# UNLOCKING SMART SUPERVISION IN THE PACIFIC

## A DIAGNOSTIC REPORT AND BLUEPRINT FOR INCLUSIVE SUPTECH INFRASTRUCTURE

DIAGNOSTICS REPORT

# CONTENTS


| | | |
|---|---|---|
| EXECUTIVE SUMMARY | | |
| 1 | INTRODUCTION | 5 |
| 2 | UNPACKING SUPTECH AND REGTECH: A PRACTICAL PRIMER | 9 |
| 3 | DIAGNOSTIC FINDINGS - REGIONAL NEEDS AND GAPS | 14 |
| 4 | BLUEPRINT FOR A REGIONAL SUPTECH SOLUTION | 34 |
| 5 | FIVE-YEAR IMPLEMENTATION ROADMAP | 53 |
| 6 | IMPACT ASSESSMENT: SUPTECH FOR FINANCIAL INCLUSION IN PIRI | 69 |
| ANNEX: LIST OF RESPONDENTS TO SURVEYS | | 77 |
| ABBREVIATIONS | | 78 |
| REFERENCES | | 79 |


## ACKNOWLEDGMENTS


This diagnostics report is a product of the Pacific Islands Regional Initiative (PIRI) and its members.

Contributors:

We would like to recognize all the PIRI Expert Group on Financial Inclusion Policy (EGFIP) members from the following institutions: Bank of Papua New Guinea, Central Bank of Samoa, Central Bank of Seychelles, Central Bank of Solomon Islands, National Reserve Bank of Tonga, Reserve Bank of Fiji, and Reserve Bank of Vanuatu, along with their colleagues, for their contribution, support, and active interest in shaping this deliverable.

From the AFI Management Unit: This project, including the drafting and review of the report, was led by Adeyemi Omotoso (Policy Manager, Digital Financial Services), with review and contributions from Dr. Eliki Boletawa (Director, Policy Programs and Implementation).

We would like to thank MicroSave Consulting (MSC) for leading the diagnostic study and supporting the drafting of this report.

We would like to extend our appreciation to the following stakeholders for supporting with interviews towards shaping this deliverable; Ravinder Singh (BSP Bank), Alisi Holani (PACER PLUS), Shiu Singh (Asia Development Bank), and Aneth Kasebele (UNCDF).

We also extend our thanks to AFI member institutions, partners, and donors for generously contributing to the development of this publication.

This report is funded with UK aid from the UK government.





Cover photo: Byvalet / Shutterstock.com

# EXECUTIVE SUMMARY

The Pacific Islands Regional Initiative (PIRI) SupTech Diagnostic Project was launched to address a shared challenge among Pacific financial regulators (including Seychelles): modernizing supervisory practices within a rapidly digitalizing financial ecosystem amid persistent constraints, such as, limited technical capacity, resource shortages, legacy technology systems, and geographic dispersion. Its objective was to assess the feasibility and design of a shared Supervisory Technology (SupTech) platform as regional digital public infrastructure, delivered as a shared utility, owned, and governed by its users, and optimized for inclusion, resilience, and innovation.

## A REGIONAL VISION FOR INCLUSIVE SUPERVISION

The vision positions SupTech not merely as a technological upgrade, but as inclusive digital infrastructure that enables granular, timely oversight of emerging risks, advances financial inclusion, strengthens consumer protection, and fosters responsible digital innovation. Anchored in a collective regional approach, it seeks to align national mandates under shared governance, reduce innovation costs, and prevent fragmented progress across jurisdictions.

## METHODOLOGY: AN EVIDENCE-BASED, PARTICIPATORY APPROACH

The project adopted a data-driven and inclusive methodology, combining:

- Dual-stream surveys of regulators and regulated entities across seven PIRI central banks
- In-depth interviews with policymakers, financial institutions, IT teams, and partners
- A validation workshop to test findings and calibrate expectations
- Regional capacity-building sessions on SupTech design and governance
- A multi-phase blueprint and roadmap, guided by diagnostic data and local insights

This ensured the proposed solution reflected national realities while achieving regional coherence and global interoperability.

## KEY DIAGNOSTIC INSIGHTS

The regional study revealed critical findings unlikely to emerge from isolated individual country assessments:

1. Manual, fragmented supervision persists, heightening compliance risks.
2. API-based reporting is desired yet underdeveloped; 74% of industry respondents are ready, but 65% of regulators face internal system gaps.
3. Supervisory priorities converge regionally, centering on six use cases: digital licensing, API-enabled reporting, dashboards, complaint handling, prudential risk analysis, and market conduct.
4. Capacity and infrastructure disparities remain, with Samoa and Fiji more advanced, and others like Tonga and Papua New Guinea needing transitional support.
5. Legal frameworks enable data collection but lack digital specificity, with few explicit SupTech or API mandates.
6. Data sovereignty and resilience are paramount, limiting appetite for cloud-native, externally hosted solutions.
7. Regulators overwhelmingly prefer a collective, regulator-led model; 66% favor a shared platform, such as the Bank Supervision Application (BSA) used by 16 AFI members.

These findings informed the model selection and blueprint design, ensuring relevance and feasibility.

## MODEL SELECTION AND SUPTECH BLUEPRINT

Four models were assessed: (i) Build-own-operate from scratch, (ii) Customize open-source software, (iii) License proprietary off-the-shelf products, and (iv) Adopt a regulator-led, built-and-operated platform (e.g., BSA). Model 4 emerged as the most viable, balancing cost, speed, proven functionality, and governance autonomy.

The blueprint defines two implementation tiers, (i) Tier 1 (Minimum Viable Solution): API/web portal data submission, licensing workflows, dashboards, analytics, and consumer protection tools, and (ii) Tier 2 (Advanced Modules): Cross-border monitoring, AML/CFT, climate risk, open finance oversight, and cybersecurity supervision. Each tier allows gradual onboarding and scalable progression based on national readiness.

## IMPLEMENTATION ROADMAP: A PHASED STRATEGY

A five-year roadmap outlines three sequential phases:

- Phase I (0–24 months): Institutional readiness, capacity building, legal reviews, and deployment of Tier 1 modules across all PIRI members.
- Phase II (24–48 months): Institutional strengthening, industry pilots, governance enhancement, and prioritization of Tier 2 features.
- Phase III (48–60 months): Deepened adoption, regional impact evaluation, and integration with open finance, climate, and digital policy agendas.

The roadmap aligns with PIRI leaders' vision, diagnostic evidence, and Pacific supervisory realities.

## OUTLOOK AND REGIONAL IMPACT

The shared SupTech solution is a catalyst for transformative supervision and inclusion, offering:

- Real-time, disaggregated insights to inform policies for women, MSMEs, youth, and rural populations
- Enhanced compliance, risk management, and consumer protection
- Shared investments reducing costs and strengthening resilience
- A foundation for next-generation priorities—open finance, RegTech integration, green finance, and CBDC oversight.

## CONCLUSION AND NEXT STEPS

This report serves as both diagnostic and strategic blueprint for regional cooperation, smart investment, and inclusive digital supervision. It showcases AFI's technical leadership, PIRI's commitment, and the power of collective intelligence.

Next steps include:

- Mobilizing resources and partnerships for Phase II
- Aligning national and regional policies around digital supervision
- Positioning the Pacific as a global exemplar of inclusive, regional SupTech infrastructure.

Kevin Hellon / Shutterstock.com

# 1 INTRODUCTION

## 1.0 BACKGROUND

The landscape of financial supervision is rapidly evolving, driven by the accelerated digital transformation of financial services, the growing complexity of financial markets, and the imperative to strengthen regulatory oversight and market integrity. For central banks and financial supervisors, particularly in emerging and developing regions, this transformation has underscored the importance of Supervisory Technology (SupTech) as a strategic enabler for modern, efficient, and forward-looking financial supervision.

In the Pacific and Seychelles, central banks are navigating a unique convergence of challenges and opportunities. From geographic dispersion and limited supervisory resources to the increasing digitalization of financial services and the entry of non-traditional market players, these jurisdictions require tailored, scalable solutions that can address foundational gaps while supporting regional and global mandates. SupTech offers the potential to meet these challenges head-on, enhancing data collection, enabling risk-based supervision, streamlining regulatory reporting, and supporting real-time insights that improve regulatory responsiveness and consumer protection.

Recognizing this critical need, the Alliance for Financial Inclusion (AFI), under its Pacific Islands Regional Initiative (PIRI) and with the support of the UK Foreign Commonwealth Development Office (FCDO), initiated a dedicated diagnostic study to explore the feasibility and strategic design of a regional SupTech solution, conceived as an inclusive digital infrastructure and deploy or implemented as a shared digital utility amongst a collective of regulators.

The study is technically supported by a consultancy team from MicroSave Consulting (MSC).

This diagnostic report forms the first critical output of the initiative. It offers evidence-based insights into the current state of SupTech readiness, institutional capacity, legal and policy frameworks, and the broader data and digital infrastructure across participating jurisdictions.

Importantly, it sets the foundation for developing a regional SupTech blueprint and five-year roadmap that is both ambitious and feasible, capable of delivering near-term gains and long-term systemic transformation.

## 1.1 SETTING THE SCENE: PROJECT SCOPE AND OBJECTIVES

This diagnostic and feasibility study examines the current state, critical needs, and opportunities for adopting and implementing SupTech across seven PIRI member institutions:

- Bank of Papua New Guinea
- Central Bank of Samoa
- Central Bank of Seychelles
- Central Bank of Solomon Islands
- National Reserve Bank of Tonga
- Reserve Bank of Fiji
- Reserve Bank of Vanuatu

The project focuses on identifying SupTech solutions that can strengthen regulatory oversight, streamline compliance, and drive inclusive financial ecosystems.

The overarching goal is to provide regulators with comprehensive clarity on their unique and collective SupTech requirements, challenges, and potential opportunities, ultimately supporting enhanced supervisory efficiency, regional collaboration, and financial inclusion.

Specifically, the objectives include:

- **Comprehensive SupTech needs assessment:** Assess the feasibility of a shared regional SupTech platform to support central banks in supervisory tasks, including a detailed evaluation of current regulatory practices, challenges, and technological readiness in financial supervision across each AFI member institution and regulated entities.
- **Identifying opportunities and barriers:** Pinpointing systemic gaps, resource constraints, and practical barriers to effective SupTech implementation within individual countries and collectively as a region, provide diagnostic insights into legal, regulatory, technical, institutional, and infrastructural readiness and capture perspectives of regulated entities, including banks, fintechs, and non-bank financial institutions.

- **Blueprint development:** Articulating a detailed "wishlist" and technical specifications of a robust and comprehensive SupTech solution aligned with both individual and collective regional requirements. Ultimately, deliver a SupTech blueprint outlining minimum viable solutions, modular functionalities, and governance frameworks.
- **Strategic roadmap development**: Providing a clear, phased, actionable roadmap to guide PIRI members from conceptualization to successful SupTech implementation, capacity building, and sustained operational effectiveness over a five-year horizon.
- **Feasibility of a shared SupTech platform:** Critically assessing various SupTech adoption models and proposing the most suitable, cost-effective, and impactful collective implementation model for PIRI members and evaluate the anticipated impact of SupTech on financial and digital inclusion indicators.

## 1.2 WHY THIS MATTERS: IMPORTANCE AND RATIONALE FOR THE PROJECT

Globally, SupTech is gaining momentum as a transformational lever for regulatory authorities. The 2023 and 2024 State of SupTech reports by the Cambridge SupTech Lab highlight that more than 160 financial authorities globally have initiated or deployed SupTech applications, with growing momentum in emerging and developing markets. Yet, progress remains uneven, particularly in the Pacific, where a lack of unified infrastructure, scarce technical resources, and fragmented efforts have slowed adoption.

For small island developing states within the Pacific region, and Seychelles in the Indian ocean[1], financial systems face persistent challenges such as limited resources, geographic isolation, fragmented infrastructure, and vulnerability to climate and economic shocks (AFI, 2023). Robust financial regulation and effective oversight are indispensable to navigating these challenges, promoting financial stability, protecting consumers, and enhancing inclusive economic growth, especially for marginalized segments such as women, youth, MSMEs, and geographically remote populations.

Currently, supervisory practices in the region largely rely on manual processes or basic technologies, resulting in operational inefficiencies, fragmented regulatory approaches, and inadequate data collection practices. These challenges hinder regulators' ability to monitor market trends, address emerging risks (e.g., de-risking, consumer fraud), and deliver targeted policies supporting inclusive finance.

The challenge of de-risking has been a recurring priority for PIRI members, culminating in the development of the PIRI De-risking Action Plan[2] (2021) and the region's commitment to advancing inclusive financial integrity. SupTech adoption complements these efforts by helping regulators analyze granular data on transactions, demonstrate robust AML/CFT compliance to global counterparts, preserving correspondent banking services, and maintaining the integrity of regional payment systems.

This poses substantial challenges including data inconsistencies, delayed risk identification, and limited capacity to formulate targeted, timely policies addressing emerging market risks (Cambridge Centre for Alternative Finance, 2023).

Therefore, SupTech is particularly relevant for regions like the Pacific and Seychelles where:

- Supervisory teams are under-resourced yet face increasing regulatory burdens
- There is limited real-time access to supervisory data, leading to reactive rather than proactive regulation
- Digital transformation of the industry is outpacing the evolution of regulatory tools and systems
- Regional collaboration offers the potential to achieve economies of scale, cost-efficiency, and peer learning.

1 The Pacific Islands Regional Initiative (PIRI) under the Alliance for Financial Inclusion (AFI) is made up of six institutions geographically in the Pacific, namely, Bank of Papua New Guinea, Central Bank of Samoa, Central Bank of Solomon Islands, National Reserve Bank of Tonga, Reserve Bank of Fiji, and Reserve Bank of Vanuatu, and upon the amended of the Charter to recognise other small island members under PIRI plus, the Central Bank of Seychelles became the seventh member.

2 Pacific Islands Regional De-Risking Action Plan: Access it here: https://www.afi-global.org/publication/pacific-islands-regional-de-risking-action plan/


BrianScantlebury / Shutterstock.com

A shared SupTech solution presents an exceptional opportunity. By pooling resources, knowledge, and capabilities, PIRI members can overcome individual resource constraints and achieve collective efficiencies, enabling:

- Timely and accurate regulatory insights
- Consistent and transparent compliance mechanisms
- Real-time data-driven policy formulation and decision-making
- Enhanced supervisory capacities to safeguard financial consumers
- Accelerated financial inclusion for underserved communities, especially women, youth, and MSMEs
- Facilitating the exchange of critical data and actionable insights among stakeholders to drive coordinated progress towards regional development goals.

This project and the anticipated solution are expected to align closely with PIRI's strategic vision and commitments articulated in the Victoria Consensus on Responsible and Inclusive Innovation (AFI, 2023), and broader AFI guidance for responsible innovation and financial inclusion, including the Sochi Accord on FinTech for Financial Inclusion (AFI, 2018).

## 1.3 WHAT TO EXPECT: ANTICIPATED OUTCOMES

This report sets out to deliver a multi-layered analysis, with actionable insights for regulators, policymakers, and technical partners. Key outputs include:

- Country-specific diagnostics on SupTech readiness across seven central banks
- A regional synthesis of shared needs, challenges, and opportunities
- A blueprint for a minimum viable regional SupTech solution, with options for modular expansion
- Technical and governance considerations for shared infrastructure across jurisdictions
- A five-year implementation roadmap outlining key milestones, capacity requirements, and risk mitigation
- An impact assessment framework linking SupTech deployment to financial and digital inclusion goals.

These outcomes are intended to support not just internal decision-making within central banks, but also to inform regional cooperation, donor and funding engagement, and private sector partnerships that can accelerate SupTech innovation across the Pacific.

## 1.4 METHODOLOGY AND DIAGNOSTICS APPROACH

The study employed a comprehensive mixed-method approach comprising both quantitative and qualitative data collection methods. Regulators across all seven PIRI central bank departments, alongside regulated entities (banks, mobile money operators, fintechs, and other service providers), participated in detailed surveys to gather comprehensive insights on needs, challenges, and opportunities.

The findings in this report are based on:

- Primary data collection through two comprehensive survey instruments:
  a. **Regulators Survey:** Collected insights from multiple central bank departments (Supervision, FinTech Units, Payments, Policy & Strategy) to capture holistic supervisory perspectives
  b. **Regulated Entities Survey:** Gathered input from banks, mobile money operators, fintechs, and financial service providers, emphasizing data submission, compliance, reporting needs, and technical challenges.
- A review of legal, institutional, and technical documents across participating jurisdictions
- Desk research drawing on global and regional trends in SupTech, RegTech, and inclusive digital infrastructure
- Comparative case studies, including collaborative regulatory models such as the Bank Supervision Application used by 22 regulators (16 from the AFI network), as well as selected proprietary and commercial solutions including ORASS (by the Bank of Ghana) and Microsoft's Koru platform
- Stakeholder engagements and consultations via physical workshops and virtual interviews to validate findings and refine insights.

The analysis was initially guided by structured analytical frameworks such as PESTEL and SWOT to identify systemic barriers and enablers, evaluate solution options, and inform decision-making. However, only frameworks that prove relevant and realistically applicable to the available data and institutional context will be fully applied and represented in this report.

Additionally, a rigorous analysis of SupTech adoption options was undertaken. The approaches assessed include:

- **Build-Own-Operate (from scratch):** Maximum control and customization but high resource demands
- **Customize an Open-Source Solution**: Cost-effective but potentially risky and maintenance-heavy
- **Purchase/License an Off-the-Shelf Product:** Faster deployment and support but lower adaptability
- **Adopt a Regulator-Led, Built, and Operated Solution** (e.g., BSA): Shared governance, co-development, proven utility and SupTech solution already deployed within the AFI network.

## 1.5 FRAMING THE REPORT: FROM DIAGNOSTICS TO DEPLOYMENT

While diagnostics are often backward-looking, this report is forward-focused. It is designed to catalyze a shift, from fragmented supervisory efforts toward a coordinated, efficient, and data-driven regional SupTech ecosystem. It reflects AFI's commitment to helping member institutions leapfrog traditional challenges and build supervisory capacity that is digitally native, financially inclusive, and regionally integrated.

The pathway laid out in this report aims to position the Pacific and Seychelles as a reference point for small jurisdictions delivering big innovation, with SupTech as a strategic enabler of central bank mandates: stability, integrity, and inclusion.

# 2 UNPACKING SUPTECH AND REGTECH: A PRACTICAL PRIMER

## 2.0 DEFINITIONS AND DISTINCTIONS

As the digital transformation of financial services accelerates globally, the tools available to regulators must evolve accordingly. Two of the most significant innovations in this space are Supervisory Technology (SupTech) and Regulatory Technology (RegTech). While often mentioned together, their functions and users are distinct.

**SupTech** refers to the application of emerging technologies by supervisory agencies, typically central banks and financial regulators, to improve and modernize their internal processes. These include licensing, off-site surveillance, on-site inspection planning, risk analysis, market conduct supervision, and data analytics. SupTech enables more efficient data collection, real-time risk detection, and adaptive policy implementation. See AFI Special Report on RegTech and SupTech for Financial Inclusion (2022).

For instance, the Bank of Ghana (BoG) has implemented the Online Regulatory and Analytical Surveillance Software (ORASS), a live API-based SupTech platform supporting digital reporting and analytics that enables real-time submission and validation of data from financial institutions, allowing the central bank to swiftly detect risks and monitor systemic stability efficiently. ORASS significantly reduced reporting delays, eliminated manual errors, and enabled proactive, data-driven supervision.

Similarly, the Financial Conduct Authority (UK) utilizes Natural Language Processing (NLP), advanced analytics and Artificial Intelligence (AI) for consumer sentiment analysis and real-time monitoring of online financial product advertisements, significantly improving market integrity and consumer protection.

**RegTech**, in contrast, is adopted by regulated financial institutions, banks, fintechs, insurance providers, and payment service providers, to facilitate more efficient compliance with regulations. Use cases include automated regulatory reporting, real-time transaction monitoring for anti-money laundering (AML), fraud detection, and electronic Know Your Customer (eKYC).

The **Bank Supervision Application (BSA)**[3], a regulator-led SupTech platform adopted by 21 central banks, including 16 AFI members, that enables streamlined supervision, licensing, compliance management, and data analytics could be a great example of a solution fulfilling a dual role in this context.

The BSA's ability to be used by both regulators and regulated entities demonstrates its dual role as both SupTech and RegTech. It helps regulators improve their oversight, while also providing tools for regulated entities to comply with regulations. In essence, the BSA acts as a bridge between regulators and regulated entities, enabling a more efficient and effective regulatory environment.

The synergy between SupTech and RegTech is evident when data pipelines are interoperable, reporting standards are harmonized, and feedback loops between supervisors and regulated entities are automated.

SupTech, therefore, demonstrates its potential for elevating supervisory capabilities, offering critical advantages including timeliness, accuracy, reduced operational risks, and proactive, predictive oversight capabilities that traditional manual supervisory methods cannot achieve.

3 Case Study on Bank Supervision Application, published by the Alliance for Financial Inclusion (AFI). Access it here: https://www.afi-global.org/publication/case-study-on-bank-supervision-application/

**TABLE 1:** COMPARATIVE OVERVIEW OF SUPTECH VS. REGTECH (ADAPTED FROM AFI (2022) AND CAMBRIDGE SUPTECH LAB REPORTS (2023-2024)

| Dimension | SupTech | RegTech |
|---|---|---|
| **Primary Users** | Supervisory authorities (e.g., central banks, financial regulators) | Regulated entities (e.g., banks, fintechs, PSPs) |
| **Key Functions** | Risk-based supervision, compliance monitoring, market conduct oversight | Compliance automation, reporting, AML/CFT monitoring, KYC processes |
| **Core Benefits** | Enhances decision-making, reduces supervisory costs, enables early warnings | Reduces compliance costs, improves accuracy, increases operational speed |
| **Tools Used** | APIs, data dashboards, NLP, AI/ML, SupTech platforms | RegTech software, compliance modules, digital ID tools |
| **Impact Focus** | Internal efficiency, policy responsiveness, financial system oversight | Meeting regulatory requirements, reducing manual effort |


## 2.1 THE STRATEGIC RELEVANCE OF SUPTECH

SupTech is not merely a technological upgrade, it is a strategic shift in how regulatory authorities fulfil their mandates. Effective SupTech implementation enhances oversight through:

- Real-time data acquisition via APIs, reducing reliance on retrospective and manual reporting
- Risk-based supervision that uses predictive analytics to identify early warning signals
- Automated compliance assessment tools that streamline internal workflows and decision-making
- Consumer protection tools that analyze complaints, social media sentiment, and reputational risk.

These capabilities allow supervisory agencies to adapt quickly to evolving market risks, detect systemic vulnerabilities, and formulate timely interventions.

**For regions such as the Pacific, SupTech holds promise in overcoming human resource constraints, enhancing supervisory reach across remote geographies, and building institutional resilience.**

The COVID-19 pandemic served as a pivotal moment for the rapid digital transformation of financial regulation. Faced with travel restrictions and social distancing measures, supervisory authorities had to rethink traditional supervisory modalities almost overnight. In Rwanda, the National Bank of Rwanda (BNR) expanded its SupTech capabilities by integrating automated reporting pipelines through APIs, complemented by a real-time supervisory dashboard system. This allowed for continued oversight of banking activities and digital financial services without reliance on in-person inspections. (National Bank of Rwanda (2021). BNR Annual Report 2021)

Similarly, the Bangko Sentral ng Pilipinas (BSP) activated and scaled its Digital Supervisory Analytics System (DSAS), enabling data-driven off-site supervision and advanced compliance monitoring of regulated entities. By leveraging dashboards, pre-configured risk indicators, and anomaly alerts, BSP ensured continuity of its supervisory mandate even during the height of the lockdown period. (*Digital Payments Transformation Roadmap 2020-2023, Bangko Sentral ng Pilipinas (2021*).

These rapid adaptations underscore how SupTech, particularly when built on modular, interoperable technologies, can dramatically improve regulatory agility. They also demonstrate the growing institutional recognition that remote supervision, once viewed as supplementary, can now be integral to modern supervisory frameworks.

Photos BrianScantlebury / Shutterstock.com

## 2.2 GLOBAL AND REGIONAL TRENDS IN SUPTECH

Over the last decade, SupTech adoption has advanced dramatically, evolving through distinct technological and institutional phases. From early experimentation to AI-enhanced supervision, regulators across jurisdictions have embraced SupTech to improve oversight, agility, and risk mitigation.

### PHASE 1 (2012-2015): EARLY EXPERIMENTATION AND AWARENESS

This phase marked the conceptual introduction of SupTech, where pioneering regulators began experimenting with basic digitization of manual supervisory tasks.

- The Monetary Authority of Singapore (MAS) and the UK Financial Conduct Authority (FCA) led early initiatives, testing data submission portals, document digitization, and early automation in supervisory information systems.
- The Bank Supervision Application (BSA), a collaborative regulator led SupTech platform, as conceptualized during this period and underwent pilot testing across selected African jurisdictions.

These efforts primarily focused on shifting from paper-based to digital workflows and improving data submission consistency.

### PHASE 2 (2016-2019): MAINSTREAM ADOPTION AND SCALING

As regulators became more confident, SupTech transitioned from pilots to wider deployments.

According to the Cambridge SupTech Lab (2023), by 2019, 72 percent of global regulators had initiated SupTech strategies or live solutions. SupTech capabilities expanded to include predictive analytics, automated reporting systems, and real-time risk dashboards.

- The Bangko Sentral ng Pilipinas (BSP) began scaling its Digital Supervisory Analytics System (DSAS) for comprehensive off-site monitoring using interactive dashboards.
- The European Central Bank (ECB) launched initiatives under the Single Supervisory Mechanism (SSM) to explore AI-powered document analysis and anomaly detection.

### PHASE 3 (2020-PRESENT): ADVANCED ANALYTICS AND CROSS-BORDER COLLABORATION

The onset of the COVID-19 pandemic accelerated digital transformation across financial supervision. SupTech tools evolved in sophistication and reach. Cloud-native infrastructure, cross-border regulatory cooperation, and AI/ML applications became standard in advanced regulatory environments.

- The Bank of Lithuania integrated AI-based models to analyze payment system transactions and identify anomalies in real time (Cambridge SupTech Lab, 2023, p. 22).
- Monetary Authority of Singapore (MAS) prototyped Project Ellipse to monitor systemic risk through cloud-hosted visual analytics (World Bank, 2021).
- The Comisión Nacional Bancaria y de Valores (CNBV) of Mexico piloted SupTech modules to oversee pension funds and detect mis-selling through biometric and behavioral analytics (AFI, 2022).

By 2022, over 80 percent of global regulators had adopted advanced SupTech tools (Cambridge SupTech Lab, 2023).

### CURRENT REACH AND MATURITY

SupTech implementations are now live in 164 authorities across 105 countries, with rapid uptake in emerging and developing markets:

- In Sub-Saharan Africa, central banks such as Mozambique and Eswatini use BSA to streamline prudential reporting and risk profiling.
- In Southeast Asia, regulators have adopted SupTech for fintech supervision, AML/CFT compliance, and e-money oversight.
- In the Pacific, emerging efforts, such as those led by PIRI members, signal a strategic shift toward shared regional utilities and modular SupTech design.

**FIGURE 1:** SUPTECH GENERATIONS 2.0 (CAMBRIDGE SUPTECH LAB 2022)

| | OG MANUAL | 1G MINIMAL TECH | 2G DIGITALLY TRANSFORMED | 3G ADVANCED TECH | 4G BIG DATA & AI |
|---|---|---|---|---|---|
| DATA PRODUCTS | Minimal statistical summaries | Static report generation | Automated dashboards | Dynamic and interactive visualizations | AI-augmented business intelligence tools |
| ANALYTICS | No additional analysis | Manual analysis only | Descriptive/ Diagnostic Analytics tools | Predictive analytics tools | Prescriptive analytics tools |
| ACCESS CONTROLS | Individual access only | Team access only | Department access only | Limited agency-wide access | Agency-wide access |
| STORAGE | Physical media | Centralized file-based storage | On-Premise Relational Databases | Cloud computing Database systems | Big Data tools |
| VALIDATION + PROCESSING | Manual or no validation rules after receipt of data | Automated validation errors and warnings integrated into date submission process | Static Task Automation | Robotic Process Automation (RPA) | Advanced Data Processing |
| COLLECTION | Manually Submitted | Web portal or File Server | Push API | Pull API or Data Commons | AI-based collection or alternative data sources |

## 2.3 COLLABORATIVE APPROACHES AND SHARED UTILITIES

For small jurisdictions, regional cooperation offers a realistic path to achieving digital transformation on a scale. Shared SupTech solutions, such as the Bank Supervision Application (BSA), illustrate how pooling regulatory resources can deliver impactful, cost-effective outcomes.

Potential benefits of shared utilities include:

- Lower development and maintenance costs via pooled procurement and shared infrastructure
- Stronger data governance and sovereignty, with regulators retaining control of national-level data
- Peer-based development, enabling localization of features and collaborative problem-solving
- Faster onboarding and support from institutions already using the platform.

The Pacific can learn from the Southern African Development Community (SADC), where the BSA has been deployed since 2003. Participating central banks, including Mozambique, Eswatini, Malawi, and Timor Leste, have reported measurable improvements in reporting efficiency, supervisory quality, and compliance consistency. The BSA's modular structure, secure architecture, and regulator-led governance framework makes it a compelling model for assessment and potential adaptation across PIRI jurisdictions.

## 2.4 TECHNOLOGY BUILDING BLOCKS OF SUPTECH

A robust SupTech solution integrates a blend of digital technologies tailored to supervisory needs and institutional maturity. Some key components include:

- **Application Programming Interfaces (APIs):** Allow secure, standardized, machine-readable data exchange between regulated entities and supervisors.
- **Cloud Infrastructure**: Ensures scalable, cost-efficient, and reliable storage and processing capacity, enabling central banks to analyze large datasets in real time.
- **Artificial Intelligence / Machine Learning (AI/ML):** Enables predictive analytics, pattern recognition in supervisory data, and automated anomaly detection.
- **Natural Language Processing (NLP):** Processes unstructured data such as complaints, call logs, or social media sentiment to identify emerging consumer risks.
- **Dashboard and Visualization Tools:** Provide real-time supervisory intelligence through intuitive graphics and heat maps for decision-makers.
- **Security Protocols:** Ensure data privacy, access control, disaster recovery, and audit trails in compliance with national and international standards.

Each component should be selected based on institutional readiness, interoperability with existing systems, and alignment with long-term strategic needs.

## 2.5 IMPLICATIONS FOR FINANCIAL AND DIGITAL INCLUSION

SupTech is more than a regulatory innovation, it is a tool for inclusive development. When designed with inclusion goals in mind, SupTech systems can:

- Monitor financial inclusion metrics disaggregated by gender, age, MSME status, or region using supervisory data
- Support proportional regulation that enables low-risk innovations (e.g., digital agents, mobile wallets) to flourish with appropriate oversight
- Strengthen consumer protection, including detection of misconduct, fair pricing, and resolution of complaints through real-time feedback loops
- Enable adaptive supervision, allowing regulators to respond more quickly to inclusion challenges through data-driven policy interventions.

For PIRI members, SupTech provides a means to operationalize the commitments outlined in the Victoria Consensus and Sochi Accord by ensuring that digital financial ecosystems are not only well-supervised but inclusive and trusted.

Kevin Hellon / Shutterstock.com

# 3 DIAGNOSTIC FINDINGS- REGIONAL NEEDS AND GAPS

## 3.1 PURPOSE AND ANALYTICAL APPROACH

This section distills regional insights and strategic considerations emerging from a comprehensive multi-country diagnostic on the adoption and readiness for supervisory technology (SupTech) across the seven central banks participating in the Pacific Islands Regional Initiative (PIRI): Papua New Guinea, Samoa, Seychelles, Solomon Islands, Tonga, Fiji, and Vanuatu.

The goal is to synthesize the diagnostic data into actionable intelligence that highlights common institutional priorities, shared constraints, and regional opportunities. These insights lay the empirical foundation for the SupTech solution blueprint (Section 4) and the phased implementation roadmap (Section 5).

While individual country findings are detailed in separate technical report, this section functions independently and is written for the reader seeking to understand the case for collective SupTech development in the Pacific and Seychelles region.

### DIAGNOSTIC METHODOLOGY

The regional insights presented here are based on:

- Two structured surveys conducted with:
  - Regulators (Regulator Survey) across supervision, payments, IT, policy, and strategy departments.
  - Regulated entities (Industry Survey) including banks, fintechs, mobile money operators, and non-bank financial institutions.
- Heatmap analysis of SupTech use case prioritization across 10 core functionalities, applied to both institutional and industry data
- Comparative benchmarking against global SupTech trends drawn from Cambridge SupTech Lab reports, and AFI member implementations
- Qualitative inputs from the PIRI Expert Group on Financial Inclusion Policy (EGFIP) regional technical working group discussions, strategic peer review sessions, and the engagement with stakeholders during interviews and the stakeholder workshop and member training held in Apia, Samoa (February 2025).

### ANALYTICAL FRAMING

To ensure that Section 4 delivers both technical depth and strategic clarity, the analysis is structured around five dimensions:

1. **Institutional readiness** – Based on self-assessed digital maturity, governance structures, and staff capacity (Regulator Survey);
2. **Legal and policy enablers** – Evaluates the presence of data protection laws, digital reporting mandates, and SupTech-aligned regulatory frameworks (Regulator Survey);
3. **Data ecosystem and infrastructure** – Assesses existing systems, reporting workflows, and technical infrastructure (Regulator and Industry Surveys);
4. **Use case priorities** – Captures the convergence and divergence across regulators and industry actors on functional SupTech priorities (and heatmap inputs);
5. **Industry collaboration and constraints** – Evaluates industry digital readiness, technical capacity, and support needs for SupTech transition (Industry Survey).

Where appropriate, comparative insights, charts, and regional benchmarks are included to improve interpretation and support peer learning. A summary table and selected visuals are provided to aid understanding and high-level engagement with the findings.

## 3.2 REGIONAL TRENDS AND INSTITUTIONAL STRENGTHS

This section presents a structured synthesis of institutional strengths drawn from the SupTech diagnostic across seven central banks in the Pacific and Seychelles. These findings are based on quantitative responses from two structured surveys, administered to both regulators and regulated entities, and supported by heatmap data comparing SupTech use case prioritization and implementation maturity across the region.

The analysis demonstrates that, despite varying levels of digital infrastructure, all institutions show a foundational level of SupTech readiness and a strong regional basis for collaborative development. These strengths are not anecdotal; they reflect clear patterns from the diagnostic data that underscore the feasibility of a shared approach.

However, these emerging strengths must be viewed in parallel with structural gaps and capacity constraints that may limit implementation if left unaddressed.

## INSTITUTIONAL STRENGTHS EMERGING FROM THE DATA

1. **SupTech Is widely recognized as a strategic priority**

   Across all seven institutions, there is a high level of strategic recognition for SupTech. In the Regulator Survey, 100 percent of respondents ranked at least three SupTech functions (e.g., licensing, dashboards, APIs, complaints) as relevant to their institution's supervisory goals, indicating that SupTech is already part of the institution's strategic planning or actively under consideration for near-term integration. While not all institutions have a formal SupTech strategy document, their intent and leadership commitment are present.

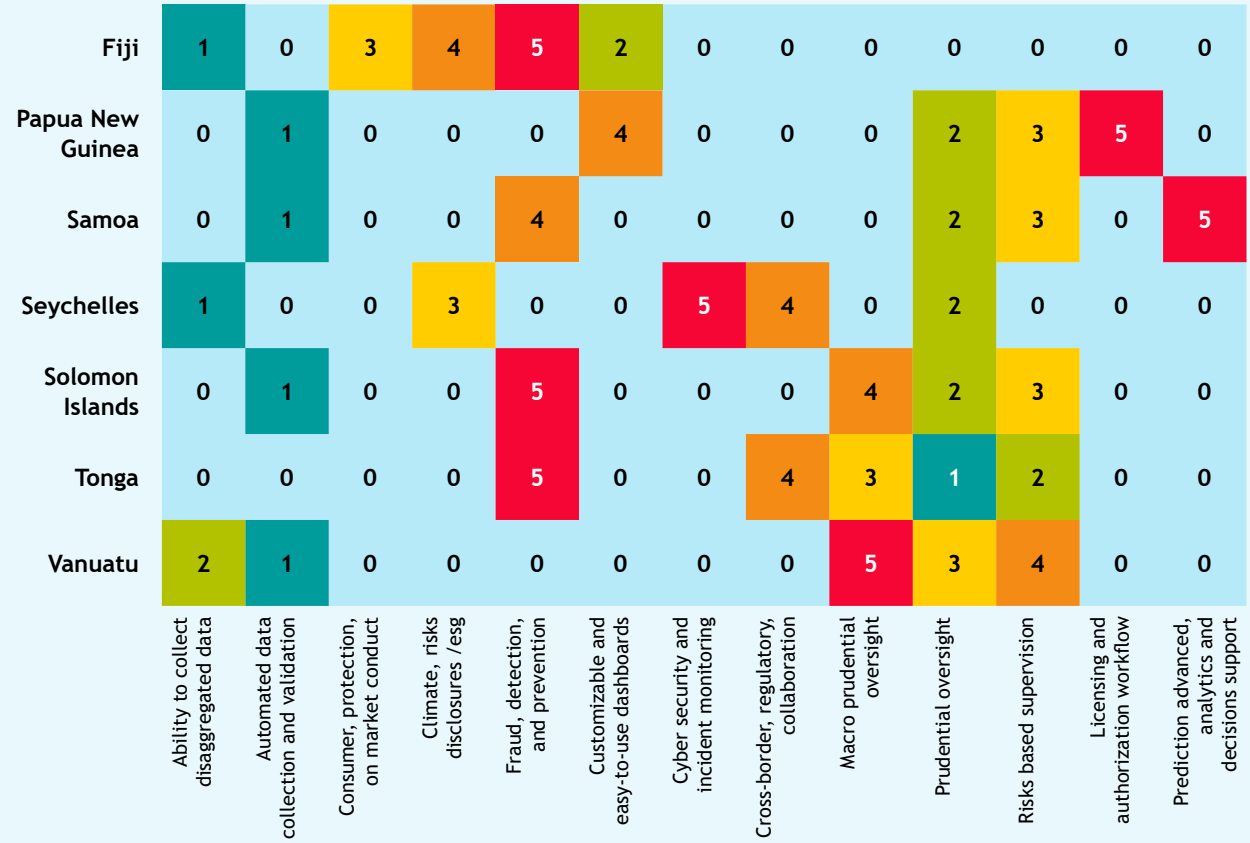
   The figure below shows the SupTech priorities of all 7 countries. It can be seen that a majority of the regulators want automated data collection and validation, prudential oversight, and risk-based supervision. Most of the supervisory functions of regulators require a strong data management system.

2. **Internal coordination across core departments is active**

   The diagnostic found that SupTech planning is not isolated within IT or supervision departments. Regulators from supervision, fintech, payments, IT, and policy units all participated in the diagnostic, and 85 percent of institutions reported active coordination between at least three of these functional units when considering technology adoption (Regulator Survey).

   This cross-functional engagement is a significant enabler of effective SupTech governance, system design, and cross-functional adoption. It reflects both operational integration and institutional awareness that successful SupTech adoption requires coordination beyond technical teams.

**FIGURE 2:** HEATMAP OF SUPTECH PRIORITIES



3. **Alignment with national and institutional digital agendas**

   Six of seven institutions indicated that SupTech forms part of, or directly supports, their broader institutional modernization or national digital strategy. For example:

   - Fiji (RBF) links SupTech planning to its National Digital Strategy 2025–2030 and has formalized sectoral guidelines on consumer data protection
   - Seychelles (CBS) operates under a newly enacted Data Protection Act that supports the adoption of secure digital infrastructure, including SupTech
   - Samoa (CBS) and Tonga (NRBT) reported efforts to align licensing and supervisory automation with broader public sector digitization.

     While this alignment does not guarantee implementation success, it improves visibility, political support, and long-term relevance of SupTech investments.

4. **Strong willingness to collaborate regionally**

   While there is broad openness to adopting a regional SupTech solution within a 12–18 month timeframe, most jurisdictions are not yet ready to commit without further internal discussion. This reflects the need for additional stakeholder engagement, internal alignment, and perhaps clearer demonstration of value and feasibility before securing full buy-in.

The strong readiness shown by Tonga and partial readiness from Vanuatu suggest that targeted technical and strategic engagement could quickly bring them into implementation. Meanwhile, Fiji and Samoa, despite not expressing immediate readiness, show no resistance, making them prime candidates for early-stage readiness building. In Regulator Survey Q31, most respondents indicated willingness to:

- Participate in regional peer learning on SupTech
- Join a regional sandbox or shared solution if governance and design were co-developed
- Share lessons learned or act as a pilot site if capacity and alignment were permitted.

This signals a strong regional appetite for cooperation, especially in areas like reporting APIs, licensing portals, and dashboards, where foundational functionalities are common, but resource capacity varies widely.

Several central banks, Samoa, Seychelles, and Fiji, offered to share technical insights or serve as early adopters, while others signaled openness to pooled resources and shared tools, provided governance safeguards are in place.

## DIFFERENTIATED INSTITUTIONAL PROFILES (NOT RANKINGS)

While institutional readiness varies, each central bank brings unique capabilities and learning opportunities that can enhance a regional initiative:

**TABLE 2:** COUNTRY-WISE SUPTECH INSTITUTIONAL PROFILES

| Central Bank | SupTech Prioritization | Internal Coordination | Digital Strategy Alignment | Willingness to Collaborate Regionally | Institutional Positioning |
|---|---|---|---|---|---|
| **BPNG (Papua New Guinea)** | High | Yes | Partial | Confirmed | Large, complex market; needs scalable foundational tools. |
| **CBS (Samoa)** | High | Yes | Yes | Confirmed | Advanced in policy experimentation and early adopters of automation. |
| **CBS (Seychelles)** | High | Yes | Yes (Data Protection Act) | Confirmed | Legal enabler in place; strong foundation for trusted digital systems. |
| **CBSI (Solomon Islands)** | Medium | Yes | Partia | Confirmed | Market conduct innovation, willing to co-create. |
| **NRBT (Tonga)** | Medium | Yes | Partial | Confirmed | High supervisory interest; limited internal resources. |
| **RBF (Fiji)** | High | Yes | Yes (NDS 2025–2030) | Confirmed | Regional digital anchor with strong analytics focus. |
| **RBV (Vanuatu)** | Medium | Yes | Partial | Confirmed | Digitally transitioning; seeks modular, scalable support. |

## ASSESSMENT AND FORWARD CONSIDERATIONS

These institutional strengths are real, measurable, and promising. They offer a credible entry point for coordinated SupTech development across the region. However, they are also emergent and not yet institutionalized. The majority of central banks lack formal SupTech strategies, dedicated staff, or budgetary allocations for regulatory technology. Most depend on general IT or supervision departments with competing responsibilities, and progress remains highly dependent on a few internal champions.

Furthermore, coordination does not yet equal capability. While cross-functional collaboration is active, the capacity to convert these diagnostic findings into live deployments remains limited in most institutions without additional technical support and structured implementation guidance.

For instance, only 24% of the respondents mentioned that they currently share data regionally. 31% were unsure and 45% were willing to but were not already doing it.

## CONCLUSION

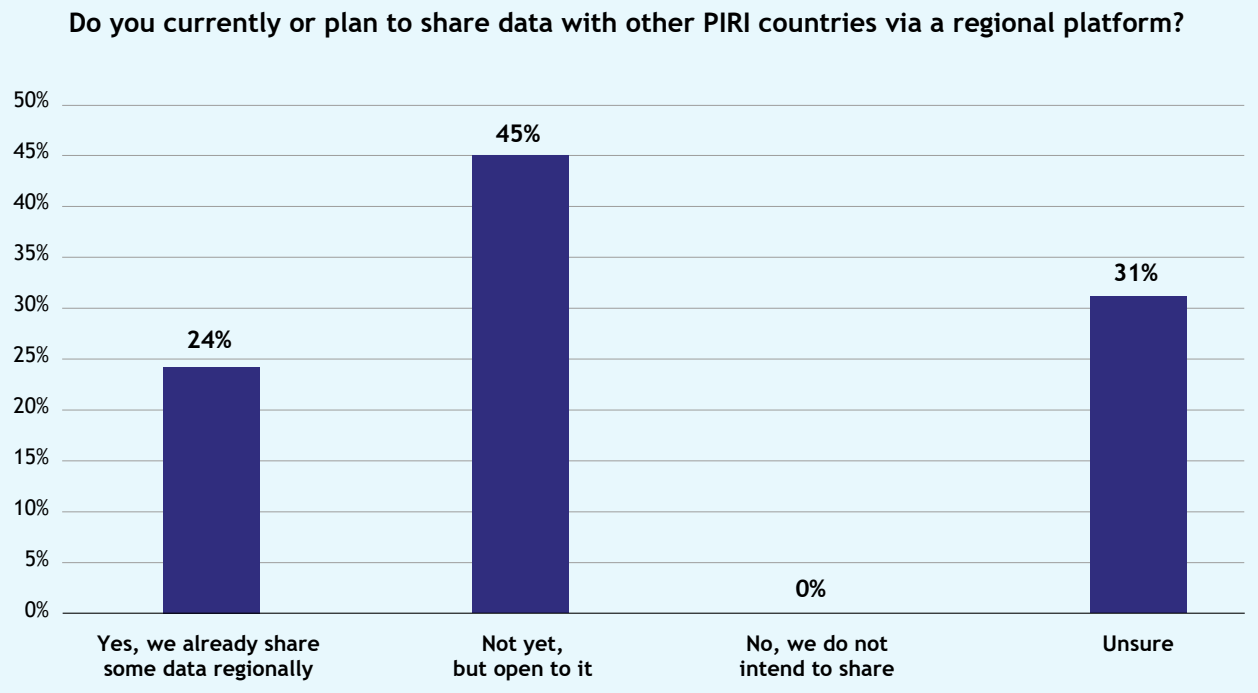
The diagnostic demonstrates that all seven central banks possess:

- Strategic alignment with SupTech goals
- Active internal collaboration across regulatory and digital functions
- A supportive institutional context driven by digital modernization
- A shared willingness to engage in collective learning and development.

These are vital conditions for SupTech adoption. However, translating this momentum into impact will require closing persistent institutional gaps, particularly in workforce capacity, legal certainty, systems integration, and long-term investment.

Without sustained commitment and structured support, there is a significant risk that good intentions will not translate into operational SupTech deployments. Building on shared strengths must therefore go hand in hand with addressing institutional gaps and ensuring that regional coordination does not become a substitute for internal preparedness.

**FIGURE 3:** SHARING DATA REGIONALLY



## 3.3 SHARED CONSTRAINTS AND GAPS

While the previous section highlighted key strengths and foundational readiness across the seven PIRI central banks, the diagnostic study also revealed a consistent set of structural constraints and institutional limitations that could significantly hinder SupTech implementation if not proactively addressed. These are not isolated weaknesses but cross-cutting challenges, common to both larger and smaller jurisdictions, spanning legal, technical, operational, and human resource dimensions.

Each of the gaps identified below is supported by data from the regulator and industry surveys, as well as commentary received through the qualitative sections of the diagnostic.

### LEGAL AND REGULATORY AMBIGUITY SLOWS INSTITUTIONAL CONFIDENCE

The most foundational constraint is the absence of SupTech-enabling legal mandates across most jurisdictions.

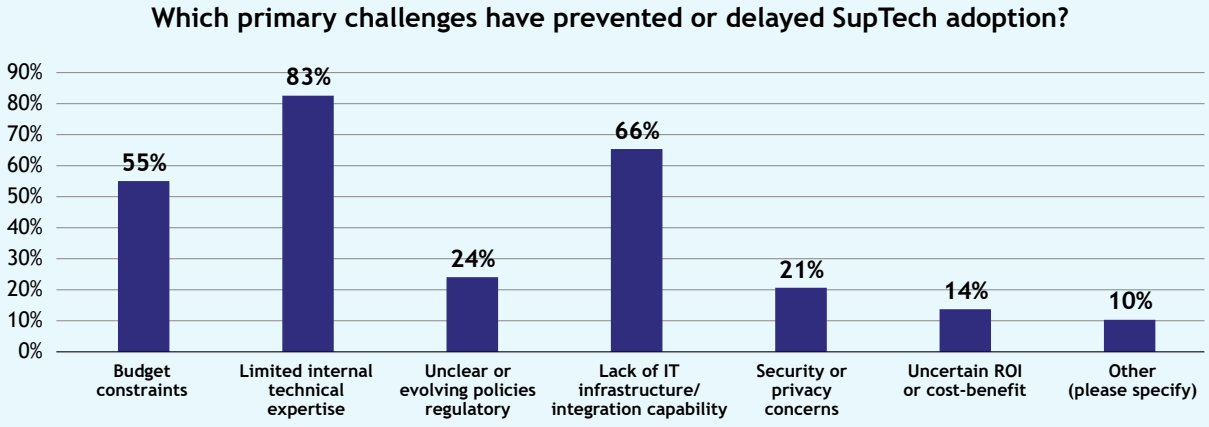
In Regulator Survey, five out of seven institutions reported uncertainty or constraints related to the legal basis for digital supervision. This legal uncertainty introduces risk aversion or institutional hesitation. Institutions that might otherwise pursue SupTech adoption may delay investment due to the lack of statutory backing, for systems involving personal or sensitive institutional data, especially around cross-border data transfers, use of third-party platforms, or adoption of cloud-based analytics tools.

The graph below shows that limited internal technical expertise, lack of integration capability, budget constraints, and unclear regulatory policies are major impediments to the adoption of SupTech.

**TABLE 3:** REGULATORY GAPS AND LEGAL AMBIGUITIES AFFECTING SUPTECH IMPLEMENTATION

| Issue area | Survey evidence and relevance |
|---|---|
| **Data protection and privacy laws** | Only CBS (Seychelles) has an enacted Data Protection Act (2023). Others, including NRBT, CBSI, and RBV, operate without formal legal instruments governing personal data, data retention, or third-party processors. |
| **API reporting mandates** | In Regulator Survey, only CBS and RBF confirmed legal comfort with digital submissions. Others flagged the lack of formal acceptance of machine-readable data or real-time digital compliance. |
| **Audit trail and admissibility** | A few survey questions revealed concerns from CBSI, BPNG, and RBV that digital submissions may not be audit-proof or legally defendable—particularly in enforcement or offsite reviews. |

**FIGURE 4:** CHALLENGES IN ADOPTING SUPTECH



## INFRASTRUCTURE MATURITY IS LOW AND HIGHLY FRAGMENTED

Across all central banks, SupTech adoption is constrained by weak technical infrastructure. Based on Industry Survey, 91 percent of institutions across all seven jurisdictions continue to use:

- Email-based Excel reporting,
- Manual templates,
- Unstructured attachments without automated validation or schema enforcement.

Furthermore, several institutions cited unreliable internet connectivity, lack of automated validation tools, and dependency on legacy hardware as key constraints. These issues affect both the efficiency of supervision and the timeliness of regulatory response, particularly in managing fast evolving fintech markets or responding to consumer grievances.

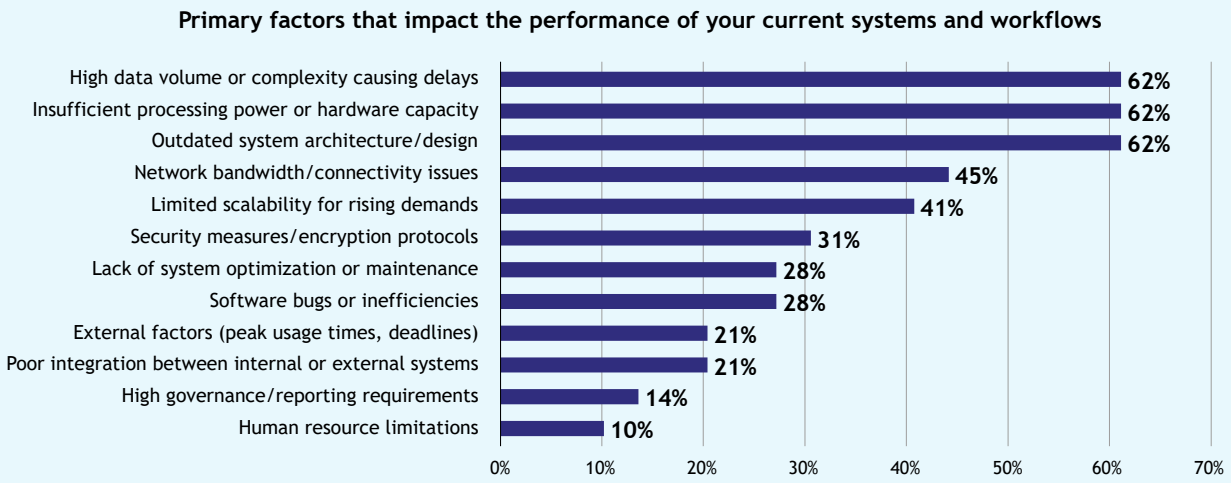
The systems and workflows are impacted by high data volume and complexity, insufficient hardware capacity, outdated system design, network bandwidth. All these issues severely impact the regulator's ability to collected data as per the required frequency and complexity. Therefore, it is important to address infrastructural issues to ensure effective SupTech adoption.

Even countries with strong policy ambition (e.g., CBS, CBSI) face systemic limitations that prevent real-time data monitoring. Fiji has piloted dashboards but lacks backend integration. PNG and RBV reported high manual burden in handling quarterly reporting cycles.

**TABLE 4:** CENTRAL BANK-WISE TECHNOLOGY ADOPTION

| Central bank | API gateway | Dashboard in use | Validation engine | Real-time ingestion |
|---|---|---|---|---|
| **CBS (Samoa)** | No | Limited | No | No |
| **RBF (Fiji)** | Under Design | Piloted | Partial | Partial |
| **CBSI** | No | No | No | No |
| **NRBT** | No | No | No | No |
| **BPNG** | No | No | No | No |
| **RBV** | No | No | No | No |
| **CBS (Seychelles)** | No | Planned | No | No |

**FIGURE 5:** FACTORS IMPACTING THE PERFORMANCE OF CURRENT SYSTEMS



## INSTITUTIONAL CAPACITY IS THIN AND UNEVEN

SupTech is a multidisciplinary domain that requires capabilities in IT integration, data analytics, supervisory frameworks, and project governance. Across the region, capacity remains a binding constraint.

While interest is strong, SupTech-specific capacity is extremely limited in most institutions.

Some comments noted:

- Overreliance on a handful of digitally proficient staff
- Difficulty recruiting or retaining tech-savvy staff in public service roles
- Absence of dedicated SupTech or RegTech units
- Limited exposure to project management practices for technology implementation.

This can be seen in Figure 4 as well, which shows that limited technical expertise is the biggest impediment to SupTech adoption.

This issue is particularly acute in smaller central banks (e.g., NRBT and RBV), where cross-functional roles often stretch institutional capacity thin. Therefore, even with shared use cases, the ability to lead or co-develop SupTech tools varies sharply. While RBF may pilot dashboards, NRBT will need basic form digitization and progressive onboarding.

**TABLE 5:** INSTITUTIONAL AND TECHNICAL CAPACITY GAPS AFFECTING SUPTECH DEVELOPMENT

| Capacity element | Diagnostic evidence |
|---|---|
| **Dedicated SupTech staff** | None of the central banks have a team solely responsible for SupTech or RegTech. |
| **Technical skills gap** | In Regulator Survey Q4, Q9 and Q14, five institutions self-rated internal readiness as 3 or lower (out of 5). |
| **Skills most lacking** | Survey commentary highlights gaps in: API architecture, AI/ML, system integration, data governance. |
| **Resource concentration** | Smaller banks (e.g., NRBT, RBV) rely on 1–2 individuals with digital expertise, posing continuity risks. |

## GOVERNANCE AND STRATEGIC ANCHORING ARE MISSING

In the Regulator survey, all institutions marked SupTech as a priority, but none confirmed the existence of a formally endorsed SupTech strategy, roadmap, or change management framework. Across the region, SupTech remains initiative-driven, not strategy-led.

Despite high strategic intent, none of the institutions have published a SupTech strategy or developed a dedicated governance structure for regulatory technology implementation. SupTech initiatives are often pursued informally, led by internal champions or cross-functional working groups without permanent mandates.

This creates risks related to:

- Procurement inconsistencies
- Vendor dependence or duplication of systems
- Lack of clarity on inter-departmental responsibilities for SupTech adoption, integration, and sustainability.

Therefore, without anchoring SupTech within institutional governance, there is a risk of pilot fatigue, failed vendor integrations, or fragmentation of efforts.

**TABLE 6:** STRATEGIC AND ORGANIZATIONAL WEAKNESSES IN SUPTECH ADOPTION

| Area | Risk observed |
|---|---|
| **Vendor engagement** | No institution has an internal procurement guide or due diligence checklist for SupTech tools. |
| **Cross-department governance** | SupTech efforts are often coordinated informally; reporting lines and mandates are unclear. |
| **Change management gaps** | No central bank reported a structured plan for transitioning from manual to digital compliance. |

## FRAGMENTATION OF DATA AND INCONSISTENCY IN SUPERVISION

In the absence of shared data taxonomies or standardized reporting templates, central banks and industry entities alike face challenges around:

- Duplication of license classification and/or reports across departments
- Inconsistent data classification and reporting templates (e.g., by license type, reporting period) vary by institution, sometimes even within departments
- There is no consistent set of reporting codes, XML schema, or centralized repository across any of the seven central banks.
- Delays in consolidating sectoral intelligence.

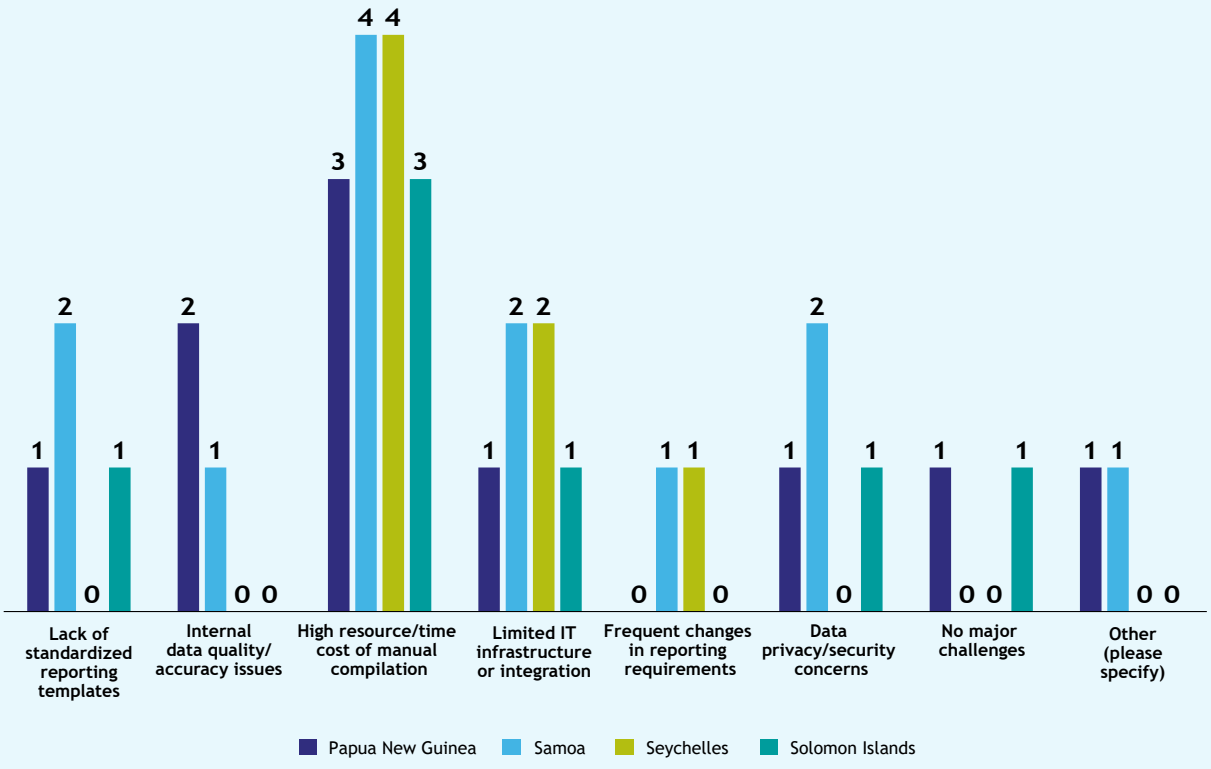
Heatmap results and survey responses confirm that most institutions are not yet able to harmonize data collection across different supervisory domains, limiting their ability to generate timely, high-quality insights.

A shared observation across both regulator and industry feedback is the lack of standardized taxonomies or supervisory data architecture.

As per regulators, delays and missed deadlines, data quality and accuracy issues, limited technological infrastructure, and cross-departmental fragmentations are major issues faced while collecting data from regulated entities.

In Industry Survey, 72 percent of institutions cited “duplicative reporting requirements” and “inconsistent submission formats” as major pain points.

**FIGURE 6:** MAIN CHALLENGES ENCOUNTERED IN PREPARING AND SUBMITTING REGULATORY DATA



**Consequence:** Without standardization, automation becomes difficult, and comparative analysis across institutions, especially for peer benchmarking or thematic supervision, is unreliable.

PACER PLUS, with similar experiences, stated, *"Since the platform is backed by efficient data collection systems, it needs to be addressed whether the required data collection systems are in place, what are the data priorities, and how do these SupTech solutions support policy formulation. To ensure the success of such a project, we need to determine how it can best support these needs while aligning with national and regional policy goals."*

## CONCLUSION

**Constraints are shared, but so is the opportunity.**

These challenges are not unique to any one country, they are regional in nature. Their persistence is not a result of lack of will, but a consequence of resource constraints, legacy systems, and institutional fragmentation.

If left unresolved, these gaps could slow or derail the region's SupTech ambitions, regardless of strong alignment on use cases or peer willingness to collaborate. Effective SupTech implementation will require that these issues be acknowledged upfront and addressed collectively, but only through a combination of:

- Shared infrastructure investment
- Pooled technical expertise and co-developed technical solutions
- Joint legal modernization efforts and shared legal models
- Progressive onboarding, ongoing peer engagement, and structured capacity-building development.

The data does not suggest any country is immune to these constraints. Even the most advanced institutions, such as Fiji and Seychelles, face infrastructure, procurement, and system integration challenges. For others, the foundational work of establishing legal clarity, structured workflows, and scalable reporting will require time and support.

Therefore, a collective approach is not just efficient, it is necessary. These shared gaps form the very rationale for building a regional SupTech solution that is modular, phased, and locally configurable. Given the unique challenges of each country, a representative from PACER PLUS remarked, *"To address these limitations, one effective approach is to bring countries together and identify potential champions—countries that can take the lead. Smaller countries may be more willing to follow once they see the benefits demonstrated by early adopters."*

## 3.4 REGIONAL USE CASE PRIORITIES

One of the clearest findings of the SupTech diagnostic is the strong and remarkable degree of convergence of functional priorities among PIRI central banks. Despite variations in institutional maturity, digital readiness, and legal environments, the same six use cases emerged repeatedly as top priorities, both from regulators and industry stakeholders.

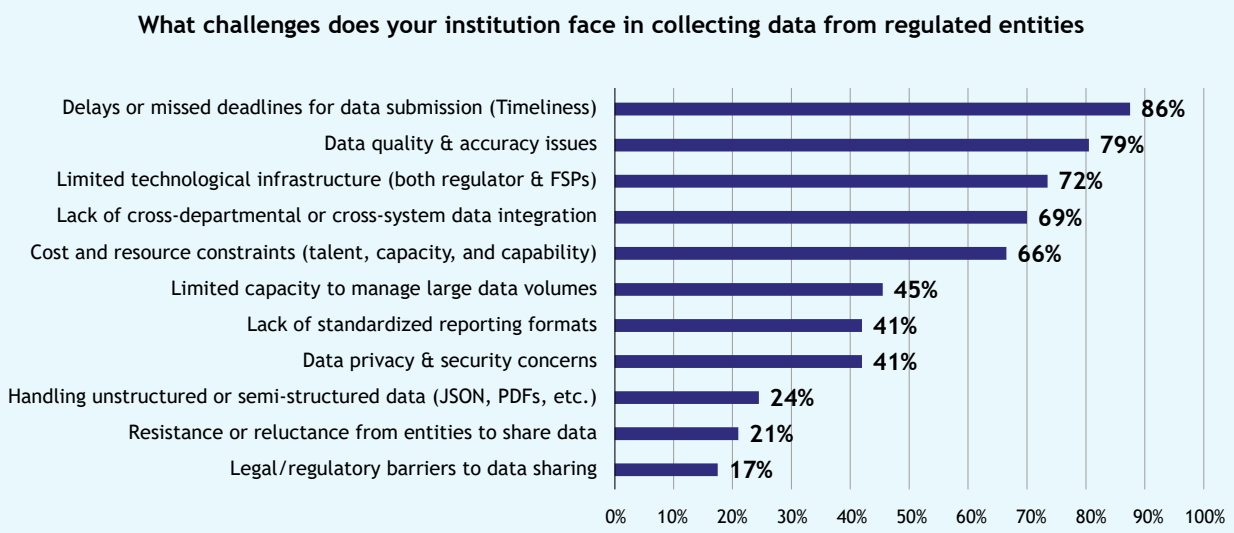
These use cases, ranked by frequency and urgency in both Regulator Survey and Industry Survey, represent shared pain points that SupTech can immediately address.

Importantly, their prominence was not imposed or abstract, but emerged organically from data, reflecting real-world challenges faced by supervisory departments and compliance teams alike.

**TABLE 7:** THE TOP SIX REGIONALLY PRIORITIZED SUPTECH USE CASES

| SupTech use case | No. of central banks prioritizing (out of 7) |
|---|---|
| **1. Automated data collection & validation** | 5 |
| **2. Prudential oversight** | 4 |
| **3. Risk-based supervision** | 5 |
| **4. Fraud detection & prevention** | 4 |
| **5. Ability to collect disaggregated data** | 3 |
| **6. Macroprudential oversight** | 3 |

**FIGURE 7:** CHALLENGES IN COLLECTING DATA FROM REGULATED ENTITIES




## AUTOMATED DATA COLLECTION & VALIDATION

All seven central banks ranked this as a priority. Across the region, data collection remains manual, fragmented, and time-consuming. Institutions rely on in-person submissions and email-based approvals. This leads to:

- Considerable time spent on data validation
- Inconsistent data entries
- Data quality and timeliness issues

In Regulator Survey, a majority of the respondents mentioned that they still rely on manual methods.

The graph above shows that missed deadlines, data quality and accuracy, limited technological infrastructure, lack of cross-system integration and cost and resource constraints are biggest challenges in collecting data from regulated entities.

A representative from PACER PLUS remarked along similar lines, *"The effectiveness of this SupTech platform will largely depend on data availability. However, each country is at a different stage in terms of data availability. Before considering regional integration, it's essential to first address country-level challenges."*

**Policy impact:** Impacts timely and quality data on the basis of which needed interventions can be deployed. Data is the backbone of all other SupTech functions.

## PRUDENTIAL OVERSIGHT

Many regulators wish to improve the prudential oversight over regulated entities and the economy.

Without a strong technological infrastructure and human capacities, this becomes increasingly difficult.

**Strategic insight:** For prudential oversight, having access to high-volume and comprehensive data is required.

## RISKS-BASED SUPERVISION

Six of seven institutions indicated dashboards as a top priority for evolving toward risk-based supervision. Use cases include:

- Visualizing prudential metrics (capital, liquidity)
- Tracking compliance trends over time
- Identifying outliers or early warning signals.

RBF (Fiji) leads the region in dashboard experimentation, while CBS, CBSI, and NRBT expressed strong intent to adopt dashboards for thematic reviews and inspection planning.

**Operational insight:** Dashboards are both a data consumption and change management tool. They enable cross-departmental engagement and proactive supervision.

### FRAUD DETECTION AND TRANSACTION MONITORING

This use case received support from four regulators, particularly in systems with higher mobile money penetration or exposure to AML/CFT risks.

- CBSI, CBS (Seychelles), BPNG, and RBF identified fraud as a key challenge, but noted that current tools rely on manual inspections or reactive responses.
- Industry respondents shared concerns about increasing transaction volumes and digital product complexity overwhelming existing manual checks.

**Forward risk management:** Automated anomaly detection and fraud analytics modules can bolster oversight in fast-moving sectors such as e-wallets, remittances, and microcredit.

### ABILITY TO COLLECT DISAGGREGATED DATA

All central banks have priorities to collect data on ESG, financial inclusion and others to have a more comprehensive overview of their financial markets. This priority is also aligned with their Financial Inclusion strategies.

**Operational Insight**: Having disaggregated data will help regulator develop targeted initiatives to meet their objectives.

### MACROPRUDENTIAL OVERSIGHT

While this was not a priority listed by all regulators, some wish to improve their monitoring of macroeconomic and high frequency variables such as interest rates, inflation, trade, foreign exchange, credit and more. This will guide their monetary policy and other directives.

To achieve this data collection systems, need to be in place.

## CONCLUSION

**Converging priorities, differentiated depths.**

The SupTech diagnostic reveals that regional alignment is strongest at the functional level, particularly in use cases where inefficiencies are tangible, such as licensing, reporting, and market conduct oversight. However, variation exists in readiness to implement, and in appetite for advanced tools like AI or fraud detection systems.

This reinforces the need for a modular approach: a core set of common use cases (the top four), with optional pathways for more advanced modules based on institutional maturity and reform ambition.

These findings are central to the upcoming blueprint design. Section 5 will build directly from these use cases to define the technical and operational parameters of a shared regional SupTech solution that is both inclusive and adaptive.

Pablo Rasero / Shutterstock.com

## 3.5 INDUSTRY PERSPECTIVE AND INSTITUTIONAL ALIGNMENT

A key component of this diagnostic was the structured engagement of regulated entities, banks, fintechs, mobile money operators, and non-bank financial institutions. Their perspectives are not ancillary; they are central to SupTech's success.

The diagnostic surfaced a critical insight: **while central banks are aligned in ambition, the industry is aligned in intent but constrained in capacity.**

This section distills the readiness, concerns, and expectations of the industry. It reflects on how well these align with regulator priorities and what gaps must be addressed for SupTech to deliver on its promise.

### STRONG SUPPORT FOR SUPTECH TRANSITION

Across all jurisdictions, industry responses indicated broad support for SupTech reforms, particularly those that reduce the compliance burden and improve regulatory transparency.

The industry recognizes that SupTech has the potential to make regulatory processes more efficient, consistent, and less resource-intensive if implementation is well-managed and not disruptive.

**FIGURE 8:** CONCERNS ABOUT IMPLEMENTING A NEW SUPTECH PLATFORM BY THE REGULATOR

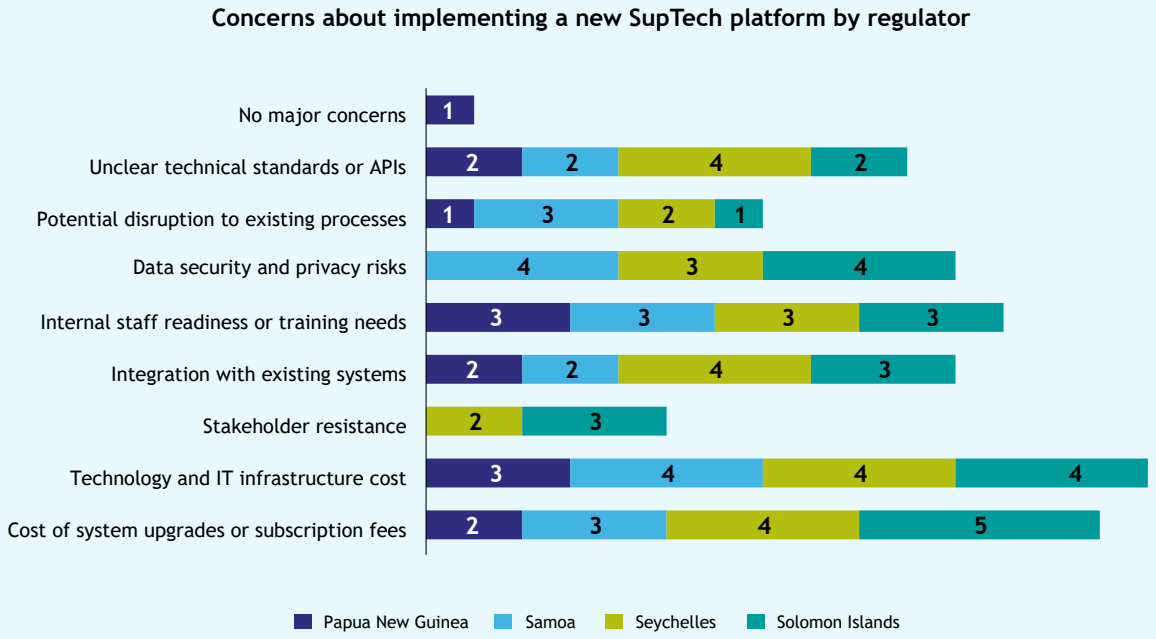
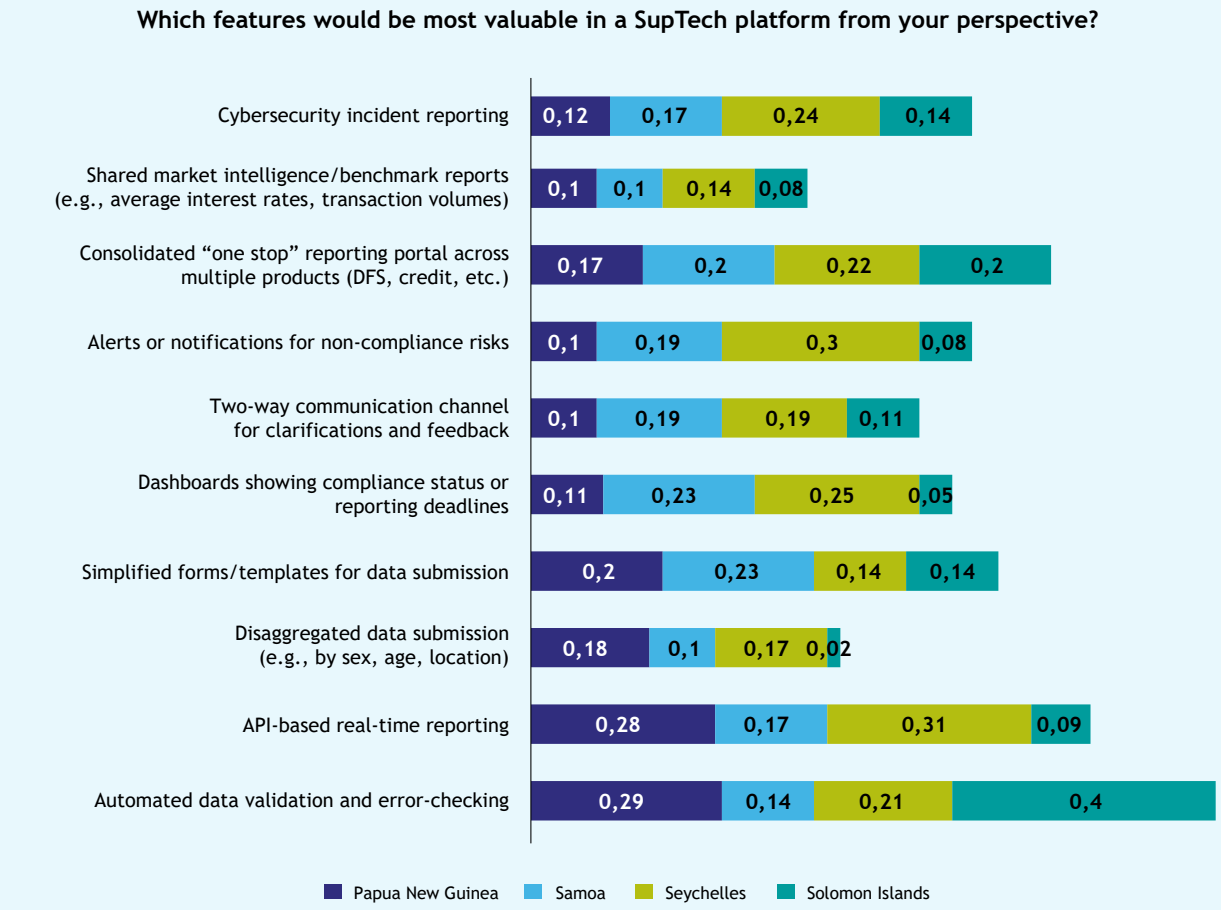



**TABLE 8:** STRONG SUPPORT OR SUPTECH ADOPTION

| Metric | Result |
|---|---|
| **Support for digitizing reporting** | 82 percent of respondents indicated support for transitioning to digital tools |
| **Support for API-based reporting** | 72 percent expressed willingness to integrate with APIs, if phased and guided |
| **Demand for licensing automation** | 80 percent cited delays and paperwork in nsing as a major barrier |
| **Interest in structured complaints processes** | 69 percent saw value in a regulator-managed complaints resolution system |

**FIGURE 9:** INDUSTRY VIEWPOINT OF REQUIREMENTS FROM A SUPTECH PLATFORM




## READINESS IS UNEVEN: LARGE INSTITUTIONS ARE PREPARED, SMALLER ONES NEED SUPPORT

The readiness to implement SupTech solutions, especially digital reporting and API integration, varies widely between large and small players.

In the Industry Survey, smaller institutions noted:

- Limited in-house IT resources
- Concerns over the cost of system upgrades
- Need for standardized APIs and templates from the regulator
- Preference for sandbox environments to test compliance before full rollout.

It is therefore apparent, SupTech adoption without support mechanisms could widen the compliance capability gap, potentially leading to exclusion or non-compliance of smaller players.

**TABLE 9:** VARIATIONS IN SUPTECH READINESS ACROSS FINANCIAL INSTITUTION TYPES

| Institution type | Readiness summary |
|---|---|
| **Large commercial banks** | Most have internal IT teams and favour standardized interfaces |
| **Microfinance institutions** | High willingness, but very limited digital capacity |
| **Mobile money providers** | Digitally mature, but require security and integration assurances |
| **Credit unions/ co-ops** | Often lack digital infrastructure and may need shared solutions |

## TOP PAIN POINTS ARE PROCESS-DRIVEN, NOT JUST TECHNICAL

The diagnostic revealed that industry pain points often stem from manual, repetitive, and duplicative processes, rather than the absence of digital tools per se.

Common grievances included:

- Reporting the same data in different formats to multiple departments
- Having no visibility into complaint resolution timelines
- Receiving last-minute regulatory updates without digital notification systems
- Burden of printing, signing, scanning, and emailing regulatory forms.

Within the context of PIRI members, we can argue that SupTech is not just about new systems; it is about replacing outdated processes that cost time, money, and trust.

## WHERE INDUSTRY AND REGULATORS ARE ALIGNED

A review of survey correlations shows strong alignment between regulator and industry views on four key areas:

**TABLE 10:** USE CASE PRIORITY OF REGULATOR AND INDUSTRY

| Use case | Industry demand | Regulator priority | Notes |
|---|---|---|---|
| **Digital licensing** | Very High | High | Ranked No.1 by both regulators and industry |
| **API-based reporting** | High | High | Industry expects phased implementation and sandboxing |
| **Complaint resolution systems** | High | Medium-High | Industry demand for stronger than current regulatory tools |
| **Dashboards for compliance transparency** | Medium-High | High | Industry wants access to summary dashboards where applicable |

This alignment suggests strong potential for co-creation and smooth onboarding if implementation sequencing considers industry capacity.

## KEY INDUSTRY RECOMMENDATIONS FOR SUPTECH DESIGN

In open-ended survey responses and workshop dialogue, regulated entities consistently offered five recommendations to support effective SupTech implementation:

- Create clear API documentation and data dictionaries, with sample payloads and test environments
- Provide standardized digital templates for returns, licensing, and complaints
- Offer pilot or sandbox periods before full regulatory enforcement of new tools
- Implement digital alert systems (e.g., email notifications) for compliance tasks and regulatory changes
- Engage industry early and often, especially during module design and rollout.

## COUNTRY DISTINCTIONS WORTH HIGHLIGHTING

- **Fiji:** Most mature institutions; banks and insurers already exploring data automation
- **Samoa and Seychelles:** Strong alignment between regulator ambitions and industry willingness
- **Tonga and Solomon Islands:** Industry open to change but highly resource-constrained; regulators must provide phased, low-cost integration pathways
- **Vanuatu and PNG**: Institutions are ready for licensing and dashboard tools but need robust regulator-led guidance and integration support.

## CONCLUSION

### Industry is a willing partner, but needs tailored onboarding

The data shows that regulated entities are ready to embrace SupTech, but implementation must recognize the diversity of digital capacity and the need for regulator-provided guidance, tools, and communication.

The implication for SupTech platform design is clear: build for modularity, onboard based on parity and proportionality, and scale with support. A shared regional SupTech solution will only be successful if its rollout is inclusive, its tools are standardized yet flexible, and its benefits are tangible from day one.

## 3.6 CASE FOR A SHARED REGIONAL SUPTECH UTILITY

The diagnostic findings presented in the preceding sections lead to one unavoidable conclusion: while SupTech is recognized as a strategic imperative across all PIRI central banks, no institution can achieve its goals alone at pace, scale, or sustainability without coordinated support, shared solutions, and common frameworks.

This section presents the evidence-based rationale for a shared regional SupTech utility, grounded in institutional realities, aligned with global practices, and reflective of both central bank and industry needs.

### CONVERGING USE CASES SUGGEST A COMMON TECHNICAL CORE

As shown in Section 3.4, six SupTech use cases were prioritized by a majority of PIRI member institutions. These are not speculative or long-term aspirations, they are the most urgent, foundational gaps in supervision today:

- Automated data collection & validation
- Prudential oversight
- Risk-based supervision
- Fraud detection & prevention
- Ability to collect disaggregated data
- Macroprudential oversight

Five of these six use cases are shared by at least a majority of the seven central banks. This alignment suggests that 80–90 percent of required functionality could be built on a shared platform, saving cost, time, and effort.

### SHARED CONSTRAINTS CALL FOR SHARED INVESTMENT

From Sections 3.2 and 3.3, we know that:

> Most central banks lack SupTech strategies, permanent teams, and procurement mechanisms
> Only Seychelles has a comprehensive data protection law
> No country has a complete API gateway or real-time validation engine
> Skills in API integration, system design, and AI are rare.

Even if institutional intent is high, implementation is likely to stall or fragment, unless institutional and infrastructural gaps are bridged collectively.

A shared SupTech utility could pool:

> Procurement processes (e.g. vendor due diligence)
> Infrastructure (e.g. sandbox environments, code libraries)
> Expertise (e.g. shared support teams or regional knowledge hubs).

### INSTITUTIONAL APPETITE FOR A REGIONAL APPROACH IS STRONG

From the Regulator Survey:

> 100 percent of central banks expressed willingness to participate in a regional SupTech project
> 86 percent were open to regional testing environments and shared architecture
> Many offered to serve as pilot countries or contributors to governance.

The PIRI platform is already built on collaboration, peer learning, and co-developed regulatory frameworks. SupTech is a natural extension of that ethos, especially when functional needs are aligned.

Fokke Baarseen / Shutterstock.com

## COST EFFICIENCY AND SCALE BENEFITS ARE UNMATCHED

If each country pursued SupTech individually:

- Duplication of investment and vendor engagement is estimated to increase costs by multiples of 3 to 5
- Smaller jurisdictions like Tonga or Vanuatu might not reach critical mass to attract vendors or build scalable systems
- Peer comparisons and regional data exchange would remain aspirational.

A majority of the respondents highlighted that they anticipate high to very high cost across different aspects of SupTech adoption. These include change management, compliance, and regulatory alignment, infrastructure upgrades, human resource dependencies and others.

By contrast, a regional SupTech utility would enable:

- Cost-sharing on infrastructure, design, and security
- Harmonized taxonomy and reporting logic
- Easier onboarding for regulated entities operating in multiple countries
- A collective position when engaging with global RegTech vendors or funders.

## GLOBAL BEST PRACTICES SUPPORT SHARED MODELS

Other regional supervisory platforms show the viability of shared SupTech governance:

- The Bank Supervision Application (BSA); used by 22 regulators (16 from AFI), demonstrates how a collective platform can be built, governed, and customized to local needs
- The SADC region has already developed joint reporting tools
- The EU's Single Supervisory Mechanism offers a central reporting gateway with national-level controls.

The Regulator Survey findings show that 90% of the respondents most preferred or preferred to adopt BSA. This shows that a collaborative approach is appreciated by these regulators.

Shared SupTech solutions do not require identical institutions, they require common priorities and mutual accountability. PIRI members have both.

**FIGURE 10:** ANTICIPATED COST LEVEL FOR SUPTECH ADOPTION

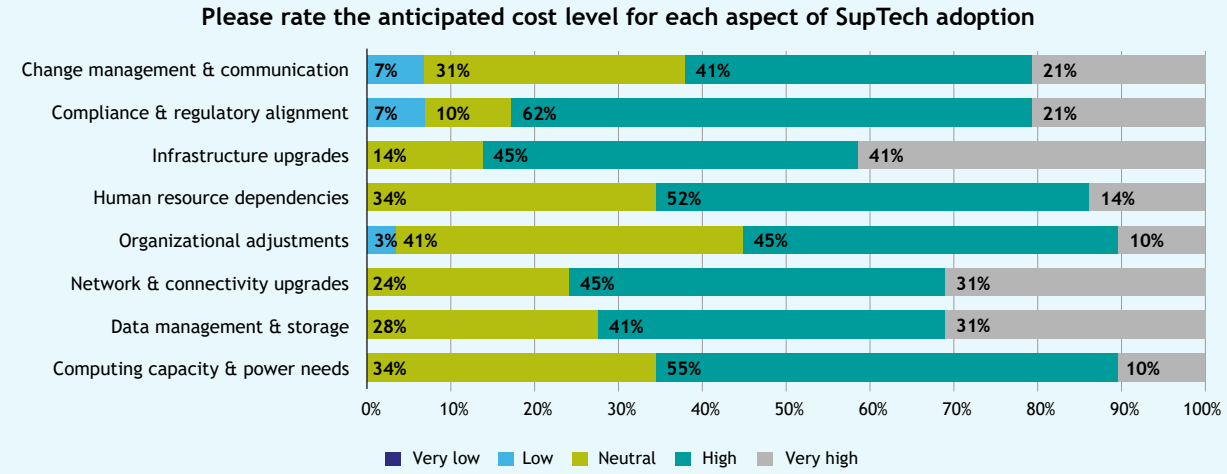



**FIGURE 11:** PREFERENCES FOR APPROACHES TO SUPTECH ADOPTION

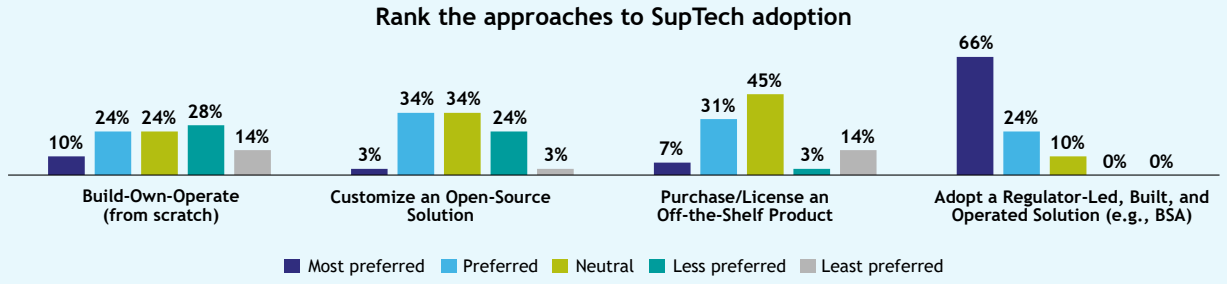


**TABLE 11:** STRATEGIC RATIONALE OF A COLLABORATIVE APPROACH

| Strategic rationale | Supporting data and explanation |
|---|---|
| **Converging use cases suggest a common technical core** | Five of the six most critical use cases are shared by nearly all central banks. Licensing remains paper-ba sed; reporting is email-driven; complaints are tracked manually. Fact: 80–90 percent of needed functionality could be addressed by one platform, reducing duplication and fast-tracking deployment. |
| **Shared constraints call for shared investments and commitments** | All central banks face resource constraints, weak legal scaffolding, and limited internal SupTech skills. Most lack APIs or validation engines. Pooling procurement, templates, test environments, and support tools will create efficiencies and lower the risk of partial success. |
| **Institutional appetite for a regional approach Is strong** | From the Regulator Survey, 100 percent of institutions expressed interest in a shared SupTech solution. Several volunteered for pilots. Existing collaboration under PIRI provides a foundation. SupTech can extend this into technical co-development and cost-sharing. |
| **Cost efficiency and scale benefits Are unmatched** | Individual national efforts are expensive and fragmented. Shared SupTech allows pooled development, centralized standards, and peer benchmarking. Smaller central banks avoid isolation, and regional credibility improves with coordinated donor reporting and system integration. |
| **Global best practices support shared models** | Examples: BSA (used by 22 regulators), EU's SSM reporting gateway, and SADC's shared licensing tool. Shared systems work when the design is modular, and governance is inclusive. PIRI members show alignment, which is similar to these models. |
| **Strategic risk of fragmented implementation** | If countries act independently, progress will diverge, and some may fall behind. Donor confidence may be eroded by slow, unequal progress. A shared utility helps reduce supervisory fragmentation and maintains institutional equity while accelerating rollout. |

## STRATEGIC RISK OF FRAGMENTED IMPLEMENTATION

Without a shared approach:

- Institutions with less digital readiness risk falling further behind
- Smaller banks and credit unions may face rising compliance costs
- Regional supervisory comparisons will remain manual and unscalable
- Donor fatigue may emerge if results are inconsistent or slow.

A fragmented approach risks exacerbating inequality in supervisory capabilities across the region, weakening trust, interoperability, and efficiency.

## CONCLUSION

### From shared challenges to shared solutions

The diagnostic data does not just highlight what is broken, it reveals what can be built together.

SupTech priorities are aligned. Capacity gaps are mirrored. The appetite for collaboration is high. Therefore, a regional SupTech utility, co-developed, co-owned, and modularly deployed, is not only justified, but also necessary. It offers a path to:

- Deliver core regulatory functionality fast
- Build long-term institutional capability
- Ensure no central bank or regulated entity is left behind
- And lay the foundation for inclusive, data-driven supervision.

The next section (Section 4) will present a design blueprint for what this shared SupTech platform could look like, based on the six priority use cases, institutional realities, and implementation logic surfaced through this diagnostic.

## 3.7 SUMMARY OF REGIONAL NEEDS AND OPPORTUNITIES

The findings from the diagnostic study make a compelling case: the PIRI region is at a turning point. The push for modern supervision is real. The technical and legal foundations are emerging and the willingness to collaborate is clear. But without strategic alignment, resource pooling, and platform-level coordination, this momentum risks stalling or fragmenting.

This section synthesizes the data, institutional realities, and forward-looking insights into a cohesive summary of what must be done, and why a shared regional SupTech solution is the most efficient, inclusive, and sustainable pathway forward.

### 3.7.1 WHAT THE DATA REVEALS

Across all sections of this report, a consistent picture has emerged:

- Every central bank recognizes SupTech as a strategic priority, but none has a fully operational SupTech framework or fully adopted or deployed one
- Six core use cases are shared by nearly all regulators and validated by industry as top priorities (see Section 3.4)
- All institutions lack advanced API systems, real-time data pipelines, or integrated analytics dashboards
- Only one country (Seychelles) has a full legal regime enabling digital supervision
- Industry is supportive but needs handholding: APIs, templates, sandbox access, and transitional compliance support
- Crucially, 100 percent of regulators have expressed willingness to pursue a shared regional approach, if designed inclusively and rolled out equitably.

### 3.7.2 THE CASE FOR SHARED SUPTECH AS REGIONAL INFRASTRUCTURE

SupTech is no longer just a back-office tool; it is becoming the critical infrastructure for financial stability, inclusion, market conduct and supervision, oversight, and digital trust. In the PIRI context, where individual capacity is often limited, and market fragmentation is high, SupTech is uniquely suited to be developed and governed as a shared digital infrastructure and utility offering public value.

#### How it mirrors regional infrastructure models

Just like shared payment systems, digital identity (ID) platforms, or cybersecurity frameworks, SupTech can be designed, deployed, and operated as a shared digital infrastructure and utility:

- Requires standards and interoperability
- Benefits from economies of scale and shared learning
- Protects data sovereignty through controlled architecture
- Accelerates innovation by reducing redundancy.

### 3.7.3 REGIONAL IMPACT LENS: FINANCIAL INCLUSION, MARKET CONDUCT, AND REGULATORY EQUITY

SupTech is not just about automation or dashboards. For the PIRI region, evidence from our quantitative and qualitative analysis suggests it can:

- Lower compliance costs for smaller banks and microfinance institutions (MFIs)
- Enable proportional regulation by risk profile, not institution size
- Strengthen market conduct oversight in fast-growing digital finance sectors
- Allow real-time monitoring of consumer inclusion metrics, by gender, geography, or MSME status
- Harmonize supervisory capacity, preventing a “sunrise problem” with different-speed regulatory and supervisory regimes.

Westock Productions / Shutterstock.com

### 3.7.4 SWOT ANALYSIS: SUPTECH AS A REGIONAL SHARED UTILITY

**TABLE 12:** SWOT ANALYSIS OF COLLABORATIVE SUPTECH

| Strengths | Weaknesses |
|---|---|
| Clear convergence on six use cases | No dedicated SupTech teams or roadmaps in any country |
| Regional collaboration platform (PIRI) already exists | Limited technical infrastructure (APIs, dashboards, validation tools) |
| Strong regulator–industry alignment on core needs | Skills gaps in data analytics, Artificial Intelligence (AI), data architecture, and technical integration |
| Precedents in BSA (with 16 AFI member institutions) for shared supervision platforms | Varying legal readiness, especially for cross-border data standards |
| **Opportunities** | **Threats** |
| Shared investment reduces duplication and speeds delivery | Fragmented national efforts may fail due to low capacity |
| Leveraging the regional sandbox could lower onboarding barriers for industry | Donor confidence and external technical support may erode if rollout is uncoordinated |
| Vendor engagement is stronger when platforms cover multiple countries | Risks of institutional overload without phased rollout and support |
| Potential to anchor broader digital transformation (e.g., sex disaggregated data collection, address regional de-risking issues, license passporting and harmonization, fraud and risk data sharing etc.) | Smaller institutions may be left behind if support is uneven – the sunrise problem |

### 3.7.5 PESTEL ANALYSIS: SUPTECH AS A REGIONAL SHARED UTILITY

**TABLE 13:** PESTEL ANALYSIS OF COLLABORATIVE SUPTECH

| Dimension | Regional insight |
|---|---|
| **Political** | Central bank leadership across PIRI is aligned on digital modernization.<br>National and institutional support varies but is generally favorable toward regulatory innovation. |
| **Economic** | SupTech can lower supervisory costs, improve compliance efficiency, and de-risk financial services at country and regional levels. |
| **Social** | Improved oversight and consumer protection mechanisms build trust and support inclusion, especially for underserved groups including women, youth, MSMEs, and the elderly. |
| **Technological** | Infrastructure gaps are high. SupTech can accelerate system upgrades and foster regional interoperability if modular and API-ready. |
| **Environmental** | SupTech can support Environmental, Social, and Governance (ESG), Inclusive Green Finance (IGF), and climate-risk monitoring core systems are in place, e.g., scenario analysis dashboards, uptake of IGF-related products like insurance and others. |
| **Legal** | Only one country has complete legal alignment. Most others need reforms in data governance, authentication, and cross-border digital law (if required). |

### 3.7.6 SUMMARY OF REGIONAL NEEDS AND OPPORTUNITIES

**TABLE 14:** REGIONAL NEEDS AND OPPORTUNITIES

| Category | Regional pattern | Implication |
|---|---|---|
| **Use case prioritization** | 6 shared use cases across 6 regulators | Design shared SupTech core functionality across these pillars |
| **Legal and policy readiness** | Fragmented; only 1 has comprehensive data law | Shared policy frameworks or reference legislation needed alongside platform rollout |
| **Infrastructure capacity** | Lacks API, dashboard, or cloud analytics in nearly all jurisdictions | Regional investment in platform infrastructure essential |
| **Institutional capacity** | High intent but low implementation capacity | Training, peer support, and a regional SupTech Centre of Excellence could help |
| **Industry engagement** | High willingness, especially for licensing and reporting APIs | Must design with industry in mind, shared templates, sandboxes, phased transition plans |
| **Strategic collaboration** | 100 percent of regulators are willing to collaborate; some have volunteered for pilots | Strong foundation for inclusive governance, co-design, and regionally owned SupTech utility |

Drazen Zigic / Shutterstock.com

# 4 BLUEPRINT FOR A REGIONAL SUPTECH SOLUTION

## 4.1 OBJECTIVE AND DESIGN PHILOSOPHY

This section sets out the vision and foundational rationale for designing a shared regional SupTech utility that meets the supervisory, operational, and inclusion goals of the seven PIRI member central banks. The blueprint presented here is both:

- A strategic framework for guiding the direction of regulatory technology adoption in the region.
- A technical and business specification document, defining the system features, functions, and integration requirements needed for successful implementation.

While our survey findings show a positive response regarding the willingness to adopt SupTech solutions. The survey findings also highlight the major factors that influence the choice of approach to adopt SupTech solutions.

The survey findings show that data security and sovereignty (72 percent), flexibility for future customizations (69 percent), and ongoing support and maintenance model (62 percent) are the top factors that influence the choice of approach for SupTech adoption.

Therefore, the proposed blueprint is based on a detailed evaluation of current supervisory capabilities, priority use cases, and critically, a structured review of four potential adoption models, as explored through the diagnostic.

**FIGURE 12:** WHICH FACTORS INFLUENCE YOUR CHOICE OF SUPTECH ADOPTION

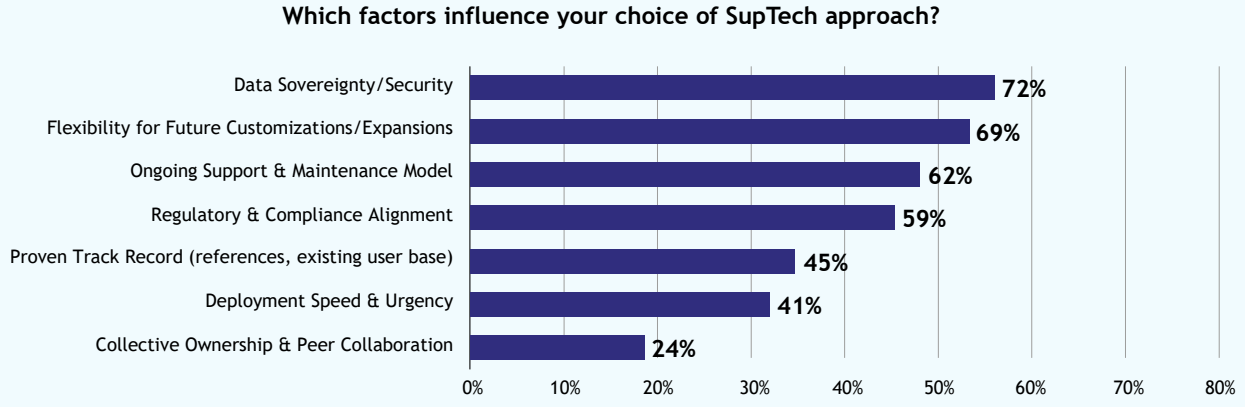



**FIGURE 13:** FACTORS THAT INFLUENCE THE CHOICE OF APPROACH TO SUPTECH ADOPTION

| The strengths and weaknesses of the approach are based on the following | |
|---|---|
| Deployment speed | Data sovereignty or security |
| Customization flexibility | Peer collaboration and sharing |
| Overall suitability | Total cost of setup, operations and management |
| Governance and future upgrades | Vendor support |

| The oppotunities and threats of the approach are based on the following | |
|---|---|
| Return on investment | Human capital or technical expertise |
| Network bandwidth | System architecture or design |
| Budget | Integration with existing systems |

## EVALUATING FOUR APPROACHES TO SUPTECH ADOPTION

As part of the diagnostic, PIRI central banks were asked to evaluate four distinct adoption pathways. Each approach was assessed for its viability, cost, sustainability, legal compatibility, and institutional fit.

The survey findings show that PIRI members have a clear preference for adopting a regulator-led, built, and operated solution such as BSA (66 percent).

The findings from the diagnostic are summarized in the table below.

**TABLE 15:** EVALUATION OF FOUR APPROACHES TO SUPTECH ADOPTION

| Adoption Model | Definition | Pros | Risks / Challenges |
|---|---|---|---|
| **1. Build-Own-Operate (BOO)** | Develop an in-house SupTech platform from scratch. Full internal control and customization. | Complete autonomy; tailored to national policies. | High cost; long development time; limited internal capacity; 48 percent said not viable. |
| **2. Customize an open-source solution** | Modify a freely available open-source tool to suit national needs. | Flexibility; no licensing costs. | 76 percent flagged security risks, bugs, lack of support; and concerns over sustainability. |
| **3. Purchase/License off-the-shelf product** | Buy a vendor-developed SupTech system and configure it as needed. | Fast deployment; vendor support. | 59 percent were concerned about vendor lock-in, high licensing costs, and weak customization options. |
| **4. Adopt a regulator-led, built, and operated platform (e.g., BSA)** | Join a SupTech solution designed and governed by peer regulators. Example: Bank Supervision Application (BSA) used by 22 regulators globally. | 66 percent ranked as most preferred; lower cost (62 percent), track record (76 percent), data sovereignty (66 percent). | Concerns about long-term governance, fee structures, and national policy alignment (noted by 28 percent). |


Sam Lawrence Photography / Shutterstock.com

## KEY FINDINGS FROM THE DIAGNOSTIC ON ADOPTION PREFERENCES

1. Regulator-led models (e.g. BSA) received overwhelming support from central banks:
   - 90 percent preferred or strongly preferred this option.
   - Reasons: Cost-efficiency (lower cost due to shared development and licensing (62 percent)), technical readiness and proven track record with 22 regulators (76 percent), peer learning potential, and data governance and sovereignty cont rols (66 percent).
2. The least preferred approach was building a system from scratch, cited by 48 percent as not viable due to time and resource constraints.
3. Open-source customization was viewed with skepticism. 76 percent or respondents cited concerns primarily due to security, maintenance, and institutional readiness to manage potential security vulnerabilities (e.g., trojans, bugs).
4. Off-the-shelf commercial platforms had moderate support but raised fears of vendor lock-in and incompatibility with regulatory mandates and data sovereignty.

Following the results from the diagnostic, we can conclude definitively that the preferred design path is clear; **a regulator-led, shared SupTech utility with modular, country-configurable components**, inspired by systems like the BSA, but adapted for PIRI's strategic and institutional context.

**FIGURE 14:** ADVANTAGES OF ADOPTING BSA

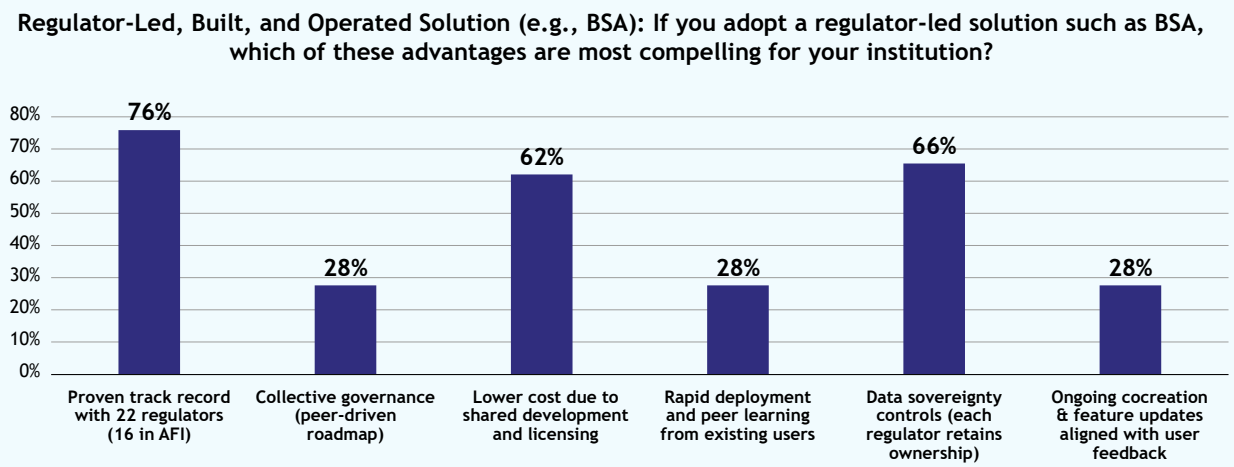



**FIGURE 15:** LIKELIHOOD OF BUILDING A SUPTECH SOLUTION FROM SCRATCH

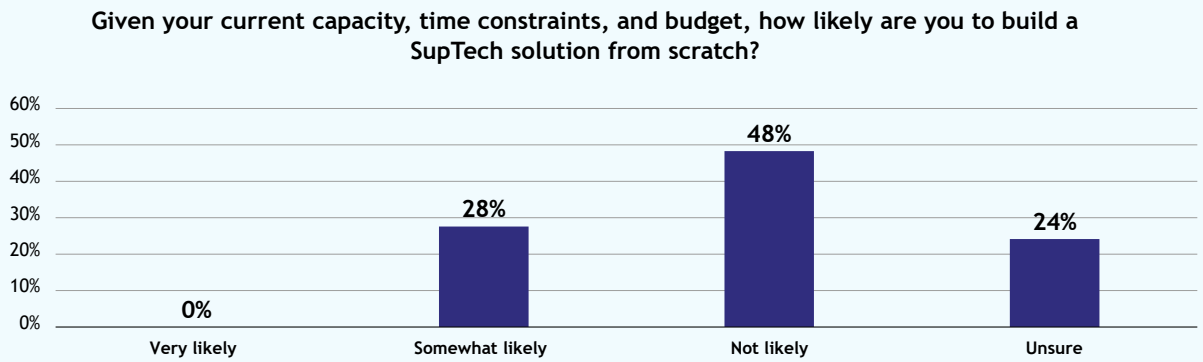
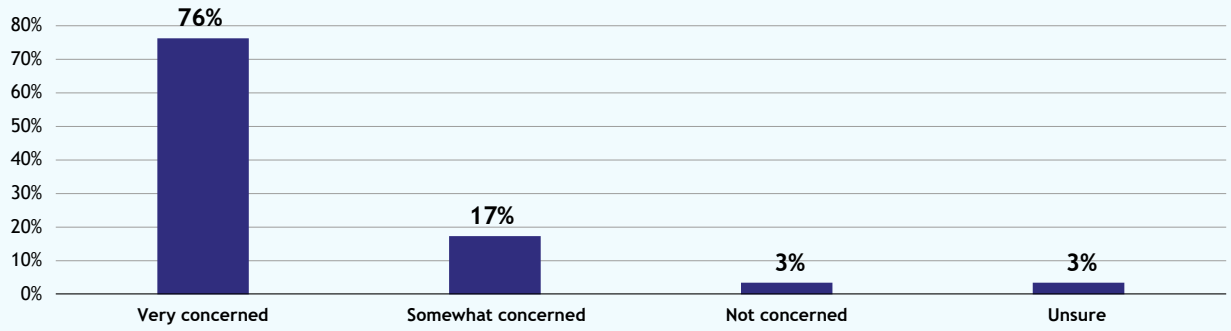


**FIGURE 16:** CONCERNS ABOUT POTENTIAL SECURITY VULNERABILITIES IN AN OPEN-SOURCE SOLUTION

**Q28 Customize an Open-Source Solution: How concerned are you about potential security vulnerabilities (e.g., trojans, bugs) and lack of centralized support in an open-source solution?**




## WHY THE PROPOSED BLUEPRINT ALIGNS WITH THE PREFERRED MODEL

The SupTech blueprint proposed in this report is directly informed by this consensus. It offers:

- Shared governance and co-development through regional leadership leveraging the PIRI platform and guided by national focal points
- Modular functionality, enabling each country to adopt the solution at its own pace
- Tiered design that supports incremental growth from foundational licensing and reporting to advanced AI, AML/CFT, and Inclusive Green Finance (IGF) and ESG tools
- Data sovereignty controls, with clear national and regional access protocols
- Peer-tested architecture, building on lessons from BSA and similar global implementations.

The blueprint will not promote a one-size-fits-all system. Rather, it proposes a "regulator-led, peer-configured, modular platform", designed to maximize speed to impact while ensuring security, flexibility, and sustainability.

## DESIGN PHILOSOPHY AND GUIDING PRINCIPLES

The proposed blueprint is intended not to be theoretical, but the product of clear preferences, potential challenges, and tangible opportunity.

The PIRI region is ready to adopt a SupTech solution, but it must reflect the realities surfaced by the diagnostic:

- Speed matters
- Capacity is limited
- Industry must be onboarded in phase
- Sustainability depends on collective ownership and flexible architecture.

**TABLE 16:** DESIGN PHILOSOPHY AND GUIDING PRINCIPLES FOR THE PROPOSED REGIONAL SUPTECH

| Principle | Explanation |
|---|---|
| **Inclusivity** | Supports small and large central banks with tiered onboarding and low entry barriers. |
| **Modularity** | Tier 1 = core functions; Tier 2 = advanced analytics; countries adopt based on their capacity and priority. |
| **Security and Sovereignty** | National regulators retain full control over data, access, and workflows. |
| **Interoperability** | Built on open standards (e.g., APIs, taxonomies) for smooth cross-platform integration. |
| **Sustainability** | Designed for long-term funding and platform independence. |
| **Speed to Value** | Fast-track Tier 1 rollout using existing regional governance (e.g., PIRI) and proven infrastructure models. |

## 4.2 FUNCTIONAL BLUEPRINT: CORE AND OPTIONAL MODULES

This section presents the functional architecture of the regional SupTech utility, built on the design philosophy and adoption model preferences outlined in Section 5.1. The blueprint is modular, phased, and adaptable, structured to deliver rapid benefits through foundational capabilities while supporting long-term strategic evolution.

### A TIERED MODULAR FRAMEWORK FOR REGIONAL IMPLEMENTATION

Recognizing the diversity in digital readiness and supervisory needs across the PIRI region, the SupTech solution is structured around two implementation tiers:

1. **Tier 1: Minimum Viable SupTech Solution (MVSS)** – Comprises core supervisory capabilities prioritized by all seven central banks.
2. **Tier 2: Advanced optional modules** – Provides a library of scalable modules addressing complex or emerging supervisory needs.

This approach ensures countries can onboard based on current capacity, while allowing for progressive advancement over time.

### Tier 1: Minimum Viable SupTech Solution (MVSS)

The following six modules constitute the MVSS and reflect shared regional priorities validated by the diagnostic. These modules are immediately actionable, technically feasible, and foundational for all future SupTech enhancements.

It is noteworthy that these components are critical for modernizing regulatory operations across all jurisdictions and align closely with capabilities offered by the proven SupTech solutions assessed including the BSA[4], ORASS (Bank of Ghana), Regnology[5], and Microsoft Koru.

4 https://www.afi-global.org/publication/case-study-on-bank-supervision-application/

5 https://www.regnology.net/en/solutions/industry-served/financial-regulators-and-international-organizations/

**TABLE 17:** MINIMUM VIABLE SUPTECH SOLUTION: FEATURES AND CAPABILITIES

| Module | Key features and capabilities |
|---|---|
| **Data collection** | > Use of **APIs and web portals** for structured data submission<br>> Standardized **reporting templates**, data formats, and taxonomies<br>> Editable datasets with version control<br>> Embedded data privacy and consent protocols |
| **Digital licensing and registry** | > Online institution registration and digital onboarding<br>> Application pre-screening and document verification<br>> License issuance, renewal, suspension, and tracking<br>> Integrated audit trails and supervisory notes |
| **Consumer protection and market conduct** | > Multi-channel complaint submission (web, mobile, chatbot)<br>> AI-assisted complaint classification and routing-<br>> Case escalation, resolution, and monitoring dashboard<br>> Alerts for systemic issues and delayed resolution |
| **Customizable dashboards and analytics** | > 360-degree institutional profiles<br>> Personalized supervisory dashboards by department<br>> Risk trend analysis and heatmaps<br>> Early warning indicators based on configurable thresholds |
| **Prudential supervision** | > Core **CAMELS** ratings and stress testing modules<br>> Macroprudential oversight dashboards<br>> Governance and conduct monitoring<br>> Embedded fraud risk analysis tools |
| **Financial inclusion and market performance tracker** | > Disaggregated DFS usage metrics (gender, MSMEs, urban/rural)<br>> Transaction cost tracking, pricing structure monitoring<br>> Financial literacy and affordability indicators<br>> Automated inclusion policy gap analytics |

### Tier 2: Optional Advanced Modules

Tier 2 modules are optional and scalable, providing deeper analytics, cross-border functionality, AI capabilities, and regulatory intelligence.

These modules can be activated based on national priorities, system maturity, or donor-funded enhancements.

**TABLE 18:** OPTIONAL ADVANCED SOLUTION: FEATURES AND SOLUTIONS

| Module | Key features and capabilities |
|---|---|
| **Transaction monitoring and AML/CFT compliance** | > Real-time anomaly detection and AML risk scoring<br>> Integration with centralized KYC databases<br>> AI-driven illicit flow analysis- Compliance tracking with FATF recommendations |
| **Climate risk data collection and reporting** | > Automated ESG metric ingestion from regulated entities<br>> Climate exposure dashboards<br>> Sectoral climate profiling tools |
| **Climate stress testing and scenario simulation** | > NGFS-aligned climate stress frameworks<br>> Automated simulation of environmental shock scenarios<br>> Visualization of risk propagation across sectors |
| **Green finance and investment tracking** | > Monitoring of green project investments<br>> Automated taxonomy classification for sustainability<br>> Identification of potential greenwashing risks |
| **Cybersecurity & Incident Supervision** | > Role-based access control (IAM)<br>> Encryption, log trails, and intrusion detection<br>> Cyber incident classification and regulatory compliance scoring |
| **Agent Registry & Supervision** | > National agent registry system<br>> Agent onboarding, license issuance, and revocation<br>> Supervision of agent network behaviour and compliance |
| **Open Data Exchange Monitoring** | > Real-time API transaction tracking<br>> Consent log registry and verification<br>> Detection of unauthorized data access and audit support |
| **API Performance & Security Oversight** | > Automated API health diagnostics<br>> Real-time incident alerts and response tracking<br>> Compliance dashboards for data exchange standards |
| **Consumer Consent & Data Privacy Monitoring** | > Consent collection and lifecycle audit tools<br>> AI-based detection of non-compliance or data abuse<br>> Alerts for unauthorized system-level access |
| **Competition & Market Conduct Supervision** | > Price benchmarking and open API usage monitoring<br>> Dashboards to flag anti-competitive behaviour<br>> Alignment with regional and global open finance practices |
| **Cross-Border Supervision & DFS Oversight** | > Monitoring of international remittance flows<br>> Regional interoperability scorecards<br>> Multi-jurisdictional regulatory dashboard with alerts |
| **Cross-Border Climate Risk Supervision** | > Monitoring of cross-border climate-related financial flows<br>> Integration of regional and global ESG standards<br>> Cross-jurisdiction compliance tracking via RegTech tools |

Natee Meepian / Shutterstock.com

## SYSTEM ALIGNMENT WITH EXISTING SOLUTIONS

The functional blueprint aligns with internationally recognized SupTech platforms already deployed across developing and advanced markets. This alignment ensures both technical feasibility and peer credibility, facilitating easier procurement, configuration, and benchmarking.

- Bank Supervision Application (BSA) – Adopted by 22 regulators, including 16 AFI members. Offers entity registration, licensing, complaints, dashboards, and peer-based governance. Its modular and regulator-led model directly reflects the preferred approach among PIRI central banks (66 percent preference).
- Regnology Supervisory Hub[6] – A scalable, API-native solution with advanced fraud detection, anomaly pattern recognition, real-time analytics, and customizable supervision layers. Its flexible integration model supports tiered adoption similar to the proposed PIRI structure.
- Microsoft Koru – Emphasizes internal data intelligence, interactive dashboards, and policy-simulation environments. Offers capabilities aligned with Tier 2 modules such as AI-powered stress testing and climate risk forecasting based on the knowledge exchange and demo provided by the Reserve Bank of New Zealand.

We reference these systems to affirm that the proposed blueprint is not theoretical, or based solely on expert opinions, however, it is aligned with tested and operating solutions, many of which are already supported by peer AFI members.

6 https://www.regnology.net/en/solutions/industry-served/financial-regulators-and-international-organizations/

## PROPOSED DEPLOYMENT PHILOSOPHY

To accommodate PIRI's infrastructure realities, the deployment model will follow these guiding principles:

**TABLE 19:** PROPOSED DEPLOYMENT MODEL

| Deployment element | Description |
|---|---|
| **Hybrid system design** | > Supports both cloud-hosted and on-premises deployments<br>> Can operate as a shared regional utility while deployed as a sovereign national installation. |
| **Multi-channel data ingestion** | > Enables both APIs and web portals for data submission.<br>> API push/pull for digitally mature institutions.<br>> Web templates and form uploads for low-capacity entities. |
| **Security by design** | > Role-based access control (IAM) for user permissions.<br>> End-to-end data encryption, log trails, and intrusion detection.<br>> Built-in cybersecurity compliance scoring (aligned with national and ISO 27001 standards). |
| **Interoperability and standards** | > Utilizes standardized data templates, XML/JSON formats, and modular taxonomies.<br>> Integrated validation engines for schema and error checking.<br>> Compatible with international compliance frameworks (FATF, NGFS, etc.). |
| **Incremental adoption pathway** | > Tiered implementation model allows gradual adoption.<br>> Configurable by country; modules can be activated/suspended per local priorities or legal readiness.<br>> Built-in feature toggles for staged rollout. |

### DESIGN ADAPTABILITY: APIS AND WEB PORTALS

In response to infrastructure constraints and institutional feedback, the system design will not rely solely on APIs. All data collection modules will support:

- API push/pull for high-capacity financial institutions and/or regulated entities
- Secure web portal submissions with upload templates
- Error validation, standardized formats, and schema guidance for both pathways.

This dual-mode capability ensures adoption across technical and digital infrastructure maturity levels.

### CONCLUSION

The proposed tiered approach to the SupTech modules, functions, and features is aligned with a scalable architecture that supports an immediate supervisory technology utility for all PIRI members. This functional blueprint provides a structured path to SupTech modernization:

- It enables short-term transformation via Tier 1
- It allows for long-term expansion aligned with global regulatory trends via Tier 2
- And it is built to operate under a shared governance structure that respects national autonomy while promoting regional efficiency.

## 4.3 GOVERNANCE, OPERATIONS, AND REGIONAL OWNERSHIP

Effective governance is essential to ensure the SupTech platform remains technically sound, financially sustainable, and institutionally credible. Informed by the diagnostic, and aligned with global best practices, this section outlines a regional governance and operational structure designed for trust, transparency, and long-term functionality.

A PACER PLUS representative highlighted, *"It is important to establish some form of legally binding agreement to ensure that all participating countries remain committed. This agreement should go beyond a standard Memorandum of Understanding (MOU) and provide a stronger framework for accountability. In the Pacific, one challenge has been that when countries do not see immediate action, momentum tends to drop. Demonstrating tangible benefits to participating countries will help sustain engagement and commitment."*

The proposed model distributes strategic, technical, and operational responsibilities across a three-tier structure, ensuring representation, accountability, and local autonomy.

### THREE-TIER GOVERNANCE STRUCTURE

It should be noted that the proposed structure is similar to successful models such as the BSA governance framework, which uses a multi-country steering committee, country focal points, and a shared technical service provider. If PIRI members decide to join and adopt the BSA, the alignment of the proposed governance structure will be an added advantage.

**TABLE 20:** PROPOSED GOVERNANCE STRUCTURE

| Tier | Composition | Responsibilities |
|---|---|---|
| **1. Regional SupTech Council** | Senior representatives from each PIRI central bank, plus AFI as secretariat/ facilitator | > Strategic decision-making<br>> Budget approval and funding oversight<br>> Vendor governance<br>> Regional policy alignment |
| **2. Technical Working Group** | Designated IT, supervision, and legal leads from each country; supported by a regional technical lead | > Approve feature roadmap and releases<br>> Recommend configurations<br>> Handle technical change management and Quality Assurance (QA) |
| **3. National Implementation Units** | Country-level SupTech teams (cross-departmental, including supervision, IT, legal, and industry liaison) | > Local onboarding and training<br>> Industry engagement and support<br>> Configuration and data management |

## ROLE OF AFI AND THE PIRI SECRETARIAT

AFI and the PIRI secretariat are expected to:

- Act as a technical facilitator and convener
- Coordinate development sprints and training
- Ensure that knowledge sharing, vendor relationships, and capacity-building are regionally distributed
- Anchor integration with broader financial inclusion policy initiatives (e.g., financial inclusion indicators, MSME indicators, sex-disaggregated data, inclusive green finance and more).

AFI does not operate the utility but facilitates collective governance, regional collaboration, knowledge exchange, and technical peer learning.

## GOVERNANCE PRINCIPLES

**TABLE 21:** GOVERNANCE PRINCIPLES

| Principle | Implementation |
|---|---|
| **Ownership** | SupTech platform is co-owned by participating regulators, with equitable decision-making and representation. |
| **Transparency** | Feature roadmap, system upgrades, and vendor selections are approved and published via the SupTech Council. |
| **Adaptability** | Countries can select and configure modules based on national laws, maturity, and supervisory priorities. |
| **Consensus-driven change** | Major changes (e.g., fee structures, core design changes) require consensus from two-third of the members of the SupTech Council. |
| **Regulator-first governance** | No decisions are made without regulatory leadership; vendors and third parties have advisory, not voting, roles. |

## GOVERNANCE RISKS AND MITIGATION

**TABLE 22:** GOVERNANCE RISK AND MITIGATION

| Potential risk | Mitigation strategy |
|---|---|
| **Dominance by larger countries** | Equal voting representation; rotating chairpersonship of the SupTech Council |
| **Vendor lock-in** | Modular architecture with open standards; vendor-neutral procurement processes |
| **Slow decision-making** | Defined SLAs for approvals; technical subcommittees with the mandate to handle low-risk changes |
| **Misalignment with national policies** | National units have the right to decline modules or delay adoption until legal conditions are met |
| **Funding disputes** | Shared funding formula (flat fee + usage tier) with the ability to escalate budget matters to PIRI leaders |

## OPERATIONAL MODEL

**TABLE 23:** OPERATIONAL MODEL

| Operational function | Delivery mechanism |
|---|---|
| **Technical support** | Regional helpdesk (Tier 1); country-specific support desks (Tier 2 and beyond) |
| **Training and onboarding** | The core curriculum is delivered regionally; national onboarding adapted for institutions |
| **Software updates** | Managed centrally by the platform provider, with national approval gates and opt-in release timing |
| **Performance monitoring** | Regional dashboard showing uptime, data volumes, errors, and usage by country/module |
| **Policy integration support** | Joint working groups with legal, regulatory, and digital policy stakeholders for harmonization efforts |

### STRATEGIC ADVANTAGES OF SHARED GOVERNANCE

- Peer-driven development ensures relevant features and avoids vendor overreach
- Local autonomy supports legal compliance and contextual configuration
- Shared ownership lowers costs and spreads innovation benefits
- Built-in accountability through transparent voting and consensus models.

### CONCLUSION

This governance model is designed to balance national sovereignty with regional consistency, efficiency with inclusivity, and innovation with regulatory caution. It reflects the governance preferences identified in the diagnostic and builds on successful models from other AFI regions.

A representative from ADB remarked, *"For long-term sustainability, the foundational work needs to be in place. This includes revamping the regulatory and legal frameworks, identifying foundational infrastructure gaps, and allowing the regulated entities to organically integrate the new systems by improving their institutional capacities."*

By putting regulators in charge, strategically, technically, and operationally, the platform is more likely to deliver on its promise of supervisory modernization, financial inclusion, and resilience.

## 4.4 BUSINESS AND OPERATIONAL MODEL

While a technically sound and modular platform is critical, its effectiveness ultimately depends on how it is managed, delivered, and sustained. This section outlines the business and operational framework required to support the regional SupTech utility, ensuring it is responsive to user needs, cost-effective, and resilient over time.

The model incorporates shared delivery principles, localized implementation responsibilities, and flexible cost recovery mechanisms.

### OPERATING MODEL STRUCTURE

The proposed model is designed around a shared services utility model with decentralized implementation flexibility. The utility will be structured as a regional digital infrastructure that delivers public value, via one of the following pathways:

**TABLE 24:** OPERATING MODEL STRUCTURE

| Delivery Option | Description | Applicability |
|---|---|---|
| **Centralized platform utility** | Platform hosted and operated regionally (e.g., via AFI/PIRI vendor), with shared licensing and tiered onboarding. | Suitable for countries without in-house DevOps capacity. |
| **Sovereign deployment support** | Country-hosted installation based on same codebase, with regional onboarding, support, and upgrades. | Suitable for countries with stronger IT infrastructure. |
| **Hybrid governance option** | Shared backend and modular services; country-level front-end and data isolation. | Recommended for maintaining sovereignty and shared scale. |

### CORE SHARED SERVICES AND FUNCTIONS

**TABLE 25:** CORE SHARED SERVICES AND FUNCTIONS

| Function | Responsibility / Structure |
|---|---|
| **Software maintenance and upgrades** | Managed centrally (quarterly/ biannual), governed by Technical Working Group. |
| **User support (L1 - L3)** | Regional helpdesk with country implementation units. Support escalation protocols. |
| **Training and onboarding** | Standardized training curriculum; onboarding toolkits; cross-country peer learning support. |
| **Documentation and compliance** | Documentation templates, audit logs, and policy guidance provided as shared services. |
| **Vendor coordination** | Managed by AFI/PIRI in alignment with SupTech Council decisions. |
| **Change management** | Joint roadmap reviews, feature prioritization forums, and technical feedback cycles. |

## COST AND BUDGET CONSIDERATIONS

Cost and resourcing are central to adoption decisions. Diagnostic surveys revealed the following insights:

### A. Willingness to invest

- 100 percent of respondents from Tonga expressed willingness to invest in additional expenses
- Others (e.g., PNG, Samoa, Seychelles, Solomon Islands, and Vanuatu) indicated 67 percent – 75 percent willingness with the need for internal discussion on budget reallocation or external funding.

### B. Anticipated budget barriers

As shown in figure 9 above,

- Infrastructure upgrades, data management, and compliance alignment were rated as having the highest cost impact
- Many countries (e.g., Samoa, Solomon Islands) noted that these investments are only possible with donor support or budget shifts
- 88 percent of respondents prefer a phased, low-upfront model for SupTech adoption.88 percent of respondents prefer a phased, low-upfront model for SupTech adoption.

The graph below shows that a majority of the respondents were unsure about their institution allocating a budget for SupTech adoption. Others claimed to allocate less than 500,000 USD for the same.

The graph below shows that 62% of the respondents need to internally discuss such expenses. 38% did anticipate and agree to invest in additional expenses.

**FIGURE 17:** PIRI MEMBERS WILLINGNESS TO INVEST IN A SHARED SUPTECH SOLUTION

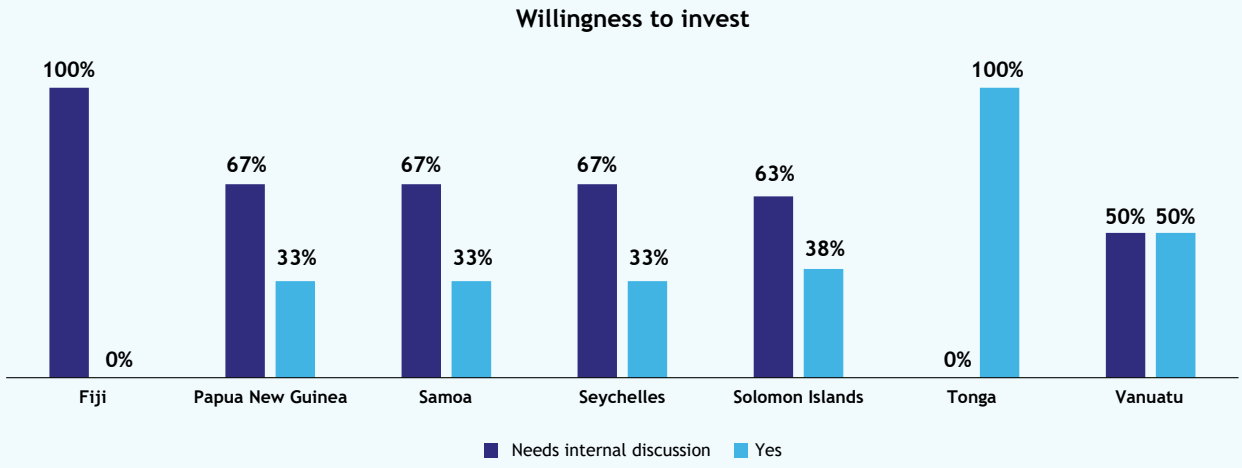



**FIGURE 18:** POSSIBLE BUDGET ALLOCATION FOR SUPTECH ADOPTION

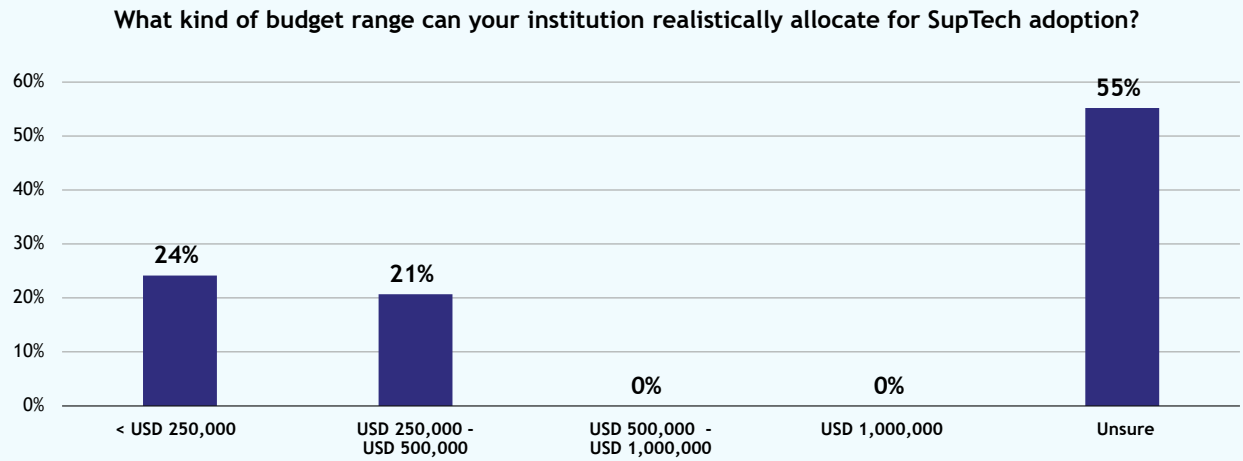
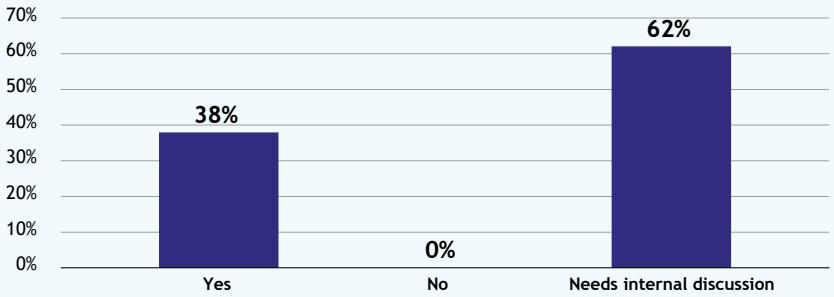


**FIGURE 19:** WILLINGNESS TO INVEST IN ADDITIONAL EXPENSES

**Q40. Are you willing to invest in additional expenses (e.g., infrastructure upgrades, system network architecture changes) if needed?**




## COST RECOVERY AND FUNDING STRATEGY

**TABLE 26:** COST RECOVERY AND APPROACH

| Cost element | Approach |
|---|---|
| **Platform development or initial onboarding cost**** | Seed funding via donor/grant sources. Complemented with in-kind contributions by the PIRI secretariat. |
| **Operations and hosting** | Shared cost recovery via regional licensing pool (tiered by module usage and country size). |
| **Country-level onboarding** | Project-based budget support; optional co-funding from national regulators or the financial sector. |
| **Maintenance and support** | Regional service agreement (SLA-based) for centralized vendor or consortium support. |
| **Future expansion modules** | Optional fee-based opt-ins (e.g., AI/AML/CFT, climate risk modules) with multi-country bundling. |

**Initial Onboarding Cost: This represents the cumulative cost, comprising the application license, technical readiness, and one-off adoption fees, should PIRI members choose to join and adopt an existing shared SupTech solution such as the BSA, under an equitable governance structure that ensures shared participation and delivers the benefits and outcomes outlined in this Blueprint.

## RESOURCE ALLOCATION ROLES

**TABLE 27:** RESOURCE ALLOCATION ROLES

| Entity | Key contributions |
|---|---|
| **SupTech Council (Strategic)** | Approves financial model, funding sources, and resource allocation formula. |
| **Technical Working Groups (Operational)** | Coordinates vendor input, support prioritization, and SLA management. |
| **National Units (Local Execution)** | Coordinate national onboarding, infrastructure assessments, and institutional cost-sharing models. |

## TRANSITION AND SUSTAINABILITY PLANNING

To ensure sustainability:

- Budgeting should be integrated into national strategies and ICT investment plans.
- A 5-year financial forecast and regional cost-sharing roadmap should be developed under the project implementation roadmap.
- Opportunities for regional pooled procurement, shared cloud services (if needed), and cross-country vendor negotiation will be explored.

## CONCLUSION

The business and operational model is designed to balance shared scale with local flexibility. It aligns with survey insights on investment readiness, internal capacity, and infrastructure gaps. Most importantly, it enables the SupTech utility to be sustained as a collaborative regional asset—equipped with localized support, centralized upgrades, and flexible budget logic.

## 4.5 LEGAL, POLICY, AND COMPLIANCE CONSIDERATIONS

No SupTech platform can function without a robust legal and regulatory foundation. While the technology enables new efficiencies, its legitimacy and trustworthiness depend on compliance with existing laws, privacy protections, cross-border frameworks, and supervisory mandates.

This section outlines the key legal, policy, and compliance issues that must be addressed to implement and sustain a regional SupTech utility.

### LEGAL MANDATES FOR DIGITAL SUPERVISION

While PIRI regulators are legally empowered to supervise financial institutions, the expansion to digital-first regulatory methods, such as API-based data collection, cloud infrastructure, automated decision tools, and cross-border reporting, exposes critical legal gaps and regulatory grey zones.

The diagnostic revealed that while core mandates exist, current legislative and policy frameworks are not fully aligned with the needs of modern SupTech tools, as directly acknowledged by the regulators themselves.

Insights from the diagnostic study reveal:

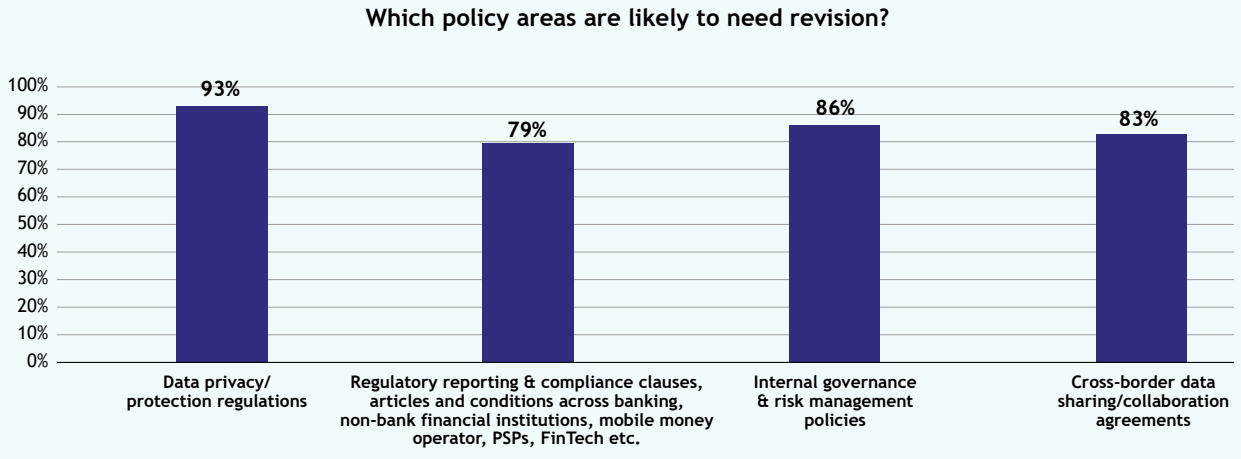
- 93 percent of PIRI regulators identified data privacy/ protection laws as likely needing revision
- 86 percent flagged internal governance and risk management policies, especially regarding IT procurement, compliance oversight, and data flow responsibilities
- 83 percent recognized gaps in cross-border data-sharing frameworks, impacting regional utility deployment and interoperability
- 79 percent indicated a need to revise clauses across banking, non-bank financial institutions, PSPs, and FinTechs to ensure compliance mechanisms reflect digital reporting and automation.

These responses highlight that the majority of existing legal and supervisory mandates do not yet anticipate:

- Real-time data streaming
- AI-supported supervisory actions
- Shared licensing and agent monitoring platforms
- Cloud-hosted applications and regional shared utilities.

A representative from Asian Development Bank (ADB) also recounted their experience in Pacific Island countries for a KYC and customer due diligence project, and pointed out, “Most countries faced various challenges while attempting to adopt a regional tool in terms of national sovereignty, data privacy issues, and the lack of basic infrastructure in many countries. As a result, each country opted for a country-by-country approach to develop foundational infrastructure and strengthen their existing capacities before revisiting the possibility of a regional tool.” He further added, *“Once a system becomes fully functional at the national level, it can then be linked with other countries, creating a more seamless and efficient regional network.”*

**FIGURE 20:** WHICH POLICY AREAS ARE LIKELY TO REQUIRE REVISION



## MINIMUM LEGAL AND POLICY ENABLERS

**TABLE 28:** MINIMUM LEGAL AND POLICY ENABLERS

| Legal requirement | Purpose |
|---|---|
| **Digital submission recognition** | Ensure that data submitted via APIs, web portals, or secure uploads is legally admissible as evidence or in compliance reviews. |
| **Data protection framework** | Define the lawful processing, sharing, and storage of personal and institutional data. |
| **Consent and privacy protocols** | Require explicit, revocable consent from regulated entities or consumers when personal data is collected or processed. |
| **Cybersecurity and digital authentication** | Legal basis for multi-factor authentication, audit trails, and user access controls. |
| **Cloud hosting and cross-border data** | Enable lawful use of regional or third-party cloud environments, with strong sovereignty and data localization protections. |

## VARIATIONS ACROSS JURISDICTIONS AND PROPOSED REMEDIES

**TABLE 29:** COUNTRY-WISE LEGAL GAPS AND MITIGATION STRATEGIES

| Country | Legal gaps identified | Proposed mitigations |
|---|---|---|
| **Papua New Guinea** | No enforceable data protection law; digital government policy not yet codified | Reference National DGDP policy; interim legal guidance from the regulator |
| **Samoa** | Lacks personal data legislation; digital tools used in practice but not under formal law | SupTech sandbox or pilot under supervisory discretion; develop MoU or guidance note |
| **Tonga** | No data protection or cloud framework | Emphasize on-premise model until regulatory clarity is achieved |
| **Fiji** | RBF issued sector-specific data privacy guidelines; national law under development | Leverage RBF's Guideline on Protection of Consumer Data and Privacy (2024) |
| **Seychelles** | Full data protection law in place; regulatory flexibility exists | Proceed with broader deployment; could serve as regional pilot jurisdiction |

## CROSS-BORDER DATA EXCHANGE AND COMPLIANCE RISK

The SupTech platform, especially if deployed as a regional utility, must comply with multiple jurisdictional boundaries and data sovereignty requirements. Concerns raised in the diagnostic include:

- Exposure of financial data to external jurisdictions (e.g., vendor-hosted infrastructure);
- Lack of clarity on data residency, cross-border supervisory collaboration, and metadata logging;
- Uncertainty on how audit trails, redress mechanisms, or incident response protocols should operate when hosted externally.

**TABLE 30:** CROSS-BORDER DATA EXCHANGE AND RISKS

| Risk | Mitigation |
|---|---|
| Data localization violations | Offer hybrid deployment; country-level data isolation by default |
| Third-party data misuse | Use regulator-defined service-level agreements (SLAs) and vendor-neutral architecture |
| Policy misalignment | Map each module to national policies before activation; allow opt-in only if compliant |
| Legal challenges on cloud usage | Define fallback pathways (e.g., on-premise backup, encrypted transit-only models) |

### LEGAL READINESS SCORECARD

To support implementation, each country should conduct a legal readiness assessment using a standard scorecard, evaluating the following:

- Existence of digital supervision mandates
- Legal recognition of electronic submissions
- Existence or draft of a data protection law
- Governance for API and third-party tools
- Digital identity and user authentication framework.

The scorecard can inform:

- Module deployment sequencing
- Need for legal reform or regulatory guidance
- Design of compliance layers in the SupTech tool.

### POLICY COORDINATION MECHANISM

Given cross-functional legal dependencies, national rollout teams should include:

- Legal departments within the central bank
- ICT ministries or authorities
- Data protection regulators (where applicable)
- National cybersecurity centers.

These stakeholders will support:

- Policy alignment
- Drafting of binding and non-binding legal instruments (e.g., guidance notes, API policy statements)
- Coordination with national legislative bodies.

### CONCLUSION

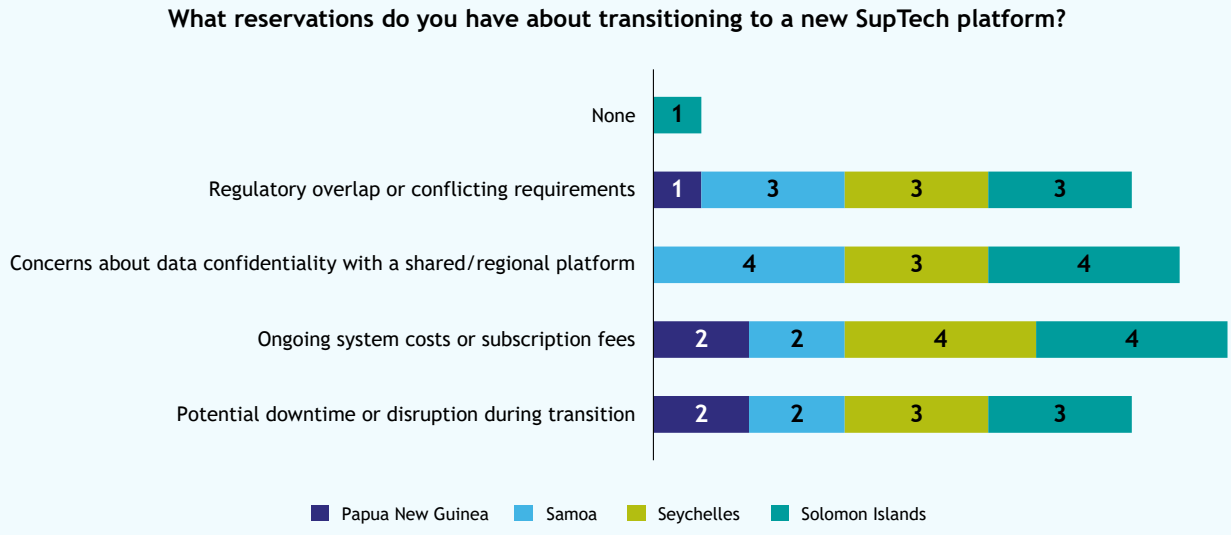
A shared SupTech solution requires more than technical capability, it needs explicit legal permissions, safeguards, and frameworks that protect both the regulator and the regulated. By identifying existing gaps, proposing national-level mitigations, and offering common tools (e.g., legal toolkits and readiness scorecards), the platform can scale responsibly, lawfully, and securely across the PIRI region.

## 4.6 INDUSTRY INTEGRATION PATHWAY

The success of any SupTech solution depends not only on regulatory capabilities but also on how effectively regulated institutions are onboarded and integrated into the new supervisory ecosystem.

This section outlines the pathway to industry integration, ensuring that the SupTech platform is accessible, practical, and beneficial for all reporting entities, regardless of size or capacity. It combines incentives with compliance levers and incorporates readiness gaps identified in the diagnostic surveys.

**FIGURE 21:** CHALLENGES IN TRANSITION TO NEW SUPTECH PLATFORM



## WHY INDUSTRY ONBOARDING MATTERS

Across the PIRI region, regulated entities, ranging from commercial banks and fintechs to mobile money operators (MMOs) and non-bank financial institutions (NBFIs), often:

- Operate with limited IT integration capacity
- Rely on manual submission workflows (e.g., Excel via email)
- Lack in-house compliance automation or reporting infrastructure
- Are uncertain about the legal and audit implications of digital reporting.

The SupTech platform will require institutions to engage with:

- Digital licensing portals
- Structured data uploads or API submissions
- Secure dashboards and notifications
- Complaint resolution portals and compliance feedback loops.

Without a structured integration model, the digital divide between regulators and institutions could deepen, undermining supervisory objectives and slowing platform adoption.

## DIAGNOSTIC INSIGHTS FROM INDUSTRY SURVEY

Findings from the Industry Survey show:

- 88 percent of institutions still rely on manual submission processes (Regulated Entity Survey Q6–Q9).
- 38 percent cited limited IT infrastructure as a core barrier to SupTech adoption.
- 25 percent raised concerns about data privacy, standardization, and reporting requirements (e.g., fear of error penalties).
- Willingness to invest in digital reporting is conditional on:
  - Mandates from the regulator
  - Availability of support resources
  - Transitional timelines and sandbox testing environments.
  - Integration strategy: Three-phase model

**TABLE 31:** THREE-PHASED INTEGRATION STRATEGY

| Phase | Description | Tools and enablers |
|---|---|---|
| **Phase 1: Awareness and mandate** | Introduce new reporting expectations, legal justification, and incentives to the industry. | > Circulars and guidance notes<br>> Industry consultation forums<br>> Policy briefings |
| **Phase 2: Enablement and testing** | Equip institutions with tools, environments, and documentation to experiment and learn. | > API sandbox environments<br>> Web-based template libraries<br>> Integration guides and FAQs |
| **Phase 3: Onboarding and compliance** | Formalize data submission, automate checks, and monitor performance with feedback loops. | > Reporting dashboards<br>> Digital compliance scoring<br>> Penalty warnings, exception handling dashboards |

## INDUSTRY SUPPORT TOOLKIT

The SupTech platform will offer country-specific toolkits, including:

- Web portal for manual submission
- Sandbox environment for API testing (with mock data scenarios)
- Standard reporting templates (XLS, JSON, XML)
- Demos, self-service guides, and video tutorials
- Helpdesk and technical support escalation process
- Webinars and capacity-building for Chief Information Officer (CIOs), compliance teams, and reporting officers.

Countries may also opt to conduct joint regulator-industry workshops, coordinated by the national SupTech implementation unit and supported by the regional team.

### COMPLIANCE INCENTIVES AND ENFORCEMENT LEVERS

**TABLE 32:** COMPLIANCE INCENTIVES AND ENFORCEMENT LEVERS

| Approach | Examples |
|---|---|
| **Progressive mandate enforcement** | Optional participation in Year 1 to 'Required for large entities in Year 2' to 'Full compliance Year 3' |
| **Tiered requirements** | Large banks use API; smaller entities are allowed to use the portal for the first 12–18 months |
| **Feedback dashboards** | Institutions receive digital compliance reports and improvement metrics |
| **Recognition and rewards** | Digital-first compliance awards; fast-track licensing renewals for high compliance performers |

### ALIGNMENT WITH LEGAL AND POLICY FRAMEWORKS

Section 4.5 highlights that legal reform is underway across PIRI. To ensure institutions comply lawfully:

- Industry onboarding must reflect the existing data submission laws and privacy frameworks.
- Compliance modules will respect national thresholds for what constitutes "official" reporting.
- All reporting tools will include consent protocols, data protection notices, and user logging to maintain audit readiness.

### CONCLUSION

Industry integration is not only about regulatory compliance, but it is also a critical opportunity to build digital capacity, reduce operational burden, and enhance industry-regulator trust.

By combining clarity, capacity-building, and phased enforcement, the SupTech utility can bring the private sector into the heart of regulatory modernization, turning manual overhead into data-driven engagement.

## 4.7 RISK, TRADE-OFFS AND MITIGATION STRATEGIES

Implementing a regional SupTech utility is both a transformative opportunity and a complex undertaking. The proposed system introduces new technologies, regulatory approaches, governance models, and cost structures across jurisdictions with varying capacities.

This section outlines the key risks and trade-offs; technical, financial, political, and institutional, and presents targeted mitigation strategies to address them.

### STRATEGIC TRADE-OFFS AND DESIGN CHOICES

**TABLE 33:** TRADE-OFFS AND DESIGN CHOICES

| Trade-Off | Rationale and implications | Mitigation strategy |
|---|---|---|
| **Standardization vs. Customization** | Shared tools enable cost efficiency but risk misalignment with national legal or operational needs | Use modular design with country-specific configuration and opt-in features |
| **Speed vs. Inclusion** | Quick rollouts may exclude institutions with low digital readiness | Adopt tiered onboarding and hybrid interfaces (API and portal) for accessibility |
| **Cost efficiency vs. Local control** | Regional shared infrastructure lowers the cost but may raise sovereignty concerns | Support sovereign deployments with a shared licensing model; national data control |
| **Innovation vs. Legal conservatism** | AI, cloud tools, and open data introduce policy and legal uncertainty | Prioritize use cases with clear legal backing in Tier 1; defer advanced tools as optional |
| **Top-down mandate vs. Industry buy-In** | Enforcement ensures compliance, but voluntary engagement builds trust and sustainability | Use phased mandates, sandboxes, and dashboards to balance compliance and cooperation |

## KEY RISK AREAS AND PROPOSED MITIGATION PLANS

**TABLE 34:** KEY RISKS AND MITIGATION PLANS

| Risk category | Identified risks | Mitigation strategy |
|---|---|---|
| **Legal and policy risk** | > Lack of data protection laws or cloud regulation in some jurisdictions<br>> No explicit legal mandate for APIs | > Use model legal toolkit and readiness scorecards<br>> Limit features per country until compliant<br>> Leverage peer learning, technical support, and in-country implementation (ICI) opportunities from AFI to review and update specific policies |
| **Governance risk** | > Disagreements among countries over upgrades, vendor terms, or platform rules | > SupTech Council with equal representation and rotating leadership<br>> Binding charter for dispute resolution |
| **Adoption risk** | > Resistance from low-capacity regulators or industry partners | > Tiered rollout, pilot jurisdictions, and country-led implementation units |
| **Technical risk** | > Infrastructure failures, low bandwidth, or integration issues | > Use hybrid cloud/portal model; ensure fallbacks and offline templates |
| **Funding risk** | > Inadequate budget for maintenance or scaling | > Regional pooled funding formula + external seed funding |
| **Security and privacy risk** | > Data breaches, unauthorized access, or cross-border data misuse | > Implement IAM, encryption, audit trails; ensure local hosting options |
| **Vendor lock-In** | > Over-reliance on a single platform provider or proprietary toolsets | > Use open standards, no-code modularity, and vendor-neutral procurement |

## ANTICIPATED RISKS BY STAKEHOLDER TYPE

**TABLE 35:** ANTICIPATED RISKS BY STAKEHOLDER TYPE

| Stakeholder | Top concerns | SupTech response |
|---|---|---|
| **Regulators** | Legal uncertainty, implementation delays, budget constraints | Country-specific onboarding, model laws, and shared vendor management |
| **Industry entities** | Cost of compliance upgrades, fear of regulatory penalties, technical skill gaps | API sandboxes, template-based portal options, digital compliance dashboards |
| **Governments / ICT agencies** | Concerns over cross-border data hosting, digital sovereignty, cyber governance | Sovereign data hosting and compliance overlays for national frameworks |
| **Funders and donors** | Value for money, accountability, measurable outcomes | Open-source governance model, KPI dashboards, and regional reporting by AFI/PIRI |

## CONCLUSION

SupTech transformation carries inherent risks, but so does inaction. The blueprint balances ambition with caution by integrating modular design, governance safeguards, and proactive risk mitigation tools.

To support with managing and tracking uncertainty, a regional SupTech risk registry is proposed, managed by the Technical Working Group, to:

> Monitor implementation risks in real time
> Track incident reports and mitigation outcomes
> Inform quarterly reviews and governance meetings.

This will ensure the platform is not only technically adaptive, but also governance responsive.

By preparing for legal, operational, and institutional risks, PIRI regulators can move forward together, confident that their SupTech platform is as resilient and adaptable as it is innovative.

## 4.8 BLUEPRINT SUMMARY: VISUAL ARCHITECTURE AND PHASED DEPLOYMENT MAP

**FIGURE 22:** SUPTECH LAYERED ARCHITECTURE

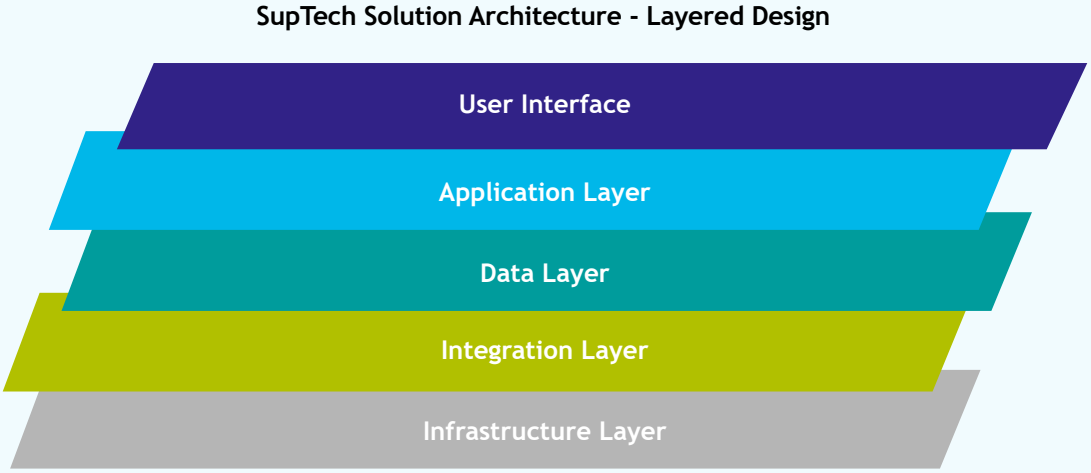



**TABLE 36:** SUPTECH LAYERED ARCHITECTURE DESCRIPTION

| Layer | Functionality |
|---|---|
| **User Interface (UI)** | Dashboards, web portals, mobile access, and multilingual form support |
| **Application layer** | Core modules: Licensing, complaints, dashboards, supervision, analytics (modular microservices) |
| **Data layer** | Structured databases for institutions, transactions, metadata, logs, and disaggregated reports |
| **Integration layer** | APIs, data pipelines, upload templates, validation engines, consent systems |
| **Infrastructure layer** | Cloud/on-premises hosting, elasticity, system monitoring, encryption, and compliance vaults |

This final section consolidates the SupTech blueprint into a visual summary of the platform architecture and a phased deployment pathway for implementation across PIRI member countries. It translates the technical, governance, and operational design into a sequenced, action-oriented model.

Layered technical architecture overview

The SupTech platform follows a modular, layered architecture to ensure scalability, security, and separation of concerns. Each layer supports a distinct set of functionalities, deployment responsibilities, and integration touchpoints.

### WHAT SUCCESS LOOKS LIKE

By the end of the first twenty-four (24) months, we anticipate:

- All seven PIRI countries will operate a core set of SupTech modules.
- Legal and policy frameworks will be modernized or clarified for digital supervision.
- Regulated entities will have transitioned from manual reporting to structured digital workflows.
- A sustainable, regulator-owned inclusive digital infrastructure delivered as a shared utility will be in place, supporting stability, inclusion, and innovation across the Pacific.

# 5 FIVE-YEAR IMPLEMENTATION ROADMAP

## 5.1 PURPOSE AND VISION OF THE IMPLEMENTATION ROADMAP

This five-year roadmap sets out the actionable plan to implement a regional Supervisory Technology (SupTech) platform across the seven member institutions of the Pacific Islands Regional Initiative (PIRI). It draws from the evidence, gaps, and opportunities identified in the diagnostics and blueprint, translating them into sequenced steps with measurable outcomes.

The roadmap is designed around a central premise: **the adoption and phased rollout of the Bank Supervision Application (BSA) as the foundational, regulator-led platform delivering the Minimum Viable SupTech Solution (MVSS) to all PIRI members.**

The BSA with its proven capabilities, regulator-led governance model, and modular architecture, is an ideal tool for rapid deployment across the Pacific. Furthermore it:

- Meets all Tier 1 functionality requirements (Section 4.2)
- Already in use by 22 regulators, including 16 AFI members
- Offers a tested, cost-effective implementation pathway
- Supports sovereign deployment, while offering regional shared governance and vendor support
- Addresses the "sunrise" problem of fragmented SupTech adoption.

Therefore, the roadmap's strategic vision is threefold:

1. **Supervisory transformation:** Equip PIRI regulators with real-time insights and automation capabilities for improved compliance, consumer protection, and risk oversight.
2. **Financial inclusion:** Harness disaggregated data and analytics to address the unique needs of women, youth, MSMEs, and underserved communities.
3. **Regional collaboration:** Leverage shared infrastructure and governance to scale collective innovation, reduce duplication, and harmonize compliance environments.

> **"This roadmap is our commitment to move beyond diagnostics; to build something real, collective, and sustainable for the Pacific." — Governor, Central Bank of Samoa, (February 2025)**

## 5.2 IMPLEMENTATION APPROACH AND PHASING RATIONALE

### STRATEGIC DESIGN OF THE ROADMAP

The proposed roadmap is divided into three sequential phases, which isn't done arbitrarily, but informed based on institutional capacity, resource timelines, diagnostic gaps (Section 3), and SupTech system maturity models.

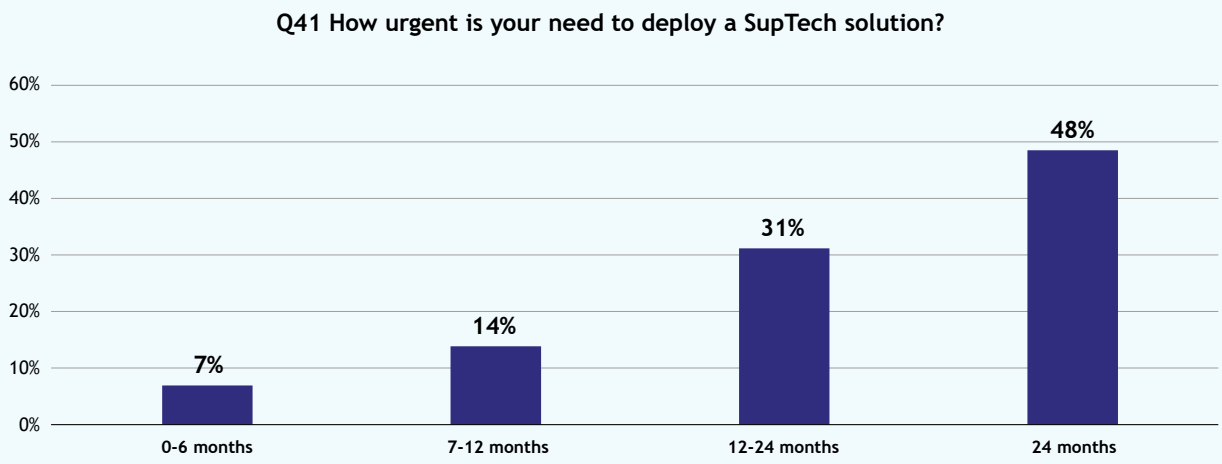
**TABLE 37:** PHASE-WISE STRATEGIC FOCUS ON THE ROADMAP

| Phase | Timeframe | Strategic focus |
|---|---|---|
| **Phase 1: Deploy and normalize** | **0 - 24 months (Jun 2025 - May 2027)** | Technical and policy readiness, regional policy alignment, capacity building and knowledge exchanges, governance establishment, and concurrent BSA deployment across all 7 PIRI countries, |
| **Phase 2: Integrate and innovate** | **24 - 48 months (Jun 2027 - May 2029)** | Country-specific feature enhancement, pilot testing with industry, technical deployment scale-up, and user-driven improvements |
| **Phase 3: Scale and elevate** | **48 - 60 months (Jun 2029 - May 2030)** | Tier 2 planning, performance optimization, regional benchmarking, cross-border use cases, and impact measurement |

It is crucial to have goals set at the end of each phase. The first phase is expected to last 24 months, where the Minimum Viable Solution will be deployed.

The timeline of 24 months is also well aligned with the expectations of regulators, regarding the timelines to deploy SupTech solutions. Almost 80% of the respondents expressed their urgency to deploy SupTech solutions between 12 to 24 months.

**FIGURE 23:** URGENCY TO DEPLOY SUPTECH SOLUTIONS




## GAPS AND PRIORITIES ADDRESSED BY THE PHASED APPROACH

**TABLE 38:** GAPS AND PRIORITIES ADDRESSED BY THE PHASED APPROACH

| Identified gap (from sections 3-5) | How the roadmap responds |
|---|---|
| Varying digital readiness and IT infrastructure across countries | Phase 1 focuses on technical readiness assessments and foundational installation across all seven institutions |
| Lack of legal clarity on APIs, data privacy, and digital reporting mechanisms | Country-specific policy refinement support and model legal toolkits introduced early in Phase 1 |
| Absence of operational dashboards, automated data validation, and licensing systems | BSA deployment ensures these core features are embedded from the outset and PIRI members benefit from the regulator-led, modular approach and collaborative governance established with the BSA Support Office |
| Low SupTech awareness and internal staff capability in smaller central banks | Capacity building, peer exchange, and sponsored learning engagements spread across Phases 1 and 2 |
| Manual reporting by regulated entities and industry onboarding uncertainty | Phase 2 prioritizes API/web portal sandboxing and industry pilot testing |
| Risk of uneven adoption and lack of shared governance in SupTech development | Participation in the BSA Member Council and roadmap decision forums ensures equity and co-development |

## DECISION TREE FOR PHASING AND COUNTRY ROLES

Each country's readiness is defined by four indicators: (i) Infrastructure maturity (ii) Legal & policy alignment (iii) Internal skills (iv) Industry interface maturity

The roadmap assumes simultaneous BSA deployment across all countries in Phase 1, with technical support delivered by the BSA Support Office (BSO), AFI, and onboarded specialized consultants.

## UNITE FRAMEWORK FOR IMPLEMENTATION

To guide the phased rollout of the BSA across seven Pacific jurisdictions under Phase 1 to 3, the roadmap adopts an implementation framework inspired by the U.N.I.T.E model[7], tailored to PIRI's SupTech aspirations:

7 Based on internal MSC analysis

Fizzik / Shutterstock.com

**TABLE 39:** READINESS CATEGORY AND ROLES IN ROADMAP

| Readiness category | Role in roadmap |
|---|---|
| **High (e.g., RBF, CBS)** | Lead pilot installations, regional knowledge hubs, early contributors to roadmap development |
| **Medium (e.g., CBSI, Seychelles)** | Simultaneous deployment with staged onboarding and shared policy refinement |
| **Foundational (e.g., PNG, NRBT, RBV)** | Concurrent deployment with targeted capacity support and governance participation |

**FIGURE 24:** UNITE FRAMEWORK

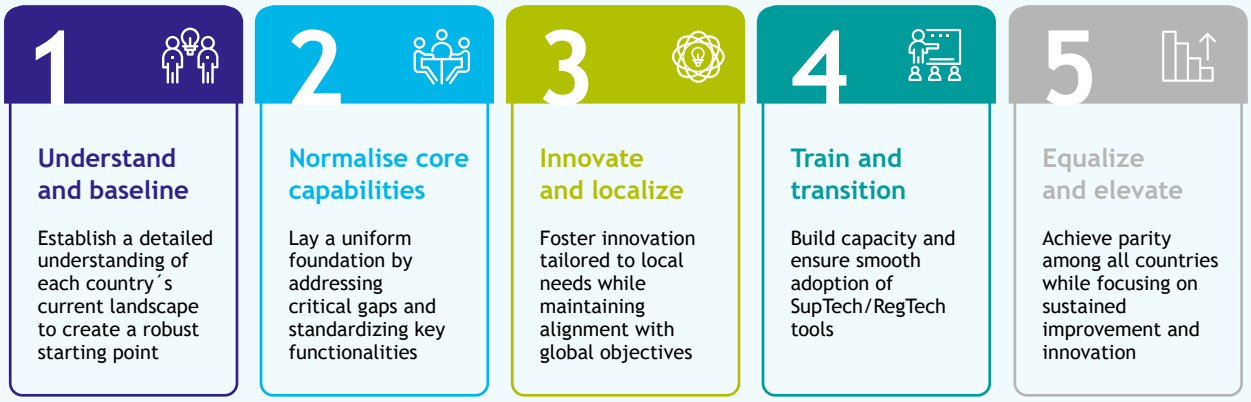


**TABLE 40:** PHASE-WISE OBJECTIVES AND APPLICATIONS OF THE UNITE FRAMEWORK

| UNITE pillar | Phase | Strategic objective | Application across roadmap phases |
|---|---|---|---|
| **U - Understand** | Phase 1 | Establish readiness and institutional ownership | > Technical readiness assessments in all countries (IT infrastructure, data center requirements, server and software application licensing requirements, network infrastructure requirements, and others)<br>> Security architecture checks and assessment<br>> Diagnostics validation<br>> Country-led planning<br>> Governance and leadership alignment<br>> Regional platform consensus |
| **N - Normalise** | Phase 1 | Deploy standardized, proven solutions | > Deploy a common BSA baseline with shared configuration and governance<br>> BSA installation and Tier 1 configuration<br>> Onboarding of staff and institutions |
| **I - Innovate** | Phase 2 | Tailor tools to national needs | > Industry sandboxing and local template customization<br>> API pilot tests with regulated entities<br>> Use-case refinement, new use-case development, and change requests to BSO |
| **T - Train and transition** | Phase 1 & 2 | Build capacity and enable institutional adoption | > Regional peer learning and knowledge exchanges<br>> Technical capacity building<br>> Cambridge SupTech Lab - SupTech curriculum,<br>> BSO-led onboarding with BSA user exchange<br>> High-level public-private dialogues<br>> National policy alignment and PIRI-wide onboarding plans |
| **E - Elevate** | Phase 3 | Scale, sustain, and institutionalize SupTech | > Activate Tier 2 modules such as cross-border risk tools, green finance dashboards<br>> Conduct regional impact assessments<br>> Impact storytelling<br>> Formalize governance roles within the BSA Member Council |

## 5.3 READINESS-BASED COUNTRY ONBOARDING

### OVERVIEW AND STRATEGIC RATIONALE

Given the varying levels of institutional readiness, technical infrastructure, legal frameworks, and supervisory capacity across the seven PIRI countries, the country onboarding and deployment strategy for the BSA has been designed as a phased and staggered process.

While the roadmap (Section 5.2) outlines a unified deployment plan, this section translates regional ambitions into tailored onboarding pathways that reflect country-specific realities, ensuring no country is left behind and avoiding asynchronous rollout challenges (often referred to as the **"sunrise problem"**).

The diagnostic findings (see Section 3) revealed differences in:

> **Technical infrastructure** (e.g., availability of digital reporting systems, server hosting capacity)
> **Human capacity and SupTech experience** (digital literacy, SupTech understanding, AI/data analytics exposure)
> **Legal and policy frameworks** (clarity on digital submissions, data privacy laws, cybersecurity standards)
> **Industry digitization** (manual vs. digital submissions, willingness to adopt API-based reporting)

Therefore, the onboarding plan is built around four readiness categories (High, Moderate-High, Moderate-Low, and Foundational), which were established based on aggregate findings from Section 3 to Section 4, including survey data on internal capabilities (Q1–Q4), legal provisions (Q12-Q14), technical ecosystem (Q6–Q9), and preferred implementation models (Q18-Q26).

## READINESS CATEGORY PROFILES AND ONBOARDING APPROACH

**TABLE 41:** READINESS CATEGORY PROFILES AND ONBOARDING APPROACH

| Category | Countries | Onboarding strategy | Targeted support areas |
|---|---|---|---|
| High readiness | Fiji | > Early pilot deployment<br>> National configuration lead<br>> Contributor to joint learning agenda<br>> Phased training across departments<br>> API sandboxing | > BSO onboarding readiness<br>> Supervision-to-IT integration<br>> Deployment playbook documentation<br>> SOP and dashboard development |
| High readiness | Samoa | > Pilot deployment with multi-department integration<br>> Phased training across departments<br>> Regional mentoring role | > Configuration leadership<br>> Taxonomy alignment<br>> Peer learning content contribution |
| Moderate-high readiness | Seychelles | > Concurrent rollout with staged internal onboarding<br>> Phased training across departments | > Internal alignment support<br>> Template harmonization and reviews<br>> Industry API sandboxing and pilot testing |
| Moderate-low readiness | Solomon Islands | > Phased onboarding<br>> Licensing and dashboard pilots<br>> Phased training across departments | > Dashboard customization<br>> Complaints and risk reporting flows<br>> Template harmonization and reviews<br>> Industry API sandboxing and pilot testing |
| Moderate-low readiness | Vanuatu | > Phased onboarding<br>> Template harmonization<br>> Integration workshops for dashboards and reporting<br>> Phased training across departments | > Hosting support<br>> Licensing and registry configuration<br>> Template harmonization and reviews<br>> Industry API sandboxing and pilot testing |
| Foundational to moderate-low readiness | Papua New Guinea | > Focus on workflows and gradual onboarding<br>> Template harmonization<br>> Integration workshops for dashboards and reporting<br>> Phased training across departments | > IT capacity upgrades<br>> Legislative review for SupTech data compliance<br>> Change management programs<br>> Deployment support |
| Foundational to moderate-low readiness | Tonga | > Focus on workflows and gradual onboarding<br>> Align to PIRI-wide template structure<br>> Template harmonization<br>> Integration workshops for dashboards and reporting<br>> Phased training across departments | > Change management design<br>> Gradual deployment oversight<br>> IT infrastructure ramp-up<br>> Coordinated peer review participation |

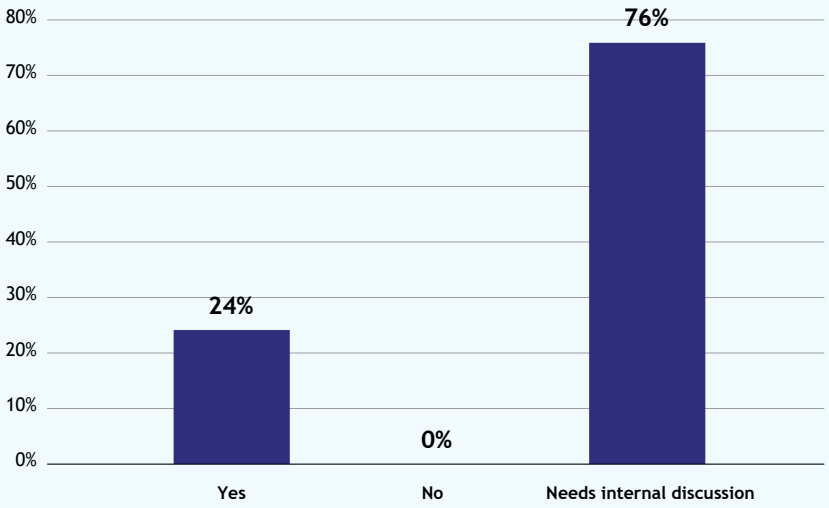
Note: The readiness groupings presented are based on data provided through the regulator survey, infrastructure diagnostics, legal and regulatory maturity (Section 4.5), and indicated willingness to invest (see compliance and expense charts in Section 4.4).

These classifications reflect the information supplied during the survey and diagnostic phase. However, if any PIRI member, through its internal assessment, determines that its readiness aligns better with a different category, this is not only welcomed but encouraged.

Regardless of the category assigned, the corresponding onboarding strategy and targeted support areas outlined remain applicable and adaptable to ensure effective participation and alignment.

**FIGURE 25:** WILLINGNESS TO PROCESS WITH A SUPTECH ADOPTION ROADMAP

**Q42 Is your institution willing to proceed with a regional SupTech adoption roadmap with a 12-18 months timeline (i.e. establish institutional readiness, test, and deploy a SupTech solution)?**




The above show that 76% of the respondents need to discuss internally whether their institution is willing to proceed with a SupTech adoption roadmap. This must be due to lack of clarity on the pre-requisites for Suptech adoption. In such a case, being part of a learning and knowledge exchange network will be greatly beneficial.

What makes this implementation approach feasible and uniquely impactful is the strength of AFI's global peer learning and knowledge exchange network, particularly among existing BSA users. As of 2025, 16 AFI member countries, including Mozambique (as host of the BSA), Zimbabwe, Zambia, Eswatini, Sao Tome and Principe, and Timor Leste, are active BSA users. These members provide credible and contextually aligned use cases and peer learning opportunities for the Pacific.

Through this extended peer learning approach, PIRI members gain not only technical support but also hands-on insights from real-world deployments. Both virtual and physical learning programs will be hosted across the AFI network and refined as an ongoing work plan, developed collaboratively between AFI, the BSA Support Office (BSO), and PIRI member institutions. These activities will include:

- **Joint Learning Programs (JLPs)** hosted by advanced adopters (e.g., Mozambique, Zimbabwe, or Zambia)
- **Peer learning and knowledge exchanges** among peer SIDS (e.g., learning from Timor Leste or Sao Tome)
- **Regional capacity-building events** hosted by Pacific regulators to deepen regional ownership
- **Technical implementation and policy workshops** guided by AFI and the BSO.

This model ensures that each country's onboarding is not an isolated effort but part of a collective learning journey that accelerates national-level success while deepening regional cohesion.

## INSTITUTIONAL RESPONSIBILITIES AND ROLES

While the BSA platform will be deployed regionally, successful onboarding depends on country-level ownership. Each central bank will establish a SupTech Implementation Core Team comprising:

- Project Lead: Oversees national deployment, coordinates with BSO and AFI
- IT Lead: Manages infrastructure integration, hosting, and security
- Supervision/Regulatory Lead: Defines core use cases, supports reporting templates and schema mapping
- Legal/Policy Advisor: Reviews data mandates, privacy, and consent frameworks
- Industry Liaison Officer: Coordinates pilot rollout to regulated institutions

AFI and the BSA Support Office will jointly facilitate structured onboarding, with a detailed checklist, helpdesk, and tiered support model.

## MINIMUM ONBOARDING REQUIREMENTS BY THE END OF PHASE 1

To ensure that all countries are positioned to transition from concept to execution within the first 24 months, the following minimum onboarding milestones are expected to be met:

**TABLE 42:** MINIMUM ONBOARDING MILESTONE EXPECTED FOR PIRI INSTITUTIONS AT THE END OF PHASE 1

| Milestone | Deadline | Lead entity |
|---|---|---|
| **National technical readiness assessment completed** | June 2026 | BSO + Central Bank IT teams |
| **SupTech implementation team established and trained** | September 2026 | AFI + Country focal institutions |
| **BSA tier 1 modules configured and tested** | December 2026 | BSO + Supervision units |
| **Internal SOPs and compliance mappings developed** | December 2026 | Legal + Policy + IT team |
| **Industry pilot launched (at least 1 FI per country)** | May 2027 | Central Bank + industry liaison |
| **Live system demonstration to PIRI leadership** | May 2027 | All PIRI institutions |

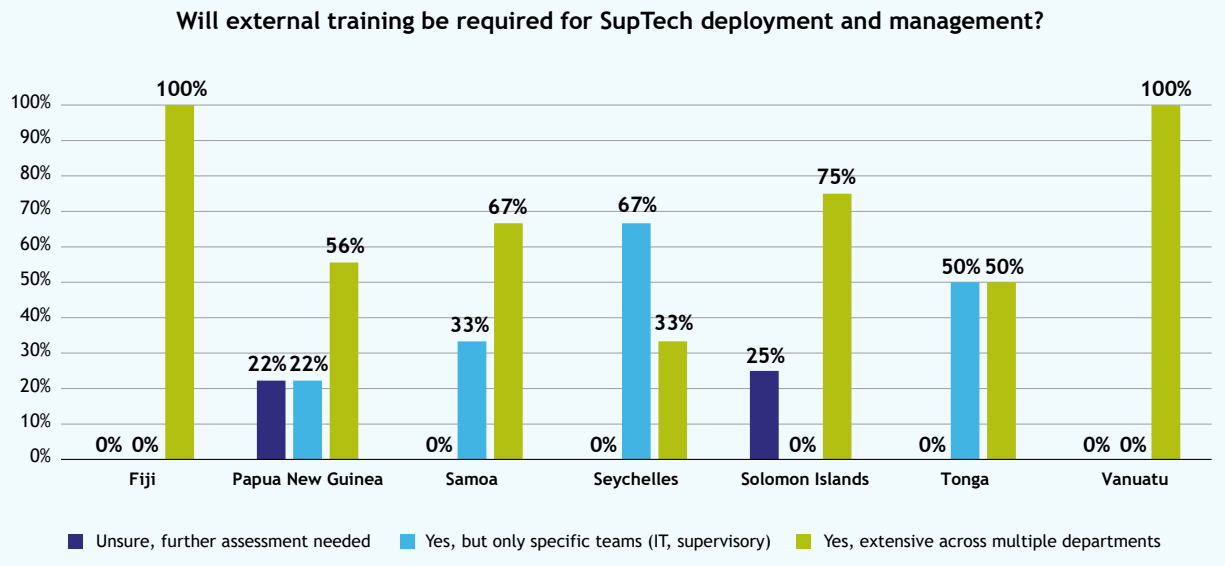
Carynn / Shutterstock.com

## REGIONAL COORDINATION AND PEER LEARNING APPROACH

To drive efficiency, consistency, and mutual progress across the seven PIRI countries, the onboarding model leverages regional joint learning programs (JLP), peer learning (PLE) and knowledge exchange (KX) and other appropriate capacity-building approach, anchored by the AFI network and the BSA Support Office (BSO).

This is informed by the training needs identified by all PIRI members as shown in Figure 26: Training Requirement for SupTech Deployment and Management.

**FIGURE 26:** TRAINING REQUIREMENT FOR SUPTECH DEPLOYMENT AND MANAGEMENT



gg-foto/ Shutterstock.com

Rather than assigning learning responsibilities to individual countries, AFI and the BSO, alongside experienced BSA implementers like Mozambique (the BSA host), Zimbabwe, Zambia, Eswatini, Timor Leste, and Sao Tome and Principe (and any other from the 16 AFI member institutions) will coordinate joint training programs, structured onboarding workshops, and technical deep-dive sessions for all seven PIRI central banks.

Key elements of this ecosystem include:

- Joint regional learning events: Physical and virtual workshops covering deployment planning, reporting templates, dashboard configuration, and internal system integration.
- BSA user exchange forums: In-person knowledge-sharing opportunities via the BSA Annual User Council and Peer Learning Events (PLEs), hosted in collaboration with established BSA adopters.
- Targeted implementation labs: Theme-specific learning modules hosted by peer institutions (e.g., licensing workflows in Zimbabwe, API onboarding in Zambia, dashboard configuration in Eswatini).
- Central knowledge repository on the BSA or PIRI Member Portal, featuring:
  - Step-by-step deployment guides
  - Use-case implementation playbooks
  - Sample SOPs from experienced regulators
  - Troubleshooting and onboarding FAQs
  - Recorded webinars and how-to videos
  - Technical checklists and templates

These peer learning engagements will be iteratively refined as part of an ongoing work plan by AFI, the BSO, and participating PIRI institutions, ensuring evolving needs and feedback loops inform future sessions.

## CONCLUSION

This model ensures that while all seven PIRI countries embark on a shared SupTech deployment journey, the pathway is tailored to reflect country-specific capacities and starting points. By embedding country onboarding within a regional support ecosystem and combining BSA expertise with AFI's extensive peer-learning infrastructure, this approach avoids fragmented implementation and accelerates collective digital transformation.

The result is a credible, cost-effective, and resilient regional SupTech utility, grounded in practical delivery models, shaped by peer regulators, and designed for long-term inclusion, transparency, and supervisory excellence.

## 5.4 PHASED IMPLEMENTATION PLAN

This section presents a structured, actionable, and data-driven plan for rolling out the Bank Supervision Application (BSA) as a regional SupTech platform for all seven PIRI countries. It translates the strategic intent of Sections 3–4 into a clear execution path over three implementation phases, aligned with readiness levels, institutional capacities, and member aspirations for collective deployment, learning, and innovation.

Each phase of the roadmap builds logically on the last, starting with joint activation of the Minimum Viable SupTech Solution (MVSS), followed by incremental improvements, and culminating in full platform maturity across priority functions.

**TABLE 43:** 5-YEAR PHASED IMPLEMENTATION PLAN

| PHASE 1: Deploy and Normalize | PHASE 2: Integrate and Innovate | PHASE 3: Scale and Elevate |
|---|---|---|
| **Timeline:** June 2025 - May 2027 | **Timeline:** June 2027 - May 2029 | **Timeline:** June 2029 - May 2030 |
| **Objective:** Deliver the foundational implementation of Tier 1 BSA modules across all PIRI member institutions, while establishing the policy, institutional, and technical conditions for sustainable adoption. | **Objective:** Deepen national integration, improve inter-agency coordination, and begin Tier 2 expansion through localized innovation. | **Objective:** Scale SupTech use across supervisory domains, integrate with other regulators, and elevate regional impact through Tier 2 innovation and knowledge export. |
| **Key Activities:**<br>> PIRI Regional SupTech Policy Symposium (2025)<br>> Technical readiness assessments for each country (Q3 2025 – Q1 2026)<br>> Onboarding and configuration of BSA Tier 1 modules (Q4 2025 – Q2 2026)<br>> Training for SupTech Implementation Teams across supervision, IT, legal, and policy units<br>> Pilot data submissions and early sandbox testing with financial institutions<br>> Establishment of country-specific SOPs and compliance mapping<br>> Peer learning exchanges and onboarding support via AFI and existing BSA member countries<br>> Knowledge repository setup on the AFI member portal | **Key Activities:**<br>> Internal expansion to other departments (e.g., AML/CFT, market conduct, FinTech oversight)<br>> In-country sandbox environments operationalized for additional regulated entities<br>> Annual feedback loops to the BSA User Council and regional working groups<br>> Testing and prioritization of Tier 2 modules based on country use cases<br>> Deeper integration of API/web portal submissions from industry actors<br>> Collaborative refinements to taxonomies and data schemas<br>> Joint capacity-building sessions on analytics, climate risk, and financial inclusion dashboards | **Key Activities:**<br>> Initiation of development for selected Tier 2 modules (e.g., ESG supervision, open data oversight)<br>> Full integration of financial inclusion monitoring dashboards across institutions<br>> Cross-border regulatory modules tested (e.g., remittances, regional payment data)<br>> Longitudinal impact assessment: inclusion, supervision, compliance cost<br>> Knowledge sharing at global BSA User Councils and AFI events<br>> Publication of joint regional policy paper on digital supervision in SIDS<br>> Funding proposals and donor alignment for the Tier 2 roadmap |
| **Success Indicators:**<br>> All seven countries achieve live deployment of core BSA modules<br>> At least one pilot institution submits API or portal-based data in each jurisdiction<br>> Regional onboarding workshops completed and documented<br>> Internal SOPs finalized and system demonstrated to PIRI leadership (May 2027) | **Success Indicators:**<br>> At least 3 departments per country actively using BSA analytics and dashboards<br>> More than 50 percent of regulated entities in each country are onboarded to the new digital reporting model<br>> Country-led configuration updates submitted to BSO for roadmap integration<br>> Documented case studies on localized enhancements shared across PIRI | **Success Indicators:**<br>> At least 3 Tier 2 modules operationalized across 3 or more countries<br>> Regional dashboard launched on inclusion, climate risk, and compliance trends<br>> PIRI recognized as a model for regional SupTech implementation<br>> External evaluation confirms system maturity and impact on policy outcomes |

### INTEGRATED GOVERNANCE AND COORDINATION

All three phases will be steered by:

- **PIRI SupTech Steering Committee** (comprising representatives from all central banks)
- AFI Secretariat (coordinating partners, M&E, and capacity building)
- BSA Support Office (leading deployments, configurations, helpdesk)
- Regional Working Groups and Thematic Leads (e.g., for Tier 2 use cases, industry integration)

Governance will be formalized through Terms of Reference (ToR), annual work plans, and feedback loops.

### CONCLUSION

This phased implementation plan ensures the SupTech journey is inclusive, efficient, and strategically aligned across all seven PIRI member countries. With proven technology, shared governance, and embedded learning pathways, this roadmap transforms aspiration into action, building a Pacific supervisory future that is data-driven, digitally empowered, and regionally resilient.

## 5.5 GOVERNANCE AND REGIONAL COORDINATION STRUCTURE

Effective governance is the cornerstone of a successful regional SupTech platform. For PIRI countries adopting the Bank Supervision Application (BSA) model, the governance and coordination architecture must enable national sovereignty while fostering collective ownership, collaborative decision-making, and shared innovation. This section outlines the proposed governance framework that ensures agility, inclusivity, security, and sustainability in the deployment and evolution of the shared SupTech platform.

### GOVERNANCE PRINCIPLES

The proposed governance structure is built on six core principles:

1. **Regulator-led ownership:** SupTech must remain under the control and strategic guidance of PIRI central banks, ensuring alignment with national mandates, confidentiality, and sovereignty.
2. **Equal voice, shared responsibility:** All participating institutions, regardless of size or capability, must have equal voting rights in key decisions affecting platform enhancements, roadmap changes, and shared utilities.
3. **Transparency and accountability:** Operational oversight mechanisms must include transparent reporting lines, clear escalation procedures, and published upgrade schedules.
4. **Scalability and inclusion:** Governance structures must accommodate varying readiness levels and the onboarding of future members, partners, and modules.
5. **Regional customization:** The structure must support country-specific requirements while maintaining technical and policy coherence across the shared infrastructure.
6. **Feedback loops for continuous improvement:** Decisions on upgrades, security protocols, and module priorities must be informed by member feedback, user data, and evolving supervisory needs.

### GOVERNANCE FRAMEWORK COMPONENTS

The proposed governance model will align with the existing BSA governance structure, which has supported over 22 central banks, including 16 AFI members, and will be tailored to reflect PIRI-specific needs.

**TABLE 44:** PROPOSED GOVERNANCE FRAMEWORK FOR THE REGIONAL SUPTECH IMPLEMENTATION

| Governance Layer | Role | Composition | Frequency |
|---|---|---|---|
| **PIRI SupTech Council** | Strategic oversight, endorsement of major changes, regional prioritization | Governors or delegated senior leadership from each PIRI country | Bi-annual (aligned with PIRI Leaders Roundtable) |
| **SupTech Steering Committee** | Operational governance, roadmap validation, budget alignment, inter-country issue resolution | SupTech leads from each country + AFI Secretariat + BSO | Quarterly |
| **Technical Working Group (TWG)** | Technical implementation, module co-design, testing, cybersecurity, integration discussions | IT + Data + Supervision teams; BSO engineers | Monthly or ad-hoc |
| **Thematic Task Teams** | Co-development of Tier 2 modules (e.g., Climate Risk, Market Conduct, Inclusion) | Voluntary opt-in groups based on national/regional interest | As required |
| **AFI Secretariat + BSO** | Platform administration, onboarding, capacity building, helpdesk, and documentation support | AFI Technical Lead; BSA Support Office | Continuous |

### DECISION-MAKING PROTOCOLS

To ensure fairness and alignment, decision-making will follow a three-tiered approach:

1. **Consensus-based voting** at the SupTech Steering Committee level for configuration, roadmap, and module updates.
2. **Escalation to PIRI SupTech Council** for decisions requiring funding or cross-border implications.
3. **Documentation and transparency** via the AFI Member Portal, where decisions, timelines, and guidance are accessible to all stakeholders.

### SAFEGUARDS FOR SOVEREIGNTY AND POLICY COHERENCE

While leveraging a shared platform, each country will retain full control over:

- National-level data access and usage
- User permissions and audit logs
- Country-specific dashboard views and alerts
- Legal and supervisory mappings to local laws and mandates

In addition, PIRI members may define country-specific SOPs, fallback mechanisms, and locally administered reporting pipelines that feed into the broader platform.

### ROLE OF AFI AND THE BSA SUPPORT OFFICE (BSO)

- **AFI's Role:** Act as the neutral convener, fund coordinator, peer learning hub, and performance monitor across the project lifecycle.
- **BSO's Role:** Provide Tier 1 and Tier 2 technical implementation, ongoing support, bug fixes, roadmap enhancements, and onboarding assistance to all PIRI members.

Both institutions will coordinate to ensure that the regional governance body evolves with the needs of the members, new regulatory use cases, and emerging risks.

### CONCLUSION

The proposed governance model for PIRI's SupTech platform that has been proposed is not solely an administrative framework; it is the driving force behind the collective digital transformation. It guarantees that SupTech becomes a genuine regional digital utility that delivers great public value and purpose, with defined roles, inclusive participation, and embedded accountability, that is responsibly developed, expertly managed, and equitably governed by the institutions it is intended to empower.

Sabrina Bracher / Shutterstock.com

## 5.6 MONITORING, EVALUATION & FEEDBACK LOOPS

As a regional inclusive digital infrastructure initiative, the PIRI SupTech platform must be anchored in a robust Monitoring and Evaluation (M&E) framework. The purpose is to track implementation progress, validate that outcomes align with member expectations, measure policy and market impact, and provide actionable feedback for course correction. This section defines the architecture for monitoring progress, gathering stakeholder feedback, and informing iterative enhancements to both the platform and its governance mechanisms.

### MONITORING AND EVALUATION (M&E) OBJECTIVES

The M&E framework is designed to serve the following strategic purposes:

1. **Track implementation progress:** Assess whether technical milestones, onboarding targets, and institutional readiness activities are being completed as planned.
2. **Evaluate impact:** Measure the SupTech platform's contribution to supervisory efficiency, compliance cost reduction, and financial inclusion outcomes.
3. **Enhance governance transparency:** Enable informed decision-making and oversight through shared performance data and periodic review sessions.
4. **Foster learning and adaptation:** Use structured feedback loops to adapt modules, deployment timelines, and technical specifications based on evolving needs.

## KEY INDICATORS ACROSS LEVELS

A tiered set of indicators will be tracked across project, institutional, and regional levels:

**TABLE 45:** KEY INDICATORS AT PROJECT, INSTITUTIONAL, AND REGIONAL LEVEL

| Level | Indicator category | Sample metrics |
|---|---|---|
| **Project** | Deployment and usage | Number of countries live; number of Tier 1 modules configured; number of Financial Institutions reporting digitally |
| | Training and capacity building | Number of staff trained; peer exchange events held; training satisfaction scores |
| **Institutional** | Supervisory efficiency | Percentage (%) reduction in manual reporting time; Number (#) of auto-validated returns; Percentage (%) of supervisory reports generated |
| | Policy use and integration | Number (#) of decisions informed by SupTech dashboards; adoption of API frameworks in policy documents |
| **Regional** | Inclusion outcomes | Availability of sex-disaggregated data; Number (#) of complaints processed digitally; uptake of agent monitoring |
| | Governance and participation | Attendance at steering committee meetings; Number (#) of feedback submissions integrated into roadmap |

## FEEDBACK LOOPS AND USER VOICE

The M&E approach incorporates continuous feedback loops through:

- **Quarterly platform feedback surveys** (central banks and regulated entities)
- **Helpdesk analytics** (response time, issue types, satisfaction scores)
- **Mid-year review workshops** (to recalibrate timelines, feature priorities, and support models)
- **Annual user forum** (linked to BSA Global Conference) for collective feedback, benchmarking, and roadmap discussion

The **Technical Working Group (TWG)** will prioritize and integrate this feedback, which will then be escalated to the SupTech Steering Committee.

## BASELINE AND ENDLINE ASSESSMENTS

To assess attributable impact, the following evaluations are proposed:

- **Baseline survey** (End of Phase I – June 2026): Captures current supervisory pain points, digital reporting maturity, and inclusion data availability.
- **Endline assessment** (End of Phase III – May 2030): Measures SupTech platform performance, policy improvements, cost savings, and regulatory agility.

Both will use a mix of qualitative interviews, KPI analytics, and ecosystem surveys (regulators and regulated entities) to ensure multidimensional impact tracking.

## REPORTING AND DISSEMINATION CHANNELS

- **Quarterly technical reports:** Consolidated by TWG & BSO, shared with PIRI SupTech Council and AFI.
- **Annual regional review:** Presented at the PIRI Roundtable, linked to the roadmap and budget discussions.
- **Interactive dashboards:** Hosted on the AFI Member Portal or a PIRI-dedicated web portal for real-time progress tracking by PIRI institutions.

## ADAPTABILITY AND FUTURE PROOFING

The M&E structure is designed to evolve with the platform, incorporating:

- New modules as they are developed (e.g., climate risk, open finance supervision)
- Country-specific indicators (e.g., sovereign reporting mandates, digital ID linkages)
- Emerging risks and innovations (e.g., AI bias, cross-border fintech operations)

## CONCLUSION

This M&E and feedback loop strategy guarantees that the SupTech deployment is not an inert endeavour, but a living ecosystem—enriched by experience, guided by data, and sustained through collaboration. It is consistent with the most effective methods of agile digital infrastructure development and reflects the collective vision of PIRI members for a more inclusive, intelligent regulatory future.

SALMONNEGRO-STOCK / Shutterstock.com

## 5.7 SUSTAINING AND SCALING THE SUPTECH PLATFORM

The successful deployment of the Bank Supervision Application (BSA) as the Minimum Viable SupTech Solution (MVSS) for the seven PIRI member institutions marks only the beginning of a broader journey toward long-term sustainability, iterative growth, and regional resilience. This section outlines the strategic considerations and institutional commitments necessary to maintain and evolve the SupTech platform well beyond the initial five-year deployment horizon.

### LONG-TERM SUSTAINABILITY PILLARS

To ensure sustained impact, the platform must be anchored in three critical sustainability pillars:

**A. Financial sustainability**

Sustaining the SupTech platform requires a forward-looking financing model that balances shared regional investment with national ownership. Key strategies include:

- **Cost-sharing mechanisms** among PIRI members for annual licensing, support, and customization through the BSA governance structure.
- **Leveraging regional and global donor partnerships** (e.g., FCDO, ADB, MFAT. DFAT, Gates Foundation and more) to subsidize Tier 1 readiness, capacity building and adoption, and Tier 2 development and advanced capacity-building tracks.
- **Incorporation of SupTech budgeting** into national digital transformation or central bank modernization strategies.

**78 percent of regulators agreed that shared licensing and hosting arrangements were more viable than standalone, fully nationalized systems.**

**B. Technical sustainability**

Technical sustainability will rely on:

- **Continuous upgrades and backward compatibility** of the BSA modules as part of the global release pipeline governed by BSO and the user council.
- **Standardized documentation, deployment SOPs, and training protocols,** to reduce onboarding friction and maintain institutional memory despite staff turnover.
- **National IT team development plans,** including secondments, peer exchanges, and certified training with institutions like Cambridge SupTech Lab or AFI's technical knowledge exchange and capacity building facility.

**C. Institutional sustainability**

Institutional continuity depends on:

- **Establishing a permanent SupTech coordination team within each central bank,** co-led by supervision and IT.
- **Aligning SupTech KPIs with national financial sector strategies,** digital economy blueprints, and risk-based supervision mandates.
- **Ongoing political support from leadership,** including finance ministries, where integration with national development priorities is crucial.

## STRATEGIC PATHWAYS TOWARDS SCALING THE PLATFORM

The shared SupTech platform is envisioned as an inclusive digital infrastructure (a form of DPI) for regulatory oversight. To grow its utility and value, the following pathways are proposed:

**A. Tier 2 functional scale-up (post-year 3)**

Following full deployment of Tier 1 across all seven PIRI countries, attention must turn to:

- **Prioritizing tier 2 modules** based on collective feedback and use-case validation (e.g., AML/CFT transaction monitoring, ESG/climate risk supervision, agent registry).
- **Launching joint feature requests** through the BSA user council to ensure PIRI interests are addressed in future BSA iterations.
- **Piloting cross-border supervision capabilities,** such as interoperability testing dashboards, with technical guidance from more advanced regulators.

**B. Industry-wide deepening**

As capacity increases:

- **Expand BSA use across financial sectors**, including insurance regulators, microfinance units, payment system supervisors, mobile money operators, and electronic money issuers (EMIs).
- **Standardize reporting templates and taxonomies** through industry consultations.
- **Enable voluntary onboarding of regional fintechs and EMIs,** which may seek alignment with regional compliance norms.

**C. Cross-regional integration**

The platform can serve as a foundational layer for:

- **Pacific-wide financial oversight and coordination,** enabling better **anti-de-risking strategies** and AML harmonization.
- **Exploring relevant and purposeful linkages** with African, Caribbean, and other SIDS regulators, several of whom are already part of the BSA ecosystem, fostering global inclusive digital infrastructure cooperation.

## INSTITUTIONALIZING REGIONAL GOVERNANCE

Sustaining the platform also demands:

- **Active participation in the BSA User Council,** where PIRI members can vote on updates, share roadmaps, and shape the platform's future.
- **Appointment of regional focal points** within PIRI who will participate in cross-country diagnostics, training, and policy alignment.
- **Annual regional peer learning events,** alternating between technical implementation deep-dives and policy-level discussions on SupTech evolution.

**Insight:** The establishment of a regional working group under AFI's SupTech and RegTech Program can help institutionalize these functions and act as a technical advisory hub for member-driven innovation.

## RISK MONITORING AND ADAPTATION

A living platform must evolve with its risks. To support adaptive scaling:

- Establish regular joint reviews of system effectiveness, incorporating feedback from end-users, industry, and regulators.
- Maintain a "SupTech Health Scorecard", monitoring system uptime, data latency, complaint resolution timeliness, and other KPIs across countries.
- Institutionalize feedback loops to integrate lessons from system incidents, changes in legal frameworks, and user experiences into development cycles.

### KEY INDICATORS FOR SUSTAINED SUCCESS

**TABLE 46:** KEY INDICATORS FOR THE SUSTAINABILITY OF THE SHARED SUPTECH PLATFORM

| Pillar | Key success indicator |
|---|---|
| **Financial sustainability** | Annual budget line item for SupTech in all 7-member central banks |
| **Technical sustainability** | ≥90 percent module uptime and compatibility with regional reporting standards |
| **Institutional buy-in** | SupTech KPIs embedded in NFIS, DFS, or regulatory modernization plans |
| **Governance participation** | All 7 PIRI members active in BSA Council meetings |
| **Impact and outcomes** | Documented evidence of improved oversight, policy outcomes, and inclusion impact |

As SupTech continues to evolve, the PIRI members' journey does not end with implementation, it is only just beginning. By embedding SupTech within national and regional strategies, co-investing in shared governance, and continuously evolving based on data and dialogue, the Pacific can not only catch up with the rest of the world, but lead. A sustainable SupTech platform is not just a technical tool, it is a regional innovation catalyst and a foundational pillar of digital financial supervision in the Pacific.

## 5.8 FINAL IMPLEMENTATION CONSIDERATIONS AND TRANSITION PLANNING

The successful execution of a shared SupTech platform for PIRI members demands more than technology deployment, it requires foresight in transitioning from the pilot phase to full institutional adoption, from central coordination to national ownership, and from initial funding to sustainable resourcing. This section outlines the critical considerations that must inform the final stage of implementation to ensure longevity, adaptability, and institutional anchoring.

### TRANSITIONING FROM PROJECT TO PERMANENT INFRASTRUCTURE

A major risk identified in comparable digital infrastructure projects is the **"pilot trap"**; where promising tools remain in prolonged pilot phases without fully embedding into organizational workflows. To avoid this, PIRI members should:

- Embed SupTech within institutional policies and budget cycles by 2027, ensuring it transitions from a donor-supported project to a national system.
- Institutionalize SupTech teams within central bank IT and supervisory departments to maintain ownership and continuity.
- Assign a SupTech focal officer or unit, with defined TORs, reporting lines, and key performance indicators (KPIs), in each central bank.

Transition milestone example:

**TABLE 47:** INDICATIVE MILESTONES FOR INSTITUTIONALIZING SUPTECH AS PERMANENT INFRASTRUCTURE

| Milestone | Description | Deadline |
|---|---|---|
| **Integration of SupTech activities into 2027 - 2030 strategic plans** | SupTech incorporated as a budgeted item in each institution's core strategic document | March 2027 |
| **Formal handover from BSO to national SupTech teams** | Local teams take over Tier 1 system configuration and helpdesk support | June 2027 |

### OPERATIONAL SUSTAINABILITY: RESOURCING AND OWNERSHIP

Survey feedback (regulator survey) reveals that 89 percent of PIRI central banks are concerned about ongoing costs for system maintenance, hosting, and upgrade cycles.

Therefore:

- PIRI members and BSO should co-develop a shared cost model for hosting and system upgrades (e.g., based on number of users, modules enabled, or licensing tiers).
- Cost-sharing arrangements should be determined by PIRI leadership with flexibility for countries at different stages of digital maturity.
- National financial institutions could be asked to contribute to future onboarding costs through nominal integration or registration fees, especially for API-based reporting tools.

## KNOWLEDGE CONTINUITY AND STAFF ROTATION

One of the biggest operational threats is staff attrition or transfer. To manage this risk:

- Each country should maintain a **"SupTech bench"**; a minimum of 3 staff per central bank trained across system administration, data validation, and report analytics.
- Establish an annual capacity-building calendar through AFI and the BSO to keep technical knowledge up to date.
- Retain user manuals, recorded training videos, and SOPs as part of a centralized knowledge repository accessible via the PIRI Members Portal.

## GOVERNANCE CONTINUITY WITHIN THE BSA ECOSYSTEM

Since the SupTech platform is delivered through a shared utility model (BSA), PIRI's long-term influence will depend on continued participation in the governance process:

- Nominate at least one PIRI member representative to the BSA Steering Committee.
- Ensure annual policy feedback loops between country teams and the BSO to recommend feature enhancements.
- Engage in working groups or user forums to stay informed about global trends, new threats, and evolving supervisory needs.

## DEALING WITH TECHNOLOGY EVOLUTION AND REGULATORY CHANGE

To remain relevant, the SupTech platform must evolve with technology and regulation:

- Plan annual roadmap updates through AFI's coordination with the BSO and country focal points.
- Encourage adaptive regulation by supporting central banks in updating digital supervision guidelines to reflect new SupTech tools (e.g., AI-based analytics, climate risk monitoring).
- Establish a quarterly innovation review, where supervisors and IT staff evaluate the system's ability to support emerging policy needs.

## INSTITUTIONAL KPIS FOR TRANSITION SUCCESS

The following KPIs should be monitored to ensure a successful transition:

**TABLE 48:** KPIS FOR TRANSITION SUCCESS FROM PILOT PHASE

| Domain | Key performance indicator | Target by 2028 |
|---|---|---|
| **Technical operations** | percent of data collected through SupTech platform | 80 percent |
| **Policy integration** | # of policies amended to reflect digital supervision | ≥3 per country |
| **Capacity** | # of staff trained and/or certified in SupTech operations | ≥5 per country |
| **Governance** | percent participation in BSA governance forums | 100 percent |
| **Cost sustainability** | percent of SupTech operations funded by the national budget | ≥60 percent |

The roadmap culminates not in a system rollout, but in the transformation of SupTech into a strategic asset, a shared digital infrastructure that delivers public value, enhances regulatory performance, and expands financial inclusion in the Pacific. Through deliberate transition planning, strong institutional anchoring, and regional solidarity, PIRI members can ensure that the SupTech platform remains not only operational, but influential and enduring.

# 6 IMPACT ASSESSMENT: SUPTECH FOR FINANCIAL INCLUSION IN PIRI

## 6.1 INTRODUCTION AND FRAMING

This final section presents a forward-looking impact assessment of the proposed regional SupTech platform for the seven PIRI jurisdictions. Grounded in the diagnostic evidence, blueprint design, and implementation roadmap outlined in previous sections, this assessment aims to articulate the anticipated benefits, risks, and policy linkages associated with deploying a shared supervisory technology infrastructure.

SupTech is not merely a technological intervention, it is a transformative enabler of regulatory effectiveness, institutional resilience, and inclusive financial sector development. For PIRI members, the proposed deployment of a regional SupTech platform, anchored in proven solutions like the Bank Supervision Application (BSA), holds the potential to reshape supervisory outcomes, deepen market confidence, and accelerate national and regional policy agendas, including those on financial inclusion, climate risk, gender equality, and digital public infrastructure.

Drawing on comparative insights from over 16 other AFI member institutions currently using BSA, as well as feedback from the dual-track surveys administered across regulators and regulated entities in the PIRI region, this assessment provides a structured view of how the platform could unlock measurable gains across the following domains:

- Supervisory efficiency and intelligence
- Market conduct and consumer protection
- DFS ecosystem development and innovation
- Financial inclusion, especially for women, youth, MSMEs, and rural populations
- Institutional capacity and cross-border collaboration
- Climate risk supervision and resilience
- Alignment with emerging policy frameworks like open finance, CBDC, and regulation of FinTech and non-bank entities

Each subsection in this chapter blends evidence from the diagnostic surveys (e.g., questions Q1–Q24 across both instruments), technical gap analysis (Section 3), and the strategic priorities reflected in the Victoria Consensus, the Sochi Accord, and national NFIS plans. In doing so, the report highlights how a shared SupTech platform can move beyond operational efficiency to deliver transformative, equitable impact across the region.

## 6.2 INCLUSION PATHWAYS ENABLED BY SUPTECH

The following pathways are highlighted as potential avenues through which the regional SupTech can drive equity, access, oversight, and trust in digital financial services (DFS) across the Pacific.

### DIGITALLY INCLUSIVE SUPERVISION FOR UNDERSERVED SEGMENTS

SupTech enables granular visibility into market dynamics—including adoption patterns among rural populations, women, MSMEs, and informal sector users. By embedding gender-disaggregated data collection, geographic tracking, and affordability indicators directly into Tier 1 reporting templates and analytics dashboards, regulators can proactively identify underserved segments.

- **Data-driven inclusion tracking:** As seen in BSP (Philippines), real-time supervisory dashboards mapped DFS access gaps by gender and location, helping reshape agent network policies
- **Simplified KYC monitoring:** SupTech analytics can track uptake of simplified customer due diligence (CDD) regimes and their impact on onboarding unbanked populations
- **Informed policymaking:** Automated policy gap analysis for financial inclusion regulations helps regulators simulate the impact of interventions and calibrate more inclusive frameworks.

### Real-time visibility into market conduct and consumer protection

By embedding consumer protection features (Tier 2), the platform allows supervisors to detect patterns of exclusion or abuse before they escalate.

- **Sentiment analysis and complaints monitoring:** Emerging SupTech deployments use AI to mine sentiment from call logs, social media, and complaint datasets, surfacing issues affecting vulnerable customers—including poor disclosures, pricing abuse, or digital fraud
- **Behavioral nudges and market incentives:** Data collected on DFS pricing, transaction friction, and dropout patterns can be fed back to providers or used to incentivize inclusion-enhancing behaviors.

### INCLUSION-ENABLING LICENSING AND INNOVATION MONITORING

A modular SupTech platform can help supervise new DFS entrants, especially fintechs and alternative models, while tracking the inclusive potential of innovation.

- **Regulatory sandbox integration:** Supervisors can use SupTech to evaluate inclusion metrics of sandbox participants.
- **Agent network supervision:** Digital onboarding, performance tracking, and anomaly detection in agent networks can increase confidence and access in rural and island settings
- **Open data exchange monitoring:** APIs and consent dashboards offer insights into how inclusive open finance initiatives are unfolding (e.g., number of MSMEs accessing credit through data-sharing models).

### EMPOWERED INSTITUTIONAL INCLUSION AND PEER LEARNING

The regional nature of the platform enhances smaller or less-resourced PIRI regulators' access to high-quality supervisory infrastructure, regardless of national constraints.

- **Cloud-based access with configuration flexibility:** Allows foundational countries to join at their own pace while gaining visibility and comparability with peers.
- **Regional inclusion benchmarking:** Automated peer benchmarking dashboards help countries monitor their inclusion progress relative to regional targets.
- **Knowledge-sharing loops:** With built-in learning loops from AFI peer institutions (e.g., BSA users in Mozambique, Zimbabwe, Eswatini), low-capacity countries benefit from shared documentation, SOPs, and use-case playbooks

### INTEGRATION OF GREEN FINANCE AND CLIMATE RISK INCLUSION

SupTech-enabled sustainability supervision modules (Tier 2) will allow countries to embed inclusive green finance indicators into national oversight systems.

- **Climate impact reporting for inclusion:** Tiered stress testing and ESG risk data collection can be used to identify communities most vulnerable to financial exclusion from climate risks.
- **Supervisory innovation pilots:** Early-stage use cases may include tracking green credit flows to MSMEs, or climate-linked financial product compliance in remote areas

### DE-RISKING AND FINANCIAL INTEGRITY INCLUSION

The PIRI De-risking Action Plan8 identifies challenges, particularly the withdrawal of correspondent banking relationships (CBRs), that undermine financial access for MSMEs, remittance-dependent households, and rural communities. SupTech provides regulators with tools to operationalize the plan in an inclusive manner by embedding financial integrity oversight directly into supervisory systems.

- **Transaction monitoring for high-risk corridors:** SupTech dashboards can track remittance flows and cross-border payments to detect systemic exclusion risks from de-risking.
- **CDD/KYC uptake visibility:** Supervisors can analyze how simplified or tiered KYC regimes impact MSME access, remittance affordability, and inclusion of low-income groups.
- **AML/CFT compliance scoring:** Automated reporting modules allow regulators to demonstrate robust compliance capacity to international counterparts, reducing the likelihood of blanket correspondent bank withdrawal.
- **Regional cooperation:** Shared SupTech infrastructure enables peer regulators to harmonize standards, pool risk intelligence, and present a coordinated regional approach to global correspondent banks and standard setters.

### SUPPORT FOR EMERGING DFS POLICY PRIORITIES (OPEN FINANCE, CBDCS)

As financial systems evolve, inclusive SupTech systems will be crucial for overseeing new technologies such as open finance ecosystems and central bank digital currencies (CBDCs).

- **Cross-jurisdictional alignment:** Supervisors can use shared dashboards to track regional API standards, consumer consent models, and fintech licensing patterns.
- **CBDC interoperability and adoption monitoring:** SupTech modules can track CBDC usage across inclusion demographics, ensuring new systems do not replicate existing exclusion patterns.

8 https://www.afi-global.org/publication/pacific-islands-regional-de-risking-action-plan/

## POTENTIAL INCLUSION PATHWAYS AND SUPTECH ENABLERS

**TABLE 49:** POTENTIAL INCLUSION PATHWAYS AND SUPTECH ENABLERS

| Inclusion priority | SupTech capability | Expected outcome |
|---|---|---|
| **Gender and MSME Inclusion** | Disaggregated data, affordability analytics | More tailored policies and targeted interventions |
| **Rural and remote outreach** | Agent supervision, geospatial mapping | Enhanced oversight of physical and digital DFS access points |
| **Digital conduct and transparency** | Complaint tracking, AI-powered sentiment analysis | Faster resolution of emerging market conduct risks |
| **Innovation for access** | Sandbox inclusion scoring, FinTech market tracking | Smarter and safer innovation oversight |
| **Vulnerable consumer protection** | Transaction monitoring, affordability signals | Detection of pricing abuse and exploitative practices |
| **Green and climate-finance inclusion** | ESG risk tracking, stress testing dashboards | Increased access to sustainable finance in vulnerable areas |
| **Data rights and open finance** | Consent oversight, API call audit logs | Equitable access to open data benefits |
| **Institutional equity (for regulators)** | Cloud-native platform, shared BSO resources | Smaller regulators gain parity with better-resourced peers |
| **Peer benchmarking and learning** | Inclusion performance dashboards, shared SOPs | Accelerated capacity building and standardization |
| **De-risking and financial integrity inclusion** | AML/CFT compliance scoring, transaction monitoring, CBR mapping, and CDD analytics | Strengthened correspondent relationships, reduced remittance costs, and inclusion of MSMEs and remittance-reliant households |

## 6.3 ANTICIPATED SUPTECH-ENABLED OUTCOMES IN PIRI JURISDICTIONS

## GENDER AND VULNERABLE GROUP INCLUSION OUTCOMES

**TABLE 50:** GENDER AND VULNERABLE GROUP INCLUSION OUTCOME

| Inclusion focus | Existing gaps Across PIRI jurisdictions | SupTech response capability | Anticipated outcomes (3-5 years) |
|---|---|---|---|
| **Women** | Low availability of sex-disaggregated data; limited oversight on DFS products tailored for women | API-based data reporting with demographic tagging; dashboards for gender-disaggregated supervision | Improved policy targeting for women's financial inclusion; compliance-based evaluation of gender-sensitive product rollouts |
| **Youth** | Limited supervision of youth-targeted financial services; low tracking of financial literacy progress | Data collection modules capturing age-segmented usage; market conduct supervision for digital youth savings & credit products | Better monitoring of youth access; early warnings on exploitative digital credit services; youth-focused policy interventions |
| **Persons with Disabilities (PWDs)** | No supervisory focus on DFS accessibility or inclusion for PWDs | NLP analysis of complaints and user experience data; tagging accessibility in digital product metadata | Identification of exclusion patterns; regulatory nudges for inclusive design of apps, USSD, and agent services |
| **Elderly and retirees** | Inadequate data on elder access and exclusion; increased vulnerability to fraud | Fraud and risk modelling tuned to age profiles; visual reporting of age-segmented access and complaints | Proactive monitoring of scams targeting the elderly; improved grievance redress mechanisms; targeted DFS literacy efforts |
| **Low-Income & Rural Populations** | Weak visibility on access gaps in rural areas; uneven supervision of agent networks and pricing transparency | Geo-tagged data collection; agent registry systems; automated analysis of pricing patterns and cash-in/cash-out agent coverage | Lowered cost of access for rural users; regulation of agent conduct; real-time insights into underserved geographies and product distribution |

## MARKET DEVELOPMENT, INNOVATION, CONDUCT, AND CONSUMER CONFIDENCE OUTCOMES

**TABLE 51:** THEME-WISE CHALLENGES AND SUPTECH OUTCOMES

| Theme | Current challenges | SupTech-enabled capabilities | Anticipated outcomes (3-5 years) |
|---|---|---|---|
| **Market development** | Fragmented market data, and limited product innovation due to regulatory uncertainty. | Real-time market intelligence, automated product approval monitoring, and supervisory data dashboards. | Better market transparency, faster rollout of inclusive products, improved understanding of DFS usage and gaps. |
| **Innovation enablement** | Cautious experimentation due to supervisory blind spots and reactive policymaking. | Early warning systems, performance tracking of new providers, sandbox integration with SupTech data environments. | Increased FinTech participation, agile regulatory response, more responsive and inclusive innovation ecosystem. |
| **Market conduct supervision** | Weak enforcement, especially in remote or underserved regions; inconsistent handling of consumer complaints. | Multi-channel complaint systems, conduct scoring analytics, auto-flagging of misconduct based on transaction or agent data. | Higher compliance, stronger consumer recourse, uniform treatment of providers, and increased trust in digital financial services. |
| **Consumer confidence** | Low trust due to opaque practices, pricing irregularities, fraud, and lack of recourse. | Digital transparency dashboards, pricing monitoring, and customer protection tools with AI-based trend detection. | Increased digital adoption, stronger uptake by underserved segments, improved DFS safety and accountability perception. |

## 6.4 CLIMATE RESILIENCE AND INCLUSIVE GREEN FINANCE

The regional SupTech platform presents an opportunity to integrate climate risk considerations into the core of supervisory practices across PIRI member countries who are acutely vulnerable to climate-related shocks.

By embedding climate-related financial disclosures, stress-testing tools, and ESG data monitoring capabilities into the SupTech architecture, regulators can better anticipate, mitigate, and respond to the systemic financial risks posed by climate change.

As central banks globally begin to incorporate environmental risk into prudential frameworks, guided by institutions like the Network for Greening the Financial System (NGFS), SupTech will become an indispensable enabler of climate-aligned supervision. For PIRI, this offers dual dividends: **protecting the stability of small, exposed financial systems and mobilizing sustainable finance flows to underserved communities.**

Survey insights reinforce this potential:

- Over 71 percent of regulators expressed interest in tracking climate risk exposures in their supervisory systems.
- 68 percent of industry respondents supported the inclusion of ESG reporting requirements, noting their growing importance for investors and multilateral partners.

Notably, integrating inclusive green finance into supervisory frameworks will also require:

- Strengthening climate risk data reporting standards across regulated institutions.
- Building analytical capacity within supervisory departments.
- Close coordination with ministries of environment and climate funds to align taxonomies and frameworks.

## SUPTECH CONTRIBUTIONS TO CLIMATE RESILIENCE AND GREEN FINANCE

**TABLE 52:** SUPTECH CONTRIBUTIONS TO CLIMATE RESILIENCE AND GREEN FINANCE

| Thematic area | SupTech functions and capabilities | Anticipated inclusion outcomes |
|---|---|---|
| **Climate risk data collection** | > Web/API-based data ingestion for climate-related financial risks<br>> ESG metrics integration<br>> Sector-specific risk tagging | > Improved national dashboards for physical and transition risks<br>> Transparent baseline for policy actions |
| **Stress testing and scenario modelling** | > Simulations for climate-linked credit, market, and operational risk<br>> Visualized macroprudential impact assessments | > Early-warning systems for climate-induced financial instability<br>> Enhanced capital adequacy planning |
| **Green finance flow monitoring** | > Track credit flows to green sectors and climate-vulnerable communities<br>> Monitor alignment with sustainable finance taxonomies | > Incentivized lending to SMEs and rural areas<br>> Evidence for policy incentives or concessional finance arrangements |
| **Carbon exposure dashboards** | > Real-time asset-level monitoring<br>> Geographic mapping via GIS data<br>> Sectoral carbon intensity benchmarking | > Supervised transition planning by institutions<br>> Identification of carbon risk concentration in portfolios |
| **Compliance with green taxonomies** | > Automated classification tools<br>> Greenwashing detection algorithms<br>> Alignment verification with national/ international standards | > Protection of consumers and markets from false sustainability claims<br>> Improved trust in green markets |
| **Cross-border climate coordination** | > Regional alignment dashboards<br>> Integrated ESG/green reporting standards<br>> Risk signal sharing among PIRI supervisors | > Streamlined oversight of cross-border exposures<br>> Peer-based improvements to green finance supervision |

If developed and deployed intentionally, the SupTech platform can serve as a foundational digital infrastructure not just for prudential oversight but also for inclusive green finance.

Beyond supporting prudential risk analysis, consumer protection and green finance, the proposed SupTech platform has the potential to deliver measurable gains in inclusive financial integrity. Enhanced digital reporting and API based data submission can support proportionate risk-based supervision of banks, fintechs and remittance providers, in turn contributing to sustaining correspondent banking relationships and lowering remittance costs.

For PIRI members, it provides a cost-efficient channel to embed sustainability into regulatory workflows, while aligning with global standards and unlocking climate-aligned investments that benefit the most vulnerable.

## 6.5 DEPENDENCIES, RISKS, AND ENABLERS OF IMPACT

Successful implementation and scaling of a regional SupTech platform in the Pacific hinge on the interplay of several dependencies, potential risks, and strategic enablers. While the diagnostic findings demonstrate a strong collective commitment and foundational readiness, realizing long-term inclusion and oversight outcomes requires proactively navigating implementation challenges and structural limitations.

## KEY DEPENDENCIES

**TABLE 53:** KEY DEPENDENCIES AND ENABLERS OF IMPACT

| Dependency | Description | Relevance |
|---|---|---|
| **Cross-institutional commitment** | Sustained endorsement from central bank governors, policymakers, and technical leads. | Guarantees continuity, resource allocation, and institutional alignment throughout the project lifecycle. |
| **BSA Support Office (BSO) engagement** | Ongoing technical support, training, and platform customization facilitated by the BSO. | Essential for timely and successful deployment, updates, and onboarding across the 7 member institutions. |
| **Digital infrastructure** | Reliable access to the internet, hardware, cloud hosting options, and internal data management systems. | Fundamental for hosting, data integration, and real-time reporting features. Responses to the survey flagged disparities here. |
| **Legal and policy readiness** | Clear mandates for digital reporting, data protection, and cross-border data use. | Several PIRI countries lack updated laws or enforcement capabilities |
| **Human capacity** | Availability of skilled IT staff, supervisory analysts, and cross-functional champions. | Both regulator and industry surveys confirmed technical skills gaps, especially in data analysis and automation. |

## PRINCIPAL RISKS AND MITIGATION STRATEGIES

**TABLE 54:** PRINCIPAL RISKS AND MITIGATION STRATEGIES

| Risk | Description | Mitigation strategy |
|---|---|---|
| **Sunrise problem (disparate adoption rates)** | Different levels of readiness may delay collective implementation. | Implement the country-onboarding matrix with tailored timelines, joint trainings, and readiness assessments. |
| **Infrastructure gaps** | Poor internet connectivity, limited hardware or hosting options. | Focus Phase 1 on digital readiness assessment and basic tech upgrades; encourage hybrid API + portal approach. |
| **Resistance to change** | Hesitation to replace legacy manual systems and workflows. | Prioritize high-visibility success stories, onboard champions, and conduct joint peer-learning programs. |
| **Vendor or governance fatigue** | Over-dependence on a single governance entity may reduce agility. | Leverage the BSA governance model with equal voting rights and user-led roadmap development. |
| **Data privacy and sovereignty concerns** | Lack of clear rules may inhibit cross-border or cloud-based deployment. | Strengthen policy frameworks through AFI-led in-country support and reference Data Protection Acts (e.g., Seychelles 2023 Act). |

## STRATEGIC ENABLERS

**TABLE 55:** STRATEGIC ENABLERS

| Enabler | Description | Impact |
|---|---|---|
| **AFI's technical support and peer network** | The existing network of 16+ BSA-using regulators offers immense peer learning, templates, and troubleshooting. | Reduces time to value, accelerates institutional learning, and avoids duplication of effort. |
| **Shared licensing and support costs** | Reduced financial burden through pooled platform development and shared helpdesk infrastructure. | Promotes sustainability and equitable access across small and large regulators. |
| **Policy alignment with NFIS and inclusion agendas** | Most countries have National Financial Inclusion Strategies and gender-focused targets. | SupTech can serve as a data and monitoring utility to support these goals. |
| **Progressive modular architecture** | Tiered implementation roadmap allows countries to scale as capacity increases. | Prevents overburdening institutions; supports tailored national adoption. |
| **Joint capacity building and BSO roadmap** | BSO roadmaps co-developed with users ensure alignment with PIRI-specific needs. | Increases ownership, transparency, and value realization. |

The regional SupTech initiative represents a bold and necessary step toward inclusive, data-driven financial sector oversight in the Pacific. However, impact is not guaranteed. It will be earned through strategic coordination, staged deployment, risk mitigation, and deep peer engagement. By leveraging AFI's ecosystem, proven models like BSA, and strong regional cohesion, PIRI members are well-positioned to overcome initial hurdles and deliver measurable long-term outcomes.

## 6.6 CONCLUSION: SUPTECH AS A CATALYST FOR INCLUSIVE DEVELOPMENT

The implementation of a regional SupTech platform for the Pacific Islands Regional Initiative (PIRI) marks a defining moment for financial regulation, digital transformation, and inclusive innovation in small island developing states (SIDS). What began as a diagnostics exercise to assess needs, gaps, and opportunities has now evolved into a credible, evidence-backed pathway for deploying a shared digital infrastructure to enable robust, real-time, and risk-based supervisory oversight.

The insights across this report affirm the catalytic potential of SupTech in driving multidimensional transformation. First, by digitizing data collection and supervisory processes, regulators can enhance efficiency, reduce compliance burden, and improve transparency, outcomes that are foundational to both financial sector stability and innovation.

Second, SupTech enables a granular view into financial inclusion progress, helping central banks better identify gaps by gender, geography, and socio-economic status, while enforcing consumer protection, responsible innovation, and proportionate regulation. Third, SupTech opens the door for greater cross-border coordination, climate risk tracking, and policy experimentation across emerging domains like correspondent banking relationships, Open Finance, CBDCs, and ESG reporting.

The unique governance model of a regulator-led solution such as the Bank Supervision Application (BSA), with co-creation rights and institutional sovereignty, ensures that SupTech can evolve with user needs. The preference expressed by over 90 percent of surveyed PIRI institutions for this model reflects a strong appetite for collective action, shared capabilities, and sustainable digital transformation. Importantly, it enables the region to avoid "sunrise problems" where adoption progresses unevenly, risking fragmentation and resource waste.

Nonetheless, this vision will not implement itself. As highlighted in Section 7.5, execution depends on active governance, human capacity, legal readiness, and financial sustainability. The roadmap, modular blueprint, and onboarding strategy presented in Sections 5 and 6 must now be taken forward with political will, technical rigor, and institutional collaboration. With strategic leadership and continued support from AFI, the BSO, and development partners, the regional SupTech platform can become a foundational digital public infrastructure that future-proofs financial regulation while deepening inclusion.

Ultimately, this initiative signals a shift, from reactive, paper-based supervision to proactive, insight-led regulation; from fragmented oversight to harmonized regional innovation; and from inclusion ambition to actionable progress. The SupTech platform is not an end, but a beginning, of how small jurisdictions can punch above their weight by pooling knowledge, co-owning digital utilities, and ensuring no community is left behind in the digital financial era.

Video Media Studio Europe / Shutterstock.com

## CASE FOR INVESTMENT: ADVANCING INCLUSIVE SUPERVISION THROUGH PHASE II IMPLEMENTATION

### FROM VISION TO ACTION

Phase I of the Pacific SupTech Diagnostics has delivered clear, data-backed evidence that a shared Supervisory Technology (SupTech) platform is both feasible and transformative for the Pacific. Through multi-country surveys, readiness assessments, and use-case mapping, regulators have co-designed a comprehensive blueprint and five-year roadmap. With strong consensus among PIRI members, the region is now ready to move from design to delivery. **Phase II represents the critical bridge, translating strategic vision and political will into operational SupTech infrastructure that strengthens inclusion, financial integrity, and systemic resilience across all Pacific jurisdictions.**

### CATALYST FOR INCLUSIVE GROWTH AND FINANCIAL INTEGRITY

At the heart of this initiative lies a dual mandate: advancing financial inclusion and safeguarding financial integrity. Phase II operationalizes key elements of the PIRI De-risking Action Plan, enabling real-time visibility into cross-border flows, AML/CFT compliance, and market vulnerabilities. By embedding gender- and MSME-disaggregated data, regulators can shape more equitable policies and close access gaps. For funders, this is a rare opportunity to support a solution that simultaneously addresses **inclusion, integrity, and trust**, the cornerstones of sustainable development.

### REGIONAL EFFICIENCY AND COLLECTIVE RESILIENCE

For small island developing states, standalone digital systems are cost-prohibitive and unsustainable. A shared, regulator-led SupTech platform, built on the proven **Bank Supervision Application (BSA)** model, delivers scale, value-for-money, and sovereignty. By pooling investments, governance, and technical support, the Pacific can leapfrog capacity constraints while ensuring consistent, high-quality supervision. This regional model exemplifies **smart aid: where every dollar multiplies its impact across multiple jurisdictions.**

### ANCHORED IN LOCAL LEADERSHIP, BACKED BY GLOBAL PARTNERSHIP

PIRI central banks have endorsed SupTech as a regional priority under AFI's facilitation and technical leadership. With governance frameworks, capacity-building, and implementation sequencing ready, the initiative is locally owned and globally aligned. Partnering in this phase offers donors a high-visibility opportunity to **amplify regional leadership**, demonstrate **public-public innovation**, and establish a replicable model for inclusive digital infrastructure worldwide.

### AN INVESTMENT IN SCALABLE IMPACT

Phase II will deliver measurable results within 24 months: operational SupTech modules in all PIRI members, improved data timeliness and quality, enhanced consumer protection, and evidence-based policy interventions for women, MSMEs, and rural populations. It also lays the foundation for future-ready supervision in open finance, green finance, and emerging digital innovations. **This is a strategic, low-risk investment with outsized returns, positioning the Pacific as a global beacon of inclusive, data-driven regulation and exemplifying the power of collective digital transformation.**

Worchi Zingkhai / Shutterstock.com

# ANNEX
# LIST OF RESPONDENTS TO SURVEYS

## REGULATORS

National Reserve Bank of Tonga

Reserve Bank of Vanuatu

Central Bank of Papua New Guinea

Central Bank of Seychelles

Central Bank of Solomon Islands

Reserve Bank of Fiji

Central Bank of Samoa

## REGULATED ENTITIES

Seychelles Credit Union

First Investment Finance Limited

Creditbank PNG

Pacific MMI Insurance Ltd

Bank Of Baroda

Financial and Private Sector Staff Savings and Loan Society Ltd

Central Bank Officers Savings and Loan Societies

Papua Finance Limited

Credit Corporation Finance Limited

Airtel Seychelles

Women's Micro Bank Limited

Rural Development Bank Savings & Loans Ltd

Bank Of Ceylon

Mibank

Nouvobanq

Trans Pacific Assurance Limited

Al Salam Bank Seychelles Ltd

Bank South Pacific (BSP)

Credit Corporation Si Ltd

Capital Insurance (Solomon Island) Limited

ANZ

Samoa Life Assurance Corporation

Tower Insurance

POB

Vodafone Samoa

Bred Bank Solomon

Development Bank of Solomon Islands (DBSI)

Vodafone Samoa Limited

SPBD Microfinance (Samoa) Ltd

# ABBREVIATIONS

| | |
|---|---|
| **ADB** | Asian Development Bank |
| **AFI** | Alliance for Financial Inclusion |
| **AI** | Artificial Intelligence |
| **AML** | Anti-Money Laundering |
| **API** | Application Programming Interface |
| **BSA** | Bank Supervision Application |
| **BSO** | Bank Supervision Application (BSA) Support Office |
| **CAMELS** | Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk |
| **CBN** | Central Bank of Nigeria |
| **CFT** | Combating the Financing of Terrorism |
| **CICO** | Cash In Cash Out |
| **CSV** | Comma Separated Values |
| **DFS** | Digital Financial Services |
| **DNFBP** | Designated Non-Financial Businesses and Professions |
| **ECB** | European Central Bank |
| **ESG** | Environmental, Social, and Governance |
| **KPIs** | Key performance indicators |
| **KYC** | Know Your Customer |
| **MOU** | Memorandum of Understanding |
| **MSC** | MicroSave Consulting |
| **MSMEs** | Micro, Small & Medium Enterprises |
| **MVSS** | Minimum Viable SupTech Solution |
| **NAMFISA** | Namibia Financial Institutions Supervisory Authority |
| **NFIS** | National Financial Inclusion Strategy |
| **PACER PLUS** | Pacific Agreement on Closer Economic Relations Plus |
| **PIRI** | Pacific Islands Regional Initiative |
| **RegTech** | Regulatory Technology |
| **SupTech** | Supervisory Technology |
| **TFS** | Targeted Financial Sanctions |
| **UAT** | User Acceptance Testing |
| **UNCDF** | United Nations Capital Development Fund |

# REFERENCES

1. **di Castri, S., Grasser, M., Ongwae, J. 2023.** "State of SupTech Report 2023." Cambridge SupTech Lab. 28 December. Available at: https://lab.ccaf.io/wp-content/uploads/2024/03/Cambridge-State-of-SupTech-Report-2023.pdf; **di Castri, S., Grasser, M., Ongwae, J. 2024.** "State of SupTech Report 2024: Executive Summary." Cambridge SupTech Lab. 19 December. Available at: https://lab.ccaf.io/wp-content/uploads/2024/12/Cambridge-SupTech-Lab-State-of-SupTech-2024-Exec-Summary-1.pdf

2. **Alliance for Financial Inclusion. 2024.** "Victoria Consensus: Advancing Responsible and Inclusive Innovation for Financial Inclusion." Alliance for Financial Inclusion. 10 October. Available at: https://www.afi-global.org/wp-content/uploads/2024/10/Victoria-Consensus.pdf

3. **Alliance for Financial Inclusion. 2022.** "Sochi Accord on Inclusive FinTech." Alliance for Financial Inclusion. 5 September. Available at: https://www.afi-global.org/wp-content/uploads/2024/10/Sochi_Accord-2022.pdf

4. **Alliance for Financial Inclusion. 2022.** "Regulatory and Supervisory Technologies for Financial Inclusion." Alliance for Financial Inclusion. February. Available at: https://www.afi-global.org/wp-content/uploads/2024/10/RegTech_SupTech_special_report_isbn.pdf

5. **di Castri, S., Grasser, M., Ongwae, J. 2023.** "State of SupTech Report 2023." Cambridge SupTech Lab. 28 December. Available at: https://lab.ccaf.io/wp-content/uploads/2024/03/Cambridge-State-of-SupTech-Report-2023.pdf

6. **Alliance for Financial Inclusion. 2022.** "Regulatory and Supervisory Technologies for Financial Inclusion." Alliance for Financial Inclusion. February. Available at: https://www.afi-global.org/wp-content/uploads/2024/10/RegTech_SupTech_special_report_isbn.pdf

7. **di Castri, S., Grasser, M., Ongwae, J., Mestanza, J. M. 2022.** "State of SupTech Report 2022." Cambridge SupTech Lab. 20 December. Available at: https://lab.ccaf.io/wp-content/uploads/2023/01/Cambridge-State-of-SupTech-Report-2022.pdf

8. **Alliance for Financial Inclusion. 2023.** "Developing an Agent Registry System as a RegTech Tool in the Philippines." Alliance for Financial Inclusion. September. Available at: https://www.afi-global.org/wp-content/uploads/2024/10/Developing-an-Agent-Registry-System-as-a-Regtech-Tool_Philippines.pdf

9. **di Castri, S., Grasser, M., Ongwae, J. 2023.** "State of SupTech Report 2023." Cambridge SupTech Lab. 28 December. Available at: https://lab.ccaf.io/wp-content/uploads/2024/03/Cambridge-State-of-SupTech-Report-2023.pdf

10. **di Castri, S., Grasser, M., Ongwae, J. 2023.** "State of SupTech Report 2023." Cambridge SupTech Lab. 28 December. Available at: https://lab.ccaf.io/wp-content/uploads/2024/03/Cambridge-State-of-SupTech-Report-2023.pdf

11. **Alliance for Financial Inclusion. 2024.** "Behavioral Insight Can Accelerate Progress on Financial Inclusion." Alliance for Financial Inclusion. 17 February. Available at: https://www.afi-global.org/opinion/behavioral-insight-can-accelerate-progress-on-financial-inclusion/

12. **Alliance for Financial Inclusion. 2023.** "Developing an Agent Registry System as a RegTech Tool in the Philippines." Alliance for Financial Inclusion. September. Available at: https://www.afi-global.org/wp-content/uploads/2024/10/Developing-an-Agent-Registry-System-as-a-Regtech-Tool_Philippines.pdf

13. **Alliance for Financial Inclusion. 2023.** "Case Study on Bank Supervision Application." Alliance for Financial Inclusion. 6 December. Available at: https://www.afi-global.org/wp-content/uploads/2025/02/AFI_Case-Study_Bank-Supervision-Application.pdf

14. **di Castri, S., Grasser, M., Ongwae, J. 2023.** "State of SupTech Report 2023." Cambridge SupTech Lab. 28 December. Available at: https://lab.ccaf.io/wp-content/uploads/2024/03/Cambridge-State-of-SupTech-Report-2023.pdf

Alliance for Financial Inclusion
**AFI,** Sasana Kijang, 2, Jalan Dato' Onn, 50480 Kuala Lumpur, Malaysia
**t** +60 3 2776 9000 **e** info@afi-global.org www.afi-global.org
Alliance for Financial Inclusion AFI.History @NewsAFI @afinetwork