



*Issue 6 / December 2017*

# GLOBAL SCANNING REVIEW

## **INCLUDED INSIDE**

This issue looks at algorithms fighting human trafficking, slow schooling, megabrand stagnation, Facebook servers heating Danish homes, sustainable food production, social media as art, meta-luxury, diagnosing cancer in seconds 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 decision-making, 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.

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## **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

## RENEWABLES IN PUBLIC TRANSPORT

### Buenos Aires deploys solar panels at bus stations

The Buenos Aires city government has installed 328 solar panels on the roofs of bus stations on the main thoroughfare of the city with the potential to generate energy for 190 homes per year. The purpose of the facility is to generate free and clean energy for city consumption. Today, Argentina's energy system depends mainly on imported gas for the generation of electricity, emitting more than 400 grams of CO<sub>2</sub> per kWh. The installation of the solar panels will prevent the emission of 44 tons of CO<sub>2</sub>, equivalent to the circulation of 276 cars for a year or 46,000 incandescent lamps. In the future, the project should extend the installation of solar panels to 17 bus stations at Avenida 9 de Julio, generating up to 805 MWh per year. With the increasing demand for energy and the change in the availability of energy sources, there is a trend towards a shift from centralized models maintained by fossil fuels to decentralized models with renewable energies. However, the installed solar panels are not yet able to store the energy generated during the day.

*Source Link*

## SLOW SCHOOLING

### Education system in Australia too focused on speed?

Scholars in Australia are calling for a slowing down, in opposition to what is referred to as the 'cult of speed' in education. Schools in Australia have been caught up in the push for rapid learning improvement, which ends up leaving many children behind, in particular from disadvantaged backgrounds. Ongoing national assessment programs, tests and requirement to provide evidence of learning within eight-week periods all contribute to this situation. The call for a longer-term focus on learning is an important step towards identifying the contributing factors for greater equity in schools. A short-term focus on learning creates stress and doesn't allow for the development of reflection, collaboration and other evidence based practices needed to promote equity in Australian schools. A slow school movement could allow for a re-focus on what conditions allow and encourage learning for all. A long-term focus as suggested by the slow school movement could also encourage a re-focus on what skills are needed for the long term rather than just being focused on improving student's abilities to do well on tests.

*Source Link*

## FACEBOOK HEATING DANISH HOMES

### Utilizing data centers in local communities

A growing number of companies are connecting their systems to district heating networks to stop wasting excess heat produced. The Facebook data center established in Odense practices such heat recycling procedure to reduce impact on the environment, while boosting their usefulness to the local community. When complete, Facebook says the heat recovery infrastructure will enable the recovery of 100,000 MWh of energy per year, which can produce enough heat to warm up 6,900 homes. Further, thousands of homes are being heated by data center servers in Stockholm and other European cities that employ district heating. These heat recycling projects position data centers as beneficial neighbors, which could help counter growing tensions about their impact on communities, as well as making them more environment friendly and economically sustainable.

*Source Link*

## CAMBODIA BANS SAND EXPORT

### Forcing expanding Singapore to innovate

Cambodia has become a major supplier of sand to Singapore after many countries like Indonesia, Malaysia and Vietnam have implemented restriction on their sand trade. In response to environmental concerns the Cambodian government has now issued a permanent ban on the export of sand. Even though sand is considered an abundant and cheap material, it is also one of the most required resources as it is widely used in the making of concrete, asphalt, glass, and electronics. The extraction of sand can cause erosion of riverbeds and riverbanks, land and surface degradation and disrupting the ecosystems on which local coastal communities depend. As Singapore is still expanding its surface area this requires huge quantities of sand which the country needs to source outside national borders. As the neighboring countries are slowly but surely banning the export of sand, Singapore's experts are looking for innovative materials and technologies to use for its construction projects.

*Source Link*

## AI DETERMINING SEXUALITY

Facial recognition technology looks at dating profiles

Researchers at Stanford University have developed an algorithm that by using deep neural networks is able to determine a person's sexuality. By looking at 35,000 images on an online dating website, the algorithm could distinguish between gay and straight people with 81% accuracy for men and 74% for women. This algorithm has raised questions about the ethics of facial-detection technology. Apparently, faces contain a lot of information regarding sexual orientation. This algorithm could easily violate people's privacy or could become part of an anti-LGBT movement by easily discriminating between "straight" and "gay", which could happen without the person's consent.

*Source Link*

## ALGORITHMS FIGHTING HUMAN TRAFFICKING

Machine learning combined with blockchain can increase transparency

A Ph.D. candidate at UC Berkeley has created an automatic process to identify ads that are related to human trafficking rings by using public information from Bitcoin ledgers. Two new algorithms, a machine learning one that uses stylometry (the analysis of an individual's writing style) to identify authors of sex-ads, and a second one that uses public information from Bitcoin's blockchain. The main difficulty is linking the person who posts the ads, with the one who offers the services, with the one who receives the money. The process can identify if the ads are of willing people offering sex services or if they are related to human trafficking. This is a significant advance in developing tools that help to overcome the challenges in identifying victims of human trafficking and sexual exploitation. One of the potential threats with this kind of breakthrough is that sexual trafficking will become more obscure in its processing form, by going away from websites such as Craigslist. Likewise, there are possibilities of new cryptocurrencies being created that offer a higher degree of anonymity than Bitcoin.

*Source Link*

## DRIVERLESS BUS TRIALS IN RURAL JAPAN

Delivering healthcare across a municipal complex

Japan has introduced driverless bus trials this month in Nishikata, a rural center, where approximately a third of its 6,300-resident population is aged 65 or more. This population is representative of the ageing population across Japan. This shuttle is developed by DeNA Co., an internet commerce, and games provider. The company is extending service areas by providing healthcare in a municipality. This is an important move for smaller rural centres where the aging population is increasing dramatically along with population shrinkages. This could be important for many nations with ageing populations. Enabling population mobility could have many social and health benefits. Once, driverless cars were only thought to be relevant for urban areas, but are now a great opportunity for more remote communities.

*Source Link*

## GOOGLE IN THE AMAZON

Efforts against deforestation of the rainforest

Google aims to combat the growing deforestation of one of the most important world habitats and help preserve indigenous culture of people, living in the forest. The Amazon rainforest covers 7,000,000 km<sup>2</sup> territory belonging to 9 nations. The majority is in Brazil (60%) and that part produces 20% of Earth's oxygen, and provides the habitat to approximately one-third of all animal species on Earth. Because of the large scale destruction of this globally important habitat, where land clearance in 2016 has risen by 29%, Google launched the project I am Amazon. Indigenous people in Brazil's rainforest will be able to map deforestation in the Amazon in almost real time with Google Earth and Google Maps. With local support from Brazil's National Indigenous Foundation (FUNAI) and the Instituto Socioambiental. This project could help monitor vulnerable territories and help to protect them. This would be an important step in nature preservation and maintaining socio-biodiversity both on a local and a global level.

*Source Link*

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# FUTURE OF BUSINESS & ECONOMY

## ECOBRANDING

### Reducing ink usage in logos

French designer Sylvain Boyer has redesigned the logos of some of the biggest companies in the world with less ink. With small adjustments, the environmental effects could be massive, since these logos are printed in large numbers on packaging, containers etc. For instance, the redesigned McDonald's logo would use up to 40% less ink. This could both lead to savings in terms of spending (ink is one of the most expensive substances in the world) as well as reduce environmental impact. Although this seems like a relatively small change, it could become a trend in branding, the same way that Flat Design became a trend in graphic design. This could be an opportunity for a holistic approach to becoming environmentally friendly, and representing this visually to customers as 'ecobranding' could become a trend like greenwashing, where companies spend money into making their logos green or ecofriendly whilst keeping other non-environmentally friendly practices.

*Source Link*

## PETRO-YUAN

### China's petro-yuan challenge to the dollar

China, the world's top oil importer, will soon launch a crude oil futures market denominated in gold-backed yuan, according to a report from Nikkei Asian Review. This development would create a Chinese counterpart to the dollar-denominated Brent and West Texas Intermediate (WTI) futures that currently dominates the global crude oil markets. China's move will also allow exporters such as Russia and Iran to bypass US sanctions by trading in yuan, which can be fully converted into gold in the Shanghai and Hong Kong exchanges. This will be China's first commodities futures contract open to foreign investment funds, trading houses, and petroleum companies. Earlier attempts to peg the crude oil trade to yuan have failed, as China's independent refiners lacked an optimal domestic ecosystem. This has now changed with the advent of highly-diversified domestic players providing economies of scale and product variety to China's O&G complex. New yuan-backed oil and gold futures may precipitate rapid economic decline in petrodollar-dependent economies.

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## APPLE ENTERS HEALTHCARE BUSINESS

### Apple has decided to expand into the healthcare business with cardiac monitoring devices

Apple is collaborating with Stanford University in order to understand if Apple Watch's heart-rate sensor can be used to diagnose serious diseases like cardiac arrhythmias and abnormal heart rhythms. Apple Watch already has various workout features, but Apple wants to expand these functionalities. Until now, Apple has avoided making medical claims that would attract attention from the federal government and from the U.S. Food and Drug Administration, but many wellness apps and devices used in daily life could evolve into medical devices. The diagnosis and control of different diseases would be a lot easier if Apple Watch's heart-rate monitor is accurate enough to be used as a screening tool to avoid false positives and false negatives. If everyday devices could diagnose diseases, people would know that they have specific diseases at a very early stage, and treatment would become easier, quicker, and cheaper, reducing public spending for treating lifestyle diseases like cardiovascular diseases.

*Source Link*

## E-HIGHWAY FOR HYBRID VEHICLES

### Siemens builds electric freight transport highway in Germany

The cost on health of air pollution in OECD countries was about USD 1.7 trillion in 2010. Road transport accounts for about 50% of this. The German state of Hesse has appointed Siemens to build an electric highway for freight transport. The A5 federal highway will be equipped with a 10 km long overhead contact line, allowing trucks with internal combustion engines to be replaced by hybrid motor vehicles. The system is being built as part of the joint project "Electrified, innovative heavy freight transport on autobahns" (ELISA) by Germany's Federal Ministry for the Environment, Nature Conservation, Building, and Nuclear Safety (BMUB). The trucks will use the electricity provided by the grid to run on the e-Highway and automatically switch to a hybrid engine on roads without overhead lines. The e-Highway is twice as efficient compared to internal combustion engines and can cut energy use by 50%.

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## DRIVE-YOURSELF-SERVICES IN AUSTRALIA

Australia has a rapidly changing urban transport-sharing landscape

The spiraling cost of car ownership in Australia is now creating a market for on-demand drive-yourself services such as GoGet and Car Next Door. GoGet gives its members access to a fleet of pay-as-you-go cars parked in designated places in and around a city, while Car Next Door is more of a car-matching service, connecting carefully vetted car borrowers with car owners willing to rent out their vehicles. To date, over 110,000 Australians have signed up for either company. Other upcoming vehicle-sharing services are the popular company Camplify, effectively an 'Airbnb for caravans'. A recent AECOM report suggested that a single carshare vehicle can take up to 10 private cars off the road, and there could be as many as 9,000 car-sharing vehicles in Sydney by 2036. This would reduce the estimated 4 million privately owned cars in the city by 2.25%; a small, but significant step towards 'peak car'; the point in time when the number of privately owned and single-occupancy vehicle trips stop increasing and start to decline.

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## SUSTAINABLE FOOD PRODUCTION

Dutch solutions are eagerly copied

Innovative, effective, and sustainable agriculture is crucial to meet the rising food demand driven by growing populations. The Dutch economy is the sixth-largest in EU and is investing a lot in research and technology in the agricultural sector. Due to innovative agri-food technology, such as crop-monitoring drones and vertical greenhouses, the country has become one of the world's largest producers and exporters of fruits and vegetables, only exceeded by USA. Highly mechanised agriculture and coordination allows food production with reduced use of pesticides and low water consumption. The Dutch food production methods may contribute to global food security, one of the main challenges in upcoming years, and is a good step to meet the sustainable development goal to end famine. The Dutch solutions are eagerly copied by other countries like Mexico, Brazil, China, and Ethiopia, giving them the opportunity to establish their own sustainable food production.

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## CRYPTOCURRENCY ATMS IN ARGENTINA

Argentina will have 250 bidirectional cryptocurrency ATMs

In October 2017, 250 bidirectional ATMs were installed in Argentina, allowing transactions in both cash and cryptocurrencies. Typically, ATMs only allow either cryptocurrencies or cash. Other countries already operate ATMs for cryptocurrencies, including Kosovo, Colombia, the Dominican Republic, the Czech Republic, the United States, and Israel (BitCoin), Spain (BitCoin, Ethereum, and LiteCoin), Canada (BitCoin, Ethereum, LiteCoin, and others), but none of them bidirectionally. This solution comes from the understanding that the global financial system is changing. It points to a monetary convergence, which will enable the use of different payment methods and currencies like traditional currencies, cryptocurrencies, and loyalty points. This movement requires a human point of contact, like an ATM that allows transactions across multiple currencies, turning digital money into physical money and vice versa.

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## RECORD-HIGH US DEBT

Creating an economic trap

The International Monetary Fund finds that high levels of household debt deepen and prolong recessions. US household debt is at levels like just before the Great Recession. Household debt has increased by more than USD 500 billion in the second quarter of 2017 to USD 12.84 trillion. As of June, US households were more than half a trillion dollars deeper in debt than they were a year earlier, according to the latest figures from the Federal Reserve. Michael Lebowitz, the cofounder of the market-analysis firm 720 Global, says the US economy is already dangerously close to the edge. Most consumers, especially those in the bottom 80%, are tapped out. They have borrowed about as much as they can. Servicing this debt will act like a wet towel on economic growth for years to come. Until wages start to grow faster than inflation, this problem will only worsen.

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# FUTURE OF CONSUMERS & RETAIL

## ENHANCED GOOGLE STREET VIEW

Advancing with AI and user based input

Since its debut in 2007, Google Maps and Google Street View have chartered almost every place on Earth. Now, the company is planning to improve their footage, with the use of new technology and image recognition algorithms. This will not only allow better images, but will also allow the analysis of information available on the street e.g street signs, business names, phone numbers, opening hours, etc. Since Google is resolving ever more complex queries by the users, linking web indexing with maps and street view indexing will be very useful. The company is giving users the possibility of contributing to Street View with the aid of 360-degree cameras, that are becoming cheaper every day. The main opportunity is to increase ad revenue for Google, but as people are going to be able to contribute to Street View the algorithms will allow to charter places that are rapidly or constantly changing, especially in developing economies where there is an increasing population that could benefit from these services and still don't have access to them.

*Source Link*

## THE FUTURE OF CARS

Smart vision for a self-driving, electric, autonomous vehicle

At the Frankfurt Motor Show 2017, Smart presented a new concept for a self-driving, electric, autonomous vehicle with a ride-sharing idea of matching passengers by their profile. According to the company this is the future of car-sharing in the city. As all smart vehicles, this car is also designed to fit well in the dynamics of a busy and congested city. Urban mobility and an access to safe transport is a pressing global issue, as population living in urban areas is more than 50% and is expected to reach up to 66% by 2050. More companies such as Mercedes, Tesla, BMW are investing in the development of prototypes that will represent the future face of urban mobility. Self-driven cars have the possibility to reduce road accidents by eliminating human mistakes. Car-sharing initiatives allows society to move towards a more shared economy that can have positive implications on numerous social, economic and political problems such as depleting resources, pollution and social alienation.

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## PERSONAL SHOPPER DATA

Retailers gaining vital customer information

The popularity for personal shopping is growing, creating a key tool for retailers to analyze people's shopping habits. The trend has appeared to be of global scale, building new platforms for businesses seeking to take advantage of personal fashion advice. There are different ways to collect such data. One of those is, for example, an app through which consumers can give feedback on products and outfits. This can make personal shopping help retailers to understand their clients through the information based on truly personalized experiences instead of relying on traditional statistics. It also gives opportunity for establishing of new approaches in retail business. Providing personal shopping advice is still mostly seen as a high-end service that is not associated with traditional high street brands. However, new retailers and online retailers can take advantage of the information by adapting their services and goods to consumers personalized needs and foresee the future changes.

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## MEGABRAND STAGNATION

Nestlé breaks into hipster market by acquiring Blue Bottle Coffee

Many megabrands are stagnating and giant companies such as Unilever and L'Oréal are trying to break into alternative markets in order to gain new costumers. Tiny labels with hipster or organic credentials are an increasingly attractive investment for giant companies. To maintain the customers, the giant companies will have to maintain the values of the brand they are acquiring. Nestlé has acquired a majority stake (68%) of Blue Bottle Coffee in a 425-million-dollar deal. Blue Bottle Coffee is a California based high end brand that started as a home delivery service in 2002. Hipster markets, organic markets, and small alternative markets in general have gained success and are seen as an attractive target for investments. This could be an opportunity for the owners of small companies in terms of positioning towards giant companies that gradually acquire small successful brands.

*Source Link*

## SOCIAL MEDIA AS ART

### WeChat added to museum collection

The Victoria and Albert museum in London has added China's largest social media platform to its permanent collection. The exhibition of WeChat is currently showing screen captures of how this app is used for chatting, hailing cabs, transferring money, and paying, etc. This app is vital in 21st century China. Preserving an app is not a minor task, since the nature of WeChat is that it is constantly connected and changing. This could be the start of a redefinition of what a museum means in the digital 21st century. Museums normally collect important historical objects, or things that have changed the course of humanity. Collecting a platform that has completely redefined daily lives in the 21st century exemplifies how museums could take a place in documenting the evolution of social media, as online archives for social networks are not reliable and very fragile.

*Source Link*

## THE SHAZAM OF FASHION

### Kim Kardashian West has become the ambassador for the ScreenShop App

Developed by the American start-up developer Craze, ScreenShop is a new mobile app that promises to be the "Shazam" of fashion, but instead of music, the focus is retail. The company claims to use multiple technologies such as artificial intelligence, computer learning vision, language processing, algorithms, smart notifications and storage optimization, which enable the user to scan the screenshots taken from any app or website, converting it to exact, similar and budget versions of clothes, making it possible to purchase it directly from the phone. ASOS, Farfetch, TopShop, Boohoo.com, Yeezy, Kanye West, Forever-21 and Saks Fifth Avenue are among some of the 460 associated brands for the database of more than 10 million products. The increased focus on mobile device businesses for retailers and brands through social media has been providing new tools that optimize and democratise the purchasing process.

*Source Link*

## META-LUXURY

### The development of knowledge-based vintage

Brands such as Rolex, Patek Philippe, Richard Mille and Audemars Piguet are selling vintage items for record-setting prices at auctions. Expertise and condition followed by provenance are of high importance for potential buyers. This is an example of the development of meta-luxury sectors, where knowledge is crucial factor for the understanding and appreciating luxury products such as cars, wine and designer bags. The watch companies invest in their brands by concentrating their marketing strategy on heritage and exclusivity achieved by limited production. They educate their consumers with specific knowledge and make them see the product purchased as a valuable investment piece. This trend contributes to development of a meta-luxury vintage market within several industries, what would encourage sustainable consumption and refocus consumers' attention from possession to the historical and cultural value of a vintage product.

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## EDUCATION IN DIGITAL RISKS

### BBC launches a safety-online portal for children

BBC has taken on a mission of teaching young internet users about the risks related to the digital realm. On the 6th of December, their platform "Own It" was launched. The goal of the platform is to provide children as young as 9 with tools that will enable them to safely navigate the internet, especially with relation to personal data, social media, or malware. The age group has been targeted based on statistics of presence on social media. Most of the popular platforms require users to be over 13, however, studies reveal that children as young as 10 commonly have a profile, as it is easy to lie about their age in the registration process. BBC believes that education and fitting children with the right tools on internet use is key to allowing the next generation to benefit from the immense possibilities that the online world brings. This launch creates an opportunity to speak about the place of children in the online world, about safety online in general, and possibly also highlights the importance of these issues to parents.

*Source Link*

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# FUTURE OF PEOPLE & WELL-BEING

## SLOWING AGEING

New class of drugs (senolytic drugs) could significantly slow down the process of ageing

The Mayo Clinic in Rochester, Minnesota, has made significant advances in the study of senolytic drugs. Senescent cells are accumulated in the human organism with age; these cells are damaged cells that resist dying. They stay in the human body and affect its normal functioning. Senolytic drugs work by killing senescent cells without harming healthy cells. Advances in the study of senolytic drugs could allow a change from animal research to human clinical trials in the near future. There are many factors that influence the ageing process. Cell damage or dysfunction, and the accumulation of senescent cells, is one of these processes, alongside inflammation and changes in DNA. If scientists are able to develop senolytic drugs suitable for human beings, the science of ageing and medicine in general will take an enormous step. Senolytic drugs could revolutionize the treatment of many age-related chronic diseases (dementia, diabetes, cardiovascular disease, arthritis and osteoporosis, among many others).

*Source Link*

## VIRTUAL LSD

An artificial LSD experience created using infinite liquid effects in virtual reality

The Brazilian project LS4D looks like a game: the participant wears VR glasses, chooses one of four songs and enters a scenario. LeapMotion, a device with a sensor that captures the movements of the hands, makes it possible to interact with a fluid in a psychedelic environment. The purpose of the experiment is to understand its potential impacts for drug users, especially how to satisfy the desire to use and eventually how to help get rid of addiction. The experience is non-invasive and does not cause damage to the body or any chemical change. Software development cost between R\$ 15,000 (US \$ 4,000) and R\$ 20,000 (US\$ 5,000) and 100 technical hours. The project is experimental and is not for profit. The company believes that the learning can be useful in both game development and neuroscience-related research.

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## MALE BIRTH CONTROL

New potential birth control gel tested

A male birth control gel is approved for worldwide clinical trials. In early 2018, trials will start in the UK, Sweden, the US, Kenya, Italy and Chile. The gel is a combination of progestin and testosterone and has to be applied daily on both shoulders. A topical gel, instead of a pill or a shot, is a more feasible solution as it releases hormones at a more controlled and safer rate. Similar to women's birth control pills, side effects like mood swings, acne, decreased libido, increased appetite, headaches and insomnia are expected. The birth control pill for women was introduced in late 1950s, while the male alternative to a contraceptive pill has been a hot topic only in recent decades. This gel would give couples the choice of whether the contraceptive will be taken by the man or woman, meaning increased equality. Even though hormonal contraception is the individual woman's choice, it often is a choice made because there are no alternatives for men.

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## AN ARTIFICIAL WOMB

One step closer to an artificial human womb with an artificial lamb womb

An international group of scientists, for the second time this year, have succeeded in growing preterm lambs using ex-vivo uterine environment (EVE) therapy. They were able to maintain the lambs in healthy, infection-free condition with significant growth. The major step was the ability to use a high-tech amniotic fluid combined with an artificial placenta, which then allowed the lambs' lungs to continue to develop. The lamb's own heart pumps the system. This research has the potential to save many lives as it is developed. However, the idea of a human baby growing in an artificial womb will need to overcome the barriers of ethics boards as well as the hearts and minds of the public. The next step forward is to be able to support babies born prematurely in these artificial wombs, but perhaps growing animals faced with extinction may also be in the future. Given dwindling rates in male and female fertility and ageing populations, this could in time may provide the opportunity to grow human babies full-term as well.

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## DIAGNOSING CANCER IN SECONDS

New device allows the identification of cancer in 10 seconds

Scientists at the University of Texas report that they have been able to create a device that allows the identification of cancerous tissue in 10 seconds. The device is called MasSpec Pen. 253 cancer patients participated in the study and the device was shown to be accurate 96 % of the time. This means surgeons would be able to remove every last trace of cancer during surgery. This innovative process is 150 times faster than conventional methods. In addition, the device could help surgeons to more accurately remove tumours. The device was tested on tissue related to breast, thyroid, lung and ovarian cancers and proved very fast and relatively accurate. Cancer surgeries could be quicker and more precise, and more importantly, safer. Surgeons will know exactly what tissue to remove and what tissue is healthy. This is a very important aspect because unnecessary removal of healthy tissue entails a longer recovery process.

*Source Link*

## COMBATting ADDICTIVE TECHNOLOGY HABITS

Arianna Huffington joins Samsung betting on digital wellness-tech for mobile devices

Wellness apps are nothing new, but collaboration between co-founder of The Huffington Post, Arianna Huffington, and Samsung could make a difference combatting addictive technology habits. The collaboration is the startup and app Thrive, which aims to help people disconnect and create healthier relationships with technology, through technology that promotes wellbeing to both companies and individuals. The app has features that limit the notifications, links and messages you receive, except those sent by people included in your "VIP list" (when the Thrive mode is activated, if someone who is not on your "VIP" list gets in touch you will receive an automatic message that you are "thriving"). The concept of conscious consumption and wellness has expanded to the professional field, and preventing digital overload has become part of programs in many companies since addiction to social media and other applications can directly affect employee stress levels, harming people's ability to focus.

*Source Link*

## AI FOR HEALTHCARE

SayKara - an Amazon Alexa for healthcare

A Seattle based team of former employees from different companies (such as Nuance and Amazon) have developed SayKara. SayKara is a virtual assistant specifically developed for medical doctors and works similarly to Amazon's Alexa by being activated by a hot word (such as 'OK Kara') or a tap on the app that runs on iOS devices. During a consultation, by using voice recognition, SayKara can automatically incorporate the details of a patient interaction into the electronic medical record; this could improve patient-doctor interaction since the doctor will not have to chart information while talking to patients. Doctors will be able to spend less time doing administrative tasks such as filling out forms and electronic health records, leaving them with more time to focus on improving interactions during patient visits. In healthcare, errors are inadmissible and SayKara will also need to meet high compliance, security and privacy requirements.

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## STD OUTBREAKS IN THE UNITED STATES

The country faces STD and STI epidemic

The United States is currently staring at an STD epidemic primarily due to the lack of condom use, growing illicit prostitution, and rampant poverty. Washington DC, in particular, has emerged as the capital for sexually transmitted diseases (STDs) and sexually transmitted infections (STIs) in the United States. A recent study by the Center for Disease Control (CDC) reveals that chlamydia outbreaks in Washington D.C. exceeded the national average by 118% in 2016, with the next closest state, Alaska, seeing a rise of 40%. During the same year, gonorrhoea outbreaks surged by a staggering 230% above the national average, while syphilis outbreaks in D.C. exceeded the national average by over 175%. The growth in STDs has been steadily rising in the United States over the past 16 years, with an estimated 20 million new STD cases each year, half of which involve young people aged 15 to 24 years. By 2025, up to 40 percent of all men and half of all women – totalling more than half of the US population – may carry genital herpes.

*Source Link*

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## **MEMBERS' REPORT 1/2018 THE FUTURE OF TRANSPORTATION**

The transportation technologies of the future will drive – and be driven by – new business models, mobility patterns and trends such as globalisation, rapid population growth, urbanisation and increasing demands for environmental sustainability. The upcoming members' report from CIFS takes a broad view on the future of transportation, ranging from personal mobility in cities to global freight shipping.

### **CIFS EXECUTIVE**

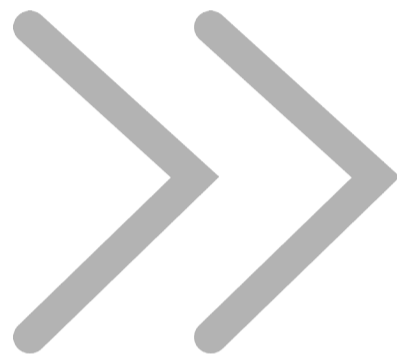
CIFS Executive is our international membership network for decision-makers. The CIFS Executive meetings are open for members of the Copenhagen Institute for Futures Studies and are by invitation only. We wish to create a dialogue between people who understand the need to use the future proactively. Our 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 7 2018  
**STAVANGER**

March 12 2018  
**COPENHAGEN**

March 7 2018  
**OSLO**

March 15 2018  
**BRUSSELS**



## **SCENARIO MAGAZINE 01/2018**

Society must be understood as "self-stressing, constantly forward-rushing worry systems," says the German philosophical superstar, Peter Sloterdijk – and stress, in his terms, is not something that breaks us down. In fact, it is what makes everything stick together. Read our interview with Sloterdijk in the next issue of SCENARIO.

Other topics and articles include: Juvenioia: Fear of Teens / The Big Business of Yoga / Wildcard: Demographic Death Stall / Technological Singularity is Not the Only Scenario / Plastics & the Business Model that Ruined the World / Tech, trends ideas and much more.

### **COPENHAGEN INSTITUTE FOR FUTURES STUDIES**

is an international, apolitical and not-for-profit think tank that has advised governments, multinationals, public and intergovernmental bodies all over the world about the future since 1970 through a membership network, strategic consultancy, seminars, workshops, presentations and publications.

The Institute identifies and analyses the trends and driving forces that shape the world, and works with scenario planning that can be used in strategy development and other change processes. The Institute is therefore both a think tank and strategic advisor for public and private enterprises that wish to know more about the future before they make important decisions.

The objective of the Copenhagen Institute for Futures Studies is to strengthen the basis for decision-making in public and private organisations by creating awareness of the future and highlighting its importance to the present.

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