Creation

The fast track to co-create, implement,
and scale sustainable innovations

Initiated by
T Systems

Creation is a curated community and service that accelerates sustainable innovation.

We curate challenges

Through input from our community and partners, we identify pressing challenges and find the right people to address them.

We enable solutions

We form and empower diverse teams of practitioners from companies, scientific institutions, NGOs, and public administrations.

We drive scale

We help teams set up implementation partnerships and secure access to funding to bring solutions to life.

With a growing network of collaborators, we address the challenges of the 2024 program.

Cordes & Graefe
Dell
Deutsche Börse Group
Detecon
Deutsche Telekom
Hochschule Trier - Umweltcampus Birkenfeld
Ignite AI
Intel
real-cis
Shell
The Urban Transitions Mission
T-Systems
Ubitricity
UN Climate Change Global Innovation Hub

more to be announced soon

"I am very pleased to partner with you because you are doing it right. Together we can accelerate the systemic innovation for sustainability."

Massamba Thioye
Project Executive, UN Climate Change Global Innovation Hub

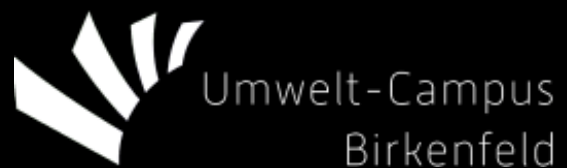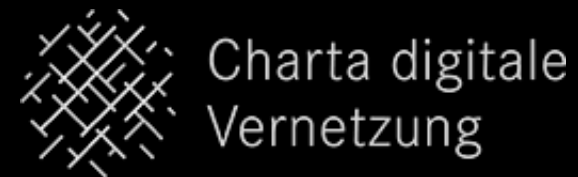"There are many events out there, but in this network, we jointly focus on building solutions."

Melanie Kubin-Hardewig
Vice President Group Corporate Responsibility, Deutsche Telekom

"We threw a lot of exciting topics together and found a lot of common ground. It was incredibly inspiring."

Christina Sell
Chief Sustainability Officer Trading & Clearing, Deutsche Börse Group

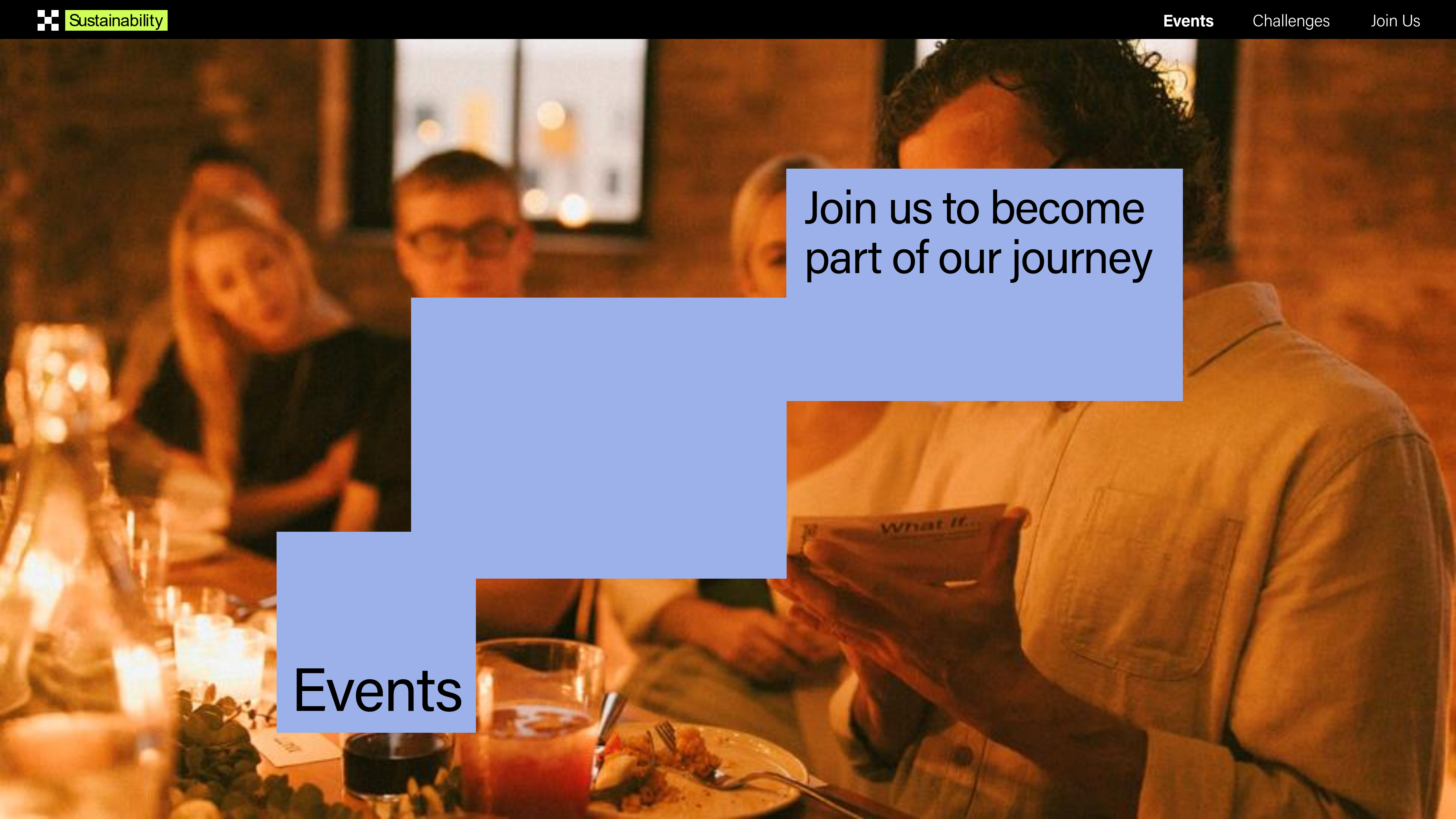# Gratitude to our logo partners for championing our collective goals.

B.A.U.M.
NETZWERK FÜR
NACHHALTIGES
WIRTSCHAFTEN

Charta digitale
Vernetzung

Design at
Business

T

FORUM FÜR
VERANTWORTUNG
STIFTUNG

IGNAITE

INNER
DEVELOPMENT
GOALS
COLOGNE & BONN HUB

R'

Umwelt-Campus
Birkenfeld | HOCH SCHULE TRIER

initiated by
T·Systems

more to be announced soon

Join us to become part of our journey

Events

The Creation Journey

Dec 23	March	April 16th	June 10th	Dec 24
COP 28 Dubai	**Inspiration Studios**	**Ideation Day**	**Innovation Day**	**COP 29 Baku**
UN Climate Change Global Innovation Hub	Build a community with trust and engagement around challenges	Show the whole spectrum of challenges and work on them	Show solutions and gain publicity	UN Climate Change Global Innovation Hub
Strategic Innovation Workshop	Explore challenges in depth	Onboard additional collaborators and potential partners	Create commitment for scale	Strategic Innovation Workshop

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We curate challenges   We enable solutions   We drive scale

Inspiration Studios

An open house for meaningful conversations, inspiration, and connection

Our 2024 journey begins with Inspiration Studios, a place to explore and create effective solutions that we can showcase at COP 29. Each studio will present an opportunity to meet our network of partners (including the UN Climate Change Global Innovation Hub), take part in special events, and connect with practitioners from companies, scientific institutions, NGOs, and public organizations who share a mission to build a sustainable future.

Frankfurt March 5-7, 2024

Accelerating the Circular Economy

How we can reconfigure and build sustainable industrial value chains

Berlin March 11-13, 2024

Transitions in Mobility, Energy, and Food

How open-source principles and open data resources can accelerate regional impact

Cologne March 19-21, 2024

The Next Stage of ESG

How AI is making ESG harder and easier simultaneously

What's happening at our Inspiration Studios?

The doors at each Inspiration Studio will be open for three days. Drop by anytime for a coffee or take part in the events in your city that pique your interest.

Day 1 | 17:30 – 21:30
Welcome Reception

Drop by to get to know X-Creation, connect with sustainable innovators, and enjoy inspirational talks.

Day 2 | all-day
Open Studio

Schedule a private meeting or just hang out and co-work with free lunch and great coffee.

Day 2 | 16:00 – 17:00
Media hour

Take a deep dive into some of the challenges the X-Creation community wants to tackle in 2024.

Day 2 | 18:00 - 21:30
Collaborators' Dinner

A special experience to co-create solutions (by invitation only).

Day 3 | 10:00 - 12:00
Collaborators' Workshop

A focused work session to advance solutions (by invitation only).

Day 3 | 12:30 - 13:30
Farewell Lunch

Join us for food and conversation as we say goodbye and share what's next (by invitation only).

Frankfurt March 5-7, 2024

Out of Office | Westend

Bockenheimer Landstraße 94-96, 60323 Frankfurt am Main

Incl. joint challenges with the UN Climate Change Global Innovation Hub

Accelerating the Circular Economy

How we can reconfigure and build sustainable industrial value chains

Most industries are defined by systemic overproduction. One key way to address this, and pave the way towards a circular economy, is to create marketplaces that repurpose existing resources, such as textiles and building commodities. Join us to explore how we can get better at connecting supply to demand and unlock significant environmental and economic benefits. Together, we can co-create solutions to boost connectivity and information-sharing inside industries.

Berlin March 11-13, 2024

Lovers and Leaders

Torstraße 101, 10119 Berlin

Incl. joint challenges with the UN Climate Change Global Innovation Hub

Transitions in Mobility, Energy, and Food

How open-source principles and open-data resources can accelerate regional impact

Adaptation to climate change, and the mitigation of its consequences, needs to happen at a local level. Advanced digital solutions will be critical to achieve this, but may prove too complex for local stakeholders (e.g., municipalities and farmers) to manage on their own. Open-source principles and open-data resources, such as the Copernicus Data Space, can help democratize sustainable solutions and make them accessible to everyone. Join us to explore how we can foster collaborative innovation for climate action and its wider implementation in the public domain.

Cologne March 19-21, 2024

Backyard Loft

Richard-Wagner-Str. 31, 50674 Cologne

The Next Stage of ESG

How AI is making ESG harder and easier simultaneously

The rise of Artificial Intelligence dramatically increases a company's social responsibility. Businesses across sectors, along with ESG leaders, must prioritize compliance with the EU AI Act in order to foster trust, while still accelerating innovation. At the same time, AI presents many potential benefits for ESG implementation, such as simplifying the monitoring and reporting of its practices and upskilling employees with relevant skills. Join us to explore how AI can shape the next stage of ESG in responsible, efficient, and hyper-personalized ways.

Later this year

Ideation Day

April 16, 2024 | Bonn

A full-day, hands-on work session to co-create solutions for our 2024 challenges.

Registration opening soon

Innovation Day

June 10, 2024 | Bonn

Build on the results of our co-creation process and bring the solutions to life.
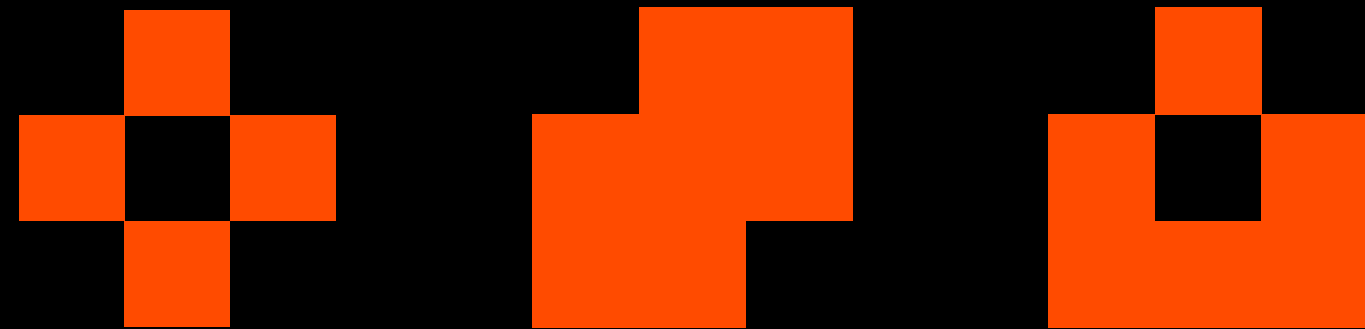
Registration opening soon

Collaborate to co-create and scale meaningful solutions.

Challenges

Accelerating the Circular Economy

Building a Marketplace to Reuse Building Commodities

A challenge by Deutsche Börse Group

Circular Fashion Revolution

A challenge by UN Climate Change Global Innovation Hub

Testing Edge Cloud Heating and Cooling as a Service Business

A challenge by real-cis with Dell, Intel, Shell and T-Systems

Building a Marketplace to Reuse Building Commodities

A challenge by Deutsche Börse Group

Repurposing commodities such as concrete offers significant environmental and economic benefits. However, this potential is often untapped due to the lack of connectivity and information flow among key stakeholders in the building industry.

How might we create an innovative marketplace for repurposing building commodities that not only bridges these gaps but also fosters efficient collaboration and resource exchange, thereby revolutionizing the reuse of concrete in construction?

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Potential solution space

- Connecting suppliers (e.g., demolition companies, construction sites with excess concrete) and consumers (e.g., construction companies, landscape designers) to facilitate targeted offerings and requests.
- Implementing a system to verify the quality of the recycled concrete. This could involve certifications, user ratings, or partnerships with testing laboratories.
- Inventory Management: Real-time tracking of available materials, including types, quantities, and locations. This feature helps in efficient matching of supply with demand.
- A transparent pricing system, possibly with options for bidding or negotiation, to ensure fair market values.
- Integration of transportation solutions, either by partnering with logistics companies or providing a platform for users to arrange their own transportation.
- Information and guidelines about relevant regulations and standards, ensuring that all transactions comply with local building codes and environmental regulations.
- Providing information and resources about the benefits and uses of recycled concrete to increase awareness and acceptance.

Stakeholder ecosystem

- Construction industry (demolition, construction, architects, engineers)
- Recycling companies and facilities
- Technology providers
- Logistics and transportation firms
- Financial institutions and investors
- Research and academia
- Cities and regions

Circular Fashion Revolution

A challenge by UN Climate Change Global Innovation Hub

The very complex supply chain in the textile industry leads to significant overproduction, posing a major sustainability challenge. In response to this, in 2023, the European Union introduced extensive strategies to enhance the sustainability of the textile sector.

How might we effectively minimize systemic overproduction while simultaneously creating marketplaces for the repurposing of textiles to align with these new EU sustainability directives?

Potential solution space

- Implement AI-driven predictive analytics for dynamic demand forecasting and modular manufacturing processes to reduce overproduction.
- Develop online platforms with blockchain technology for material exchange, collaboration, and transparent tracking of material lifecycles.
- Introduce garment passports (Digital Product Pass) detailing material composition, environmental impact, and recyclability, accessible via QR codes or NFC tags.
- Foster R&D in sustainable materials and design practices, promoting durability, recyclability, and open-source collaboration on sustainability.
- Launch awareness campaigns and interactive educational programs using AR/VR to inform consumers about sustainable fashion choices and garment lifecycles.

Stakeholder ecosystem

- Regulators
- Fashion value chain
- Academia
- Technology providers

Testing Edge Cloud Heating and Cooling as a Service Business Model

A challenge by real-cis with Dell, Intel, Shell and T-Systems

In the context of the ICT sector's significant energy consumption, and the necessary transitioning to sustainable electric heating and cooling, using waste heat from edge computing offers an innovative solution for efficient energy reuse in buildings.

How might we test and validate an innovative business model that integrates edge computing with heating as a service in a proof-of-concept (POC) scenario?

Potential solution space

- Integration of edge computing units with existing heating and cooling systems in buildings.
- Testing and analyzing different workloads on edge computers and their corresponding heat output patterns.
- Evaluating the impact of this integration on the overall greenhouse gas (GHG) footprint of buildings and the computing business model.
- Exploring adaptive algorithms that balance computing needs with building temperature requirements.
- Exploring the scalability and replicability of the model across different building types and climates, as well as cloud business models.

Stakeholder ecosystem

- Edge Computing Providers/Users
- Commercial Building Operators
- Energy Efficiency Consultants
- Local Regulatory Bodies
- ICT Industry Experts

Transitions in Mobility, Energy and Food
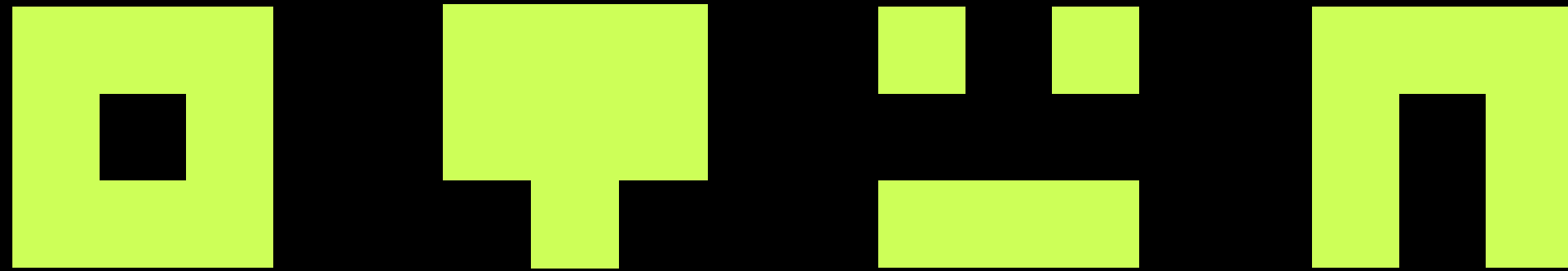
Using the Copernicus Data Space for Regional Mitigation and Adaptation Scenarios

A challenge by T-Systems

Developing a Digital Toolbox for Urban Transitions Planning and Mobility

A challenge by The Urban Transitions Mission & UN Climate Change Global Innovation Hub

Accelerating Green Energy Infrastructure Deployment

A challenge by Ubitricity

Revolutionizing Regional Agriculture

A challenge by tba

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Using the Copernicus Data Space for Regional Mitigation and Adaptation Scenarios

A challenge by T-Systems

The Copernicus Data Space is a component of the Copernicus program, the European Union's Earth observation program. It's one of the most ambitious Earth observation programs to date. The Copernicus Data Space offers a wealth of information that can be instrumental in regional sustainability planning activities, including Environmental Monitoring, Climate Change Adaptation, Urban Expansion and Land Use Planning, Agriculture and Water Management, Energy Planning, Biodiversity Conservation, Disaster Management and Response, and Public Engagement and Policy Making. However, regional planning actors face challenges in using the Copernicus Data Space effectively due to the complexity and volume of data, the need for technical expertise and resources, integration issues with local systems, privacy concerns, and the translation of data into actionable policies.

How might we improve the use of the Copernicus Data Space for regional planning needs to accelerate sustainability planning activities?

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Potential solution space

- Open Data Platforms: Facilitating the sharing of planning data to improve transparency, collaboration, and stakeholder engagement.
- Open Source Geographic Information Systems (GIS): Spatial analysis and visualization capabilities essential for informed decision-making in mobility planning.
- Open Source Stakeholder Engagement and Collaboration: Applications for engaging various stakeholders, including the public, in planning and decisionmaking processes.
- Open Source Infrastructure as a Service: Cloud platform that service providers use to host the toolbox.
- Regional Software as Service: Providers present this service as an integrated offering.

Stakeholder ecosystem

- Cities and regions
- Insurance companies
- Government agencies
- Environmental organizations
- Educational institutions
- Local communities
- IT and data security experts

Developing a Digital Toolbox for Urban Transitions Planning and Mobility

A challenge by The Urban Transitions Mission and the UN Climate Change Global Innovation Hub

Municipalities aim to reduce mobility needs and make transportation greener and more accessible. Digital solutions are key, however the complexity of their development and management poses a significant challenge for individual municipalities.

How might we develop an affordable digital toolbox, rooted in open data and open source, that facilitates the building and sharing of green mobility solutions, and that can be effectively scaled across regions?

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Potential solution space

- Open Data Platforms: Facilitating the sharing of planning data to improve transparency, collaboration, and community engagement.
- Open Source Geographic Information Systems (GIS): Spatial analysis and visualization capabilities essential for informed decision-making in mobility planning.
- Mobility applications: including informal & multimodal transportation.
- Open Source Stakeholder Engagement and Collaboration: Applications for engaging various stakeholders, including the public, in planning and decision-making processes.
- Open Source Infrastructure as a Service: Cloud platform that service providers use to host the toolbox.
- Regional Software as Service: Providers present this service as an integrated offering.

Stakeholder ecosystem

- Cities and regions
- Open-source communities and IT service providers
- Urban planners and architects
- Mobility and energy experts and academics

Accelerating Green Energy Infrastructure Deployment

A challenge by Ubitricity

As municipalities and solution providers face the complexities of developing infrastructure for green energy production and distribution, their efforts and national commitments are jeopardized by bottleneck delays in spatial planning and permissions. Digital platforms that streamline these processes are becoming crucial to enable energy transitions, which present formidable challenges for individual municipalities to address on their own.

How might we collaboratively create an affordable digital toolbox for both urban planning and permission processes, anchored in open data and opensource principles, that enables the sharing and enhancement of solutions, ensuring effective scalability across diverse regions?

Sustainability

Potential solution space

- Open Data Platforms: Facilitating the sharing of planning data to improve transparency, collaboration, and community engagement.
- Open Source Geographic Information Systems (GIS): Spatial analysis and visualization capabilities essential for informed decision-making in mobility planning.
- Adaptable Process Digitalization: Possibly low-code / no-code for easy local adaptability.
- Open Source Stakeholder Engagement and Collaboration: Applications for engaging various stakeholders, including the public, in planning and decision-making processes.
- Open Source Infrastructure as a Service: Cloud platform that service providers use to host the toolbox.
- Regional Software as Service: Providers present this service as an integrated offering.

Stakeholder ecosystem

- Mobile charging operators
- Electricity network operators
- Existing service providers
- Cities and regions
- Universities

Revolutionizing Regional Agriculture

A challenge by tba

In transitioning towards sustainable agriculture practices at a regional level, farmers and stakeholders face challenges in accessing relevant, localized data, such as weather patterns, soil health, and market trends, which are crucial for informed decision-making. The lack of a centralized, open-source data platform hinders the sharing of knowledge and best practices, leading to inefficiencies and missed opportunities for innovation and collaboration in sustainable agriculture.

How might we develop an open-source, open-data space that effectively aggregates and shares regional agricultural data, thereby fostering collaboration, innovation, and sustainable practices among farmers and stakeholders?

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Sustainability

Potential solution space

- Open Data Platforms: Facilitating the sharing of planning data to improve transparency, collaboration, and stakeholder engagement.
- Open Source Geographic Information Systems (GIS): Spatial analysis and visualization capabilities essential for informed decision-making in mobility planning.
- Open Source Stakeholder Engagement and Collaboration: Applications for engaging various stakeholders, including the public, in planning and decision-making processes.
- Open Source Infrastructure as a Service: Cloud platform that service providers use to host the toolbox.
- Regional Software as Service: Providers present this service as an integrated offering.

Stakeholder ecosystem

- Local farmers and growers
- Agricultural researchers and scientists
- Government agencies
- Agritech companies
- Environmental organizations
- Educational institutions
- Local communities
- IT and data security experts

The Next Stage of ESG
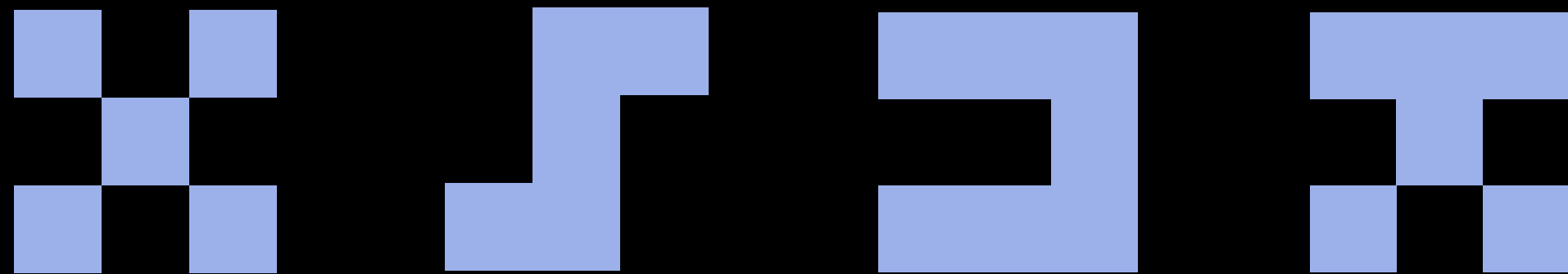
Putting Responsible AI into Practice - The EU AI ACT and Beyond

A challenge by Detecon and T-Systems

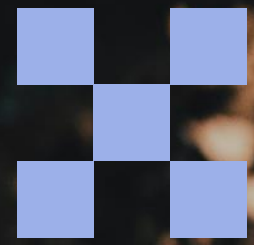## Safeguarding AI's Democracy Risks

A challenge by Deutsche Telekom

Collecting ESG Supplier Data through AI

A challenge by Cordes und Graefe

Training ESG Skills With the Help of AI

A challenge by Umweltcampus Birkenfeld and IGNAITE

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Sustainability

Putting Responsible AI into Practice - The EU AI ACT and Beyond

A challenge by Detecon and T-Systems

In a world increasingly shaped by AI, companies face the impending implementation of the EU AI Act, a landmark regulation aiming to set global standards for ethical AI. As these standards evolve, it becomes imperative for companies to not only comply with regulations, but also meet the growing expectations of society.

How might we effectively implement responsible AI compliance with the EU AI Act and other ethical standards in our organizations, fostering trust among our employees, customers, and partners, while simultaneously accelerating innovation?

Sustainability

Potential solution space

- Strategic and Organizational Approaches: Developing compliance frameworks, establishing governance structures for AI ethics, and engaging stakeholders.
- Technological Solutions: Utilizing AI auditing tools, implementing data management and privacy technologies, and investing in explainable AI (XAI).
- Collaboration and Knowledge Sharing: Participating in industry consortia and cross-sector alliances for sharing best practices.
- Education and Training: Implementing employee training programs and public awareness campaigns about ethical AI.

Stakeholder ecosystem

- Private sector: DAX and larger companies, industry users, startups, and SMEs.
- Public sector and regulatory bodies: EU and national regulators, and policymakers.
- Academic and research institutions: Universities, research centers, ethics boards, and think tanks
- Civil society and advocacy groups: Consumer advocacy groups and human rights organizations
- Industry associations and collaborative groups: Professional associations in technology and AI, industry consortia.
- Other key players: Legal and compliance experts, investors, and financial institutions.

Safeguarding AI's Democracy Risks

A challenge by Deutsche Telekom

AI's potential to positively impact the world is immense, yet its misuse in creating deep fakes and spreading misinformation threatens the core principles of our democracy.

How might we create innovative and effective solutions to identify and mitigate the spread of deep fakes and misinformation in media, thereby preserving the truth and transparency that are fundamental to a democratic society, while also upholding our social responsibility as companies?

Sustainability

Potential solution space

- Advanced Detection Technologies
- Public Education and Awareness Campaigns
- Collaboration Across Sectors
- Content Authentication Technologies

Stakeholder ecosystem

- Tech companies and AI developers
- Media industry
- Academic institutions and researchers
- Civil society and non-profit organizations
- Cybersecurity experts

Collecting ESG Supplier Data through AI

A challenge by Cordes und Graefe

Collecting ESG data along the supply chain is time consuming. Standardized systems for data collection are not available. There are many data standards and a wide variety of KPI derivations.

Some companies do not respond to external requests for specific CSR data. Despite publication in CSR reports, specific data is often not accessible or is not provided in response to requests.

In addition, available data is often hardly trustworthy. The origin and quality of the data collected or purchased is often unclear. Estimated data can often be obtained via commercial data providers, but must be verified and confirmed by the respective supplier.

How might we develop a system that automatically pre-fills supplier questionnaires with CSR data from the Internet to efficiently check compliance with the Supply Chain Act and increase acceptance?

Potential solution space

- Use of uniform standards (values, indicators, KPI) for data collection and processing to ensure consistency. Development of a set of standardized questions targeting key CSR indicators and ESG standards.
- A controlled process to ensure that all relevant data is systematically collected. Use technology to automatically generate queries and collect responses. Ensure that the query process is compatible with suppliers' IT systems.
- Methods to identify and extract relevant data from public reports Using AI and machine learning to interpret and summarize data from large reports.
- Use AI to improve the accuracy and reliability of data extracted from company reports. Systems to automatically collect and process data from multiple sources.
- Standardize data from multiple sources, including company reports and direct inquiries. Ensuring that data collection and use complies with ethical and legal standards.
- Using tools to check the accuracy and completeness of responses. Connectors for Sharing the data through a common ESG data room or through various proprietary data rooms across solutions.
- Strategies to motivate companies to participate and provide data. Develop approaches for dealing with companies that do not respond to data requests. Identify and manage risks arising from missing or insufficient data.
- Assessing the costs of data collection versus the potential benefits.

Stakeholder ecosystem

- Industrial clients: e.g., retail, manufacturing, consumer goods, finance, automotive
- Medium-sized supplier companies
- Software vendors
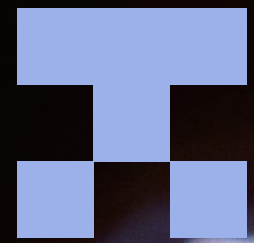
Training ESG Skills With the Help of AI

A challenge by Umweltcampus Birkenfeld and IGNAITE

A crucial element in the transformation journey of a company is the enablement of employees. Employees at all levels need to acquire high-quality ESG-skills relevant to their tasks, and translate these skills into sustainable working practices and sustainable business outcomes.

In this context, businesses face three significant barriers. First, businesses find it difficult to source ESG skills training that are relevant at a job, company, and sector level (the relevance barrier). Secondly, businesses face difficulties in finding relevant ESG skills training of a satisfactory quality (the quality barrier). Thirdly, businesses often lack processes and frameworks for implementing relevant ESG skills into sustainable working practices and sustainable business outcomes (the implementation barrier).

How might we design a generative AI model to overcome the relevance, quality, and implementation barriers of ESG skills and ESG knowledge tailored to meet the unique needs of each employee in a specific company?

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Potential solution space

- Personalized Learning Paths: The AI could analyze each employee's role, experience, and learning progress to create customized learning modules. This would ensure relevant and efficient learning.
- Dynamic Content Generation: Utilizing AI to generate up-to-date training content, including case studies, regulatory updates, and best practices in sustainability, could keep the training material current and engaging.
- Interactive Learning Tools: Incorporating AI-driven simulations, quizzes, and interactive scenarios can enhance engagement and knowledge retention.
- Feedback and Improvement: AI can provide real-time feedback and adjust the training modules based on the employee's performance and feedback.
- Scalability and Accessibility: Leveraging cloud-based AI solutions can make the training accessible to a large number of employees simultaneously, regardless of their geographical location.
- Integration with Existing Systems: Ensuring the AI model can integrate with existing HR and learning management systems for seamless deployment and tracking.
- Ethical and Bias Considerations: Incorporating mechanisms to ensure the AI model is free from biases and aligns with ethical standards.

Stakeholder ecosystem

- Businesses and other types of organizations
- Environmental organizations in civil society or public sector
- Higher education institutions and research organizations
- Technology providers, start-ups

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Become part of the X-Creation community to co-create and scale sustainable innovations.

Join us

Take part in our Inspiration Studios

Sign up at
www.event.telekom.com

Become a partner or collaborator

Reach out to
x-creation@t-systems.com

Connect with us on Linkedin

Our LinkedIn community

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