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# *ISSA Symposium 17*

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## Practical Application of Technology to Solve Regulatory Challenges

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## *Who is here today*



- Vice President and Partner with Strategy&, formerly Booz & Company
- Leads the Financial Services *Fit for Growth* practice for Strategy&
- Over 15 years of experience, focused on large scale business transformations spanning both operations and technology
- Relevant experience meeting regulatory requirements, most recently working with DTCC and six banks to stand up a consortium to offer a central, standard solution to KYC/AML and FATCA



- Vice President and Partner with Strategy&, formerly Booz & Company
- Leads the Enterprise Architecture practice for Strategy&.in North America, which includes the data and analytics
- Over 30 years of experience, focused on technology-driven business transformation, primarily in financial services
- CEO/President/Founder of five software and services companies
- Designed the payment and securities settlement and clearing systems for seven central banks

***Regulatory change – do companies feel ready?***

***Solutions are multi-faceted, implementing one is not enough***

***That's a lot... but there are success stories***

# Regulatory change is a pressing issue – it’s not just the knowns, but the changing nature driving uncertainty

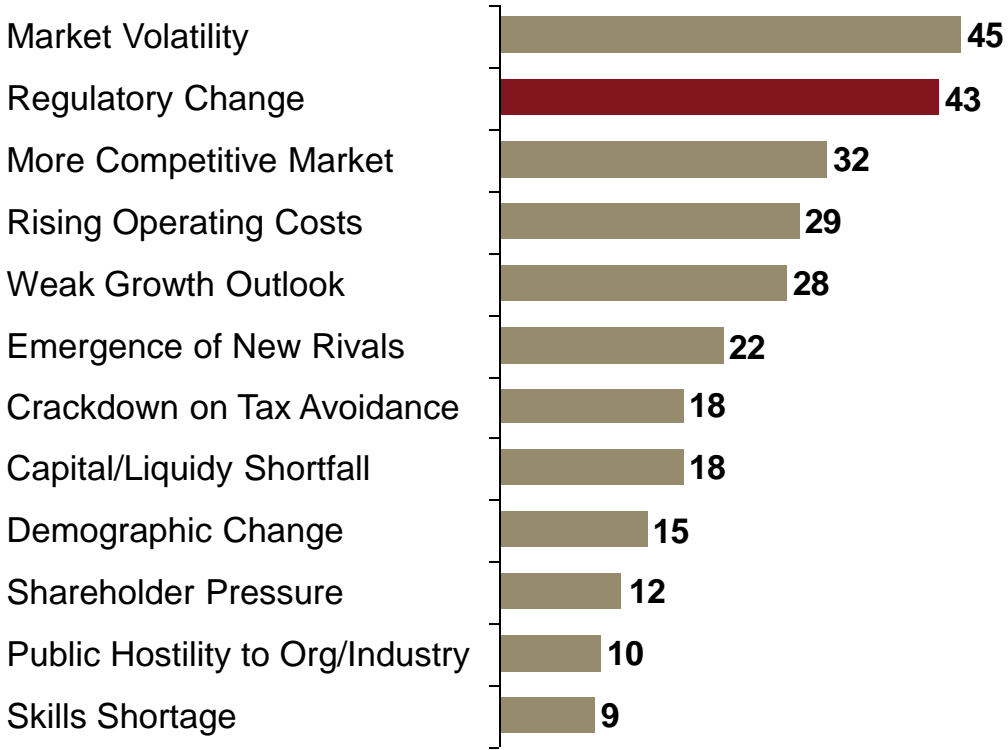
## Existing regulations

Basel II	KYC / AML
Dodd Frank	AIFMD
FATCA	UCITS

## Up-coming regulatory changes






Basel III	EMIR
MiFID II	G20 Financial Transactions Tax
Solvency II	

## Which of the following issues will likely be the most pressing for your organization in the coming two years?



Sources: Sunguard Financial Systems: Regulatory Pressure Cooker Compliance in the Boardroom (2014); Strategy& analysis

# Organizations are scrambling to comply, managing both direct and indirect impacts

Direct Impact			Indirect Impact	
<p><b>Transparency &amp; Reporting</b></p>  <ul style="list-style-type: none"> <li>• Enterprise view requires data &amp; technology integration, e.g.,                             <ul style="list-style-type: none"> <li>– DFA stress tests &amp; CCAR</li> <li>– FATCA</li> <li>– Basel II/III</li> </ul> </li> </ul>	<p><b>Liquidity</b></p>  <ul style="list-style-type: none"> <li>• Capital &amp; liquidity limits require enhanced modeling, e.g.,                             <ul style="list-style-type: none"> <li>– DFA</li> <li>– Basel II / III</li> <li>– SEC Rule 2a-7</li> </ul> </li> </ul>	<p><b>Globalization</b></p>  <ul style="list-style-type: none"> <li>• Global as well as local rules drive complexity, e.g.,                             <ul style="list-style-type: none"> <li>– KYC/AML</li> <li>– FATCA</li> </ul> </li> </ul>	<p><b>Cost Reduction</b></p>  <ul style="list-style-type: none"> <li>• Compliance spend and capital needs increase cost pressure, e.g.,                             <ul style="list-style-type: none"> <li>– Compliance ~\$50B by 2015</li> <li>– IT costs 6.9% CAGR 2014-17</li> </ul> </li> </ul>	<p><b>Lost Business Focus</b></p>  <ul style="list-style-type: none"> <li>• 50% of executives say regulatory pressure is impinging their ability to do business</li> </ul>

## Enterprise Wide Implications



- Requires coordinated response across traditionally siloed business units, functions and regions, optimizing resources and initiatives

Sources: SunGuard Financial Systems; IDC; Strategy& analysis

# The impact on technology and data is significant, with a need for rapid reaction to change driving increasing investment

## Common challenges

*“Our data is distributed across regions, functions & systems – how do we rapidly get an enterprise view?”*

*“Technology is aging and not integrated – how do we meet reporting & compliance while maintaining cost?”*

*“Evolving reforms have already overburdened systems and organizations ... what technology innovation would help relieve this stress?”*

*“Increasing adoption of mobile and real time escalates regulatory oversight... what is the optimal way to manage delivery?”*

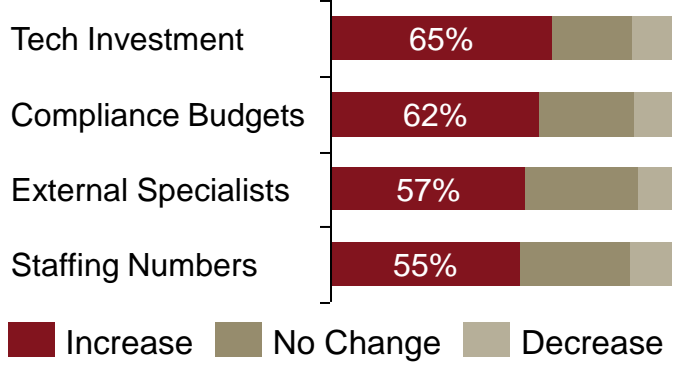
**Technology must evolve and be designed to evolve**

**Technology requires the greatest investment**

The groundwork for the emergence of a new business and IT paradigm

- Enterprise view of risk, return, cost and asset quality
- Common enterprise data taxonomy
- Real time platforms & analytics
- Fit for purpose infrastructure for transparency & resiliency

Regulation causes business to change – but also significantly impacts technology



Source: Sunguard Financial Systems; Strategy& analysis

# Do companies feel ready? Some... but challenges remain for management, infrastructure and staff



**Leadership is stretched thin...**

- 80%** C-suite executives face significant stress due to fear of damage to firm and personal reputation and the overhaul in IT and operations
- 63%** Firms anticipate significant change in the leadership team (size, responsibilities, etc.)

**... Infrastructure requires significant change...**

- 80%** Capital Markets firms plan to enhance compliance development, e.g.,
  - Outsourcing QA/testing of compliance IT development
  - Cloud-based regulatory reporting
  - Big data to identify compliance breaches

**...and talent is running short**

- 11%** Rise in salaries for regulatory roles due to talent shortage; firms are meeting short term needs with external support
- 68%** Adopting a holistic approach via integrated governance, risk and compliance programs

Source: Sunguard Financial Systems: Regulatory Pressure Cooker Compliance in the Boardroom (2014); CEB, Robert Half, PwC, Strategy& Analysis

*Regulatory change – do companies feel ready?*

*Solutions are multi-faceted, implementing one is not enough*

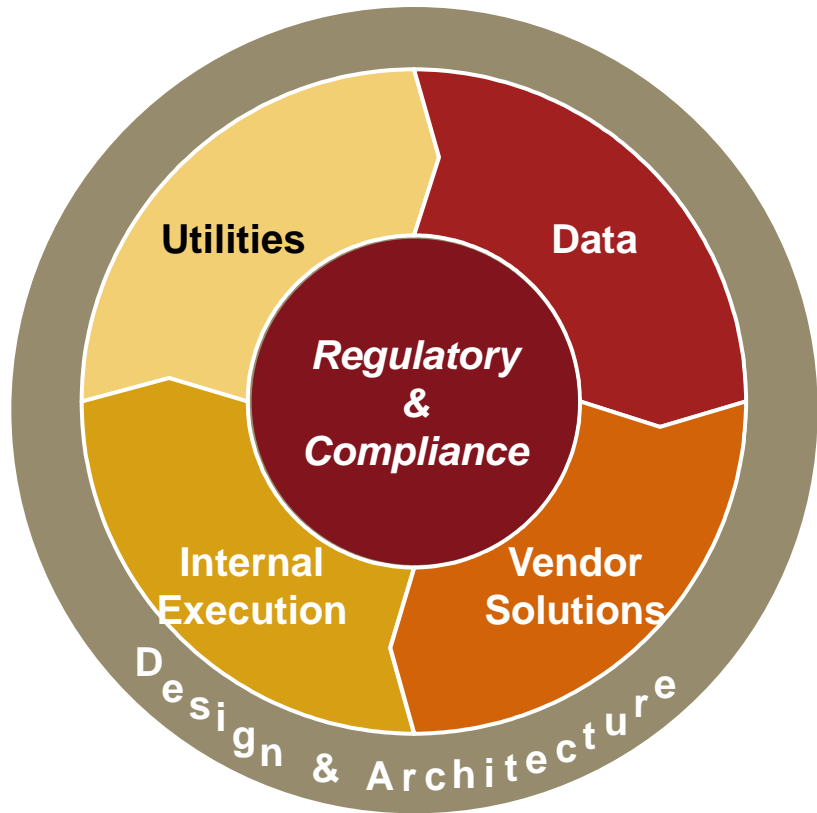
*That's a lot... but there are success stories*



# ***Solving for Regulatory and Compliance challenges requires a multi-faceted approach to IT***

*Vendors are not the only third party solutions – emerging utilities take on un-differentiating tasks to meet regulatory needs*

*Execution is critical – optimize organization, methodologies and technologies to execute technology-driven transformations*



*Determining data needs once – enterprise view to fulfill multiple regulatory requirements*

*Buy versus build – vendor solutions can be leveraged to support regulatory and compliance functions*

*Design for flexibility – how you architect now helps you meet continued change*

# Integrated requirements and a common taxonomy enable enterprise reporting without heavy data transformation

From 2014-2015, Financial institutions will increase spend on data management by 17% from US \$7.5B to US \$8.9B. Spend on analytics is considerably higher – growing by 12% from US \$10.7B to US \$12B

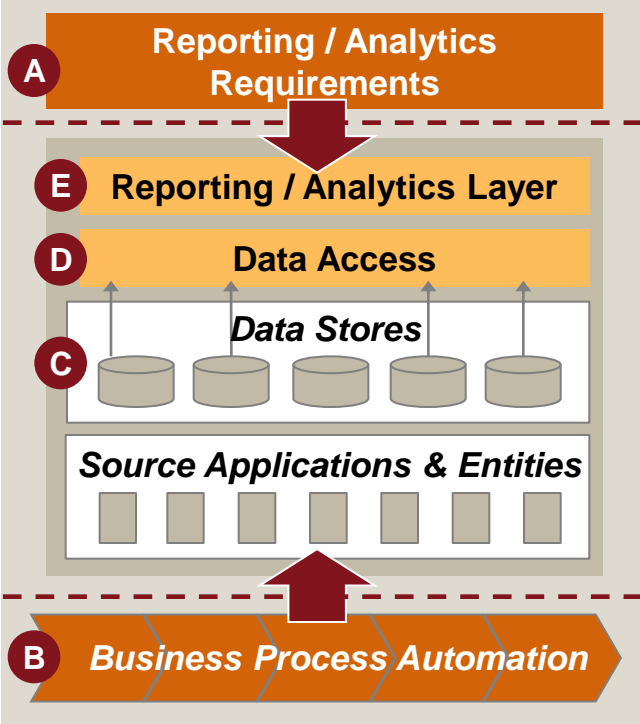
- A** Enterprise reporting (e.g., KYC / AML / FATCA for customers spanning assets, markets and jurisdictions)

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- E** Enterprise reporting and analytics to fulfill regulatory requirements, with potential for additional revenue opportunities
- D** Data access is enabled through enterprise taxonomy standards, e.g., APIs connect local data stores and central reporting
- C** Integrating data is onerous and expensive – a federated approach is recommended with local management of data definitions and quality

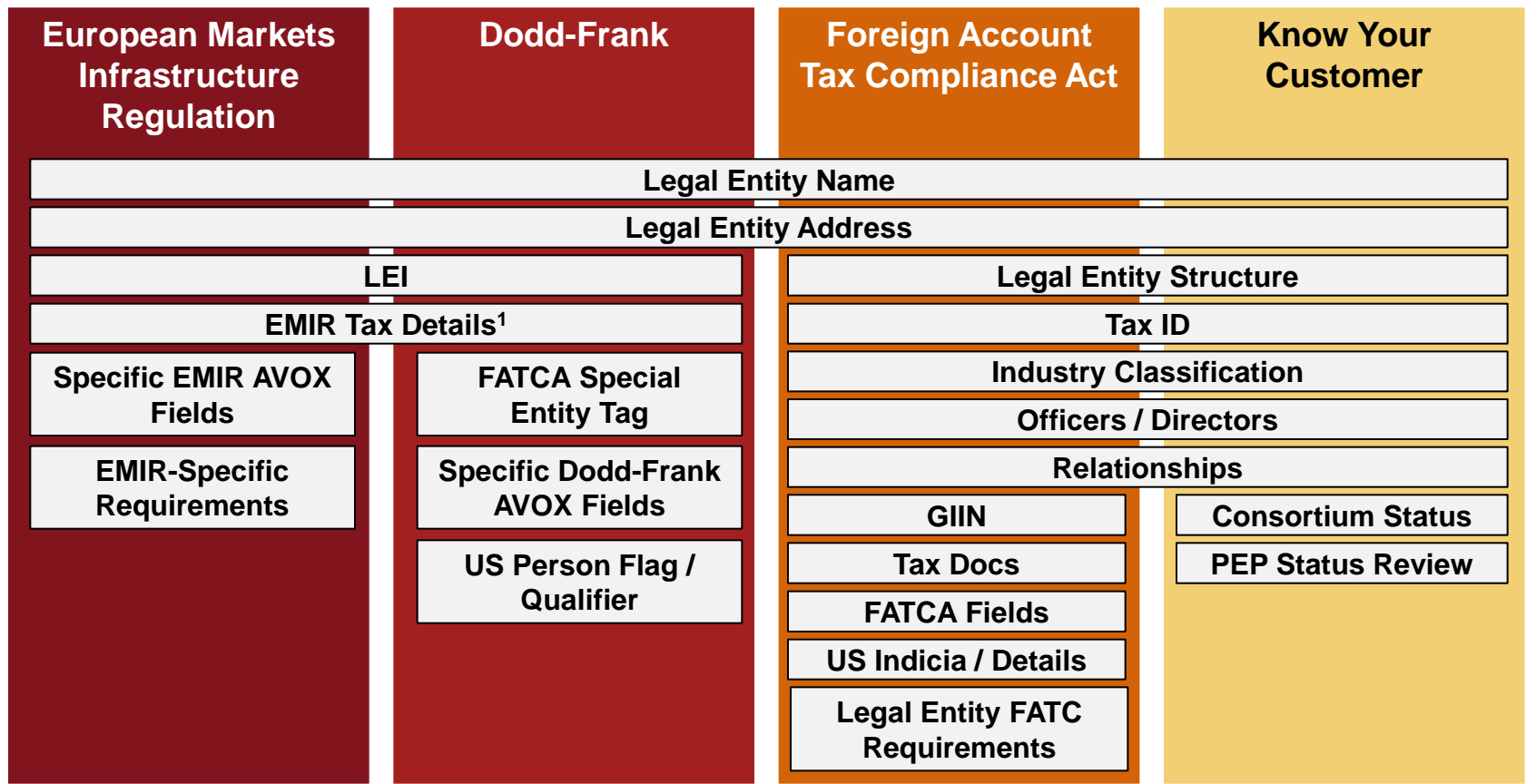
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- B** Data is ever increasing – driven by process automation, digitization and market needs (e.g., mobile, real-time)



# Viewing data requirements holistically reduces effort – up to 80% of data may be common across regulations

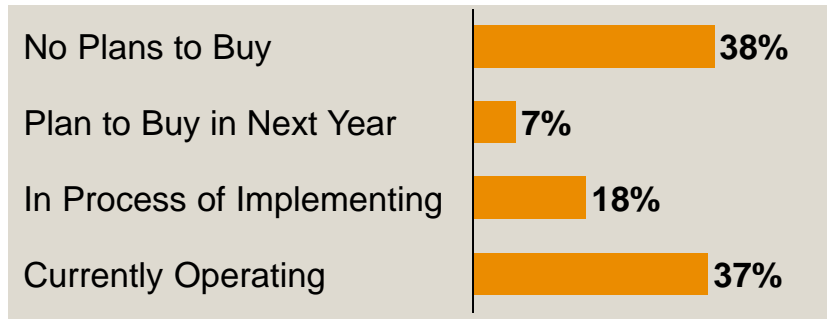
Sample of Data Requirements by Regulation



1) Data entities are partially shared between regulatory requirements  
 Source – Strategy& Analysis, Marc Murphy FIMA Video (Fenergo, 2/27/2014)

# ***Firms are looking to 3<sup>rd</sup> parties for integrated solutions to address governance, risk and compliance challenges***

## **Adoption of Governance, Risk and Compliance (GRC) Systems by Banks (2012)**



- Interest is growing rapidly – **survey in 2011 showed 50% had no interest** in a GRC system
- In 2015, financial institutions are **projected to spend \$1.4B** on GRC software
- Banks face a choice – update complex, aging custom solutions **or leverage integrated solutions** offered by 3<sup>rd</sup> party vendors

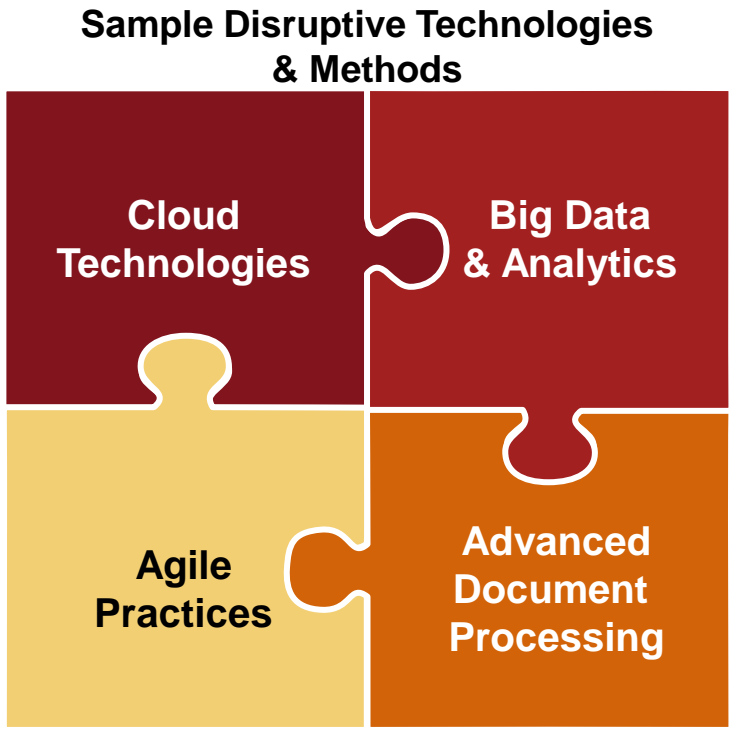
## **Sample of Leading GRC Vendors for Financial Services**

Type	Sample Vendors
<b>Data Management</b>	Goldensource, PolarLake, Smartstream, Informatica
<b>GRC Systems</b>	Oracle Fusion, IBM OpenPages, Nice Actimize, SAS® Enterprise GRC, SunGard Ambit Operational Risk, Wolters Kluwer ARC Logics
<b>KYC / AML / FATCA</b>	Strevus, Fenergo, CTI, KYCnet, KPMG
<b>Other</b>	Recognos, Pega, Alacra

Source – Strategy& Analysis, FSO Knowledge Xchange: Regulations Drive IT Spending in Financial Services (2013), American Banker: Banks' Risk Tech Spending Expected to Grow Steeply Through 2017 (1/9/2014), Operations Risk & Regulation: Compliance Software Rankings in 2012, RiskTech 100 2014, Forrester Research

# Firms should explore leading technologies and practices to improve IT delivery efficiency and effectiveness

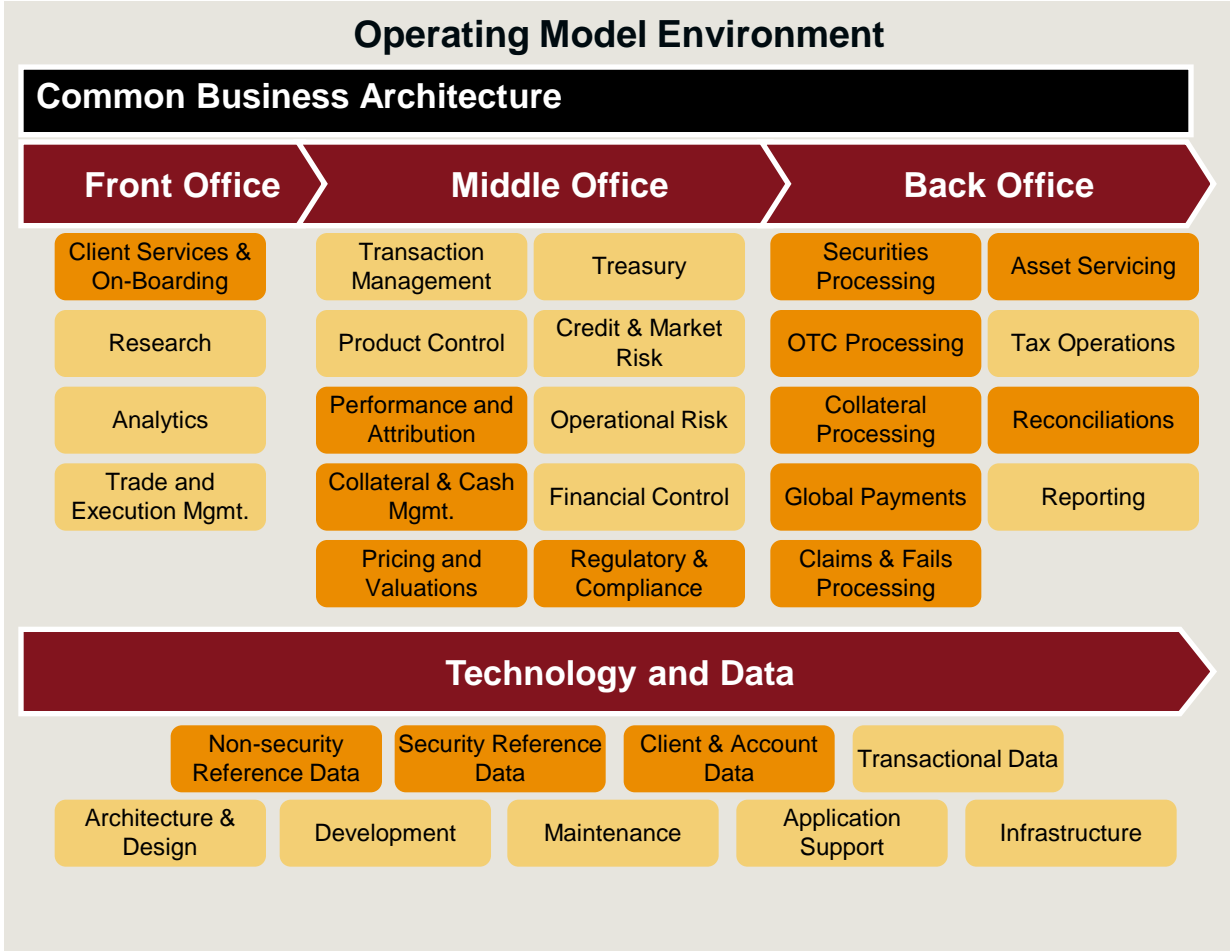
- “Cloud” is fundamentally scalable, virtualized and standard IT delivery
  - **Cost Savings:** 20-60%
  - **Scalability:** capacity in minutes, not weeks
  - **Ease of maintenance**
- Market \$76.9B in 2010 to \$210B in 2016 – **63% of financial institutions**
- Small, cross-functional teams (“scrums”) with incremental delivery in iterations (“sprints”)
  - **Faster time to market:** 70% reduction
  - **Business Collaboration**
  - **Flexibility**
- **52%** usage, with **35%** relying on hybrid methodologies to meet regulatory & audit



- Discovers & predicts across disparate sets of structured & unstructured data
  - **Risk Analytics**
  - **Operational:** real time data aggregation
  - **Monetization**
- **Building in house & via partnerships**, e.g., Thomson Reuters, DowJones, Citigroup
- OCR with automated data extraction and evidencing from documents
  - **Cost Savings:** 70% doc scanning costs labor
  - **Evidencing**
  - **Throughput**
- Market advancing from doc management to processing – **new vendor** landscape

Source – Strategy& Analysis, Gartner: Public Cloud Services, 2011-2016, (2/8/2013), Financial Times: Regulation: IT stands to play bigger role as compliance rules tighten (9/17/2013), CPrime: Agile Adoption by the Financial Services Industry, Forrester: Q3 2009 Global Agile Adoption Online Survey, Version1: State of Agile Survey (2013)

# The emergence of industry utilities are enabling firms to meet new client and regulatory demands in an efficient manner



- Industry “utilities” are on the rise – traditional role is expanding beyond back office to middle and front
- Banks see increasing value – consolidating non differentiating capabilities into an industry standard to support regulatory needs (e.g., EMIR, KYC/AML, FATCA)
- Recent examples
  - DTCC’s GTR
  - Swift KYC Registry (2014)
  - Client Reference Data Consortium (“CReD”)

Source: Strategy& analysis

Orange box: Potential Opportunity for Utility

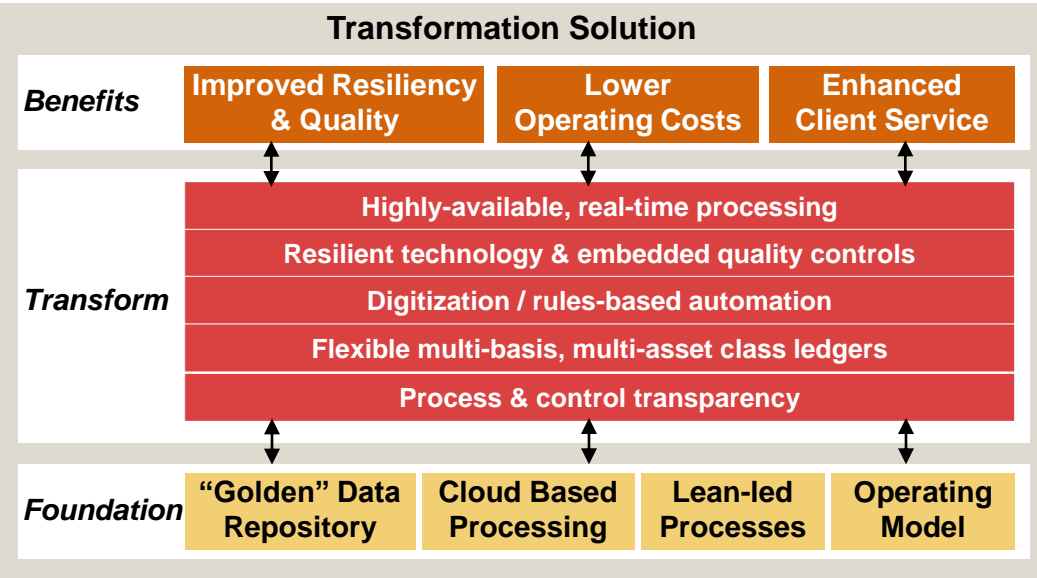
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# Case Study #1: Global Custodian Bank

**Context: technology-driven transformation to significant reduce cost while improving quality and service**



- **End-to-end STP** and real-time data capabilities
- Delivered **\$400M-600M in cost reduction over ~5 years**
- Highly resilient with customizable **embedded quality controls**
- Enables **day-to-day transparency into regulatory, contractual, policy and procedural process controls**

## Internal Compliance

- A **control framework** to facilitate fast changes to **accommodate changing compliance needs**
- **Aggregated and dynamic reporting**, enabled by automation and enhanced data management

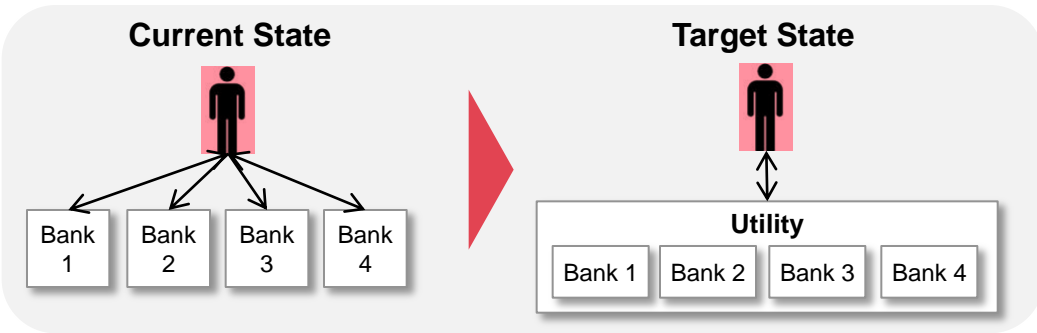
## Additional Opportunities

- Innovative capabilities for clients including **real-time data, risk transparency, analytics**, and flexibility to service any asset class and fund structure globally
- Parallel opportunity to offer **full-service client onboarding and reporting**, leveraging data transformation from effort



# Case Study #2: Client Reference Data Utility

**Context: Deliver a trusted source of standardized data and processing for FATCA and KYC**



- A **single trusted source of standardized data** based on industry agreed validation rules and controls
- **Regulatory compliance** through provision of data focused initially on **FATCA, Dodd-Frank and KYC**
- Standard document management and **controlled delivery** to all counterparties
- **User-governed solution** that adapts to industry change
- Innovative data services with functionality focused on **secure permissioning, digitization, cleansing, and a validation**
- High availability via **scalable platform 24/6.5**, supported by experts with deep knowledge

**Mission**

- Drive the industry's call for a comprehensive, global, standardized platform to collect and manage client reference data
- Create a solution that increases control and data security while reducing operational complexity for all industry participants through standardization and digitization

**Founders**

<p><b>Founding Banks</b></p>	<p><b>Operating Partner</b></p>

# The entire company must be committed – organize at an enterprise level and drive new behaviors

## Eight Success Factors for Regulatory Change



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# THANK YOU