**Intelligent Banking:** ARE YOU READY?



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### INTELLIGENT BANKING: ARE YOU READY?

Digitization of business services and related processes is transforming the relationship of the customer with the bank - creating new relationships and expanding existing relationship. Now, digitization of IT operations ensures the ability of the bank to operate at scale - handling an increasing number of transactions in a shorter period of time.

Research shows that banking customers are expecting the same "on demand" speed they experience from sites for retail, transportation and other services. Modern banks should consider the operational requirements of providing services like loan underwriting, credit approvals and payment services that are fast, reliable and secure. To expand current customer relationships, compete with new age lenders and increase shareholder value, banks will adopt AI and ML across business and IT operations.

#### "If you're not the disruptor in the rapidly changing digital landscape, someone else will try to steal your future."

**David Carley** Vice President Distinguished Analyst and Gartner Fellow



Are you ready for AI Ops?

#### ANYONE CAN BE A BANK - REALLY?

Based on the broadest definition of "bank" - anyone can be a bank. This poses challenges for incumbent and new age digital banks. Incumbent banks are weighed down with regulations and compliance, not to mention legacy infrastructure. They are challenged by the loss of brick and mortar branch banks which are slowly disappearing in many geographies. The challenge is replacing the physical relationship with low touch, fast digital services.

Digital banks are quickly establishing mindshare and market presence. Mobile apps are their "branches" and their applications are cloud native. They are challenged with creating new relationships, engaging new clients online at the moment of truth and gaining trust. No margin for error in their fast paced, transactional world. Whether its payments, lending or investing - digital banks need speed and the ability to scale.

Incumbents and digital banks have one thing in common - they can't ignore IT operations. IT Operations needs to see more across the organization. They need to ingest more data from many sources - data that Is streaming and constantly refreshing. **Real time analysis provides Insights to maintain the speed and scale of the Intelligent bank.** 



Are you ready for AI Ops?

### BREAKING DOWN DATA AND OPERATIONAL SILOS

Intelligent banking requires orchestration across the IT organization. Banks should consider breaking down the operational and data silos that exist across banking entities, functional departments and applications. IT needs to consider data generated from on premise Infrastructure and the data originating from the cloud. Seamless Integration and digital decoupling of legacy from cloud creates new challenges for operations.

Adopting a flexible and responsive AI platform breaks down data silos to provide agile Insights that improve availability and performance.

Digitization of operations improves response time and availability. The volume and complexity of data makes it impossible to explore all possible relevant data relationships using traditional approaches. To explore combinations of data relationships that may be highly relevant but remain undetected requires Advanced Analytics and Artificial Intelligence. It requires using all the data across service layers from the business process to the application through the infrastructure that supports it.

Banks successfully transforming their operations are making use of transformative technologies like IoT and cloud to drive better customer experiences and profitable outcomes.



### ANALYTIC TECHNOLOGIES GAIN TRACTION IN BANKING



Applies logic and analytics to data as soon as it is produced enabling insights to be developed, conclusions drawn, and action to be taken rapidly based on immediately available information. Gartner refers to this as "continuous intelligence".



#### ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Enable decisions to be made and actions to be taken that normally require human expertise and intervention.

#### $\gamma_{\Pi}^{\rho}$ ADVANCED ANALYTICS COMBINED WITH MACHINE LEARNING

Continuously seek out data patterns and anomalous behavior and enhance performance, augment capabilities, and initiate and automate processes.



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#### PREDICTIVE ANALYTICS AND MACHINE LEARNING

Automatically discover the leading indicators and fingerprints that foreshadow problems. The predictive models continuously monitor the incoming data for early problem detection leading to proactive resolution.



#### AUGMENTED ANALYTICS

Describe environments and tools that automate aspects of data scientist and data engineering functions and support how analytics content is developed, consumed and shared.

We want to be there for customers in the moments that matter most incorporating artificial intelligence information our mobile banking offering will hel sp customers manage their simple banking needs more efficiently and spend more time with customers to understand their more complex needs and help them improve their financial lives."

#### **Thong Nguyen**

President of Retail Banking, Bank of America

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## TRANSFORMATIONAL POWER OF AI, ML, AND ADVANCED ANALYTICS

America's largest banks are seeing results from their investment in Artificial Intelligence (AI), Machine Learning (ML) and Advanced Analytics.

OUTCOME		USE CASE
Increasing revenue and overall lifetime client value	J.P.Morgan Retail Banking	<ul> <li>Identifying client best positioned for follow-on equity offerings</li> <li>Personalising offerings and tailoring rates</li> </ul>
Improving the client experience	WELLS FARGO	<ul> <li>Simplify and accelerate the customer password reset process</li> <li>Al enabled advisors along with automated delivery of personalised financial guidance</li> </ul>
Eradicating fraud	<b>cîtî</b> bank	Real-time identification of questionable and fraudulent activity
Capturing efficiencies and reducing cost	BNY MELLON	Robotic Process Automation incorporated into applications to reduce payment processing, resolve data errors

Sources: Al in Banking – An Analysis of America's 7 Top Banks, Kumna Ennaar, June 13, 2019; 19 Al and IOT Use Cases in Banking Industry, Data Science Central, Maheen Kumar, May 4, 2019

### OVERCOMING THE SKILL CHALLENGES

Although many of the largest American banks are realizing return on their technology investments, many financial institutions are stymied with execution.

Why? The challenge is not around lack of data, but acquisition of the skill sets needed to develop and interpret the data to effect transformation.

To overcome this challenge, investment in augmented analytics is essential. Augmented analytics is a term used by Gartner to support how analytics content is developed, consumed and shared. It includes automating data preparation, automating machine models and supporting visualization of insights generated from data.

Augmented analytics and environments that support a low code/no code environment enable citizen data scientists and relieve in part the skill shortage that is expected to be sustained for several years.

Mobile Banking

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LOGIN

Gartner describes a citizen data scientist as someone who "creates or generate models that can be used to advanced diagnostic analytics or predictive and prescriptive capabilities, but whose primary job function is outside the field of statistics and analytics."

### SUCCESS FACTORS TO EFFECTIVE EXECUTION

Banking requires a capable, extensible and agile analytics platform to deliver rapid returns.



**FAST:** Capable of processing high volume and velocity data, millions of events per second in real time



**EXTENSIBLE**: An open platform that integrates with the existing IT/OT technology stack and supports changes to underlying technology



**OPERATIONAL VISIBILITY:** Delivers the visual insights from the data to drive performance management improvements and support changes in behaviour



AGILE: Enables the citizen developers/analysts to extend digitalization opportunities for continued innovation and process improvement using a visual low code development environment

**RAPID RETURN:** Fast solution on boarding, application build, and demonstrable returns

## VIA BY VITRIA FOR DATA-DRIVEN EXECUTION

An agile analytics platform enabling rapid design, development, and deployment of digital operation solutions that solve problems by making sense of data – even the volume and speed of real-time event processing

**FASTER IMPLEMENTATION**, **LOWER COST AND RISKS** by using pre-designed solutions templates and a model-driven development approach

EXTENSIBLE AND SIMPLER data integration & correlation through pre-designed interfaces

**PROVEN, COMPLETE AND SCALABLE** platform technologies for the most complex digital operation use cases, incorporating real-time computation, Artificial Intelligence and automation

**COMPLETE** digital operations road map that leverages real-time analysis and artificial intelligence to identify and correlate anomalies, discover root cause and improve prediction accuracy

OPEN framework to tailor and expand the solutions beyond existing data sources and use cases

**EXPERIMENTATION FRIENDLY** to rapidly test new hypotheses and increase operational efficiency



Lower Operating Costs



Improve Service Quvality



Enable Personlization of Bank Services



Enhance Judgement and Decision Making in Reduce Fraud



### LOW CODE PLAFORM FOR INTELLIGENT BANKING

When you combine streaming real-time data for context with data from internal systems and advanced analytics, timely business insights can be delivered. But lacking the skilled resources are challenges for most finance organisations.

Our Analytics Platform delivers augmented analytics. VIA's self-service, model-driven development environment enables the rapid creation of highly effective analytic applications in days not months. VIA provides a visual modelling environment that requires minimal coding. A visual dataflow language enables solution developers to rapidly lay out the analytic value chain consisting of multiple data and analytic processing steps with a library of reusable "drag and drop" building blocks.



Reusable analytic models and rules can be exposed for configuration to citizen data scientists. Libraries of analytic algorithms can be made available to be composed into new and supportable use cases that continue on an ongoing basis to support your evolving business needs and requirements.

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OPERATIONS. NOT SALES Investment

EXPENSES Development Operting expenses Marketing NET INCOME

### HOW WE MAKE IT HAPPEN





# TAKE THE NEXT STEP TO **INTELLIGENT BANKING**

EASY TO START WITH A SINGLE DATA STREAM OR USE CASE.

Use the **VIA SOLUTION ACCELERATOR** – the VIA platform and templates Or choose the **VIA CORE PLATFORM AND TOOLS** for serious developers.



# **ARE YOU READY** TO TAKE THE NEXT STEP?

ACCELERATE YOUR JOURNEY TO INTELLIGENT BANKING WITH VITRIA

> Call for a free consultation. See a demonstration of how VIA's development environment can rapidly advance yo<u>ur progress.</u>