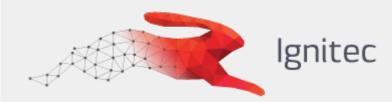
10 major technological advances in the last decade





We are an award winning product design consultancy, we design connected products and instruments for pioneering technology companies.

10 major technological advances in the last decade

Reading time 10 mins

Key Points

- As we prepare to turn ten years old, we take a look back at 10 major technological advances that changed our lives over the past decade
- The 2010s have been described as 'The Decade of Disruption': so much of what is now 'normal' barely existed ten years ago
- 5G, voice recognition, artificial intelligence, cloud computing, and the Internet of Things have changed how we communicate, manage our health, and consume content
- Electric vehicles, self-driving cars, and wearable technologies have significantly impacted public and personal safety and health
- What we produce, how we shop and pay for goods/services have been transformed by 3-D printing, augmented reality and blockchain technologies
- We're looking forward to the technological advancements that the next ten years will bring and our role in it!

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Ben Mazur

Managing Director

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As we prepare to turn 10 years old, it's incredible to realise that it's been a full decade since we started the company in 2013. How different the world of technology was back then: major technological advances have drastically changed our lives! Who would have imagined that we'd spend so much of our lives in online and virtual spaces? Or that <u>automation in sales, marketing, and finance</u> would change how so many companies do business?

Birthdays have a way of making us feel nostalgic, so let's take a look back at some of the major technological advances that have happened in the last 10 years.

- 1. Smartphones and the 5G revolution
- 2. Electric vehicles and self-driving cars
- 3. Wearable technology
- 4. Artificial Intelligence (AI)
- 5. Augmented reality (AR)
- 6. Voice recognition technology
- 7. The internet of things (IoT)
- 8. Cloud computing technology
- 9. 3D printing
- 10. Blockchain

Global technology company, <u>Nasdaq</u>, describes the past 10 years as '<u>The Decade of Disruption</u>' – but in a positive sense. <u>Disruptive technologies</u>, in this sense, refer to major technological advances or innovations that change the way things are done. A classic example is Netflix: they disrupted the television/movie industry by offering an inexpensive and accessible alternative to network TV/cinema with expertly curated and high-quality content.

1. Smartphones: Mobile phone technology gets smarter, faster, and more integrateable

Since 2013, smartphones have become faster, more powerful, and more capable. The new 5G networks allow us to do things we never thought possible with our phones, such as gaming and streaming videos at such high speeds that we can do it all in real time without buffering.

Additionally, smartphone cameras have become incredibly robust, with dual and triple-lens cameras being standard on most flagship models. This has unleashed creative and competitive potential on a whole new level as content creators (e.g. filmmakers, chefs, journalists) can film, edit, upload, send, and share content in real time and on the go.

Take, for example, how <u>smartphones have changed the face of news journalism</u>. Ten years ago, you could sit on a story for 24 hours and still be 'breaking news'. Nowadays, if you're not reporting news as it happens, your audience will move to a rival outlet which is. Bulky and expensive equipment makes many reporting locations dangerous, slow or difficult to access, but smartphones remove many obstacles and barriers to entry, allowing journalists to report events as they unfold.

2. Electric vehicles and self-driving cars: The automobile landscape becomes cleaner and safer

While self-driving cars are still a few years away from becoming commercially available, they are already being tested on public roads worldwide. Companies like Tesla, with their <u>autopilot self-driving</u> <u>software</u>, and Google's <u>Waymo</u> (way forward in mobility) are leading the charge for autonomous vehicles with their fleets of self-driving cars logging millions of miles every year as part of their testing process.

Electric vehicles (EVs) are also starting to compete for their market share with conventional internal combustion engine (ICE) vehicles. <u>Hey Car</u> (UK and Europe car dealership) describes the EV market is 'booming'. Sales increased by 40% in 2022, with <u>approximately 660,000 EVs in the UK alone</u>—a stark difference from a decade ago when there were barely any on the roads at all.

3. The wearables technology market is booming

We've seen an explosion in wearable technology over the past ten years, with what was seen, by some, as a <u>passing trend proving to have a meaningful and lasting impact</u>. Industries such as sports and fitness, education, healthcare, construction, and entertainment have contributed to the major technological advances and conveniences that wearables – which started off as simple pedometers – have contributed to our lives.

That the <u>global wearable technology market</u> is forecast to reach USD 118.16 billion by 2028 is telling. Everything we can wear, from watches and jewellery; to headbands, socks, and clothing in <u>e-textiles</u> <u>and smart fabrics</u>, has digital alternatives that transform and enhance everyday life – and product designers are bringing them to market!

4. Artificial Intelligence (AI) goes mainstream

Al powers many products these days, including image recognition software that can identify faces or objects in photos or videos; virtual assistants like Siri or Alexa that answer questions; and even robots that work autonomously alongside humans in factories or warehouses. As such, Al is quickly becoming a significant component of modern technology as companies look for ways to use it to make their products faster, more intelligent, and more efficient.

We recently looked at <u>AI and the opportunities for innovation</u> regarding healthcare. The capabilities to improve diagnostic and preventative medicine and offer precision treatments are just the beginning – and we're excited to see where it will go.

5. Augmented Reality (AR) is gaining visibility

AR is quickly gaining traction thanks to its ability to overlay digital images onto real-world environments using a phone or tablet camera as an augmented reality viewer. Popular apps like Pokémon Go use AR tech to create unique digital experiences that blend seamlessly into physical spaces and bring digital creatures into your living room. Other capabilities, such as <u>AR furniture</u> <u>shopping apps</u>, let you see what pieces will look like in your home before you buy them online or instore.

6. The supersonic rise of voice recognition technology

The idea of talking to a machine that answers back coherently only existed in the realm of science fiction a few decades ago. Since it was first introduced into consumer devices (e.g. smart speakers, Siri or Alexa) in 2013, voice recognition technology has come a long way.

Cutting-edge algorithms, deep learning language capabilities, and voice-based <u>virtual assistants have</u> <u>disrupted the consumer market</u>: they're changing the way we shop, communicate with customers or service providers, navigate maps, and are even <u>enhancing education for young children</u> at home.

7. Internet of Things (IoT) is the glue that binds technologies together

Few of the major technological advances we experience today would be as effective without IoT: a network of connected devices communicating with each other through wireless technologies such as Wi-Fi or Bluetooth Low Energy (BLE). This network allows users to control various appliances remotely via smartphones or tablets without being physically present or near those devices.

Because of its ability to enhance efficiency and improve capabilities, you'd be hard-pressed to find an industry where IoT isn't in play. For example:

- Healthcare services such as remote patient monitoring and diagnostics
- Wildfire detection and illegal forestry practices (e.g. unlawful logging, poaching)
- Household waste management
- Our ability to de-plastify oceans and curb overfishing
- Farming and precision agriculture to prevent insect population decline

8. Cloud computing digitised space!

Cloud computing has revolutionised data storage over the past decade. This technology allows companies and individuals to store large amounts of data securely on remote servers rather than on local hardware (e.g. an external hard drive), which would require a significant investment upfront for hardware setup costs plus ongoing maintenance fees.

If you can't imagine life before Whatsapp, Zoom, or Facetime, or you've noticed how much easier it's become to make various secure payments online, you have the cloud to thank!

9. 3-D printing makes pipe dreams a reality

3D printing has become increasingly popular over the last ten years. A rapidly growing market has allowed individuals and businesses access to affordable 3D printers that can easily create intricate designs from digital files. This technology has opened up new possibilities for product prototyping, enabling creators to manufacture small batches of items quickly and cost-effectively.

If disruption is the name of the technological advancement game, few are playing it better than 3-D printing. Some of the most <u>innovative and effective uses</u> include:

- Orthopaedic devices, custom implants and prosthetics
- Human organs
- Spare parts for machinery, vehicles, and appliances
- Education and training
- Prototypes for functional testing, such as the <u>forensic fingerprint autorotator we</u> <u>developed and built</u>

10. Blockchain technology is permanently evolving

Blockchain technology is, in essence, a digital ledger and is changing how transactions are done online. It provides secure and transparent methods for transferring data between two parties (i.e. peer-to-peer) without any need for intermediaries such as banks and credit card providers.

This revolutionary form of transaction processing could completely change how online payments are handled going forward. While Bitcoin is probably the most common application of blockchain technology that most of us are familiar with, the <u>innovative applications of blockchain technology</u> go beyond cryptocurrency. Anyone wishing to add transparency, authenticity, and tracing (e.g. where diamonds or food originated from) can use this technology to meet those objectives, making this an exciting space to watch.

Cheers to another decade of major technological advances!

In just 10 short years, we've seen incredible technological advancements that have drastically changed our lives. Undoubtedly, this decade will go down in history books as one of the most

disruptive technological eras of our time. We were hard-pressed to limit our selection to 10 – but you're welcome to add your favourites in the comments below!

While we're excited to see what the next 10 years will bring, we're equally committed to continuing with what we do best: researching and developing technologies that make life better, healthier, and more manageable.

Cheers to another decade of innovation, collaboration, and participation!

Comments

We love to talk about new ideas

Do you have an idea? Book a consultation with an expert - it's free, it's confidential and there are no obligations.

+44(0)117 329 3420 info@ignitec.com

Ignitec Technology Centre 1 The Powerhouse Great Park Road Bradley Stoke Bristol BS32 4RU

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