BIAN Webinar;
"CIBC & Santander - A BIAN Adoption Journey"

BIAN
Banking Industry
Architecture Network

October 22nd 2020

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

BIAN
Banking Industry
Architecture Network

On Today's Webinar

Messalina Cadiz-Tostevin
Sr. Management Consultant
CIBC
Canada

Warren Hankin
Solution Architect
Santander
UK

Hans Tesselaar
Executive Director
BIAN eV

BIAN

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.

BIAN

Introduction | BIAN & Financial Institutions

Introduction | BIAN & Partners

Introduction | BIAN & Academic, Standard Bodies and Training Partners

Model Management Practice
BIAN @ CIBC Overview
Enterprise Architecture

October 22, 2020

CIBC

Banking that fits your life.

Introduction

Presenter

Messalina Cadiz-Tostevin

Senior Management Consultant, Enterprise Architecture & Data Governance, CIBC

Over 20 years technology and business analysis experience working in the insurance and banking industry. The past few years of my career has been spent leading the model management practice for the Enterprise Architecture & Data Governance group in CIBC.

Introduction

About CIBC

CIBC is a leading North American financial institution and one of the top 5 banks in Canada. From Personal, Business, and Commercial Banking to Wealth Management and Capital Markets businesses, our 45,000 employees provide a full range of financial products and services to 10 million clients in Canada, the United States and around the world. CIBC was founded in 1867 and has its headquarters in Toronto.

Investor Facts*:
- Total Assets of $651.6 billion
- Market Capitalization $50 billion
- Reported Revenue $18.6 billion
- Reported Net Income $5.1 billion

Awards & Recognitions:
- Recognized by Global Finance magazine as the Best Consumer Digital Bank in Canada (2020).
- Earned top overall score in The Forrester Banking Wave™: Canadian Mobile Apps report (2019)
- Recognized by Celent Research for delivering a cutting-edge integration platform that leverages open source technologies (2019).

*Reported as of October 31, 2019

# Our models are framed around the Architecture stack and represents a view to each layer
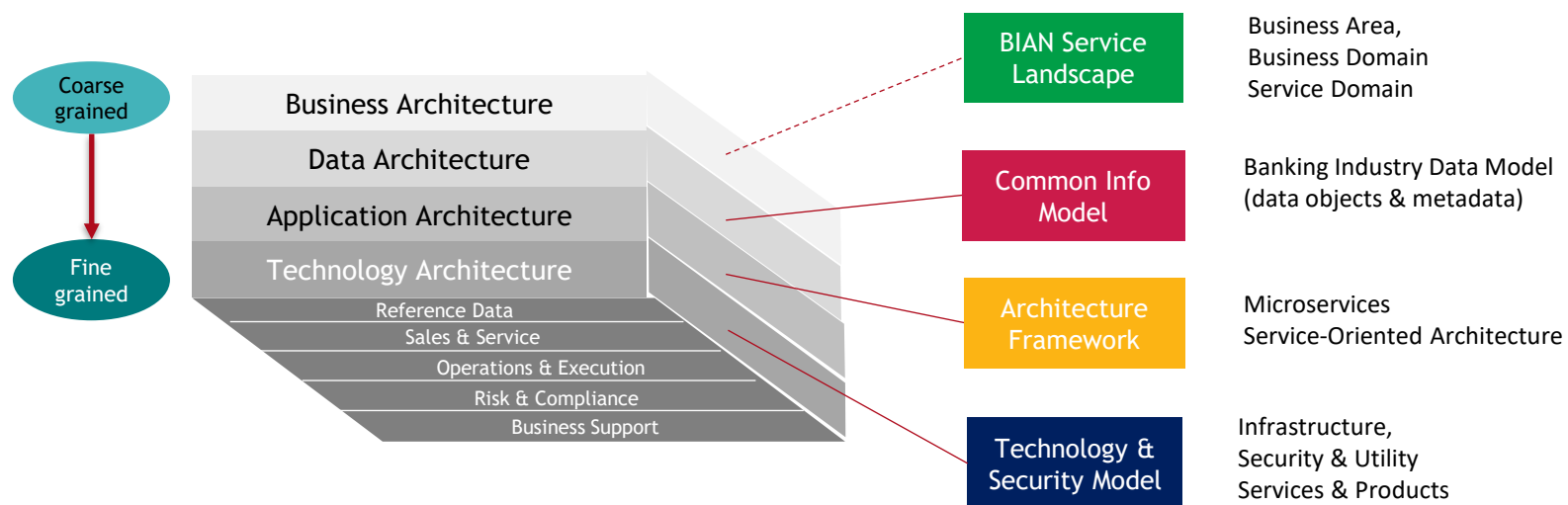
BIAN is **technology and implementation agnostic** and focuses solely on the business capability level; capabilities that support the realization of our banking products and services and that help us run as a bank.

Our vision is to leverage models that are fit for purpose and inform our strategic decisions.
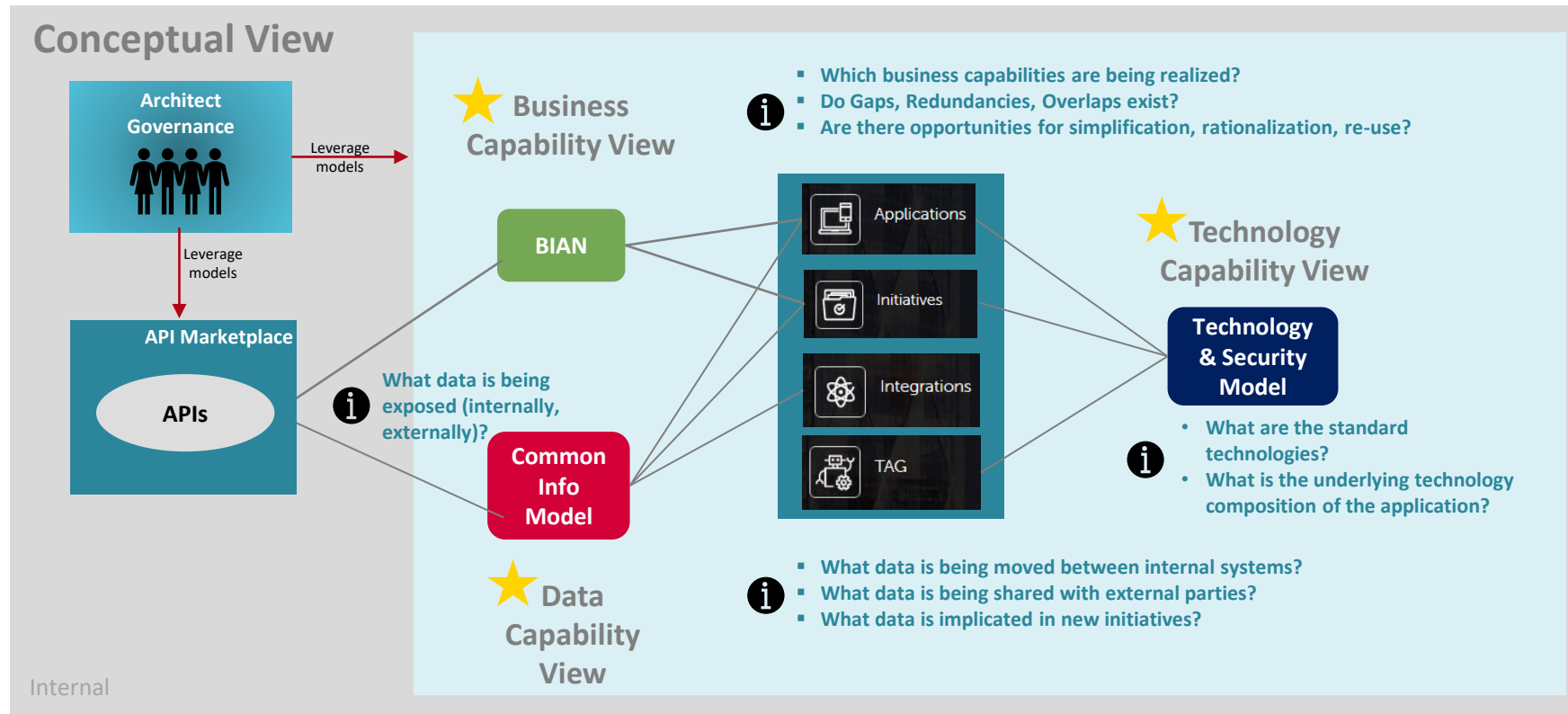
Why BIAN? The Value Proposition

1 **Applying a Business Capability Lens to our Technology Landscape**

a. We mapped every application in our portfolio to BIAN Service Domains

b. This allows us to view our application portfolio alignment to the BIAN Service Domains; we can identify applications that overlap across multiple service domains and applications that support similar capabilities.

2 **Creating a Value Chain 'Bank on a Page' View for the Enterprise**

a. We were able to create a 'Bank on a Page' view through which we can examine our current technology investments against business capabilities, and which can help us identify rationalization and optimization opportunities as well as potential gaps.

b. Our triage, governance and risk processes will be able to leverage the same 'Bank on a Page' view to evaluate proposed new solutions to our application portfolio and to promote application rationalization and modernization while preventing the proliferation of redundant applications.

**3** **Future proofing our Technology Portfolio for Disruptive Industry Change**

a. We anticipate that BIAN will assist us to evolve our core banking capabilities into a componentised framework and enable us to **help our clients achieve their ambition** while adapting to changing market and technology demands.

b. We are positioning our Bank for Domain Driven Design, Microservices architecture and Open Banking.

CIBC

CIBC BIAN Journey – Planting the Seed

Lessons Learned

Establish clear goals for the POC to validate BIAN:

- ✓ Compare/contrast BIAN against other models
- ✓ Identify areas where BIAN could help
- ✓ Leverage BIAN resources & WGs
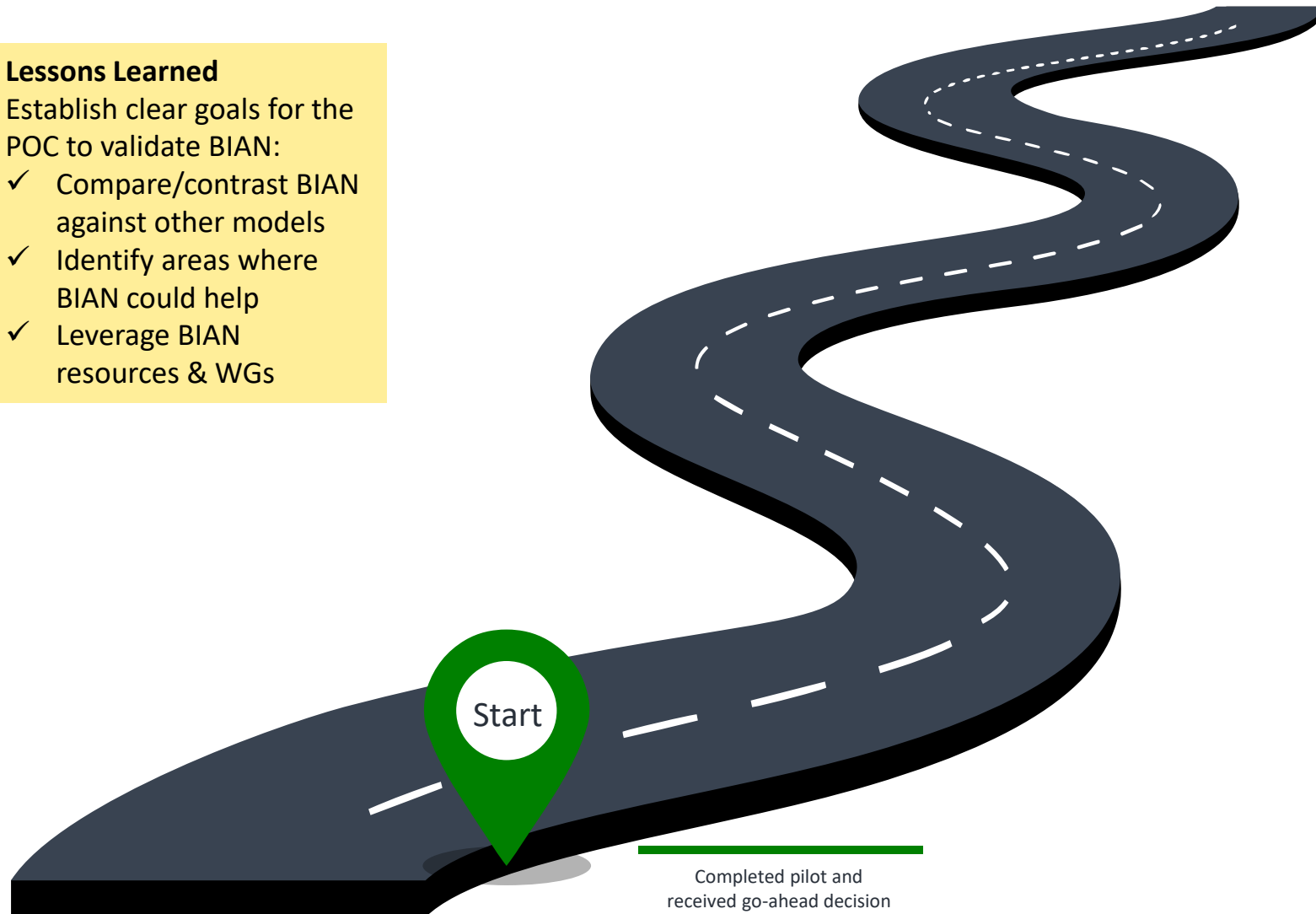
Start

Completed pilot and received go-ahead decision to move forward with BIAN (Q3 2018)

CIBC

CIBC BIAN Journey

01- Lessons Learned

- ✓ A clear Roadmap is helpful on how to incrementally roll out BIAN as the model is complex & the PCM effort is huge for big organizations with legacy systems and proprietary models.
- ✓ Start with a small group of change agents & champions to establish a baseline.

01

Developed BIAN Roadmap And Project Organization & Scope for Phase 1 "Plant the Seed" (Q4 2018)

Start

Completed pilot and received go-ahead decision to move forward with BIAN (Q3 2018)

CIBC

CIBC BIAN Journey

02- Lessons Learned
- ✓ The BIAN model is very complex and the online resources are plentiful but overwhelming. We created a more simplified deck to onboard our Enthusiasts.
- ✓ Learning curve is steep.
- ✓ Architects with Business Banking background had an easier time adopting the model.

01
Developed BIAN Roadmap And Project Organization & Scope for Phase 1 "Plant the Seed" (Q4 2018)

Start

02
Enthusiasts selected and trained on BIAN (Q1 2019)

Completed pilot and received go-ahead decision to move forward with BIAN (Q3 2018)
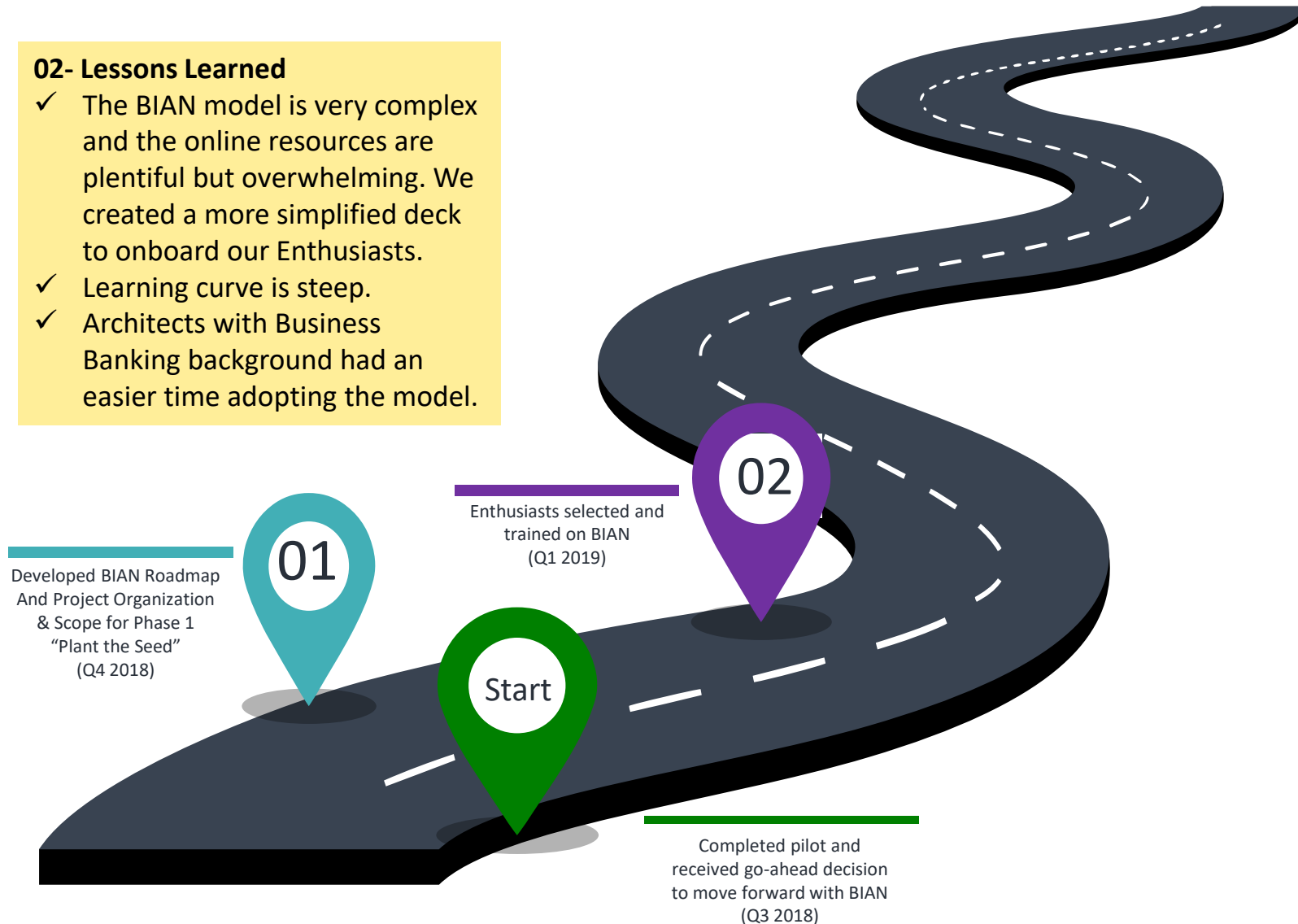
CIBC BIAN Journey

03- Lessons Learned
- ✓ The HPBM-to-BIAN to model confirmed that we could match the majority of the HPBM components to BIAN except for those that we knew where implementation, technology or data specific.

01
Developed BIAN Roadmap And Project Organization & Scope for Phase 1 "Plant the Seed" (Q4 2018)

Start

02
Enthusiasts selected and trained on BIAN (Q1 2019)

03
Iteration 1 HPBM-to-BIAN Mapping of Future State Components/Sub-Components By SME's (Q2 2019)

Completed pilot and received go-ahead decision to move forward with BIAN (Q3 2018)
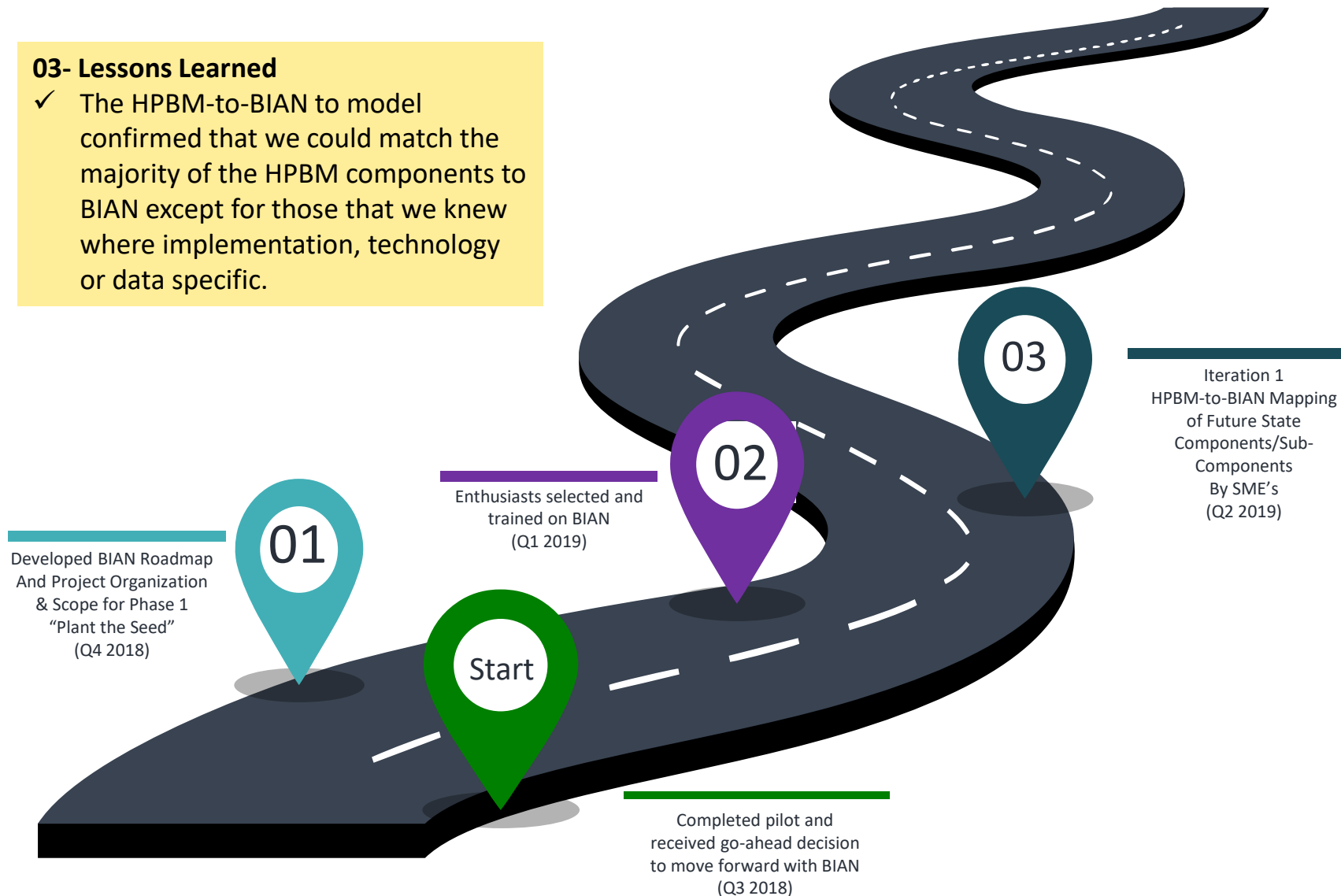
CIBC

CIBC BIAN Journey

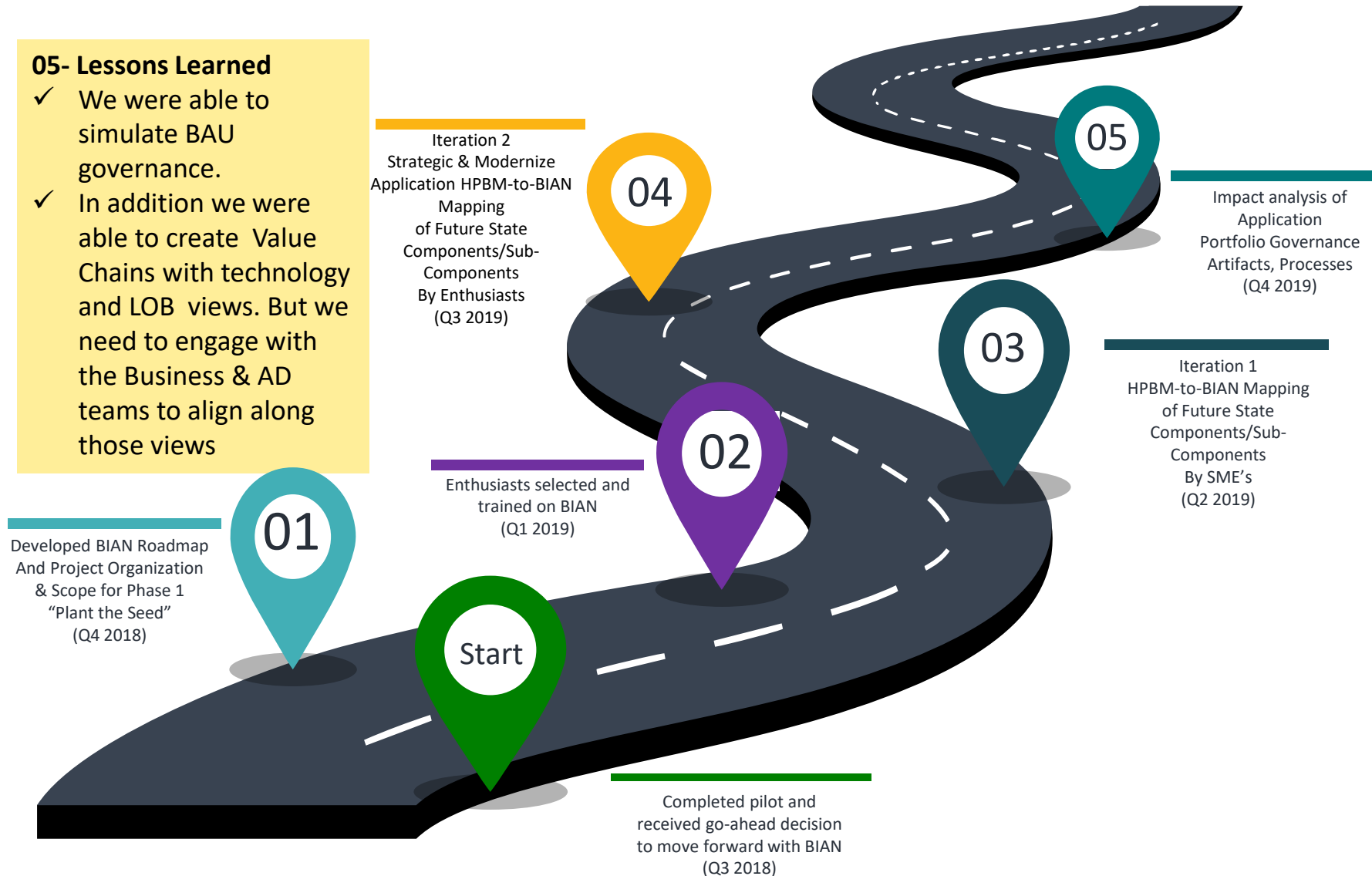**04- Lessons Learned**
- ✓ The mapping exercise took longer than anticipated as the Enthusiasts had to shift their thinking from technology to business capabilities.
- ✓ Some of the Service Domain Role descriptions were a little vague.

Iteration 2
Strategic & Modernize
Application HPBM-to-BIAN
Mapping
of Future State
Components/Sub-
Components
By Enthusiasts
(Q3 2019)

04

03

Iteration 1
HPBM-to-BIAN Mapping
of Future State
Components/Sub-
Components
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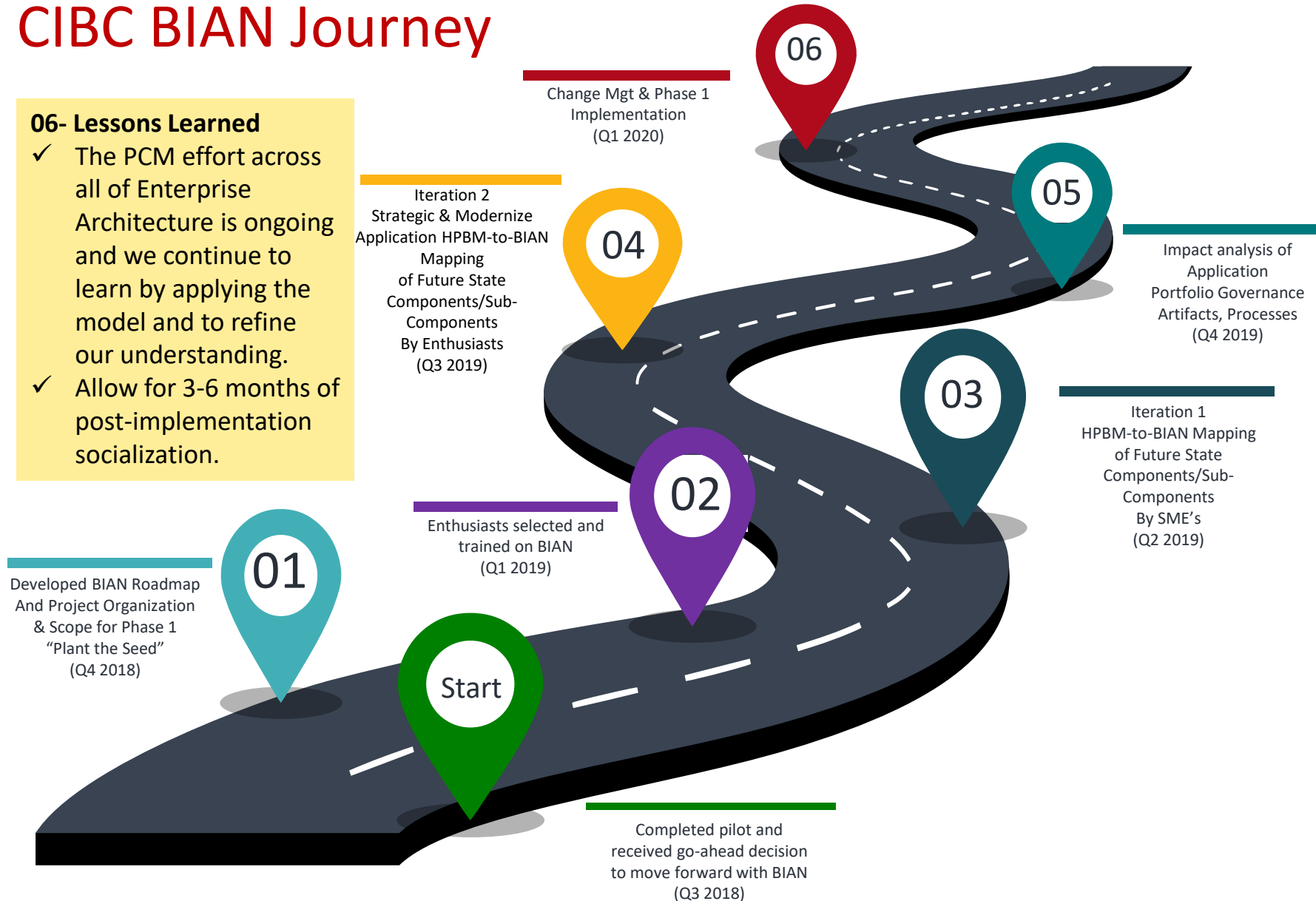# CIBC BIAN Journey

05- Lessons Learned
- ✓ We were able to simulate BAU governance.
- ✓ In addition we were able to create Value Chains with technology and LOB views. But we need to engage with the Business & AD teams to align along those views

Iteration 2
Strategic & Modernize Application HPBM-to-BIAN Mapping
of Future State Components/Sub-Components
By Enthusiasts
(Q3 2019)

04

05

Impact analysis of Application Portfolio Governance Artifacts, Processes
(Q4 2019)

03

Iteration 1
HPBM-to-BIAN Mapping of Future State Components/Sub-Components
By SME's
(Q2 2019)

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Enthusiasts selected and trained on BIAN
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Developed BIAN Roadmap And Project Organization & Scope for Phase 1 "Plant the Seed"
(Q4 2018)

Start

Completed pilot and received go-ahead decision to move forward with BIAN
(Q3 2018)

CIBC

CIBC BIAN Journey

06- Lessons Learned
- ✓ The PCM effort across all of Enterprise Architecture is ongoing and we continue to learn by applying the model and to refine our understanding.
- ✓ Allow for 3-6 months of post-implementation socialization.

06
Change Mgt & Phase 1
Implementation
(Q1 2020)

05
Impact analysis of
Application
Portfolio Governance
Artifacts, Processes
(Q4 2019)

04
Iteration 2
Strategic & Modernize
Application HPBM-to-BIAN
Mapping
of Future State
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CIBC

What are the opportunities going forward?

We have a unique opportunity to partner more closely with our business and technology partners to develop solutions with the following benefits –

Raise Business Value: The alignment to a common framework and ubiquitous language improves cross-functional collaboration and communication to successfully deliver business solutions and value.
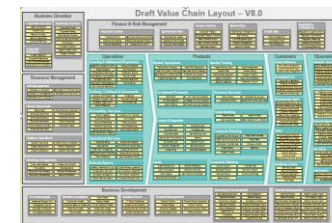
Lower Cost & Risk: Cost and risk are minimized through a tightly managed value chain that effectively connects purpose to strategy to business and organizational capabilities.

CIBC

Leveraging BIAN Artifacts and Tools

The **BIAN Service Landscape** is a logical, organizing framework of all currently identified Service Domains.

The **BIAN Value Chain** view shows the service domains that the organization uses in the front office, middle and back office.
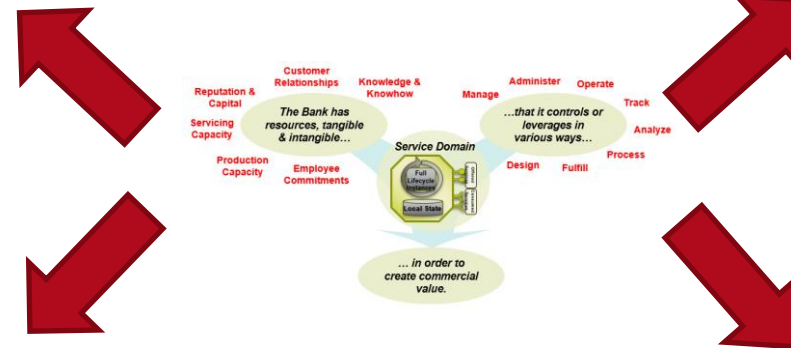
The **BIAN Service Domain** is a generic, elemental business capability building block and is stable over time.
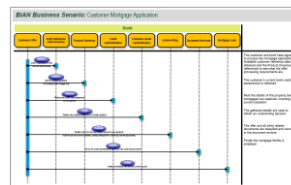
The BIAN **Business Scenario** is a linked sequence of interactions between Service Domains in response to a business event.
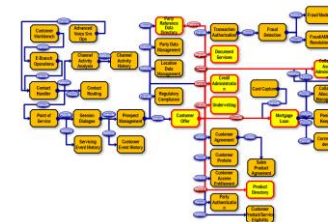
The **BIAN Wireframe** represents the available service connections for a selection of Service Domains.

Moving from the business narrative to business scenarios to componentized capabilities to a component-based architecture and design.

Thank You

BIAN Webinar

BIAN as a functional language - the journey (so far!) toward fully compliant Domain Driven landscape.

21st October 2020

# View of Generic Banking Institution

NOTE – not intended to be an exact representation of Santander

Santander is a complex global, multi-entity organization.
For purpose of demonstrating, this is a an example of the generic global bank view across the customer and product dimensions
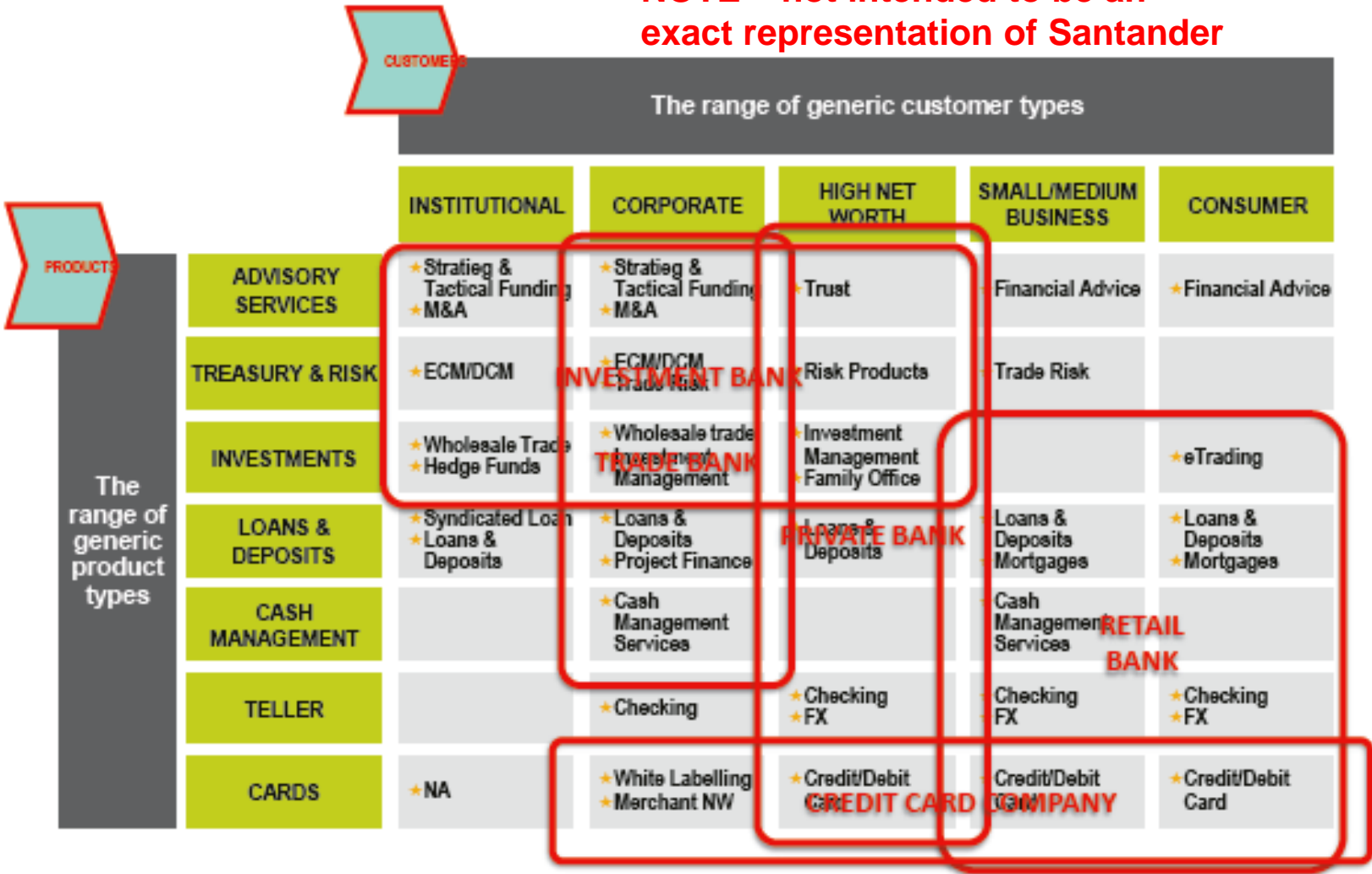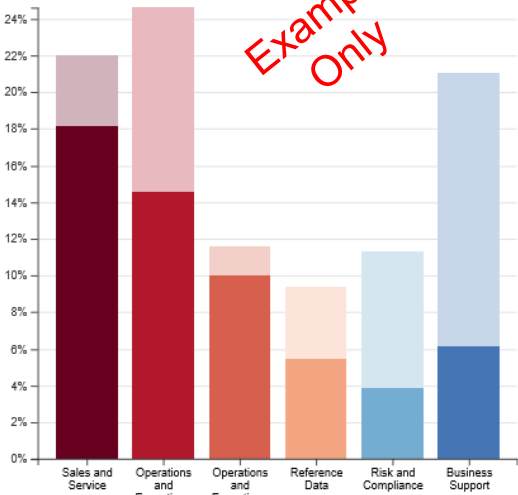

Examples of product segmentation and "bank type" coverage

Example BIAN Use Case 1

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FUNCTIONAL LANGUAGE FOR IT
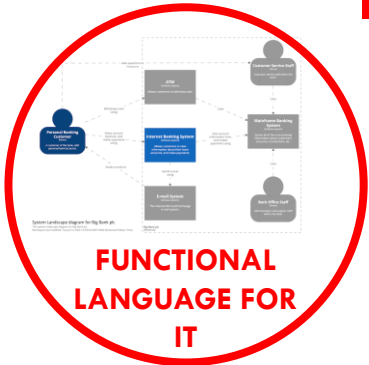
BIAN AS A FUNCTIONAL LANGUAGE TO ORGANIZE IT LANDSCAPE

- **In a complex global, multi-entity organization such as Santander Group, BIAN provides value as a common functional language to organize and manage the Applications Portfolio.**
- **Key IT portfolio tools are being updated to include BIAN Service Landscape as a new dimension to manage our assets.**
- **This also provides a view into opportunities such as simplification of the application landscape, reducing costs, decommissioning.**
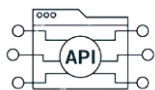
BIAN Coverage

Example BIAN Use Case 2

API DESIGN

Domain Driven Design

BaaS - API FUNCTIONAL REFERENCE FRAMEWORK

- **A reference architecture framework has been defined in order to provide common standards across the group.**

- **API Functions are published in the Intranet API Portal**

- **Enables more efficient identification of required APIs, also preventing inadvertent duplication.**

- **Each API is classified under its corresponding BIAN Service Domain.**

- **API Design: Each API must expose functions from only one BIAN Service Domain.**
  - **Also recognises, in some cases, a service domain may have more than one API**

- **An API can delegate responsibility to another API, matching the Service Domain model of delegating responsibilities to other service domains. This is hidden from the consumer.**

Example BIAN Use Case 2
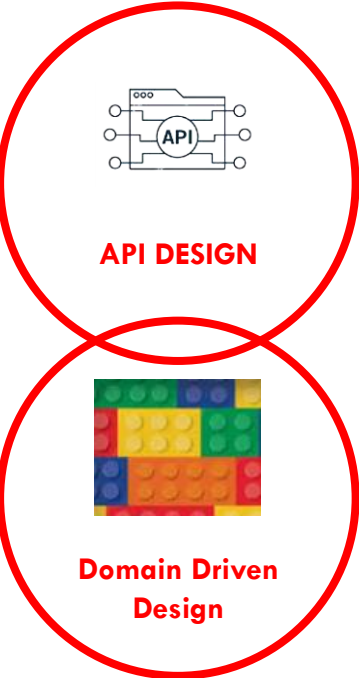
BaaS - API FUNCTIONAL REFERENCE FRAMEWORK

- **Banking as a Service (BaaS) APIs can be reused and have business logic that is common for many applications according to its BIAN Service Domain (Capability) which sets the logical boundaries and scope of functionality and data (I.e. Domain Driven Design)**

- **BaaS APIs are Touchpoint, Customer Journey or Customer Service capabilities**

- **Each BaaS API must exclusively manage it's own data, for the whole lifecycle of that data.**

API DESIGN

Domain Driven Design

Channel
UK Application

Experience API
Experience API Service

Delivers a business function

Service Domain 1
BaaS API #1
BaaS API #1 Service
System Service

Service Domain 2
BaaS API #2
BaaS API Service #2
Simple orchestration
System Service API
System Service
System Service

Backends, Domains/Processors
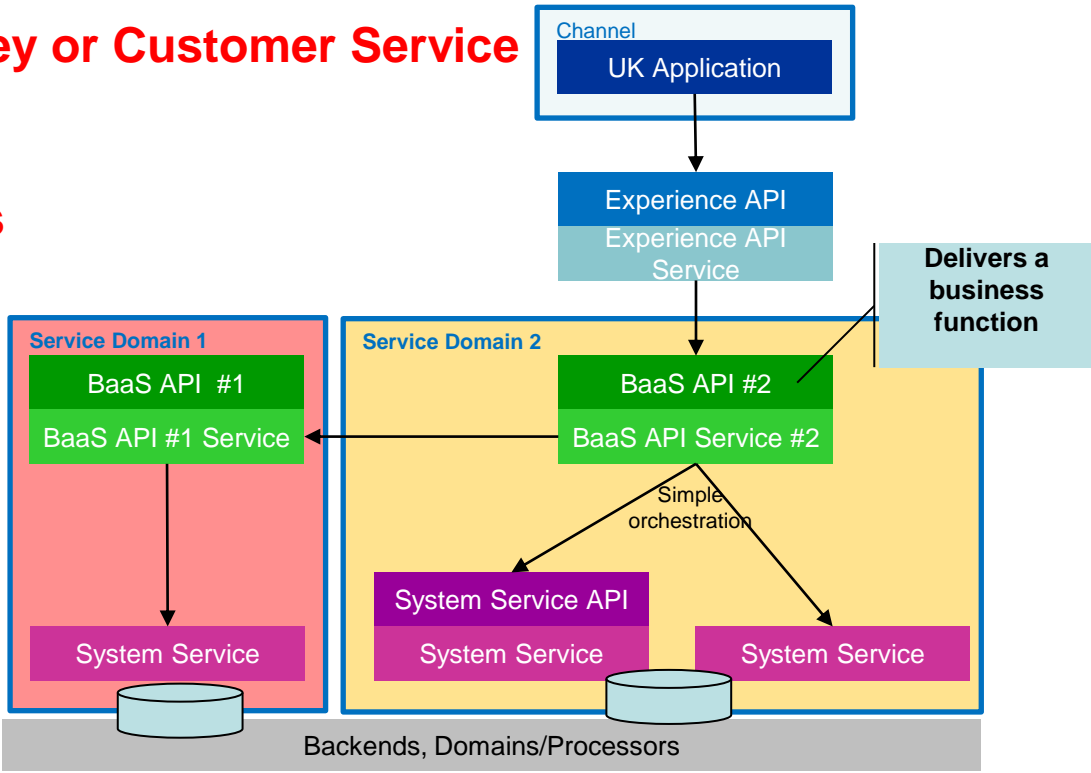
Direction of travel towards service orientated fully compliant landscape

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	Type 1. Direct to Core	Type 2. Wrapped Host	Type 3. Component Architecture
Definition	The API routes direct to the core system providing the service. Intermediate channel based access control and 'buffering' is required	Integrating service middleware – a service bus – 'wraps' the host systems. The service bus can offer various host access mitigation capabilities/enhancements	The host services are implemented as loose coupled microservices with complex interactions supported by sophisticated connective middleware
API Service Description	Read only or simple 'atomic' update transactions supported by a single host system. The solution is likely to be host application specific	Enhanced 'simple access' services aligned to established standards. Wrapping may enhance service capabilities and some hosts may support more complex exchanges	Support for flexible and complex interactions involving multiple business activities and processing/decision chains
Examples	◆ Retrieve a balance/account statement ◆ Reference a product/service directory ◆ Initiate a payment	Message conforms to industry standards (e.g. ISO20022) ◆ Retrieve a balance/account statement ◆ Reference a product/service directory ◆ initiate a payment ◆ Customer on-boarding/offers	◆ Prospect on-boarding and origination ◆ Customer dispute/case resolution ◆ Customer relationship development/up-sell/cross-sell campaigns ◆ Third party service integration
Business Drivers	Provide application based access to an established/existing type of customer exchange	Provide application based access with a high degree of standards alignment. Mask/augment host/legacy system limitations.	◆ Support sophisticated interactions ◆ Support new business models ◆ Support for 3rd party integration ◆ Leverage advanced technolgies/architectures

Direct to Core

Wrapped Host

Microservice Architecture

BIAN Aligned

BIAN INFOGRAPHIC

https://view.ceros.com/hotwirepr/bian-guide-to-adoption/p/1
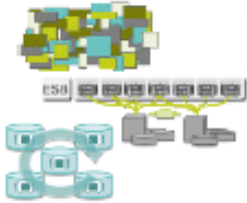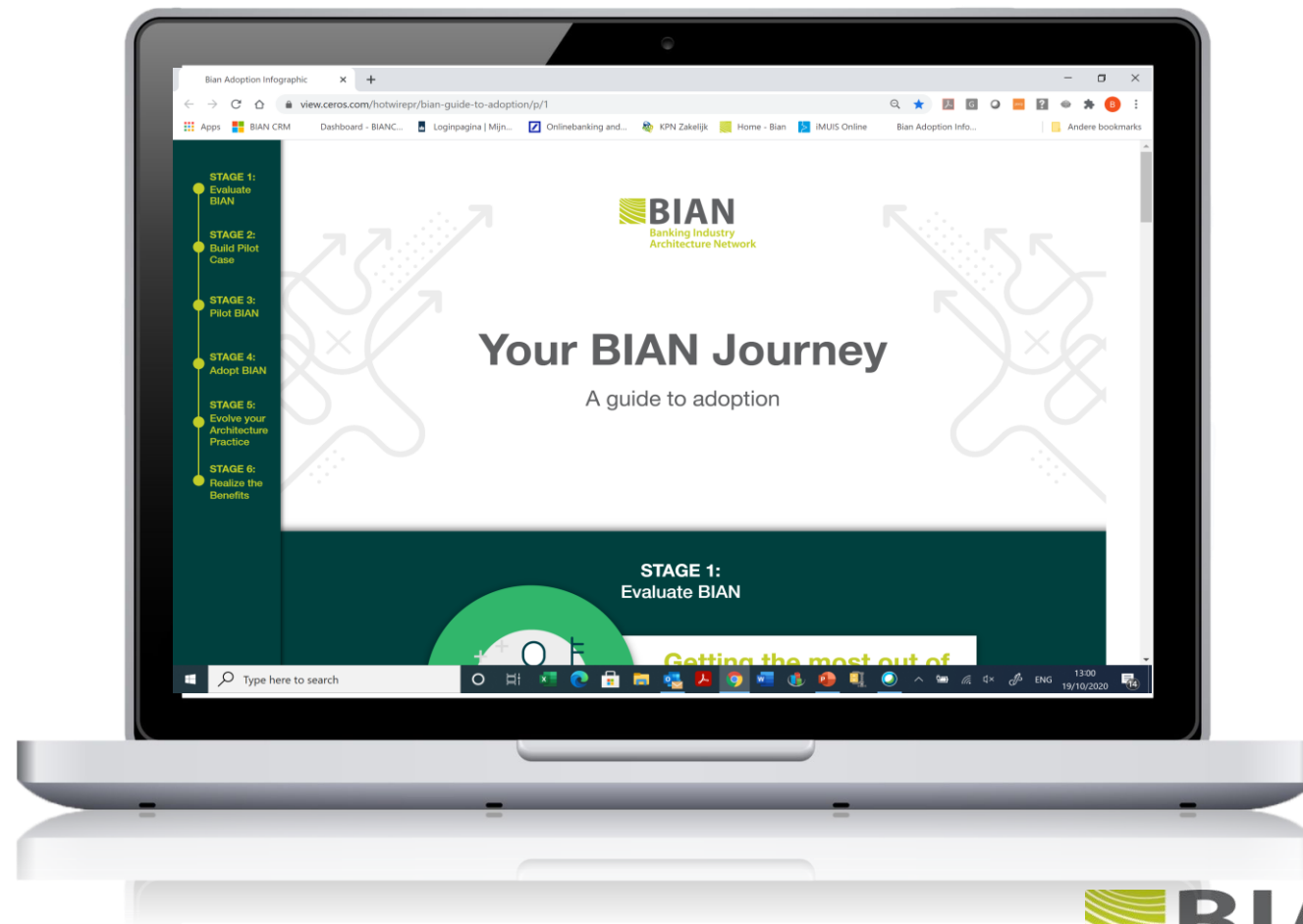
Benefits: Premium versus Freemium

		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	✓	✗
	Foundation Corporate Governance Board and Members meet annually to drive the strategy of the community	✓	✗
NETWORK	**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,-

Complimentary BIAN Webinar:

BIAN Release 9.0, from Open Banking Enterprise Architecture to Open Semantic APIs

In this webinar BIAN will give an introduction in the BIAN release 9.0 of the Banking Industry Reference Architecture.

We guide you through the content of the BIAN release 9.0 digital repository and show how to navigate through the BIAN architectural artifacts.

November

3

9am - 10am (CET) or
3pm - 4pm (CET)

Can´t make it on
November 3?

Complimentary BIAN Webinar:

## The BIAN Framework as the Cornerstone for Open Banking in China

In this webinar, our members Shanghai Pudong Development Bank share their experiences on an Open Banking PoC they launched in China Their experiences are an example for the usage BIAN for the Chinese Banking and Insurance Sector.

More

tbd

Questions?

Please stay muted and type your Questions in the righthand bar, or send them to info@bian.org
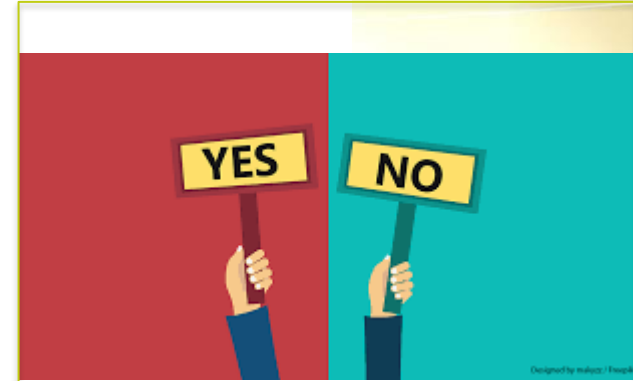
There is a short poll at the end of this webinar, please take a few minutes to share your thoughts with us!
Thanks in advance.

BIAN