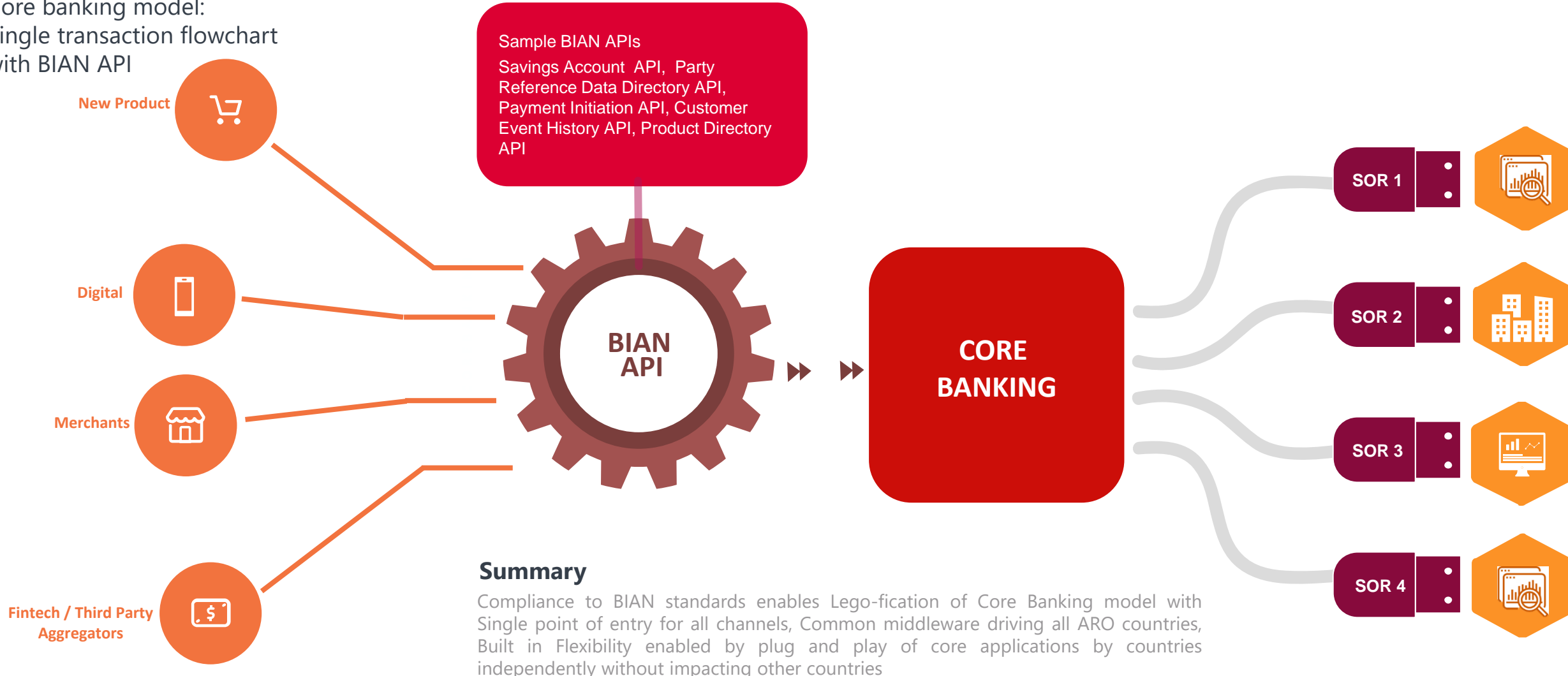
Single point of entry for all channels, Common middleware driving all ARO countries, Built in Flexibility enabled by plug and play of core applications by countries independently without impacting other countries

Unstable Monolith, Time & effort intensive to introduce new Business features

● Applications
 ■ Core Banking
 ⬡ ARO Apps
 - - -> Multiple Integrations with Core banking
 - - -> Integrations through multiple languages
 ▬ ▬ Core Banking Integrating with internal applications

BIAN Adopted Architecture

Core banking model:
Single transaction flowchart
with BIAN API



Summary

Compliance to BIAN standards enables Lego-fication of Core Banking model with Single point of entry for all channels, Common middleware driving all ARO countries, Built in Flexibility enabled by plug and play of core applications by countries independently without impacting other countries

Secure, Reusable, Standardized enabling cost and effort efficient introduction of Business features

Program Approach

MVP – Current Approach

- Focused on onboarded channel only

Pros:

- Faster TAT (Turn around time) for channels
- Zero wastage

Cons:

- Additional cost due to continuous engagement with SORs and Channels
- Lack of reusability. Need enhancement every time

Big Bang

- Consider all channel needs at once

Pros:

- Zero rework as all requirements analysis completed before start of development

Cons:

- Can lead to wastage due to un-used APIs
- Increase in time to market of new channels
- Disconnect between business needs and solution offered
- Not able to gain competitive advantage

Hybrid – Suggested Approach

- Consider requirements for existing key channels and uplift APIs for new requirements on need basis

Pros:

- Build right first time
- Zero or minimal re-work
- Reduce cost for SMEs support
- Faster Time to market of channels introduction

Cons:

- None

- Adopted green field implementation approach to maximize benefits of agile architecture.
- Targeted new Channels to be onboarded first on the new platform followed by transformations of existing channels.
- MVP approach followed for quick onboarding of transactional Chat Banking channel and now we are looking at analysing existing capabilities of all digital channels.

BIAN Adoption trends & recent experiences

- Multiple customers
- Few customers
- Very Few customers

Speed to Market – Launch products, features, capability faster

Business - IT Alignment & Enterprise/ LoB Blueprinting ●

Moving away from ESBs to Standardized APIs and Microservices on Cloud ●

Application portfolio rationalization to identify gaps, overlaps and misaligned applications ●

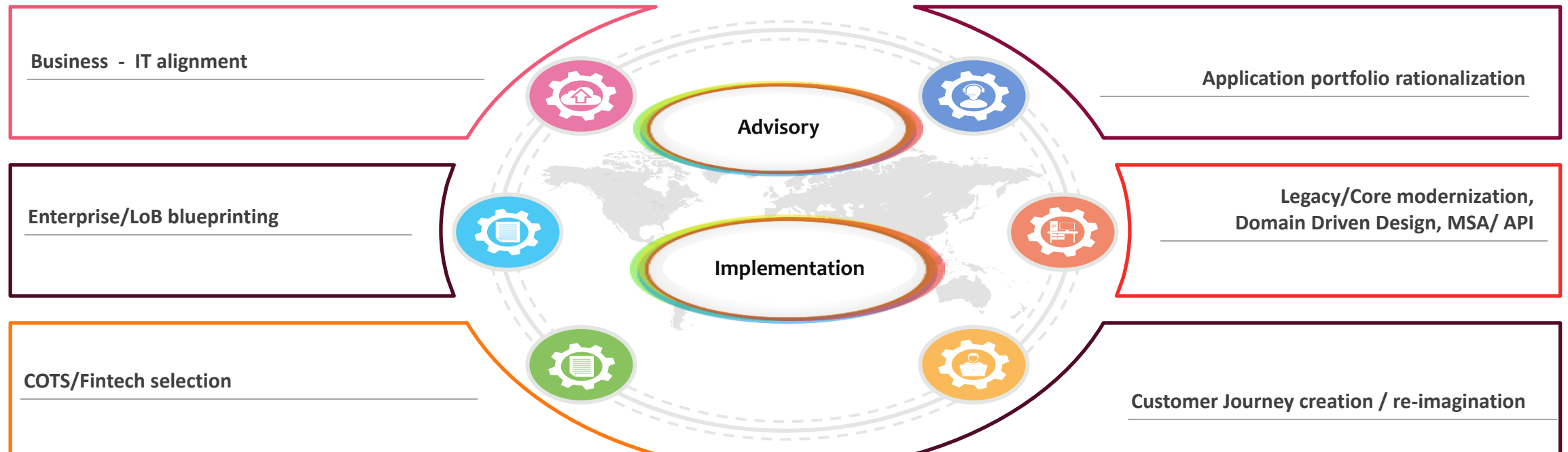
Legacy modernization / Core systems repurposing and moving towards coreless banking ●

Match and select vendor solutions/COTS/Fintech for business capabilities ●

Create DDD based right sized services for any greenfield / brownfield implementations ●

During M&A process to select competing capabilities from the merged organization ●

Innovation - Customer journey creation / re- imagination ●



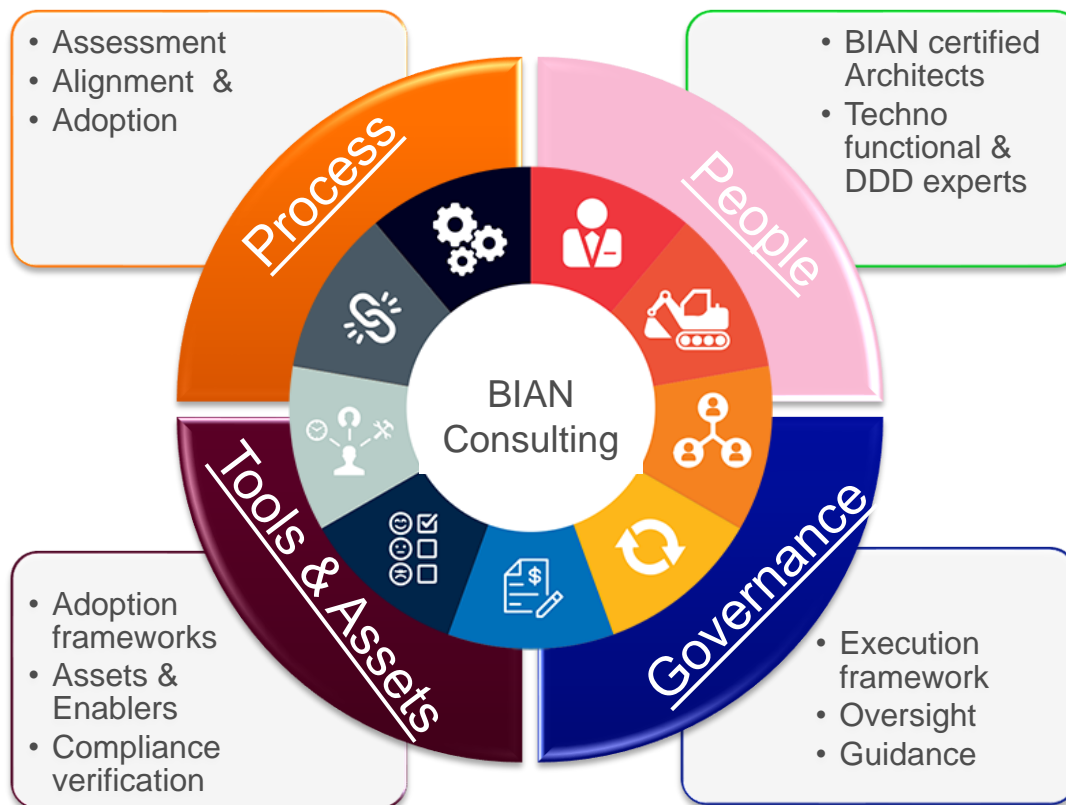
TCS BIAN Consulting
(BIAN.Consulting@tcs.com)
Establishing future readiness in Banks

Participation in 16 BIAN working groups | Unique assets empowering adoption | Multiple adoption pattern expertise.

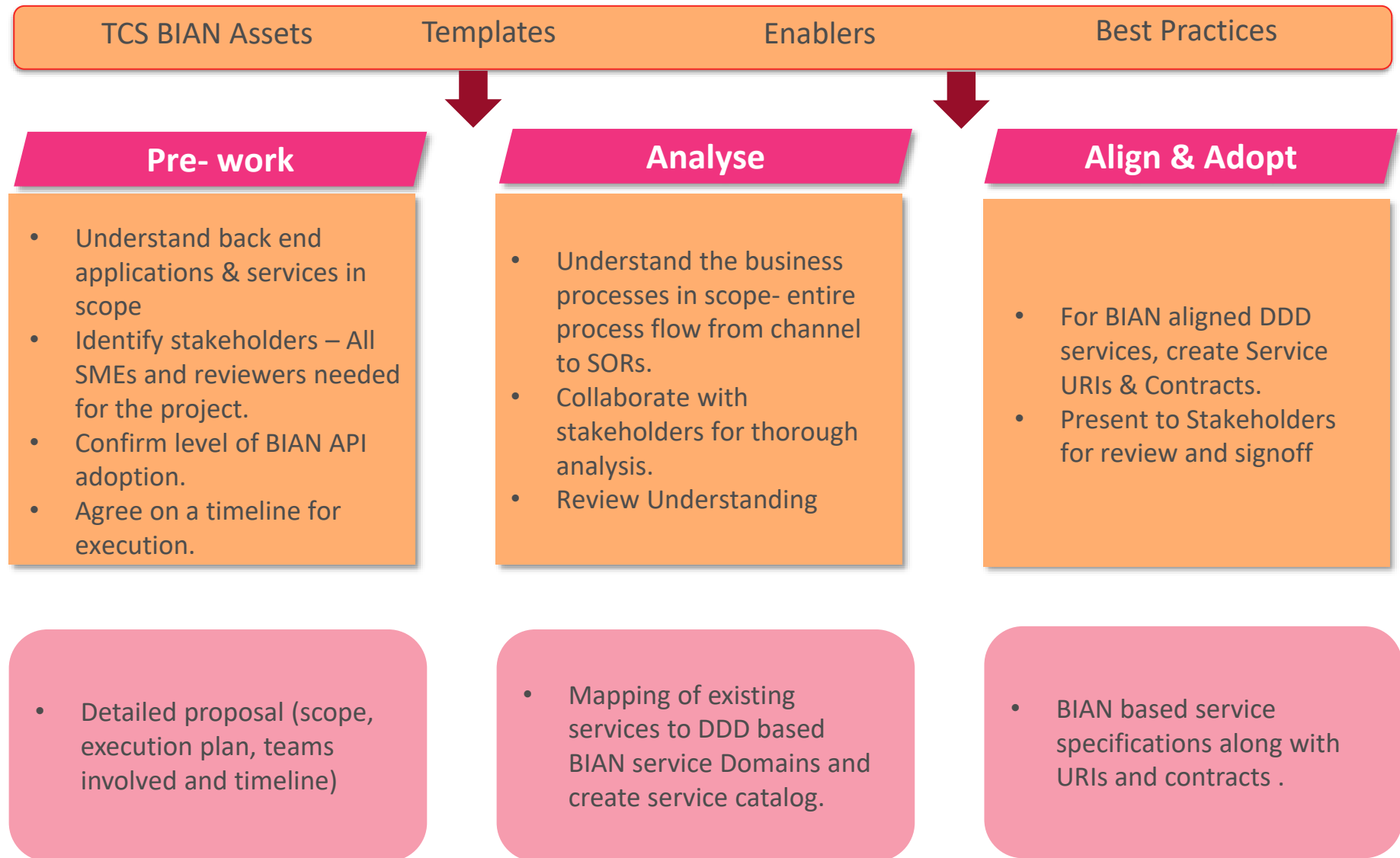


BIAN Consulting

Enable BIAN adoption,
Adoption assessment,
Adoption pattern identification,
BIAN compliance,
Contextualization and
extension of BIAN business
Scenarios, Accelerate
deployment through TCS
Enablers



The Journey – We started with an execution approach ...



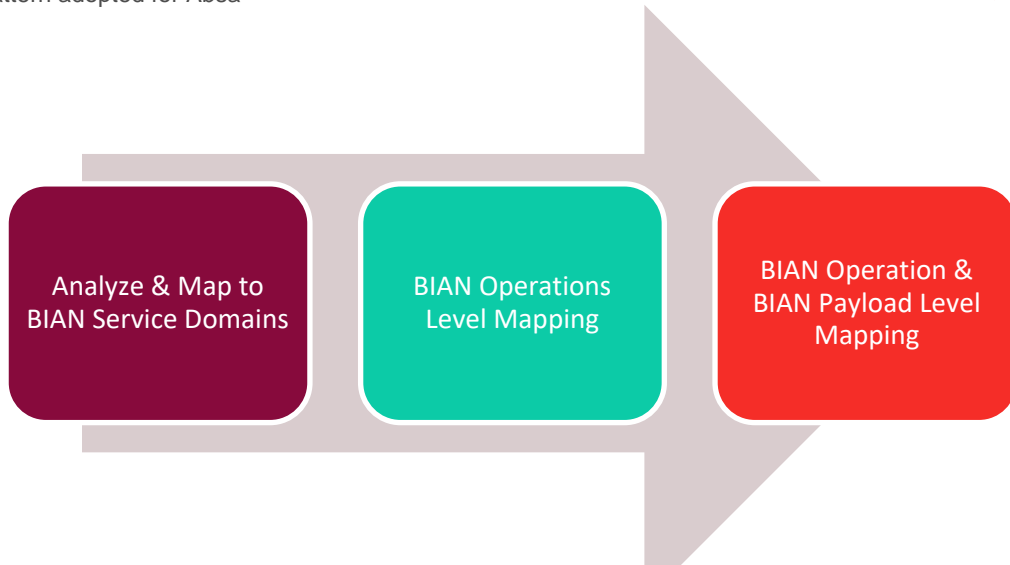
Post PoC Implementation, a detailed execution approach was put together for the entire program

Identified the right API Adoption pattern & delivered artefacts...

API adoption pattern	Align Service Domain & URI	Align Service Domain, URI and Control record	* Align Service Domain, URI and Control record as well as BIAN BOM
Impact	Consumers will have to be made aware of changes in the URI.	Request response will have to be changed, mapping dictionary to be maintained for data elements.	Entire data model has to be aligned with BIAN.



* Pattern adopted for Absa



Channel API to BIAN API to SOR service mapping

“Helped consolidate multiple services providing same capabilities. Eg. 20 payment services were consolidated to 4”

Mapping multiple channels to BIAN API

“Helped identify reuse across channels “

Channel APIs to BIAN URI mapping

“Helped create future ready services, channel agnostic services “

“Helped provide the right level of abstraction thereby ensuring SOR changes are not impacting the channels.”

BIAN APIs & request response mapping to SOR services request / response

Handling few challenges faced during adoption....

BIAN provided Payment initiation semantic API has this URI for initiation operation -

[/payment-initiation/{sd-reference-id}/payment-initiation-transaction/initiation](#)

While implementing for Absa we added multiple sub qualifiers for the various business scenarios as shown

[/v1/payment-initiation/payment-initiation-transaction/fund-transfers/domestic/initiation](#)

[/v1/payment-initiation/payment-initiation-transaction/fund-transfers/international/initiation](#)

[/v1/payment-initiation/payment-initiation-transaction/bill-payments/initiation](#)

CR Payment Initiation Transaction Instance Record

- + Payment Initiation Transaction Instance Record
- + Payment Transaction Type
- + Recurring Payment Record
- + Recurring Payment Customer Reference
- + Recurring Payment Reference
- + Customer Reference
- + Payment Transaction
- + Payer Reference
- + Payer Bank Reference
- + Payer Product Instance Reference
- + Payee Reference
- + Payee Bank Reference
- + Payee Product Instance Reference
- + Amount
- + Currency
- + Date Type
- + Date
- + Payment Fees/Charges
- + Payment Mechanism
- + Payment Purpose
- + Document Directory Entry Instance Reference
- + Document Content

Challenges

- BIAN semantic APIs will serve as reference APIs hence during implementation journey, for all the needs specific to banks we need to introduce the right sub-qualifiers in the service operations so that they are discrete and non-overlapping and rightly mirror the banks context.

- Most of the Bank's data elements were mapped to BIAN BOM, for the ones which were not available in BIAN BOM were added and Bank's own custom data model extending BIAN BOM was created. This exercise needs a lot of domain expertise as well as in-depth knowledge of BIAN BOM. It is quiet time consuming, so we have created a framework to automate some aspects of this data mapping exercise.

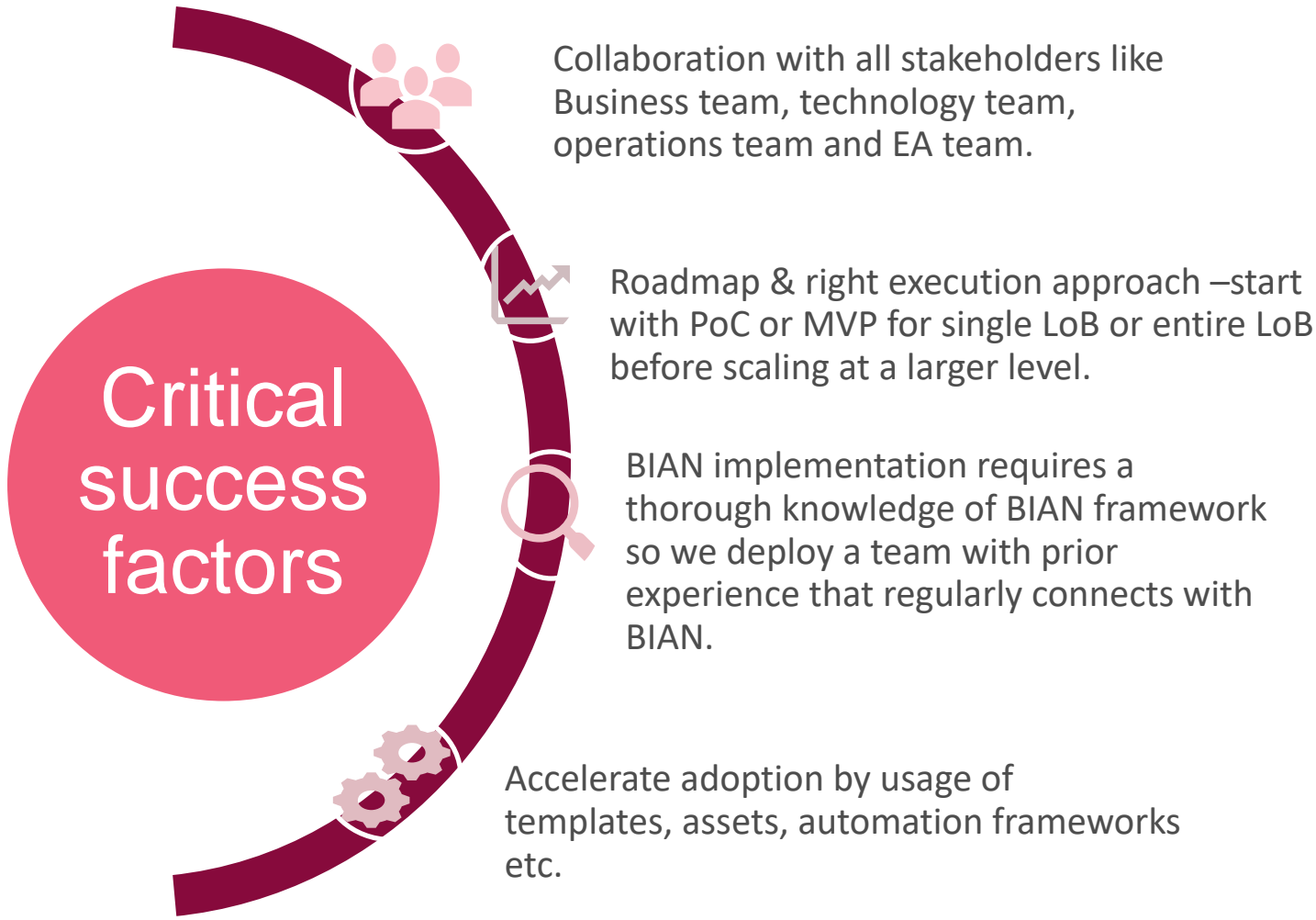
- Synchronizing with latest BIAN releases have to follow a well -defined process so that there is no impact to execution timeline and also ensures the latest BIAN updates are incorporated.

Sample updates in BIAN version 9

Service Domain Name Changes

- Fraud AML/Resolution => Fraud Resolution
- Credit/Charge Card => Credit Card
- Customer Product/Service Eligibility => Customer Product and Service Eligibility
- Document Services => Document Library
- Party Data Management => Legal Entity Directory
- Customer Reference Data Management => Party Reference Data Directory
- Contact Dialogue => Session Dialogue

Critical success factors that helped

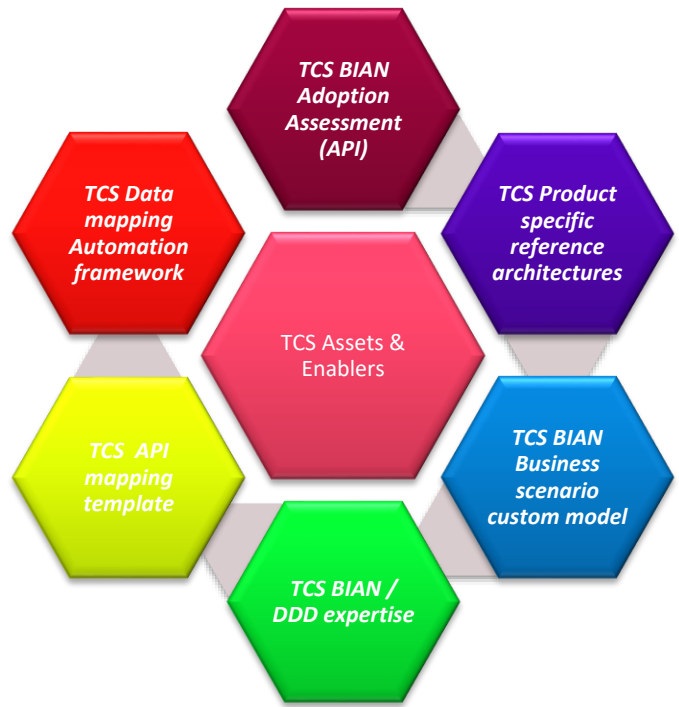


Sample feedback shared with BIAN

For a business scenario, we have a situation to handle Memo for transaction processing within a Current/Savings account service domain. We have not come across memo handling capability. Can it be added?

In BQ Association instance record of Party reference Data directory SD, we have 'Proxy/Representative/Power of Attorney Reference' element to capture associated reference details . Can we extend it to capture address, email etc.

We need a field in credit card control record to store reference to 3rd Party who acquired this customer. Can this be added?



Delivered the below benefits to the bank...

Speed To Market

- Quicker Integration due to standardization.
- Plug & play integration capabilities.
- Avoidance of Vendor –lock in.
- API catalog re-used across the enterprise leading to quicker development
- CI/CD to improve TAT
- Enabled API Marketplace business model

Increased revenue

- Capability to leverage ecosystem players leading to new revenue stream
- Seamlessly integrate with fintech and partners to deliver new features & products

Standardization & Scalability

- Standardization of architecture capability definition & information model,
- Leaner application stack, Optimized calls to the core
- Discrete Business functionalities driven by Modular service domain design
- BIAN aligned APIs with clarity of purpose
- Scalability and availability as per business needs
- Enabled Cloud readiness



Cost reduction & Reuse

- API re-use across the enterprise.
- Cost reduction due to reduced API footprint.

Customer satisfaction

- Improved customer satisfaction due to quicker launch of products.

) Thank you (



How to become a member?

Freemium versus Premium

Benefits: Premium versus Freemium

		MEMBER	NON-MEMBER
COMMUNITY	Consume software and standards Anyone in the community can use and provide feedback for our open source projects and standards	•	•
	Contribute to the BIAN Standard Members and non-members are encouraged to get engaged and contribute	•	—
	Propose New Programs Any member can propose ideas for new programs or working groups	•	—
	Approve and Steer Programs The Board approves new programs driving the Foundation direction	•	—
NETWORK	Foundation Corporate Governance Board and Members meet annually to drive the strategy of the community	•	—
	Program Promotion & Thought Leadership We work with our Community to promote standards adoption and produce thought leadership content	•	•
	Strategy Advisory Free attendance and additional member perks at our annual conference.	•	—
	BIAN Introduction Days Meet-ups open to the entire community focused on specific topics	•	•
	Member Meetings, Resources and Events Member only events with market leaders including shared networking and workgroup meetings	•	—
BIAN SERVICES	Open Developer API Platform Our Open API Sandbox environment is open for all contributions	•	•
	BIAN Architect Certification Program Access to training and certification program and supporting materials	•	•
	Project Startup and Support Mentor and advisory services to our members as they consider to use the BIAN Models in their Architectural environment to ensure the projects succeed.	•	—
	General Assembly Meeting All members have voting rights, 1 member 1 vote, due = ring our annual general assembly regarding Board Elections, Budget, Strategy and so on	•	—
	Roundtables, Training, Workshops SMEs from BIAN and member firms provide custom training and workshops on a range of topics	•	—

Member driven organization

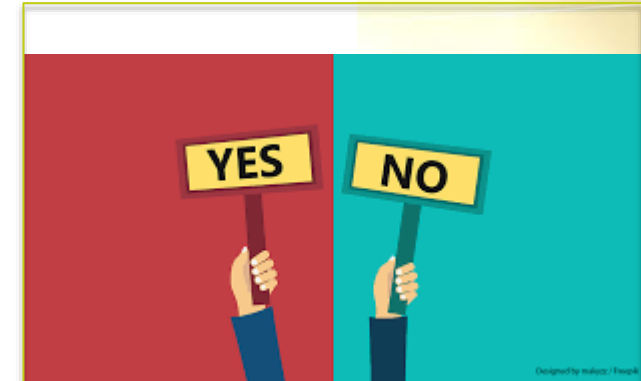
Fees (annual membership)

- **Large Software / Tech vendors / Integrators**
(250 employees or more)
EUR 30.000,-
- **Banks / FI's that are not vendors**
EUR 20.000,-
- **Mid-Size Software / Tech vendors / Integrators**
(less than 250 employees)
EUR 10.000,-
- **Federal Banks / Central Banks**
EUR 10.000,-
- **Small Software / Tech vendors / Integrators / FinTech's**
(less than 50 employees)
EUR 5.000,-
- **Academic Partners**
EUR 0,-



Questions?

Please stay muted and type your Questions in the righthand bar, or send them to info@bian.org



There is a short poll at the end of this webinar, please take a few minutes to share your thoughts with us!
Thank you in advance.

