

SECRETARÍA DEL BANCO
División de Traducciones



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Innovation in Central Banking

Experience at the Central Bank of the Dominican Republic (BCRD)

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Santo Domingo, July 2022

AGENDA



I. Technological Innovation vs. Digital Transformation vs. central Banks



II. BCRD experience and lessons learned



III. Advances in Payment Systems and Fintechs



IV. Cybersecurity in DR

V. Conclusions



II. Technological Innovation

Or...



Digital transformation: "integration of new technologies in all areas of an institution to change the way it operates".

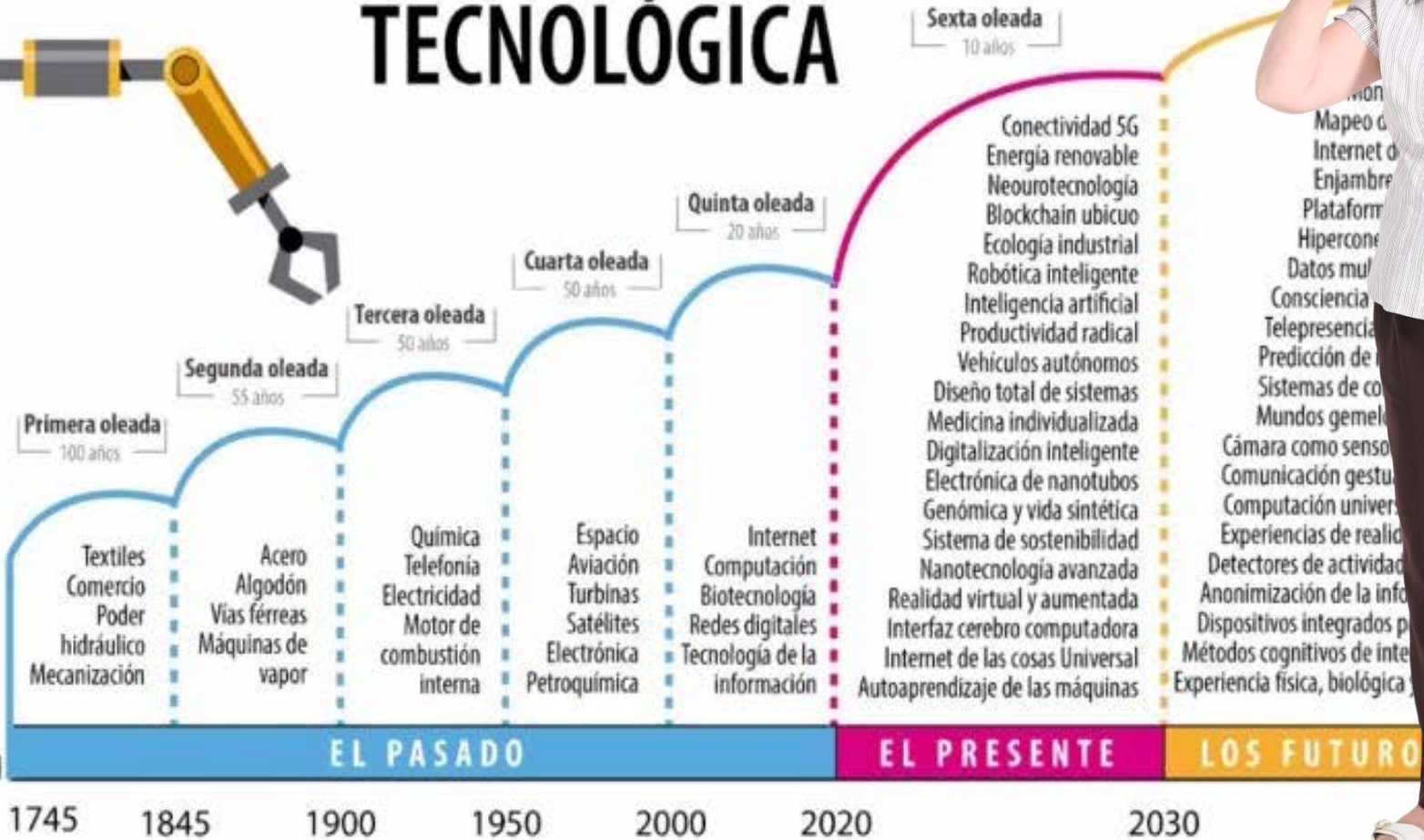
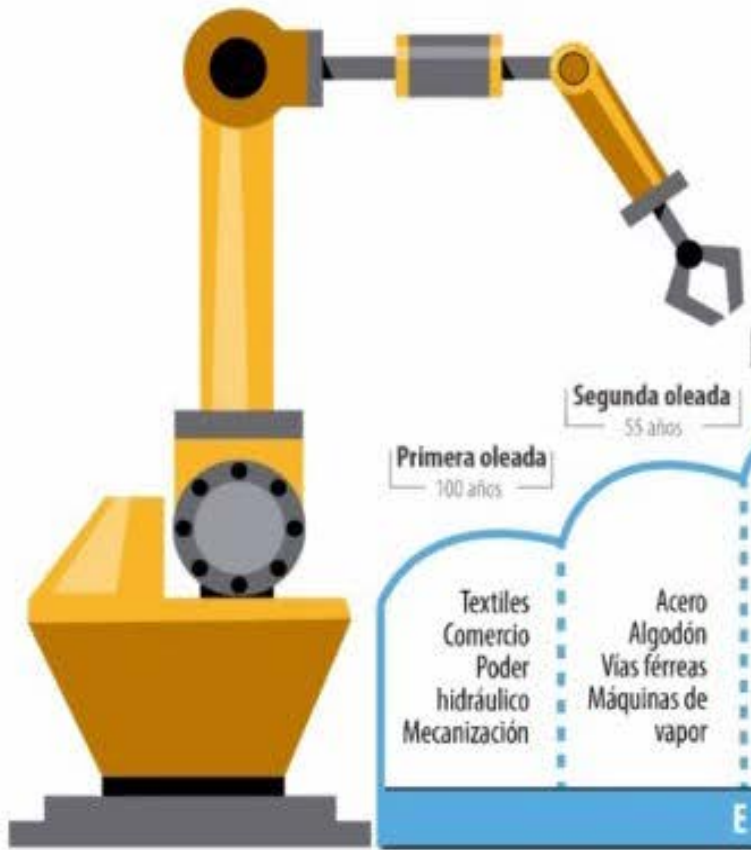
It is not an option to be evaluated, nor a possibility to be considered in the medium or long term; it is a requirement to be assumed immediately, with a positive attitude towards the changes brought about by digitalization.



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ERAS DE INNOVACIÓN TECNOLÓGICA



Fuentes consultadas: "La gran transición: Retos y oportunidades del cambio tecnológico exponencial", José Ramón López-Portillo; "Communications in the 6G Era", Harsh Misra et al.



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Why are traditional players losing ground?

They have been conservative

They keep away from people

They do not respond quickly to the needs of the new generations

Low innovation

Concentration on high-volume lines of business and not retail

Key disrupters

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Speed to Market (**technology**)



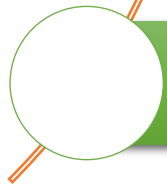
Personalization Expectation (**clients**)



Cybersecurity Risks



Alternatives to Banking (**suppliers**)



Balance between Innovation and Regulation

What do we associate central banks with?





Dream.

Think.

Create.

Innovation Lab
[MAKERSPACE @ SPC]



Eight I's of Infinite Innovation

**HOW DO WE LOOK AT
OURSELVES?**

Implementation

Investigation

Ideation

Inspiration

Iteration

Installation

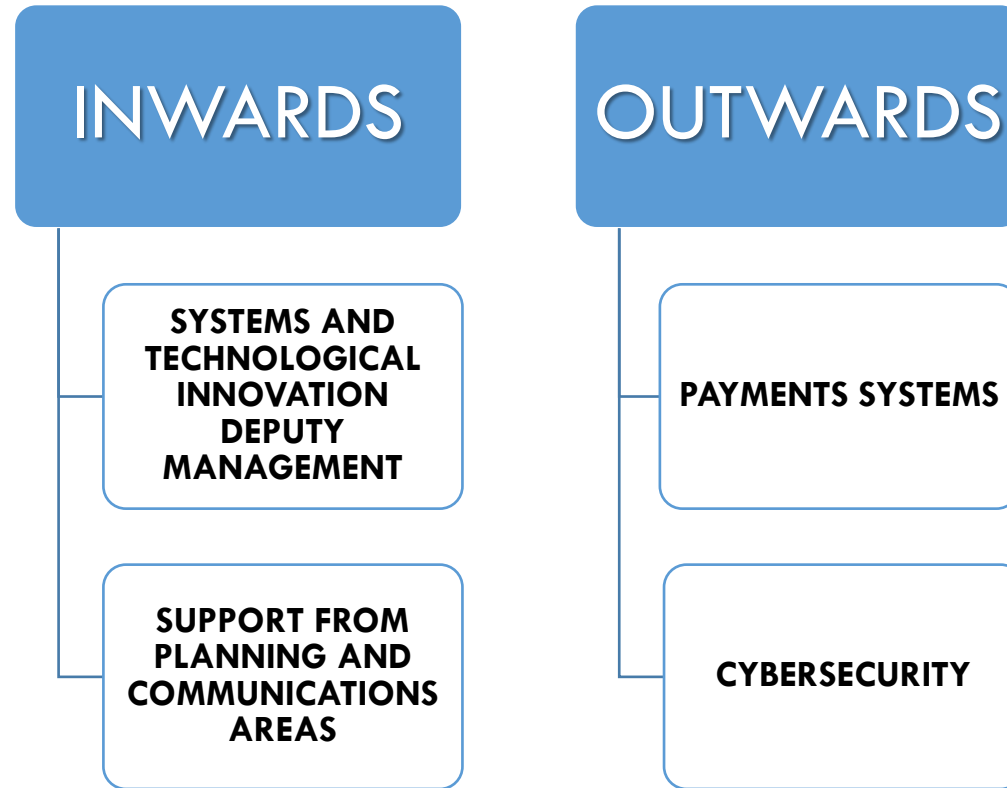
Identification

by Braden Kelley



III. BCRD experience and lessons learned

HOW HAVE WE HANDLED IT AT THE BCRD?



Objective:

TECHNOLOGICAL INNOVATION

HOW ARE WE DOING IT?

Open
Banking
(API's)*

Digital
Signature in
financial
processes

Payments
Ecosystem for

Innovation
Hub

Sectorial
CSIRT*

payments
(CBDC, eP
EPEs)

Compliance
Evaluation
Tool (HEC)*

Tran
P

Connectivity
and
Redundancy*

**USING OUR MAIN WEAPON: THE
REGULATION**

Collaboration

ongoing)



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Innovate to regulate or regulate to innovate?

Aspects to be regulated:

- Company incorporation, local or cross-border, shareholders.
- KyC and compliance (to them and to customers)
- Protection of users' rights (personal data and their money).
- Guarantees for proper operation, not impacting macroeconomic balance
- Transparency
- Interoperability
- Hidden costs
- Contingency mechanisms, continuity of operations
- Dissolution procedure....etc.



III. Advances in Payment Systems and Fintechs

Participants



EIF



CEVALDOM



TN



TSS



IV



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Payment Services Providers



ASP



EA



Payment
Aggregators



EPE



EIF



ARAtm

Payment Systems



Supporting
entities

Bank
Cards

Subagents

SCC

LBTR
System

Direct
Db and
Cr

Securities

Mobile
Payments

Recharge
and
Payment
of Bills

Payment Instruments



Checks



Inter-banking



Instant Payments



Direct Deposits and Credits



Bank Cards



Electronic Payment Account

Electronic Payment Entity

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Sole proprietorship authorized by the Board of Directors to provide payment services through electronic payment accounts through technological solutions

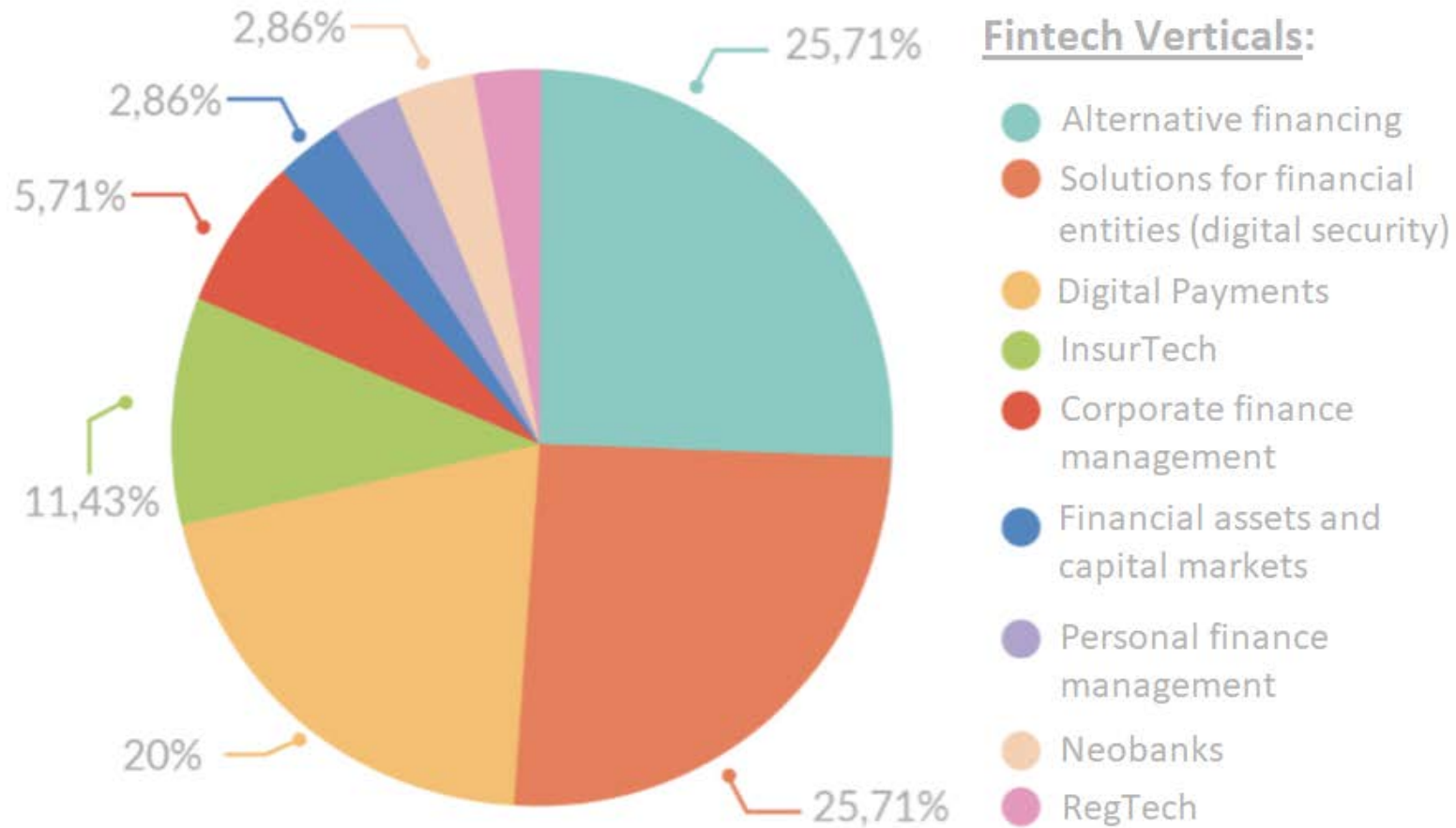


To have a minimum paid-in capital of RD\$15.0 million, to be increased according to the risks associated with the provision of the service



They will manage electronic payment accounts for use by individuals or legal entities that will be accessible through technological solutions.

FINTECHS IN DR





HUB DE INNOVACIÓN FINANCIERA

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What is the HUB?

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It is a space dedicated to dialogue and consultation for innovative regulated and non-regulated companies that wish to develop their projects in the Dominican financial sector.

WHO ARE ITS MEMBERS?



Objetivos

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To guide



Innovators within the current
legal framework

To promote



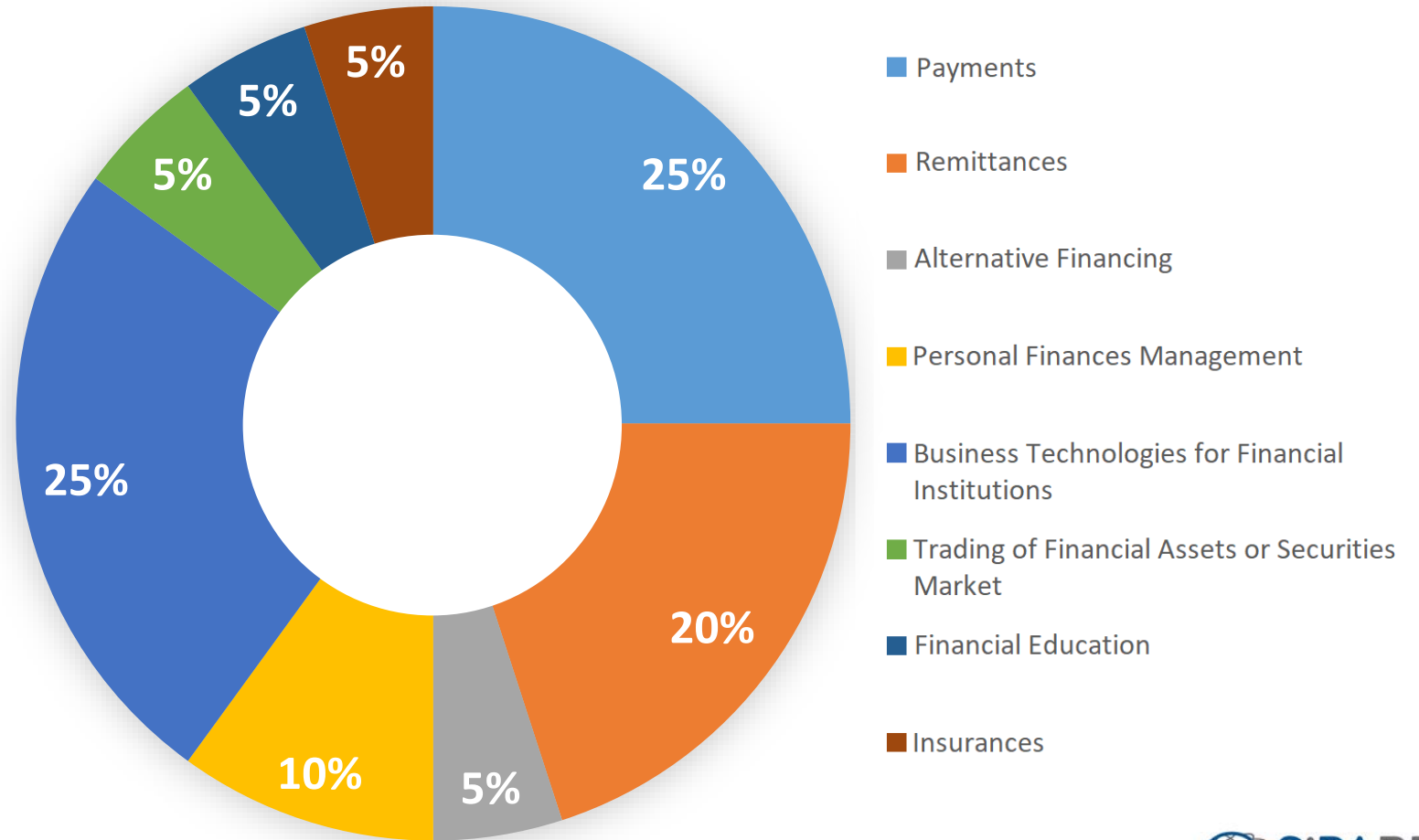
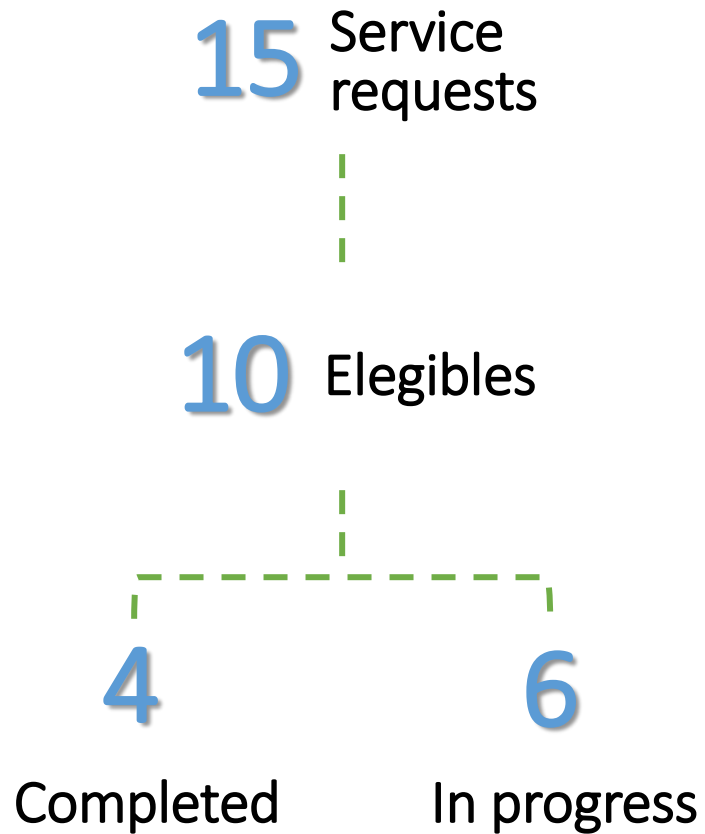
Innovations in the Dominican
financial system

To observe



Trends to promote innovative
reforms

Initiative Impact Areas





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FINANCIERA**
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The background of the slide features a close-up, overlapping view of several Dominican Republic coins. The coins are a golden-brown color and show the text 'REPUBLICA DOMINICANA' and 'BANCO CENTRAL DE RESERVA' along with the national coat of arms. The coins are arranged in a way that they appear to be stacked or overlapping, creating a textured, layered effect.

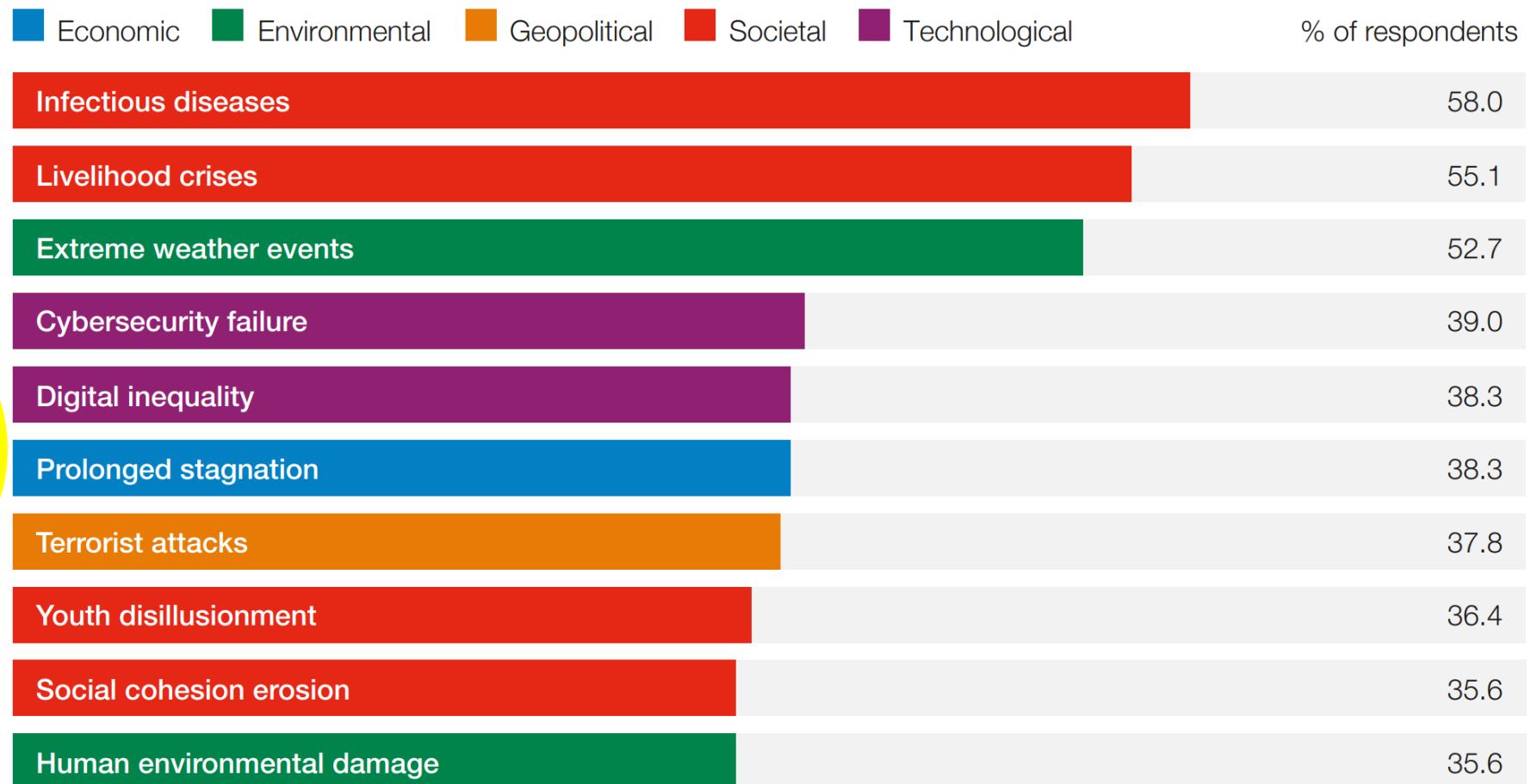
IV. Cybersecurity in DR

World Economic Forum's Global Risks Report 2021

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When do respondents forecast risks will become a critical threat to the world?



Clear and present dangers

Short-term risks
(0 – 2 years)

Risk management measures

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**Strengthening
the regulatory
and normative
cybersecurity
framework**

**Strengthening
of
administrative
and
technological
controls in the
cybersecurity
area**

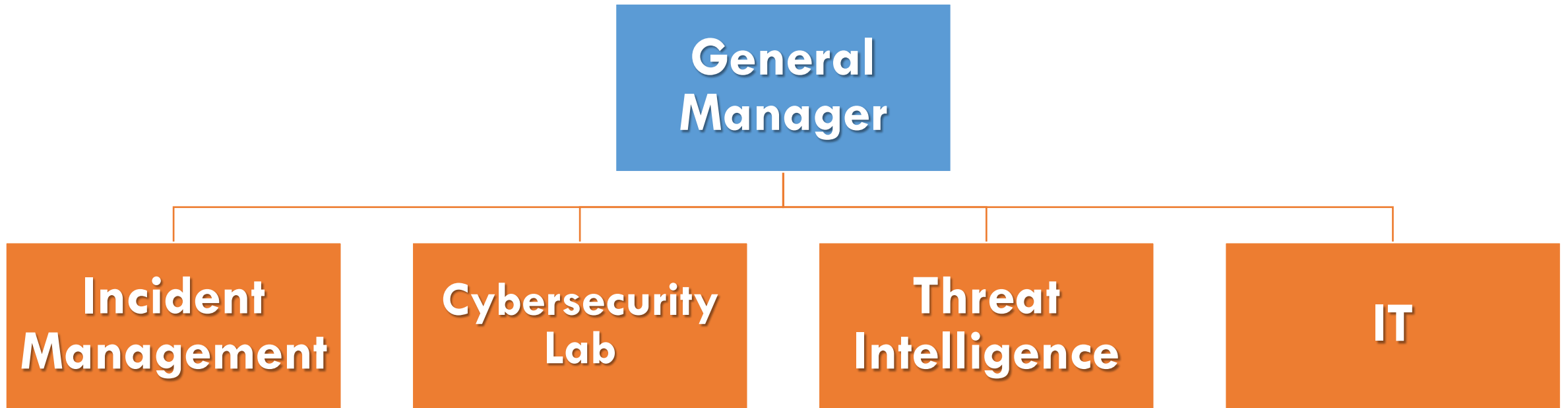
**Ongoing
entities'
technical staff
training**

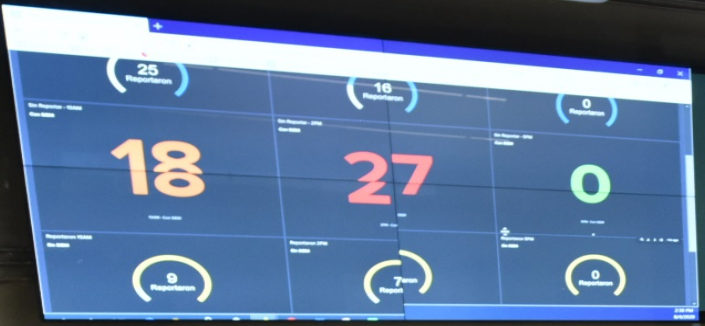
**Continuous
exchange of
information
and experience
between
entities and
regulators at
the local and
international
level**

**Establishment
of internal and
sectoral
cybersecurity
incident
response
mechanisms**

CSIRT Structural Diagram

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Cybersecurity and Information Security Regulation

for the financial and payment system

Regulation Framework

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Purpose

- To establish the general principles and guidelines for the regulated entities to ensure the integrity, availability and confidentiality of the information and the optimal operation of their Information Systems and Technological Infrastructure.

Scope of Application

- Financial Intermediation Entities (FIEs) participating in SIPARD.
- Administrators and other SIPARD Participants.
- Support Entities and Related Services interconnected with any FIU or to SIPARD.



Conclusions

Future Perspectives: role of the regulator

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Pressure of change on the ecosystem

New regulation

Customer expectations

Technology

New players in the ecosystem, including government entities*

Leveling cyber risk management

Guarantee of Security, Integrity and Privacy

Banca abierta frente a la "banca de bolsillo"

Differentiation between the entity that faces the customer (24/7, accessibility, personalization...) and the entity/s that provide services, both core business and infrastructure services

Segmentation vs. interconnection

New but interoperable products, services and types of entities

INTERNAL CULTURE CHANGE!

It is up to us to regulate and supervise,
seeking a balance between.....

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"All this would not have been possible without a **regulation** driven by the Central Bank, **which seeks a balance between promoting innovation in the provision of financial services, including the emergence of new players in the ecosystem, and the preservation of financial stability and user protection.**

As central banks, we have opened spaces and forums for collaboration and learning.... in which guidelines and policies related to topics such as open banking, cybersecurity, the Cloud, Artificial Intelligence, and more recently, discussions on the benefits of distributed technologies, central bank digital money (CBDC), cryptocurrencies and many other novelties that are already part of our daily work.



We at the Central Bank wish to reiterate once again our commitment to this progress and modernization, to this drive towards a financial and payment system that is as digital as possible, and **to the financial inclusion of traditionally underserved sectors.**

But always, within a framework of economic and financial stability for all, to contribute to achieving **"a fairer, sustainable and inclusive economy that leaves no one behind."**

Héctor Valdez Albizu, Governor of the Central Bank

Thank you





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Div. de Traducc.: Innovation in Central Banking Experience BCRD - July 2022 (Eng)

26-07-2022

LO/ IM/ OERA

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