2023 INTERNET2 TECHNOLOGY exchange

Devias – A Case of Success of the Reformulated RNP Advanced Services RDI Program

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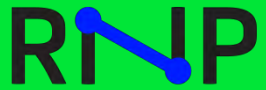
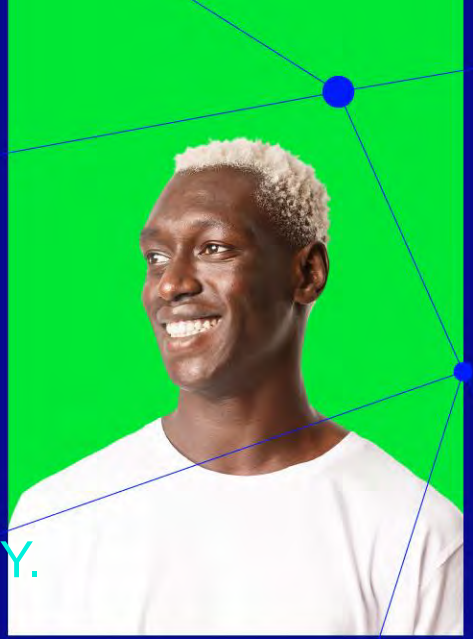


Networked Education,
Research and Innovation

OUR BUSINESS IS
MORE THAN CONNECTIVITY.
IT'S CONNECTION.



SHARE TO EXPAND:

WE CONNECT PEOPLE
IN AN ENVIRONMENT CREATED FOR
THE PRODUCTION OF KNOWLEDGE
AND WE PROVIDE SAFE AND
HIGH CAPACITY SERVICES

800
Connected organizations

+ 4 million
User

50
Community connections

+ 100 Gbps
Connections

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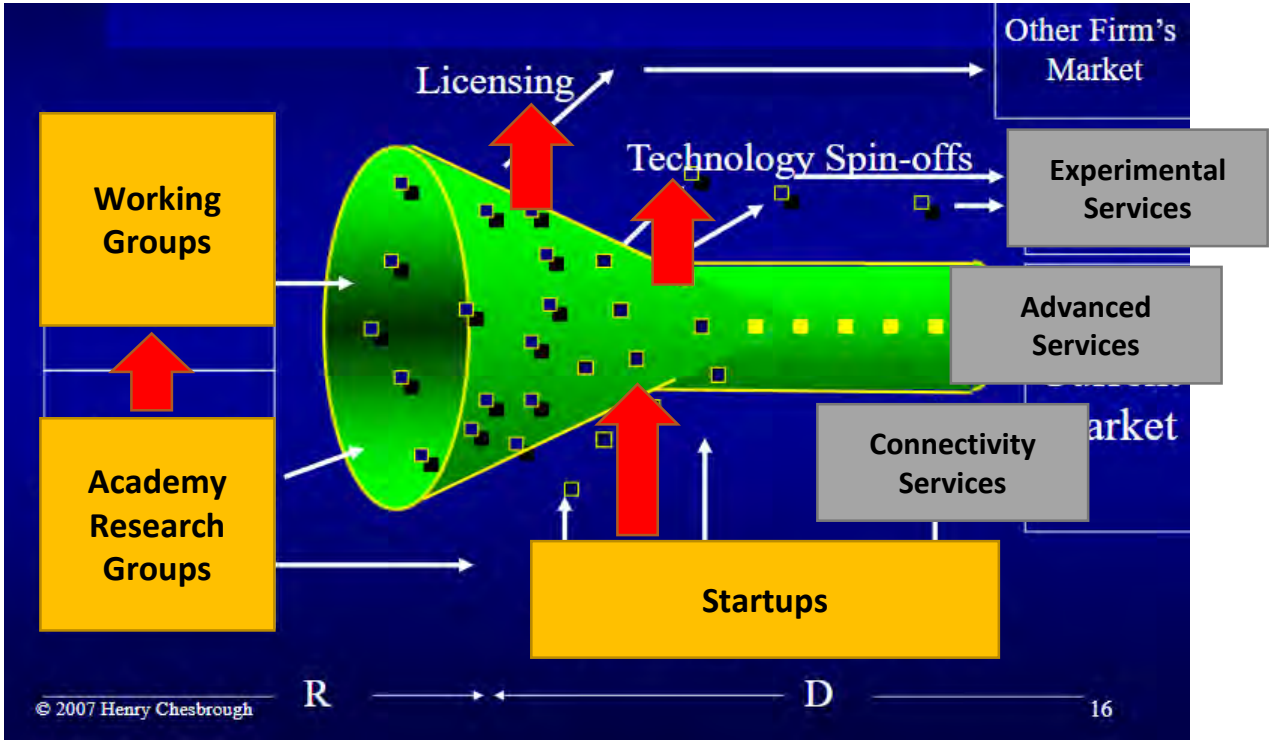
RNP Open Innovation Funnel



- **+20 years** innovating with **Brazilian academy**
- Focused on creating **new products and services** for RNP

Former ‘R&D Working Group Program’ and Current ‘Advanced Services R,D&I Program’

+20 years innovating in partnership with academia

New products and services for RNP community

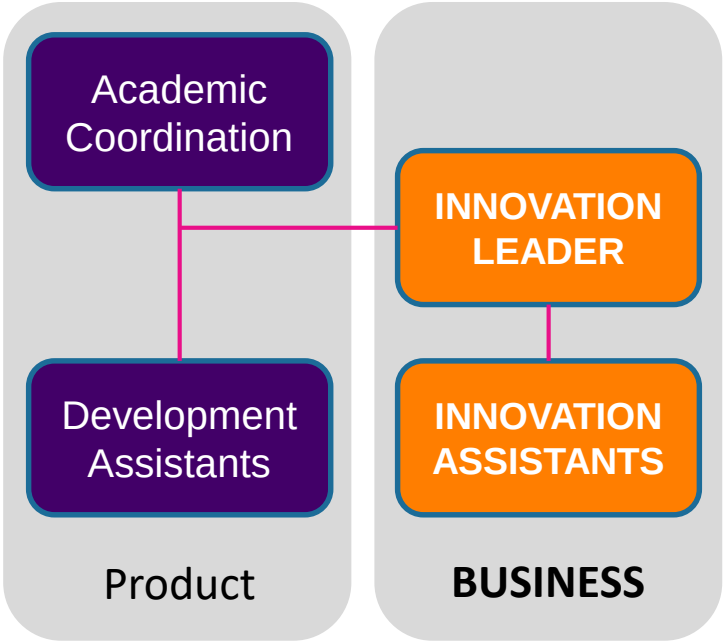
Former WG Program:

- Since 2002
- Build **prototypes and pilots**
- Only **Technological Development**
- Public **Open Calls** to **academia**

Current Advanced Services R,D&I Program:

- Since 2019
- Develop/validate a **Minimum Viable Product (MVP)**
- **Business / Market** + Product / Technology
- Public **Open Calls** to academia + **startups**
- **Faster value delivery** with **Innovation Ecosystem**

RNP Working Group (WG) in the ‘Advanced Services R,D&I Program’

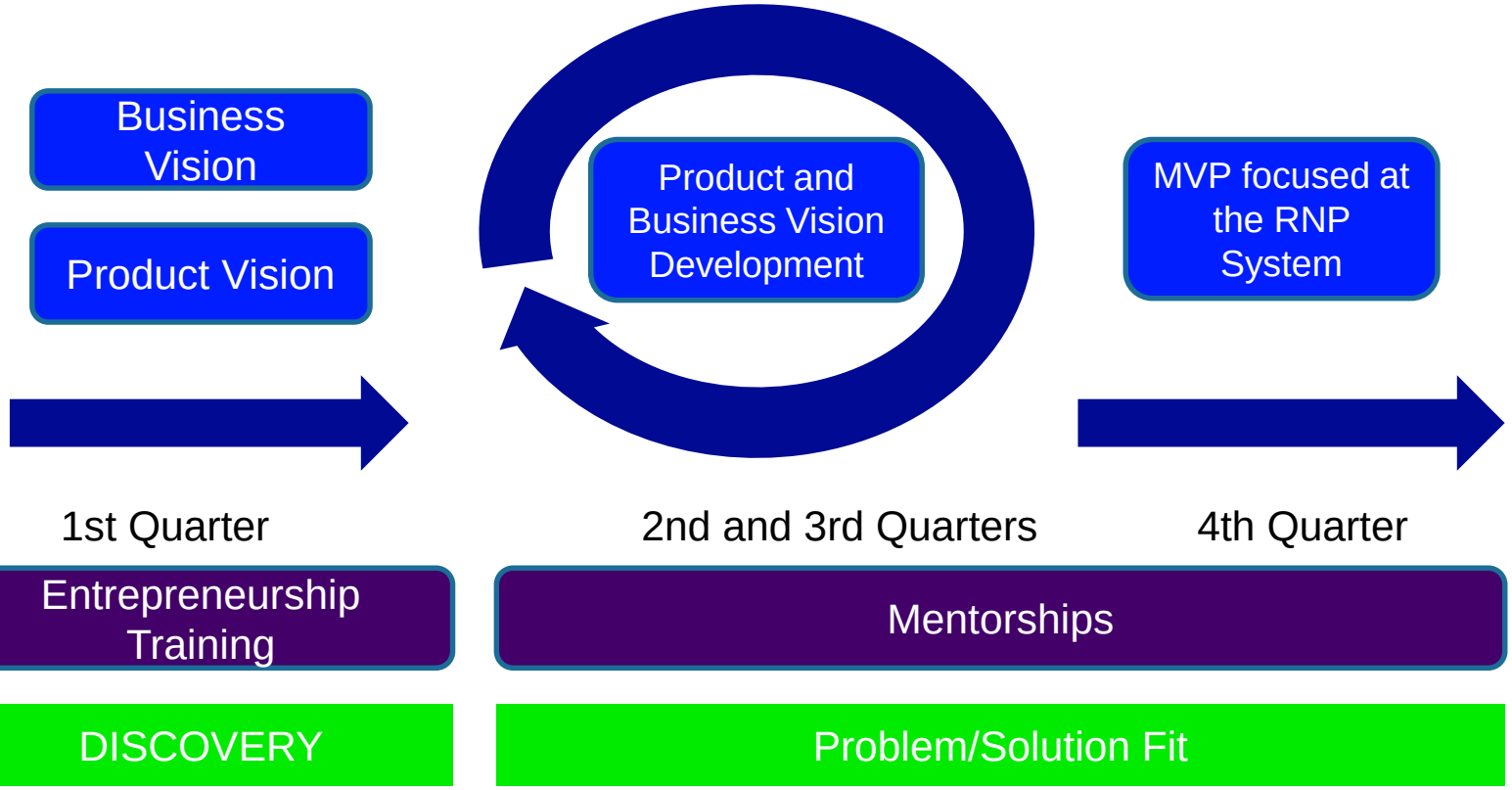


PARTNERSHIP or **INDUCTION** of startups

The Phases of the ‘Advanced Services R,D&I Program’

Phase 1	Phase 2
Customer Discovery + MVP Development	MVP Evolution + Early Adopters + New Offerings

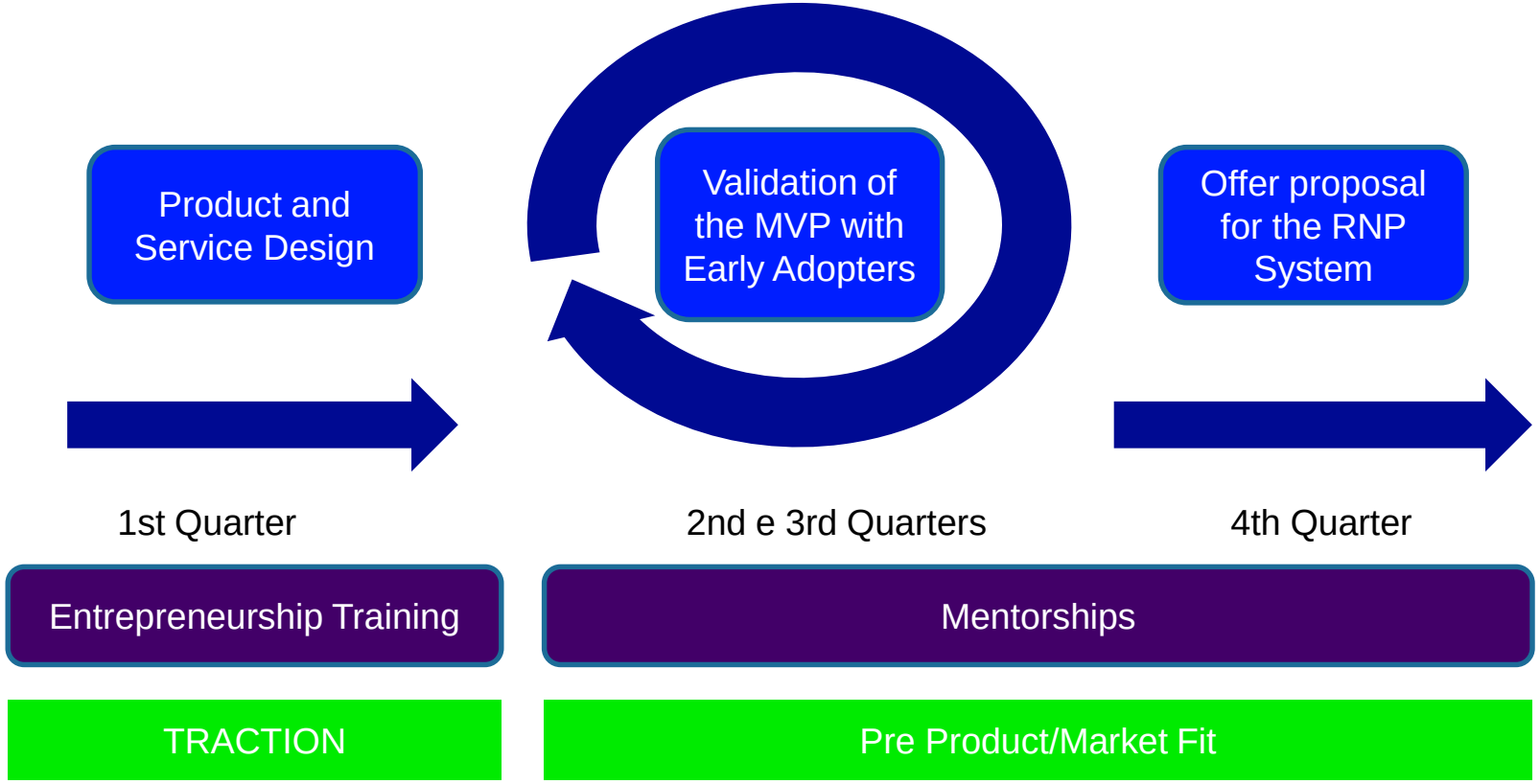
Phase 1: MVP Development Cycle



Phase 1: Entrepreneurship Capacitation

- Based: **‘PIPE Empreendedor’** (FAPESP) - **iCorps Program** (NSF)
- External instructor: **Flavio Grynzspan (iCorps Brazil Institute)**
- Goal:
  - Build first **business model canvas (BMC)**
  - **Validate** business **hypothesis**
  - Focus on **business** from beginning
- How:
  - **Interview** early adopters (RNP System)
  - Understand **customers’ problems/needs**
  - **Mentors** to build the BMC

Phase 2: Development Cycle



Phase 2: Entrepreneurship Training

- Training program by **‘Tração.Online’**
  - Bespoken methodology based on **‘Growth Hacking’**
  - **Validate** the MVP with **early adopters**
  - Mix of **self-paced training**, and **group and individual mentorships**

- 1st quarter:
  - Refine **persona, pain points and moment**
  - Build **first hypothesis** for experimentation
  - Prioritisation using **‘bullseye framework’**
  - Definition of a **‘North Star Metric’**

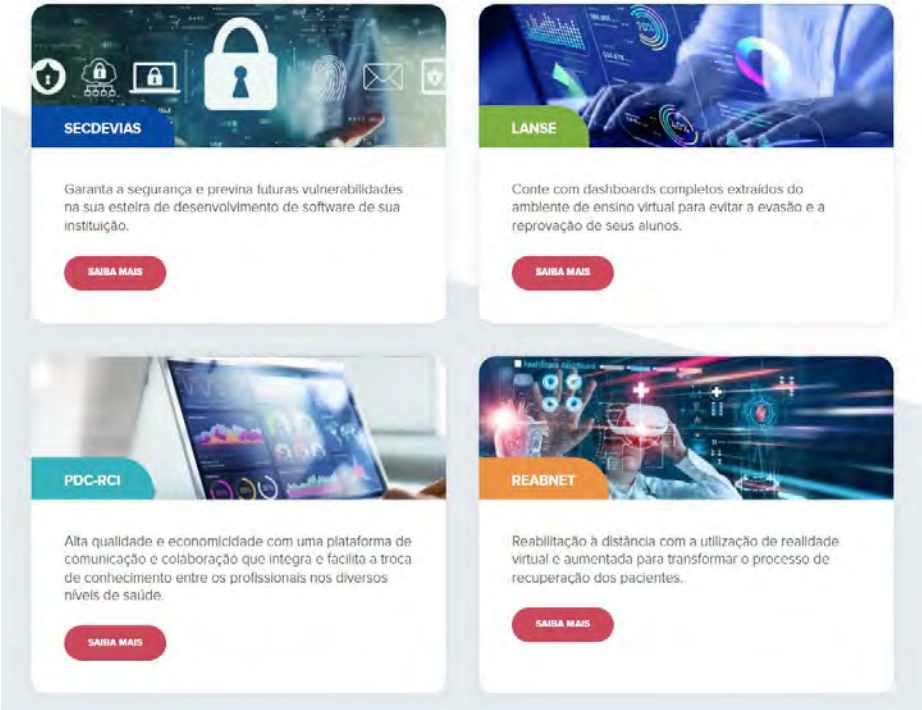
- 2nd and 3rd quarters:
  - WGs **run experiments and collect results**
- 4th quarter:
  - WGs **consolidate the results**
  - Training in **pitch techniques**

Some results: products and services

Hórus++

Some results: startups baked

Lab Nasnuvens: Innovation Lab



- Experimentation and validation with RNP research and education community
  - Early adopter quest
  - Refine Business Models

https://www.nasnuvens.rnp.br/lab

SECDEVIAS

an automated SecDevOps environment by Devias WG

Devias Working Group

Stage 2 Working Group of RDI Advanced Services Program

Researchers and professionals with cybersecurity background

Problem

How it should be...

Separate environments, specific goals, **different codes**!

Problem

But...

VULNERABLE code in **PRODUCTION**!

Problem

Microsoft says SolarWinds hackers may have breached 14 more companies

Nobelium attempted 23,000 attacks since July but had a low success rate, according to Microsoft.

Kris Holt
Contributing Reporter
Mon, Oct 25, 2021 · 2 min read

https://www.engadget.com/microsoft-solarwinds-hackers-nobelium-campaign-152633479.html

SolarWinds hack explained: Everything you need to know

Hackers targeted SolarWinds by deploying malicious code into its Orion IT monitoring and management software used by thousands of enterprises and government agencies worldwide.

By **Saheed Oladimeji, Sean Michael Kerner** Published: **27 Jun 2023**

https://www.techtarget.com/whatis/feature/SolarWinds-hack-explained-Everything-you-need-to-know

Technology

Brazil health ministry website hit by hackers, vaccination data targeted

Reuters

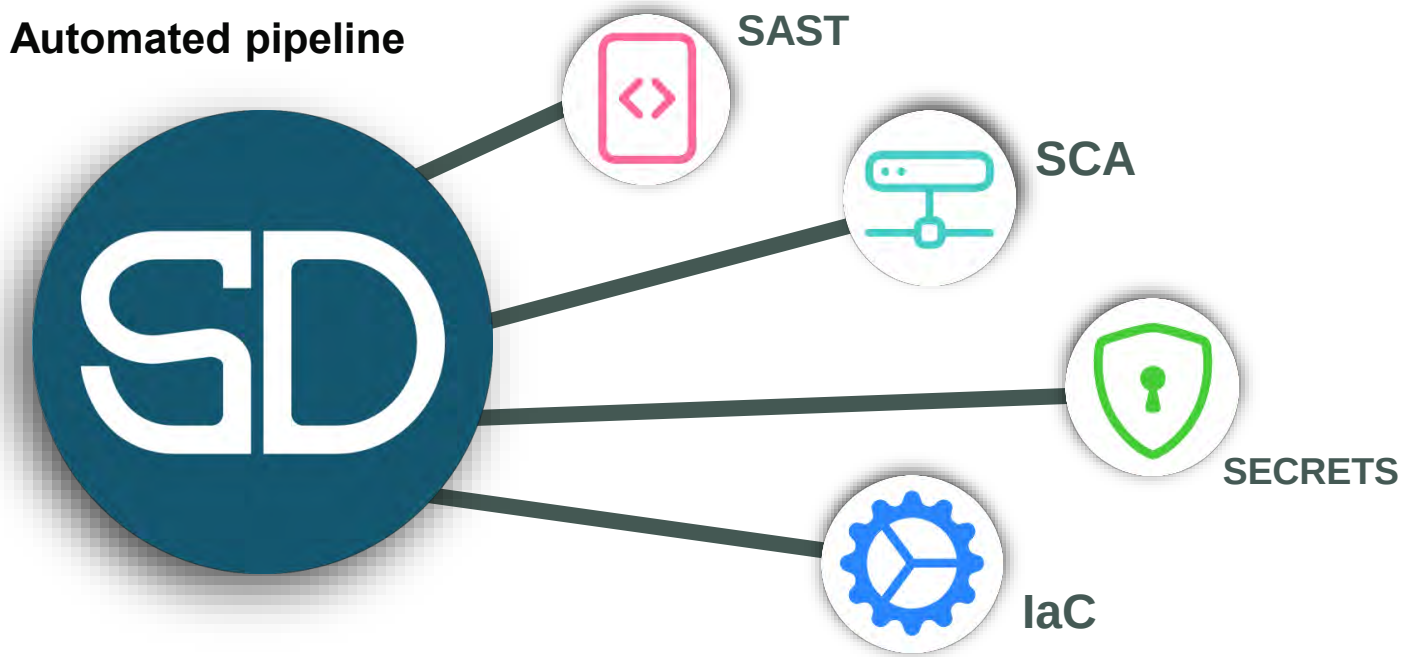
December 10, 2021 9:08 PM GMT-3 · Updated 2 years ago

https://www.reuters.com/technology/brazils-health-ministry-website-hit-by-hacker-attack-systems-down-2021-12-10/

SecDevias Solution

SecDevias is an automated SecDevOps environment, which receives code submissions and repositories and creates a Secure Software Development LifeCycle (S-SDLC) automated pipeline

SecDevias Solution



SecDevias Solution

Vulnerability Management: Easy prioritization of actions.

Humanized Reports: text enrichment in Pedagogical Language

Coverage: Python, Java, Java Script, and Microsoft dotNet (.NET)

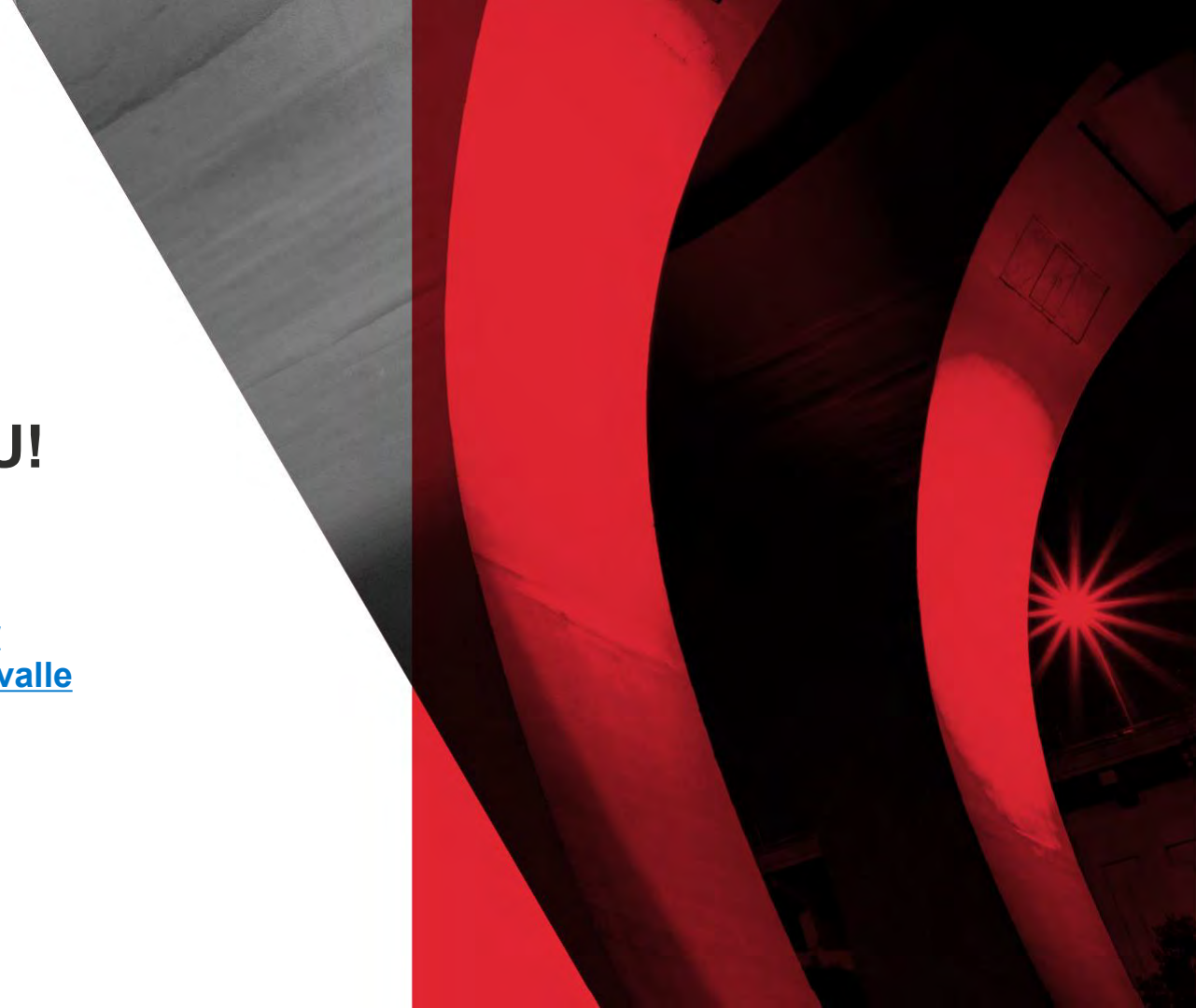
SecDevias Solution

- Less time in code inspection
- More time for vunerabiliy resolution
- More productivity

Final Remarks

- RNP has built a successful R,D&I Program in order to develop new products and services in partnership with Brazilian research and education Community
- Engaging with innovation environment has increase sustainability of R&D solutions
- Cocreation helps built products and services that matters
- SecDevias has been in validation by some institutions such as

THANK YOU!

Rafael Valle

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