

Cybersecurity Industry Development

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INCIBE Operations

A large yellow triangle pointing downwards, partially overlapping a red triangle on the left and a dark grey bar at the bottom.

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INSTITUTO NACIONAL DE
CIBERSEGURIDAD
NATIONAL CYBERSECURITY
INSTITUTE OF SPAIN



Cybersecurity market situation



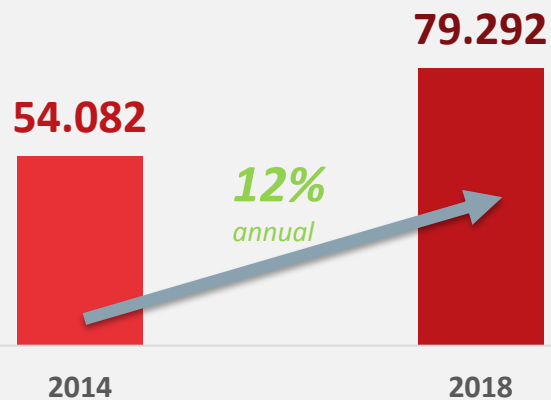
Global
Sales
2018

Competitive
Dynamic



Sales Spanish
companies 2014

CAGR cybersecurity (M€)



1.000 M€

Cybersecurity local demand

2018

Complex Value Chain: creation & delivery

Public Administration

Ministry of Industry, Energy and Tourism, Ministry of Telecommunications and Information Society, Ministry of Economy and Competitiveness, Ministry of Finance and Public Administration, INCIBE, CNI, CCN, CNPIC, AEPD, Other CERT's national and regional

Other Clusters: AEI Ciberseguridad , Seguridad y Confianza de la Comunidad de Madrid

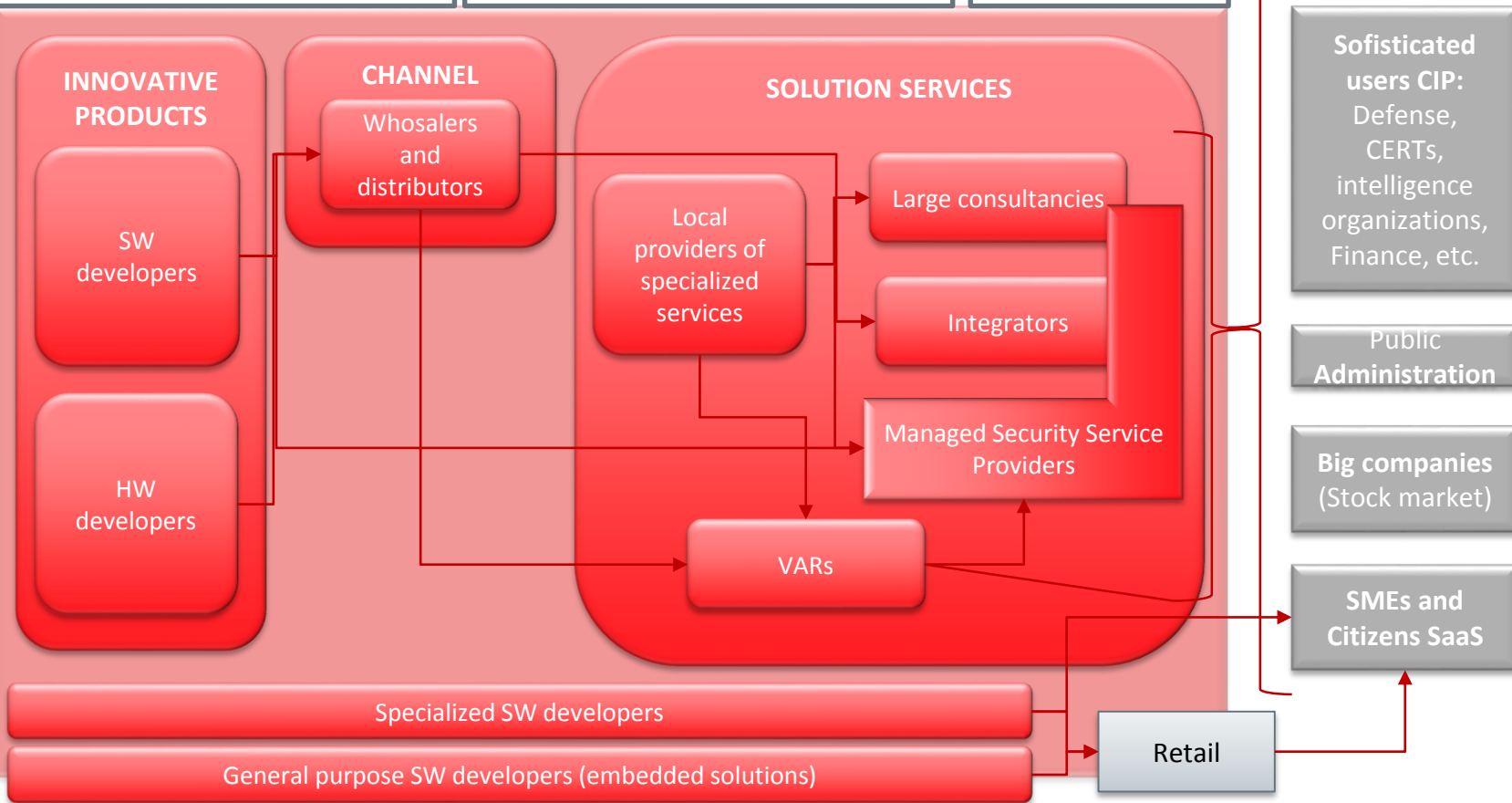
Main associations: ISMS, GTS, Foro digital de confianza , AMETIC, CONETIC, ISACA,, etc.

Other entities and associations

Talent suppliers:
Universities
 (UPM, UC3M, UGR, UPC, Univ.Málaga...),
Tech centers
 (Fedit, Tecnalia)...

Methods&tool Accelerators and Incubators
 (Wayra, Conector, Lanzadera, SeedRocket, Mola, Plug &Play...)

Smart Money Risc Capital
 Adara Ventures, Kibo Ventures, Nauta Capital, Telefónica Ventures, Inveready, Swaanlab Venture Factory...



Where to put the effort?

Common issues for industry growth

INDUSTRY ASSOCIATIONS

INNOVATION

- Broad range of research and technological groups but **no leadership**

- Variety of initiatives on **regulatory, standards** and awareness aspects.

LOCAL DEMAND

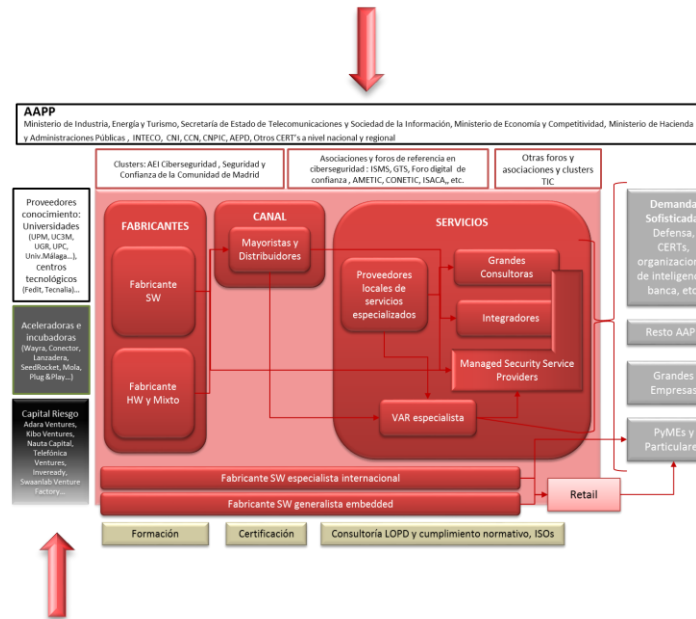
- Key role of the Public Administration to develop start ups and **innovation ecosystem**

TALENT

- Limited offer of **specialized training**
- Limited collaboration **University-Industry**

- Product **certification** criteria

- **Sustainability** of solutions **recurring sales**
- Public Demand:** Defense, Home Affairs, CERTs, CIPs Authorities, etc

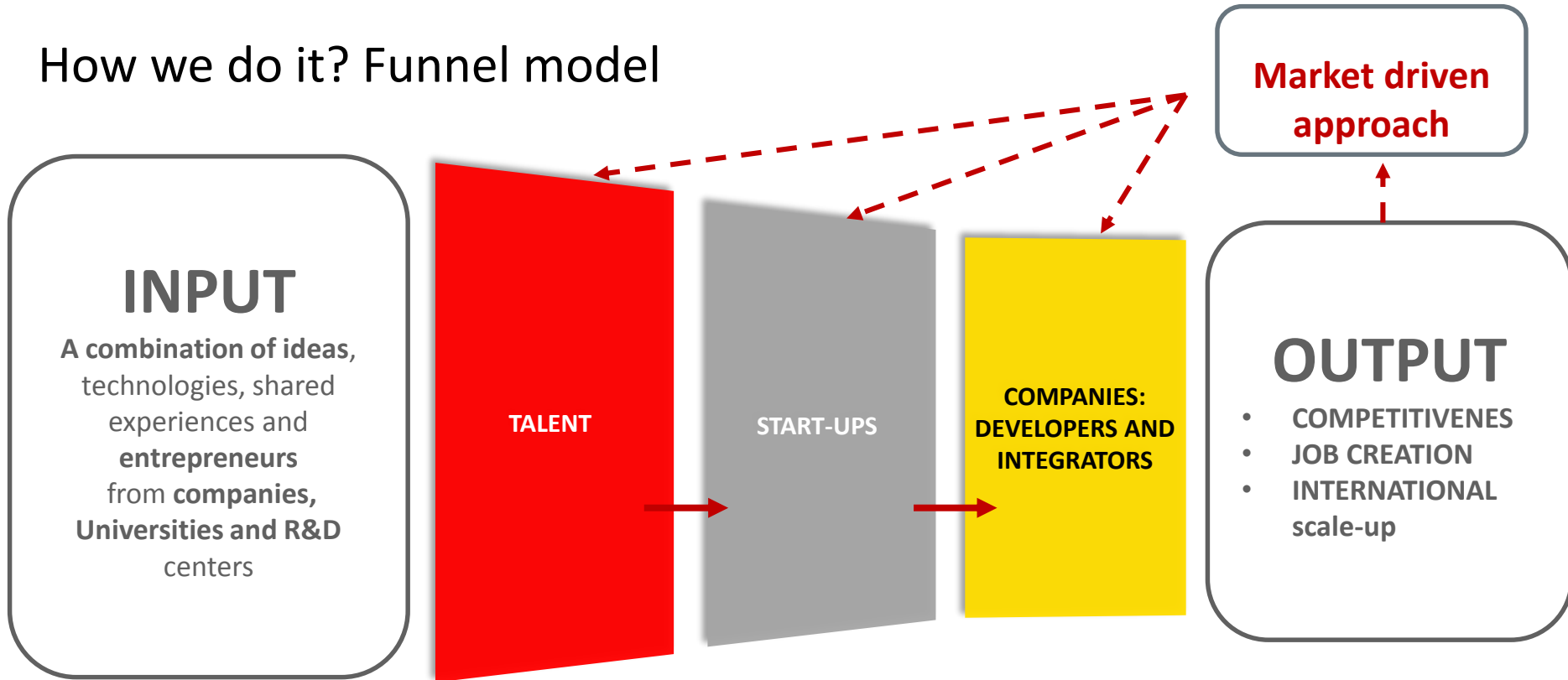


FINANCING NEEDS

- Lack of financing and **capital risk**

How to develop DIH?

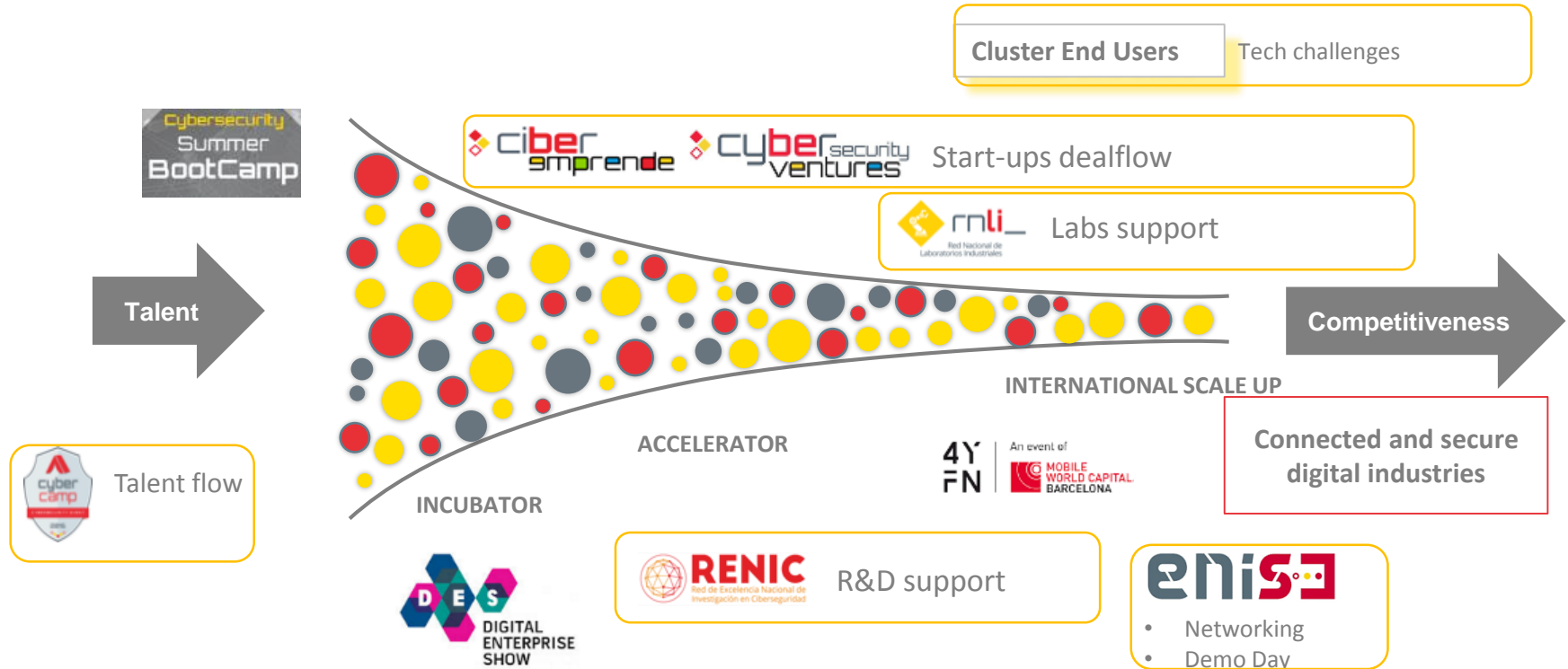
How we do it? Funnel model



TECH TRANSFER	ACCELERATOR	To INDUSTRY CLUSTER
COMMUNITY DEVELOPMENT	MENTORING AND TRAINING	NEW PRODUCTS AND INNOVATION
TRAINING AND BUSINESS MODELING	CUSTOMERS AND SCALABILITY	INTERNATIONAL OPPORTUNITIES.
PRIZE AWARDS AND OPPORTUNITIES	INVESTORS - DEMO DAY	COLABORATION AND NETWORKING

Support from INCIBE

Integrated wide Program



How INCIBE helps the Cybersecurity Industry?

INCIBE implements a **complete** **programe** including activities to increase **local demand**, **new tech suppliers**, and **stronger international positioning**.

3 strategic actions:

1: Cluster Development - existing companies

Supporting market development, higher visibility abroad, trade fairs, comercial missions, latest trends and opportunities,

2: R&D transfer to solve industry challenges

Better alignment and communication between academia and industry

3: New start-ups and entrepreneurship

Incubation and acceleartion programs

1. Cluster Development (National)

Tackle challenges & break barriers

Fragmented Cybersecurity Industry
Few innovative projects
Low international presence
Lack of specialized talent
Limited market intelligence
Infrequent collaborative working

Roadmap

Create new talent opportunities
Develop a community of experts
Reinforce with new entrants (start-ups)
Access to international markets
Cybersec demand from main players and end users
Technology transfer from R&D to monetize viable business projects

PROJECT PLAN AND WORKING GROUPS

- 1) **Networking and awareness events**
- 2) **New International Cybersecurity exhibition**
- 3) **Trade missions and fairs abroad**
- 4) **Observatory and trends studies**
- 5) **Countries Market Research studies and guides**
- 6) **Technology challenges and transfer to industry**
- 7) **Investment and financial solutions for cybersecurity start-ups in each stage.**
- 8) **Entrepreneurship and incubation programs**
- 9) **International Cybersecurity Accelerator**
- 10) **Stakeholders management and communications**



1. Cluster Development (European)

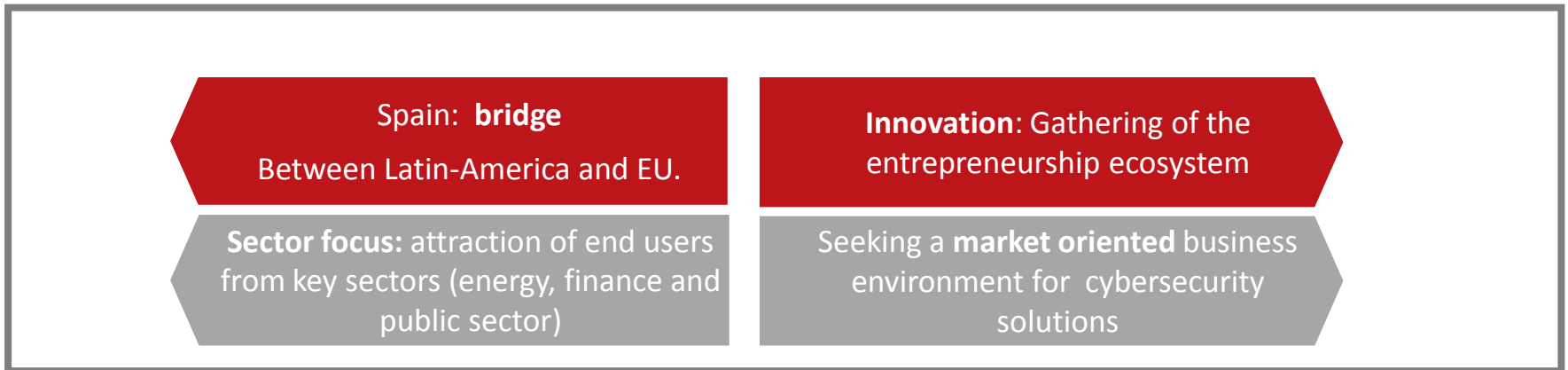
Cybersecurity Innovation HUB
Improving competitiveness in an EU DSM



- **Demand:** Increase visibility about **end users challenges** for innovative cyber solutions
- **Supply:** **Specialized competence center and facilities** to provide talent and technology
- **MS collaborative** approach: **create EU Leaders** with **competitive advantages**
- Group cooperation to share and address **common strategic challenges**
- **Fostering collaboration** between **public-private** players
- **Break physical MS and environmental barriers**
- Address long-term cluster **sustainability**

1. Cluster Development

12th Edition Cybersecurity event



- Participation of public policy-makers, **high level conferences and panels**
- **Start-ups and Entrepreneurship track**
- **Trade show and Expo** to facilitate **networking and business deals** of Spanish cybersecurity companies
- **Central role to showcase product innovation**

1. Cluster Development

Networking and international visibility: 4YFN, DES, InfoSecurity, RSA, CyberTech...



2. R&D transfer to solve industry challenges

Practical approach: **Piloting projects** to solve end users' challenges and create future market leaders

1. Dynamize demand of cybersecurity solutions

- Public instruments to **encourage** participation, such as **pre-commercial public procurement** to adopt innovation.
- **Focus** around main challenges and **specific use cases** to develop the supply of innovation capabilities and environment for **experimentation and testing**

2. Facilitate supply capabilities

- **Competence centers** and training
- **Facilities for experimentation** and **rapid prototyping**.

3. Reduce market transfer gap

- **PoCs into MVP** that solve client needs
- **IPR protection**
- **Talent and tech skills into SMEs** and start-ups

2. R&D transfer to solve industry challenges

Orchestrate a R&D Network

RENIC: National R&D Excellence Network in Cybersecurity...”

TO AVOID FRAGMENTATION AND REACH CRITICAL MASS

- +100 Research teams
- Infrastructure

COORDINATION & PRIORIZATION

- National Cybersecurity Research Agenda
- European Commission NIS- Strategic Research & Innovation Agenda (SRA)

OBJECTIVES

- Knowledge transfer to Industry
- Spin-offs / Start-ups
- Attract Seed Capital / Venture Capital (VC).



2. R&D transfer to solve industry challenges

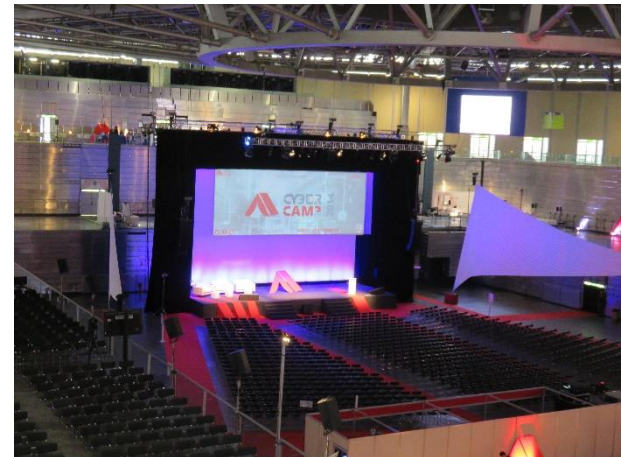
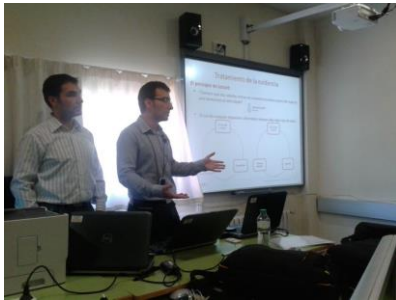


Talent development

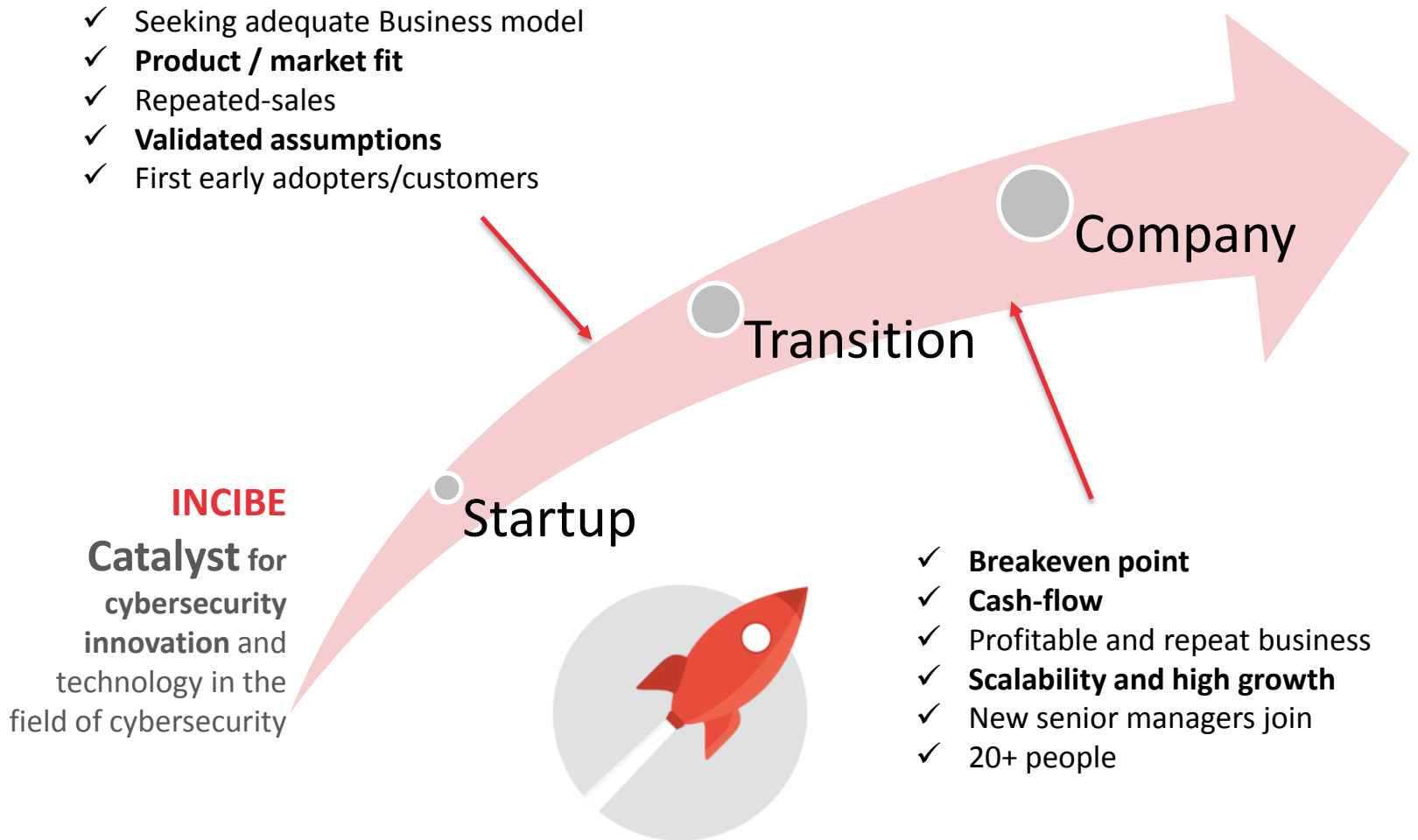
“... INCIBE is a Center of Excellence that **drives highly qualified professionals**”

e2e Talent lifecycle management

- **DETECTION** (Cybersecurity EVENTS CyberCamp, **Contests**, simulations, **CTFs**, **Wargames**, **MOOCs**, etc.)
- **ATTRACTION** (**incentives**, awards, **advanced training**, coaching, mentoring etc.)
- **AWARENESS** (**practical training** for several itineraries, youngest, families, entrepreneurs, spaces)
- **JOB CREATION** (**Talent Forum**, employment **programs**, knowledge **transfer**, PhD contracts, etc.)



3. New start-ups and entrepreneurship



Gracias por su atención

