

Welcome

AI for Business

25 October 2023



Not an LBV member,
scan QR Code to
join....

Anjuu Trevedi MBE

LBV Board Director
&
Head of Knowledge Exchange and Innovation
DMU

Anjuu.trevedi@dmu.ac.uk

Mukesh Bulsara

LBV Director
&
Partner
Coadax

LBV (Leicestershire Business Voice)

- A **non-profit making** organisation
- **Run by the Members for the Members** (organisations of all sizes and across all sectors) who **work with key decision makers to stimulate debate, raise areas of concern and shape policy affecting businesses.**
- Board of **Directors volunteer their time, experience and expertise** for the benefit of the business and local community
 - ***Influence***... the decision-making bodies and key organisations, be a critical friend and support actions that lead to better business
 - ***Inform***... members on key developments and how they can benefit from and contribute to the overarching goal.
 - ***Initiate***... and develop activities, partnerships and promote innovation to enhance Leicestershire as a great place to do business.

Not a member, scan QR Code to join....



AI for Business

- Advancements in Artificial intelligence (AI) seem to be moving at ‘lightning speed’.
- **AI for Business** will highlight advances in, the pros/cons of AI for business. showcasing academic research, demonstrating how businesses are using AI to grow and innovate as well as providing a mechanism for local businesses to meet and network with specialists in the field.
- Event takeaways:
 - Better understanding of and insights AI developments
 - Identify potential AI solutions for your business
 - Networking and connecting with likeminded professionals
 - Insight for LBV on how we may assist and provide added value in the development of AI at a local level

Agenda

12:15 LBV Welcome

Anjuu Trevedi MBE, LBV Board Director & Head of Knowledge Exchange and Innovation, DMU

Advances in AI Research and Development, De Montfort University

- **AI for industry and Responsible Applications** - Prof Mario Gongora, Professor in Applied Intelligent Systems [Institute of Artificial Intelligence](#),
- **AI State of The Art** - Prof Tracy Harwood, Digital Culture & Deputy Director, [Institute of Creative Technologies](#)

Unleashing the Power of AI, Revolutionising Marketing

Adam Payne, CEO, [New Way Growth](#)

Technology Demonstration: Cyferd, Powering the Business AI Revolution

Baljit Virdee, Senior Vice President of Sales, [Cyferd Ltd.](#)

AI and IBM Consulting

Gary Kingsbury, General Manager, [IBM Client Innovation Consulting UK](#)

13:40 Q&A

Mukesh Bulsara, LBV Board Director & Partner, Coadax

13:55 And Finally....

Anjuu Trevedi MBE, LBV Director & Head of Knowledge Exchange and Innovation, DMU

Our AI Experts



Prof Mario Gongora

Professor in Applied
Intelligent Systems
[Institute of Artificial
Intelligence](#)



Adam Payne

CEO
[New Way Growth](#)



Gary Kingsbury

General Manager
[IBM UK Client Innovation
Centre](#)



Baljit Virdee

Senior Vice President
of Sales
[Cyferd Ltd.](#)



Prof Tracy Harwood

Professor of Digital Culture
& Deputy Director
[Institute of Creative
Technologies](#)

Prof Mario Gongora

AI for industry and Responsible Applications

De Montfort University



Institute of
Artificial
Intelligence



Mario Gongora

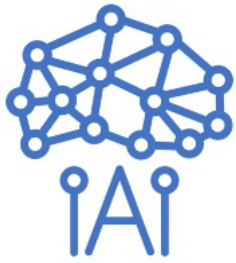
Professor in Applied Intelligent Systems
Faculty Enterprise Lead
Faculty of Computing Engineering and Media
mgongora@dmu.ac.uk

AI for Industry and responsible applications

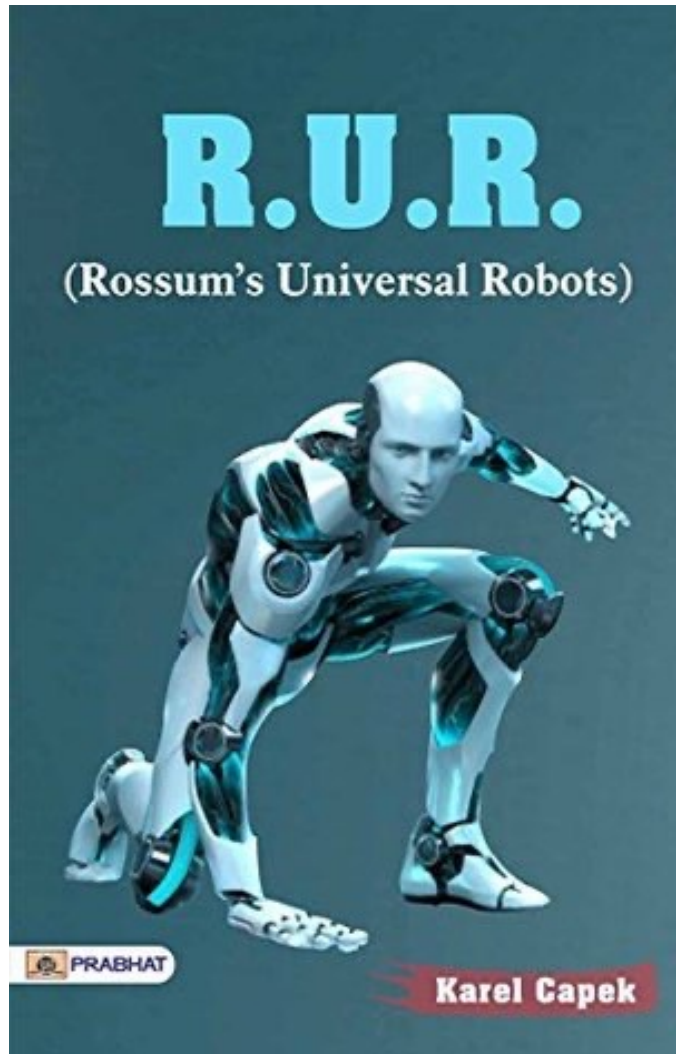
Research in Societal Enhancement - RiSE

RiSE@dmu.ac.uk

Oct 2023



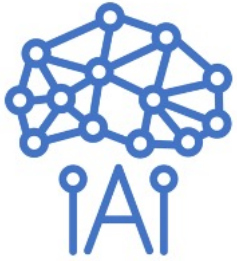
Artificial Intelligence will take over the world!



This concept (FEAR) has existed in the mind of humans long before Artificial Intelligence (AI) technologies, as we know them, existed!!!

We are a long way off 'AI taking over the world' but in the meantime they are **helping to make our lives easier** today!!



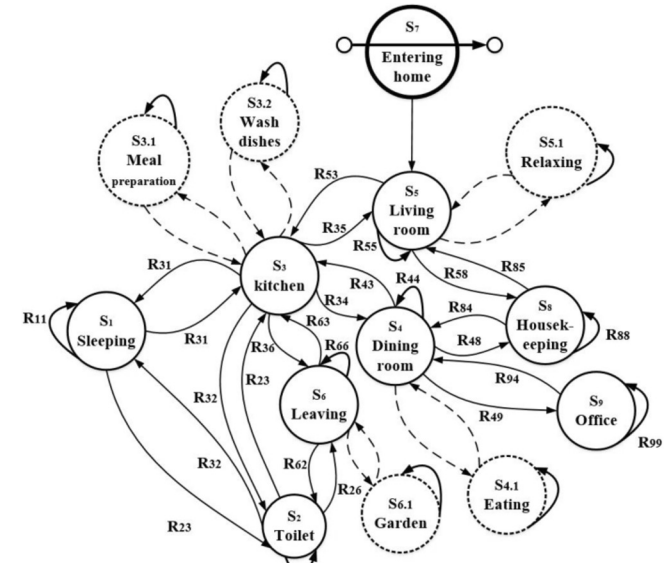


What is Artificial Intelligence?

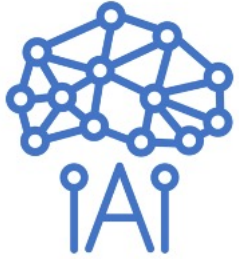
No “official” AI definition, many academic and big companies have their own.

For us “*AI enables us to use computer [programs] to model and solve problems without having to pre-consider every possible situation*”

- It is NOT necessarily trying to imitate human reasoning!
- It is NOT making autonomous decisions without human intervention!
- It is NOT solving impossible problems...
- AI does NOT need to be better than a human at a given task!



AI’s **super-power is to be scalable**, fast and holistic...



Artificial Intelligence - a dormant volcano?

Many techniques mainly based around 2 principles:

1. Logic and Knowledge (expert knowledge / experience of solving a problem)

AI can embed knowledge - no need for data - explainable / transparent

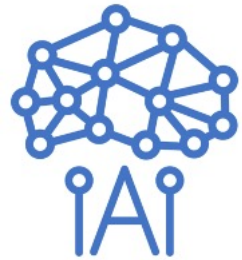


2. Machine Learning (from large datasets), and knowledge extraction

No knowledge required, but needs large curated datasets, obscure workings (hidden in the volcano)

- No technique is the 'silver bullet'!
- Business needs to choose techniques to meet their needs using the correct criteria
- The choice of technique determines performance and reliability





Industry and Artificial Intelligence

Application of state-of-the-art AI tools to solve problems in Industry and Society

AI is no longer optional, you are using it in one way or another!

AI adoption comes with compromises

- Too early and technology will not be mature enough (light risk)
- Too late and it will become obsolete sooner (very costly)

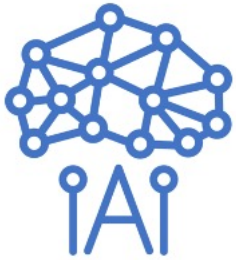
It becomes partly risk management

- Choosing the most suitable techniques for usability, reliability and understandability
- Wrong choice can be dangerous and harm processes and customer service



Some Partners





Need-to-know about Artificial Intelligence

Application of state-of-the-art AI tools to solve problems in Industry and Society

AI techniques (some examples from a large space of possibilities)

Supervised Machine Learning

learns from curated datasets

data quality control

Unsupervised Machine Learning

finds patterns in any dataset

cannot predict usefulness

Knowledge Based Systems

no need for data, accountable

needs access to experts

Optimisation

finds best solution to a problem

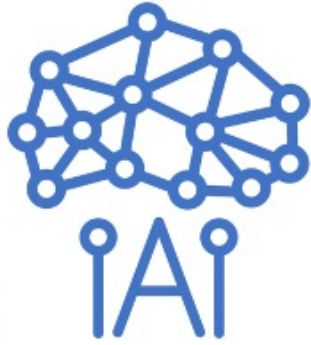
needs a model and cost function

Responsible use of AI

- User training (**effective use**) and awareness (**know capabilities and limitations**)
- Mitigation, consequences, accountability and correction / recovery of errors / mistakes

Some Partners





Questions?

Prof. Mario Gongora

mgongora@dmu.ac.uk

Research in Societal Enhancement

RiSE@dmu.ac.uk

Oct 2023

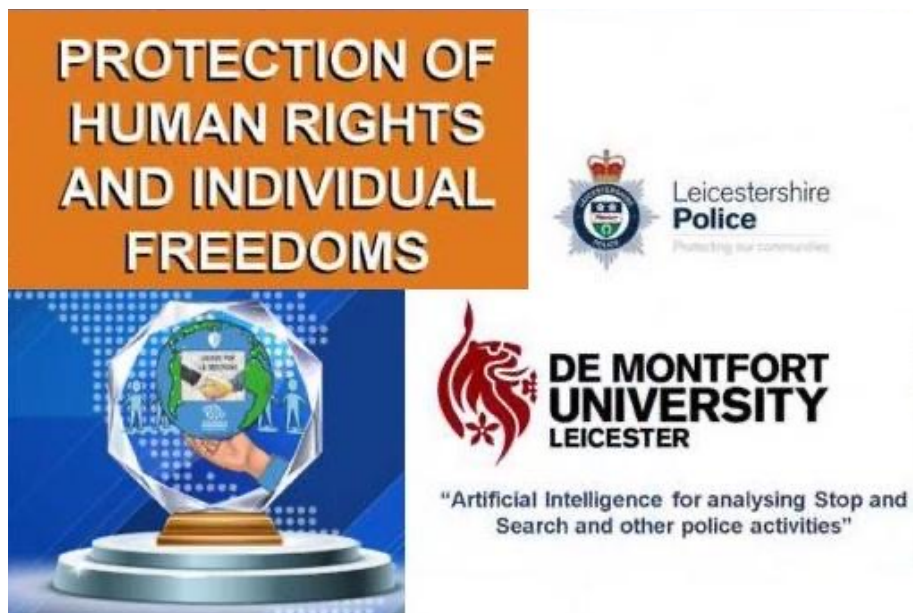


Artificial Intelligence at DMU




Applications of AI expertise with industry

- DMU has an extensive network of international academic and industrial collaborations
- To resolve industrial and societal challenges with industry and institutions

All DMU projects involves active stakeholders to deliver usable outcomes!



PROTECTION OF HUMAN RIGHTS AND INDIVIDUAL FREEDOMS



Leicestershire
Police
Protecting our communities

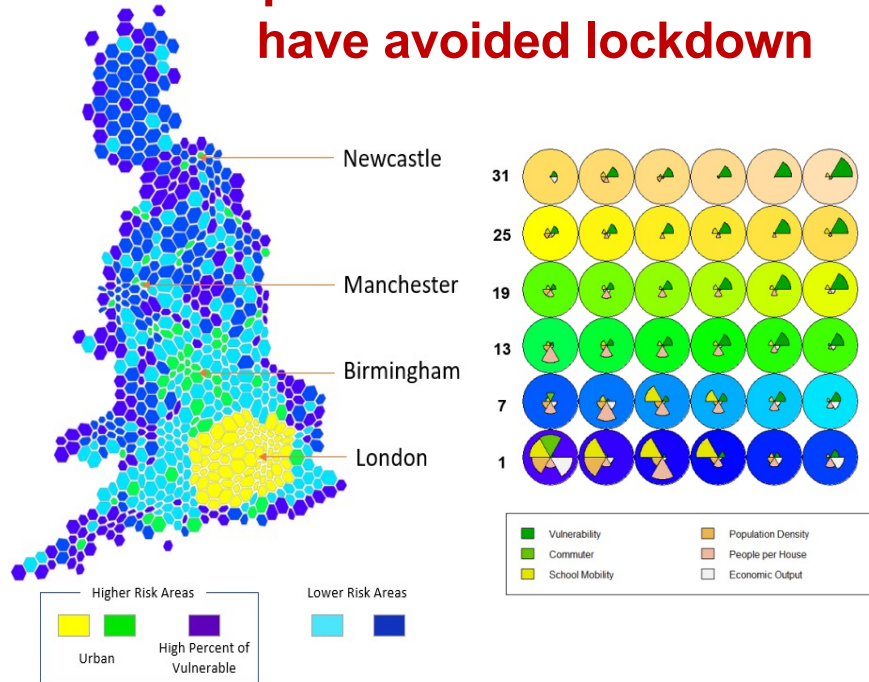
DE MONTFORT UNIVERSITY LEICESTER

"Artificial Intelligence for analysing Stop and Search and other police activities"



Recent AI Collaborations at DMU

Up to 25% of Britain could have avoided lockdown

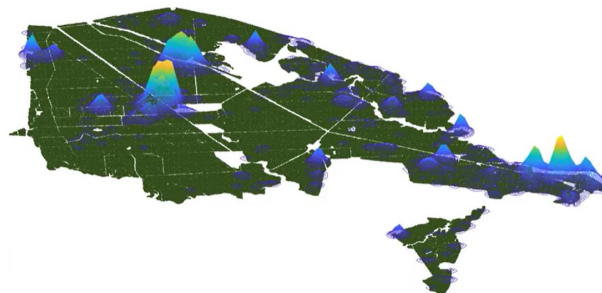


We analysed demographic and incoming data at the onset of the Covid19 pandemic and suggested the localised lockdowns 6 months before the world started to implementation. We advised the parliament through their POST (Parliament Office for Science and Technology)

Precision Agriculture

We are applying combined AI techniques (computer vision, modelling, optimisation, ...) to support crop management, and increase sustainability with a high-profile project in the oil palm industry.

Our models further inform finance and risk assessment to enhance the reach of Fintech to small producers and optimise it for large producers



Driving down persistent absenteeism at schools using AI

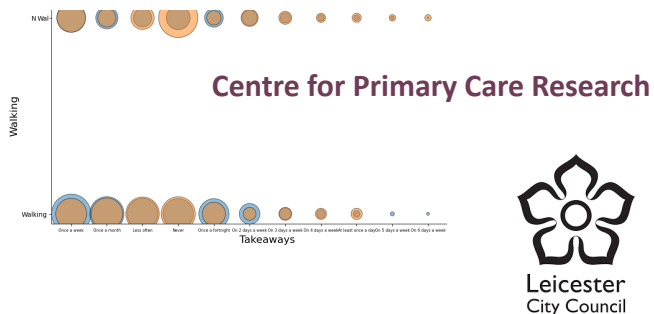
We analysed Milton Keynes-based Willen Primary School's attendance data using AI models to identify patterns relating to pupils who were frequently absent. Thanks to these analyses, the school was able to take effective measures to achieve the required national average attendance of 96% for the first time in four years. They also saw a huge improvement in persistent absenteeism, which improved by more than 55% compared with a year ago and changed the life outcomes for ~20 children.

	2015/16	2016/17	2017/18	2018/19
WPS (% of total)	13.1%	11.3%	12.8%	5.8%
National (% of total)	8.2%	8.3%	8.7%	8.2%

Recent AI Collaborations at DMU

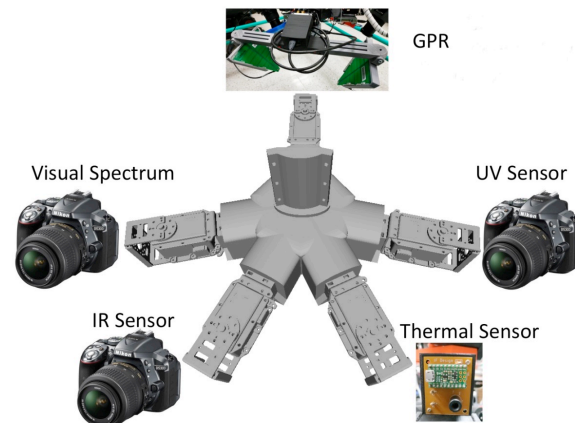
A Holistic Multi-Modal Approach for a Healthier Weight and More Active Lifestyle – H2A

AI supports Leicester City Council to develop personalised weight loss plans for people across Leicester in a new campaign to tackle obesity. The programme is being delivered by DMU and Leicester City Council, drawing on expertise in not only artificial intelligence and machine learning but sports, psychology and social care.



Land Mine Detection

Working with stakeholders from countries affected by civil warfare, we supported the sensor fusion AI for Land assessment robot systems that detect improvised explosive devices. Supporting optimal use of land in post-conflict Colombia.



Supporting Security in the Air transport Industry

Our research outcomes in optimisation for security have supported IATA's and ACI's Smart Security programme. Including contributing to the "Information Paper: Facilitating Health Screening at Airports" and "Low Cost, Low Tech Checkpoint Optimisation Implementation Guide" pandemic response documents.

International Air Transport Association
Trade association

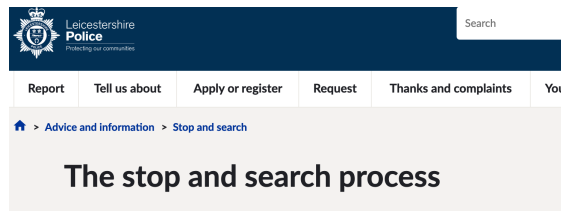


Recent AI Collaborations at DMU

Stop and search

The stop and search project has been validated by Leicestershire Police and has been cleared for operational use in analysing Police reports to increase transparency and support officers training policies.

The Police will start using the system operationally imminently.



The stop and search process

A police officer or a police community support officer (PCSO) in uniform can stop you but only police officers can search you. A police officer does not have to be in uniform but they must show you their warrant (ID) card. They can search you, anything you are carrying and a vehicle.

The types of stops you may encounter

Stop and search

This is when a police officer stops and then searches you, a vehicle and anything you're carrying.



LEICESTER PUBLIC MEETING
FRIDAY 30 OCTOBER 2020, 7PM - 9PM

STOP & SEARCH
THE BLACK COMMUNITY AND THE POLICE

ACCDG monthly meeting series
NEXT MEETING DATE
FRIDAY 27 NOVEMBER 2020



Skill demand analyses

We have supported our regional chamber of commerce to develop a nationally acclaimed system to analyse skill offer and demand for businesses and education providers, bringing them together.



UK CHAMBER OF THE YEAR

east midlands chamber

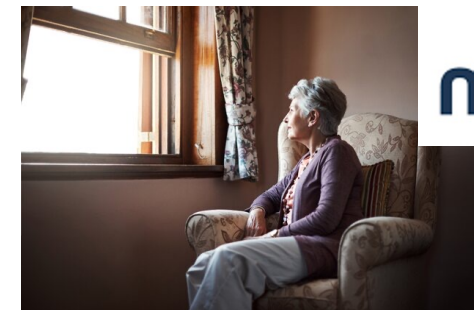
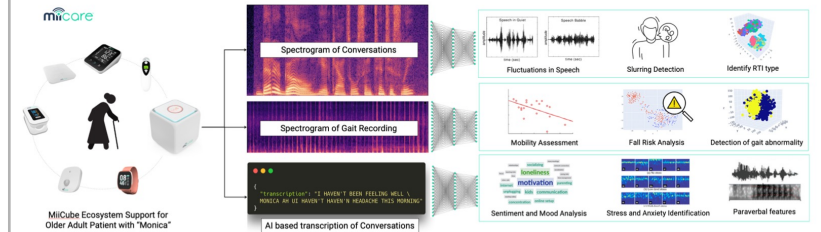
27 Jun 2023

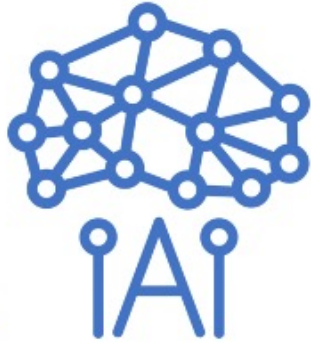
East Midlands Chamber launches database that gives insight into local skills needs and supply



Supporting Discharge to Assess (D2A) processes

Using novel approaches, we will help develop a system to support lonely and frail people handle themselves at home and monitor their health after a problem or being discharged from hospital.





Research in Societal Enhancement

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solve problems in Industry and Society

RiSE

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Oct 2023

Prof Tracy Harwood

AI State of the Art

De Montfort University

AI State of the Art

Tracy Harwood

PhD BA(Hons) FRSA FHEA National Teacher Fellow

Professor of Digital Culture

Director, Art AI Festival

Institute of Creative Technologies | De Montfort University

tharwood @ dmu.ac.uk | @tgharwood

AI State of the Art

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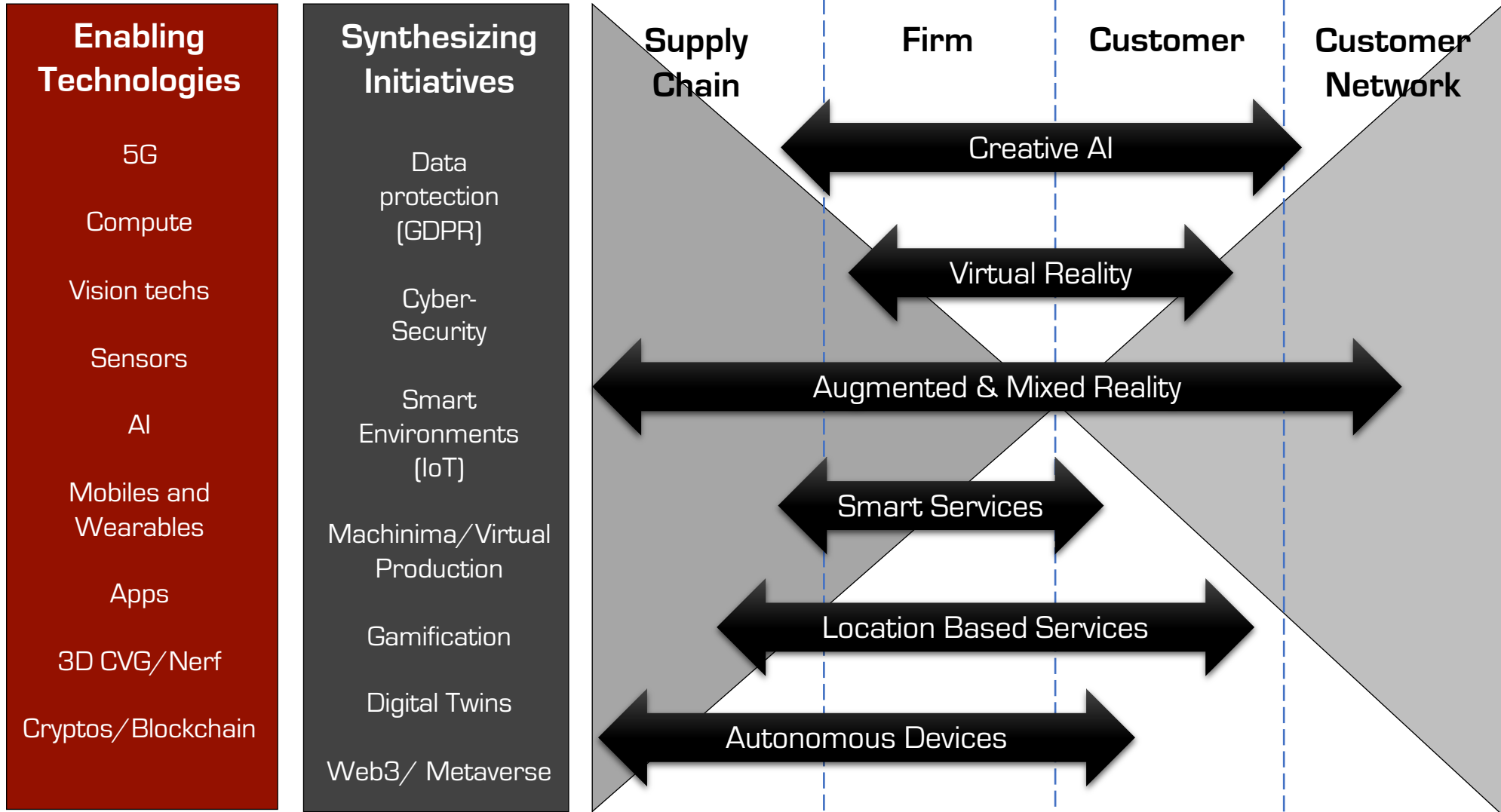
Professor of Digital Culture

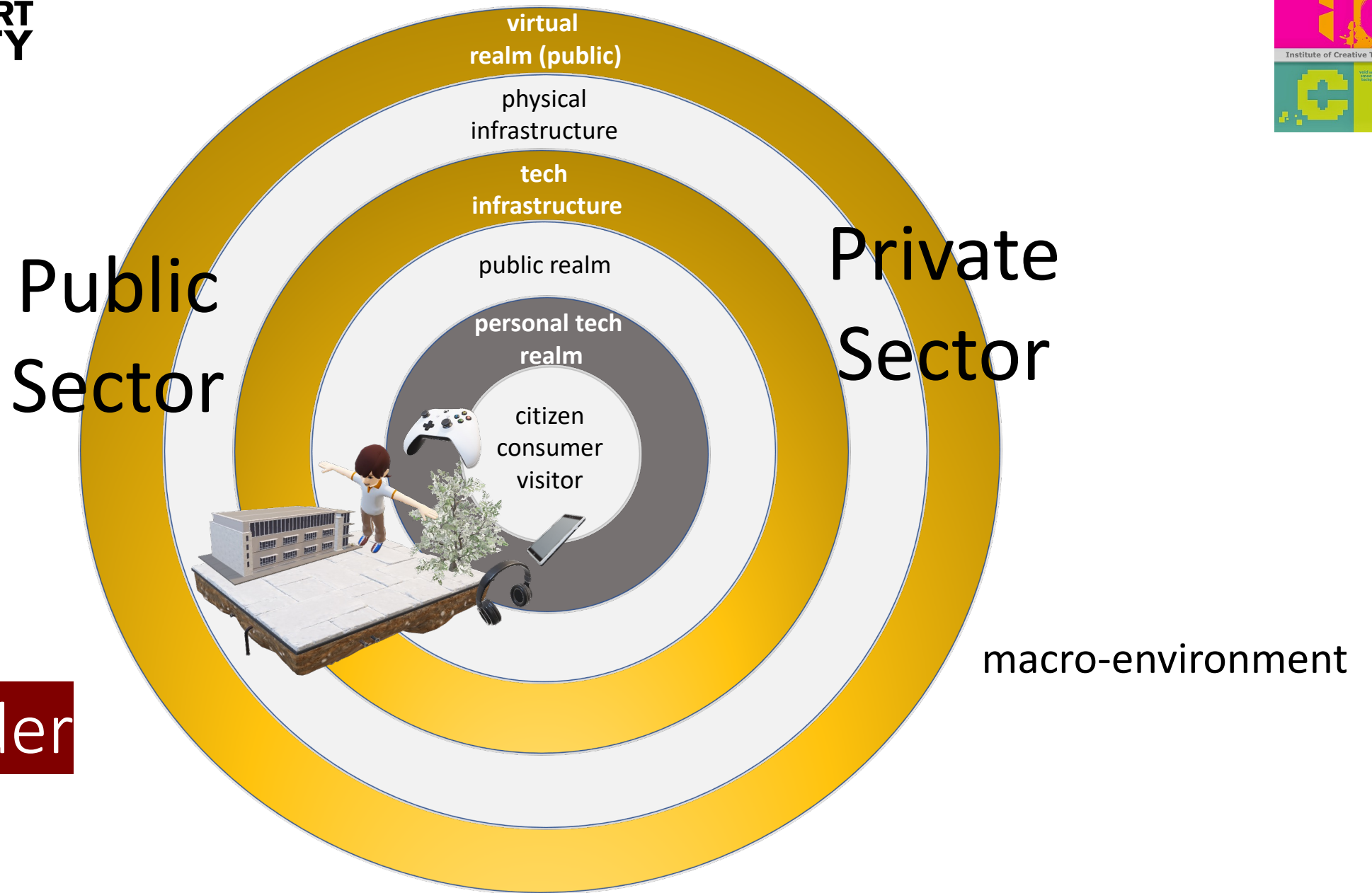
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tharwood @ dmu.ac.uk | @tgharwood

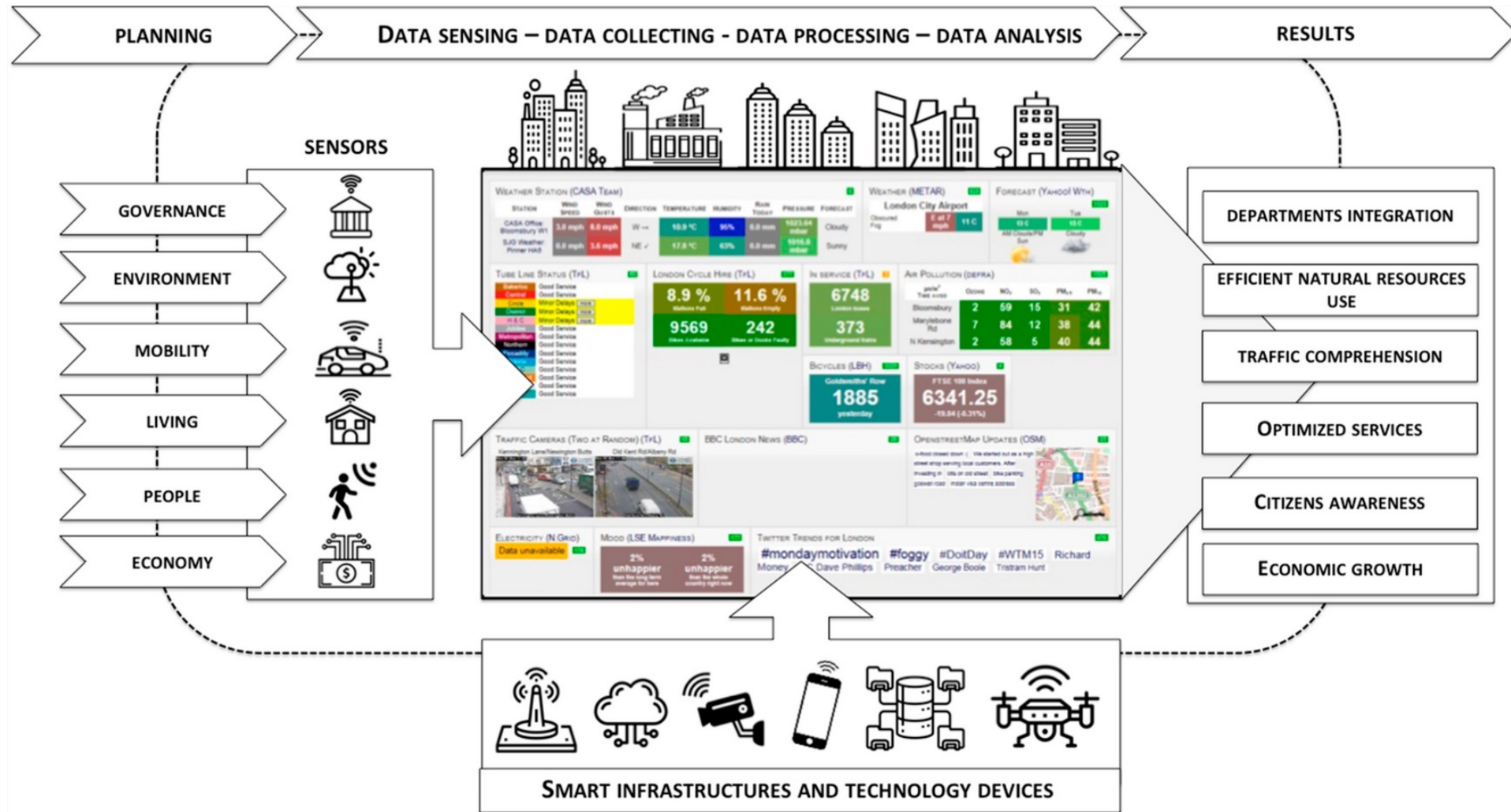
emerging technologies context





stakeholder
context

technology infrastructure



PROGRAMME

WHAT IS THE TURING TEST?

+ About this years programme

Webinars Upcoming Playbook Performance Out and About On Now
Installations For Kids For Artists Finished Film Booking Required

All Events



ART-AI PLAYBOOK
SIDEFEST
4 May 2021



HELLO LAMP POST
1 May - 31 October 2021
16 sites across Leicester



ELVIS
LIBBY HEANEY
1 May - 31 May @
Haymarket
Highcross Shopping
Centr

WHAT DO YOU KNOW ABOUT CREATIVE AI?

WWW.ART-AI.IO
#LOVELEICS



SECTION 1: FACES

In this section we compare the features of different faces, and how AI uses these features to recognise different people.



CONTENTS

- INTRO: An Introduction to Faces.....2
- ARTIST: ELVIS, by Libby Heaney.....3
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- ACTIVITY: Low Poly Mask.....17

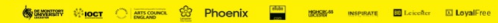
Playbook by



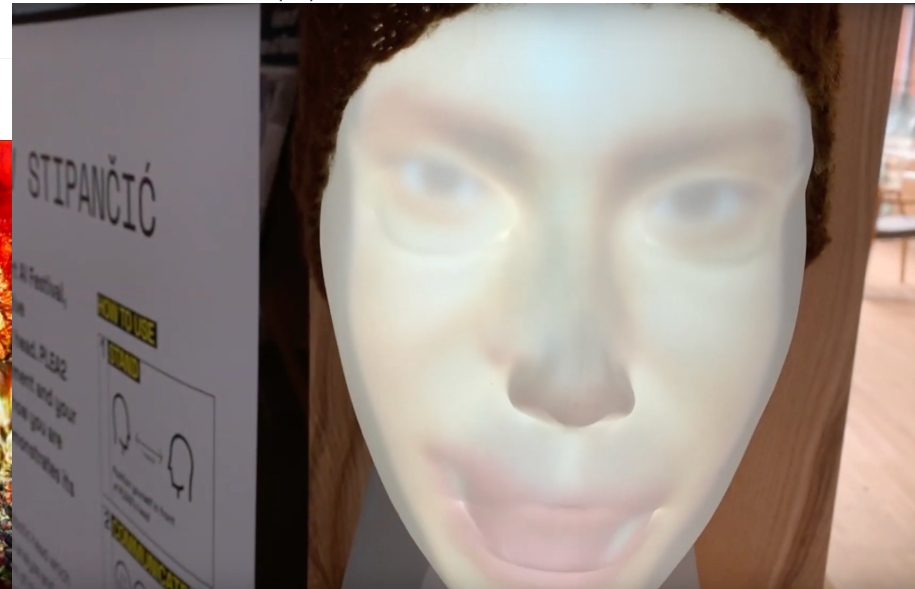
IS THE KING REALLY DEAD?

CHECK OUT THE
ART-AI FESTIVAL INSTALLATION
ELVIS BY LIBBY HEANEY
LOCATED IN UNIT SU20

WWW.ART-AI.IO
#LONGLIVETHEKING



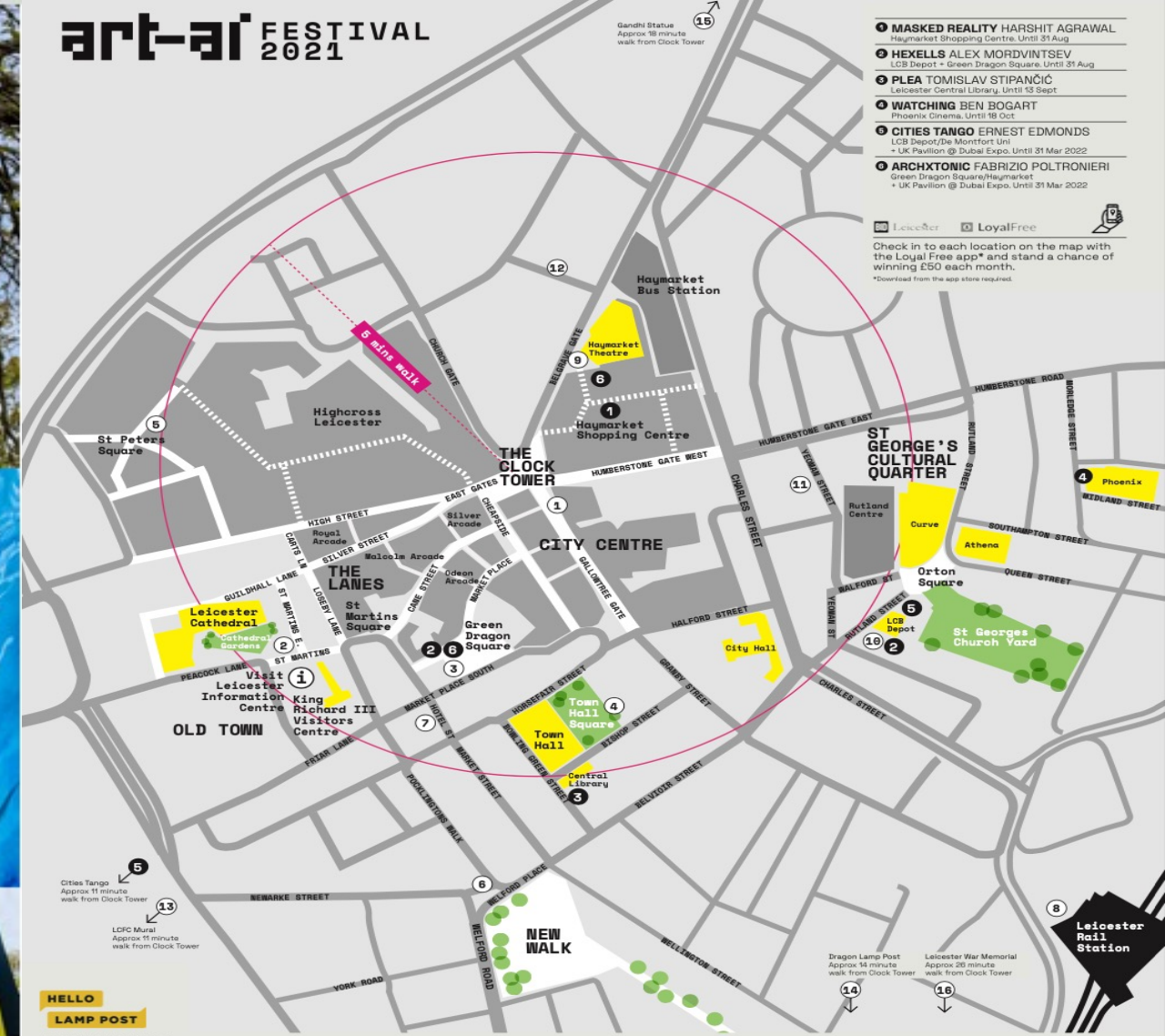
art-ai FESTIVAL LEICESTER



smart cultural engagement

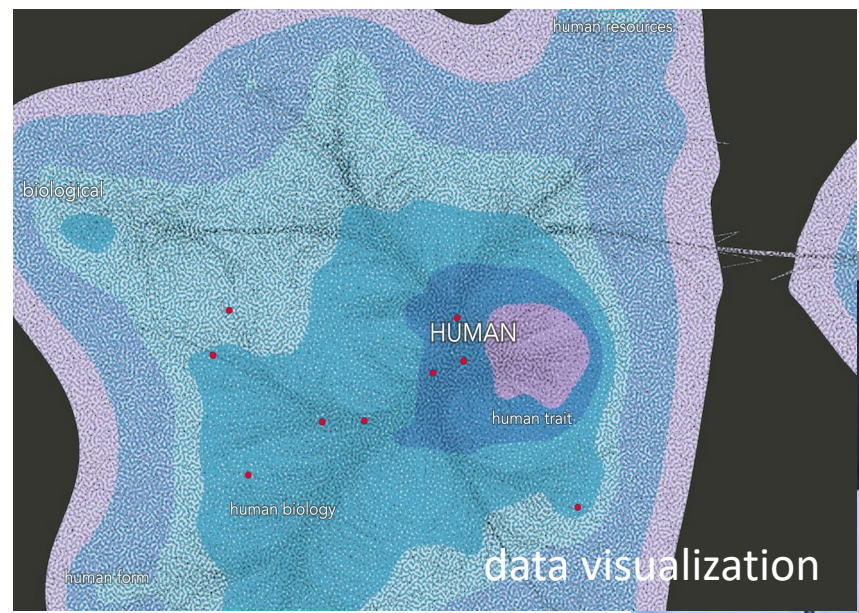


art-ai FESTIVAL 2021





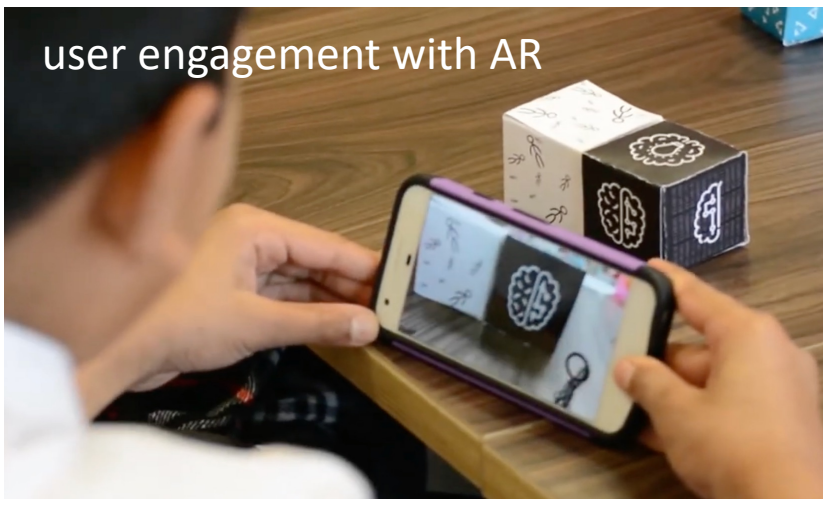
photogrammetry



data visualization



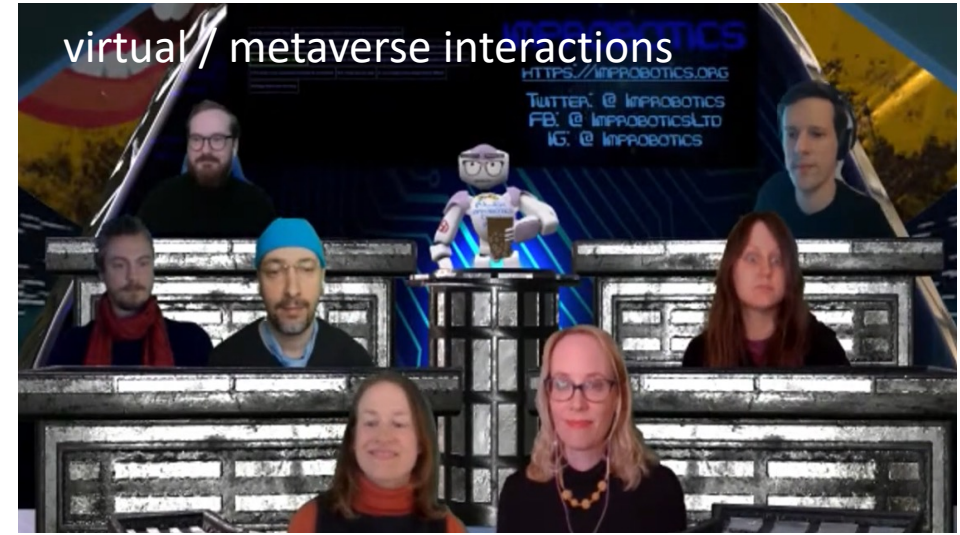
prototyping concepts



user engagement with AR



musicking robots



virtual / metaverse interactions

videos: [YouTube.com/ArtAIFestival](https://www.youtube.com/ArtAIFestival)

source: Harwood (2018, 2019, 2020, 2021, 2022, 2023)

e.g., scoping ideas: creativity



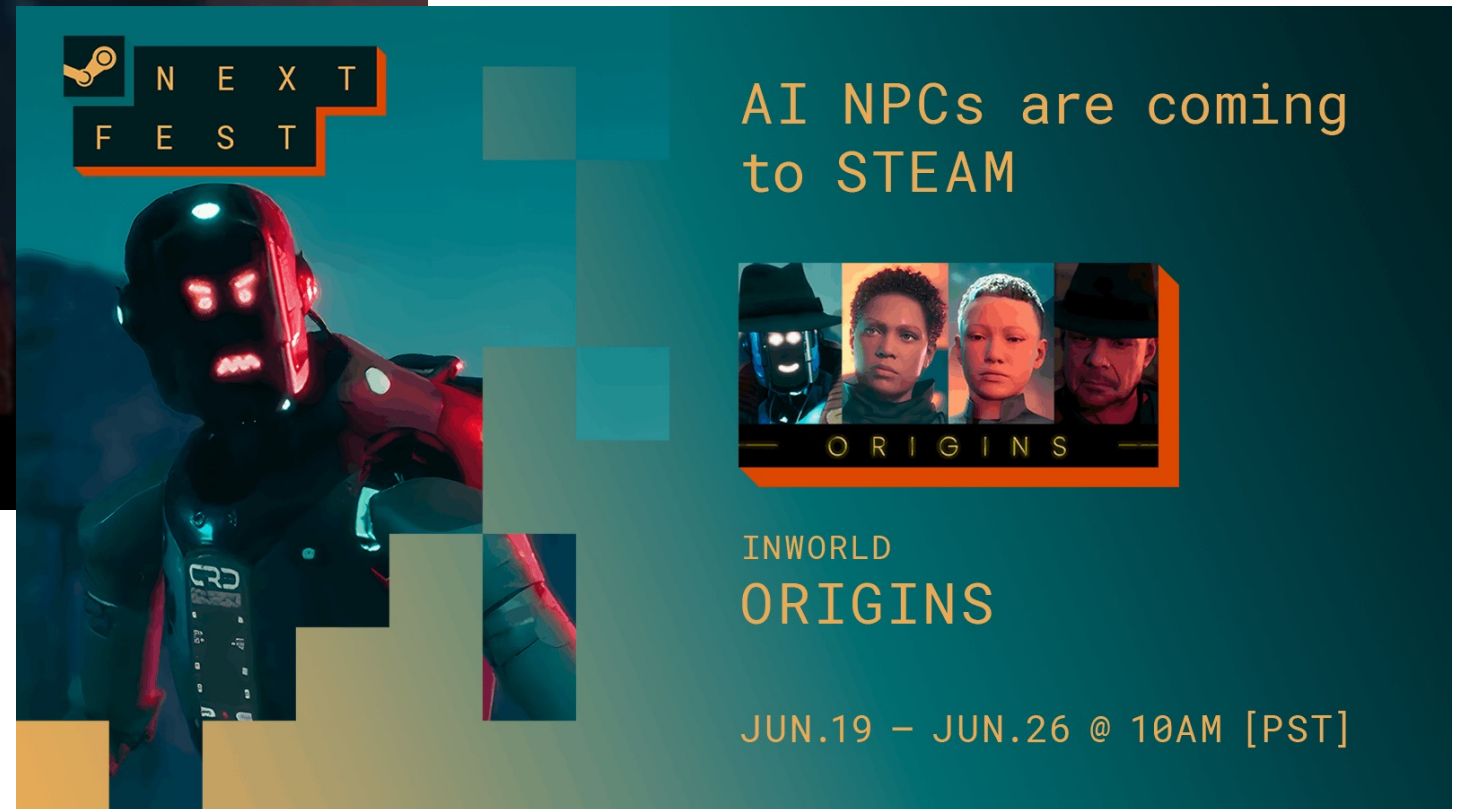
Two stage process: Ask a **text AI generator** to imagine a new character for an H P Lovecraft inspired story.

Ask an **image AI generator** to visualize the character... eg., Prompt: In full colour, the style of H P Lovecraft, illustrate Professor Alistair Dunsmore, a troubled man, pouring over ancient texts and forbidden tomes, piecing together the scattered clues that hint at the Chluthu's existence. Show a person in his study looking at the book, with atmospheric lighting and the Chluthu hidden in the scene.

Origins (Inworld AI)



example of virtual
characterized generated AI
natural language interface



STEAM
NEXT
FEST

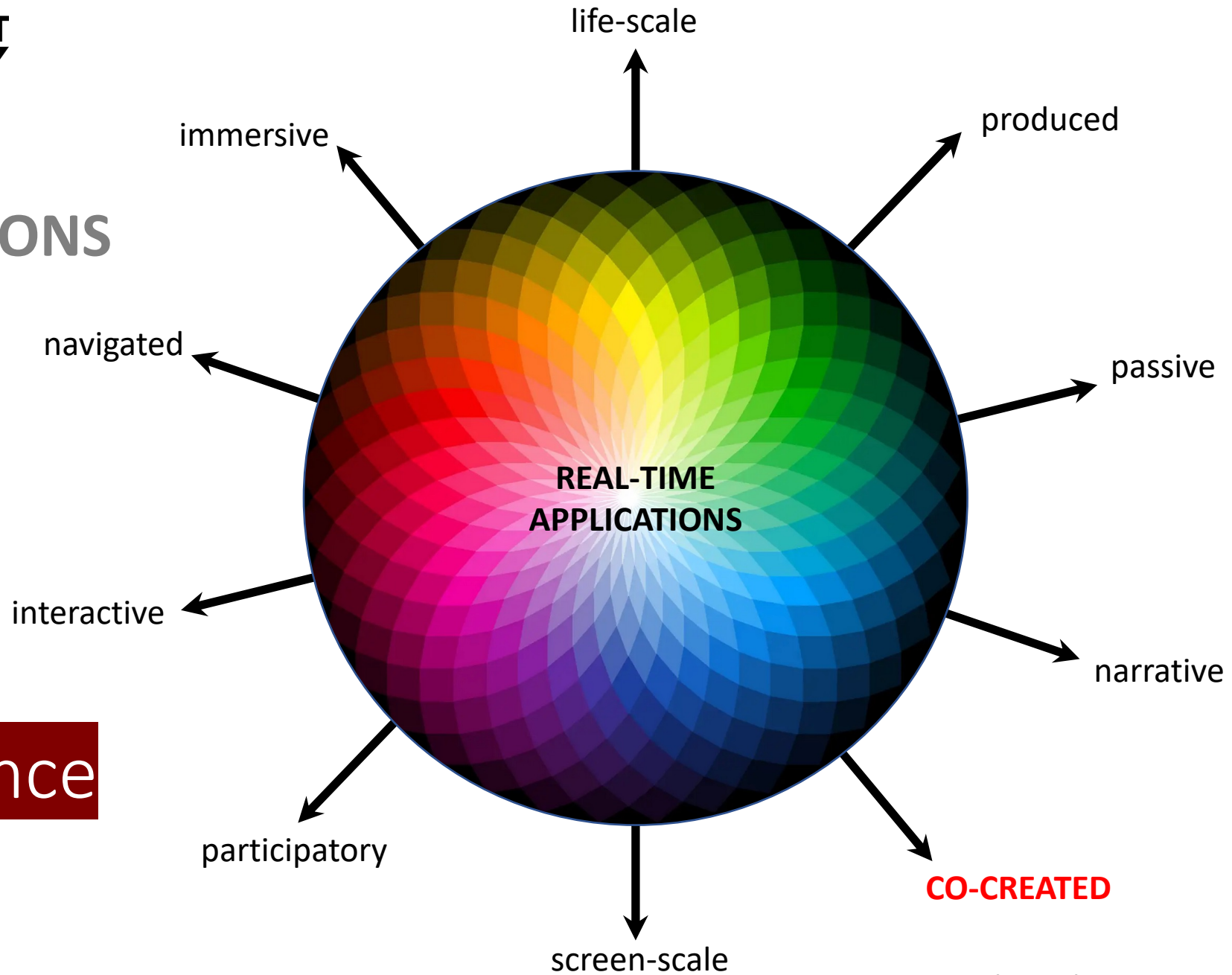
AI NPCs are coming
to STEAM

ORIGINS

INWORLD
ORIGINS

JUN.19 – JUN.26 @ 10AM [PST]

DIMENSIONS



convergence

effort +
wrong tools
= poor results

Spatial Application Layers

Base Layers

ENTERTAINMENT



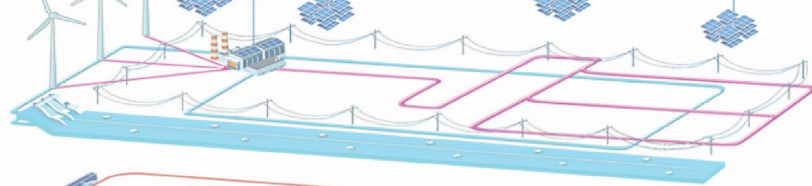
COMMUNICATIONS



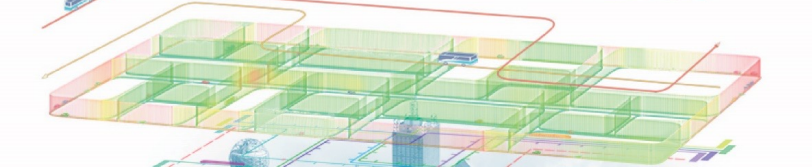
HEALTH & WELLNESS



ENERGY & WATER



MOBILITY



DIGITAL WORLD



PHYSICAL WORLD



Thoughts....



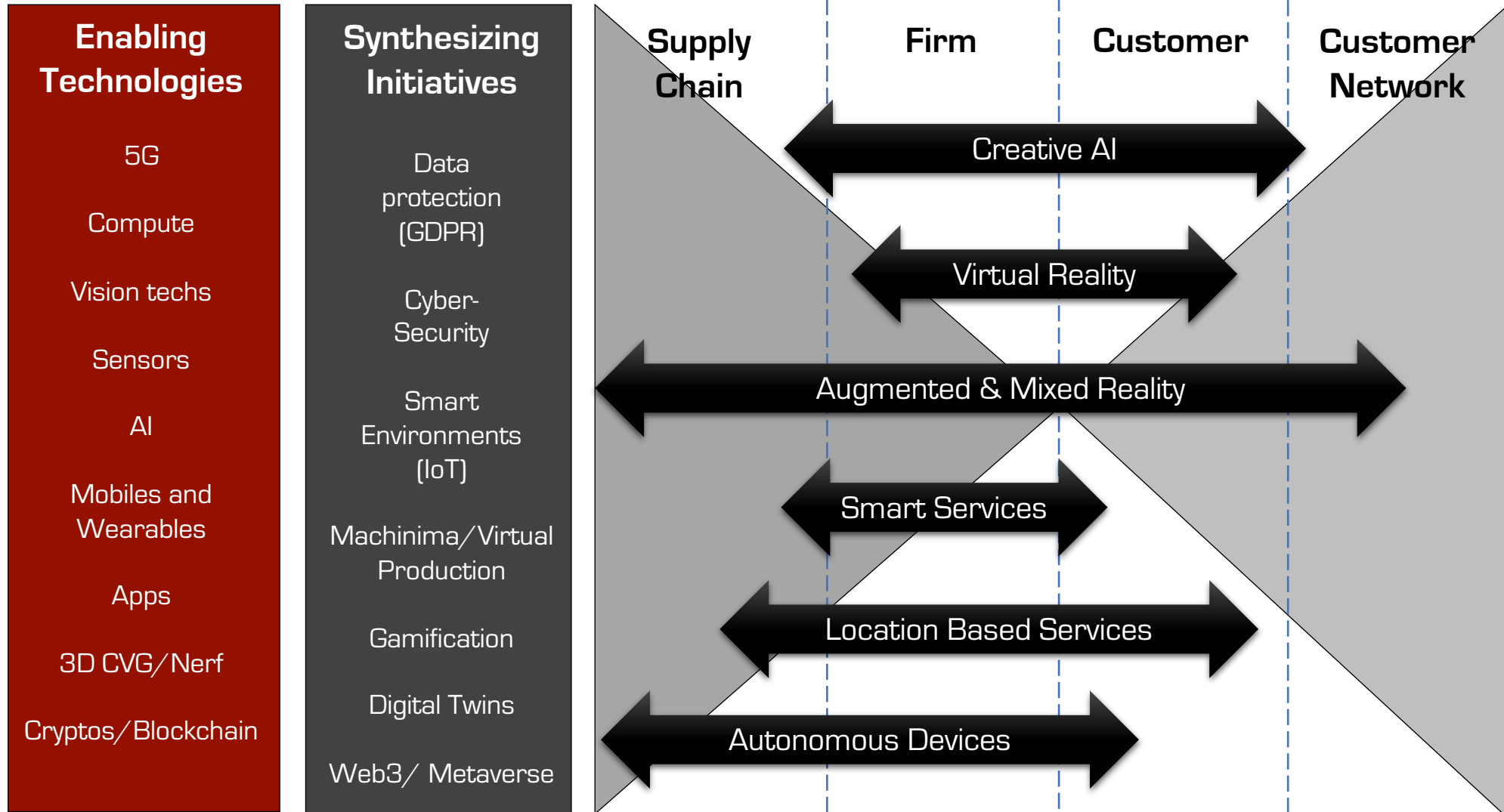
- Embedded & embodied-ness of AIs
- Synthesizing technological advancements
- Convergence of virtual and physical
- Changing nature of 'public realm'
- Humans-in-the-loop
- Places-in-the-loop
- Stakeholder ecosystem integration
- GDPR
- Cybersecurity
- **Keeping up with customer/end user behavior!**

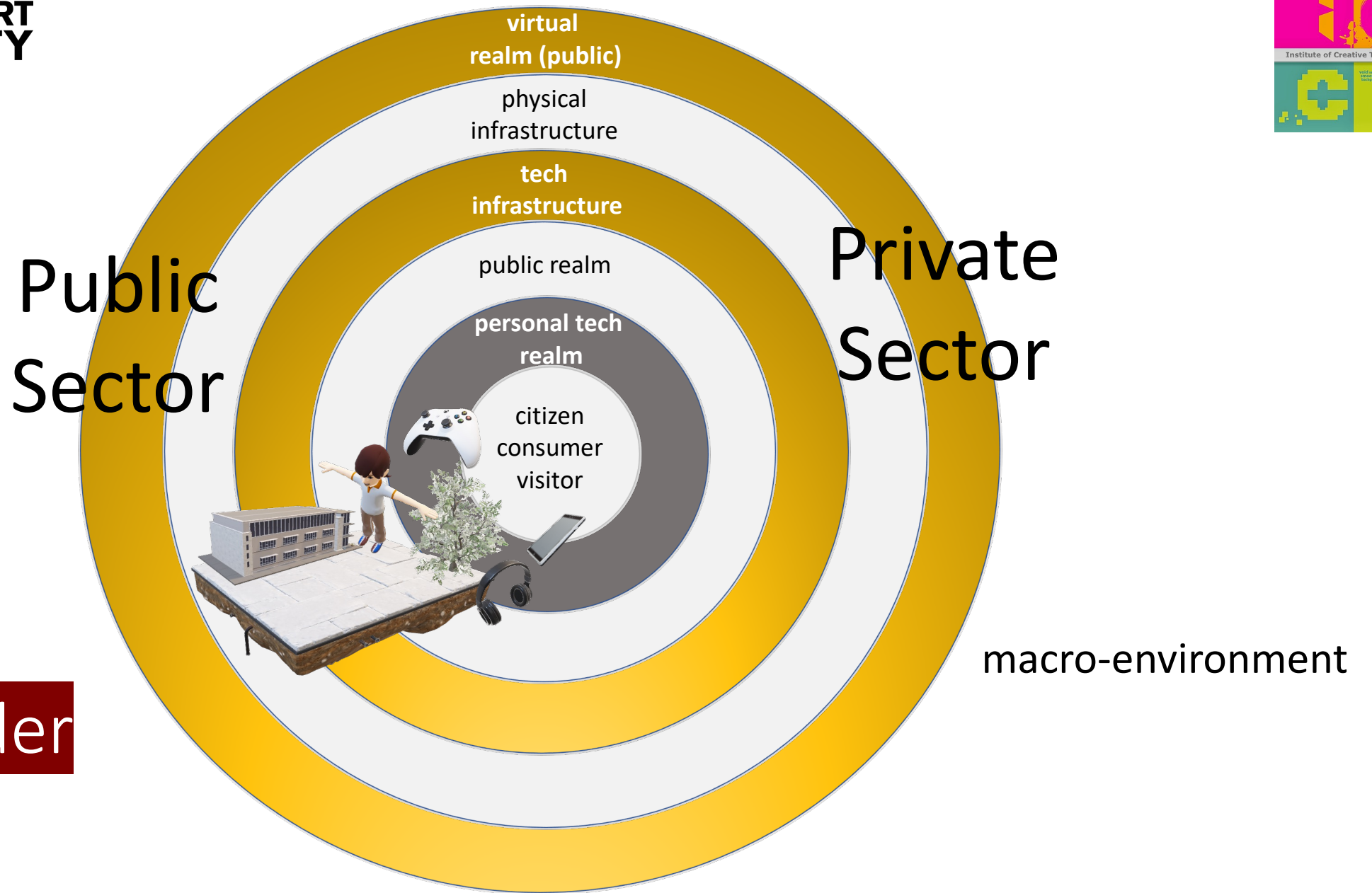
Get in touch...



- discuss, identify and scope areas for use with AI
- R&D, prototype AI applications
- test and evaluate AI applications and impacts on stakeholders
- training and support for staff teams working with AI applications
- grant collaboration for fundamental or translational research into development of AI applications
 - e.g., Innovate UK KTP projects, smart grants & UKRI, EU Horizon

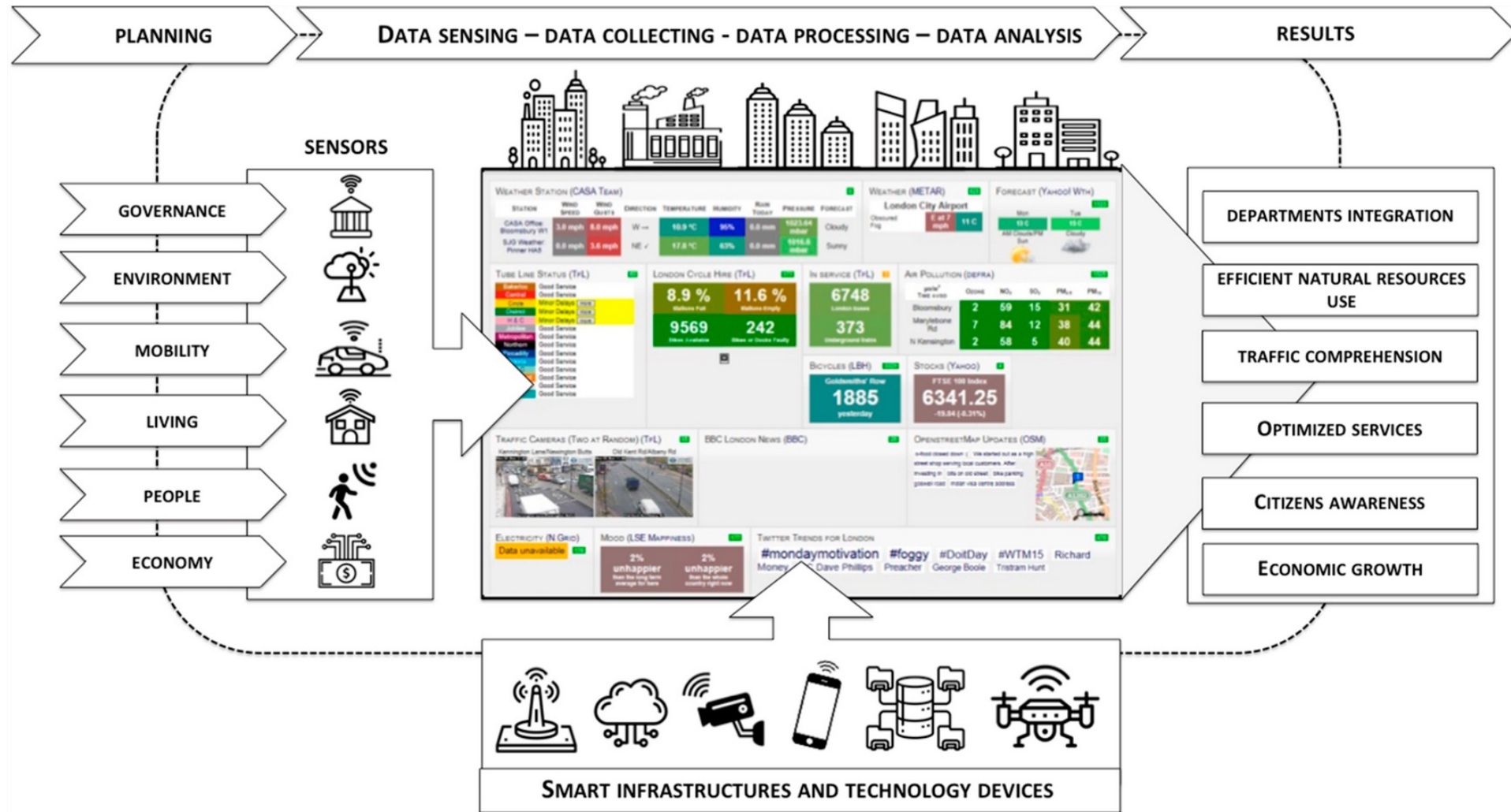
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stakeholder
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Playbook by



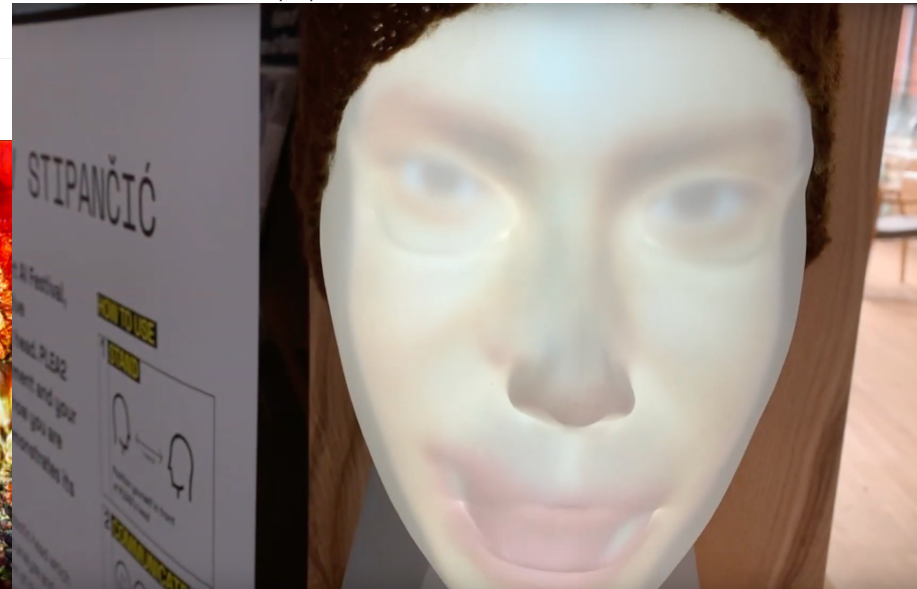
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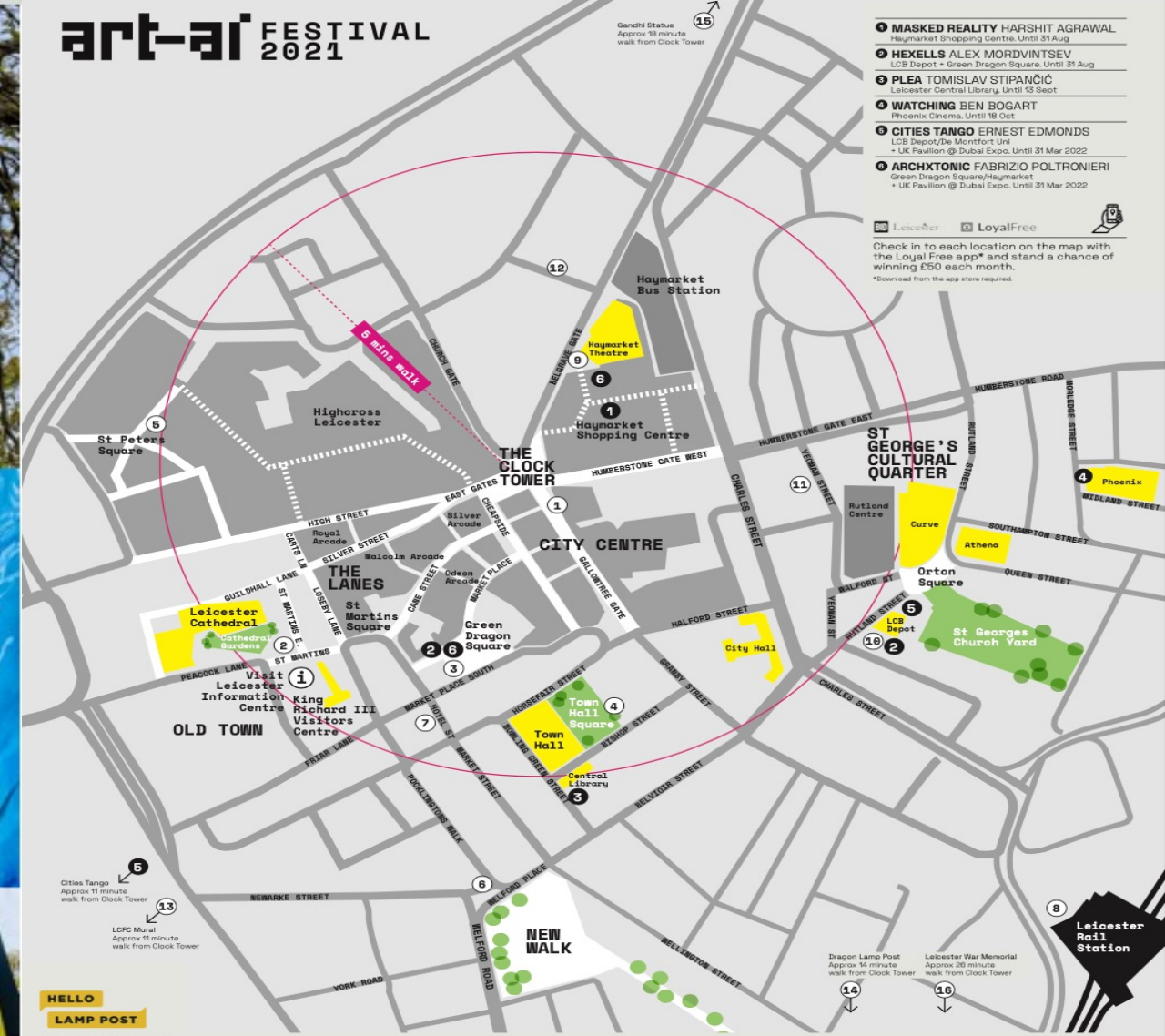
art-ai FESTIVAL LEICESTER



smart cultural engagement



art-ai FESTIVAL 2021



HELLO LAMP POST

LOCATION GUIDE



- 1 MASKED REALITY HARSHIT AGRAWAL
Haymarket Shopping Centre, Until 31 Aug
- 2 HEXELLS ALEX MORDVINTSEV
LCB Depot + Green Dragon Square, Until 31 Aug
- 3 PLEA TOMISLAV STIPANČIĆ
Leicester Central Library, Until 13 Sept
- 4 WATCHING BEN BOGART
Phoenix Cinema, Until 18 Oct
- 5 CITIES TANGO ERNEST EDMONDS
LCB Depot/De Montfort Uni
+ UK Pavilion @ Dubai Expo, Until 31 Mar 2022
- 6 ARCHXTONIC FABRIZIO POLTRONIERI
Green Dragon Square/Haymarket
+ UK Pavilion @ Dubai Expo, Until 31 Mar 2022

Leicester LoyalFree

Check in to each location on the map with the Loyal Free app* and stand a chance of winning £50 each month.

*Download from the app store required.

Adam Payne

Unleashing the Power of AI, Revolutionising Marketing New Way Growth

Baljit Virdee

Technology Demonstration: Cyferd, Powering the Business AI Revolution Cyferd Ltd.



Powering the Business AI Revolution

CYFERD

Baljit Virdee

Senior Vice President of Sales



“Cyferd was designed to be a living, breathing, operational platform for small, medium and large sized businesses. Cyferd replaces or enhances existing enterprise software with an intelligent data layer powered by AI. The Cyferd data layer adapts to the business environment, just as an organic species would adapt to its environment. It transforms and evolves to fit the company. We think of it as a living, breathing, business operating organism that will disrupt our very understanding of the way we support companies to evolve and do business”

Ranjit Bahia, CEO





Cyferd is not just a platform

It's a transformative solution designed to address the unique challenges faced by businesses of all sizes and all sectors:

Data Integration: Seamlessly connect disparate systems to unlock the power of your data, enabling informed decision-making and improved efficiency.

Cost Savings: Embrace a Cyferd ecosystem to streamline operations and significantly reduce software and maintenance costs.

Modernization: Transition from legacy systems to a connected ecosystem that drives accuracy and efficiency while meeting the evolving needs of your business.

Cloud Strategy: Whether it's harnessing customizations or exploring cost-effective replacements, Cyferd helps you chart a strategic path to the cloud.

Innovation: By enabling quick prototyping, agile development, and user-driven customization, we significantly reduce deployment timelines.



Digital Transformation Made Simple



Cyferd migrates customers away from complex, rigid and expensive technology to an agile, data driven, fully integrated, automated operational environment in the cloud



Build New Apps

Replace Old Systems

Augment Existing Solutions





A Totally New Approach to Digital Transformation

Existing Solutions

Off the shelf software

- ✗ Requires significant time, cost and energy to adapt to business needs
- ✗ Rigid and difficult to later adapt as needs change
- ✗ Requires expensive ecosystem for development and maintenance

Custom develop your own solutions

- ✗ Unclear what solution you'll end up with
- ✗ Complex to build, can lack quality and increase lead times
- ✗ Expensive specialist skills need to be retained

CYFERD

- ✓ 80% of functionality built within minutes
- ✓ Platform ready to go within hours
- ✓ Self-correcting and evolving with reduced cost of maintenance
- ✓ Designed with market leading API connectivity and data aggregation in mind
- ✓ Centralized support on updates included in subscription, reducing need for company based dedicated resources



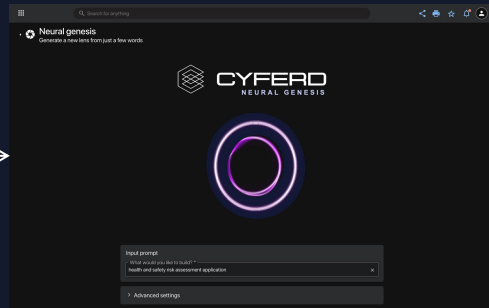
Neural Genesis: The Power of AI

Evolving ecosystem of business apps

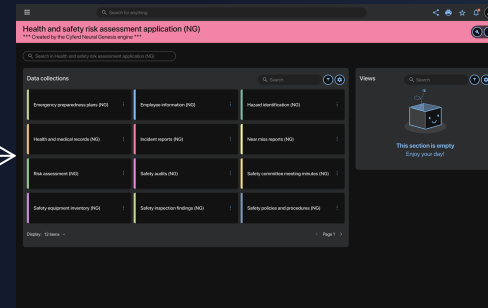
Neural Genesis engine continuously monitors usage and requests and evolves templates recursively, self-improving and optimizing for next user



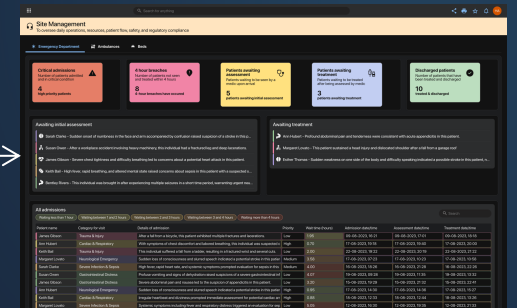
"Build me a New Client Intake application"



Build solutions with AI from pre-defined modular sets



Customize and refine your solution within hours



Ready for roll-out within days



Business at the Speed of Thought

Businesses of all sizes are tired of overpaying for critical operational software that takes too long to design and implement and is too complex, for only marginal advantage. Business owners want a secure, functional, evolving platform that lets them focus resources on building more business, not building more software!

Traditional Business Solution Deployment

Apps 'go live' in **months**

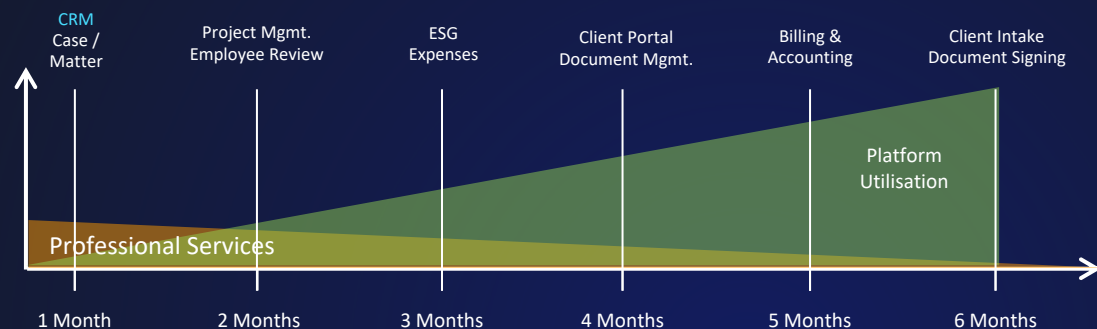


- ✗ Rigid solutions
- ✗ Professional Services heavy
- ✗ When ready to 'go-live', initial requirements already outdated

"For every \$1 spent on software license costs, we spend \$8 on professional services need to setup and customize our HR system"
IT Director, Housing Association

Cyferd Business Solution Deployment

Apps 'go live' in **weeks**



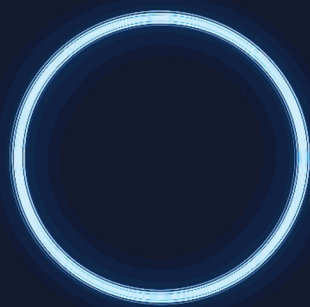
- ✓ Agile and nimble solutions
- ✓ Rapid app rollout
- ✓ Up to 80% to build solutions
- ✓ Up to 10x faster to deploy
- ✓ You think it, we build it!



Neural Genesis™ AI

Accelerates Digital Transformation by up to 10x

Self-writing, self-correcting software that continually evolves and improves as it absorbs larger and richer datasets



5 Types of AI make the Neural Genesis engine which powers the Cyferd Platform

NGGenerate

Generative AI that creates new operational applications in minutes

Autonomous AI that writes software

Create new process flows

Unlike any technology that exists today

NGSearch

LLM driven search

Enable command centre function

Ask any question

See all your connected data

NGAnalyze

Proprietary LLM technology

Ask Generative AI style questions around your enterprise data

Comprehensive workflows

Guides triage sentiment analysis

NGAssimilate

AI migration of legacy databases into the Cyferd platform in minutes

Takes years and millions to do without Assimilate

Remove risk and compliance issues related to unsupported systems

NGPredict

Diagnostic Algorithm technology

Detect outliers

Industry agnostic triage

Runs on operational data

Structures unstructured data



Protecting Your Most Valuable Asset: Your Data

No Data Access: We want you to have peace of mind. Your data is hosted in a dedicated tenant for your company securely in the cloud. Cyferd does not have access to your business data.

NGAssimilate: Our cutting-edge NGAssimilate feature is designed to securely assimilate data from external sources into your dedicated tenant. This process is seamless, efficient, and most importantly, secure.

Encryption: Data at rest and data in transit is encrypted using state-of-the-art encryption protocols. Your information is always protected.

User Control: With the Cyferd Platform, you have complete control over your data authorization. You decide what data sources are assimilated and how they are accessed in your dedicated Cyferd tenant.

Privacy Compliance: We align and comply with international standards on data security, privacy and compliance and are fully committed to continuously enhancing our own internal process and procedures.





Realize the Benefits of Cyferd

70% Less Customization:

Reduce the need for extensive customization of core backend systems, saving time and resources.

80% Faster Prototyping:

Accelerate the development and release of new applications, enabling quick adaptation to changing needs.

33% IT Cost Reduction:

Cut IT operating costs significantly, freeing up resources for strategic initiatives.

25% Efficiency Improvement:

Enhance operational efficiency across your business, from legal, to HR, to financial governance.



What Are Your Pain Points?

We can create business applications and workflows for any pain points you have in any industry, including the following:



CRM



Compliance



Claims Management



Marketing



Workforce Management



Risk Management



Reviews



Human Resources



Asset Management & Service Desk



Presented to you by

Baljit Virdee

Senior Vice President of Sales

baljit.virdee@cyferd.com

0203 336 9763





AI-LED, DATA-DRIVEN, DIGITAL TRANSFORMATION

www.cyferd.com



Crown
Commercial
Service
Supplier



Gary Kingsbury

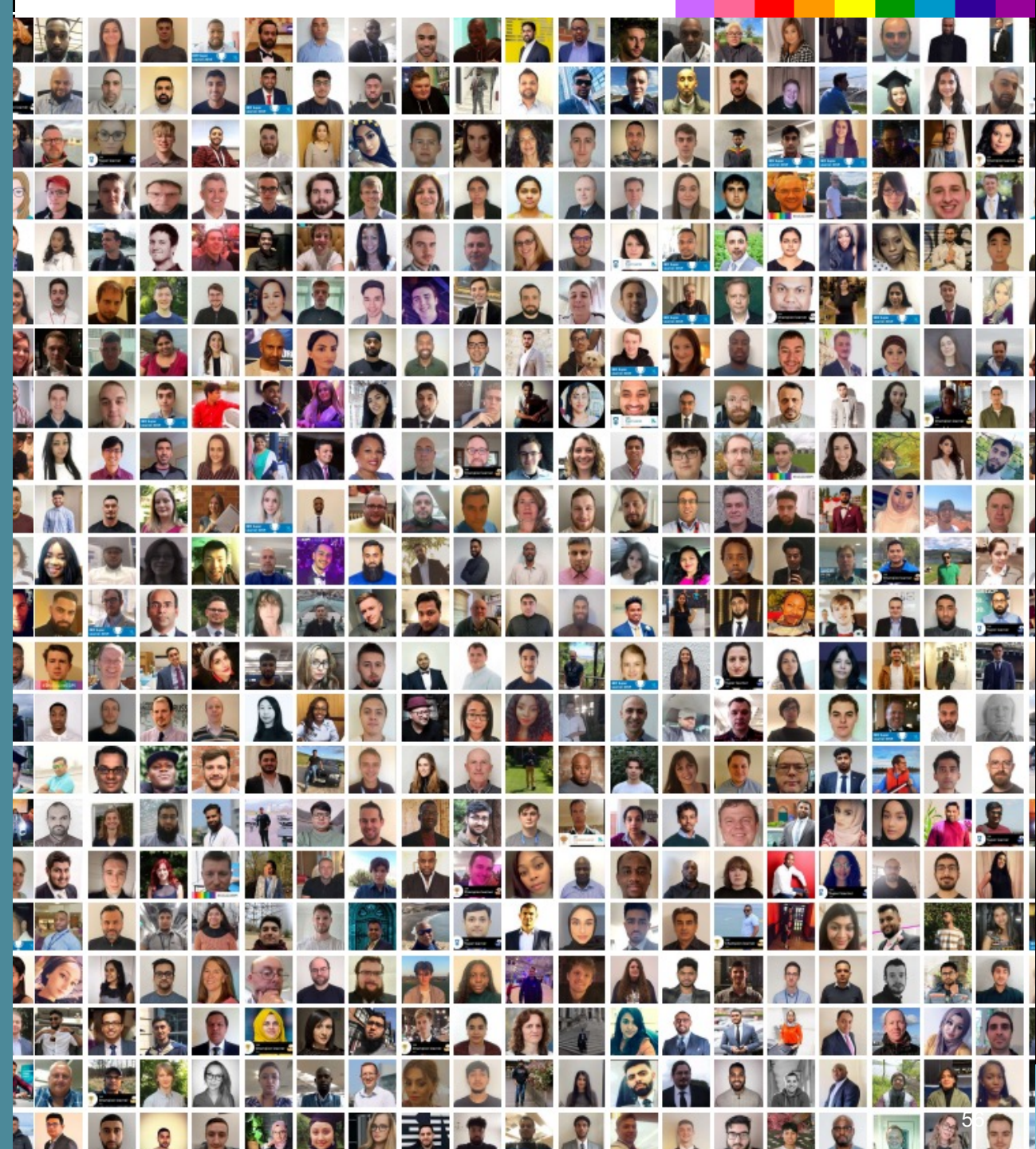
AI and IBM Consulting
IBM Consulting

IBM Client Innovation Centre UK

Client. Innovation. Centre.

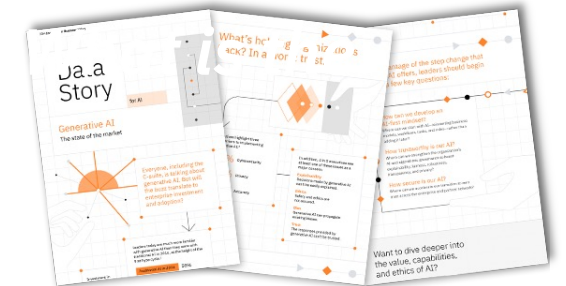
Wednesday 25th October 12-2pm

Gary Kingsbury
IBM CIC UK Leader



- 1.
- **Media hype** around generative AI has reached unprecedented levels

- 2.
- CEOs face immediate **pressure to adopt** generative AI across enterprise levels

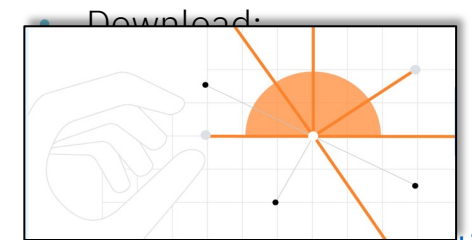


- 3.
- But despite financial potential, actual generative AI **investment is lagging**

- 4.
- 84% of business leaders see **cybersecurity, privacy, accuracy** as barriers to adoption

- 5.
- And 80% executives also cite other **trust-related concerns**: explainability, ethics, bias, trust

- What should they do?



- <https://ibm.co/generative-ai-data-story>

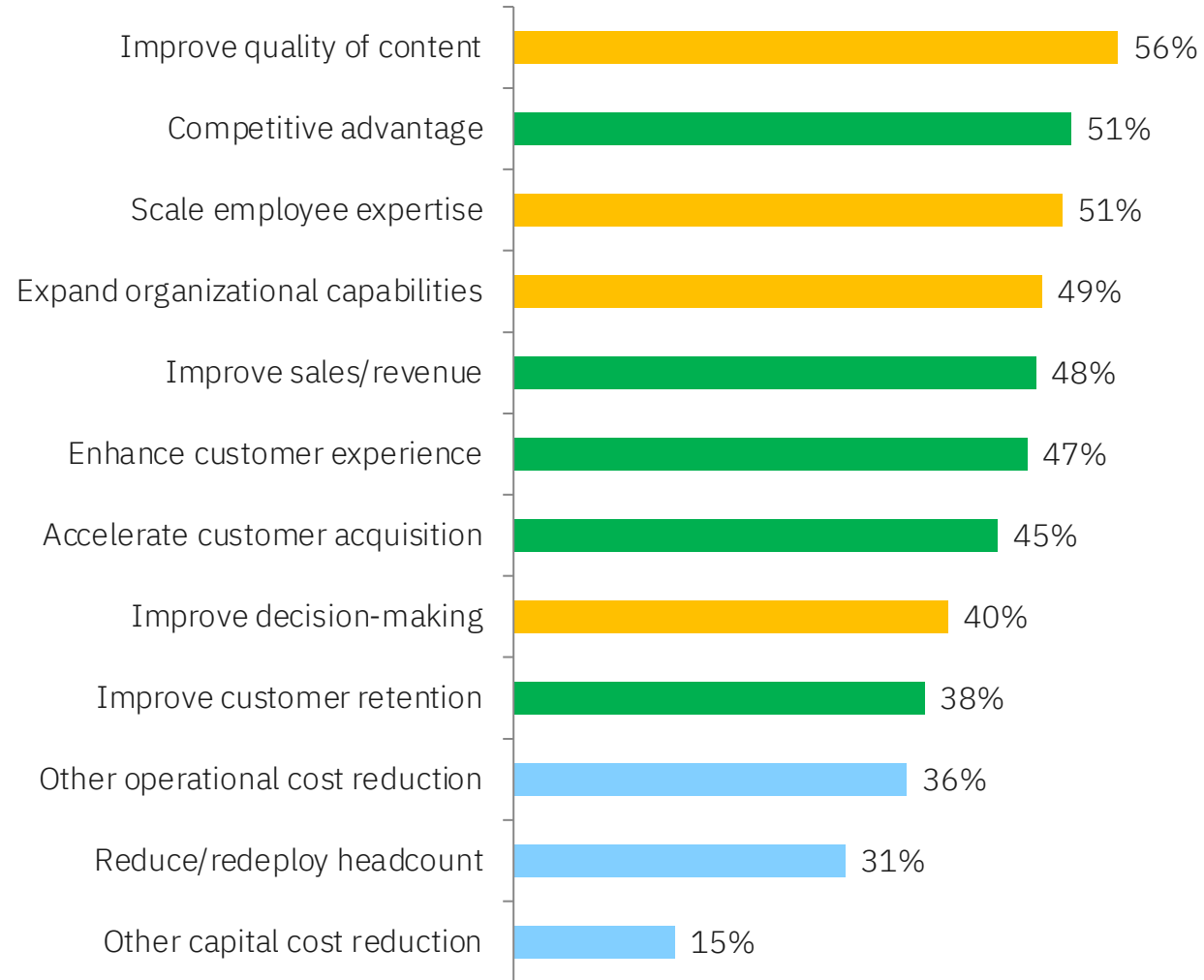
What are
businesses
expecting to
gain?

Expanded
capabilities

Business growth

Cost reduction

Benefits of adopting generative AI



***Building
capabilities
and driving
growth***

Organization and skills

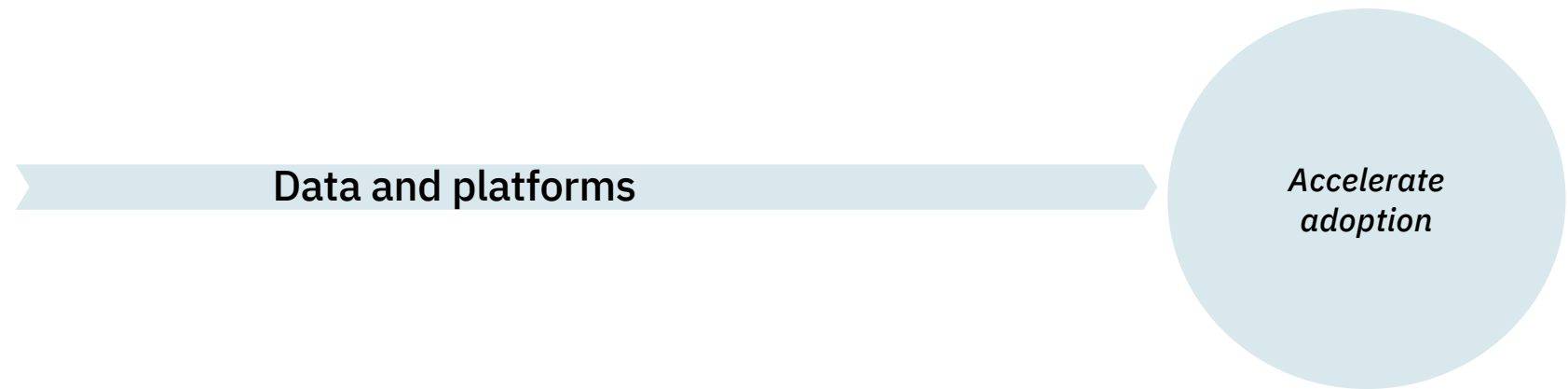
Data and platforms

*Accelerate
adoption*

Risk and governance

Organization and skills

Generative AI augments roles. People + technology skills are essential for the next generation.



Risk and governance

Generative AI in Organisation, Talent and Skills

While workplaces have been in flux since the pandemic, change is about to become even more intense. Generative AI is redefining every job and every task, from entry level to the executive suite.



Are organizations ready?

And do they have the skills?

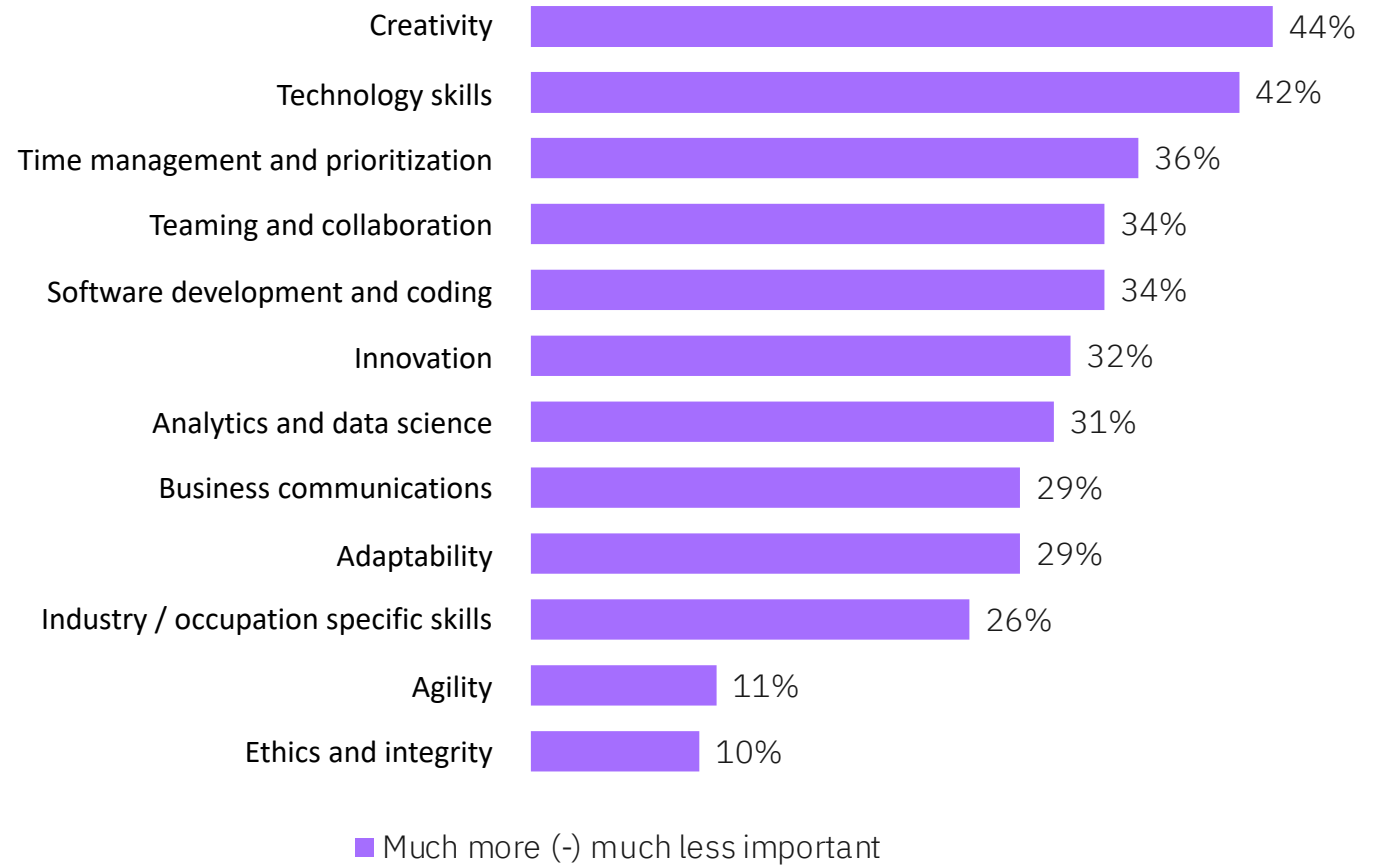
- 74%
 - CEOs already believe their teams have the generative AI skills they need.

- But only 29%
 - of their C-suite agree their organizations are ready.

- 80%
 - of business leaders say roles and skills are changing due to generative AI.

Emphasis on workforce skills
– especially those needed to interact with generative AI tech, or people

44% of executives believe that by 2025, creativity will be a more important skills due to generative AI



What CEOs need to do

Rethink your operating model to unlock creativity

- **Make generative AI upskilling** an advancement opportunity for everyone, especially top performers. Generative AI can't augment or improve poor performance. It's revolution not evolution. Pioneer the use of generative AI in the C-suite and at managerial levels.

- **Crystalize a culture of curiosity** to accelerate creativity. Make generative AI central to team building. Build a sense of employee equity. Use generative AI to create clear feedback loops where they don't exist today, and distribute learnings and insights that previously sat on a shelf in a binder.

- **Redefine ways of working** by using generative AI-augmented process mining to analyze how work is done, where bottlenecks and inefficiencies exist, and how to remediate them—including how decision making can be accelerated and improved at scale.

Organization and skills

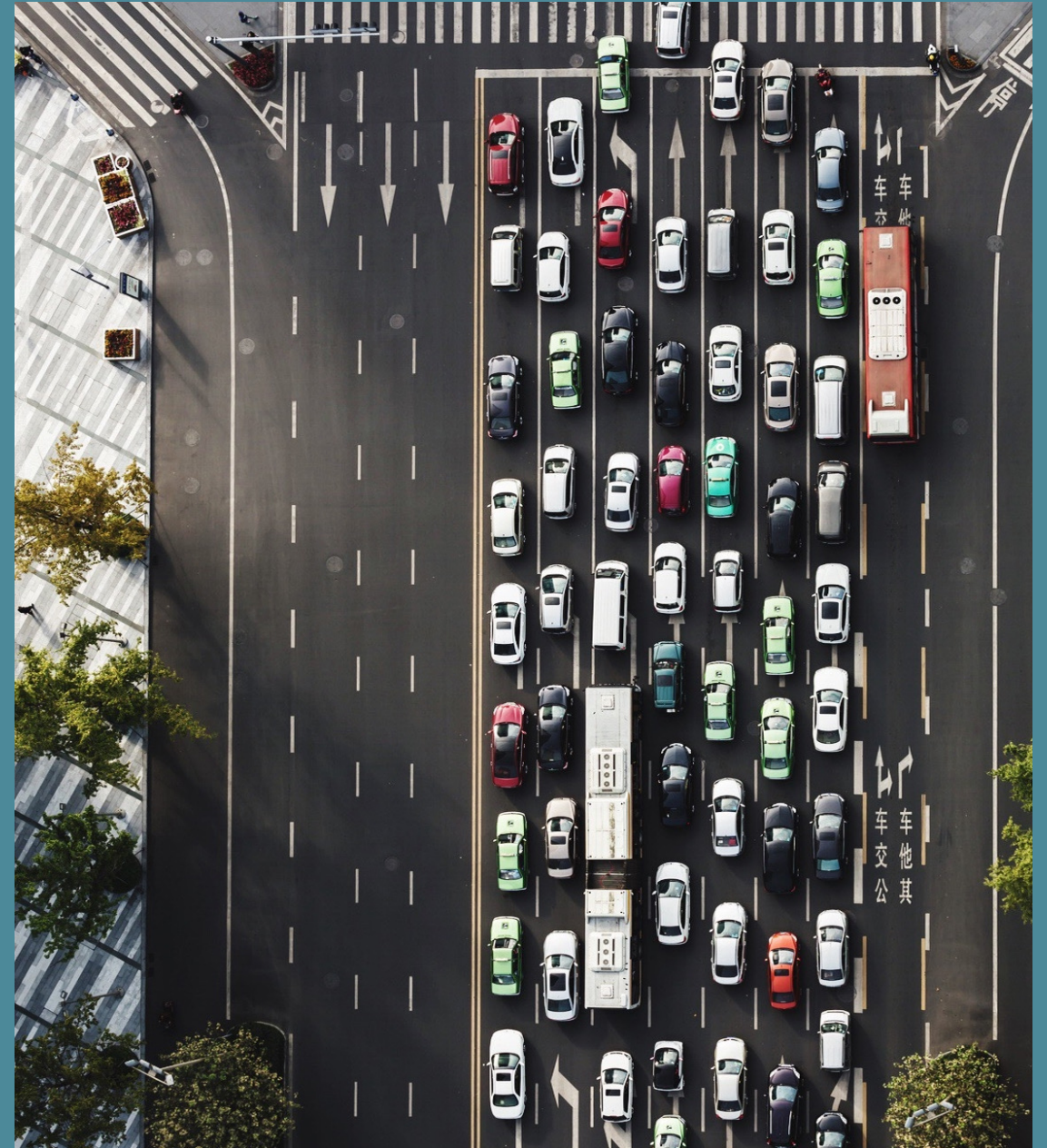
Data and platforms

Generative AI requires new data approaches. Hybrid platforms help organizations rapidly adapt and evolve.

*Accelerate
adoption*

Risk and governance

Generative AI is disrupting the disruptors—and platform-based businesses have the edge



What CEOs need to know

Generative AI offers a second bite at the platform business model apple

While...

• 57%

- greater returns anticipated by executives on platform investments in 2023 relative to 2020

And...

• 94%

- of CEOs planned to participate in platform business models in 2022, up from only 46% in 2018

But only...

• 17%

- of platforms succeeded in the past 20 years according to research by Harvard Business Review

- Generative AI could be the missing ingredient for platform success — as it transforms functions across organizations

Functions where generative AI would have most impact according to executives

Sales	57%
R&D	55%
Product development	40%
Customer service	37%

What CEOs need to do

Jump at the opportunity for a disruptive do-over

- **Act like a startup.** Avoid incrementalism. Design a generative AI platform business that could be your biggest, highest-growth, most profitable business unit within three years.

- **Design for outcomes, adapt to surprises.** Structure the platform around real value-adds to platform participants at every touchpoint. Establish a mechanism to constantly assess and iterate the model based on increasing data volumes.

- **Test before you invest.** Test the new generative AI capabilities your platform depends on before pulling the trigger on major investments. Learn lessons from how your customer-facing AI initiatives are faring.

What CEOs need to know

Data dependency is both a challenge and an advantage

- Companies with high data wealth are gaining an edge

9% vs. 4.8%

double the ROI realized from AI capabilities by companies that have large stores of high-quality data trusted by internal and external stakeholders

- Data wealth escapes enterprises that go it alone

53%

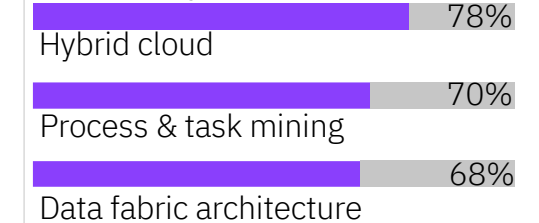
- CEOs saying that a lack of proprietary data will be a barrier to successful generative AI initiatives

- More data, the better the generative AI model trained

#1

- expected benefit of adopting generative AI for innovation is ecosystem collaboration as per executives

- Basic plumbing needed for value to flow across ecosystem



- ***Silo-busting practices and technologies employed by highest-performing, most interoperable data operations***

What CEOs need to do

Outfit a generative AI data expedition

- **Define requisite data sets.** Work backward from the customer experience: what will a generative AI platform need to offer to attract customers and ecosystem participants? What data will those generative AI value propositions depend on?
- **Explore all data sources.** Ruthlessly mine the unstructured data that you need. Develop this data mining capability as a lever of competitive advantage that can differentiate your platform value proposition from the competition.
- **Ask the ecosystem for help.** Expand your data expedition to include your customers, potential ecosystem participants, and their customers. Amplify the platform's network effects by tapping into their data streams.

- .

Organization and skills



Risk and governance

Generative AI creates new risks and exposure.
Robust governance and compliance is essential.

What CEOs need to know

AI and data governance are board-level concerns

• 61%

- Of CEOs say data lineage and provenance related concerns are a barrier to generative AI adoption

• 57%

- Of CEOs say data security related concerns are a barrier to generative AI adoption

• 45%

- Of CEOs say data privacy related concerns are a barrier to generative AI adoption

- In this environment, AI and data governance is a key driver of value creation



AI ROI of best-in-class enterprises



AI ROI of other enterprises

Double the average AI ROI realized by enterprises that assess infrastructure and processes to balance AI experimentation with industrial-strength scaling and have data teams review governance, management, ethics, literacy, and other frameworks

What CEOs need to do

Put governance at the heart of the generative AI lifecycle

- **Build a governance-savvy executive team.** Educate your team and the board. Then make AI and data governance a recurring agenda item at board meetings, ensuring it gets the attention it warrants. Don't just delegate and forget; active leadership is essential.

- **Govern the whole system, not bits and pieces.** Build governance into each stage of the AI lifecycle. Break the design and execution of AI and data governance out of organizational silos. You need an end-to-end system.

- **Put someone in charge.** Appoint and empower a senior executive to lead AI and data governance across the enterprise. Actively mitigate the risks of failure due to fragmented ownership and accountability.

Actions to take to accelerate adoption

- **Organization and skills**
 - Change the mindset
 - Set measurable goals
 - Establish ethical guidelines
 - Promote an experimental culture
 - Empower middle management
 - Clarify role adjustments
 - Revamp the operating model
- **Data and platforms**
 - Understand data and platform needs
 - Set selection criteria for platforms
 - Identify suitable ecosystem partners
 - Leverage next-gen data capabilities
 - Scale without disruption
 - Address robust data governance
- **Risk and governance**
 - Identify risks collaboratively
 - Deploy mitigation policies
 - Document AI governance
 - Trace provenance of AI assets
 - Monitor and control risks
 - Transition to zero trust cybersecurity
 - Implement AI-enabled security intelligence

Details in ensuing slides

Organization and skills

For a broader and deeper set of AI-related actions across a holistic set of business capabilities (including data and platforms), please see the IBM IBV report, [“Generating ROI with AI: Six capabilities that drive world-class results.”](#)

- **Change the mindset:** Shift from “adding AI” to “starting with AI.” This facilitates a deeper understanding of generative AI, promotes agility to respond when market conditions change, and aligns investments and funding with cross-organizational buy-in at all levels.
- **Set measurable goals:** Define financial and non-financial goals for generative AI adoption and identify specific, quantifiable measures that encapsulate the changes you want your people to embrace.
- **Establish ethical guidelines:** Develop boundaries for the ethical use of AI. Generative AI models are powerful, but they must be used responsibly. This includes respect for privacy, transparency, fairness, and accountability.
- **Promote an experimental culture:** Recognize generative AI is new for everyone. Encourage teams to test, iterate, and improve with generative AI, and track success metrics.
- **Empower middle management:** Middle managers play a crucial role in forming a continuous feedback loop between executives and front-line employees. Train managers to be a bridge by prioritizing generative AI use cases and communicating adoption successes and failures.
- **Clarify role adjustments:** Identify and communicate changes to roles and responsibilities of existing employees transparently in areas where generative AI is being deployed.
- **Revamp the operating model:** To expedite AI adoption, rethink and restructure the operating model to promote cross-functional understanding, streamline the AI deployment process, and ensure that the benefits of generative AI and foundation models are realized across the organization.
- **Establish AI integration frameworks for AI to be deployed across your operations seamlessly.**
- **Establish robust data & AI governance practices that are compliant with regulatory standards and best practices.**
- **Foster a collaborative environment between different business units, technology teams, data scientists, and decision-makers.**
- **Develop AI skills academies that prioritize not just technical skills but also collaboration, communication, and empathy. The curriculum should cover proper and improper use of foundation models, thereby fostering responsible AI usage.**

Data and platforms

For a broader and deeper set of AI-related actions across a holistic set of business capabilities (including data and platforms), please see the IBM IBV report, [“Generating ROI with AI: Six capabilities that drive world-class results.”](#)

- **Understand data and platform needs:** Begin by comprehensively assessing the specific data and hybrid platform requirements that foundation models demand in your identified use cases. This involves understanding the types of data you have and the computational requirements for processing and analyzing such data.
- **Set selection criteria for platforms:** Establish selection criteria for the platforms that will support your use of generative AI and related foundation models. These may include:
 - Use-case specificity
 - Cost (model development and operational expenses)
 - Availability and accessibility of relevant data
 - Balance between prediction accuracy and computational efficiency
 - Security measures and protocols
- **Degree of customization required**
- **Overall system performance**
- **Portability across different environments**
- **Compliance with legal and regulatory standards**
- **Identify suitable ecosystem partners:** Once you’ve established your criteria, identify potential ecosystem partners that can meet your hybrid platform needs effectively and efficiently. These partners should have a proven track record in supporting AI at scale.
- **Leverage next-gen data capabilities:** Use state-of-the-art data marketplaces and automation capabilities. This includes platforms that allow for seamless data ingestion, cleansing, and preparation specific to your AI outcomes.
- **Scale without disruption:** As you integrate foundation models into your operations, ensure you can scale these models without compromising on business outcomes or causing operational disruptions. This involves robust model management, performance monitoring, and continuous improvement mechanisms.
- **Address robust data governance:** Given that foundation models require access to vast, diverse, and potentially sensitive datasets, establish robust data governance practices. This includes data collection, storage, access, processing, and security protocols compliant with regulatory standards and best practices.

Risk and governance

For a broader and deeper set of AI-related actions around risk and governance, please see [“AI ethics in action: An enterprise guide to progressing trustworthy AI.”](#)

- **Identify risks collaboratively:** Recognize the specific input/output and usage risks associated with foundation models. This includes model reliability, data privacy, and security, as well as ethical and regulatory compliance issues.
- **Deploy mitigation policies:** Develop and implement appropriate policies to mitigate these identified risks. These should be flexible enough to adapt to changes in regulation or industry standards.
- **Document AI governance:** Create comprehensive documentation, possibly in the form of fact sheets, detailing all instances of AI use in the organization, along with the current governance structure. This creates transparency and accountability.
- **Trace provenance of AI assets:** Implement mechanisms to trace the origin of all AI-generated outputs back to the foundation model, dataset, prompt, and other inputs. This information should be logged in digital asset management and other systems to ensure traceability and accountability.
- **Monitor and control risks:** Adopt a comprehensive monitoring and control system that is proportionate to the level of risk and compliance needed throughout the AI system’s lifecycle. This system should continuously track and evaluate model performance, data usage, and compliance.
- **Transition to zero trust cybersecurity:** Accelerate the adoption of a zero-trust cybersecurity framework across the enterprise and partner network. This approach assumes potential threats can originate from any source and thus ensures all access to systems are verified and monitored.
- **Implement AI-enabled security intelligence:** Leverage AI-enabled security tools to enhance your organization’s ability to detect, prevent, and respond to potential security threats. Ensure clear incident escalation policies are documented at every level, all the way up to the board of directors.

IBM

Q&A

AI Experts with Mukesh Bulsara

LBV Director & Partner at Coadax LLP



Prof Mario Gongora
[Institute of Artificial
Intelligence](#)



Prof Tracy Harwood
[Institute of Creative
Technologies](#)



Adam Payne
CEO
[New Way Growth](#)



Baljit Virdee
Senior Vice President
of Sales [Cyferd Ltd.](#)



Gary Kingsbury
General Manager
[IBM](#)

And Finally...

- **A BIG THANK YOU TO:**



- Our amazing AI expert speakers
- Gary Kingsbury for hosting the event at IBM
- You for your ongoing support for LBV



- **Most presentation slides and useful links available at www.lbv.co.uk/events**

Next event: [East Midlands Chambers' 'Annual State of the Economy Conference'](#)

When: 9:00am, 14 December 2023

Where: Peter Jackson Lecture Theatre, University of Leicester, Leicester, LE2 1RQ

With input from expert economists, politicians and business leaders, this free session is for members wanting to learn more about the global and local factors that are influencing operating conditions and share ideas on how future business growth can be best supported.

LBV is Recruiting Board Directors*

Talk to LBV if you are interested in supporting LBV to:

- ***Influence***... the decision-making bodies and key organisations, be a critical friend and support actions that lead to better business
- ***Inform***... members on key developments and how they can benefit from and contribute to the overarching goal.
- ***Initiate***... and develop activities, partnerships and promote innovation to enhance Leicestershire as a great place to do business.

*Board Directors are recruited from LBV Membership (senior representatives)

Thank you. Have a great day!



Anju Trevedi MBE
LBV Director
&
Head of Knowledge Exchange
and Innovation
DMU
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Mukesh Bulsara
LBV Director
&
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