



Core Banking Transformation at a top North American bank leveraging BIAN

A team from Cognizant's Banking and Financial Services Consulting practice led the Core Transformation strategy and design at a top 5 North American bank



Sanghosh Bhalla
Assistant Vice President

Has 21 years of global experience in the banking and financial services industry working for brands such as Deloitte, Protiviti, Capgemini. He works at the intersection of business, operations, and technology helping retail and commercial banking clients create sustainable value by developing and executing business agility and performance improvement strategies with focus on products, platforms and services, and digital/core banking transformation



Neha
Manager Consulting

Has more than 12 years of experience in leading technology and strategy projects for financial services clients. She has worked on multiple digital transformation programs for top banks across North America, EMEA and Asia Pacific and has significant expertise on Core Banking Modernization, Wholesale Lending Transformation. She is also a BIAN (Banking Industry Architecture Network) certified consultant



Niloy Sengupta
Director Consulting

Has 19 years of progressive experience in providing advisory services to the both top-tier and challenger banks. He specializes in the intersection of banking & financial services, with a focus on digital banking, platform modernization, business architecture. He is an expert on Fintech assessments , specifically Core Banking and Customer Servicing Platforms and is a BIAN certified architect



Akshaya Bhargava
(Ex) Senior Manager Consulting
Cognizant

Has more than 15 years of experience in leading technology and strategy projects for financial services clients. His experience includes strategic assessments, product management, business process optimization, target operating model design, and project management. He specializes in Treasury and Core Banking Transformations and holds a BIAN certification

The bank was using a three decades old mainframe platform, heavily customized, as its Enterprise Customer system of record and the Deposits transactional system

The Bank's core banking platform was built on legacy system (Hogan) which was highly customized over the years, leading to increased costs, complexity, and inflexibility, creating an urgency to modernize to achieve agility, differentiated capabilities, and technology parity.

Bank partnered with Cognizant Consulting for advisory support in helping formulate the overall path to modernization including the approach to decompose current legacy application into Microservices and plan to rewrite existing applications using modern technology stack and infrastructure.

Key considerations for Core Modernization

Business Considerations

- What are the implications for current Products and Process Landscape in the new core ecosystem?
- How will the new Core handle existing gaps in products and processes and customizations?
- What applications/components should be harvested, build or bought during modernization?

IT Considerations

- How will the dependencies on other projects in the pipeline be handled?
- How to find the right Consulting and SI Partners who can deliver?
- What IT resources and capabilities would be needed to support Core Modernization ?

Strategic Considerations

- How to manage the high risk and complexity of Core Modernization?
- What Organizational Change Management would we need?
- What are the new risks that will be introduced by the Transformed Core and how to manage that?

Financial Considerations

- What will the TCO and ROI of the modern Core?
- What will be the Engagement Cost of Core Banking Transformation?
- What would be the exit and opportunity costs ?

Customer, Deposits, and Relationship Pricing based Account Analysis were the three functional areas, across multiple business lines, that the legacy platform supported



Customer	Deposits	Relationship Pricing and Billing
140M Party Records	1.3M CD Accounts	200K Commercial Customers
650M Customer to Account Relationships	45M DDA Checking accounts	630K accounts analyzed
130M Phone numbers	75M DDA Savings accounts	220K accounts invoiced monthly
75M Customer Addresses	IRA : -0.9M IRA Money Market accounts -2.0M IRA Savings accounts	190K accounts auto-debited monthly

**Numbers are approximated*

Our strategy pivoted on unbundling the core ecosystem to simplify the business capabilities, streamline operations and modernize the core

DESIGN CONSIDERATIONS



Hollow Out the Core

Separate legacy add-on products from core and simplified core to essentials before beginning to modernize

Simplify products and focus on driving customer engagement

Drive product simplification to reduce product clutter and aligned product capabilities with a set of product and services to engage particular target segments.

Technology led transformation

Enable Technology to be at the front and center of core transformation initiative working cohesively with business and operations through MVP based approach

Platform approach supporting international expansion

End to end integrity, and a replicable model for international expansion (geographies) and capabilities build-out (products and services)

Product management mind-set

Drive platform build (integrations) and capability build by MVP construct – what can be taken to the market rapidly

BUILD CONSIDERATIONS



Core platforms – best of breed approach, as compared to traditional legacy with entangled capabilities

Complex integration but decoupled through API Gateways and ESBs – can invoke both fine-grained and coarse-grained microservices. Supports the target state digitization providing high speed Straight-Thru Processing

Progressive Modernization

Modernization is a journey that can include a mix of both Build and Buy approaches. Instead of a big-band replacement or re-write, use architectural patterns such as Strangler towards incremental evolution

Lean implementation

Adopt to best market practices in the packaged software, as compared to extensive build / expensive and difficult to maintain customization

Complete segregation of experience layer from the systems of records

Experience and process API's on top of domain API's (from the core) – and managing experience completely top down, as compared to point-to-point that imposes legacy characteristics on the process and experience

DELIVERY CONSIDERATIONS



Agile and Devops from the onset

Drive MVP concept through automation of the development to deployment process, and incremental improvements. Minimizing overheads of heavy waterfall style release planning, integration, and delivery

Workforce Transformation

Workforce transformation through training, upskilling, fostering a culture of innovation, instituting agile ways of working, strengthening the technology workforce, and modernizing workplace environment.

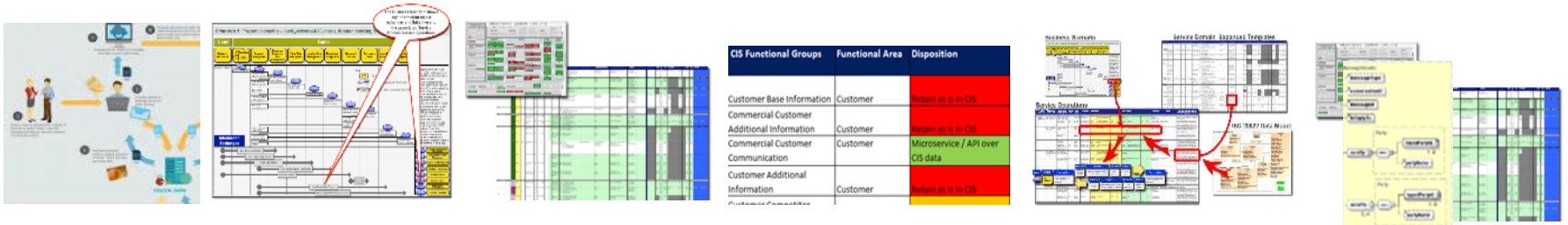
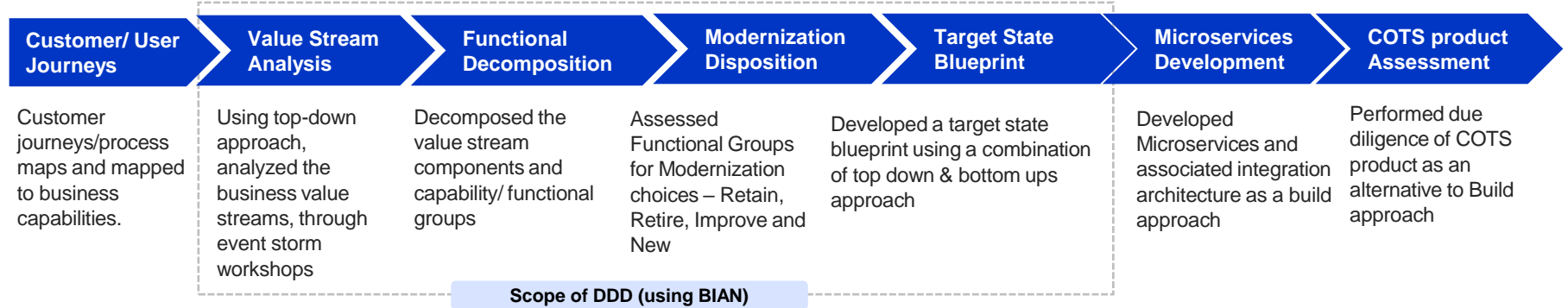
Data is the core

Analytical engines built on the data lake aggregating data from all interactions, touch points across core / non-core and experience components

API first strategy

Develop the API's in forward looking manner, to potentially monetize and help create API market place for expanding the eco system and third-party service-providers to be integrated

Using our proven DDD led progressive modernization approach, we drove both Re-write to Microservices and Replace with COTS initiatives



BIAN helped narrow down the Business Scenarios, Business capabilities and their interactions

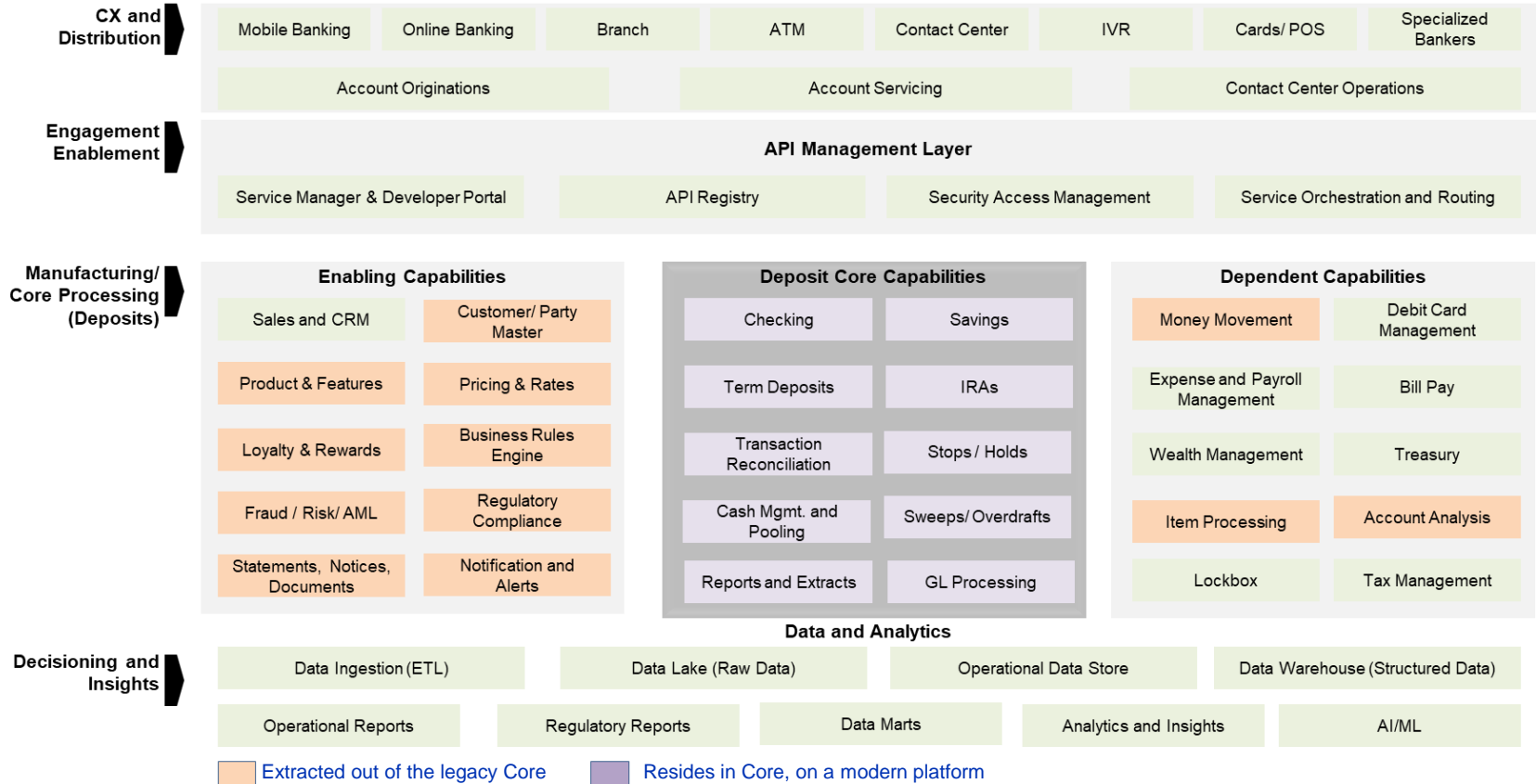
Functional groups were framed to align with the BIAN L3 Components (Service Domains)

BIAN offered Open APIs out of the box, influencing Modernization disposition assessment outcome

Aggregates, Entities, Value Objects, Domain Events were derived easily from BIAN Service Domain, Business Scenarios the business object model (BOM) and underlying ISO20022 data model

DDD = Domain Driven Design

We used BIAN extensively to outline the target state blueprint by hollowing out the Core



The Transformation strategy resulted in significant business and technology benefits for the bank



Acts as the GPS for the Core Transformation implementation and similar platform modernization journeys

- A modernization playbook with proven accelerator and frameworks based on Domain Driven Design principles and technique to collaborate between Business and tech to drive large scale transformation
- Comprehensive understanding of the emerging digital banking and leading vendor platform capabilities



Meets Strategic Business Objectives for Consumer and Commercial Banking

- Bank is anticipating significant gain in below business objectives:
- ~25 - 30% in Time to Market for New Products and Features
 - ~10 -15% in NPS by improving Digital Efficiency and CX
 - ~15 - 20% in Customer Retention through Relationship based pricing
 - New Customer target of ~15%



Supports significant Cost Avoidance and Risk Reduction

- ~**\$50M** estimated annual cost avoidance through reducing Technology and Operating Expenses and through Process Simplification
- Ability to exceed targets of Risk Reduction and meet MRA requirements



Stays Relevant in Terms of Technology

- Ability to harness the value and benefits of Cloud Computing and Digital technologies using modern technology stack
- Stay Competitive with Digitally Native Banks and Fintech Non-Bank disruptors

Thank You

Contact:

Sanghosh.Bhalla@cognizant.com
Niloy.Sengupta@cognizant.com