RegTech Report 2018
Executive Summary

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RegTech: A Triple Bottom Line Opportunity
RegTech: A Triple Bottom Line Opportunity

#1 RegTech Offers Measurable and Strategic ROI
Use of RegTech solutions results in savings through multiple avenues, while imparting a strategic edge

#2 RegTech Unlocks Resources for Innovation
The saved resources can be used for customer centric innovations, creating a higher visibility for the digital centricity of the financial institution

#3 RegTech Unleashes FinTech-Centric Transformation
Use of RegTech solutions creates the base for smooth integration of other FinTech solutions, and enables ongoing development of compliant FinTech products
Report Overview

This report provides a deep dive analysis of Regulatory Technology or RegTech, a critical segment of innovation in the financial services industry. We explore the increasing need for technologically enabled solutions in an environment of rapidly growing body of regulations governing bank activity and increased costs of compliance.

We look at the benefits of RegTech beyond simply cost savings, the specific problem areas and challenges involved in implementing these solutions. As always, we are focused on approaches that work in the real world at banks who are looking to accelerate their digital transformation for better customer experiences and growth in shareholder value.

The qualitative and quantitative findings and insights were curated by MEDICI experts to present a comprehensive view of the RegTech landscape pertaining to the financial services industry.

The research was refined through MEDICI experts’ segment and ecosystem insights that have been developed through many years of tracking the developments in the space and bringing together the overall ecosystem.
1. The Growing Need for RegTech
Heaps of rule-changes, growing compliance costs and narrowing margin for error
Post-GFC, the regulatory activity has been growing with a 500% increase in regulatory changes in the developed markets. The cost of compliance continues to increase, and also the misconduct fines. While the existing compliance practices are increasingly proving to be ineffective, banks are gradually realizing the burning need to adopt emerging technologies as part of an evolving compliance strategy. RegTech has emerged as the need of the hour.

2. The Problem Statements
Grey areas in the existing compliance functions
From silos of unstructured data, inefficient processes, inadequate analytical capabilities, & incompatibility of meta data to poor interpretation of rule changes & lack of standardization in data management – there are several problem areas that need a RegTech makeover.

3. Enabling Technologies
Making the real-time possible
A convergence of disruptive enabling technologies is coming together across big data, blockchain, biometrics, and cryptography that is allowing secure enhanced integration of previously disparate systems.

4. Benefits of RegTech Solutions
Efficiency gains on multiple fronts
From cost-restructuring to capital leverage, reduced risk-levels to enhanced supervision, non-invasive implementation to a granular view of insights into the risk data pools – RegTech solutions bring an array of benefits to the table.

5. Roadblocks to RegTech Adoption
Business silos, data quality & dearth of talent
Disparity of data management and security norms across jurisdictions present a big challenge for RegTech providers to scale up. In addition, silos of disconnected business functions, scarcity of talent, and a cost-driven myopic view of change are some of the major roadblocks for RegTech implementation.

6. Clearing the Hurdles
Standardization and collaboration are key
There is a growing need for industry-wide standardization efforts, consolidation of modular offerings, and a top-down push from the regulators. Regulatory engagement initiatives such as sandboxes and innovation hubs will foster innovation and drive adoption. A collaborative, ecosystem approach will provide the much needed solutions to address these industry-wide challenges.

7. Current Trends & Key Use Cases
Addressing the gamut of regulatory needs
Regulatory reporting, compliance, data management, fraud monitoring & control, risk management, digital identity, governance, e-KYC/AML/CFT – RegTech covers the entire spectrum of governance, risk, and compliance at the organizational level.

8. SupTech as a Breakout Segment
Regulators joining the tech bandwagon
In collaboration with RegTech players, regulators are increasingly using technology to digitize data, streamline their operational procedures and automate the regulatory reporting and collection process, while also driving broad-based innovation in policy making and regulatory strategy.

9. RegTech Adoption Strategy
A framework-driven approach for banks
Financial institutions have an array of options for choosing the right RegTech partner for their comprehensive needs. However, the road to RegTech implementation needs a well-crafted, forward looking strategy. To measure the true impact of RegTech, banks and FIs need to reflect on the non-monetary benefits (operational and strategic), which deliver even larger ROI and impact.
Regulators are growing less tolerant to instances of misconduct and are increasingly penalizing financial institutions for non-compliance.

### The Need for RegTech

**Narrowing margin for error in compliance**

- **The cost of compliance and misconduct has made a serious dent in banks’ profitability**, as they need to expand their compliance headcounts to tackle the regulatory expectations. Compliance puts additional and necessary onus on banks to transform their existing systems.

- **Globally, banks are now shelling out in excess of $270 billion per year on compliance and regulatory obligations**. Large US and European banks are spending as much as $20 billion a year on technology to help them comply with the newly evolving regulations such as MiFID and PSD2.

- **Regulators, especially in US and UK, are becoming stricter. An estimate indicates that fines levied on banks by US and UK regulators will top $400 billion by 2020.** There is almost no margin for error as regulators are not hesitant to impose huge penalties for non-compliance and misconduct.

- **While large banks have the capital to bear the cost of compliance (and pay hefty fines for non-compliance), smaller banks find it even more challenging with limited capital.** Growing costs and hefty fines can pose serious hurdles to the very sustainability of their businesses.
Key Problem Statements
Data management at the center of compliance challenges

The modern financial services industry, largely data-driven, faces challenges originating from poor data governance.

Banks have been sitting on a pool of customer data without having been able to effectively use it.

Newer data-driven FinTech models, which banks are trying to adopt, have now mobilized these data pools, resulting in greater inflow/outflow through increased data sharing among functions for analytical purposes.

The increased intensity of data flow is adding another degree of complexity in data management.

Banks and FIs need to strengthen their data management functions in a bid to enhance operational efficiency and stay compliant.
Enabling Tech Behind RegTech
A convergence of disruptive technologies

Regulatory reporting is essentially a data issue, with banks spending huge amounts of money on data collection, aggregation, and the actual reporting. Due to the multiple data processing steps and fragmented systems, several manual interventions are required in terms of adjustments and reconciliations. This is where big data analytics, machine learning and the consequent process automation & consolidation they bring about can drive a significant amount of cost reduction.

Arun Iyer | Executive Vice President, Hexanika

Big Data Analytics
- Programmable reporting
- Data visualization
- Gathering insights from structured as well as unstructured data pools/lakes
- Modern data visualization techniques for interpretation

RPA/IPA
- Reduces time to insight
- Enables productivity and efficiency gains by automating non-value-added human activities
- Reduces human error quotient
- Reduces people cost
- Enables redeployment of freed-up resources for more productive purposes

AI/ML/NLP
- Machine intelligence in regulatory tracking & reporting
- Real-time fraud monitoring & risk profiling
- Assisted intelligence driving down false positives
- NLP & visual analytics for ID verification (KYC)

Blockchain and DLT
- Shared ledger for a central AML/KYC repository for regulators & FIs driving efficiency gains
- Sharing of cost-burden for KYC/AML directives among partner FIs
- Immutable record of transactions enabling a traceable audit trail

Advanced technologies make the real-time possible.
Enabling Tech Behind RegTech
A convergence of disruptive technologies

The actual growth and true usage of AI is less than 5% of its potential, but it is growing, and people are becoming increasingly aware.
Srini Mannava | Founder, Infobelt LLC

APIs
• Enhance integration of disparate compliance functions across departments
• Allow for Plug-and-play integration of modern technology solutions to FIs’ core systems
• Enable automated reporting of data to regulators through data democratization

Cloud Computing
• Standardized and common data storage
• Common pool of key compliance functions on a single platform, enabling efficiency gains
• Enables scaling-up the operations of compliance functions in a timely, cost-effective manner
• Most RegTechs are cloud-native.

Biometrics
• Facial recognition, IRIS scan, and fingerprints for KYC authentication
• Aadhaar in India is a live example of a biometric-based identity pool, enabling eKYC and easier onboarding
• Profile creation for fraud prevention

Cryptography
• Enables secure, faster, efficient, and more effective data sharing within financial institutions for data aggregation
• Drives efficiency in risk data aggregation processes
• Other impact areas include data sharing with other financial institutions, clients, regulators, and FinTech solution providers

The back-end innovation by RegTech plays a crucial role in driving the front-end innovation of FinTech.
The Benefits of RegTech

Efficiency gains on multiple fronts

- Variable, performance-based modular cost structure as against upfront capital cost on untested technologies.
- By making compliance less complex and capacity-demanding, RegTech solutions could free up capital for more productive uses.
- Reduction in cost of hiring expensive compliance talent pool by outsourcing key functions.
- A more competitive industry with fewer / lower barriers to entry.
- Improved quality and efficiency of supervision, thus reducing systemic risk.
- Lower cost of technology solutions, including the benefit of cheaper cloud-based services.
- Enhanced efficiency, capacity, and speed of compliance.
- Non-invasive implementations eliminating the need to upgrade legacy systems.
- Programmable, API-driven actionable insights for compliance.
- End-to-end data management with a granular view of insights.
The Road To RegTech

Major challenges in RegTech implementation

**Scarcity of Talent**
Banks as well as regulators find it difficult to find people with relevant technology skillsets, as well as deep domain-specific knowledge of regulations. Since RegTech deals with both these aspects, hiring suitable resources becomes one of the most challenging aspects of RegTech implementation.

**Revenue-Based Approach Hindering Scale**
Banks tend to focus on revenue generating activities for major technology updates. As compliance is essentially a cost function, the related tech updates get relegated to a lower priority level. Banks are thus apprehensive about scaling up RegTech across their entire compliance function. They also sometimes fail to acknowledge the efficiencies RegTech can bring to their routine non-regulatory processes of data management.

**Silos of Disconnected Functions**
Multiple disconnected banking functions are not usually coherent in terms of innovation. RegTech implementation needs a collaborative effort between various departments in a financial institution, such as the compliance, technology, and legal departments. A lack of coherence between the innovation efforts in these silos often creates challenges.

**Scalability Across Functions & Jurisdictions**
The modular, point solutions offered by RegTech providers are often difficult to scale across various departments of an FI. For multi-national organizations, this challenge gets compounded with the need to comply with regulations across multiple geographies.

**Sustainability of RegTech Startups**
Financial institutions have apprehensions about the sustainability and financial stability of RegTech startups, and thus there are uncertainties in the long-term service availability and upgrades when implementing a RegTech solution.

The road to RegTech implementation is often laced with costs of transition, cynicism, and a myopic view of change.
The Road To RegTech
Major challenges in RegTech implementation

Long Decisioning Cycles
Banks’ IT procurement tends to have long hierarchical decisioning cycles, with senior stakeholder buy-in required for RegTech implementation.

Change Management
Adopting RegTech often involves a modern approach, comprehensive change management and transformation efforts at an organizational level, which makes its implementation complicated.

Capabilities vs. Credibility
While RegTech does promise new ideas and technology capabilities, financial institutions seek clear demonstration of RegTech’s credibility in making a meaningful impact.

High Cost of Implementing Untested Technologies
RegTech implementation needs greater focus on some specific technologies such as AI/ML, RPA, etc. These are often untested applications with high-cost PoCs. This feeds into a short-term ‘trial and error’ approach rather than a dedicated RegTech implementation roadmap in place.

Interation & Standardization Challenges
Though most RegTech solutions are capable of reading data from banks’ legacy systems, the lack of standardization limits their capability for seamless integration with other newly implemented third-party or in-house applications.

Training & Upskilling Costs
A RegTech implementation requires specific upskilling for banks’ compliance functions, which adds both cost and strategic effort.

The road to RegTech implementation is often laced with unavoidable costs of transition, cynicism, and a myopic view of change.
A collaborative, ecosystem approach will deliver the necessary solutions for RegTech challenges.

FIs will benefit from a coordinated industry-wide design effort to set clear standards for RegTech in the product development phase. With a standardized range of offerings, RegTech can offer plug-and-play interoperable modular solutions which will enable banks to customize final deployments to their needs.

Automated, secure online data transfer mechanisms at the regulators’ end without file size limitations could significantly increase reporting efficiency for both regulators and FIs, thus significantly easing the reporting process.

A top-down push from the regulators, highlighting the credibility of select RegTech startups through accelerators and sandboxes, will reassure banks and drive them to consider RegTech solutions as a viable opportunity.

Consolidation of modular offerings by RegTech startups in every FinServ segment will present a comprehensive solution to the banks, enabling them to have a holistic view of an end-to-end compliance transformation.

RegTech Adoption
Solutions to known challenges
RegTech Use Cases

Major areas of application

Regulatory Reporting
- End-to-end automated reporting solution
- Auto-updates based on changing compliance needs
- Customizable, configurable document generation and submission in a standardized format

Compliance
- Regulatory intelligence: Identifying and keeping track of regulatory changes
- Machine-readable regulations and alerts on non-compliance
- Policy mapping and auditing

Governance
- Internal control and accountability for risk data
- Enhance board’s effectiveness in compliance assessment
- Optimal integration, visualization and consolidation of dashboards
- Policy and procedure management

Data Management
- Risk data cleansing and aggregation
- Data discovery and classification
- Data provenance and algorithmic transparency
- Reducing data silos and improving workflow
- Dynamic data minimization

Fraud Monitoring & Control
- End-to-end integrity validation
- Anti-fraud and market abuse identification systems
- Back-office automation (post-transaction settlement, closing procedures)
- Trade surveillance and conduct monitoring

e-KYC/AML/CFT
- ID/document verification
- Digitized due diligence and onboarding
- Transaction monitoring and authentication-based AML checks

Digital Identity
- Digital trust and multifactor authentication
- Cryptographic digital signature
- Digital locker, storage and encrypted documents

Risk Management
- Risk data generation & aggregation
- Stress testing
- Internal risk reporting
- Forecasting and scenario analysis
- Alert generation and automated triggers

RegTech covers the entire spectrum of governance, risk, and compliance at the organizational level.
Decisioning Parameters for RegTech Partner Selection
Choosing the right fit for an FI’s needs

- A comprehensive range of solutions catering to the entire gamut of their regulatory needs
- Alignment with the bank/FI’s technological roadmap, and compatibility with existing systems
- Plug-and-play integration technologies such as APIs
- Deep understanding of FI’s business and the complex risk, regulatory, and compliance challenges associated with its processes
- Uniqueness of their solution and its fit with the needs of bank/FI
- Stability and sustainability of the startup and its solution
- Scalability across geographies and jurisdictions

Financial institutions have an array of options for choosing the right RegTech partner based on their modular and comprehensive needs.
Contact Us
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About MEDICI

MEDICI is your partner in enabling FinTech-at-SCALE to create global economic impact.

What does that mean for you?

If you are a financial institution or an enterprise looking at technology-enabled innovation...
MEDICI will help you identify the right technologies, the most relevant startups, and actionable data to differentiate your company in the marketplace and positively impact the millions you serve.

If you are a growing FinTech startup... MEDICI will provide you just the right tools, positioning with the perfect audience and contextual exposure in the ecosystem to amplify your company's message and showcase your product and proposition.

If you are an individual with a vested interest in the FinTech ecosystem (e.g. investor, analyst, business leader, etc.)... MEDICI's incisive original content, backed by curated data and independent research, will help you stay on top of the rapidly evolving FinTech ecosystem, every day, and in the most efficient and effective way possible via digital and in-person interactions.

Our focus is to help anyone in the FinTech ecosystem who wants to innovate at SCALE, and do so faster, smarter and cheaper through our exclusive membership programs, our advisory offerings, and the MEDICI media platform.

To learn more, go to goMEDICI.com/memberships