Content

Vision
Approach
Structure and governance
Achievements
Deliverables
Process
The future of financial supervision and regulation lies in using technology and data to improve the speed, quality, and comprehensiveness of information in support of targeted, risk-based decision-making.
New technologies, new opportunities.
R²A is an accelerator for the deployment of solutions that augment regulatory and supervisory capabilities.
R²A supports a vision of the central bank of the future

**INPUTS**
- Compliance reports
- Geo-tagged transactions
- Access point locations
- Crowdsourced customer information from users
- Integration across departments & financial authorities

**HOUSING & PROCESSING**
- Customer complaints
- Banking supervision
- Payments oversight
- AML supervision
- FIU

**OUTPUTS**
- Intelligence for risk-based prudential, market conduct, AML and competition supervision
- Proportional, lean regulation (e.g., sandboxes, CDD)
- Machine readable / searchable / self-executable regulation
- Automatized licensing process
- Intelligence for smart government & competition authority
- Open data
Terminology

FINANCIAL TECHNOLOGY (FINTECH)
Application of new technologies to the provision of financial services and products

REGULATORY TECHNOLOGY (REGTECH)
Application of new technologies for regulatory compliance

REGTECH FOR REGULATORS (REGTECH²)
Application of new technologies to needs of regulators

SUPERVISORY TECHNOLOGY (SUPTECH)
Application of new technologies to needs of supervisors
R²A provides matched funding for development of solutions.

User-centered design and development in collaboration with financial authorities.

R²A helps to structure a project in a way a vendor can understand and respond.

R²A has a vendor database and ability to follow a range of procurement approaches.

R²A helps in project monitoring and management on the client side.

R²A provides matched funding for development of solutions.

Global perspective and peer learning.
Content

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Process
BFA, the Bill & Melinda Gates Foundation, Omidyar Network, and USAID conceived R²A in 2016. The program kicked off in October. R²A was incubated as a special project of Rockefeller Philanthropy Advisors, a U.S. nonprofit. Consulting firm BFA manages the initiative. Implementing partners are financial authorities and vendors. Learning partners are other supervisors and regulators, and global standard setting bodies.
Steering committee

SIMONE DI CASTRI
ROSITA NAJMI
KABIR KUMAR
CHRIS PAGE
PAUL NELSON
A team of experts in regulation and supervision, tech, and product and project management lead the implementation of the initiative.
The R²A approach for the demonstrations is valued by the partner financial authorities and was effective for the selection of the vendors.

There is demand from financial authorities around the world (~20) for a bite-sized intervention package as offered by R²A.

There are vendors willing to come to the table around the bite-sized intervention.

There are several important RegTech use cases that leverage APIs for info collection, ML for analysis, and NLP, which are of strong interest beyond the two R²A initial partners.

There is a demand for discussion at cross-country and cross-sector levels (e.g., Financial Crime working group).
“R²A has truly connected us with the possibilities that technology can provide to enhance and further support our work in financial supervision.”

“Our RegTech projects will result in streamlined processes, enhanced ability for better data capture and increased bandwidth for our human resources to perform higher quality analytics to support more responsive supervision and development of financial inclusion policies.”

Nestor Espenilla, Governor, Bangko Sentral ng Pilipinas

“As a result of the partnership with R²A, CNBV has strengthened tech-oriented innovation for market supervision.”

Jose Bernando Gonzalez Rojas, President, CNBV
“The Institute recommends that the Department of the Treasury create an interagency RegTech Task Force to [...] Look to the examples set by the U.K.’s FCA and the R²A Accelerator to drive the adoption of SupTech solutions. This means leveraging the resources of both the public and private sector to create incentives to develop SupTech solutions.”
Deliverables

**BUY IN**
Financial authorities partnering with R²A for demonstrations. Pipeline of ~15 financial authorities that aim to partner with R²A.

**PROTOTYPES**
Prototypes delivered.

**PEER LEARNING**
- 2 in person global working group meetings
- Virtual financial crime working group
- Vendor database
- Solution tracker
- 6 knowledge documents
- Knowledge shared with relevant partners through their events
Delivered prototypes

Chatbot and CMS for customer complaints

API and back office reporting and visualization application

Data infrastructure for AML supervision
Three $R^2A$ competitions, 31 applications
See $R^2A$ vendor database
Three $100,000 awards
Delivered prototypes

Chatbot and CMS for customer complaints

API and back office reporting and visualization application

Data infrastructure for AML supervision
PHILIPPINES
Chatbot Application and Complaints Management System

A Chatbot Application and Complaints Management System for the Bangko Sentral ng Pilipinas (BSP)
R²A Project Retrospective and Lessons Learned

DATABASE STORAGE
CLOUD COMPUTING
APIs
MACHINE LEARNING
ARTIFICIAL INTELLIGENCE
DATA ANALYTICS
(Excel-like syntax)

NATURAL LANGUAGE PROCESSING
VISUALIZATION TOOLS

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NATURAL LANGUAGE PROCESSING
VISUALIZATION TOOLS
Chatbot Application

Central Bank

Complaints Resolution Database

Complaint case database

CaseManager™

Electronic Portal for Supervised Entities

Call center complaint management interface

Consumer specialist

Supervised Entities

API

Gateway

Voice Calls

Mail

Kiosks and Walk-ins

Chatbot Application

SMS Gateway

Gateway

Facebook Messenger

SMS

Future channels

Supervised Entities
BSP has visibility over customers’ experience
BSP can verify providers compliance with consumer protection and resolution mechanisms guidance
The system could determine patterns and structuralizes complaints for machine learning opportunities

Available to all Filipinos

Estimated 1 to 2 weeks/month for complaints analysis saved
Delivered prototypes

Chatbot and CMS for customer complaints

API and back office reporting and visualization application

Data infrastructure for AML supervision
PHILIPPINES
API Prudential Reporting System

An API-based Prudential Reporting System for the Bangko Sentral ng Pilipinas (BSP)
R²A Project Retrospective and Lessons Learned

SIMONE DI CECC. MAUZ GRAV, ANDREW KIENBEIN
August 2018

APIs
(XML/REST)

DATABASE
STORAGE
(SQLSERVER)

DATA ANALYTICS
(Excel-like syntax)

MESSAGING
QUEUE
(RabbitMQ)

VISUALIZATION
TOOLS
From 29 to 1 reporting scheme

From 107,000 to 50,000 data points

From 30 minutes to 10 seconds processing time
Delivered prototypes

Chatbot and CMS for customer complaints

API and back office reporting and visualization application

Data infrastructure for AML supervision
MEXICO
APIs/ML for AML supervision
Number of suspicious transaction alerts
45 alerts → 57 alerts (+)

Duration of each on site inspection
3-5 weeks → 3–5 days
Working group meetings hosted

- **March 2017**
  - 40 participants
  - 15 countries
  - 3 partner financial authorities

- **Jan. 2018**
  - 70 participants
  - 18 countries
  - 28 regulators from 16 countries
Launched in Aug. 2018 to provide AML supervisors with a shared platform

Active participation from 8 financial authorities representing 6 countries

6 virtual meetings held through 2018

Working together to develop toolkit for tech powered AML/CFT supervision
RegTech for Regulators Vendor Database

Welcome to the RegTech/SupTech vendor database! Find a company that provides a solution for your use case by clicking on the filters to the left, or explore the companies below.
RegTech²/SupTech Solution Tracker

This map will be updated to reflect RegTech solutions around the world. Don't see your country's solution listed? Contact us at R2A@bfaglobal.com.

Use Cases:
- Automate regulatory data reporting
- Big Data analytics for market data
- Clarify compliance requirements
- Data visualization
- Detect fraud and AML
- Facilitate complaints handling

70 solutions
Knowledge products

- White paper
- Process paper
- Chatbot case study
- API case study
- AML case study
- RegTech² survey results
Presentations

- FinTechStage Financial Inclusion Forum – Indonesia – March 2017
- Alliance for Financial Inclusion (AFI) 5th African Mobile Phone Financial Services Policy Initiative (AMPI) Leader's Roundtable and Regulatory Training on Digital Financial Services – Mozambique – May 2017
- Financial Action Task Force (FATF) FinTech and RegTech Forums – San Jose and Berlin – May and October 2017
- AFI Global Policy Forum (GPF) – Egypt – September 2017
- Finovate Fall 2017 – New York – September 2017
- Financial Inclusion Global Initiative (FIGI) – India – November 2017
- First “Agustín Carstens” Annual Open Lectures on Financial Inclusion – Mexico – November 2017
- The Bank for International Settlements’ Financial Stability Institute and the International Association of Deposit Insurers (BIS/FSI-IADI) RegTech and Fintech event – Basel – February 2018
- FSDA conference – London – March 2018
- Special Supervisors Group meeting held at U.S. Federal Reserve – Washington, DC – March 2018
- RBI Banking Regulation department retreat – India – May 2018
- “Reengineering Financial Supervision and Policy Development” at BIS FIS event – Basel – May 2018
- ASEAN Working Committee on Financial Inclusion (WC-FINC) 6th Meeting – Philippines – August 2018
- AFI Global Policy Forum (GPF) – Russia – September 2018

Chaired UNSGSA working group

Nearly 20 international presentations, including Bank for International Settlements and Alliance for Financial Inclusion events
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Challenges

- 2/3 report receiving incomplete or bad quality data from supervised entities (R²A survey)
- More than half report human or system errors affecting data validation (R²A survey)
- Limited internal capacity, availability of funds, and difficult procurement cycles to test innovative approaches
- Inadequate analytical and visualization tools
- The demand is unclear and fragmented
- Smaller vendors may have innovative and cheaper products, but struggle to break in
- They battle with long procurement cycles

FINANCIAL AUTHORITIES

REGTECH VENDORS
R²A provides matched funding for development of solutions

R²A helps to structure a project in a way a vendor can understand and respond

R²A has a vendor database and ability to follow a range of procurement approaches

R²A helps in project monitoring and management on the client side

R²A provides matched funding for development of solutions

Global perspective and peer learning

User-centered design and development in collaboration with financial authorities
Challenges

1. INCEPTION
Building Trust and Securing Commitment

2. USE CASE
Value Proposition Analysis

3. GOVERNANCE
Defining Project Parameters

4. DESIGN
Proof of Concept

5. RESOURCING
Pairing Sponsors with Tech Providers

6. PROTOTYPING
Iterative Testing & Development

7. PRODUCTION
Taking the Product to Market
- White paper
- Process paper
- Chatbot case study
- API case study
- AML case study
- Vendor database
- Solution tracker