Copenhagen Institute for Futures Studies Instituttet for Fremtidsforskning

Issue 6 / December 2018

GLOBAL SCANNING REVIEW

INCLUDED INSIDE

This issue looks at car free-days in Paris, bank and coffee shop in one, self-healing paints, AI politics and much more...

GLOBAL SCANNING REVIEW

The Global Scanning Review is the exclusive bimonthly members' review by the Copenhagen Institute for Futures Studies (CIFS). The ideas presented here are inspired by the horizon scanning observations made by the Global Scanning Network (GSN) at CIFS.

With our GSN, we collect, compare and evaluate a wide range of signals – including new and emerging trends, technologies, values, products, concepts, companies, services and ideas – in order to identify what's happening now and what could be emerging tomorrow. It is a process that seeks to identify the earliest indications of potentially disruptive issues, but also tracks transformations of already established phenomena or trends.

Global scanning is an evidence-based method for understanding indicators of change and possible futures. It is the art of systematically scanning the external environment for evidence of emerging issues and a practice that seeks to inform decisionmaking, by creating a patterned awareness of both potential opportunities and challenges.

Using a competitive and comparative frame, global scanning provides members and clients a detailed review and analysis of some critical raw ingredients for inspiring innovative and future-oriented business opportunities. CIFS' global scanning also offers tailored solutions in order to generate relevant industry- and business-specific insights according to specific member or client interests.

> EDITORS: ANNE DENCKER BÆDKEL (HEAD OF GSN), EMILIE LINDEBURG & TUMPREET KAUR SINGHOTA

Page 5

FUTURE OF SOCIETY & GOVERNANCE

Car free-days in Paris Biometrics in public service Swarm robots Big soybean business Micromobility Smart-card IDs Age 50+ workers more attractive than ever Red meat tax

Page 7

FUTURE OF BUSINESS & ECONOMY

Bank and coffee shop in one New business opportunities for "not available" products Apple pushes for more data privacy Google goes retail Student loan debt erased Cashless society moves too fast Cash-free could be bad for the poor Free ports in England

Page 9 FUTURE OF **CONSUMERS & RETAIL**

Self-healing paints Lab grown meat for me, please Retail Robots at Your Service Embrace the FOMO Ads on kids' apps Alcohol home delivery in India Biological LED Digital resurrection

Page 11

FUTURE OF PEOPLE & WELL-BEING

AI politics Light kills germs AI spots Alzheimer 's disease Possible Alzheimer's disease vaccine First drone-delivered kidney Long-term impact of breast-implants Affordable bionic prosthesis Smart home devices utilize domestic abuse

GLOBAL SCANNING NETWORK

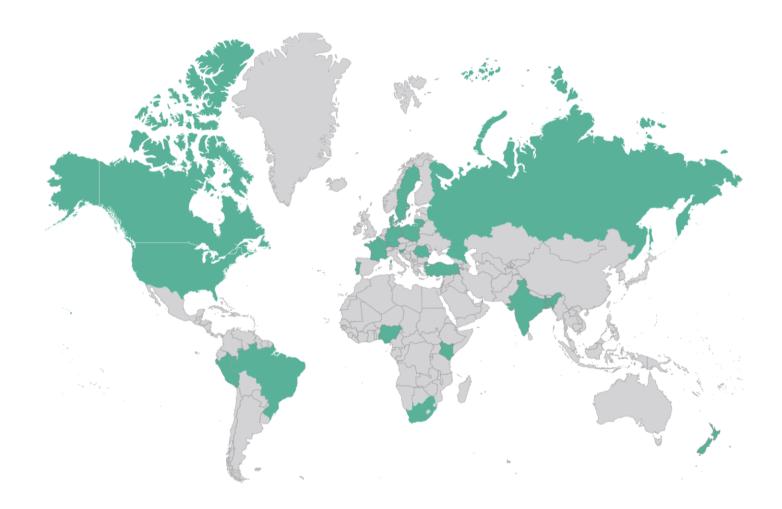
The GSN is a network comprised of CIFS consultants and associates, and a team of global ambassadors. The ambassadors are Master/PhD graduates and working professionals on a six month rotation, providing expert perspectives in the realms of science and technology, politics, culture, design, innovation, business management, finance, marketing and branding. The GSN represents a diverse, global group of individuals who contribute with unique observations, profitable ideas, and sharp insights into specific industry challenges.

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FUTURE OF Society & Governance

CAR FREE-DAYS IN PARIS

Paris introduces car-free days in its most iconic boroughs to combat air pollution

The mayor of Paris, Anne Hidalgo, is introducing car-free Sundays once a month to help the city's air pollution. A globally well received 'car-free day' was observed in 2017 in central Paris, and now the experiment will be repeated on a regular basis. The 1st, 2nd, 3rd and 4th arrondissements of Paris will go car-free the first Sunday of the month from 10 am to 6 pm. Few roads will remain open to traffic, but all non-essential avenues, streets and roads will be closed off. It is possible for e.g. local residents, delivery services, and public transport to access the car-free zones via access points provided that all vehicles limit their speed to 20 km/h to keep their presence at a minimum. *Source Link*

BIOMETRICS IN PUBLIC SERVICE

Singapore integrates biometrics in public services and lets citizens access their retirement information through fingerprints

Singapore is redesigning its mobileapp retirement services by integrating the use of fingerprints to access information on retirement savings. The Central Provident Fund is now the first governmental agency in Singapore to make use of biometrics for access to public services rather than having citizens sign in via SingPass ID and password. The redesign is part of the national plans to integrate biometrics in a digital identity system by 2020. The project has been well received; the ratings have increased dramatically, and the app was granted a prize for the best user interface and experience design at the Innovation Labs World Summit.

Source Link

SWARM ROBOTS

Study explores swarm robotics to support waste management in urban areas

A recent study from the MIT Media Lab presents the feasibility of using a swarm robotic system for urban waste management. Swarm robots are modelled after the concept of swarms in nature. The individual robot has poor abilities, but as a swarm, the robots demonstrate complex behaviours driven toward problem solving. The overall task - collecting the trash - is divided into subtasks making it possible for the robots to work in parallel and hence enhances their performance. Key to this process is that the swarm robots have a central nest; Central Place Foraging. The study found that a challenge to having swarm robots in an urban environment is expansive space combined with only one central nest. As a potential solution, the researchers suggested additional testing into Multiple Place Foraging with multiple nests across an urban environment. Nonetheless. results showed that the swarm robots demonstrated higher performance in waste removal in comparison to current practices. Source Link

BIG SOYBEAN BUSINESS

American-Chinese trade war strongly complicates soybean export for farmers in the US

American farmers are harvesting soybeans for the first time since the tariffs between the US and China took effect. Many farmers, especially in North Dakota, rely heavily on the Chinese market but have not been able to sell their crop yet as the Asian orders are severely decreasing. China would typically buy two-thirds of the harvest of soybeans to feed livestock - as for North Dakota, farmers sold USD 2.1 billion of soybeans to China in 2017. North Dakota and the Great Plains region are geographically positioned to better serve the Chinese market because they are typically able to get their crops to market in two and a half weeks. On top of this, the lack of export is accompanied by difficulties building storage facilities to hold the extra soybeans because of tariffs on steel and aluminium. To help the farmers temporarily, the US government has enacted USD12 billion relief fund that will pay for half the acreage harvested. Source Link

MICROMOBILITY

Micromobility boom has made the French want to incorporate scooters in traffic regulations

Mobility in urban centres has changed rapidly in the last decades. Moving around in cities like Paris used to involve either a car or public transportation, now Parisians are turning to motorbikes, segways, e-bikes, scooters and other forms of small e-vehicles. Although the network of buses, subway and trains make Paris one of the most comprehensive and well-connected cities in the world, using public transportation requires some flexibility and patience. With electric scooters or electric bikes, urban dwellers can go to work or make small trips while enjoying a much higher degree of freedom. There is no car blocking their way, almost no chance of traffic jam and most importantly no waiting time. However, the consequences of more scooters and electric bikes in the streets are higher chances of accidents and less safety because there is very little protection. Paris has very few bike lanes and other infrastructures which are yet to be regulated properly. Lawmakers are trying to introduce such regulations but as is well known, legislation moves much slower than consumer trends. Source Link

SMART-CARD IDS

Venezuela rolling out smart-card IDs to monitor citizen behaviour

Chinese telecoms giant ZTE is helping Venezuela build a system to monitor citizen behaviour through a new identification card, which upgrades its current ID cards to a smart-card ID known as the "carnet de la patria", or "fatherland card". The card is already used by government to track voting but additional data will be added to its tracking system, and is linked to social services that vulnerable citizens rely on to improve citizen control and bolster national security (e.g., subsidised food, health and other social programs). Information including birthdays, family information, employment and income, property owned, medical history, state benefits received, presence on social media and membership of a political party and whether a person voted are all collected on this system. The ID system is modelled after China's national identity card program, which uses smart cards to track social, political and economic behaviour. The data collected from the smart cards can help the government monitor everything from a citizen's personal finances to medical history, and voting activity. Source Link

AGE 50+ WORKERS MORE ATTRACTIVE THAN EVER

The labour market is aging but this may be a very positive change for old and young alike

In the US alone, people over 50 years old have an unemployment rate of 3.2% which is lower than the national average over all age categories with 4.2% and much lower than the unemployment rate of young adults with 14.4%. Seniors are now entering a phase where they are highly demanded by employers, and their numbers can be expected to grow in the future. As time passes and with medical and health innovations, seniors have normal working lives and the physical ability to carry on working for much longer. Seniors are also hired with the specific goal or transferring their soft skills to younger workers through mentoring and training programmes. In these conditions, senior workers do not necessarily have high-pressured jobs and highstakes responsibilities but their tasks are ensuring a better functioning of the company for the future decade. In transmitting the knowledge they have gained from working during decades, young workers gain invaluable insights and advice on how to better their skills. Source Link

RED MEAT TAX

Researchers propose red meat tax to potentially save on healthcare and fight climate change

Researchers at the University of Oxford have proposed that the government should implement a 14% tax on red meat and a 79% tax on processed meat. They argue this would save £700 million in healthcare costs as well as preventing 6000 deaths a year. Britain earlier in 2018 implemented a sugar tax on soft drinks which saw companies reduce the amount of sugar put in to soft drinks. With processed meat consumption linked to cancers by the World Health Organization the tax is being argued in favour of a reduction in healthcare spending. There is an opportunity to reduce the cost to the National Health Service in the shape of less illness as well as the lost productivity in the workforce from sick days related to meat consumption. There is also the opportunity to cut down meat production whilst at the same time helping fight climate change. Source Link

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FUTURE OF BUSINESS & ECONOMY

BANK AND COFFEE SHOP IN ONE

Banks can attract younger customers and educate existing ones by using cafe/co-working style spaces

Early in 2017, the 11th largest US bank by assets, Capital One, launched its cafe concept - a part coffee shop, part co-working space open to all. In October 2018 Capital One has 34 Capital One Cafes spread across the US, many placed in prime spot, high profile locations. With the rise of fin-tech start-ups and improved mobile banking applications, millennials and the generations that follow increasingly bank online and on the go, with little need or desire for the traditional brick and mortar banking experience. Capital One Cafes seem to be proof of concept that there is room in banking for redesigning services and user experience to reflect the preferences and modern lifestyles of the modern millennial, who rejects the traditional banking experience in favour of banking services more suited to their needs. This also indicates how banks are trying to shed their corporate culture/ image and rather nurture the rise of relationshipbased banking (as opposed to transactional). Source Link

APPLE PUSHES FOR MORE DATA PRIVACY

Tim Cook the Apple CEO called for more privacy for users and the US to enact new data privacy laws

Cook warned of a data industrial complex where users' data is weaponized. This comes in the wake of the Cambridge Analytica scandal. These calls come just after Apple launched its iOS 12 update which blocks the use of GrayKey. GreyKey is a password cracking tool used by police and government law enforcement for the purpose of unlock devices without the passcode. Data privacy has been a growing trend for years now with large scale events such as the Snowden Documents and the role big data played in the 2016 US Election. Now people are becoming more aware of how their data is used and handled. The EU recently passed the GDPR laws which forces companies that collect users' data to have the highest possible safeguards as default. Source Link

NEW BUSINESS OPPORTUNITIES FOR "NOT AVAILABLE" PRODUCTS

Australian start-up offers a shopping concierge service for items shoppers can't buy online or in Australia

The global e-commerce network is more limiting that we expect it to be. If one lives in countries like US, UK. Germany or France the availability of different products is quite high. However, many countries do not have an e-commerce infrastructure yet. The Australian start-up Just Tress It helps people with a strong desire to purchase a specific item that they know they cannot get in Australia (i.e. not shipped to Australia / shipping costs are too high). The service works by having users sign up for an account and then fill their shopping list with links to items that they wish to buy. A shopper from the start-up's network of personal shoppers will get the items and ship them. This is similar to the practice in Eastern Europe (Baltic Countries, Russia, Ukraine etc.) where special services give you the opportunity to buy products from UK, US, Germany etc. with a "fake" address and then from there send over to the client. Source Link

GOOGLE GOES RETAIL

Google joins forces with a retail start-up to teach us how smart technology works

New smart home technology might be alluring, but with increasing features, customers can be less willing to spend their money on gadgets they are not sure will meet their needs. Consumers can now try the new Google hardware presented at the "Made by Google" events in the 8 B8ta stores all over the US. B8ta, a company founded in 2015, is known for being a retail space where you can do everything, but buy stuff (showrooming). B8ta sets up its retail spaces like a home: similar to how Ikea presents products, but instead of showing off furniture, the store shows off smart home technology in places where it belongs. Displays explain what a product does and how much it costs. Customers can test the devices and decide if there is what they might need in their lives. After the testing, they go home and buy the product from any website they wish; as B8ta gets paid by brands to rent the retail space and not to sell. Source Link

STUDENT LOAN DEBT ERASED

Students defrauded by colleges can erase their student loan debt

A US court ruled that Obama-era regulations related to student who were defrauded or misled by colleges can apply for federal loan forgiveness under certain guidelines. This comes after a challenge by current Education Secretary Betsy DeVos challenging the law. The loans affected by this are for for-profit colleges such as Corinthian Colleges and ITT Technical Institutes that collapsed because of complaints related to deceptive marketing and predatory recruitment. Student loan levels in the US are currently about USD1.4 trillion dollars or 7.5% of GDP. The US federal government is the largest provider of student loans. Student loan debt has grown by 157% since the Great Recession. According to Bloomberg news students attending for-profit universities represent almost half of all borrowers and 70% of defaults. In this specific court case these borrowers were subject to predatory recruitment, including being lied to about costs, high pressure recruitment and falsified paperwork. Source Link

CASH-FREE COULD BE BAD FOR THE POOR

Bill in New York to make cash-free businesses illegal

A bill introduced in New York would make it illegal for business to be cash-free. The argument is that such businesses are discriminatory against poor people. Similar bills have been introduced in Washington D.C. and Philadelphia. According to studies 12% of New Yorkers do not have card accounts. This can be because they can't maintain account minimums or afford charge fees, and to get a credit card requires a good credit score. Undocumented New Yorkers can't open accounts because they lack identifying documentation. The implication for the consumers who rely on cash is that they may be forced out of certain establishments. One implication is that a lot of those being affected by cash-free business tend to be people of colour and according the congressman who introduced this bill the cash-free model is gentrifying the marketplace. Source Link

CASHLESS SOCIETY MOVES TOO FAST

Sweden's move to cashless might have to slow down and wait for more research into implications

Sweden's move to a cashless society is happening faster than planned with half of the nation's retailers planning to be cash free by 2025. Financial authorities however have asked banks and other financial institutions to keep peddling cash until research has been done on the effects of cashless societies on both the young and the old. This trend towards cashless societies has been heavily lead by young people who are more heavily invested in using technology and bank cards. 95% of purchases by 18-24 year olds in Sweden are made using bank cards or the app Swish. Sweden is a country leading the trend towards cashless society and the trend has move faster than most people have expected. For the younger consumers the only implication is that cash may be around longer. For the older generations there is the implication that they will either have to learn about technology and start to adapt or possibly be allowed to use cash. Source Link

FREE PORTS IN ENGLAND

With Brexit posed to bring a large amount of change to the UK the search for opportunities is on

Teesside in northeast England an industrial area is hoping to transform their current port which is currently occupied by petrochemical plants power stations and old oil rigs in a free port to spark a post-Brexit manufacturing boom. A free port also called a free trade zone or special economic zone is an area of a country where taxes and tariffs do not apply, this allows goods to be imported and stored and reexported without taxes. The idea with Teesside is to allow producers to bring in raw materials, create finished goods and then export them without the producers being taxed. Free ports can encourage firms and investment by having firms move in to an area where they pay no tax. On the other side of the British Isles Shannon Airport did something similar to great success. For the residents of Teesside there is the implication that manufacturing jobs may be returning to the region. Source Link

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FUTURE OF Consumers & Retail

SELF-HEALING PAINTS

Self-healing paints and plastics are ready for mass-manufacturing

Researchers at Clemson University have found a way to commercialise self-healing paints that can heal like human skin after being damaged. The technology have been around for a few decades, however the Clemson scientists have been successful in combining self-healing abilities with polymers already used in low-cost products such as regular paint through a process known as interdigitated topology. The application requires no need for investing in new equipment or new factories, making widespread commercialization possible. Researchers state that "the sky is the limit" when it comes to discovering potential applications, and the ease in implementing this new technology to existing products may very well have a great environmental impact. Source Link

LAB GROWN MEAT FOR ME, PLEASE

Lab grown meat could be in restaurants soon

JUST Meat, a San Francisco-based company, is growing chicken nuggets in a lab using cells from a chicken feather, and according to the company, the lab grown meat may be available in the near future. The process takes about two days in the lab using a bioreactor protein for cell growth and a scaffold to grow on, and the result is actual meat and not a plantbased substitute. JUST is one of a handful of companies working on cultured meat who are addressing the environmental issues related to producing meat and seafood alongside a growing demand as the world becomes increasingly populated. They find it unlikely that the world's population will consistently choose vegan products. Instead, they aim at producing meat and seafood several times more efficiently than the world's highest volume slaughterhouse, resulting in reduced greenhouse gas emission and the avoidance of slaughtering of animals. Source Link

RETAIL ROBOTS AT YOUR SERVICE

Uniqlo automates warehouse and cuts 90% of its staff

At Japanese clothing brand Uniglo's new warehouse in Tokyo's Ariake district, the majority of employees are now robots. The robots take care of inspecting and sorting the clothes in-store, allowing the store to stay open 24h a day and for Uniglo to cut 90% of its staff. This became possible after the company remodelled its existing warehouse, by means of implementing an automated system created in partnership with Daifuku, a provider of material handling systems. The robotic system delivers clothes to the warehouse by truck, reads electronic tags attached to products, confirms stock numbers, and wraps and labels products for shipping. Uniqlo's parent company, Fast Retailing, expects to introduce the automated system in other warehouses in Japan and overseas, and Uniglo plans to invest about USD 887 million in the project. Source Link

EMBRACE THE FOMO

Ephemeral content speaks to young consumers on SoMe

The younger generations engage more with ephemeral content that only lives for a very short amount of time. In particular, visual and audio-visual content drives engagement, as provided by Snapchat's short video conversations or Instagram stories. The strategy builds on storvtelling techniques and a feeling of FOMO to break down consumers' barriers and give them a strong sense of urgency and call to action for example, consumers have the option to send a private message to a brand directly from viewing their Instagram story. In 2017, Instagram celebrated the one year anniversary of its story function, highlighting how users doubled their average time spent on Instagram from 15 minutes in 2016 to 32 in 2017. As per August 2018, this number has increased to more than 50 minutes (on the Android app). Source Link

ADS ON KIDS' APPS

Apps marketed for young children filled with ads

A new study found that 95% of apps marketed for children under five contained at least one form of advertising. A team from University of Michigan Medical School spend hundreds of hours playing 135 different games found that many of these apps are in violation of the Federal Trade Commission (F.T.C.) rules around advertising. A lot of kids are using app enabled toys such as tablets or smartphones. Parents let their kids use them under the idea that the kids are learning. The study found that pop-up ads even had disturbing imagery. For the consumer this could lead to parents not wanting their child to use apps. This could also lead to children purchasing a lot of inapp purchases or other apps either accidentally or through predatory within-app ads.

Source Link

ALCOHOL HOME DELIVERY IN INDIA

The state of Maharashtra in India has passed a policy that allows alcohol to be delivered to private homes

The policy should help to tackle a high frequency of drunken driving and road accidents. According to the National Crime Records Bureau (NCRB) of India, 2015 noted around 1.5% of the total 4.64-millionrupee worth of accidents stemmed from driving intoxicated or under the influence of substances. causing injuries to 6,295 people, and death to around 3000 people, more than 8 casualties per day. Providing alcohol directly to home is intended to create a check and balance mechanism that did not previously exist, since the consumer will have to provide details of his allocated identification card, which will then be cross checked with the central system of information. Additionally, lawmakers hope to prevent at least some underage drinking with greater transparency and a more structured system. Source Link

BIOLOGICAL LED

Jellyfish LEDs, called BioLEDs, are shown to improve peoples mood by mimicking the sun

The supply of the key LED component, yttrium is decreasing. Yttrium is rare and extraction has high environmental costs. To meet demand for LED lighting, MIT Innovator, Dr. Rubén Costa, has combined two Nobel Prize winning developments by preparing Green Fluorescent Proteins in bacteria and stabilising them in an almost water-free medium where they are able to keep their structure and functionality. Currently, the BioLED has been expanded from 100 hours of stability to 1,700. The goal is 5,000 to 10,000 hours. Interestingly, the colour bio-filter is able to reduce the harsh blue component, and the protein regenerates when the light is turned off. This ability means that the colour of the LED may be modulated through a spectrum of changing light throughout the day. This sun paralleling potential could support people with Seasonal Affective Disorder (SAD), which has great impact throughout the world. Source Link

DIGITAL RESURRECTION

The return of deceased actors and musicians to the stage through CGI and hologram technology is becoming more common

Before Peter Cushing's appearance in Rogue One: A Star Wars Story (2016) CGI technology had only been used to de-age living actors, or to create younger versions of characters for flashbacks. However, Cushing had been deceased for twelve years, and had not given consent. Permission for Cushing's participation was given by his estate. Paul Walker, who dies during production of Furious 7, was replaced by CGI technology and the movie was finished as a farewell and tribute. Amy Winehouse, who passed away in 2011, will be touring as a hologram. Permission was given by her father and proceeds will benefit the Amy Winehouse Foundation. Unlike other hologram musical appearances, Winehouse will move around stage, dance, and be more representative of her performances from when she was alive. Other resurrection appearances by musicians include Maria Callas, Roy Orbison, and Tupac. However, debate surrounding the legal, ethical, and artistic consequences of posthumous performances are still lacking. Source Link

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FUTURE OF PEOPLE & WELL-BEING

AI POLITICS

AI is helping shape public services in Japan

Japan is currently trialling the use of artificial intelligence in their parliament, to help decision makers mine vast quantities of historical data, past opinions, and research throughout the policymaking process. They are inputting five years' worth of parliament agenda summaries into the system before it starts to churn out a response. This will help officials draft responses submitted to parliament.

This is part of Japan's broader strategy to incorporate AI and robotics into public services, into sectors handling e.g. aging, or enhancing the well-being of humans. This includes the use of AI to speed up the national drug discovery process, which involves using technology to mine local and international research papers and databases on new drugs that fit various medical conditions.

Source Link

LIGHT KILLS GERMS

Study scientifically legitimates historical anecdotal evidence that sunlight kills germs

Researchers from the University of Oregon have tested how both daylight and ultraviolet light function as potential bacteria destroyers. The experiment was conducted using dust from real homes, placed in dollhouse-sized rooms kept at a constant temperature. Rooms exposed to both types of light had significantly less bacteria than rooms kept dark after 90 days. This research not only advocates for more light for people who are already ill, but also for more light in homes, places of work, etc. Because of this recently confirmed knowledge, architecture and building design could change in order to let more sunlight in. More specifically, perhaps this new knowledge can make the vast amounts of time people spend indoors safer and more conducive to health and well-being. Building design would not necessarily even have to be revolutionized if more UV light was introduced into current buildings (most window glass filters it out). Source Link

AI SPOTS ALZHEIMER'S DISEASE

The AI was proved to be 100% accurate at detecting Alzheimer's disease 6 years before the patient was diagnosed

According to a new study conducted at the University of Sheffield, artificial intelligence could be used to spot Alzheimer's long before a patient would typically be diagnosed by identifying small changes in brain scans that are too subtle for humans to see. The researchers used a self-learning computer trained with scans of brain activity from 1,002 patients. The AI system was able to spot Alzheimer's disease in 40 patients an average of 6 years before they were formally diagnosed by regular doctors. Predicting the development of Alzheimer's disease has major advantages for improving the wellbeing of the patients. Recent research has linked the evolution of Alzheimer's disease to changes in certain brain areas. but these changes are extremely difficult to spot. This study shows one of the numerous applications of deep learning. According to Professor Noel Sharkey (University of Sheffield), finding high-level patterns in data is one of the main goals of deep learning. Source Link

POSSIBLE ALZHEIMER'S DISEASE VACCINE

Alzheimer's disease is the most common form of dementia and a big concern for public health and the welfare systems

The present Alzheimer's research is based on the theory that certain neurological markers are the causes of Alzheimer's disease. Fortunately, prevention of Alzheimer's disease may soon be possible. A vaccine could both improve the quality of life of patients and will have a positive impact on welfare systems. Dr. Roger Rosenberg, director of the Alzheimer's Disease Center at UT Southwestern in Dallas, Texas is one of the researchers who works towards the creations of the first Alzheimer's vaccine. The results of a decade of research were recently published in the journal Alzheimer's Research & Therapy. The mice that received the vaccine had a 40% reduction in betaamyloid and up to a 50% reduction in tau (which are considered triggers of Alzheimer's diseases). This study is the culmination of long research on a possible creation of a Alzheimer's vaccine. Source Link

FIRST DRONE-DELIVERED KIDNEY

LONG-TERM IMPACT OF BREAST-IMPLANTS

The first ever drone-delivered kidney was flown around Baltimore by researchers at the University of Maryland.

Results were positive, as biopsies were taken before and after the flights and no damage due to temperature or drone movement was detected. Restrictions on drones and organ transport, however, leave the future of this method uncertain. The success of this experiment is critically important for the future of donated organ transport, as well as for the transport of other sensitive or fragile items. Drones used in this manner could prove essential for moving goods around cities in disaster situations. Furthermore, this is also a cost- and resource-effective transportation alternative to aircraft for flights of short to medium distance. While the use of drones for military applications has been widely touted, this experiment sheds light on a way that they can be used for saving lives. Drones can be custom-designed for very specific applications - this particular unit has a biosensor for in-flight monitoring and carefully engineered motor and rotor design and placement. Source Link

AFFORDABLE BIONIC PROSTHESIS

Development of new, more affordable bionic prosthesis

Turkish scientists have created a light and affordable bionic arm and hand for amputees. The prosthesis functions using electromyography (EMG), help to diagnose the extent of damage to muscle and nerve cells. The device then uses electrodes to convert muscle signals into numerical values that are used to control the device. There are currently around 4 million amputees in the world many of whom (e.g. those that reside in war-torn regions) are unable to obtain or afford prostheses. The new unit represents a step forward in prosthesis availability and the technology used to create this arm-hand prosthesis might be transferable to other areas, such as legs and feet. Although the study frames the benefit of this prosthesis in terms of Turkish patients, there is hope that it might prove cost-effective and useful globally. Moreover, the functionality of this unit (which can perform seven basic hand movements) is expected to improve in the future. Source Link

Breast implants are a USD1billion industry which has failed to ensure the long-term safety of their clients

The Guardian conducted a global project to investigate concerns around clinical usage and failure to track long-term surgery outcomes of breast implants. Following up on disclosures given to the International Consortium of Investigative Journalists (ICIJ), the Guardian discovered: Since 2015, more than 1,200 (of 1,459 total reports) were serious incidents linked to breast implants have been reported in the UK; There are links between a popular type of textured implant and a rare lymphoma; Manufacturer use of non-clinicalgrade materials; Failure to monitor large numbers of women within clinical trials focused on safety; Reports of ruptured implants, pain, disfigurement, allergic reactions, etc. These findings conflict with past large-scale clinical studies of breast implants which found high rates of satisfaction and low rates of serious complications. These discrepancies imply that there has been a manipulation of data and a failure to correctly track long-term outcomes.

Source Link

SMART HOME DEVICES UTILIZE DOMESTIC ABUSE

According to help hotlines and domestic violence shelters there is a new pattern of behavior in domestic abuse

Smart home devices such as smart locks, video cameras and other smart technology, are being used by domestic abusers to control and intimidate their partners. Most of this technology can be controlled by smart phone enabling the abuser to remotely control the devices. This can lead to victims having difficulty understanding or explaining their abuse. "Smart homes" is an industry growing at an estimated 46.6% a year with yearly sales expected to reach USD116 billion by 2022. Many large tech companies have started to get in on the smart home market with Apple, Facebook, Google and Amazon introducing products in recent years. A lot of these products were met with privacy concerns heavily focused on how the companies would use the data it collects. Now a concern is how these products are being used in the home and companies would potentially need to create an AI function that recognizes this behaviour and stop it without becoming too intrusive to innocent users. Source Link

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MEMBERS' REPORT 1/2019 GEOPOLITICS

Our upcoming members' report looks at the crumbling pillars of society - what this will mean and what might come next.

CIFS EXECUTIVE

CIFS Executive is our international membership network for decision-makers. The CIFS Executive meetings are open for members of the Copenhagen Institute for Futures Studies and are by invitation only. We wish to create a dialogue between people who understand the need to use the future proactively. Our idea is to deliver flashes of inspiration that highlight potential game changers. We are putting the future on the agenda, and our members get the first chance to discuss opportunities and threats related to the latest developments identified by CIFS.

> March 5 2019 **STAVANGER**

March 7 2019 COPENHAGEN

March 6 2019 **OSLO** March 4 2019 BRUSSELS

SCENARIO MAGAZINE 06/2018

"OF COURSE, I CAN SIT LIKE THAT!" This issue's main article is an interview with forward-thinking classical composer and avantgade performance artist Louise Alenius. Other topics and articles include: Eske Willerslev revisited | Modicare – India's universal health reform | Toxoplasma Gondii – a parasite that creates winners | The techno-utopian microstate Liberland | Liquid consumers | R.I.P Paul Virilio | What's up with quantum computers | Nina Frifelt – The Private Collection | Inequality and disasters | Sociotech | Futures past: Microsoft Bob | Trends, ideas, visions – and much more ...

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