



Tomorrow Today is the Global Intelligence newsletter from Case Lane, author of the Life Online series of future tech cyber thrillers.

2017 YEAREND SUMMARY

The following are the topics covered by Tomorrow Today in 2017. Each subject highlights a coming future tech innovation that could change your world.

Digital Ambassadors

Denmark became the first country to appoint a 'digital' ambassador: [article about Denmark appointing the world's first digital ambassador](#).

This is the start for the creation of UN Special Command in the Life Online series. The Danish will have this person work directly with technology companies effectively skipping the traditional nation-state lines established decades ago by many United Nations conventions. This is an extraordinary realization that the world reaches beyond countries and into companies who are able to wield powerful influence because they control technology. In the Life Online world, all humans are connected to The Network, which is managed by the United Nations Special Command. Effectively every country will have to nominate cyber or digital only diplomats who can represent the country's interests in the virtual world beyond the physical world.

Industrial Internet for Economic Development

While we are in the world of global diplomacy, this is [an interesting article about how General Electric \(GE\) is championing the development of the Industrial Internet to meet the United Nations Sustainable Development Goals](#). Note: the article was written by GE people but it's still cool stuff. This is essentially an explanation of the 'Internet of Things' infrastructure where all the foundational parts of industry will be 'speaking' to each other electronically. This is exactly the vision in the Life Online books, and it may even happen faster than personal connectivity because businesses can internally self-regulate. But you can bet that any advances businesses make will be adapted to consumer uses as soon as someone realizes the transformation is possible. The article focuses on how advancements for health, water, agriculture and energy can be made more sustainable by using digital technologies to monitor and make adjustments to operations. By the time we hit the next century, these processes should be running the industrial world. The whole process requires the free movement of data, which of course will have to be secured by an organization like Special Command.

Robots replacing humans

A word from discussions at the World Economic Forum in Davos last month. That group held [a discussion on robots replacing humans](#) #nohumansnecessary. HP CEO Meg Whitman is quoted as saying the evolution will be "ageless...and classless." In other words, every job is in play and every type of personal interest. So those who think force creating industrial jobs is the way to go, may be in trouble if corporations turn their focus instead to accelerating the employment of robots. Some CEOs may be thinking it's easier to set-up a robot factory than face the political risk of moving jobs across borders. And the impact of those decisions on our political, cultural and economic lives will be up for discussion in the years to come.

Flying Passenger Taxis

If you have been watching the news this week, you may have noticed not one or two, but multiple stories about flying cars. I live in Los Angeles so let me tell you I was pretty jealous to see cities like [Dubai prepared to authorize flying passenger taxis](#) by this summer. Flying cars for all could be the next great relief to our very, very congested freeways. But of course the price point will have to come down. Some estimates have current models at over \$1 million, not exactly an option for every home.

Of course there are lots of regulatory and safety issues to deal with here. But like all tech advances, the product will come first and the governments will plod along after-the-fact. The early adopters will be moving around in these vehicles long before police forces have a similar transport to catch them. So we shall watch and see who makes the first move.

Preference 'signalers' for tourists

Okay I really do not know what to call this device I saw advertised multiple times while on a Caribbean cruise a month or so back. One of the cruise lines is planning to introduce a watch-like device, which will "signal" your favorite drink to the bartender before you open your mouth, and unlock your stateroom as you approach the door. My guess is it will also help you keep track of your kids (or your spouse). Now if this were a Life Online scenario, the access for your cruise would be built into your "com" so the ship would not have to develop a different device. But okay, that option will come next.

No Travel Travel

Speaking of travel, I heard a reporter mention that virtual reality for travel is going to be so realistic you will never have to go anywhere. The [Marriott Hotel chain has a 4-D Teleporter](#) so you can see London and Hawaii from...well wherever you live. Maybe it's a fun amusement park type experience but hardly a replacement for being there. The Life Online books take place all over the world. As a global traveler, I really encourage people to see the world and learn more about people, places and cultures. It would be a shame if people bailed out of 'real' travel. I hope the technology actually goes the other way and makes it so much easier to travel by taking care of all the logistics without any issues.

The Rise of Online Entrepreneurs

Alibaba CEO Jack Ma brought his Gateway conference to Detroit in June 2017 and with it, his message - use the e-commerce platform to build an online business. Ma is publically stating he will support the creation of a million U.S. jobs as entrepreneurs discover they can use Alibaba to sell to customers around the world. This vision is absolutely part of the future world expectations. With more jobs being automated,

or moving overseas to the lowest cost labor market, a large percentage of working age people will have to figure out how to support themselves. Enter, Alibaba and other e-commerce platforms that will help people reach the entire global marketplace.

In the future, every entrepreneur will consider the world population as their personal marketplace. With more people wanting customized and niche products, entrepreneurs will be able to produce their own passion and sell to all takers. With just a few thousand global customers, each entrepreneur can be self-sufficient within their own market. And oh yeah, there are no free trade barriers and treaties standing in the way of the digital economy. This is one development where direct human interaction will make the market, not governments.

Supersonic airplanes

Ready to fly around the world in half the time it currently takes? At the Paris Air show in June, Denver-based [Boom Supersonic announced they are taking orders for supersonic planes](#) to be flying by 2023. Five airlines have requested 76 planes. I'm super-excited about this development because I had already decided to base the next Life Online book around supersonic air travel (the book's working title is Supersonic but you know I'll come up with a more subtle name).

Supersonic travel will also help with the jobs' deficit mentioned above. Knowledge workers will be able to move around the world at superfast speeds, which means they too will be able to consider the entire globe their marketplace. Imagine a particularly skilled surgeon or a scientist who every morning goes to work in one country and arrives home for dinner. In my next book, people will commute from mega supersonic airports scattered all over the globe and connected on the ground by flytrains to major city centers. Of course, since I write thrillers, something unexpected will happen, but no spoilers.

Hands-free cars

Cadillac has joined the competition with its [hands-free Super cruise car](#) for highway driving. This new technology is expected to be available this fall but it's not the grand vision for the 22nd century. Hands-free transports in the Life Online world let you lie in the backseat and watch a movie, or sleep as the vehicle automatically takes you to your destination. Cadillac, Tesla and others with this technology force you to stay alert by tracking your head movement. So "hands-free," this is not. But we are coming closer to the ideal, after all if this is this year's technology, imagine what we'll have in 10 years.

I am still holding out for flying cars of course. Sitting in LA traffic the other day with the gigantic empty blue sky above me, I thought, 'when are they going to get cars off the ground?'

Facial recognition - Surveillance is not just a camera anymore

Planning to travel to Berlin anytime soon? You may just find out the government knows you are there the minute you arrive. Berlin's Südkreuz Train station will become the first to test a software's ability to recognize anyone passing by - that will be you. If you have read the Life Online books, you can imagine how I jumped out of my seat when I saw [this story on thelocal.de](#) (Germany's English news website). Automatic facial recognition technology is in all the books and is used extensively to find well...everyone.

The technology means cameras not only record activity at a site, but also feed the photos of faces into a database, which will be constantly searching existing records for anyone suspicious. Today that would be suspected terrorists. But tomorrow it could be you if you forget to register your car or skip a day at school or work.

Implementation of the technology raises the same issue as in the books, do we want personal freedom or collective security?

In Germany, the story says the system is being implemented for security reasons, to protect stations and deter crime (sound familiar). But Germans are protesting the intrusion into their privacy, civil rights, and potential for abuse. One advocate was quoted as saying "significant social control can be practiced on people." Of course that is exactly the point of The Network in the Life Online books. The system was imposed on people and supporters give it credit for bringing down the crime rate and getting everyone to behave themselves in public.

We'll keep watching this story, this will have a significant impact on public spaces everywhere. And if you are a traveler, don't forget you are subject to the laws of the country you are visiting, so you will not escape ending up on The Network even if your own country has strict personal privacy controls.

Hyperloop transportation

Advances in transportation are probably going to be the most "visible" changes we see in the march into the 22nd Century. In Life Online, we still have airplanes, people get around in autonomous flying cars, and what I call "flytrains." My vision for flytrains is something like today's Maglev from Shanghai airport into the city. The train uses magnetic levitation and does not contact the ground.

But the Hyperloop is a transport method I have not written about. The Hyperloop as envisioned by Tesla CEO Elon Musk is a type of 3 to 10 person capsule that propels people below or above ground at superfast speeds. The latest speed record on Musk's test track is 200 mph. Hyperloop is expected to be more efficient than building high-speed trains or more highways.

But some have their doubts. In [this article on theverge.com](http://thisarticleontheverge.com), the writer compares the recently announced tests with Musk's original plan and concludes compromises have been made which may detract from the initial gains.

Hopefully the compromises are short-term limitations. I think the hyperloop idea is fantastic, especially if it comes through on its superspeed promises, and can get you from Los Angeles to San Francisco in under 30 minutes. Those kinds of travel speeds are game-changers the way cars replaced horses, and airplanes replaced ships. So we will have to keep watching the tests.

Robot security guards

Okay on a fun note, [a story on france24.com](#) caught my eye about a robot named Steve who was hired to be on crime patrol, but was 'fired' when he (it?) fell into a fountain. Steve is supposed to be an intelligent machine assisting law enforcement, but people thought he committed suicide or drowned. Steve denies all this on Twitter.

Steve is a walking surveillance station with a camera, sensors, microphones, thermal imaging and more. Be careful what you are talking about when sitting outside with your cup of coffee. Steve and his siblings (maybe colleagues, who knows) are supposed to be looking for things that should not be there. You can imagine where this could lead.

I don't mention robots very often in the Life Online books because I just assume they will be everywhere. But this story particularly resonated because of where Steve was deployed. If you know Washington, DC and you are a close reader of the books, you'll recognize the DC headquarters for United Nations Special Command is underground at a place that sounds a lot like Washington Harbor in the Georgetown district.

Well Steve was patrolling around that riverside property of upscale residences and office buildings when he fell into the fountain. You can bet Special Command would have replaced the entire fleet of robots if such an incident occurred, and hired more reliable sets of surveillance eyes to protect their super high tech fortress. I may have to think about adding a robot or two into future stories.

A.I. in China (and everywhere)

The replacement of humans with machines is usually driven by factors such as increases in productivity, efficiency and a lack of labor. The idea of China, "the world's workshop" making an early switch to non-human processes seems premature since the country appears to have an endless supply of humans to manage manufacturing work.

But that assumption may be fading fast, China is as progressive in its use of artificial intelligence as anywhere. This informative article in the South China Morning Post details some of the advances already being used: schools encourage parents to download "tutoring" apps to their phones to support school lessons; automatic traffic control adjusts to the actual cars on the road; chips in public surveillance cameras that analyze facial recognition to find missing children; and an AI judge analyzing legal documents, just like in my last book *The Probable Cause*.

All of these advances are based on the computer's ability to "learn" and put into practice responses a human would take much longer to process. In the Life Online books, this is the foundation of *The Network*. Of course the drama comes when we humans are not exactly sure what the machine has been learning.

Cyber threats in Smart Cities

Smart cities are the glittering steel, glass, and green urban centers going up all over the developing world. And while most people associate cyber security threats to the stealing of credit card numbers, these high-tech and inter-connected populated areas face an even more daunting challenge. The cities do not have viable security blankets covering their hoped for "smart" living functions.

The most dramatic fears come from ideas such as self-driving cars suddenly running amok, or automatic health care providers failing to continue patient care. But as this article in Arab News explains because these breaches have yet to happen, there is little incentive to implement expensive security features.

The challenge will come when the majority of the world's people are living in these types of cities and we have to backtrack to retroactively implement security. By then, the options to safely protect the population will likely be limited.

Travelers alert: E-surveillance over you

In prior newsletters, I have flagged an issue for travelers when countries adopt more stringent electronic surveillance measures than your home country. The verdict is your face, data and movements are caught on camera, processed into a file, and available whenever someone decides to look for you.

Travelers will have no recourse when they take their mobile phones and other devices into countries that impose surveillance regulations that compromise personal privacy. This article in the Africa Report about Nigeria's efforts to enhance e-surveillance is another example.

As a global traveler, I will be keeping track of these developments. I imagine in the future, before you travel you will not only check visa requirements for a foreign country but also their privacy and surveillance rules.

A.I. for Tracking Bullying

Imagine surveillance on your child that is all automated and auto-functioning. This [article from the South China Morning Post](#) talks about having A.I. analyze streaming video from children to see if they are being hurt. This would mean no more bullying, or at least the swift recourse of calling attention to the authorities as soon as the incident happens.

This type of functionality could be extended to anyone who fears personal danger, or just wants to have an extra set of eyes when alone. The Life Online stories do not go this far, surveillance tends to be from cameras, sensors and satellites. But this is an interesting possibility.

Hypersonic airplanes

Okay since the next Life Online book features supersonic airplane travel I am watching for all articles about this resurgent technology. This is technology we used to have with the Concorde, which was retired in 2003 before I had a chance to fly on it. So sad.

But now that supersonic is coming back I can't wait to try it. Is there a market for Hong Kong to Los Angeles in two hours? Why not? That's about the commute LA people have across the valley on a weekday rush hour. But [this article in the South China Morning Post](#) questions the viability of the endeavor. Same issue Concorde had, so we will have to keep following this to see who can make it happen.

Your own private satellite

If the average human has access to their own private satellite, what's to stop the creation of a private internet? That's part of the story in the first Life Online book, The Motion Clue. I set out the hypothesis that private space travel permitted individuals to get their own satellites into space and create their own "cloud" umbrella for both positive, and negative uses.

Well some kids in South Africa are definitely on the positive side of this future option. [This video story from AllAfrica.com](#) explains how the high school students have built their own satellites to collect data in outer space. Pretty cool stuff!! Maybe they are the group who will begin building the alternate Internet.

###Those were the headlines Case Lane World covered in 2017###

MORE INFORMATION FOR YOU

You can find the entire Life Online book series, including the FREE prequel novella, plus Books 1, 2 and 3 at your favorite ebook retailer.

Amazon [click here](#)

Apple products: [click here](#)

All formats (Smashwords): [click here](#)

COMING UP in 2018!!

New Release thriller series

For those who like their future thrillers with a little romance, my new series, Ravencross is available everywhere right now. Think 'Days of Our Lives meets Sim City.' The cast, crew and fans of a popular daytime drama become dangerously

involved with one another when playing an online cyber game based on the show. This series is contemporary but players interact with show characters using an advanced A.I. engine. Of course, the interactions lead to all sorts of unexpected trouble. The next 3 books will be released in 2018.

You'll find the books under my other pen name, E. Avalon.

Next Life Online book

The next century adventures of Kadie Laltanca and the UN Special Command team return soon. Come with us on a Supersonic airplane flight from London to Los Angeles that ends up in...Newfoundland. Who or what has captured The Network this time? Find out this holiday season. Details are coming.

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