

# THE TECHNOLOGY LANDSCAPE PREDICTIONS



**William Webb, Chief Technology Officer at Access Partnership, discusses his predictions for the technology landscape over the next 5 years.**

William has previously published a number of books discussing his predictions for technology. His predictions published in his book in the year 2000 have largely proven to be correct. He revisited these in 2017 here, and below is a summary of what we may expect in the coming years.



## THE CONNECTED WORLD

- IoT connectivity becoming more prevalent, primarily in business activities such as manufacturing and agriculture, resulting in improved productivity but little change in daily lives.
- AI capabilities in language translation and speech recognition will be excellent, 'Virtual assistant' functionality will be very effective. Online adverts will become highly targeted. But AI will not have transformed the world.
- Connectivity will appear to be perfect. There will be no major change as mobile and broadband networks continue to provide much greater speeds than we need, and the most prevalent not-spots such as on trains and in buildings will be mostly filled in, often with Wi-Fi.



## THE INDIVIDUAL

- For the individual the virtual assistant will be much more powerful, suggesting entertainment, filtering and auto-responding to messages, planning travel based in calendar appointments, providing personalised news feeds and more. Going forward, capability will be added to automate everyday tasks such as finding the best deals for renewal of insurance.
- However, the handset, and indeed other communications devices, will largely remain much the same, basically consisting of a touchscreen in an outer case.



## BUSINESS AND TRANSPORT

- Of the major employment sectors, agriculture will see some steady productivity improvements, vehicle maintenance will grow, retail will continue to decline at approximately its current rate, construction and hospitality will be largely unaffected, and manufacturing will see ever-growing penetration of robots on the production floor.
- There will be little change in the trajectory of transport. There will be better on-board connectivity – we are already well on the way to achieving this. Transport systems will see the extension of simplified ticketing and payments – again this is already in place, for example, on buses and underground trains in the UK.



## THE HOME AND OFFICE

There will be a continued trend of smart home development, much as we have seen in the previous ten years.

- Automated home Heating Ventilation and Air Conditioning (HVAC) systems will become ubiquitous during which time they will also gain the intelligence to adapt automatically to the diaries of the home occupants.
- Smart speakers such as Amazon's Echo, will be widely deployed within five years, but mostly used as a kitchen radio.
- Most innovation will occur at the device and the individual level rather than at the home appliance and household level.

The office will potentially see more digital evolution because it makes commercial sense. However, we may not notice as much change since the aim is not to add new functionality but to reduce maintenance costs. Specifically:

- More IoT will be deployed in lights, plants, waste bins, coffee machines and more.
- The use of Biometrics will be progressively used to open doors and enable IT systems.
- Robotics will have some impact, with robotic vacuum cleaners and other solutions to tasks that need to be performed daily.
- Computer hardware in the office will largely go away as BYOD (bring your own device) predominates. We are already seeing a huge shift towards this. Conference room IT systems will broadly disappear with simple TVs/projection units left for slideshows.



## LEISURE

- Each form of leisure will get its own specialised digital enhancement from the equipment used through to the supporting websites and apps. This will grow rapidly over the next decade.
- Digital entertainment such as games will continue their steady growth towards ever-greater realism and complexity, adding voice control and other AI-related features.
- New forms of digital entertainment, enabled by AR/VR and similar, will be trialled and adopted by a few, but will be struggling to find their first mass-market application.

## CONCLUSION

Broadly, the largest changes will be in the virtual assistant, at work, in various work environments and in our leisure activity.

These changes will be unfolding against a background of volatile social and political issues. It seems likely we are set for a turbulent time, whatever the outcome. This might dampen economic growth and investment certainty, making it even less likely that large-scale new digital infrastructures or projects will be funded.