INCREASING BUSINESS IN LATIN AMERICA'S LARGEST ECONOMIES: ARGENTINA, BRAZIL AND MEXICO

Claudio Arriola

Head of BIT Center and Tech incubator

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

Some of Mexico bright spots:

Turism, Strong manufacturing hub: automotive, aerospace, Energy

ICT - Third exporter of ICT services in the world. +5,000 million USD

Graduating a high number of engineers every year

Growing domestic market: 120 million

Hub for North America market

but...

Some of Mexico challenges:

Still a strong digital (& income) divide in my country

Quality of engineers is not at desired level

Opportunities for tech-based startups has been limited

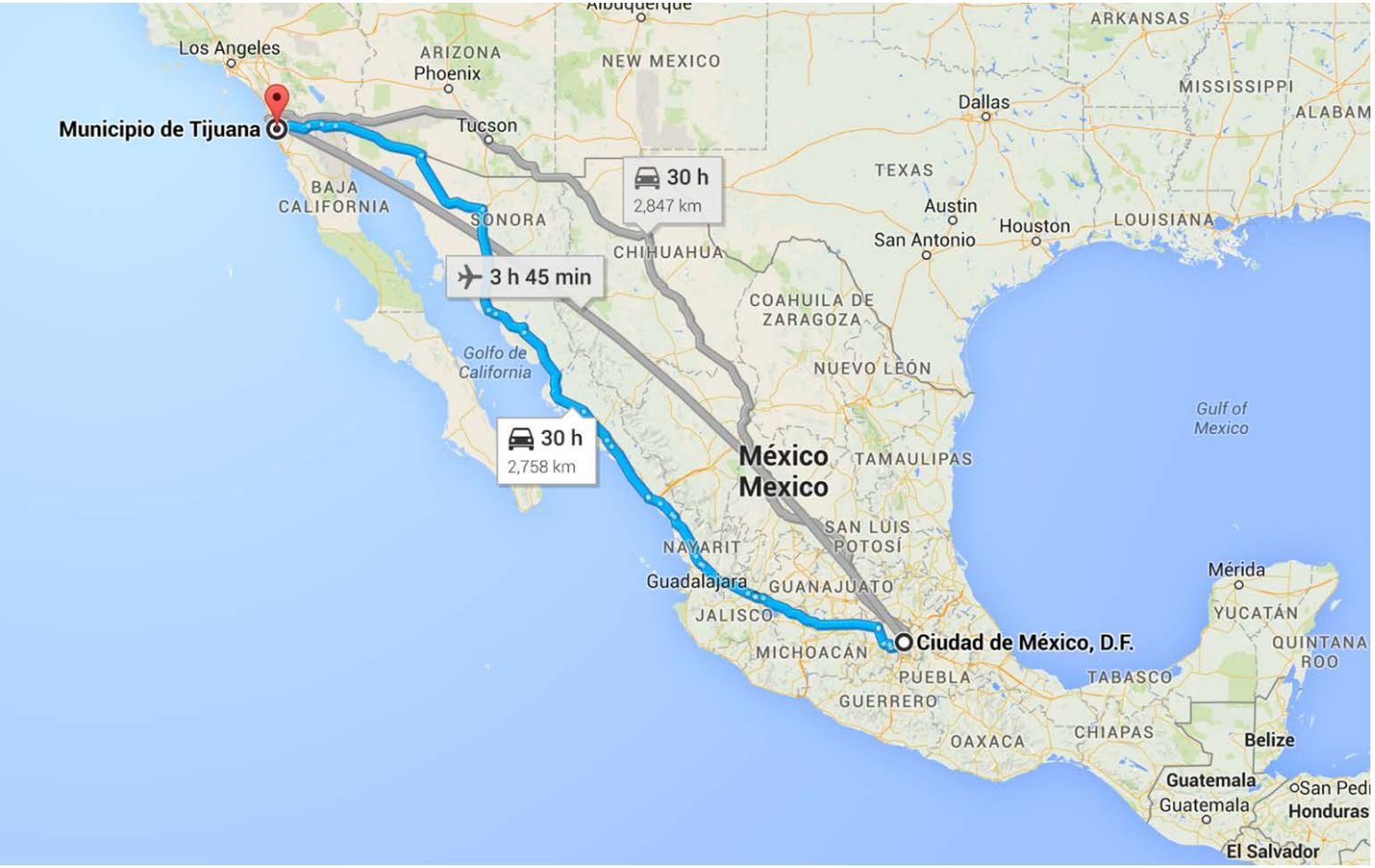
What can be done ?

Baja California:

Far away from Mexico City

Strong manufacturing hub: TVs, Aerospace, Medical Devices

Many well trained engineers working globally through these companies



bit CENTER

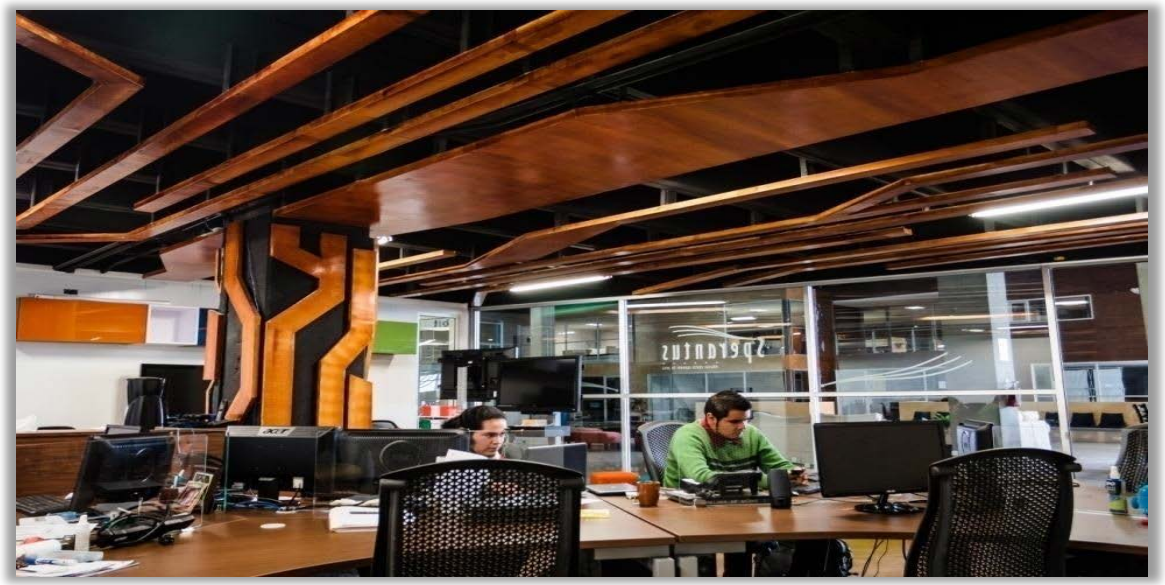
Business Innovation and Technology Center

Generating opportunities in our region…

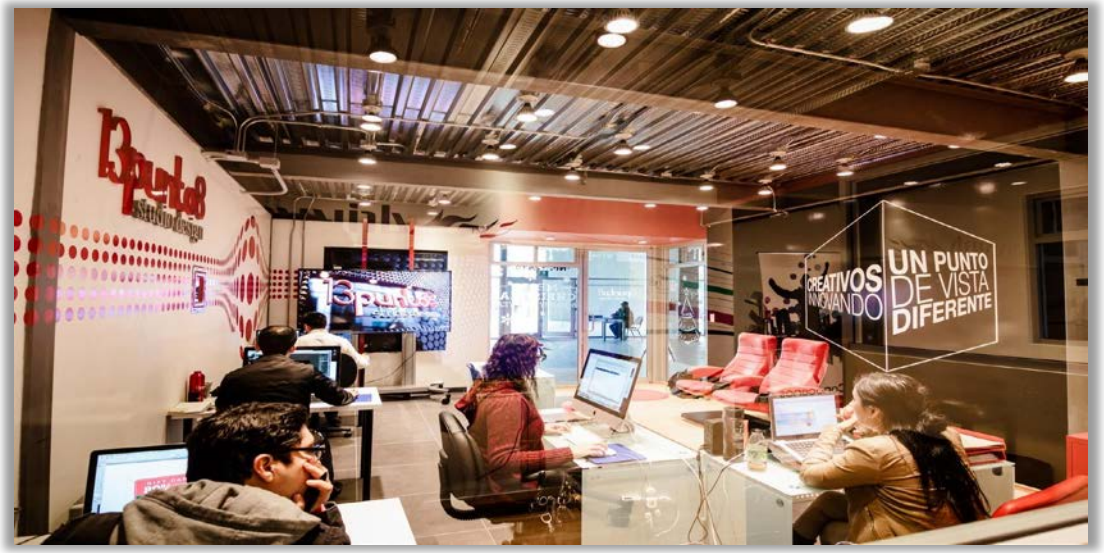
Goal is to support STEM (Science, Technology, Engineering and Math) companies by helping start ups and promoting specialized training for students and engineers.

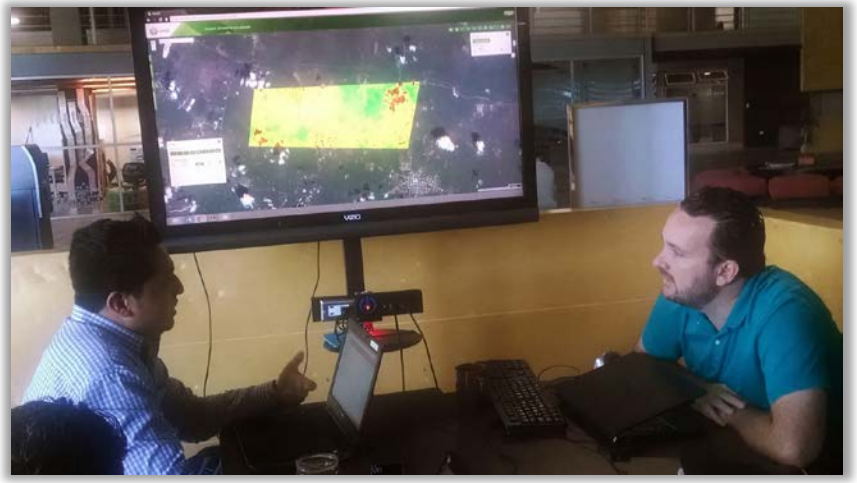
Second goal is to foster activities that help increase IT adoption in Baja`s economy & society. We want to make Baja a more digitally savvy region.

bit CENTER



bit CENTER





bit CENTER

NYCE

Misión
Ser un facilitador y acelerador de la
comercialización del conocimiento para
impacto economico y social a través
creación, y operación de empresas de
Investigación
Desarrollo Tecnológico
Unidades de negocio

bit CENTER

bit CENTER

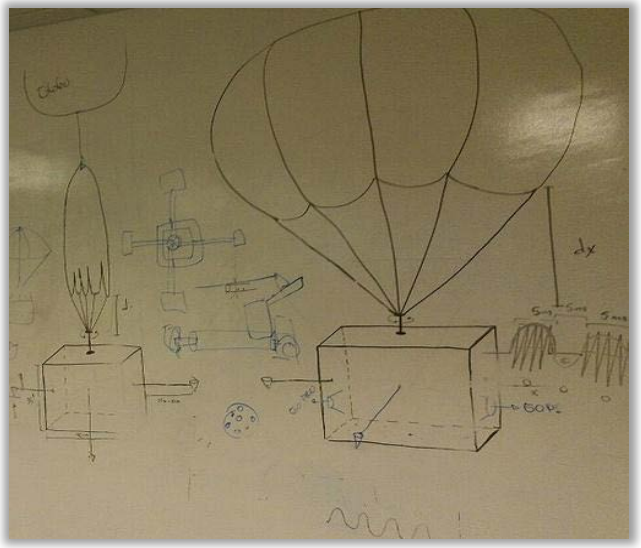
www.empleonuevo.co

soccerly
ENJOY & HAVE FUN
MAKE
DREAM AND ACCOMPLISH
ALWAYS
FAN IS KING
HUMBLE
NICE
BE

bit CENTER

Working with entrepreneurs

Ex 1: Hands on with students



Ex 2 - Digital divide

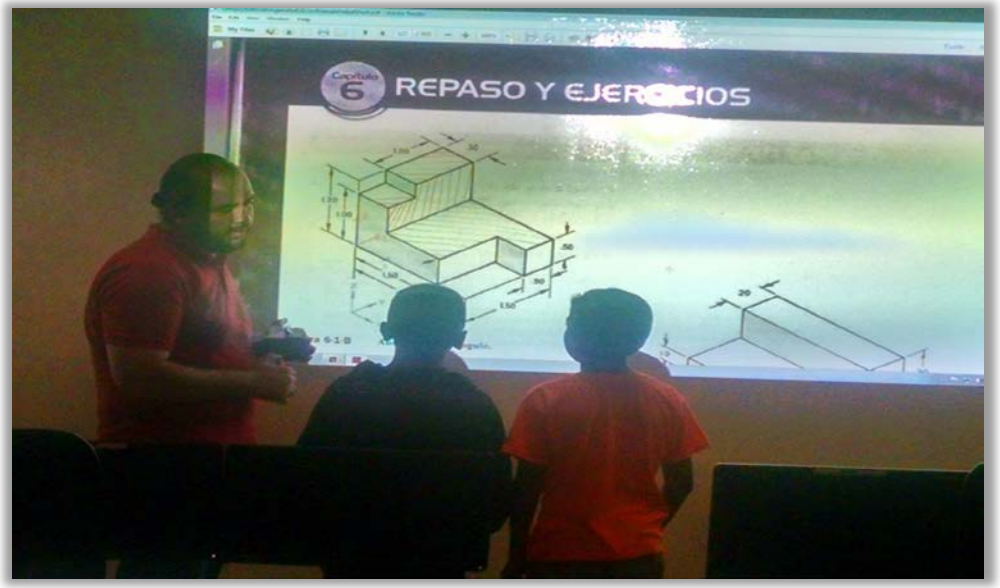
Ex 3 - High quality training

Project funded by EU:
Over 400 engineers registered in a week

bit CENTER

JAHIR

bit CENTER
DesignLAB
LABORATORIO ESPECIALIZADO PARA DISEÑO INDUSTRIAL
PROCEI
Desarrollado con el apoyo de:
PROMÉXICO
CANIETI


Capítulo 6
REPASO Y EJERCICIOS

We are discovering our own pool of talented people and getting them connected

FInally, we start generating startups pushed by experienced and well networked engineers

“Its not about what you know, but about who knows what you know”
(quote heard yesterday @ InnovateUK 2014 !)

Opportunities at three levels:

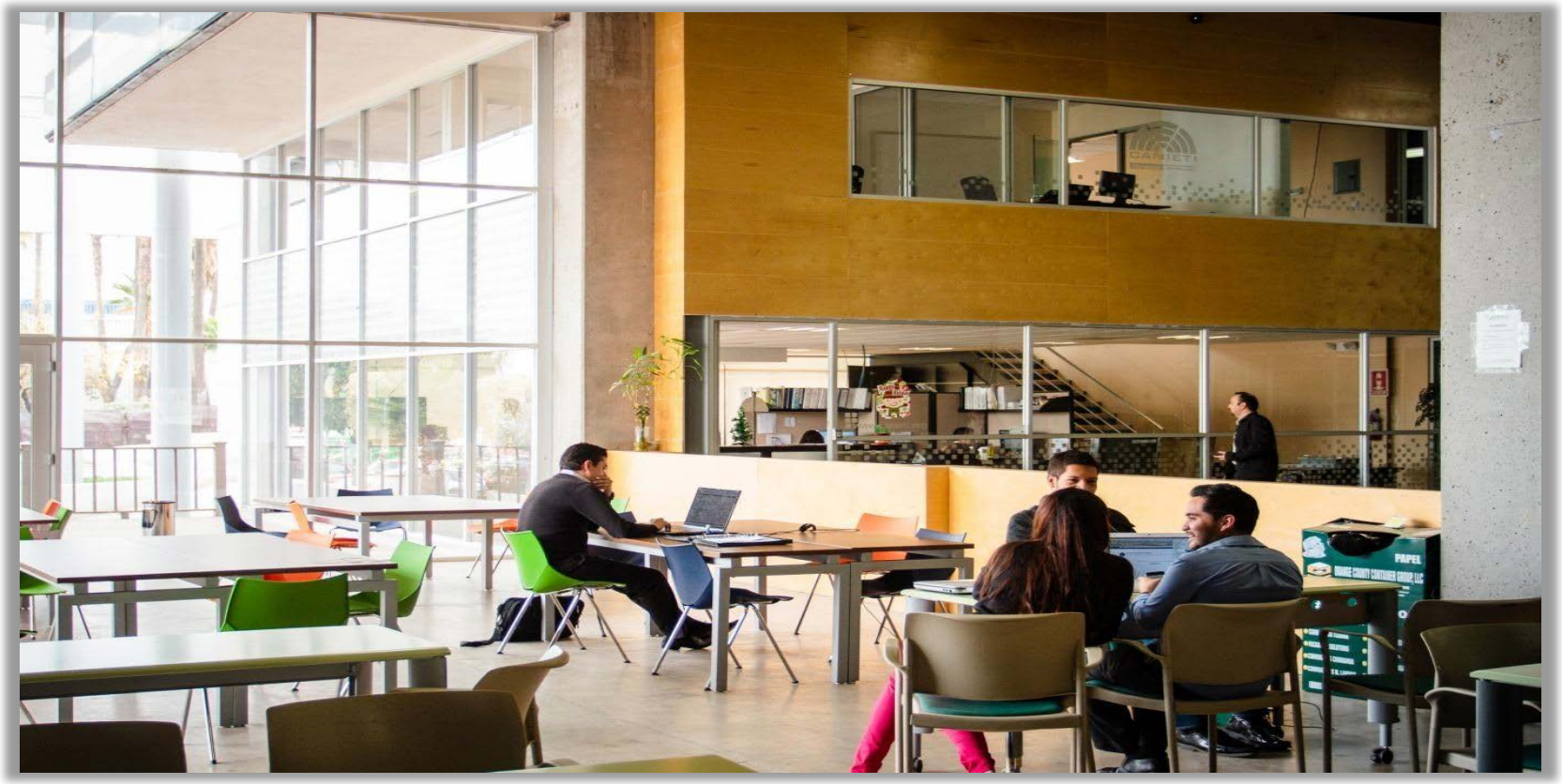
Tap into the robust manufacturing industry

Get to know Mexican tech-based SME & startups

Get involved with solutions and services for the domestic market

bit CENTER

direccion@bitcenter.mx



HOSTED BY

UK Trade
& Investment

Innovate UK
Technology Strategy Board

INNOVATE UK 2014

THE GLOBAL SPOTLIGHT ON UK INNOVATION

GREAT
BRITAIN & NORTHERN IRELAND

INCREASING BUSINESS IN LATIN AMERICA'S LARGEST ECONOMIES: ARGENTINA, BRAZIL AND MEXICO

Naldo Medeiros Dantas

Executive Director of ANPEI
(Brazilian Association for the Development of Innovative Companies)

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

ANPEI – MISSION

Stimulate technological innovation.

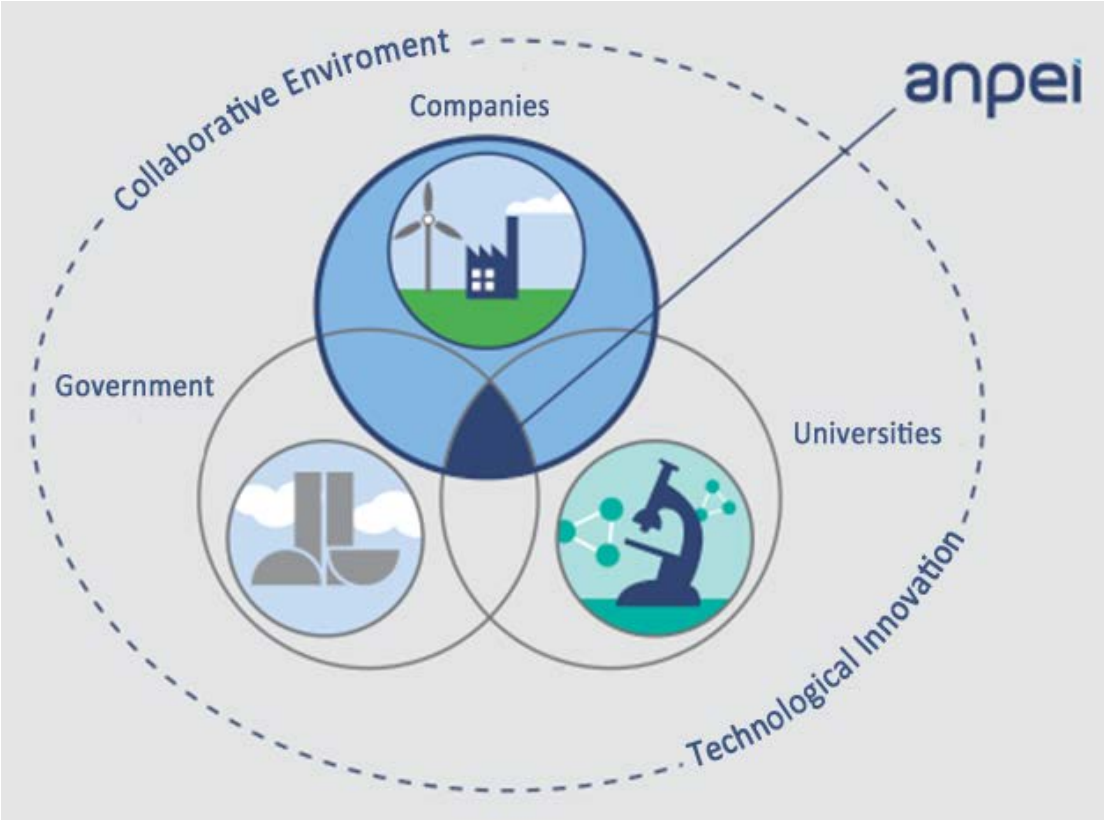
ANPEI is a private non-profit entity, which gathers companies whose main differential is the use of innovation as a strategic tool for <u>competitiveness</u>

ANPEI – WHO ARE WE?

UNIQUE BRAZILIAN ASSOCIATION
CROSS SECTOR AND INDEPENDENT THAT
CONNECT THE MAIN PROFESSIONALS THAT
ARE “HANDS ON” IN INNOVATION
BASED ON TECHNOLOGY AND
IN DEVELOPMENT OF HIGH VALUE BUSINESS

ANPEI – COLLABORATIVE ENVIROMENT

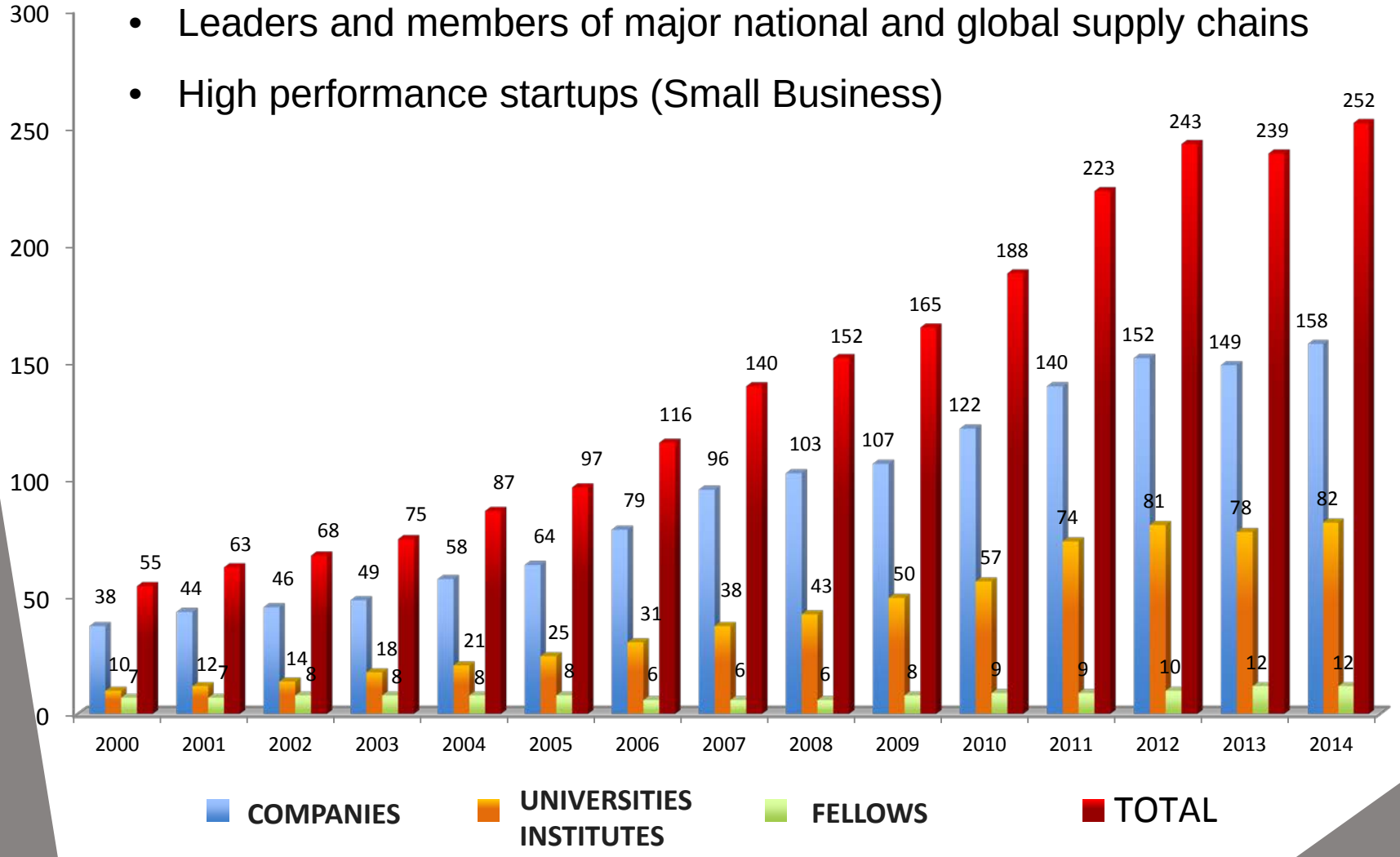
Statute:
2/3 companies and private institutes
1/3 universities and applied science institutes



Social rules:
"Learning together"
"Talking to" NOT "talk about"
Discuss innovation "in practice" approach

ANPEI – OUR MEMBERS PROFILE

- 80% of private investment in RD&I + 60% GDP from Brazil
- Leaders and members of major national and global supply chains
- High performance startups (Small Business)



INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

ANPEI – MEMBERS (a sample)

EMBRAER
Firmenich
BG GROUP
Braskem
BASF The Chemical Company
PIRELLI
Eletrobras
MSD
PETROBRAS
TECPAR
Embrapa
gsk GlaxoSmithKline
TOTVS
Venturus
MAGNETI MARELLI
I.SYSTEMS
DANNEMANN SIEMSEN
FUNDAÇÃO DOM CABRAL FDC
FIA FUNDAÇÃO INSTITUTO DE ADMINISTRAÇÃO
4INPI
DUPONT
GE
CHEMYUNION
SAMSUNG
VALE
3M
INMETRO
FIOCRUZ
FIAT
Das Auto.
RENAULT
PUCRS
MAGNETI MARELLI
UFMG
Unilever
GENTROS
kraft foods
UNIFACS UNIVERSIDADE SALVADOR
GranBio
ABP
Embraco
Serasa Experian A gente trabalha para você crescer.
Instituto Inovação
UNICAMP
Fibria
Whirlpool
USP
SIGMAPLASTH
USIMINAS
BOSCH
CRISTÁLIA PRODUTOS QUÍMICOS FARMACÊUTICOS LTDA.
IBM
Rhodia
natura bem estar bem
weg
ufscar
ELDORADO
ALBERT EINSTEIN
QUALCOMM
cielo
FUNDAÇÃO GETULIO VARGAS
PEPSICO
FMC Technologies
VLADOS THE ULTIMATE VALVES TECHNOLOGY
SIEMENS

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

Should I make business based on technology with Brazil?

Its is so exotic…

Too many forest…

Too hot…

Too dangerous…

It is not aligned with my global strategy…

Is there law protection for us?

They speak Portuguese?!?

BRAZIL: A BRIEFING

- 202 million Citizens
- 7th world economy (GDP)
- One language
- 2,0 % global papers (13th position);
- 12.000 PhD / year;
- No ethnical /religious conflicts
- Friendly and collaborative people
- Young but stable Democracy
- Strong internal market
  - ➢ Emerging Middle Class
  - ➢ 54% of population.
  - ➢ Consumption of £ 292 Billion/year

- Heath
- Education
- Web
- Communication
- Entertainment
- New experiences
- Cosmetics
- Clothes
- Mobility

List by the World Bank (2013)[14]

Rank	Country/Region	GDP (Millions of US$)
	World	74,899,822[n 7]
	European Union[n 1]	17,350,853[17]
1	United States	16,800,000
2	China	9,240,270[n 2]
3	Japan	4,901,530
4	Germany	3,634,823
5	France	2,734,949[n 8]
6	United Kingdom	2,521,381
7	Brazil	2,245,673
8	Russia	2,096,777[n 4]
9	Italy	2,071,307
10	India	1,876,797
11	Canada	1,826,769
12	Australia	1,560,597
13	Spain	1,358,263
14	South Korea	1,304,554

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

CHALLENGES & OPORTUNITIES

Energy:

Gas and Oil

Basic Engineering

Bioenergy

Energy: public fundings and targets

R$ 5,7 bilhões

Energy and chemical productions using sugarcane source (PAISS): R$ 3,3 bilhões

EM EXECUÇÃO

- 2nd generation bioethanol
- Chemicals from renewable source
- Technologies for biomass gasification

Bioenergy

Energy: public fundings and targets

R$ 5,7 bilhões

Inova Energia: R$ 2,4 bilhões

- Smart Grids
- Power transmission in ultra voltage
- Alternative energy photovoltaic and solar thermal
- Hybrid vehicles and energy-efficient vehicle

Basic Engineering

Oil & Gas: public fundings and targets

R$ 4,1 bilhões

Inova Petro: R$ 2,9 bilhões

Pipeline of knowledge intensive technologies

EM EXECUÇÃO

Other actions

R$ 1,2 bilhão

- Technologies for the pre-salt layer suplly chain
  - deployment and upgrading of R & D centers
  - new materials,
  - seismic engineering,
  - enhanced oil recovery,
  - subsea engineering
- Technologies for unconventional gas exploration

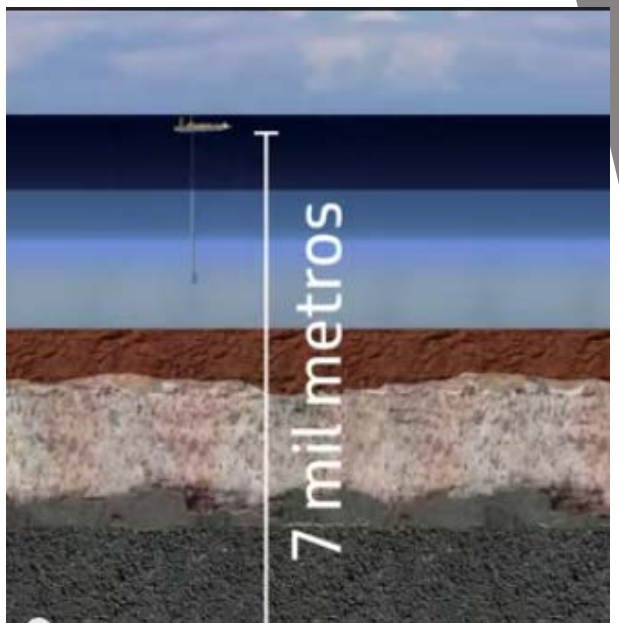
Oil & Gas

Pre-salt Layers
8 years later
500 k barrels / day

Oil & Gas Challenge

Pre Salt Oil & Gas Exploration: **70 a 100 billion oil equivalent barrels**

- **Some Other Challenges*:**
  Construction oil fields with large angles
- Integrity of oil fields
- Penetration rate in microbial carbonate reservoir
- New alloys to reduce material costs in oil fields
- Reservoir characterization
- Advanced recovery
- Rock-fluid interaction
- Flexible risers to 2.200 m water depth
- Flow behavior
- Control of fouling
- Anchoring in 2.200 m water depth
- Interaction with the system risers
- Processing CO2
- subsea processing



* Petrobras (2011)

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

CHALLENGES & OPORTUNITIES

Aerospace and defense

Green aircraft

Unmanned Aerial Vehicle (UAV)

KC390

FX-2

Aerospace and defense: public fundings and targets

R$ 2,9 bilhões

Inova Defesa:
R$ 2,4 bilhões

- Ballistic and UAVs vehicles
- Sensors, command and control technologies
- Space propulsion, satellites and space platforms
- Technological platforms for more efficient aircraft
- New materials

Other actions R$ 0,5 bilhão

DCTA

Departamento de Ciência e Tecnologia Aeroespacial

Massachusetts Institute of Technology

Tech park

PARQUE TECNOLÓGICO São José dos Campos

EMBRAER

FOR THE JOURNEY

Started : 1941

BRAZILIAN SUPPLY CHAIN

CHALLENGES & OPORTUNITIES

HEALTH

Medicaments

Vaccines

Equipments

Services

SUS Sistema Único de Saúde

BRAZILIAN
HEALTH PUBLIC SERVICE
180 MILLION USERS

Health System: public fundings and targets

R$ 3,6 bilhões

Inova Saúde: R$ 1,9 bilhão

- Structure of the value chain in biotechnology, chemical synthesis and biopharmaceuticals
- Medical equipment and devices

Demais ações: R$ 1,7 bilhão

- Biotechnology
- Investments in oncology (radiopharmaceuticals and stem cells) and molecular diagnostics

Bristol-Myers Squibb

farmanguinhos Instituto de Tecnologia em Fármacos

Atazanavir → AIDS treatment

FURP FUNDAÇÃO PARA O REMÉDIO POPULAR "Chopin Tavares de Lima"

Boehringer Ingelheim

Pramipexol → Alzheimer treatment

BIG CHALLENGE:
US$ 10 billion déficit in commercial balance

SUS Sistema Único de Saúde

CHALLENGES & OPORTUNITIES

THE ROAD MAP

R$32,9 billion

R$28,5 billion
Direct investment

Credit – 20,9 bi
Grant – 1,2 bi
Non refundable – 4,2 bi
Equities– 2,2 bi

R$4,4 bilhões
Partners organizations

TOTAL PUBLIC INVESTMENT

Brazilian Synchrotron Light Laboratory

AGRICULTURE

Genetic Improvement

Medications & Vaccines

Climate Change

Precision Agriculture

CHALLENGES & OPORTUNITIES

THE ROAD MAP

ICT´s

Cyber security

Smart cities

Web broadband

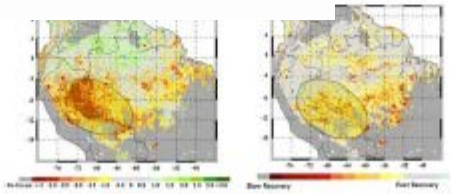
ADVANCED MANUFACTURING

Automation

Robotics

AMAZÔNIA FOREST

Monitoring and surveillance



Climate Analysis

Biodiversity and bioeconomy

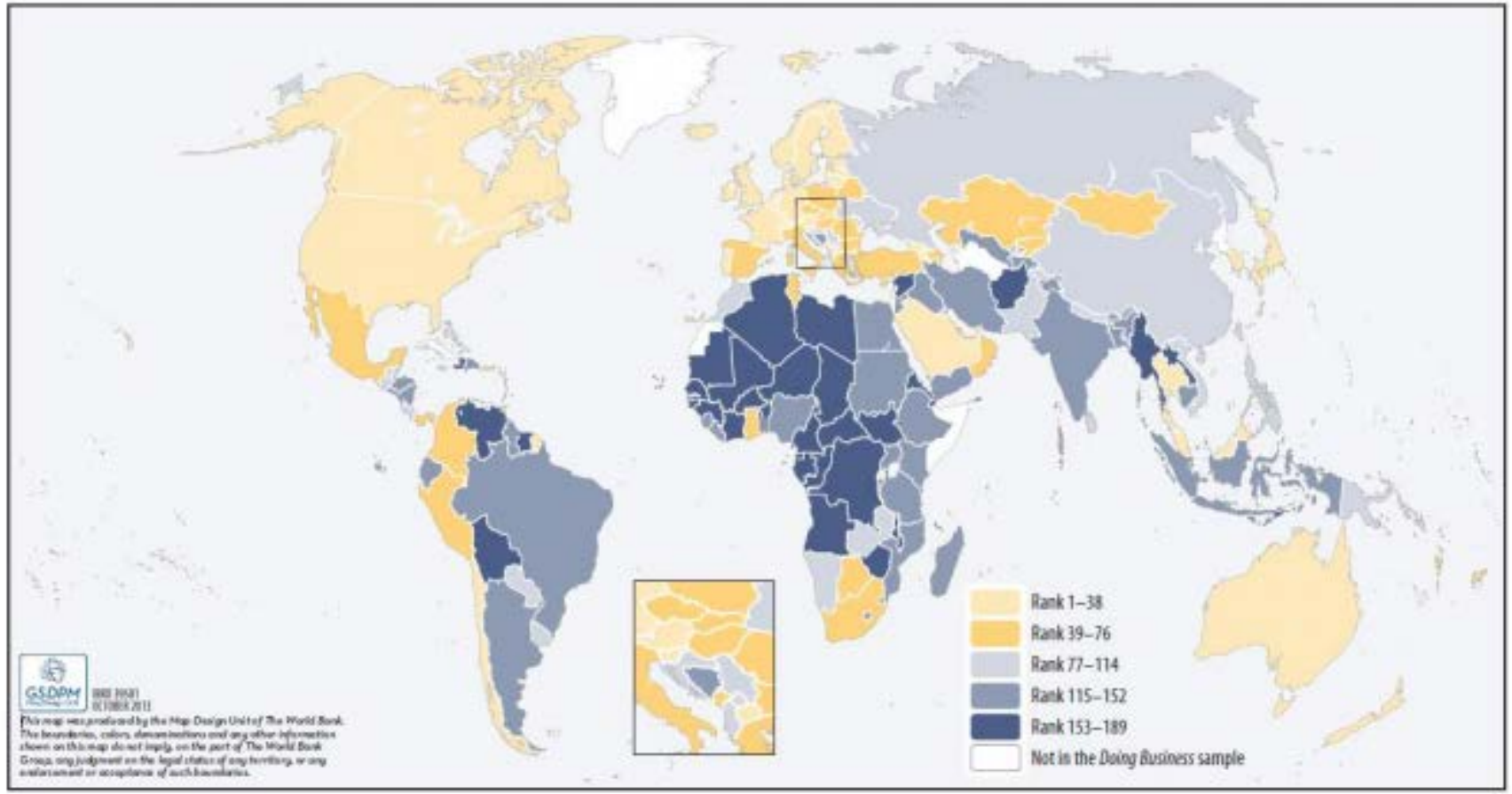
INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

Yes… we have problems
and
difficulties to solve

DOING BUSINESS – BRAZIL 116th

THE BUSINESS ENVIRONMENT

Figure 1.1 Where economies stand in the global ranking on the ease of doing business



Source: Doing Business database.

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

DOING BUSINESS – WE ARE WORKING…

How Brazil ranks on *Doing Business* topics

- Infrastructure
- Young venture capital market
- Huge backlog in the Brazilian IPO

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

BUT WE HAVE SOME SOLUTIONS ...

- differentiated and simplified tax regulation for small businesses
- Mentoring and acceleration program for startups
- Acceleration and investiment program for ICT startups
  - payment until 90% of the cost of technological services SME
  - PIPE Grant: £ 50K for Concept proof
    £ 250K for Prototyping
  - Applied Science Institutes + 2/3 cost for development paid by EMBRAPII

HIGH VALUE BRAZILIAN INNOVATION NETWORK

WE HAVE A REAL MARKET FOR INNOVATIONS SO…

KEEP CALM AND INNOVATE

IN BRAZIL

YOU CAN DO BUSINESS

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT ON UK INNOVATION

HOSTED BY

UK Trade
& Investment

Innovate UK
Technology Strategy Board

INNOVATE UK 2014

THE GLOBAL SPOTLIGHT ON UK INNOVATION

GREAT
BRITAIN & NORTHERN IRELAND

INCREASING BUSINESS IN LATIN AMERICA'S LARGEST ECONOMIES: ARGENTINA, BRAZIL AND MEXICO

Tiago Doc Luz

Chief E-Commerce Evangelist,
VTEX / E- Instituto

INNOVATE UK 2014
THE GLOBAL SPOTLIGHT
ON UK INNOVATION

HOSTED BY

UK Trade
& Investment

Innovate UK
Technology Strategy Board

INNOVATE UK 2014

THE GLOBAL SPOTLIGHT ON UK INNOVATION

GREAT
BRITAIN & NORTHERN IRELAND