











REGTECH FOR REGULATORS ACCELERATOR

Review of phase 1 (October 2016 – September 2018) @r2accelerator | www.R2Accelerator.org

Content

AN I



Vision

Approach

Structure and governance Achievements Deliverables Process



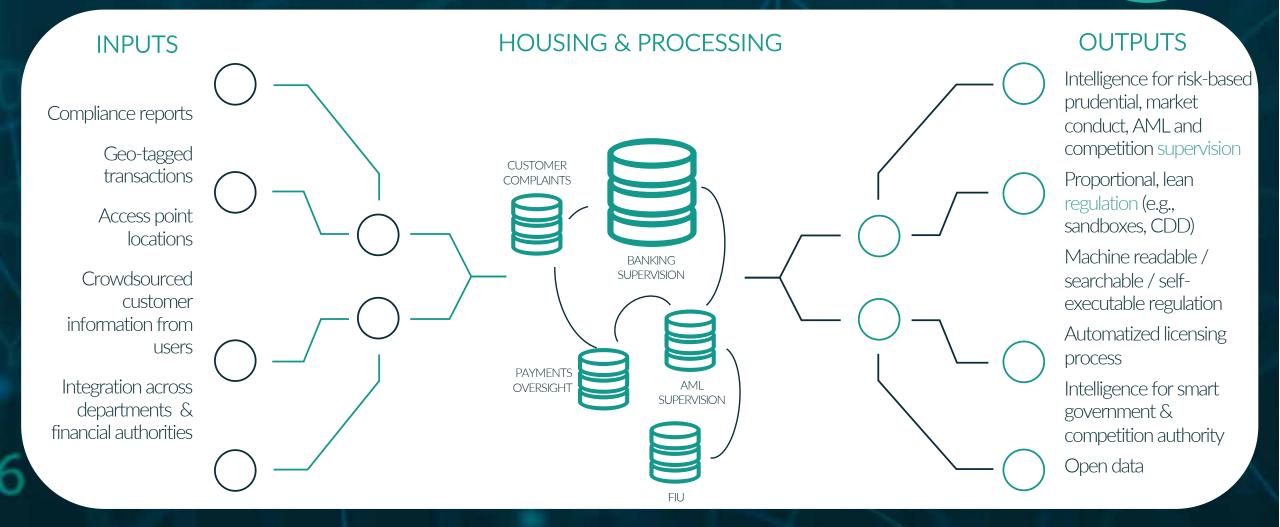
The future of financial supervision and regulation lies in using technology and data to improve the speed, quality, and comprehensiveness of information in support of targeted, risk-based decision-making

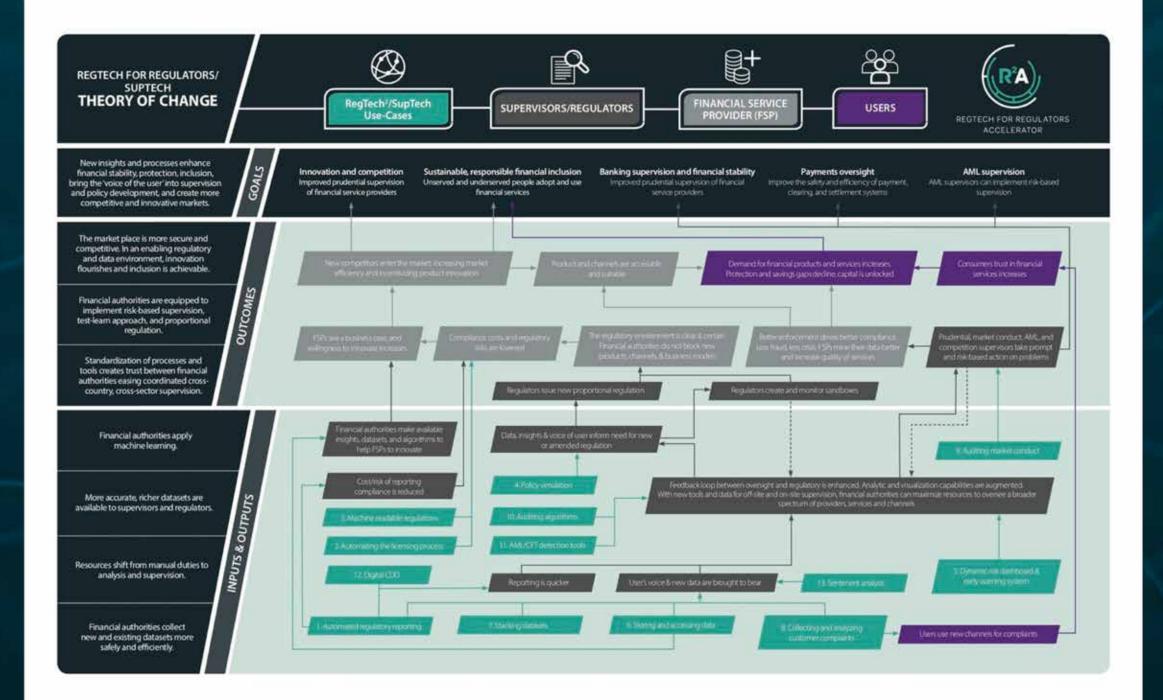




R²A is an accelerator for the deployment of solutions that augment regulatory and supervisory capabilities.

R²A supports a vision of the central bank of the future





Terminology



ENAMICAL SERVICE PROVIDE FINANCIAL FINANCIAL 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

FINANCIAL AUTHORITHS SUPERVISORY TECHNOLOGY (SUPTECH)

Application of new technologies to needs of supervisors

Content

κ¥-



Vision Approach

Structure and governance Achievements Deliverables Process



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

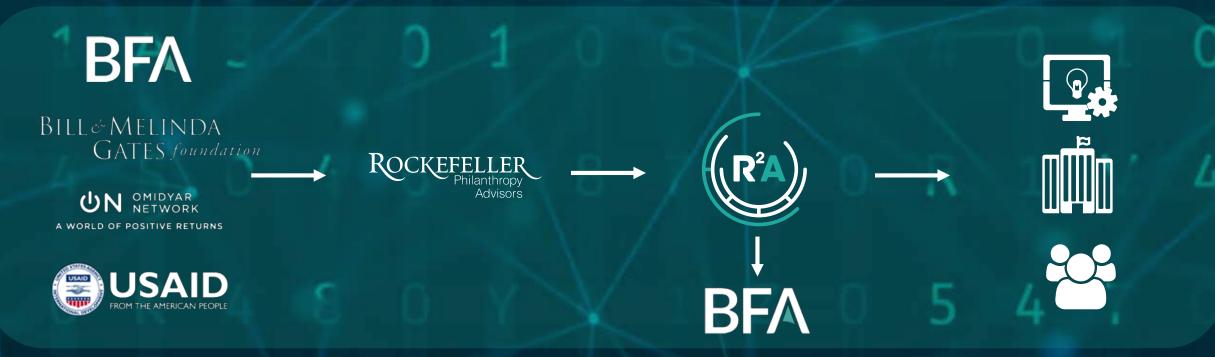
Content

لم



Vision Approach Structure and governance Achievements Deliverables Process

Structure



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.

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 BILL& MELINDA GATES foundation



KABIR KUMAF

UN OMIDYAR NETWORK A WORLD OF POSITIVE RETURNS



CHRIS PAGE ROCKEFELLER Philanthropy Advisors



PAUL NELSON USAID FROM THE AMERICAN PEOPLE A team of experts in regulation and supervision, tech, and product and project management lead the implementation of the initiative



Content

 (\bigcirc)



Vision Approach Structure and governance Achievements Deliverables Process

Achievements





The R²A approach ¦ There is demand for the demonstrations is valued by the partner financial authorities and was effective for the selection of the vendors.

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





JULY 2018

MILKEN INSTITUTE

RegTech: Opportunities for More Efficient and Effective Regulatory Supervision and Compliance Dan Murphy and Jackson Muellar

"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 R^2A 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."

Milken Institute

Engaged financial authorities



Content



Vision Approach Structure and governance Achievements Deliverables Process

Deliverables



BUY IN



PROTOTYPES

PEER LEARNING

2 oritios r

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



Prototypes delivered.

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



RA)

BFA

Financial Authorities in the Era of Data

Abundance



Chatbot and CMS for customer complaints





API and back office reporting and visualization application

00111 00101 01100

Data infrastructure for AML supervision

Three R²A competitions, 31 applications See R²A vendor database



✓ Sinitic

Argus BigML CFI – Accion Pez.Al Pure Money Technology

> Gestell Regtech Consulting

DivDOC JC Chapman Ltd Ohalo Symfanet

Fonetic Solutions 🔿

Nsano

CRT LLC & Pinecone Ltd

Software Group Deltabee Tavroi Research Clare.ai OpenCBS

M360 Ideology

Alfafusion Amagi Bloom SCI Ventures SGV TI CI



Three \$100,000 awards



♥ Sinitic

CRT

 \bigcirc CRT LLC & Pinecone Ltd



Delivered prototypes





Chatbot and CMS for customer complaints





00111 00101 01100 API and back office reporting and visualization application Financial Authorities in the Era of Data Abundance RegTech for Regulators and SupTech Solutions

BFA

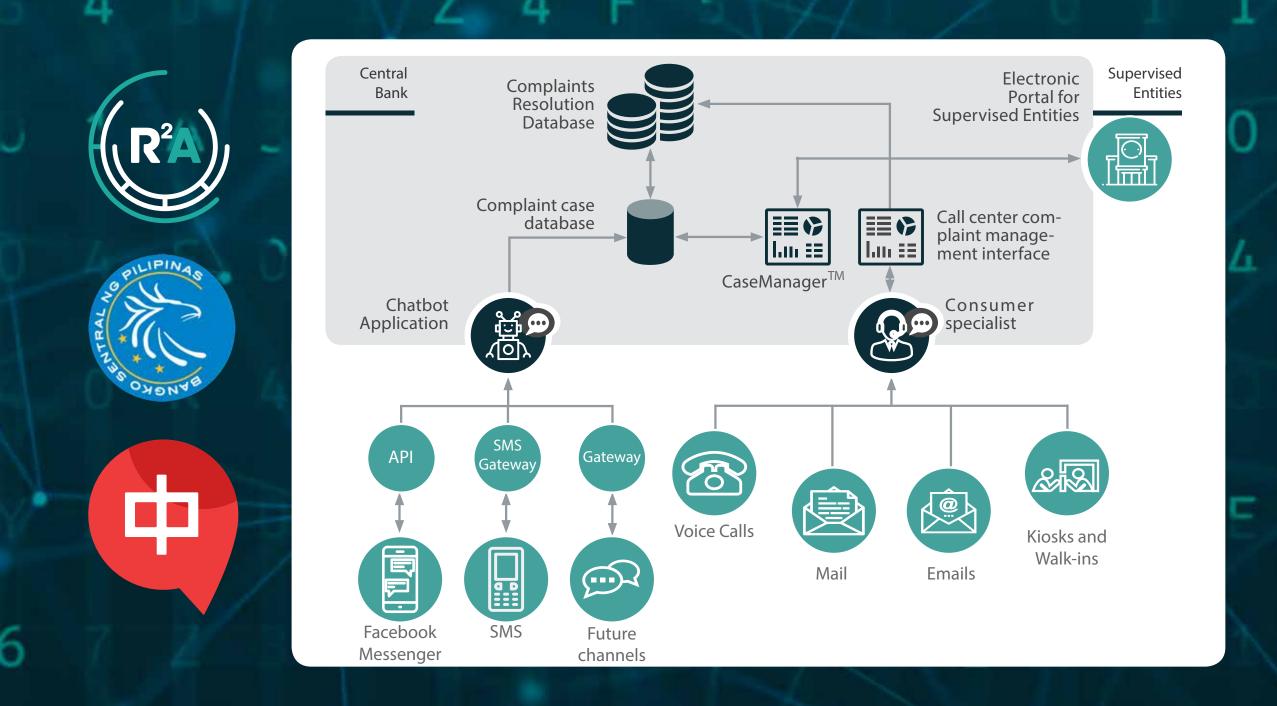


Data infrastructure for
 AML supervision

PHILIPPINES Chatbot Application and Complaints Management System



 \mathbf{R}^2





20



Estimated 1 to 2 weeks/month for complaints analysis saved

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

Delivered prototypes





Chatbot and CMS for customer complaints





API and back office reporting and visualization application Financial Authorities in the Era of Data Abundance RegTech for tegulators nd SupTech Diutions

BFA





Data infrastructure for AML supervision

PHILIPPINES API Prudential Reporting System





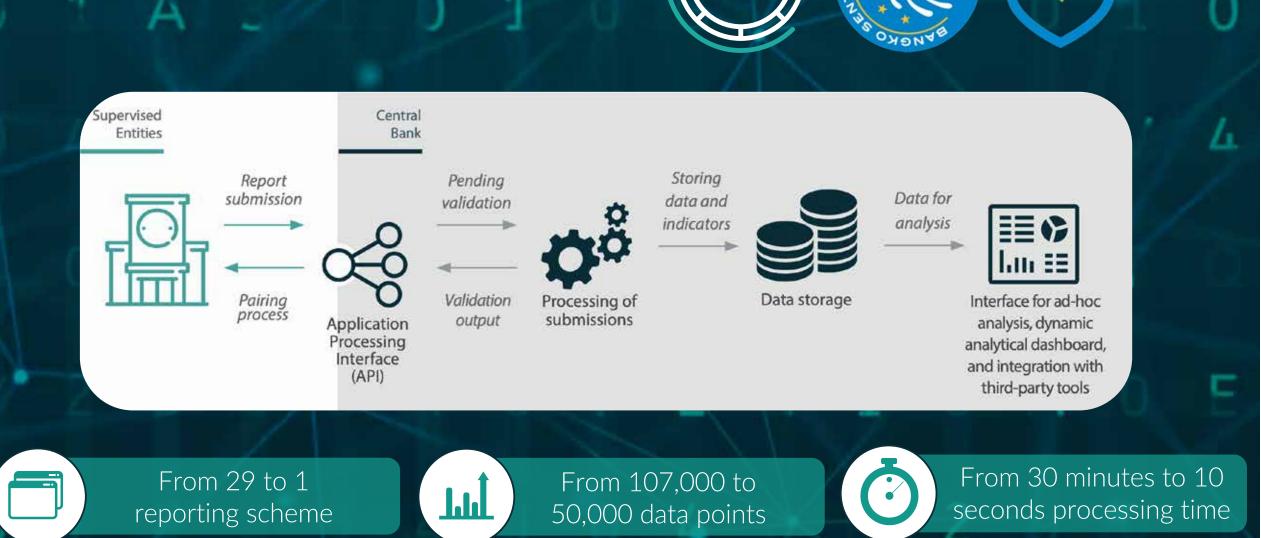
P P T



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

Simone di Castri, Matt Grasser, and Arend Kulenkampif August 2018





Delivered prototypes



BFA

Financial Authorities in the Era of Data

Abundance



Chatbot and CMS for customer complaints





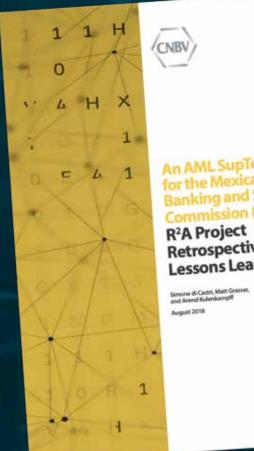
API and back office reporting and visualization application



Data infrastructure for AML supervision

MEXICO APIs/ML for AML supervision





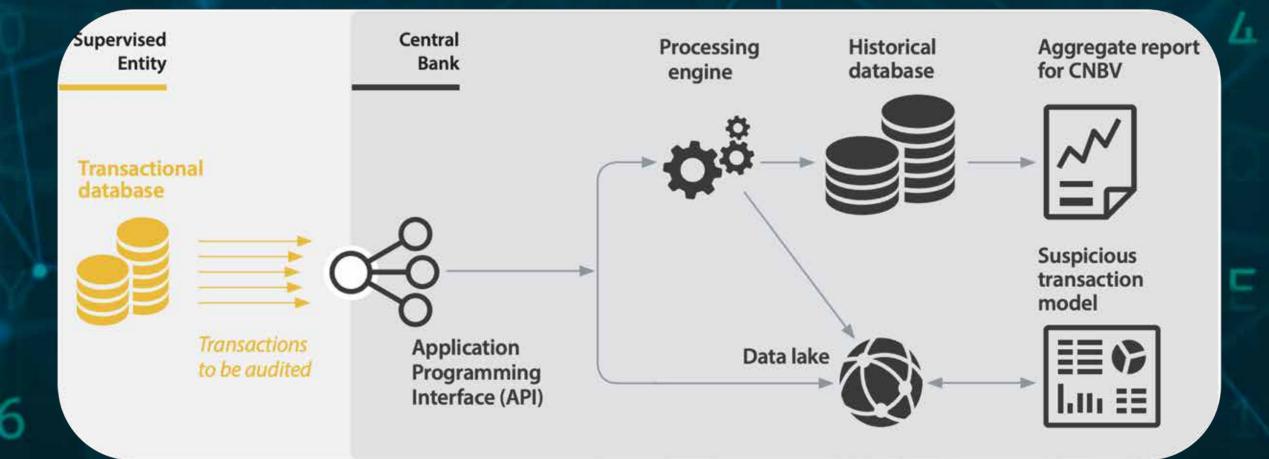
R'A RESTLICH FOR REGISTAR

An AML SupTech Solution for the Mexican Nationa Banking and Securities Commission (CNBV)

Retrospective and Lessons Learned













Duration of each on site inspection 3-5 weeks ■ 3-5 days

Working groups



Working group: Solutions to Strengthen Financial Integrity and Combat Financial Crime





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



Australian Government Australian Transaction Reports and Analysis Centre













Working together to develop toolkit for tech powered AML/CFT supervision







Vendor data base www.R2Accelerator.org



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.



R²A Solution Tracker www.R2Accelerator.org

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







R²A Solution Tracker www.R2Accelerator.org



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
- Meridian Digital Finance Future (World Bank/IMF Spring Meetings) Washington, DC April 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
- U.S. Treasury Brown Bag Session Washington, DC 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

Content

 $\overline{\mathbb{H}}$



Vision Approach Structure and governance Achievements Deliverables Process

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)

FINANCIAL AUTHORITIES

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



REGTECH VENDORS Smaller vendors may have innovative and cheaper products, but struggle to break in

They battle with long procurement cycles





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

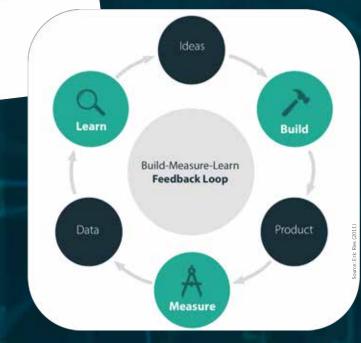
R²A provides matched funding for development of solutions

Global perspective and peer learning

Challenges

BFA

The RegTech for Regulators Accelerator (R²A) Process Giving Financial Authorities Superpowers



) 1. INCEPTION Building Trust and Securing Commitment

ł

. <u>-</u>

୍ଦ୍ର

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



Content



Approach Structure and governance Achievements Deliverables

Process

Vision

Financials

Resources www.R2Accelerator.org

White paper

Process paper

Chatbot case study

API case study

AML case study

Vendor database

Solution tracker





Contact

BFA

R2A@bfaglobal.com www.R2Accelerator.org @R2Accelerator

R²A

REGTECH FOR REGULATORS ACCELERATOR