



TRUST IS THE CURRENCY OF FUTURE PROSPERITY AND PEACE

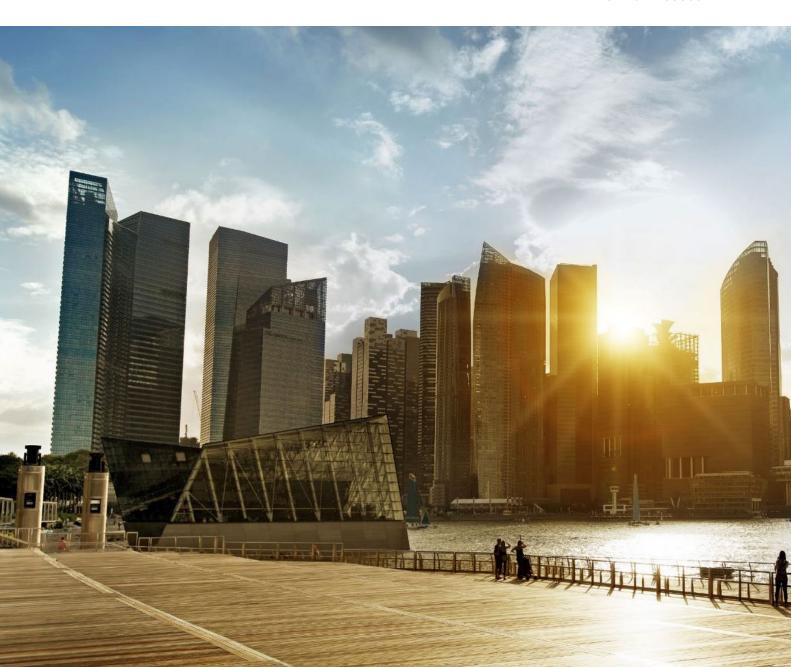
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Trust is the Currency of Future Prosperity and Peace

Introduction

Public sector leaders worldwide are under pressure to deal with the perfect storm of economic, social, political, and environmental disruptions.

Recovery from the COVID-19 pandemic brought countries together like never before. It made possible initiatives such as the European Recovery and Resilience Facility, which is bringing to market €700 billion, and the US Infrastructure Law, which is making over \$3 trillion¹ available.

"The recovery plan turns the immense challenge we face into an opportunity, not only by supporting the recovery but also by investing in our future."

European Commission President Ursula von der Leyen²

Pandemic lockdowns unleashed unprecedented growth of online commerce³ and new ways of working, learning, and playing in a hybrid, extended reality. But they also exacerbated inequalities; for instance, analysis shows that more people were pushed into poverty, COVID-19 death rates were higher among certain ethnic groups, and gender inequality was accentuated⁴. Conflicts like the Russia-Ukraine War and natural disasters caused by climate change, such as extreme weather and water scarcity⁵, are tearing communities apart and causing over 100 million people globally to be forcibly displaced⁶.

International economic and political volatility and supply chain shortages are causing inflation to reach its highest level in decades, grinding economies to

AT A GLANCE

KEY STATS

- » The more than €700 billion of the European recovery and resilience plans and \$3 trillion of the US Infrastructure Bill will boost the transformation of public services and the built environment infrastructure.
- » 100 million people worldwide are displaced by conflict, famine, and climate change.
- » More than three-quarters of households in the U.K. will have been pushed into fuel poverty by January 2023.

WHAT'S IMPORTANT

Widespread adoption of technologies, such as IoT and AI, unleashes opportunities to address societal challenges, but simply applying technology to the status quo will not be enough.

KEY TAKEAWAYS

Public sector leaders must tackle these seismic shifts by:

- » Establishing trusted collaboration with the ecosystem of private enterprises, academia, non-governmental organizations, and citizens.
- » Collecting, sharing, and using data in a trusted manner to make evidence-based policy, operational, and citizen service decisions.

https://www.eurofound.europa.eu/publications/report/2022/covid-19-pandemic-and-the-gender-divide-at-work-and-home

¹ https://www.whitehouse.gov/bipartisan-infrastructure-law/

² https://ec.europa.eu/commission/presscorner/detail/en/ip 20 940

https://www.census.gov/library/stories/2022/04/ecommerce-sales-surged-during-pandemic.html

⁴ https://www.nature.com/immersive/d41586-022-01647-6/index.html;

⁵ https://www.worldwildlife.org/threats/water-scarcity

⁶ https://www.unhcr.org/refugee-statistics/

a halt⁷ and throwing people into energy poverty⁸. Global volatility is also pushing governments to rethink digital, energy, and supply chain sovereignty to ensure country survivability⁹. The ageing population¹⁰ and increasing incidence of chronic diseases are stressing the financial sustainability of health and social care systems in the developed world, while millions are being spent to control the flow of young workers migrating from emerging countries to find a better future¹¹. People continue to move to cities to find economic opportunities, but essential services like transportation are not always accessible or safe because of a car-centric mobility model that causes congestion, pollution, and accidents¹².

Widespread adoption of advanced technologies, such as IoT, artificial intelligence, and cloud computing, unleashed new opportunities to address some of these challenges, including the monitoring of pollution at a granular level, improving the accuracy of weather forecasting to warn those at risk, and enabling refugees to access public services via their mobile phones¹³.

But simply applying technology to the status quo will not be enough.

- Digitizing public services and automating bureaucratic processes will not be sufficient.
- Expecting first responders to deal with spiraling manmade and natural safety and security risks by adding a few extra screens in command-and-control centers is unrealistic.
- Hoping for connected, autonomous, shared, and electric vehicles to eliminate congestion, pollution, and collisions is naive.
- Instrumenting buildings and infrastructures with energy consumption and air quality sensors will not improve the sustainability of the natural and built environment.

Benefits

Public sector leaders will only be able to tackle these seismic shifts by envisioning new paradigms:

- Reimagining public administrations for citizen empathy, operational excellence, and social inclusion
- Enabling first responders to orchestrate public safety programs such as emergency preparedness and early warnings with society as a whole
- Rethinking urban planning and transportation business models to provide the convenient, accessible, affordable, safe, and environmentally sustainable movement of people and goods



 $^{^{7}\,\}underline{\text{https://www.imf.org/en/Blogs/Articles/2022/10/23/europe-must-address-a-toxic-mix-of-high-inflation-and-flagging-growth}$

⁸ https://www.york.ac.uk/news-and-events/news/2022/research/fuel-poverty-uk/

⁹ https://ecfr.eu/publication/europe digital sovereignty rulemaker superpower age us china rivalry/

¹⁰ https://eurohealthobservatory.who.int/news-room/events/item/2022/01/25/default-calendar/can-the-costs-of-caring-for-an-ageing-population-be-controlled

¹¹ https://www.dw.com/en/how-the-eu-spent-billions-to-halt-migration-from-africa/a-61362906

¹² https://transport.ec.europa.eu/transport-themes/clean-transport-urban-transport/urban-mobility en

https://blog-idceurope.com/life-event-approach-to-refugee-management/

 Reengineering and operating buildings and urban spaces, and the grids that connect them — telecoms, transportation and logistics, energy, and water — for net-zero impact and resilience to climate change

Considerations

Public sector leaders around the globe cannot navigate these storms of disruption alone. In fact, according to an IDC survey of 230 European government executives¹⁴, 20% or more of respondents indicated that they are hindered by budget scrutiny, legacy systems and processes, capacity and skill gaps, lack of access to reliable and granular data, organizational resistance to change, a lack of strategic plans for adopting and developing technology, and concerns about privacy, legal and regulatory compliance, and limited citizen trust.

Also, the very technologies that are helping them achieve their strategic outcomes have democratized misinformation¹⁵ and expanded the perimeter of cyber vulnerabilities.

Trends

Public sector leaders will succeed only if they:

- Collaborate with the ecosystem of private enterprises, academia, non-governmental organizations, and citizens
- Turn data into intelligent insights to make evidence-based policy, operational, and citizen service decisions

The common currency of those two critical success factors is **trust**. Trust is the connective tissue that will enable public institutions and private enterprises to design and operate win-win ecosystem business models, such as mobility as a service¹⁶ and energy prosumer¹⁷. Trust is also the foundation of the ethical, transparent, and secure collection, sharing, and analysis of data to extract intelligent insights. For instance, according to a 2022 IDC survey¹⁸, 70% or more of governments globally do not share data yet, or they do so only when strictly necessary or mandated by law, due to security, compliance, and governance concerns that prevent trusted data sharing. Trust is the pillar that gives citizens confidence¹⁹ that governments will use data and technology to nudge their behavior toward the common good²⁰, without violating their dignity.

Trust-powered ecosystems and intelligent use of data will enable public sector leaders to:

• Enable high-performing public administrations that leverage 360-degree knowledge of citizen needs and preferences to make the bureaucracy invisible and services human-

²⁰ https://uia-initiative.eu/en/news/wesh-how-heerlens-citizens-bobajob-digital-age; https://smartbelfast.city/story/civic-dollars/



¹⁴ https://blog-idceurope.com/building-tomorrows-european-governments-through-a-disruptive-approach/

¹⁵ https://cset.georgetown.edu/article/the-existential-threat-of-ai-enhanced-disinformation-operations/

¹⁶ https://www.idc.com/getdoc.jsp?containerId=EUR149650822

¹⁷ https://www.eea.europa.eu/publications/the-role-of-prosumers-of

¹⁸ https://www.idc.com/getdoc.jsp?containerId=US48668022&pageType=PRINTFRIENDLY

¹⁹ https://www.oecd.org/governance/trust-in-government/

centric, thus including the most vulnerable groups, such as refugees, the elderly, and people with disabilities. In the future, AI-powered intelligent automation tools will trigger requests for assigning a pediatrician, setting up family allowance payments, and the issuing of personal documents, such as passports, as soon as the hospital registers a birth; and federated learning and homomorphic encryption will enable tax agencies to keep track of all financial transactions that businesses carry out to automatically assess amounts due without the need for enterprises to make any submission, while protecting privacy.

• Scale the capacity and capabilities of public safety and security agencies to use early warning systems, emergency communication systems, cybersecurity threat intelligence biometrics, and video intelligence to help society prevent, react to, and recover from cyberattacks, criminal actions, and natural disasters, while ensuring officers are safe and productive and citizens go about their daily business unscathed. In the future, quantum computing will accelerate the deployment of complex early warning models that can predict climate risks at the local scale²¹.

"We need to invest now in preparedness to mitigate future protection needs and prevent further climate-caused displacement. Waiting for disaster to strike is not an option."

Filippo Grandi, the UN High Commissioner for Refugees²²

- Connect modes of transportation through vehicle-to-everything connectivity, smart traffic
 management, smart logistics, smart journey planning, integrated ticketing, and intelligent
 electric charging infrastructure that enable seamless and sustainable mobility
 experiences. In the future, transportation authorities will not charge car taxes based on
 make and model; instead, they will dynamically offer car and truck drivers the option to
 pay a premium for faster routes versus driving for free through less congested and less
 polluted slower alternatives and geofencing will automatically trigger hybrid vehicles to
 switch to electric drivetrains in low emission zones.
- Deploy intelligent grids and advanced digital simulation capabilities to dynamically transition toward a net-zero, circular, and resilient built environment. In the future, utilities will be able to monitor in real time the electricity flowing through every transformer to dynamically balance grid loads to cope with increasing electricity demand and decentralized production by prosumers. Urban planners and architecture-engineering-construction companies will use digital twins to simulate not only the energy consumption and maintenance costs of a building, but also the impact that planting additional trees will have on cooling air in the neighborhood, or which areas are best suited for quiet spaces to help people with autism recalibrate after a stressful moment²³.



https://news.mit.edu/2022/empowering-people-adapt-frontlines-climate-change-0419; https://www.sdu.dk/en/forskning/qm/quantum-computing/qc-climate-modeling

²² https://www.unhcr.org/climate-change-and-disasters.html

²³ https://blog-idceurope.com/making-cities-autism-friendly/

Conclusion

Public sector leaders that will be able to scale the impact of trusted ecosystems and trusted use of data will unleash peace and prosperity. Those that don't will waste the unprecedented funding that post-pandemic recovery plans have made available, thus further hampering citizens' trust in the public sector. To be successful, they will have to:

- 1. Align technology investments and data sources with priority societal outcomes, such as reducing the tax burden or increasing SME compliance with licensing and permitting, while reducing the cost of bureaucracy.
- 2. Engage citizens and the broader ecosystem to codefine the problem, identify the data sources, cocreate technology innovation, and realize the benefits.
- 3. Invest in change management. Training, communication, executive sponsorship, identification of champions among civil servants and ecosystem partners and measuring the impact in terms of both social and financial ROI are necessary to achieve the intended purpose.
- 4. Master business, governance, and technology skills. It is important that the teams that apply data to solve societal challenges include data scientists and data engineers as well as subject matter experts and legal experts.
- 5. Assign clear responsibilities and budgets, while striving to maintain fluid collaboration across business and technology to apply agile approaches such as DevOps and DataOps.
- 6. Migrate legacy siloed architectures to modular, configurable, reusable components. And automate digital service development, deployment, and observability across hybrid multicloud environments.
- 7. Scale investments in data protection, cybersecurity, and ethical use of data to boost user confidence and the resilience of services.



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About Fujitsu

Fujitsu is a global leader in technology and business solutions that transform organizations and the world around us. With a long heritage of bringing together our integration capabilities and cutting-edge technologies, Fujitsu counts approximately 130,000 employees supporting customers in 180 countries.

Fujitsu's purpose is to make the world more sustainable by building trust in society through innovation. To help realize this purpose Fujitsu introduced Uvance, innovative solutions addressing customers' business challenges and solving societal issues while transforming the world into a better place to live.

One of the key focus areas of Fujitsu Uvance is Trusted Society, which aims for an environment-first, resilient society in which people can live in peace and prosperity. To achieve a flourishing, safe, and sustainable society, we are implementing innovative trustworthy technologies alongside countries, governments, citizens, and business partners in four areas: Government DX; Public Services, Safety, and Security; Sustainable Transportation; and Sustainable Energy and Environment.

Find out more: <u>Trusted Society — Fujitsu Uvance: Fujitsu Global</u>

About the Analyst





Massimiliano (Max) Claps is research director in the European IDC Government Insights team. His research empowers technology suppliers and professionals to embrace disruptive technologies such as artificial intelligence, edge computing, and cloud. He advises stakeholders across the transportation ecosystem on strategic initiatives, such as mobility as a service and intelligent traffic management.





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