AI & Software Bootcamp

7th May, 2020

Digital Catapult, Ikerlan, University of Ljubljana

Welcome

Welcome

At this table, you can't speak, and it is normal.

To display the presentation full screen

To chat with us

To zoom in and out

Agenda

- **Introduction, objectives and agenda** (10 minutes)

- **How to use AI & Software capabilities as part of your project while leveraging DigiFed Partners to maximise your proposal scores**: Excellence, Impact, Implementation Quality (45 minutes)
  - Digital Catapult
  - University of Ljubljana
  - Ikerlan

- **Open floor discussion with Q&A**

Digital Catapult

Nathan Coulson | AI&ML Technologist

AI/ML at the Digital Catapult

Accelerating AI startups

Increasing AI adoption in Industry

Leading on applied AI Ethics

MACHINE INTELLIGENCE GARAGE

SIEMENS

NEURAL INFORMATION PROCESSING SYSTEMS

AI Compute, Machine Learning & AI Ethics Capability

- **Function**: We are able to offer a specialised acceleration programme, that addresses the challenges that today's artificial intelligence (AI) and machine learning (ML) startups face.
- **Principle:**
  - Time and support on internal infrastructure (access to two DGX-1 servers)
  - Ethics Support
  - Combined AI/IoT Technical support
  - Access to cloud credits/vouchers
- **Uniqueness:**
  - We have already supported over 80 startups across multiple industries (raising £25m in equity investment over 2 years)
  - Access to resources provided by Google, Nvidia, AWS, EPCC, Graphcore and more
  - Industry leading AI Ethics expertise through our Ethics Steering and Advisory boards

- **Maturity/TRL:**
  - Technology Readiness Level
  - 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8
- **Applications:**
  - Support early stage AI startups to bring new products to market in an ethical and efficient way
  - Access to compute for resource constrained startups/smaller SMEs
  - AI ethics advice for startups, smaller and larger SMEs

Technology partners and collaborators

Examples of tailored support for AI startups

Tailored MI Garage support activities

- Technical Office hours with the AI/ML team to design a support plan

- Supported onboarded to compute infrastructure (cloud or on-premise)

- AI Ethics consultation with members of our expert AI Ethics advisory board to discuss and mitigate potential ethical issues

Technical, business and ethics workshops

- Design tools for AI: Human Centred Design for AI startups

- AI & IoT Workshop: Deploying AI at the edge

- AI Platforms and Architecture workshop: Building for scale

Recent publications

https://bit.ly/2W1WI3K

https://bit.ly/2SwtMOQ
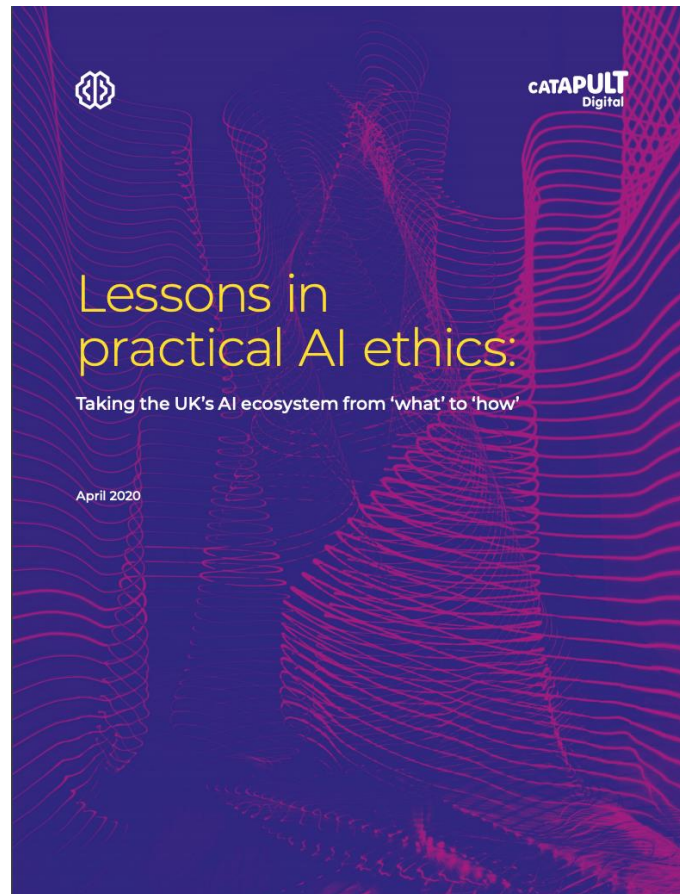
University of Ljubljana

Dr. Andrej Duh

percipio<BigData>

data-science company (team combining young & experienced researchers & entrepreneurs) based in Vienna and Maribor

officially listed as WKNÖ (Austrian Chamber of Commerce) technology & innovation partner (TIP)

started in 2013 as a spin-off company of University of Maribor

today we find information using internet search

search results $=$ keyword query $+$ context

do you know your keywords?

"The limits of my language mean the limits of my world."

(*Tractatus Logico-Philosophicus* 5.6., 1922)

L. Wittgenstein

percipio`<BigData>` value creation

1 data-driven insight & discovery

novelty search significantly outperforms objective-based search, suggesting the strange conclusion that some problems are best solved by methods that ignore the objective

2 industry convergence

Industry convergence represents an unprecedented growth opportunity for an organization, but is also a threat since other companies can absorb the organization's core business to fulfill their own industry convergence objectives. The success of cross-industry value experiences depends on a thorough ecosystem strategy, selecting the right partners within it and executing an industry expansion strategy.

1   find, organize & connect keywords (starting with > 200 000 per user, updated and expanding regularly)

2   enable and support insight + discovery (matching & ranking with over 250 M indexed data in growing percipio database - scientific papers, patents, reports and projects)

3   generate new ideas by smart guidance through connected keyword-space
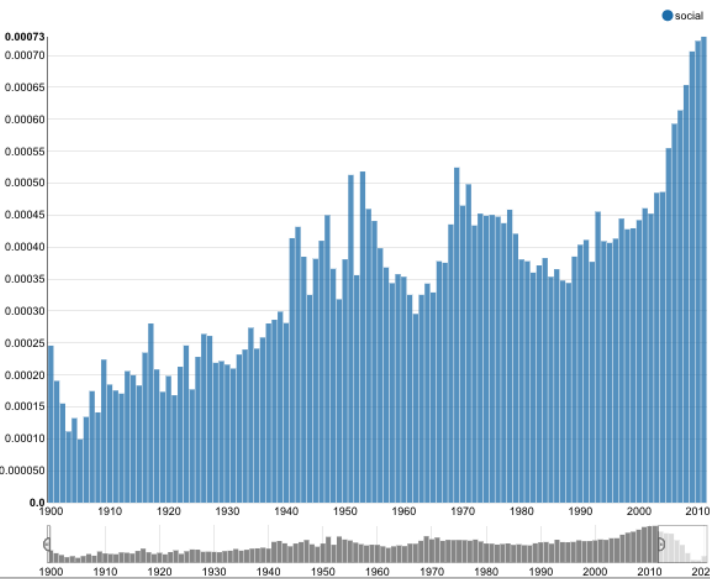
Smart_village

Frequent/Trendy — Frequent ... Trendy

energy
process growth
sustainability strategy
environmental impact service develop
network india
land renewable model risk public
policy system management global role
health change economic world
local development datum city climate
smart technology case electricity resource
community future urban paper base challenge
power area solar rural water sustainable
china research analysis
information planning country
review design increase approach
present innovation

Correlation — High ... Low

Words history from 1900

Frequency Files Percentage Rel. norm

social

All documents

Leaflet | Map data © OpenStreetMap contributors

Cultural Heritage and Social Environment Coherence in the Ethnographic Villages of Lithuania
Vilma Karvelytė – Balbierienė, Aušra Mlinkauskienė - 2014
The records of the State protected cultural heritage objects in the preserved ethnographic villages of Lithuania; the survey records on their assessment; the guidelines on their potential use are considered to comprise a very significant part in the field of culturologic assessment. It is closely related to the needs and demands of the currently developed agricultural produce in these villages and the prevailing public services...

The economic thought of "the shortage of village labors"
Wei Xin-qiang - 2005
The Shortage of Village Labors had been spread,because of village labors themselves,government and enterprises. The solution of this promblem needs the effort of government ,enterprises ,village labors themselves and social media organization.

The dialectics of village and state in modern Thailand.
Jeremy Kemp - 1991
The traditional Thai village as an autonomous and corporate local community is a myth whose origins are located in nineteenth century Western social theory. The paper examines the dynamics of relations between local patterns of social organization and the state with particular reference to the ideology of community and the manner in which it is expressed and manipulated.

The Impact of the "Village" Model on Health, Well-Being, Service Access, and Social Engagement of Older Adults
Carrie L. Graham, Andrew E. Scharlach, Jennifer Price Wolf - 2014
Background. Villages represent an emerging consumer-driven social support model that aims to enhance the social engagement, independence, and well-being of community-dwelling seniors through a combination of social activities, volunteer opportunities, service referral, and direct assistance. This study aimed to assess the perceived impact of Village membership on factors associated with the likelihood of aging in place...

The Role of Social Capital in Social Development——Tentatively on the practice of increasing social capital in the South K...
Zheng Chuan-gui - 2006
At present,social capital has been regarded as the key to world economy.It is widely used to explain the differences of economic development and project performance existing among countries or regions with same or similar physical and human capitals.Nevertheless,its role in social development is rising. The roles can be played through the four aspects: overcoming predicament of group action,improving efficiency of public...

Regionalism, mobility, and "the village" as a set of social relations: Himalayan reflections on a South Asian theme
Sara Shneiderman - 2015
This article considers how ethnographic representations of "the village" have created links between otherwise disparate "regional ethnography traditions" over time. "The village" has served as a multivalent sign that at once works to integrate specific locales into broader scholarly narratives, and to index moments of disjuncture in the production of regionality. I make this argument with specific reference to the relationship...

Economic approach to village community and institutions.
Y. Hayami, M. Kikuchi - 1980

The Romanian village: a form of human community.
C. Gavrilă - 2011

Village-based development in Niugini: the Matangan Association.
H. J. Schutte - 1973

SOCIAL INTERACTION AND SOCIAL STRUCTURE IN A GREEK ISLAND VILLAGE
Richard Currier - 1976

Can We Treat Thematic Villages As Social Innovations
Anna Kłoczko-Gajewska - 2014
The term "social innovation" gained popularity within scholars, however its definitions differ to a large extent; the most promising one says that a change in attitudes and behaviour of a group of people that in relation to the group's horizon leads to new and improved ways of collaborative action. This paper tries to answer the question whether thematic villages, where the inhabitants jointly decide on a topic and prepare unique...

Total 3208782 results
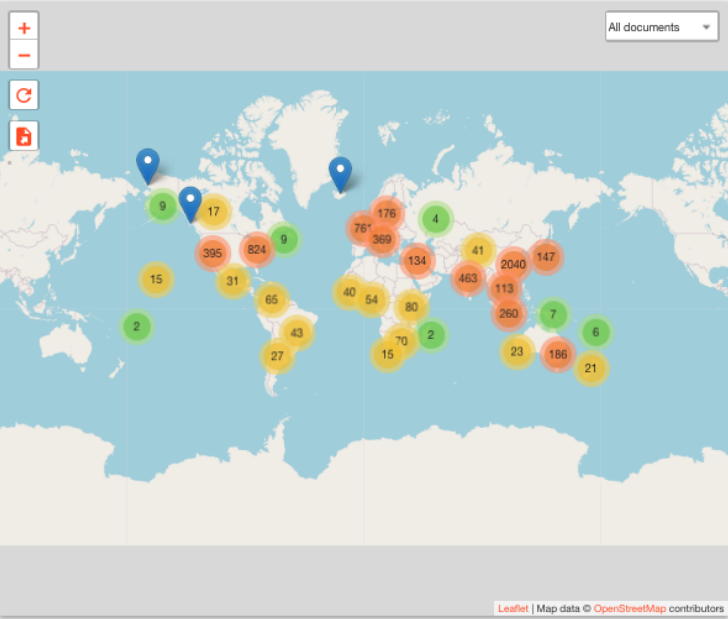
< 1 - 1000 ▾ >

Showing first 10000 results. Refine your query with additional keywords.

The Impact of the "Village" Model on Health, Well-Being, Service Access, and Social Engagement of Older Adults
Carrie L. Graham, 1University of California Berkeley School of Social Welfare, Berkeley, CA, USA
Andrew E. Scharlach, 1University of California Berkeley School of Social Welfare, Berkeley, CA, USA
Jennifer Price Wolf, 2Pacific Institute for Research and Evaluation, Oakland, CA, USA

Background. Villages represent an emerging consumer-driven social support model that aims to enhance the social engagement, independence, and well-being of community-dwelling seniors through a combination of social activities, volunteer opportunities, service referral, and direct assistance. This study aimed to assess the perceived impact of Village membership on factors associated with the likelihood of aging in place. Additionally, the research examines the characteristics and service use of members who benefit the most. Method. Perceived impacts of Village membership in the areas of social engagement, service access, health and well-being, and self-efficacy for maintaining independence were assessed through a survey of 282 active Village members from five sites in California. Bivariate and multivariate analyses examined associations between member characteristics, volunteerism, service use, and self-reported impacts. Results. Villages have the strongest impact in the area of promoting social engagement and facilitating access to services. Three quarters of the participants report that the Village increases their ability to age in place. Positive impacts were associated with level of Village involvement, but less likely among members who had worse self-reported health. Conclusion. Villages represent a promising new model designed to support community-dwelling seniors with a number of positive impacts that may reduce social isolation, improve well-being, and increase confidence aging in place. Villages appear to have the greatest benefit for members who are most involved and fewer positive impacts for members in poor health, prompting questions about the long-term effectiveness of the Village model in helping more frail seniors to age in place.

Keywords:
social support, models, access to health care, regression statistics, surveys, health, aging individuals, multivariate analysis, aging in place, social isolation, village model, correlation, health services, older adults, self efficacy, social engagement, consumer driven, well being

FOS:
socioeconomics, correlation, social psychology, health, nursing, gerontology, social engagement, multivariate analysis

References:
1. Lynne C. Giles, Patricia Metcalf, Gary Glonek, Mary A. Luszcz, Gary Andrews; The Effects of Social Networks on Disability in Older Australians, 2004, 1616, 4
2. Robert C. Kersting; Impact of Social Support, Diversity, and Poverty on Nursing Home Utilization in a Nationally Representative Sample of Older Americans, 2001, 3333, 2
3. Joong-Hwan Oh; Social Bonds and the Migration Intentions of Elderly Urban Residents: The Mediating Effect of Residential Satisfaction, 2
4. Christina Lee, Jennifer R. Powers; Number of social roles, health, and well-being in three generations of Australian women, 2002, 99, 3

social filter × Search...

1 custom projects

collecting and post processing IOT data

data modelling and predictions

2 technologies

linear scalable NOSQL DB (Cassandra), fast in-memory processing (Spark), near real time processing (Storm), custom and elastic indexing, deep learning and AI with tensor flow, chat boots

Ikerlan

Ruano Jesus Miguel

IKERLAN KONNEKT

YOUR 360º SOLUTIONS FOR INDUSTRIAL DIGITIZATION

IKERLAN.
WHERE TECHNOLOGY
IS AN ATTITUDE

WHAT IS
IKERLAN KONNEKT?

IKERLAN KONNEKT is a family of digitalisation solutions that adapts to the specific needs of each company. It covers all the necessary elements to be able to offer you a Digital Platform, integrating elements of own development and third-party applications that adapt to your business strategy of digitalisation.

SENSORIZED PHYSICAL VARIABLES → IKERLAN **KONNEKT** → **INFORMATION + DECISION MAKING**

IKERLAN KONNEKT solutions have already been successfully implemented in a dozen of industrial applications in sectors as demanding as equipment, transportation or energy.
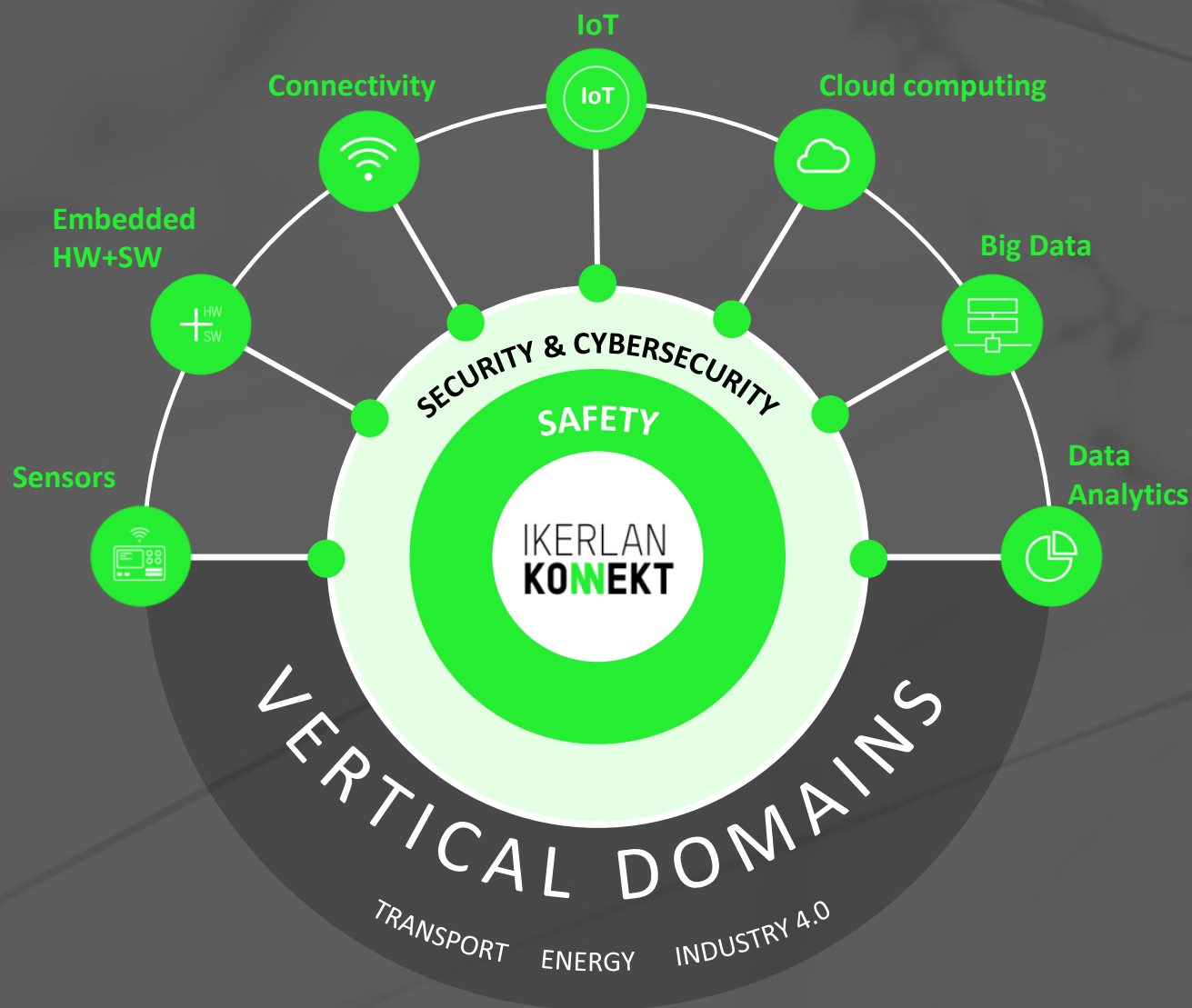
A FOCUS ON DIGITAL PERSONALISATION

—

Industrial digitalisation requires a whole chain of technologies that allow you to capture, send and process the information of your products / services (from the sensor to the cloud) in a totally secure way, so that only you can access, modify and extract value from your data.

Your business is different from others and you have individual needs. This is why you need a different and adapted technological solution. Only a specialist in EICT technologies (Electronics, Information and Communication) as IKERLAN can offer you the solution you need, thanks to its more than 150 specialized engineers.

TECHNOLOGIAL SPECIALISATION

IoT — IoT and IIoT systems over short and long-range networks in licensed frequency bands and LPWAN technologies in non-licensed bands.

Connectivity — Wireless solutions for industrial applications and distributed control in real time.

Cloud computing — Definition and management of proprietary, hybrid or third-party infrastructure.

Embedded HW+SW — Embedded systems with functional, non-functional and extra-functional requirements (security, safety).

Big Data — Ingest management and control of massive data flow, streaming and batch management, backend and frontend applications.

Sensors — Capture systems for extreme conditions (hostile environments and difficult accessibility) and low consumption.

Data Analytics — Descriptive analytic based on verification of heuristic rules and data mining techniques. Predictive analytics based on statistical models and prediction techniques.

SECURITY & CYBERSECURITY

SAFETY

VERTICAL DOMAINS

TRANSPORT   ENERGY   INDUSTRY 4.0

DigiFed

IKERLAN KONNEKT

IKERLAN
KONNEKT

IKERLAN KONNEKT: THE SOLUTION THAT ADAPTS TO YOU.

–
Your company needs a specific digitalisation process, exclusive for it, that respects its particularities and its ability to address the transformation. That's why, based on IKERLAN KONNEKT, we developed for you an absolutely optimal solution thanks to:

WE ANALYSE AND UNDERSTAND YOUR PARTICULAR NEEDS. "MULTISECTORAL KNOWLEDGE"

WE ARE EICT TECHNOLOGIES SPECIALISTS, COVERING ALL THE TECHNOLOGICAL VALUE CHAIN

THE BEST SOLUTION FOR YOU: "COMBINING OWN AND THIRD PARTY DEVELOPMENTS"

INTEROPERATATIONAL SCALABLE OT/IT CONVERGENCE

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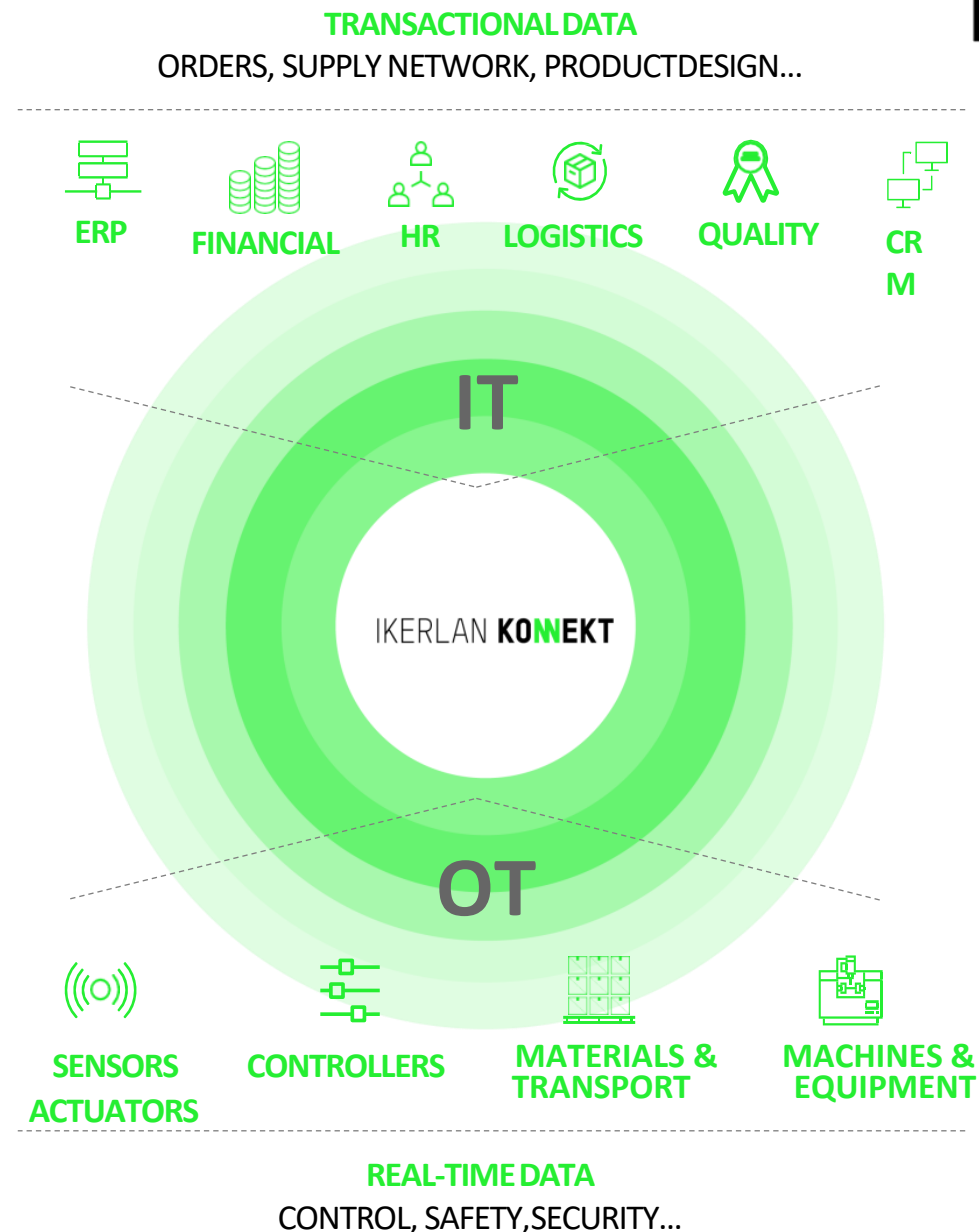# ADVANTAGES OF IKERLAN KONNEKT

INTEROPERABILITY

Designed for your product to be related to other products and integrated into the processes and digital platforms of your clients, guaranteeing interoperability and scalability.

SCALABILITY

Designed to respond to fleets or parks of growing connected equipment, maintaining the quality and the capacity of management and storage of the data derived from them.

OT/IT CONVERGENCE

Able to optimally integrate IT technologies, oriented to data computing, with OT technologies, oriented to the monitoring and control of industrial processes and equipment.

TRANSACTIONAL DATA
ORDERS, SUPPLY NETWORK, PRODUCTDESIGN...

ERP FINANCIAL HR LOGISTICS QUALITY CRM

IT

IKERLAN KONNEKT

OT

SENSORS ACTUATORS CONTROLLERS MATERIALS & TRANSPORT MACHINES & EQUIPMENT

REAL-TIME DATA
CONTROL, SAFETY, SECURITY...

ALSTOM

ENERGY SECTOR

Digital platform in the cloud for multiparking from SCADA info.

Real-time big data volume consumption.

Real-time turbine damage prediction algorithm.

Real-time calculation of operation and maintenance indicators (OEE).
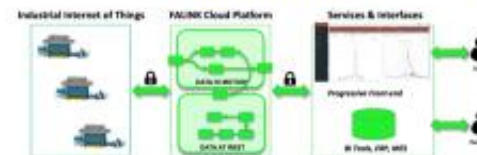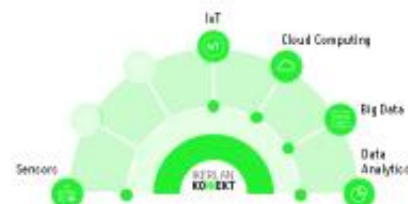
FAGOR ARRASATE

INDUSTRIAL EQUIPMENT SECTOR

IoT digital platform for industrial services.

Real-time data input from presses around the world.

Calculation of relevant indicators.

Algorithms for advanced press monitoring (hits curve, consumption curve, etc.).

Platform with multi-business technology base (automotive, steel, appliances...).

ORONA

ELEVATION / VERTICAL TRANSPORTATION SECTOR

Digital Platforms oriented to the exploitation of the conservation business.

Sensorization in critical elements (CBM: Condition Based Monitoring).

Structural monitoring.

Industry 4.0 oriented Cyber Physical Systems.

Cybersecure connectivity systems IoT/IIoT.

Intelectual property and communications protection (security +cybersec)

Predictive maintenance.

Products and services integration in the cloud.

Fleet of 500,000 lifts worldwide (50,000 with teleservice)

ULMA

LOGISTICS SECTOR

Digital platform for fleets of automatic warehouses. Multi-business deployment, multi-warehouse.

Focus on advanced services (SAT and logistics.) Real-time processing up to 100,000 events/sec.
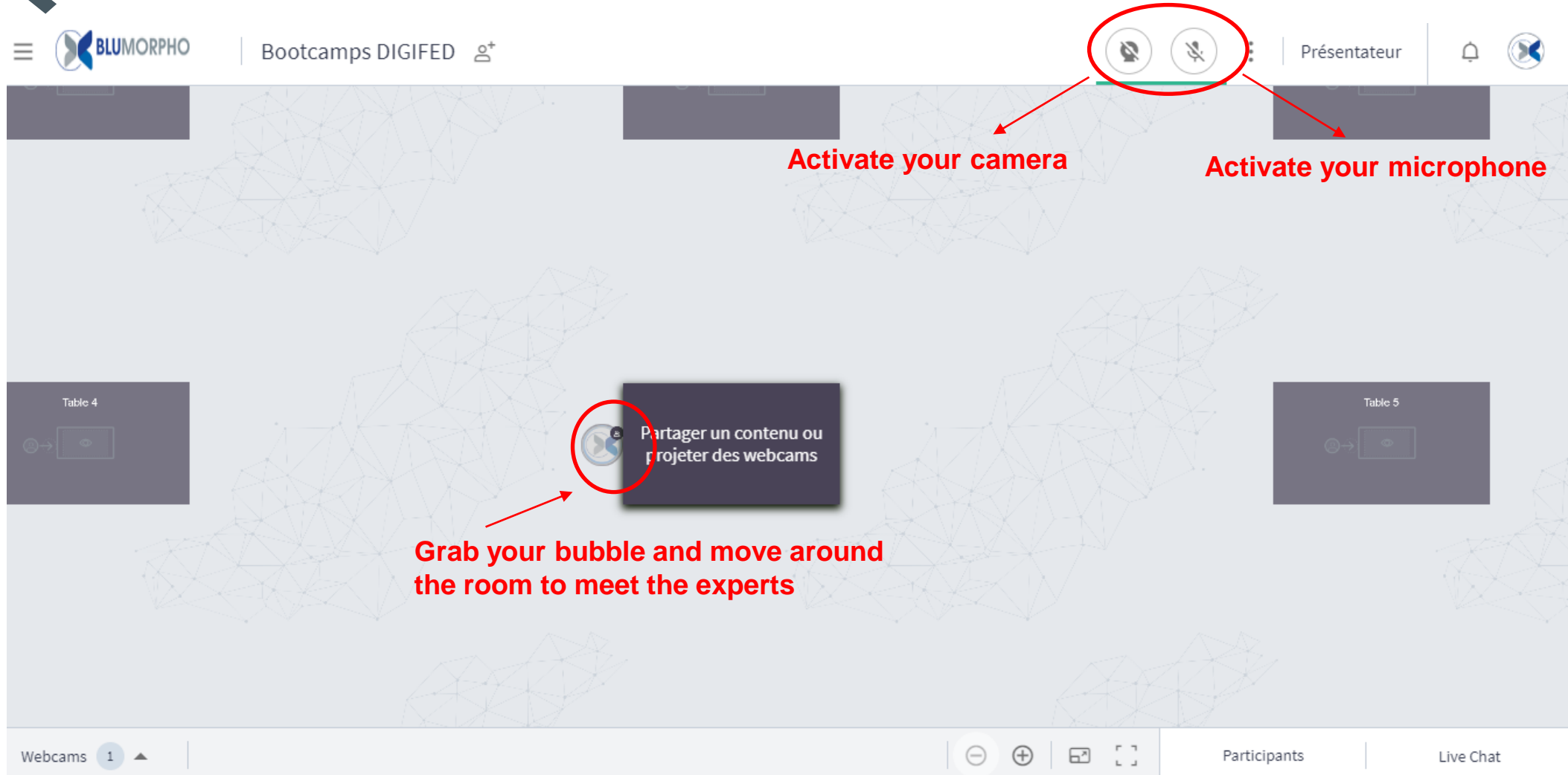
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Introduction to the Q&A session

Q&A session

Q&A session