

THE ART OF THE POSSIBLE FOR SUPTECH

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Content

About	3
Abstract	4
Introduction	4
<hr/>	
Key critical challenges	
Technological	4
Regulatory	5
Cultural and organisational	5
<hr/>	
Key considerations	
Fostering collaboration and community	5
Enhancing technological adoption	6
Streamlining procurement and vendor engagement	6
Leveraging advanced technologies	6
Enhancing regulatory frameworks	6
<hr/>	
Benefits of suptech adoption	
Productivity and effectiveness	7
Transparency and trust	7
Resilience and adaptability	7
Collaboration and innovation	7
<hr/>	
Conclusion	8
Case Studies and Examples	8
Contributors	9
References	10

ELEVANDI

Elevandi is set up by the Monetary Authority of Singapore to foster an open dialogue between the public and private sectors to advance FinTech in the digital economy. Elevandi works closely with governments, founders, investors, and corporate leaders to drive collaboration, education, and new sources of value at industry and national levels.

Elevandi's initiatives have convened over 350,000 people to drive the growth of FinTech through events, closed-door roundtables, investor programmes, educational initiatives, and research. Elevandi's flagship product is the Singapore FinTech Festival, which runs alongside other fast-rising platforms such as the Japan FinTech Festival, Point Zero Forum, Inclusive FinTech Forum, Elevandi Insights Forum, The Capital Meets Policy Dialogue, The Founders Peak and Green Shoots.

For more information, visit www.elevandi.io.



With a clear vision to be a global centre of excellence by facilitating the building of higher performing, ethical and compliant businesses through RegTech innovation and investment, The RegTech Association was founded in 2017 as a non-profit organisation that focuses on what is needed to support the growth of the sector and to accelerate RegTech adoption. We support our members to embrace and adopt best practice Environmental, Social and Governance principles.

The association brings together government, regulators, regulated entities, professional services and founder-led RegTech companies to ensure collaboration between all of the parties, promoting the RegTech industry as widely as possible, resulting in action in the uptake of RegTech proof of concepts and deployed RegTech solutions across the eco-system.

For more information, visit www.regtechglobal.org

Abstract

This white paper captures insights from a July 2024 roundtable among industry leaders in Supervisory Technology from central bank agencies, technology companies serving them and industry association perspectives. It explores the current challenges, collaboration opportunities, technological adoption, and future directions in Supervisory Technology.

Key themes include the alignment of technological capabilities with regulatory frameworks, the necessity of collaboration between public and private sectors, and the cultural shift required for effective technology adoption. The discussion was held under the Chatham House rule so therefore no individual or organisation is explicitly identified in this content.

Introduction

This white paper refers to SupTech (short for Supervisory Technology) as technology adopted and embraced by financial supervisors and regulatory agencies in their supervision, monitoring and ensuring systemic stability of the financial system.

SupTech plays a critical role in the financial industry's regulatory landscape by providing technology tools for regulatory/central financial agencies in managing and monitoring systemic financial supervisory risks. The roundtable explored the opportunities and challenges faced by regulators and supervisors, the importance of collaboration, the cultural and technological shifts needed, and the future directions for these fields. The discussions emphasised the importance of vision, execution, and fostering a culture of innovation.

Key Critical Challenges



The roundtable highlighted several critical challenges hindering the adoption and effective implementation of SupTech solutions. These challenges encompass technological, regulatory, organisational/cultural aspects that collectively impede progress in this space.

Technological

Engagement between regulators and technology vendors is often limited, leading to a disconnect between the solutions being developed and the actual needs of regulatory bodies. Many vendors lack the incentives to develop tools specifically for regulatory purposes. This misalignment results in a gap between available technologies and the practical requirements of regulators, impeding the effective deployment of SupTech solutions.

This was highlighted in a report¹ from the Financial Stability Institute and Bank for International Settlements (BIS). It is critical that spaces be established for co-creation between supervisors, academia and technology companies. This will enable vendors to clearly assess the demand and respond accordingly to develop suitable products. It is also seen as critical that suppliers of technology be given actionable feedback to ensure solutions meet the need.

Procurement processes for acquiring new technologies are often slow and cumbersome, adding another layer of complexity to the adoption of SupTech solutions. The need for customised solutions further complicates procurement, as many available technologies are not tailored to the specific needs of regulatory bodies, requiring significant modifications and adjustments. This is supported by The RegTech Association, who cites procurement as the number one barrier to adopting regulatory technology solutions since they commenced collection of data in 2019 in their Industry Perspectives reports.²

Regulatory

Another significant challenge is the complexity and fragmentation of regulatory frameworks. The rapid pace of technological advancements and the evolving geopolitical environment necessitate continuous updates to regulatory policies and procedures.

Fragmentation creates a barrier to the seamless integration and interoperability of SupTech solutions, further complicating the regulatory landscape. Having global regulatory approaches to data that considers content rights was considered a challenge.

Cultural and organisational

The importance of cultural and organisational change was highlighted as a challenge by several industry leaders. Supervisors face conservative practices, complexities in regulatory frameworks and lack of trialling and adopting new ways of working that might be driven by fear of change, resource constraints and/or job displacement.

One of the primary issues identified is the lack of resources and expertise. Tech literacy among decision-makers is of key importance, as is training and education for the teams that need to trust in the technology tools being deployed. Regulatory bodies often face significant constraints in terms of budget and human capital, making it difficult to invest in advanced technologies and the necessary training for their staff.

Key Considerations

Fostering collaboration and community

Building a strong community and fostering collaboration among stakeholders are essential for the successful implementation of SupTech solutions. Regular research, meetings, workshops, and tech sprints facilitate this

interaction, enabling a more cohesive effort towards innovation. It was acknowledged that while tech sprints are a starting point, post-tech sprint engagement is crucial for continued progress.

Sharing of knowledge gained through this testing and trialling is a key plank in achieving best practice. Global knowledge sharing, showcases, success stories and promotion of the benefits of SupTech is required. Moreover, developing a common narrative for SupTech along with a shared vision will help global stakeholders embrace and adopt SupTech to implement but also for product producers to accurately assess appetite and use cases for application.

Enhancing technological adoption

A strategic approach that includes considering a wide range of impacts including resource constraints, aligning technology with regulatory needs, securing budget and funding and ensuring stakeholder buy-in is needed for success.

Aligning technological solutions with the specific needs of regulatory frameworks and ensuring seamless integration with existing systems is essential. Investing in training and capacity-building initiatives to enhance the technical skills and knowledge of regulatory staff is also important.

Streamlining procurement and vendor engagement



Adopting more flexible procurement programs is essential to achieve successful and efficient deployment of SupTech solutions if purchasing from external software vendors. Establishing practices that promote clear communication of the technology requirements of supervisors to vendors is required as well as actionable feedback through Proof of Concepts/Trials and deployments. This greatly assists the products to meet expectations. This is underlined in the report by the Financial Stability Institute and BIS, referenced earlier.³

Leveraging advanced technologies

Advanced technologies such as generative AI, machine learning, and blockchain can significantly enhance regulatory processes. Strategic implementation of these technologies is essential for future-proofing regulatory bodies. Utilising AI and machine learning to enhance data analytics, predictive modelling, and decision-making processes can provide deeper insights and improve the accuracy and efficiency of regulatory oversight. Exploring the use of blockchain and distributed ledger technology (DLT) for secure and transparent data sharing, transaction tracking, and compliance monitoring can improve data integrity and streamline regulatory reporting.

There is a need for greater understanding of the digital assets space and the benefits of these applications. Actionable feedback was also seen as critically important in developing minimum viable product with supervisors.

Enhancing regulatory frameworks

Updating and enhancing regulatory frameworks to accommodate new technologies and methodologies is crucial for effective supervision and compliance. Formulating and implementing digital strategies that outline the adoption of new technologies within regulatory frameworks is essential. These strategies should include clear objectives, timelines, and resource allocation plans. Encouraging trialling and piloting of technology is important, such as regulatory sandboxes, tech sprints, and tech showcase programs helping to inform and educate

Benefits of SupTech Adoption

Productivity and effectiveness

Effectively adopted SupTech solutions offer many benefits that can significantly enhance the efficiency and superior data quality achieved by supervisors. These benefits span various dimensions, from operational improvements, regulatory confidence by supervisors to more strategic and systemic benefits. Utilising technologies such as artificial intelligence (including generative AI), machine learning, and blockchain can underpin the efficiency outlined above while providing for increased precision in regulatory oversight.



Transparency and trust

Public confidence in the financial system is paramount. Utilising SupTech can assist in building this confidence in the regulatory system by citizens. SupTech also adds considerable benefits as outlined above by creating a more efficient and accountable operating framework as well as better quality tools for regulators and supervisors to use to gain superior risk oversight and data quality.

Resilience and adaptability

We operate within a dynamic and rapidly changing regulatory and technological landscape. New risks will continue to emerge, and when coupled with the rate of tech change, will require supervisors to be adaptable and efficient. They will need to collaborate and share best practices and look to fit for purpose applications that provide real-time data and analytics to provide the foundations for a more resilient eco-system.

Collaboration and innovation

The collaboration between regulators, financial institutions, academic institutions, industry associations and technology vendors fosters innovation and co-creation, leading to the development of tailored solutions that address specific regulatory needs.

In addition to operational and strategic benefits, SupTech solutions also contribute to regulatory innovation. By experimenting with new technologies and approaches, regulatory bodies can develop more flexible and adaptive frameworks that accommodate future advancements.

Conclusion

The future of SupTech lies in addressing current challenges through collaboration, technological adoption, and cultural change. By fostering a community-focused approach, aligning technological solutions with regulatory needs, and emphasizing continuous engagement, we can unlock the full potential of these fields. The insights shared by industry leaders provide a roadmap for navigating the complexities and driving innovation in regulatory technology. A key insight from this roundtable that builds on the work and research that has been done thus far, is to develop a clear narrative and shared vision for SupTech to provide a clear pathway for future adaptable approaches and product development.

Case Studies and Examples

BIS IH Projects: Projects like [Pyxtrail](#), [Atlas](#), and [Gaia](#) focus on supervisors' needs, addressing manual processes and promoting co-creation and collaboration.

ECB Digital Agenda: The ECB's four-year digital agenda has led to the development of tools and platforms for the SSM, with a current focus on generative AI.

Cambridge Regulatory Genome Project: This project aims to create a global regulatory data set with structured data, encouraging collaboration between regulators, vendors, and academia. [About the RGP - Regulatory Genome Project - Cambridge Judge Business School](#)

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The views expressed here are their own and do not necessarily reflect the views of company or its staff.

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References

1. Prenio, J., Pustelnikov, A., & Yeo, J. (2024) Building a more diverse supotech ecosystem: findings from surveys of financial authorities and supotech vendors. Bank of International Settlements.
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