



**USAID**  
FROM THE AMERICAN PEOPLE



SWEDEN

# Information Technology

*roadmap to competitiveness*

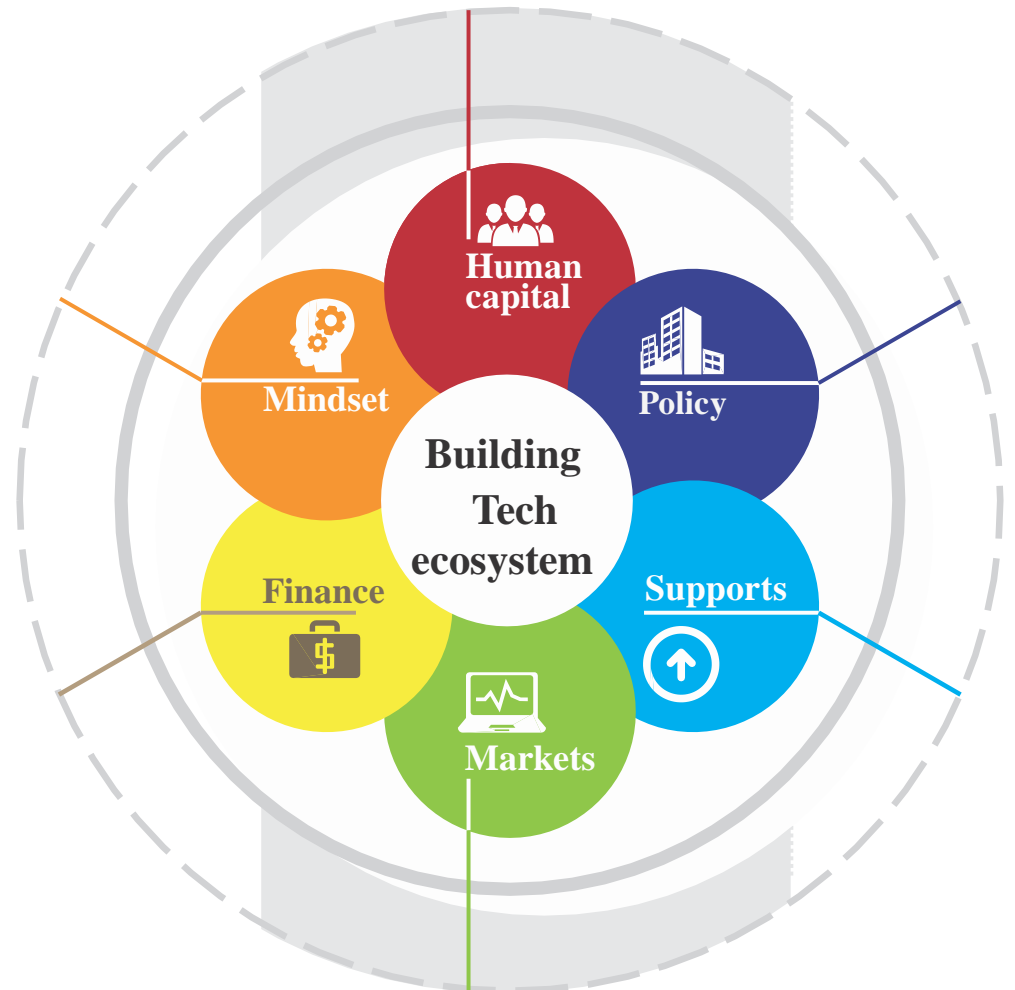
Moldova Competitiveness Project financed by  
USAID and Government of Sweden

# QUICK FACTS

- \$80M IT service exports (2016)
- 20-fold export growth in 12 years
- ~20,000 people
- ICT ~ 7% of GDP

# WHY ICT?

- Fastest growing industry
- Highest wages
- Youth employer
- Transforms & innovates





Human  
capital

# GROW TECH TALENT

- Upgrade STEM education
- Promote tech careers
- Adapt curricula to industry needs
- Nurture practical tech skills

1,000 jobs available  
today ( $\approx 10\%$  of workforce)

Large skills gap [fresh  
graduates require additional up  
to 6 months on-the-job  
training]

Moldova ICT Strategy  
targets 20,000 IT  
specialists

# ROBOTICS & STEM in schools

Demonstration effect / STEM policy / Future Classroom



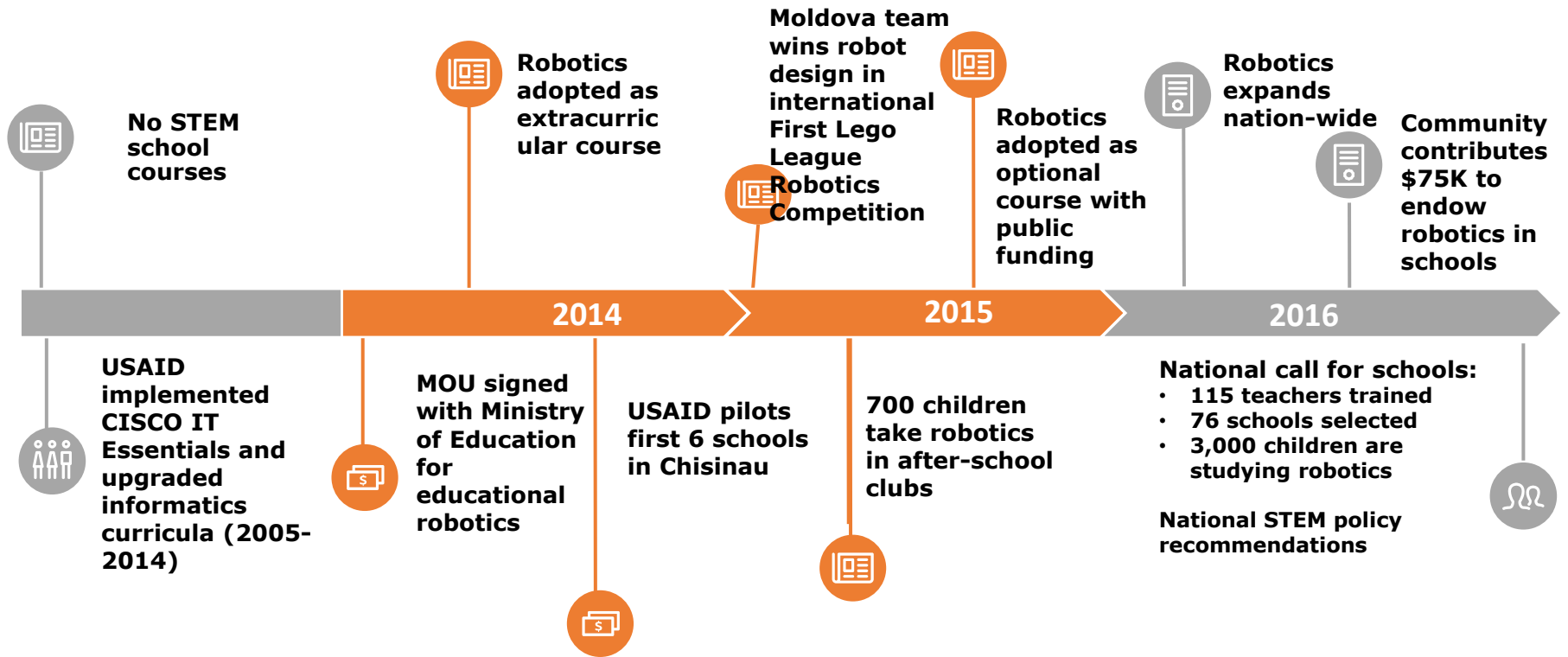
# ROBOTICS & STEM in schools

## ALREADY:

- 83 robotics clubs in 40 localities
- 150 teachers
- 3,000 + youth
- Robotics is optional school course
- \$75K fundraised by community (or \$1 for every \$3 by USAID)

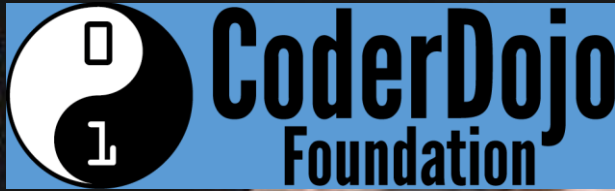
## NEXT:

- Pilot ER4STEM for younger age 7 to 12
- Expand to “Future classroom/ FabLabs”
  - Partnership with private companies
  - Aligned with WB Education Reform
- National STEM policy



# EXTRACURRICULAR TECH

Connect to global movements / Involve private sector in education



CoderDojo is a worldwide movement of free, volunteer-led, community-based programming clubs for young people.

Girls  
Go IT

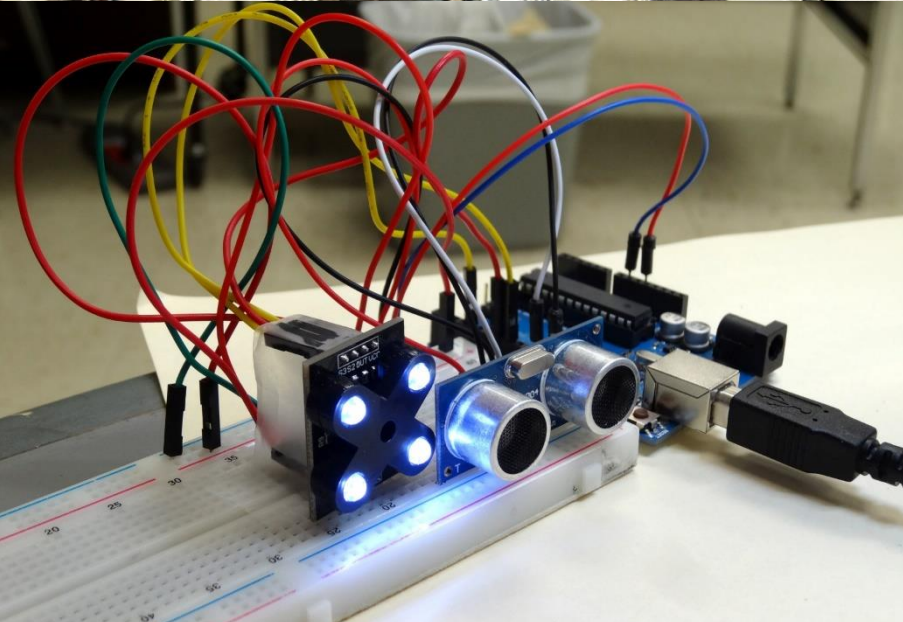
## ALREADY:

- 80 kids & 20 volunteer mentors in Coder DOJO
- Multipartner: Yopeso, FFW, Artico, TUM
- 10 locations throughout Moldova of Girls GO IT hubs
- Partnership with Novateca, UN Women, other donors

# LABS FOR PRACTICAL SKILLS

Mechatronics, Internet of Things, Security, Industrial Robotics, System Engineering

70% of employers say most severe gap is in practical skills



Start with Technical University  
Launch Fall 2017  
Private corporations –  
Siemens, Cisco, National  
Instruments, IBM  
Expand in 2018 – State  
University, ASEM, VET  
By 2020 – innovation LABs in  
each major University/VET



# ACADEMY PLUS

## Alternative tech education for youth

AcademyPlus is an international initiative – free of charge coding school to train world-class developers in under two years. A quick-win solution to produce industry needed workforce.

- Launched summer 2016 by IT Moldova Foundation
- Private partners joined: MAIB, Cedacri, Softehnica
- Satellite locations in Tekwill & regions

### FY16:

- 5,000 applicants
- 370 passed 4-week bootcamp
- 120 undergoing main program
- 40 committed to employers





# INTERNATIONAL CERTIFICATIONS

Upgrade professionals to internationally recognized/ knowledge generation

- in partnership with USAID REG
- 100+ professionals by end 2017
- ATIC main implementer

## Scrum



## Kanban

## SOFTWARE DEVELOPER EXAM (SDE – JAVA)



## OTHER



## CMMI®



Supports



Mindset

# BUILD TECH ECOSYSTEM

- Develop physical infrastructure
- Boost innovation hubs
- Strengthen acceleration & entrepreneurship

# STARNET DIGITAL CITY

Access to quality infrastructure / game-changing for Moldova's IT industry image and position

- First IT Park in Moldova
- Private investor Starnet
- €15M investment
- 2,000 jobs
- 50 technology firms, focus on multinationals and early stage
- Launch of first tower in Fall 2017
- USAID – facilitator, strategic advisor and DCA loan guarantee



# Nurture tech entrepreneurship

- Support existing and new entrepreneurship spaces, communities & initiatives
- Assist idea generation and business (pre)acceleration programs
- Connect to global ecosystem

5 Innovation Hubs / 3,000+ community members / 100+ events



Global and local entrepreneurship events





# Put Moldova on the map

- Promote Moldova as a “value-added” nearshoring destination
- Connect to regional and global markets
- Propagate IT solutions for non-IT sectors

# LOOKING WEST

German marketing coaching for IT firms / Israel testing / Sweden&UK next



## ISRAEL: THE START-UP NATION

February 20 | 6-7:30pm | University Hall 122  
Featuring NU Alumnus Daniel Blumenthal, Deputy Director of the Government of Israel Economic Mission to the Midwest



Farley Center for Entrepreneurship + Innovation  
NORTHWESTERN UNIVERSITY

ISRAEL EDUCATION CENTER

## BUSINESS SWEDEN

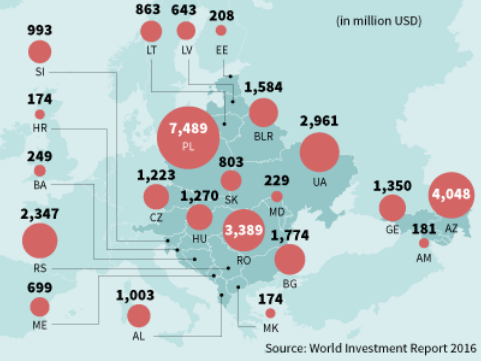
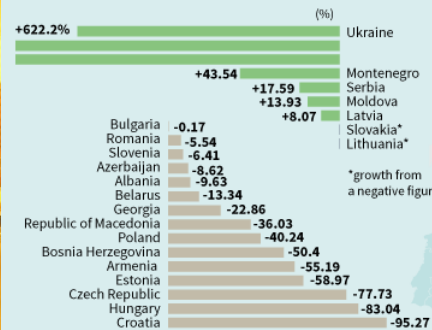


# EMERGING EUROPE on MOLDOVA

Profile Moldova business&investment /MIEPO/ IDC (2012/2014)



## FDI INFLOWS IN EMERGING EUROPE IN 2015 COMPARED TO 2014



# ICT FOR SME EFFICIENCY

Innovative use of technology for Moldovan businesses

## ALREADY:

- Cloud technology for fashion industry retail
- Class scheduling software in 75 schools
- Wine traceability and testing software

## NEXT:

Joint call with EBRD BAS  
(sharing 1/3 each  
USAID/EBRD/business)  
Start Spring 2017







# Support conducive tech policies

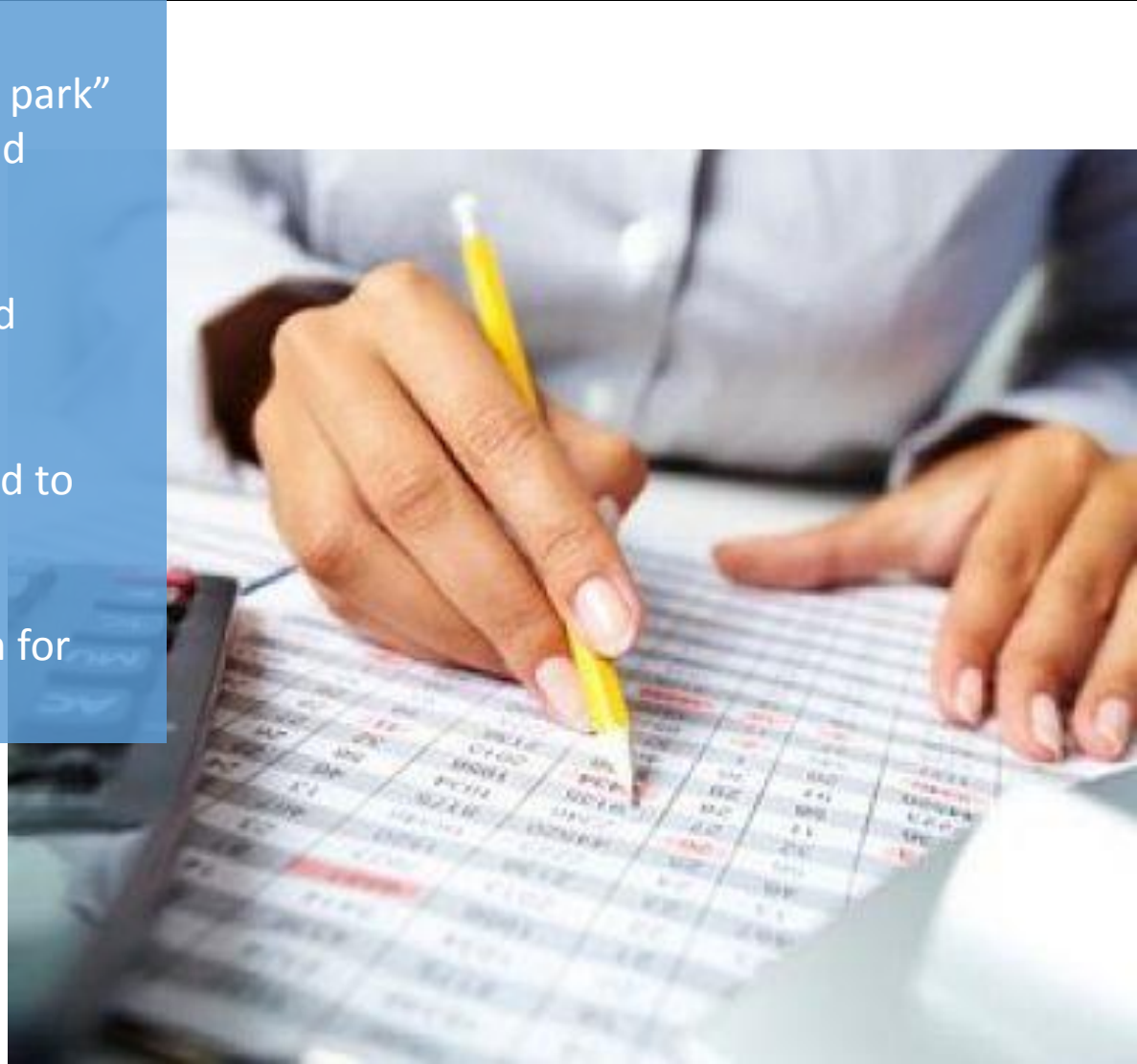
- Achieve shared industry vision
- Raise industry voice
- Create a conducive tax and business environment for IT

# FISCAL POLICIES

ICT industry in top Government priorities / Moldova's tax regime among the most competitive in the region

## ALREADY:

- New Law on IT Parks with “virtual park” and 7% single tax model – adopted Spring 2016
- Tax incentives for coders extended through 2020
- New Law on E-Commerce adjusted to best international practices
- Ministry of ICT gained mechanism for accessing public funding



# STARTUP VISA

## Facilitating infusion of foreign talent

In Spring 2016 Ministry of ICT initiated two public policies – Startup Visa and Innovation Finance

- Legislation adjustment for streamlining permits of work and stay – issuance within 2 weeks
- Facilitate “brain gain” and niche expertise
- Best practice based on 20 tech countries
- Pending Parliament approval in second reading (Spring 2017)
- Pre-requisite for STARTUP MOLDOVA initiative



Replenishment of the growing demand for skilled labor



Attracting entrepreneurs and foreign IT companies – Team sourcing



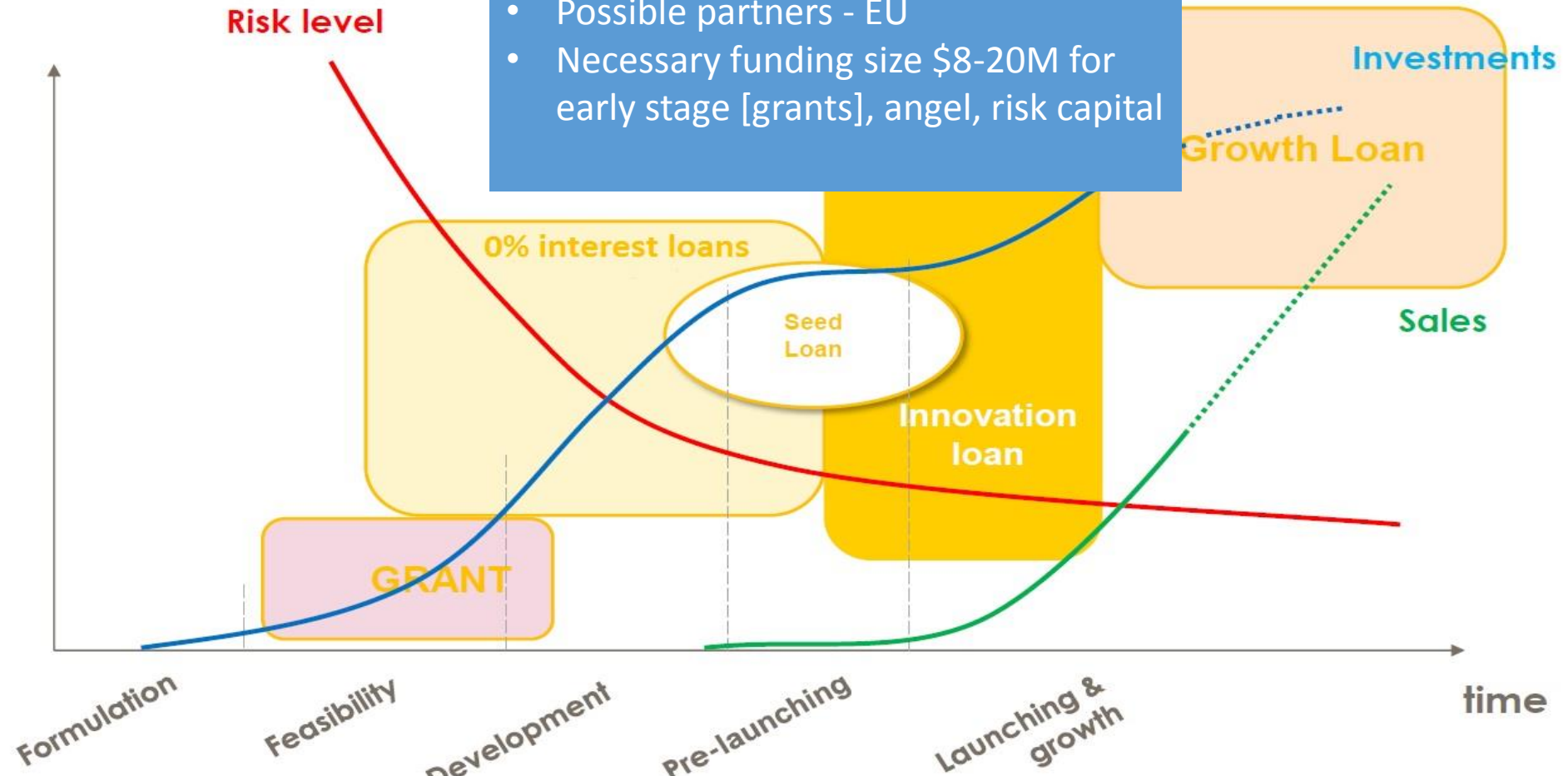
Attracting IT professionals – Startup Visa

# INNOVATION FUND

Financing innovation and startups / early stage

## Financing innovation

- Access to tech finance public policy – summer 2017
- Government-backed risk-based funding
- Possible partners - EU
- Necessary funding size \$8-20M for early stage [grants], angel, risk capital

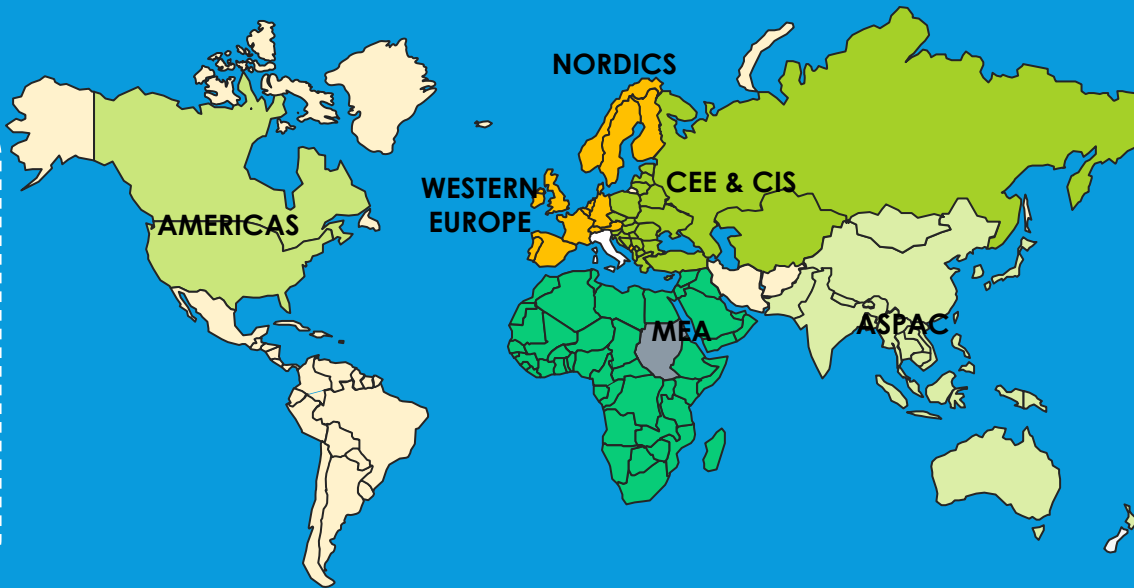


# IT INDUSTRY STRATEGY

## Shared industry vision / building on progress

### Traditional Services

Continue to offer system integration, application development, maintenance and testing services to existing clients



### Verticals/Industries



Automotive & Aerospace



Telecom



Manufacturing



BFSI



Energy



Government

### New-Age Services/Offerings



ER&D



Analytics



AI & Machine Learning



IoT



Automation



Localization



Innovation



Gaming & Animation

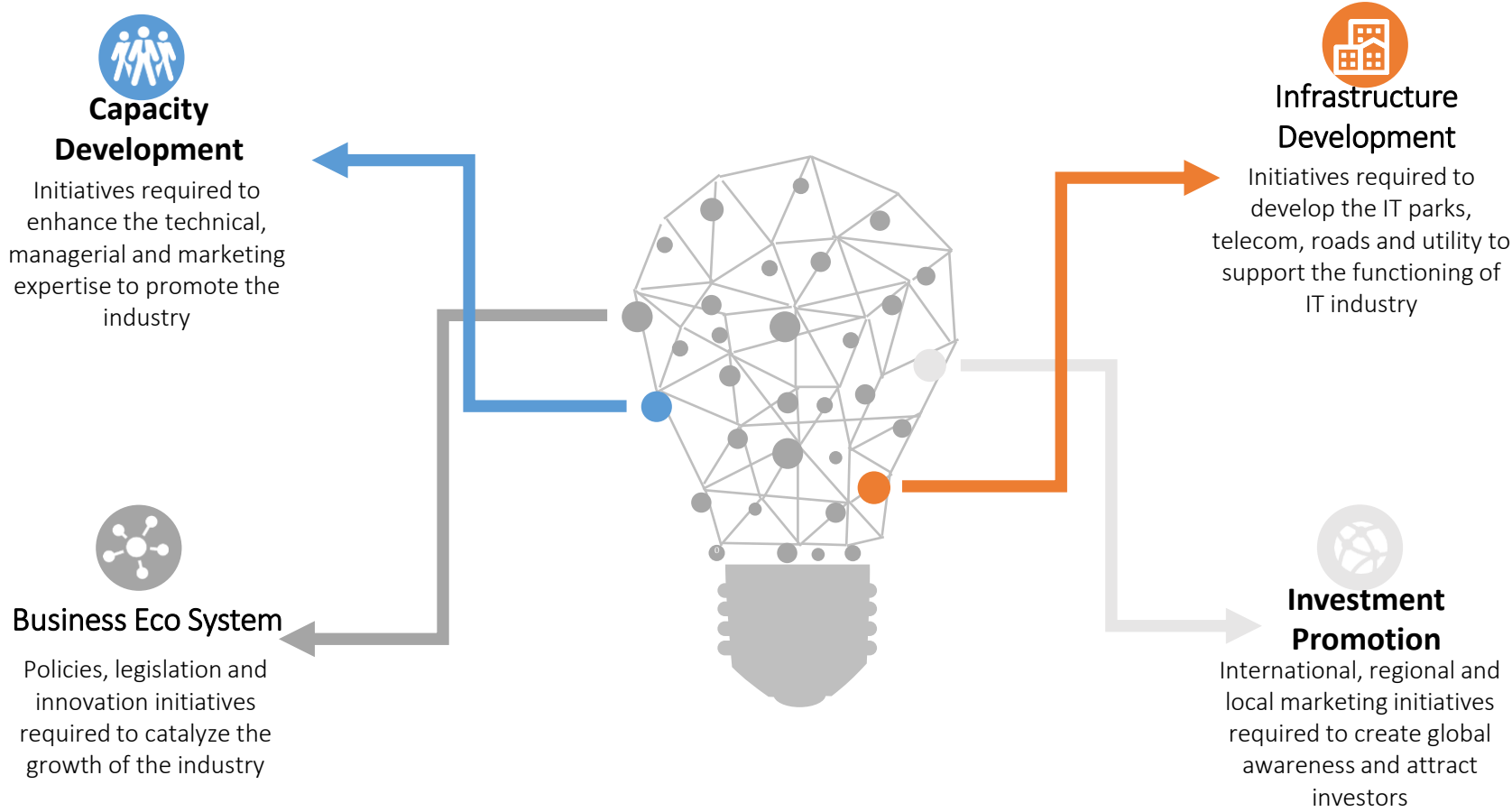


E-Government



Bio-Informatics

# The industry development initiatives can be categorized into four pillars to plan their synchronized execution ...



# ICT INDUSTRY STRATEGY

## Expected outcomes

REVENUE (USD MN) & EMPLOYMENT (FTEs) PROJECTIONS FROM PROPOSED INVESTMENTS IN IT SECTOR

By 2022  
Min US\$ 238M  
Max US\$ 590M

