PRELIMINARY HACKATHON THEMES AND CHALLENGES IDENTIFIED IN WORKSHOPS ON OCTOBER 8-9, 2019
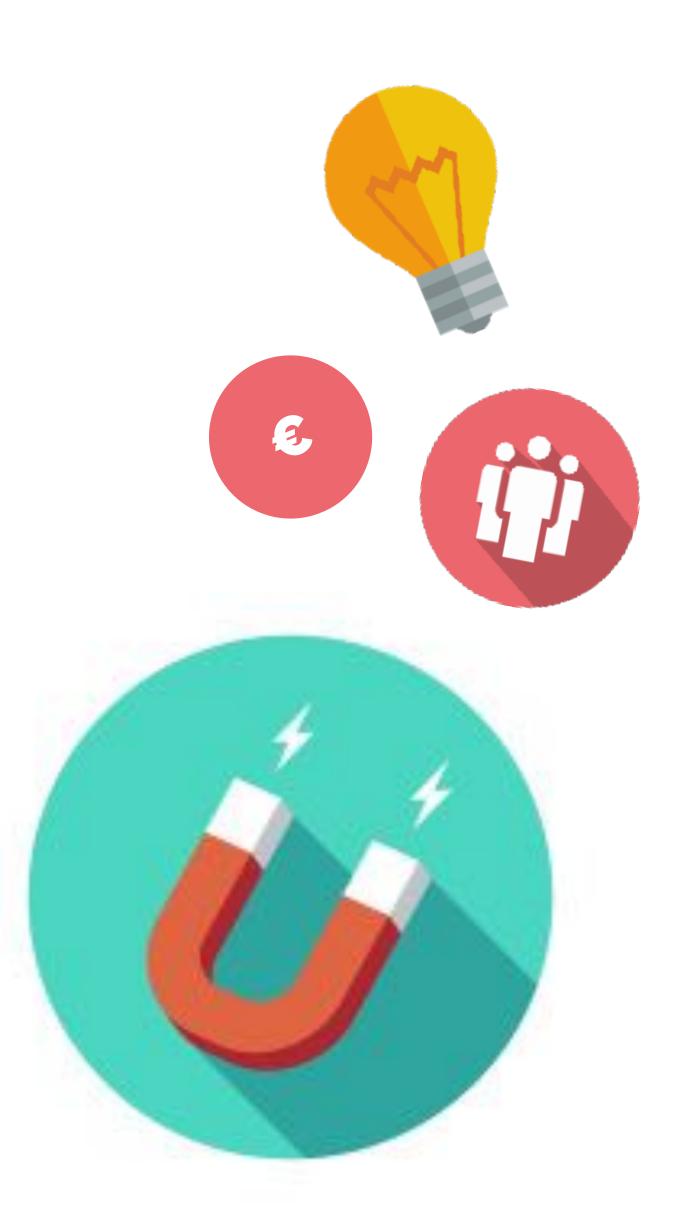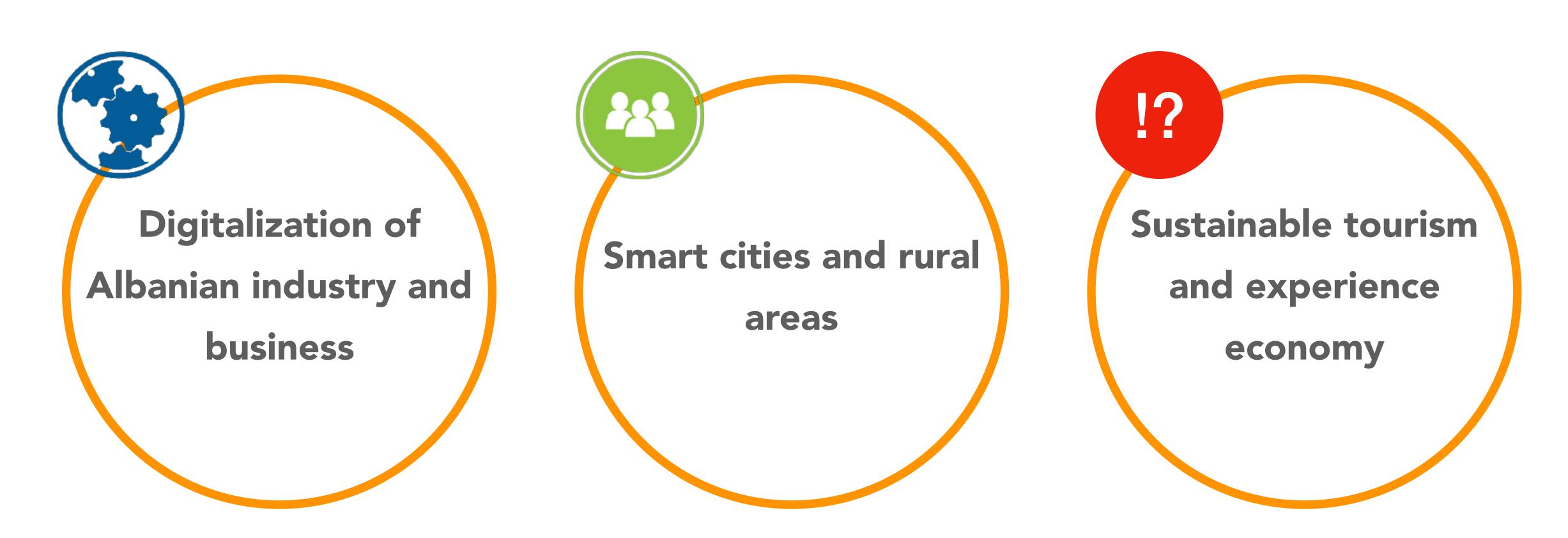
A **meaningful challenge** attracts & inspires individuals, resources

PRELIMINARY HACKATHON THEMES IDENTIFIED WITH INDUSTRY AND UNIVERSITIES IN BOTH WORKSHOPS

Digitalization of Albanian industry and business

Smart cities and rural areas

Sustainable tourism and experience economy

1-3 challenges under each theme. Note that themes will be further developed with challenge-owners, enabling businesses and universities.

Digitalization of Albanian industry and business: Potential challenges, needs and opportunities

- *What is a smart factory of the future?* #5G, #IoT, #energyeffiency, #robotics, #machinelearning, #AI, #optimization, #digitalization

- *How do we digitalize rural Albania and its business?* #5G, #agriculture, #farmtech, #ruralbusiness

- *How do we enable safe digital services? How to move from cash economy to digital payments and infrastructure? What is the future of banking?* #fintech, #payments, #cybersecurity, #blockchain #cryptocurrency

- Improving energy efficiency and sustainability

- Optimization, overall digitalization of industry and manufacturing actuviities, reduction of storage costs, electronic exchanges

- Utilizing big data, AI and machine learning, building information models (BIM) and RPA - robotic process automation.

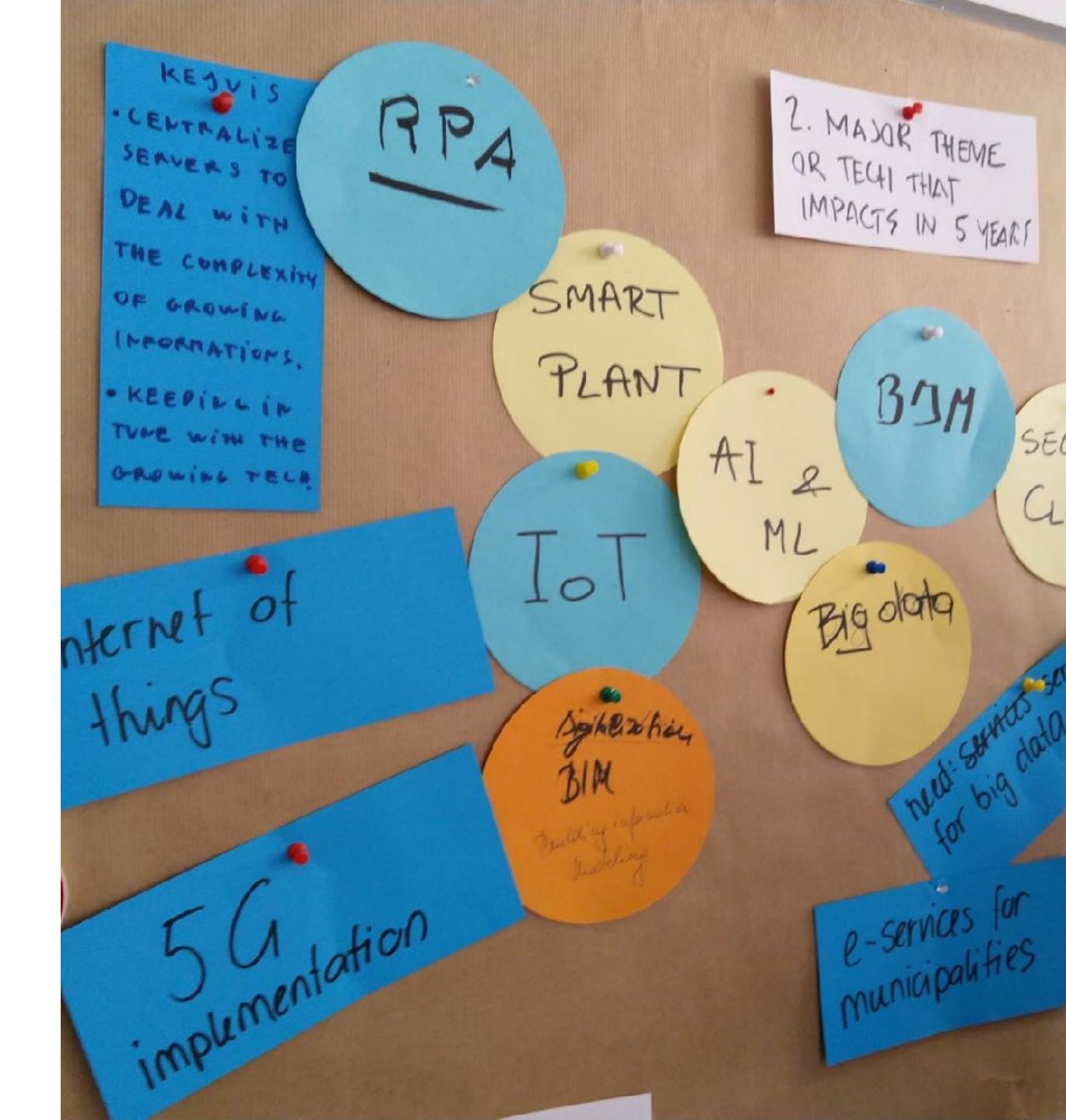## Potential business and societal actors to be involved (to be confirmed)

POTENTIAL ENABLERS	POTENTIAL CHALLENGE-OWNERS
Participants of Workshop 1, such as Crystal System, Antea Cement, telecommunications companies, banks Challenge fund participants: Associazione Imprenditori Italiani in Albania, Future University of Tirana - SMART Materials; Fintech Center and Easy Pay Cyber Security Hub AI, machine learning, robotics and telecommunications companies	Industry associations, unions, chamber of commerce (Workshop 1) Large companies, development enthuasistc companies (Workshop 1) Banks (Workshop 1) Ministries

Example of universities' potential offering (based on Workshop 2, to be supplemented)

TOPIC	UNIVERISTY
DIGITALIZATION OF INDUSTRY	
Expertise in data mining and data analytics	UMT
Creative ideas, advertising and visiblity	UART
Expertise in mentoring, software engineering, machine learning, AI, entrepreneurship	Epoka
Space and expertise	UMB
Faculty of economy, department of informatics	Tirana University
ENERGY AND SUSTAINABILITY	
REHUB, Training Center	UMB
Robotics	Epoka
Energy effiencecy, renewable energy	UAMD
Capacity building, labs	UMT
Energy, clean energy laboratory, technicians expertise	Polis
Sustainable developoment. research expertise	UAMD
FINTECH, CYBER SECURITY	
Cyber Security Hub / Academy	Epoka and others (Lyrasi, Marin Barleti, Metropolitan, Politeknik University, etc)
Insurance industry development	UAMD
Software engineering, AI and machine learning	

Smart cities and rural areas: Potential challenges, needs and opportunities

- *What are more inclusive and efficient municipality services of the future?*
#egovernment, #mobility, #IoT, #5G, #sharingeconomy, #digitalization, #inclusiveness, #efficency

- *How do we ensure inclusion of rural population with digitalization and new services?*

- Advancing the (smart) city strategies of Albanian municipalities (Tirana, Elbasan, etc.)

- Internet for all, 5G implementation, etc.

- Collection and distribution of farmers' products.

Potential business and societal actors to be involved (to be confirmed)

POTENTIAL ENABLERS	POTENTIAL CHALLENGE-OWNERS
Telecommunications providers Workshop 1 participants Challenge Fund particicpants: Future University of Tirana - SMART City; Ferma Jone	Municipalities Associations, chamber of commerce, etc.

Example of universities' potential offering (based on Workshop 2, to be supplemented)

TOPIC	UNIVERISTY
SMART CITIES	
Smart City project	UAMD
Smart City. LHS, H2020 project	UMT
Smart City projects	Epoka
IT expertise	Universiteti 'Aleksander Xhuvani
Existings smart city projects, space	UMB
Public art, interactive installations, contemporary public art, environmental deisgn	UART
IT & management expertise, business connections and water + energy systems idea	Lurasi University
Faculty of ecocnomy, department of informatics	Tirana University
RURAL ISSUES	
Rural financial servicds, rural mobility services	AUT
Expertise, mentoring, students, venue	Epoka

Sustainable tourism and experience economy: Potential challenges, needs and opportunities

- *- How do we turn Tirana into European hotspot for digital nomads and startups? How can the municipality, government, universities, startups and industry attract foreign talent to reside in Tirana?* #startups, #businesstourism, #freelancers, #entrepreneurship, #fintech, #servives

- *How do we utilize new technology and solutions for experience economy? How can we engage the foreign talent to actively experimenting with local private and public sector ecosystem players?* #XR, #AR, #VR, #AI, #5G, #IoT, #history, #arts

- *What is the future of Albanian rural tourism and other rural business opportunities? How can we utilise the emerging trend of Adventure Tourism to attract talent to rural Albania?* #agrotourism #ruraltourism #adventuretourism

Potential business and societal actors to be involved

POTENTIAL ENABLERS	POTENTIAL CHALLENGE-OWNERS
Innovation support organizations	Cities and municipalities
Telecom providers	Albanian National Tourism Agency
Challenge Fund participants such as CodeVider and Metro Research Center	Startup ecosystem developers

Example of universities' potential offering (based on Workshop 2, to be supplemented)

TOPIC	UNIVERISTY
Health Tourism	UAD
Creative ideas, advertising and visibility campaign	UART
Augmented reality for educational and tourism purposes	Polis
Creative industry FAD (product deisgn), FPMMV	Polis
Virtual reality (VR Hub-project	UAMD
Rural tourism, rural agrotourists	AUT
Agrobusiness management, environmental amangement	AUT
Tourism expertise, sports, space, projects on tourism and experience economy	UMB
Qualified human resources	UMT
Faculty of economy, department of marketing	Tirana University

Other capabilities and themes (to be potentially incorporated into other themes)

TOPIC	UNIVERISTY
Startup competition, decmber 2019	UAMD
Health, biomaterials, tissue engineering	UAMD
Life long learning	UAMD
Medical sciences know-how, CME in medicine	Lady of Good Counsel University
Hospital and labs for researching and practicing (in 2 years)	Lady of Good Counsel University
Campus and space, international contacts,	Lady of Good Counsel University