

Leveraging In-Memory Compute Grids with Core Financial Systems

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Digital Shift in Financial Services Underway – but Journey is long & risky

Competitive Pressures

- Non-traditional <u>FIs</u>
- Customer experience
 expectations
- Digital Interaction & Social media driven complaints

Regulatory Pressures

- Increasing regulations
- Changes in regulations
- Personnel shortages
- Non-common data standards



Profitability Pressures

- More inspection of marketing budgets
- Limited insights across entire organization (cross product, cross region...)

Business Operations Risk

- Transformation Disruption
- Agility to implement new business models
- Flexibility to leverage new technologies
- Skills

How best to accelerate the digital shift with profitably and security?

Existing Bank	S VS	Digital Banks
~\$ 150	AVERAGE COST TO ACQUI CURRENT ACCOUNT CUST	re new romers
DA ACCC	AYS FROM APPLICATION TO DUNT FUNCTIONALITY BEIN) CURRENT G ACCESSIBLE
3	\bigcirc	(0)
3-6	TIME TO LAUNCHA NEW F	
Ri < 1,000		15 PER FTE
25% Seurce: Oliver Wyman Analysis: Press Releases	EM PLOYEES RATING TI COMPANY AS A 5 STAR EM	HEIR IPLOYER

Addressing Competition Requires Wholistic View of Customer

Today's Landscape

- Manual processes link client assets across enterprise
- Lack real-time view of position, risk, growth

Why?

- Fragmented systems, data
- Siloed applications
- Latency & loss of granularity

Potential benefits

- Customer acquisition, retention
- Holistic view of a customer
 - Account view
 - Family view
 - Portfolio view
- Cross & Up-sell opportunities

Cross Organizational View of Client



Addressing Regulatory Compliance Challenges Requires Ecosystem Integration

- Number of regulations ٠
- Changes in regulations
- Personnel shortages ٠
- Non-common data standards

Increasing costs for Banks



Sharing costs of compliance, responding to increasing granularity of regulations, reducing risk through limiting raw data exposure

FinTech / RegTech:

- Identify most current ٠ regulations, changes, pending changes, etc.
- Provide pre-filing validation specific to the FI using new technologies

Technical Challenges

Core not Modular as needed

Core systems were often built with tight coupling and embedded business rules, but can inhibit agility.

Custom code

Many core financial applications developed over 2 decades ago and have not been modernized

Limited core with cloud integration

Core business systems often have limited integration with newer channels and cloud workloads

After the fact analytics

Analytics conducted on latent copies of data and limit real-time insights

Opportunity: Leverage Core Systems via APIs



- Faster Transformation ROI
- Broader Ecosystem

- Better Customer Experience
- Timely Delivery of Insights

Open Architecture & Modularization Principles for Banking Structure for Business Results

cosystems



TARGET STATE VISION

Open architecture principles

reinvent your core systems with a fully secure and highly resilient modern technology platform for plugand-play capabilities.



Transform & avoid negative disruption

by ensuring operations continue to meet required levels of performance, security and availability across core systems

Hyper Modular architecture

Self-contained, micro-services principle, but still able to meet nonfunctional requirements of performance, availability, etc.

BIAN-aligned reference architecture

guides the decomposition of business functions, ensuring hyper modularity.

Modularize core effectively

while preserving transactional consistency and coherency where needed, adding agility via microservices interfaces and hybrid cloud where needed

Accelerate integration

by creating standards based interfaces that can seamlessly be leveraged by the digital agility layer of modular business functions

Accelerate Digital Core Transformation: Integrate Compute Grid with Core Systems of Record

Internet	Mobile	IoT	АТМ	Branch
Intern	al Integration: Microserivces bas	sed API Management lever	aging API Connect, MuleSoft,	, Apigee
MODULAR BUSINESS FUNCT	ΓΙΟΝS			
Marketing	Sales	Servicing	Product Manage-ment	Customer Manage-ment
Internal Integratio	n: Enterprise Service Bus + Micr	oserivces based API Manag	gement leveraging API Conne	ct, MuleSoft, Apigee
	Stan		es 	
SYSTEMS OF RECORD / LED	GER		ompute Grid for Fir	nancial Systems
· · · · · · · · · · · · · · · · · · ·	········	client, product	time inquiries aggre	egations of the specific caches
Transact- ions Products Custor	ners General			
	Leuger	Data Vi	irtualization. Abstracti	ion. Context