ابتكارات الحكومات الخلاقة

EDGE OF GOVERNMENT

الطبيعـة

The future is biological

2023
The Edge of Government innovation experience challenges visitors to think in new and often counter-intuitive ways about how to solve the most pressing challenges of our time. The main purpose of the exhibit is to inform, inspire and trigger new thinking through interactive experiences. It also offers visitors the chance to have a dialogue with the brilliant innovators behind each case study.
The future is biological

We spend much of our time in virtual worlds,
We have paradoxically been reminded of our biology,

We missed the human touch,
We understood the importance of care,
We sought refuge in nature,

We ground ourselves in nature, in places, in communities.
It’s here that we can find inspiration to reimagine services,
create new infrastructures, build collective value.

We started our journey in nature,
And it is to nature we must return,
to see with new eyes.

الطبيعة تقود المستقبل

افتقدنا لستنا الإنسانية،
استنزف العالم الافتراضي أوقاتنا وطاقتنا.
استشعرنا أهمية ما يربطنا سوياً وبالطبيعة التي تأوينا.
نجد أنفسنا في هذه الطبيعة وفي الأماكن والمجتمعات التي نسكنها.

هنا نعثر على الإلهام،
الطبيعة كانت بدايتنا، ولالطبيعة نعود لنرى العالم بعيون جديدة.
The Mohammed Bin Rashid Centre for Government Innovation was established to stimulate and enrich the culture of innovation within the government sector through the development of an integrated innovation framework. The goal is for innovation to become one of the key pillars of the UAE government in line with the vision of H.H. Sheikh Mohammed Bin Rashid Al Maktoum, UAE Vice President, Prime Minister and Ruler of Dubai, which aims to develop government operations and enhance the UAE’s competitiveness, making the UAE one of the most innovative governments around the world.
Grounded in nature.
Grounded in people.
Grounded in communities.
From Web3 to Webtree

من مراكز البيانات إلى غابات البيانات
Can a tree be your hard drive?

What if we could store data and capture carbon at the same time? Today data storage represents 4% of global CO2 emissions - more than the aviation industry! Server farms also consume enormous amounts of water. But what if all of your government’s digital files were stored in just a few grams of DNA of a plant? How many emissions would that save?

To combat the problem of 'Data Warming', the municipality of The Hague and Grow Your Own Cloud conceptualised the Urban Data Forest. The technology stores data inside the genomes of trees. Unlike data centres, plants and trees create their own energy, absorb CO2, and provide us with oxygen. Ultimately, the Urban Data Forest could replace unsustainable server farms and reduce CO2 emissions. What else can we reimagine working with nature?
Designing a caring city
Are we taking enough care of our caretakers? In many parts of the world, mostly women are working as full-time unpaid caregivers to their kids, elders or other struggling family members. The care they provide is not recognized as productive and valuable work, leaving them impoverished and unable to earn a living, pursue personal goals, or simply get a few hours off. And yet, research shows, for example, that a grandmother’s death can reduce by 30% the chance that her daughter enters the labor force, and reduce her earnings by 50%. So what opportunities could we create if our cities were redesigned to support caregiving?

The city of Bogotá has radically reorganized the city to provide services, not only to those who receive care, but also to those who provide care through Care Blocks. Care Blocks are areas where caregivers and those they care for can access city services which were prioritized based on their needs and are located within a 15- to 20-minute walk, eliminating the need of long commutes.

This allows caregivers to have more free time for themselves without worry or guilt. On average, caregivers gain around 5 hours of personal time per week. With over 300,000 services already in place, the Bogotá Care System has helped thousands of caregivers to pursue an education, generate income and take care of themselves. The system has also inspired similar initiatives in other cities. What else can happen when we put care at the center of our planning?

Bogotá Care System

Contributors and Partners

Bogotá Mayor’s Office
Republic of Colombia
Protecting neurorights before it's too late
Should we regulate technology before it even exists?

Protecting Neurorights

In the near future, it might very well be possible to type out an email with your thoughts or gain superhuman memory. These innovations all sound very exciting, but since our brain is such an important part of who we are, the development of neurotechnology such as brain implants creates a lot of new questions and moral dilemmas. What do these developments mean for your brain integrity and personal identity? Should anyone be in a position to decide who gets brain enhancements, and who doesn’t? And how do we deal with the potential danger of manipulation (e.g. behavioural modifications)?

With experts sounding the alarm, Chile is pioneering the protection of neurorights. It is the first country in the world that, rather than waiting for neurotechnology developments, proactively amended its constitution to safeguard the mental privacy, free will and equal treatment of citizens. Should governments draw a line in the sand and protect the safety of human identity before technology develops to allow unthinkable manipulations to our brains?
Take care of a tree, get a new income
Heat is an invisible threat to people’s health and safety, and is likely to become more so in the future. A recent study in Europe showed that 2,600 premature deaths could be prevented by increasing city tree coverage to 30%. Trees can help in cooling down cities, but many tree planting efforts fail because of the difficulty to grow the plants after they have been seeded. Recognising the threat, Freetown is one of the first African cities in the world to appoint a Chief Heat Officer, and launched a community-driven growing initiative to plant and sustainably grow one million trees.

Through the #FreetownTheTreeTown-campaign, local community members create a unique record of each newly planted tree using a mobile app, and receive small payments for watering, documenting and protecting vulnerable seedlings. This creates new economic opportunities, stimulates community ownership and ensures the survival of humans and nature alike. So far, 560,000 trees have been planted. The community-driven growing model has achieved a survival rate of 82% for newly planted trees, and created new green jobs for over 1,000 citizens, of whom 80% are youths, and 48% women. Attaching a ‘token’ to each tree has enabled Freetown to open up new opportunities for investment, potentially making the project fully self-financing.

Contributors and Partners

City of Freetown
Republic of Sierra Leone

Freetown The Treetown

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Understanding laws and its impact without consulting a lawyer
Without the advice of experts, new regulations can often be difficult to understand for the people most affected by them. Legislation uses complex wording and official documents tend to only refer to general use cases. Citizens are left to figure out for themselves how a new law will impact them.

By using OpenFisca, governments from several countries such as France and New Zealand, have published relevant laws for citizens as machine-readable code. A freely accessible application uses this code to run tailor-made simulations that help citizens to assess their entitlement to social benefits. OpenFisca also enables different government departments and institutions to collaborate more efficiently and gives them new insights into the estimated impact of law reforms. In France, more than 2,300 young people use the platform in its first year and their government is now looking to apply the technology of OpenFisca to all of its citizens' big life events. What other social and economical gains can we generate when we turn laws into code?
Human AI for City Planning
Generative AI is the talk of town and by now you probably heard of ChatGPT. More often than not, it's talked about in fear: what if it will end up taking our jobs? But what if governments turned the tables, and used these tools to enhance rather than replace their engagement with citizens? For citizens, taking part in consultations with government officials can be challenging. It is not always easy to translate a wish or a mental image into words. This can create barriers to participation and misunderstandings.

Finnish cities are using a generative AI platform that allows just about anyone in the city to visualise their ideas and explore possibilities they might not have thought of otherwise. This way, citizens are turned from commentators to contributors. As new generative artificial intelligence tools become more common, how can governments foster collective imagination?

Reimagine Jyväskylä – UrbanistAI

Contributors and Partners

City of Jyväskylä
Republic of Finland

Participants and Partners
Donate
Your
Speech
What if government voice services understood your unique dialect and spoke to you with it?

DONATE YOUR SPEECH

The Estonian government is working towards a future where all government services will be accessible through a personal virtual assistant. This poses a challenge, since voice recognition software is still optimized for the English language, while its accuracy for Estonian is still relatively low. To complicate things further, despite Estonia being a small country of 1.2 million people, it has a rich language of 117 sub-dialects.

Setting a precedent for involving citizens in the preservation and development of their language, the government launched a new campaign, ‘Donate your Speech.’ Estonian speakers, including those living abroad, are invited to record their speech so that the software of the virtual assistant can be trained to recognise different regional variations and accents, making it more accurate over time. What other creative ways can governments explore to preserve local identities and a personal touch in the virtual world?

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Government of Estonia

Republic of Estonia
AI as a common good
What if everyone can create an AI-powered invention?

National AI platform

To access the power of AI, you must be able to afford it. For a lot of potential innovators in Serbia, the large computing infrastructures that support AI-powered inventions are simply too expensive.

To open up new economic opportunities for its citizens, regardless of their economic status, the Government of Serbia installed a next-gen supercomputer and opened it up to students, scientists and start-ups for the development and application of artificial intelligence, free of charge. The supercomputer allowed over 200 Serbian experts to create new products, services and experiments, without the worry of securing infrastructure. Since 2016, the Serbian ICT-sector has seen its number of employees increase by more than 50%, making it the country’s largest net export branch.

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Government of Serbia
The city that disrupted inspections

المدينة التي قامت بتغيير جذري في عمليات التفتيش
The Department of Buildings in Washington D.C. was experiencing lengthy turnaround times for construction inspections, which interrupted constructions and cost developers a lot of money. Hiring new qualified inspectors was a slow process that only added to their overheads.

To diminish these expensive delays, the government created an online platform called Tertius that facilitates the onboarding of third party independent inspectors in the local community. The platform uses geolocation to check-in on the hired inspectors, and makes sure all the inspections are carried out properly and on time, with early warning signs resulting in improved building safety. Inspection reports are readily accessible, including previous, pending, and completed inspections, which allows for optimal transparency and accountability. Time from inspection request to completion shrank from as much as four weeks to as little as two days, saving developers thousands. What other services can we reimagine when we explore new business models?