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NZQA
NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

Level 3 Social Studies 2020

91598 Demonstrate understanding of how ideologies shape society

9.30 a.m. Monday 30 November 2020
Credits: Four

RESOURCE BOOKLET

Refer to this booklet to answer the questions for Social Studies 91598.

Check that this booklet has pages 2–11 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

THE INFLUENCE OF TECHNOLOGY ON SOCIETY

Examples of ideologies

Authoritarianism	The idea of enforcement or advocacy of strict obedience to authority at the expense of personal freedom.
Capitalism	The idea of an economic system in which private individuals or businesses own capital goods. The production of goods and services is based on supply and demand in the general market (known as a market economy), rather than through central planning (known as a planned economy or command economy).
Consumerism	The idea of an increasing consumption of goods being economically desirable – a preoccupation with, and an inclination towards, the buying of consumer goods.
Transhumanism	The idea of advocacy for the transformation of the human condition by developing and making widely available sophisticated technologies to greatly enhance human intellect and physiology.

Social processes

Social processes are the means by which culture and social organisation change, or are preserved. For example, social processes are evident in the following:

- legislative and political reform
- changes in cultural and behavioural norms
- shifts in business practice
- evolving community practices
- demographic change.

INTRODUCTION

Technology affects the way individuals communicate, learn, and think. It helps society, and determines how people interact with each other on a daily basis. Technology plays an important role in society today. It has positive and negative effects on the world, and it impacts daily lives. We are living in an era where technological advances are common.

Without technological advancements, our way of life would not be as complex. Technological influences shape the way humans act today.

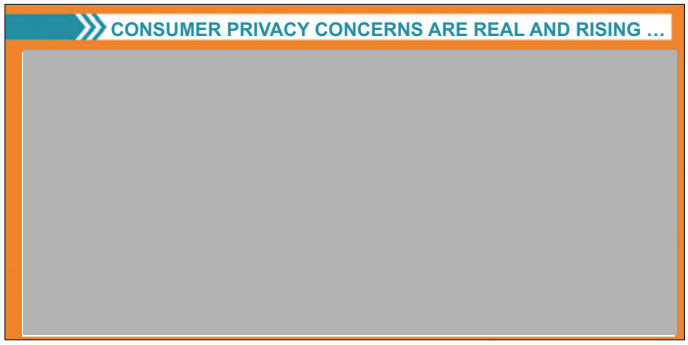
RESOURCE A: Technology and capitalism

A senior research fellow at Edith Cowan University, Donell Holloway, recently purchased a bedroom bundle (mattress, bed base, pillows and sheets) from a well-known Australian startup for her son, who has flown the nest. Now she's swamped with Google and Facebook ads for beds and bedding. The week before it was puffer jackets.

These companies collect and scrutinise our online behaviours (likes, dislikes, searches, social networks, purchases) to produce data that can be further used for commercial purposes. And it's often done without us understanding the full extent of the surveillance.

The big data economy

The late 20th century saw our economy move away from mass production lines in factories to become progressively more reliant on knowledge. Surveillance capitalism, on the other hand, uses a business model based on the digital world, and is reliant on "big data" to make money.



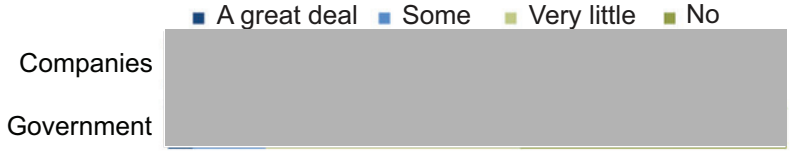
Smaller companies are also cashing in on this. In 2018, HealthEngine, a medical appointment booking app, was found to be sharing clients' personal information with Perth lawyers particularly interested in workplace injuries or vehicle accidents.

Cambridge Analytica was a wake-up call

The 2018 Cambridge Analytica revelations highlighted the extent to which internet companies survey online activity. Cambridge Analytica's actions broke Facebook's own rules by collecting and onselling data under the pretence of academic research. Their dealings may have violated election law in the United States.

The majority of Americans say they have little to no control over the data that companies or the government collect about them

% of US adults who say they have __ control over data collected about them by …



[redacted]

In this sense, Cambridge Analytica was a small player in the big data economy.

Where surveillance capitalism came from

Surveillance capitalism practices were first consolidated at Google. They used data extraction procedures and packaged users' data to create new markets for this commodity.

[redacted]

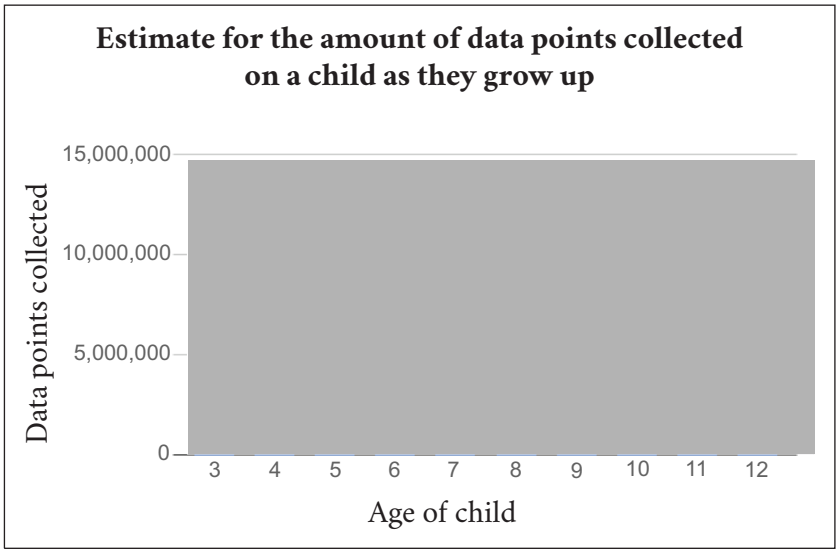
Google, for instance, processes an average of 40,000 searches per second, 3.5 billion per day, and 1.2 trillion per year. Its parent company, Alphabet, was recently valued at US$822 billion.

Sources of data are increasing

Newly available data sources have dramatically increased the quantity and variety of data available. Our expanding sensor-based society now includes wearables, smart home devices, drones, connected toys, and automated travel. Sensors such as microphones, cameras, accelerometers, and temperature and motion sensors add to an ever-expanding list of our activities (data) that can be collected and commodified.

[redacted]

Connected toys are another rapidly growing market niche associated with surveillance capitalism. There are educational benefits from children playing with these toys, as well as the possibility of drawing children away from screens towards more physical, interactive, and social play. But major data breaches around these toys have already occurred, marking children's data as another valuable commodity.



RESOURCE B: Microchips and people

Journalist Olivia Solon after getting microchipped at a "chip party" at Three Square Market in 2017, after the company became the first in the US to offer these implants to all of its employees and a handful of journalists.

As implants grow more common, experts fear surveillance and exploitation of workers. Advocates say concerns are irrational however, and on 1 August 2017, workers at Three Square Market, a Wisconsin-based company specialising in vending machines, lined up in the office cafeteria to be implanted with microchips. One after the other, they held out a hand to a local tattoo artist who pushed a rice-grain sized implant into the flesh between the thumb and forefinger, with employees who opted into the procedure receiving complimentary T-shirts that read "I Got Chipped!"

Jowan Österlund holds a small microchip implant.

Jowan Österlund, a Swedish tattooist and body piercing specialist whose company, Biohax, provided Three Square Market with the microchips, watched with interest. For Österlund, microchip implants were not radical or even novel. He had lived with one for years and Biohax had implanted thousands of other young, tech-savvy Swedes. For this community, the chip signified a seamless integration of biology and technology. They used the implants to gain access to their co-working spaces, pay for gym memberships, and even ride the train (the most popular application is as a replacement for a contactless smart card on the Swedish railway system). Österlund's Biohax is aiming to simplify identity and access in the digital world, offering a replacement to the seemingly endless collection of passwords, keys, tickets, and cards that clutter our lives. "The national railway is already compatible with my chips and as a country we are planning to be totally cashless by 2023," he said.

Thousands of people in Sweden are having microchips implanted into their skin to carry out everyday activities and replace credit cards and cash.

Österlund believes the technology is better than biometrics because the chip, unlike your fingerprint or your face, can always be replaced or reconfigured. The microchip implants are essentially cylindrical bar codes that, when scanned, transmit a unique signal through a layer of skin. The implant is entirely passive, which means it has no power source and only becomes active when it is within a few centimetres of a reader, like a contactless credit or transit card. Mostly, they have been used to organise products or warehouses or identify livestock and stray pets, although Kevin Warwick, a professor of cybernetics at Reading University, experimented in 1998 when he had a chip implanted in his hand. This demonstrated that it was possible, and was a way of exploring the transhumanist idea that fusing technology with the body is the next step in humanity's evolution.

Globally, though, the closest microchip implants have come to anything like mainstream adoption is in Sweden, and executive director at Harvard's Berkman Klein Center for Internet and Society Urs Gasser believes scaling up beyond the Swedish tech-hub environment to a broader market will be more legally and ethically tenuous [fragile] than Österlund might expect. "This experiment has so far happened in a wealthy country, among very digitally savvy people," he said. "And while having a chip may play out nicely for well-educated people in Sweden who are part of a digital hub, I question how this will play out for, say, a worker in a warehouse."

Indeed, Gasser believes that many people reacted negatively to Three Square Market's highly publicised chipping event because it symbolised power imbalances in the workplace, conjuring dystopian [horrible] images of an authoritarian employer dehumanising and controlling workers. "Seeing employees get implanted at the workplace made people question what it means to be an employee," he said. "Are you a person being paid for your work, or are you the property of the company you work for?"

Resource B continues on the following page ➤

Ifeoma Ajunwa, professor of labour and employment law at Cornell University, adds that it is crucial to consider the implications of microchipping technology in the context of increasing worker surveillance. In a 2016 paper, 'Limitless Worker Surveillance', Ajunwa and her co-authors argue that new data collection methods – tracking internet history, DNA testing, collection of health data as part of workplace wellness programmes – not only provide employers a more intimate data profile of their employees at the workplace but bleed into their private and internal lives.

Workers are increasingly monitored, tracked, and surveilled.

But according to Ajunwa, because labour laws in the US often skew in favour of the employer, workers can still be subject to coercion when it comes to surveillance tech. In 2015, for example, a woman was fired after she deleted an employee-tracking app that recorded her movements, even when she was not at work. In another recent case, an employer was found to have demanded employees provide DNA samples for genetic testing after human faeces was found in their workplace. Ajunwa says that in the absence of clear labour regulations that prevent workplace pressure to submit to surveillance, "employees might feel pressured to say yes to microchips even if they have reservations".

RESOURCE C: Closed circuit television (CCTV)

Commuters walk by surveillance cameras between two subway stations in Chongqing.

A policeman in the Chinese city of Chongqing was on duty during the summer of 2019 when he received an alert from a facial-recognition system at a local square. There was a high probability a man caught on camera was a suspect in a 2002 murder case, the system told him.

But critics warn such widespread surveillance violates internationally guaranteed rights to privacy. To meet international privacy standards protected in the International Covenant on Civil and Political Rights, both collection and use of biometric data should be limited to people found to be involved in wrongdoing, and not broad populations who have no specific link to crime. Individuals should have the right to know what biometric data the government holds on them. Automated facial-recognition systems violate those standards.

Resource C continues on the following page ➤

In May 2019, San Francisco became the first major US city to enforce a ban. Supervisor Aaron Peskin, who championed the legislation, said: "This is really about saying: 'We can have security without being a security state. We can have good policing without being a police state.' And part of that is building trust with the community based on good community information, not on Big Brother technology."

However, others are concerned about the number of surveillance cameras and data collection systems included in "smart city" initiatives. "City authorities and the people they serve need to be far more sceptical about whether actually having more data is a panacea [solution] for various issues, as well as what additional risks it creates," says Edin Omanovic, advocacy director at Privacy International.

"The obvious risk is that this only really benefits city authorities and the big tech companies who sell the solutions, rather than the actual people they are purporting to help."

Omanovic argues that live facial recognition fundamentally threatens free societies. "It might start with the monitoring of just a few thousand people but it definitely won't end there," says Omanovic. "Authorities need to permanently ban its roll out now before it's too late."

A CCTV sign in King's Cross, London.

Acknowledgements
Material from the following sources has been adapted for use in this examination (accessed 12 May 2020).

Ideologies

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Capitalism: https://www.investopedia.com/terms/c/capitalism.asp

Consumerism: https://www.merriam-webster.com/dictionary/consumerism

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Introduction

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Resource A

Text and images: http://theconversation.com/explainer-what-is-surveillance-capitalism-and-how-does-it-shape-our-economy-119158, https://www.scmagazine.com/home/security-news/u-s-online-users-more-concerned-with-privacy-than income-loss/, https://img2.helpnetsecurity.com/posts2019/Americans-no-control-data-collection.jpg, and https://www.superawesome.com/2017/12/13/how-much-data-do-adtech-companies-collect-on-kids-before-they-turn-13/.

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Resource C

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