

WEEKLY SPEED READ

Vision: Be 10 years ahead of all other cities

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In 10 years, the world may not be able to feed itself.

Source

GOVERNMENT HACKS



China

Plans for a 4000 km/h 'flying train' (4x faster than planes)



Lisbon

Reps from nearly half the world gathered to establish 'carbon markets'



USA

New cybersecurity career change training for departing soldiers



Denmark

Sells off country's last oil company for US \$7.45 billion



Jordan

3-hectare desert farm can grow 286,000 lbs of veggies/year



Las Vegas

Uses AI ("Darktrace") to protect smart infrastructure against hackers

DISRUPTIVE COMPANIES #TAGGED



#Airbus

Coming to air travel soon: yoga, kid play areas, and coworking spaces



#Stanford University

Rooftop cooling beams excess heat into space, reinventing air-conditioning



#Fitbit

Soon diabetics can check glucose levels on fitbit smartwatch



#MIT University

Crowdsourcing helps residents track flooding with social media/chatbots



#Misspao

Pay as-you-go gym booth for one, in China; unlocked by QR code



#What3Words

A revolutionary and more precise address system for every person on earth

Bill Gates and Others Invest in the 'DARPA' of Energy Tech

#Energy #Public-Private Partnerships #Climate Change



Could ARPA-E really do for energy technology what DARPA did for the Internet? Bill Gates and 20 of the world's richest business people think so, and are investing. The \$1 billion venture, called Breakthrough Energy Ventures funds ideas that could power the world with clean energy.

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Pain point addressed

Preventing the worst effects of climate change.

Key insights

The fund invests in technologies to reduce greenhouse gas emissions by at least half a gigaton. The idea is to invest in private capital that helps entrepreneurs take promising zero-emissions energy from the lab to the market - ultimately avoiding the worst effects of climate change and helping people escape poverty. But they also expect governments to increase their expenditure on these innovation breakthrough developments. Could Dubai collaborate?

Germany Adopts Ethical Action Plan for Automated Driving Systems

#Transportation #Ethics #Legislation



Germany's Ethics Commission and Digital Infrastructure (BMVI) developed the world's first initial guidelines for automated driving, empowering policymakers and lawmakers to approve automated driving for safety, human dignity, personal freedom of choice, and data autonomy.

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Pain point addressed

Building ethical laws ahead of automated driving.

Key insights

Including transport experts, legal professionals, engineers, philosophers, and theologians, the committee's report highlights the following: 1) Automated driving is ethically necessary if the systems cause fewer accidents. 2) In hazardous situations, protecting life always takes top priority. 3) In accidents, distinction between people's traits is not permissible. 4) Drivers decide whether their vehicle data is forwarded and used by others. What ethics legislation is need, with **Dubai's 25% driverless car trips** goal by 2030?

Millennials Survey: 'Climate Change, Inequality, Refugees, and Robots'

#Millennials #Citizen Needs #Civic Engagement



The World Economic Forum has launched their annual survey of millennials, where 31,000 millennials responded with their views on society, business, politics, the economy, tech, and their career aspirations. Millennials most serious global issues were climate change, wars, and inequality.

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Pain point addressed

Understanding the needs of millennial citizens.

Key insights

56% believe that young people's view are ignored before making important country decisions. They said the top 3 ways to empower youth are through entrepreneurship, access to the internet, and free media/social media (responses from MENA region are aligned). 52% also said the top ways governments can demonstrate transparency and accountability is to fight corruption/dismiss officials guilty of abuse.

Face-Reading AI to Detect Your Politics & Criminal Predisposition

#Security #Law Enforcement #Ethics #Legislation #Technology



Michal Kosinski, a Stanford University professor of Organizational Behavior, went viral last week for research suggesting that artificial intelligence (AI) can detect a person's politics, orientation, or criminal disposition based on facial recognition photos.

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Pain point addressed

Ethical concerns of new security technologies.

Key insights

Revealing private personal details could carry huge social consequences, raising complex ethical questions about privacy and misuse of AI to target vulnerable people. The growing concern is that AI could decide the length of prison sentences or whether to release someone on bail - based on biased data from a court or policing system that is racially prejudiced at every step. What ethics laws will be needed in Dubai as facial recognition is applied further?

Gen Z: Entrepreneurs, Not Employees (College-to-Career Disruption)

#Gen Z #Education Reform #Job Reform #Economic Affairs



Many students graduate with high debt and without employable skills. But something amazing is happening: 61% in high school and 43% in college say they would rather be entrepreneurs than employees. One thing is clear: In the age of AI, Gen Z is going to disrupt the college-to-career cycle for good.

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Pain point addressed

Creating reforms to match major tech and education disruptions.

Key insights

In Europe, companies get in at the front end by defining standards, helping shape programs, and providing paid internships/apprenticeships. E-learning is more popular, and there are programs teaching the young entrepreneurship skills. Over 1/3 of the workforce are now freelancers - 79% say it is better than working a traditional job. Many Gen Z are not looking to become traditional employees so how can companies in Dubai be further involved at the front end?

MORE DISRUPTIVE TRIGGERS...

- Would You Live in a Floating City in the Sky? (Future Cities)
- New Blockchain App Poised to Radically Change How People Vote

- 3 Reasons with Universal Basic Income Could Work in the Arab World
- Governments Still Struggle to Interpret and Translate Evidence into Policymaking
- Engineer Accidentally Discovered a Way to Transport Oil Safer

Case Study: Reimagining Bike-Sharing with AR and Smart Map

Problem:

How can we offer a richer, more useful experience to bike riders, using a human-centric approach?



Steps:

- 1. Meet with users who use the bikes every day (e.g. 20 people).
- 2. Ask them broad questions first (e.g. about their life and habits).
- 3. Ask them specific questions about their bike riding experience.
- 4. Discover pain points not just technical, but emotional ones as well.
- 5. Prioritize the pain points.
- 6. Come up with possible solutions, and visual concepts.

Solutions:

Notifications coming from simple sensors; turn-byturn instructions and safety warning alerts in real-time to reduce speed; audio narrations; parking scanner in AR; use AR to gain information about nearby buildings.

Reference: Tech in Asia

X-LAB MOONSHOT IDEA BANK



Pass ethical legislation guidelines: For new emerging technologies, e.g. facial recognition for law enforcement and citizen privacy laws; self-driving ethical guideline laws.



Create climate change goals for the city: Create a cutoff for carbon emissions and carbon markets, prepare for high heat temperatures and rising sea levels, and increase percentage of budget towards R&D for clean energy breakthroughs. Consider partnering with Breakthrough Energy Ventures.

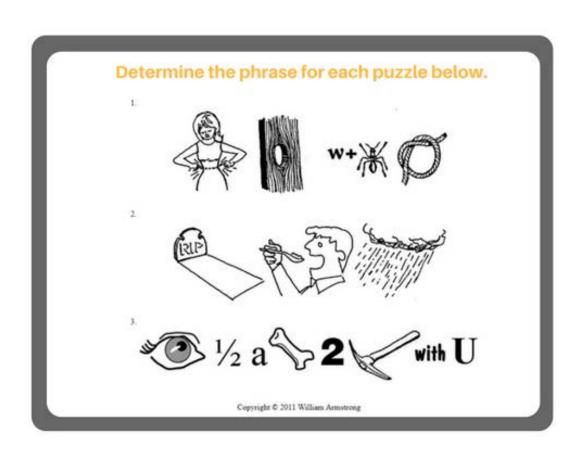


Securing smart infrastructure with machine learning: Partner with leading machine learning companies for cybersecurity to secure Dubai's smart infrastructure ahead of advancement in IoT, e.g. Darktrace.



Companies actively shaping educational programs: Have companies more actively involved in the reformation of new educational programs for Gen Z. Examples include helping in defining standards, shaping entrepreneurship programs, and providing internships and apprenticeships.



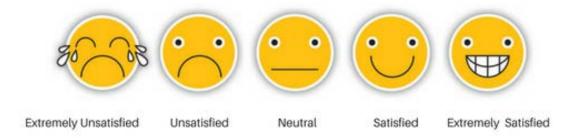


<u>Source</u> <u>Solution</u>

ABOUT this WEEKLY SPEED READ

 This Weekly Speed Read is to inspire and inform Dubai's 10X teams on latest disruptive developments and enablers from around the world

How satisfied are you with this newsletter?



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