

# Under the Hood.

## The technology carrying marketing into the future

### *Case studies illustrating the importance of understanding Digital Marketing*

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# We live online .....

- In 2019 it is difficult not to have an online presence.
- We use web-connected devices for work and leisure, post on social media etc.
- Our online behaviour leaves a “digital data trail”
- This data can be analysed to deduce lots of interesting things about us:
  - what we like to do, eat, our opinions, preferences, where we go etc.
- Even if we have a minimal online presence, by simply carrying around mobile devices we can leave a fairly detailed data trail that can reveal much about us.





# Marketing and Advertising have gone **Digital**

Although “traditional” (above the line) marketing channels still exist (*TVCs, radio ads, print ads, billboards, direct mail*):

- marketing is increasingly mediated via online channels – for good reason:

- Less expensive
- Vastly greater reach
- Potentially very quick to implement
- Can interact with customers
- Can measure effectiveness
- Customer journeys tracked
- Can be automated
- Can be **targeted** & **personalised**

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week!



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# Traditional advertising models



- “Traditional” advertising uses a mass-media model
  - *eg TVCs viewed by millions but only relevant to a percentage of these viewers*
- Some targeting of traditional ads is possible based on the broad audience for the content it is displayed with
  - *eg beer ads during cricket, cosmetics ads in Marie Claire etc.*



# Analytics and targeted advertising

- Analytics is basically the process of obtaining meaning from and making use of our digital data trails.
- Analytics data can reveal lots of interesting things about us:
  - *what we like to do, eat, our opinions, preferences where we go.*
- Using analytics, ads or other communication can be tailored to individuals based on what they like to do, eat, their opinions, preferences, where they go etc – or in other words – on their characteristics and behaviours.



# Case study – (politics) Cambridge Analytica

- Political consultancy (now defunct) offering services to help candidates and parties with election campaigns.
- Delivered targeted advertising to individuals – claiming that this “microtargeting” provided an effective way to influence behaviour.





**Cambridge Analytica** The Cambridge Analytica Files

# Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach

**Whistleblower describes how firm linked to former Trump adviser Steve Bannon compiled user data to target American voters**

- [‘I made Steve Bannon’s psychological warfare tool’: meet the data war whistleblower](#)
- [Mark Zuckerberg breaks silence on Cambridge Analytica](#)





# Cambridge Analytica / Facebook Scandal (2016)

- 270,000 people took a personality quiz delivered by the Facebook app **thisismydigitallife** created by Cambridge University researcher Aleksandr Kogan
- Kogan (Russian-American) was connected to Cambridge Analytica (the name came from his status as a Cambridge researcher).
- Users “consented” to the app accessing their Facebook profiles – and importantly profiles of their friends.
- this multiplying effect meant they got access to at least 50 million profiles – of which some 30 million were cross-matched with other data to identify the individuals.
- Data was shared with C.A. under false pretences (violating Facebook agreement) – app creator claimed data was for “research” purposes.





# How did Cambridge Analytica use the data?

Analysed what FB users “like”  
– eg: (Stanford research):

*On the basis of an average of 68 Facebook 'likes' by a user, it was possible to predict:*

- skin colour (with 95% accuracy)
- sexual orientation (88% accuracy)
- Democratic/Republican party affiliation (85%)
- also claimed could determine things like intelligence, religion, alcohol, cigarette, drug use etc.



# Psychographic Profiling



- Psychographics is the study of people's attitudes and interests, often used in conjunction with demographic data to build more complete profiles of target markets and audiences.
- Profile habits, hobbies, spending patterns, values etc (motivations).
- Demographics describe "who" psychographics explain "why"



# O. C. E. A. N. “Big Five” personality traits

A taxonomy for personality traits based on common language descriptors typically derived from survey data.

- Openness to experience
- Conscientiousness
- Extraversion
- Agreeableness
- Neuroticism

# Psychographic Profiling via Twitter

Adobe  
Symposium  
Sydney 2016  
*"Sneaks" Session*



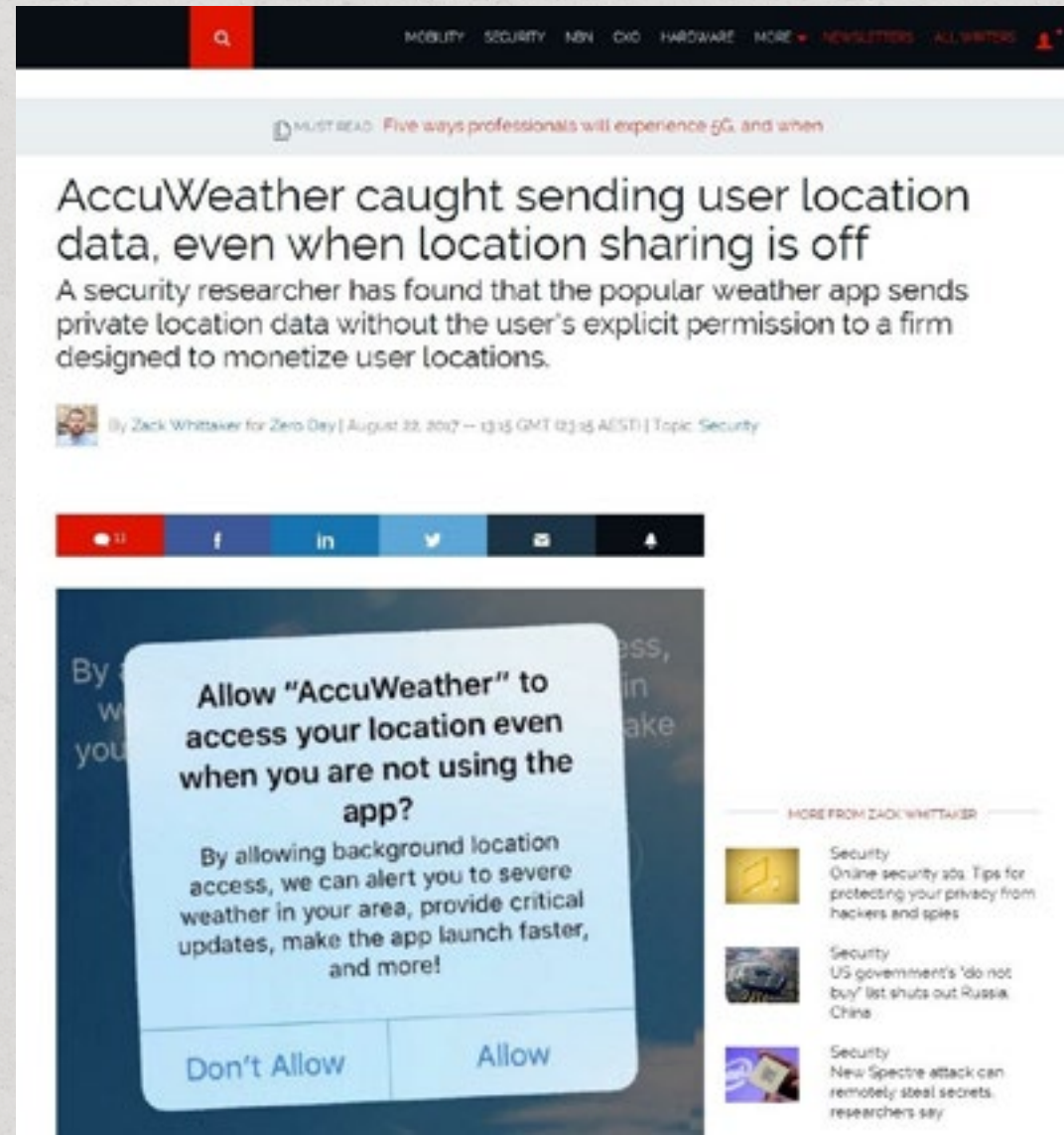


# Psychographic Profiling in Marketing

Adobe  
Symposium  
Sydney 2016  
*"Sneaks" Session*



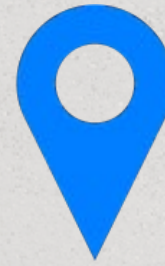
# More ways to track us... Geolocation



<https://www.zdnet.com/article/accuweather-caught-sending-geo-location-data-even-when-denied-access/>



# Location Data

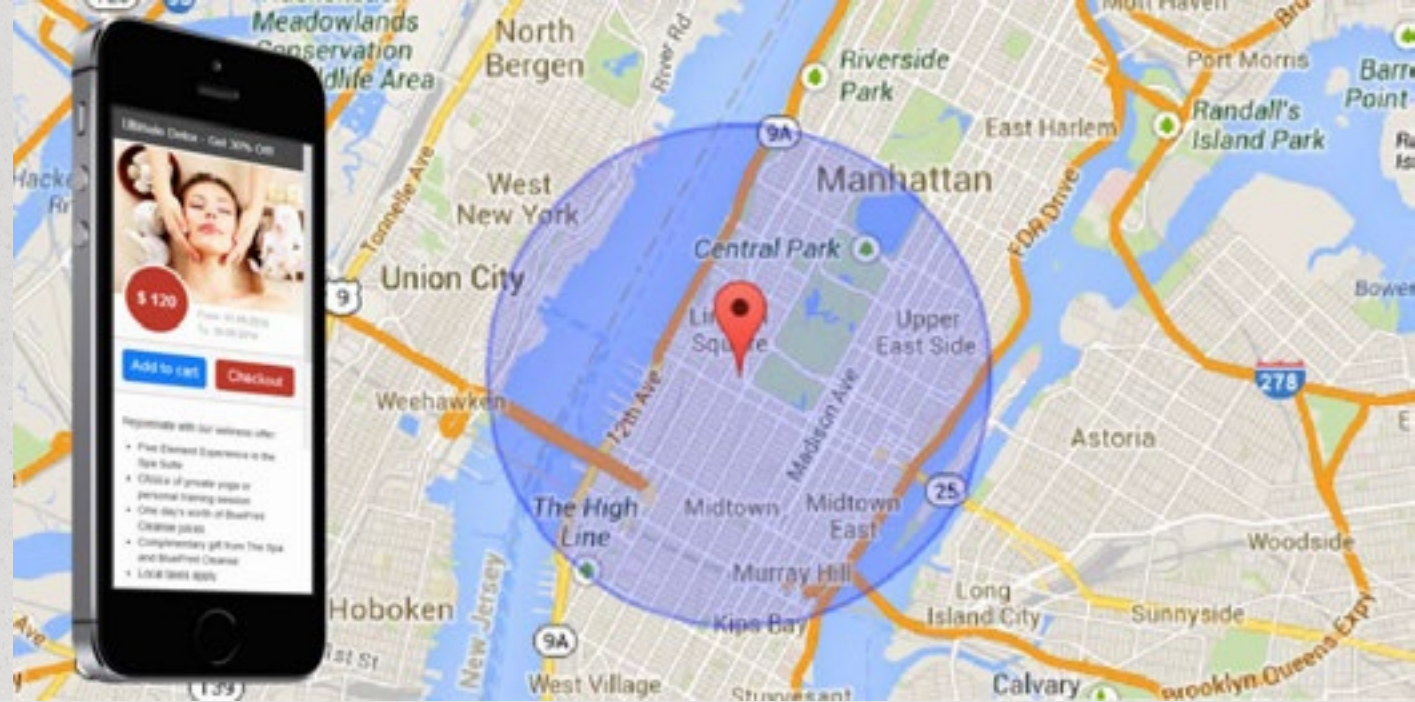


- Many apps on mobile devices capture and record the device's location.
- Although users are required to consent to this happening, it is usually bundled up with consenting to many other things (not possible to specifically turn off) – so if you want to use the app it will end up with your location data (unless location services disabled on the device)
- Location data is fairly useful on its own, but becomes extremely powerful to marketers when combined with other information (eg psychographics)



# Uses of location data:

## Geofencing



Define a region around a location. When a mobile device enters the region some specific action can be triggered, for example:

- alerts (push notifications eg VicEmergency app – user set watch zones)
- show ads specific to the location (and possibly personalised to user)
- can drive customers to bricks-and-mortar outlets
  - eg special offers to customers who are close to a store



# Geofencing case study:

## *Digital Ambulance Chasers*



## Law Firms Send Ads To Patients' Phones Inside ERs

- New York Digital Agency **TellAllDigital** offering service to personal injury lawyers in Philadelphia area
- Ads for services appear on phones of users while sitting in hospital ER waiting areas



## Geofencing case study (2):

### *Recruitment based on where people live and work*

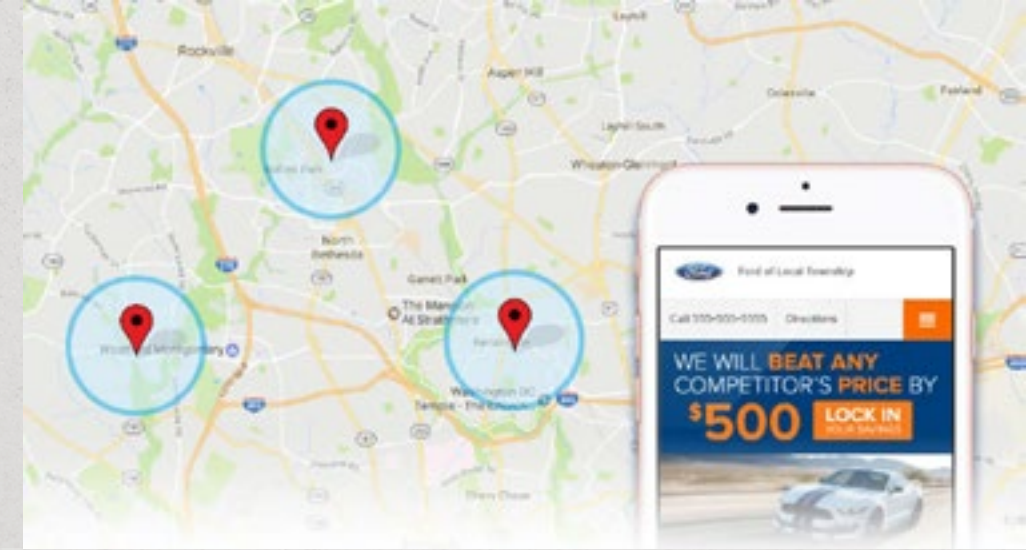


- Hard-to-recruit neonatal nurse practitioners targeted by Johns Hopkins Children's Hospital (Florida) – already have list of potential hires but struggle to attract them. By setting up geofences around where they live/work, suitable candidates from list are sent ads when (and after) they enter a geofenced zone. Result – big increase in responses.
- Salt Lake City trucking firm C.R. England use geofences around truck stops to get drivers to switch employers. Simple incentives like slight increase in pay / extra rest days enough to make a difference in competitive environment. 75% applications via mobile so ideal.



# Uses of location data:

## Geoconquesting *AKA mobile conquering, competitive geofencing*



Define a region around the location of **competitors'** business.

- When a mobile device of a known customer enters the competitors location offer them a product from your business at a significant discount.
- Rationale - consumer who is (or has been) shopping for something at a physical location demonstrates they are likely to be in the market for that particular product — so a competitor that can serve a compelling ad for the product has a decent chance at attracting business.



# Geoconquesting case study:

*Hospital with short ER wait times  
targeting patients stuck in  
competitors ER*



- Scenario: patient sitting in a hospital's emergency department with a knee injury, waiting for hours to be seen, killing time on smartphone.
- Patient is sent an ad about a nearby (rival) facility's short ER wait times, excellent facilities and level of care.



## Geoconquesting case study (2):

*Dunkin' Donuts gains market share from its top competitor, Starbucks.*



- Strategy – combine geo-conquesting with *behavioural analytics* to target Starbucks customers and convert them with a “switch mechanism” in the form of a mobile coupon campaign.
- Campaign took a big bite out of Starbucks’ local traffic.
- Effective with customers preferring the taste of Dunkin’ Donuts, but frequented Starbucks because it was closer to their daily commute.
- A simple incentive (dollar off a cup of coffee) was all it took to win back their loyalty and make the slightly longer commute worth it.



# Geoconquesting case study (3):

## *Shoe sales - Guatemalan based department store Meat Pack*



- Targeted customers shopping in nearby branded shoe stores (eg Nike, Adidas) with big discounts on the same branded trainers in their store.
- Sent push notifications to each shopper in the vicinity of competitors.
- Offer had a countdown timer on it to encourage the shopper to make a quick decision and leave the branded store for the Meat Pack department store instead



# Advantages of using location data for advertisers

- Ads or messages can be delivered to consumers when they are close to a business or relevant location.
- For ads, the closer a customer is to a business, the more likely they are to click on the ad.



# It's easy to target people with messages based on location



- Both Google Ads and Facebook enable to use geo-targeted advertising that can be used for geofencing or geo-conquesting.
- In Google Adwords, this is set up with *Radius Targeting* (location settings).
- Facebook enables this via the *Drop Pin* function (audience settings).





# Study Digital Marketing at Swinburne

Undergraduate major in Digital Advertising Technology



# Digital Advertising Technology

- Major course of study available in most degrees at Swinburne.  
("Home" degrees: Bachelor of Media and Communications / Bachelor of Arts)
- Unique to Swinburne – delivered in partnership with **Adobe**.
- Focus on the technology that enables **digital marketing** and digital advertising.



# Digital Marketing / Advertising

- Not just about selling online
- ***Targeted, personalised communication*** has applications in:
  - health promotion
  - education
  - provision of government services
  - not-for-profit sector

How is the **Digital Advertising Technology** major different from studies in “traditional” marketing or advertising?

## Digital Advertising Technology:

- focuses on the **technology** that enables **digital marketing** and **digital advertising**
- is **not** a business major. The concepts and strategies of marketing and advertising are covered from a business perspective in the *Marketing* and *Advertising* majors
- represents an excellent **complement** to studies in *marketing* and/or *advertising* (as well as many more disciplines – see handout)

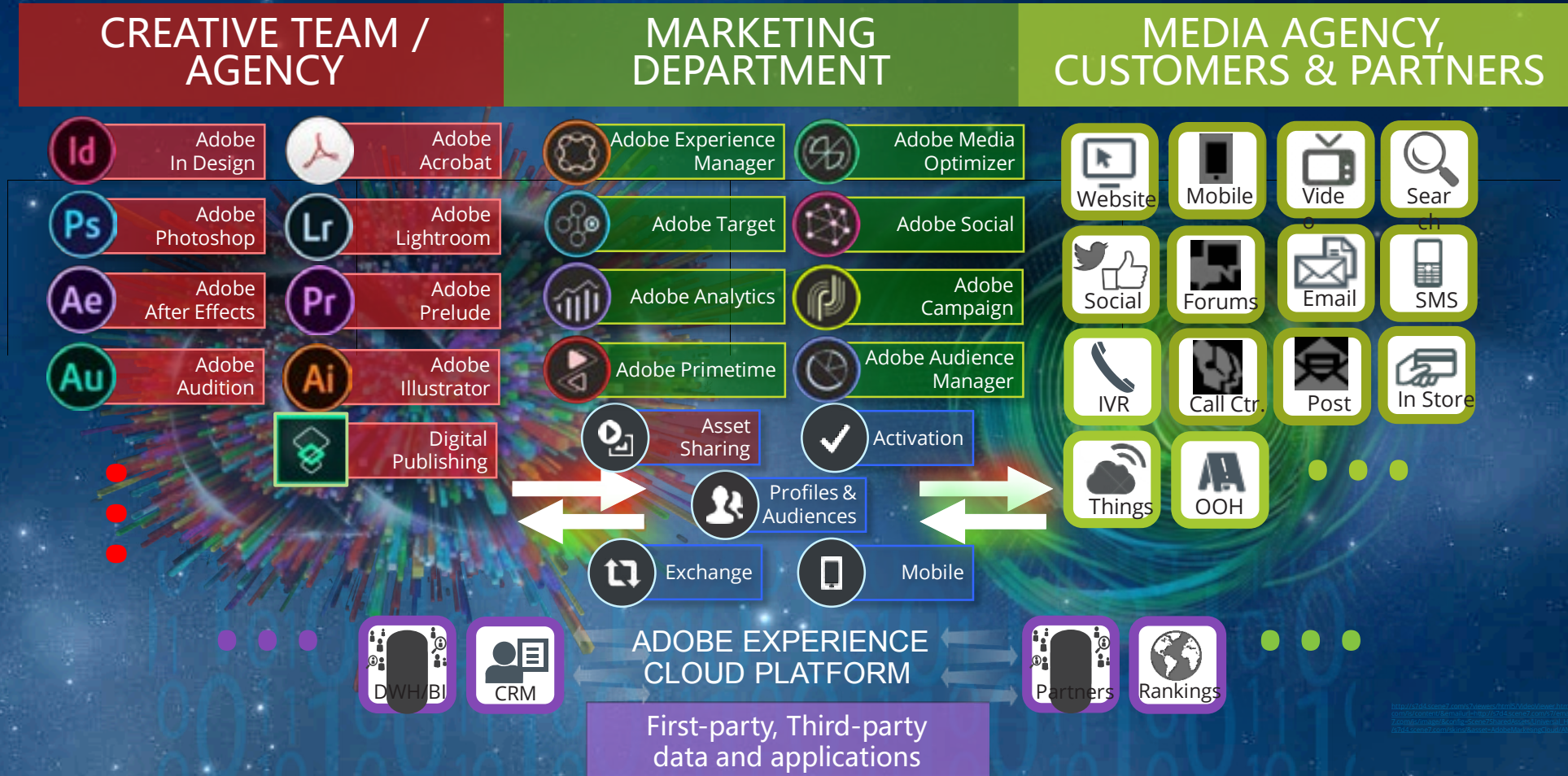


# Swinburne and Adobe

- Swinburne has a unique relationship with Adobe.
- License to integrate curriculum from *Adobe Digital Learning Services* into undergraduate and postgraduate curriculum.
- Based around training material for the **Adobe Experience Cloud**.

# Adobe Experience Cloud Platform:

Horizontal integration across the whole marketing ecosystem





## Bachelor of Media and Communication majoring in Digital Advertising Technology

March entry sequence

D.A.T

M+C Core

Comajor /  
elective

1 Content Creation and Management

2 Digital Data Listening, Optimisation and Analysis

3 Campaign Management, Media Buying & Ad Tech


Electives can be taken from any discipline areas, as either *single units*, *minors* (4 unit blocks) or *majors* (8 unit blocks).

**Recommended minors/majors:** *Marketing, Advertising, Social Media, Animation, Screen Production, Digital Media Design, IT, Business Analytics, Health Comms, Psych, Data Analytics, Entrepreneurship & Innovation, Design, Film and Television, Games.*

BMC with a major in **Digital Advertising Technology** and a co-major in **Marketing**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Marketing Major  
(8 units)

Advertising Minor  
(4 units)

Combine **Digital Advertising Technology** with a major in **Marketing** for the ultimate advertising / marketing combination - a thorough grounding in marketing theory and strategy along with the practical focus on digital. Add a *minor in Advertising* to round off your expertise.

BBus with a major in **Marketing** and a co-major in **Digital Advertising Technology**

Bachelor of Business  
Core Units (8 units)

Marketing Major  
(8 units)

Digital Advertising Technology Major  
(8 units)

For a *business degree* with a strong focus on Marketing, choose **Marketing** as your major along with **Digital Advertising Technology** as a co-major. This will produce BBus graduates with an unrivalled coverage of marketing principles and digital practice.



BMC with a major in **Digital Advertising Technology** and a second major in **Advertising**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Advertising Major  
(8 units)

Psychology Minor  
(4 units)

Majoring in both **Digital Advertising Technology** and **Advertising** will provide thorough coverage of advertising - theory, practice, strategy and cutting-edge advertising technologies. Add a *minor in Psychology* to develop a good understanding of the motivations and needs of consumers.

BMC with a major in **Digital Advertising Technology** and a second major in **Social Media**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Social Media Major  
(8 units)

Editing Minor  
(4 units)

Combining **Digital Advertising Technology** with **Social Media** covers off many of the in-demand skills that employers are seeking in a digital marketing professional. Add a *minor in Editing* to learn how to hone social media messages for maximum impact.

BMC with a major in **Digital Advertising Technology** and co-major in **Health Communication**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Health Promotion Major  
(8 units)

Data Analytics Minor  
(4 units)

Combining **Digital Advertising Technology** with **Health Promotion** empowers graduates with the ability to accurately target health campaigns to the appropriate audience in a timely manner, saving lives and the health budget. Add minor in **Data Analytics** to maximise personalisation.

BMC with a major in **Digital Advertising Technology** and co-major in **Screen Production**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Screen Production Major  
(8 units)

Animation Minor  
(4 units)

Combine **Digital Advertising Technology** with **Screen Production** to focus on the production of compelling visual content while understanding how to get that content to a receptive audience. Includes VR/AR content. Throw in an **Animation** minor to complete your skill set.



BMC with a major in **Digital Advertising Technology** and co-major in **Data Analytics**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Data Analytics Major  
(8 units)

Web Development  
Minor (4 units)

Combine **Digital Advertising Technology** with **Data Analytics** to help meet the growing demand for data science professionals working in digital marketing. Add a *minor in Web Development* to increase your chances of being snapped up by large corporations desperate to recruit staff with these tech skills.

BMC with a major in **Digital Advertising Technology** and co-major in **Computer Science**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Computer Science Major  
(8 units)

Data Analytics Minor  
(4 units)

The combination of **Digital Advertising Technology** with **Computer Science** will produce graduates with the skills to work as a highly-paid developers responsible for setting up and administering sophisticated digital technology solutions for large corporations. *Minor in Data Analytics* to be even more in-demand.

BMC with a major in **Digital Advertising Technology** & co-major in **Entrepreneurship+Innovation**

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Entrepreneurship and Innovation Major  
(8 units)

Film and Television  
Production Minor  
(4 units)

Combining **Digital Advertising Technology** with **Entrepreneurship and Innovation** will provide graduates with the skillset needed to find the audience likely to be interested in their start-up enterprises and/or services. Add *FTV Production minor* to produce compelling pitch videos for the crowd-sourcing

BMC with a major in **Digital Advertising Technology** and 3 minors (many possibilities)

Bachelor of Media  
& Communication  
Core Units (4 units)

Digital Advertising Technology Major  
(8 units)

Social Media Minor  
(4 units)

Data Analytics Minor  
(4 units)

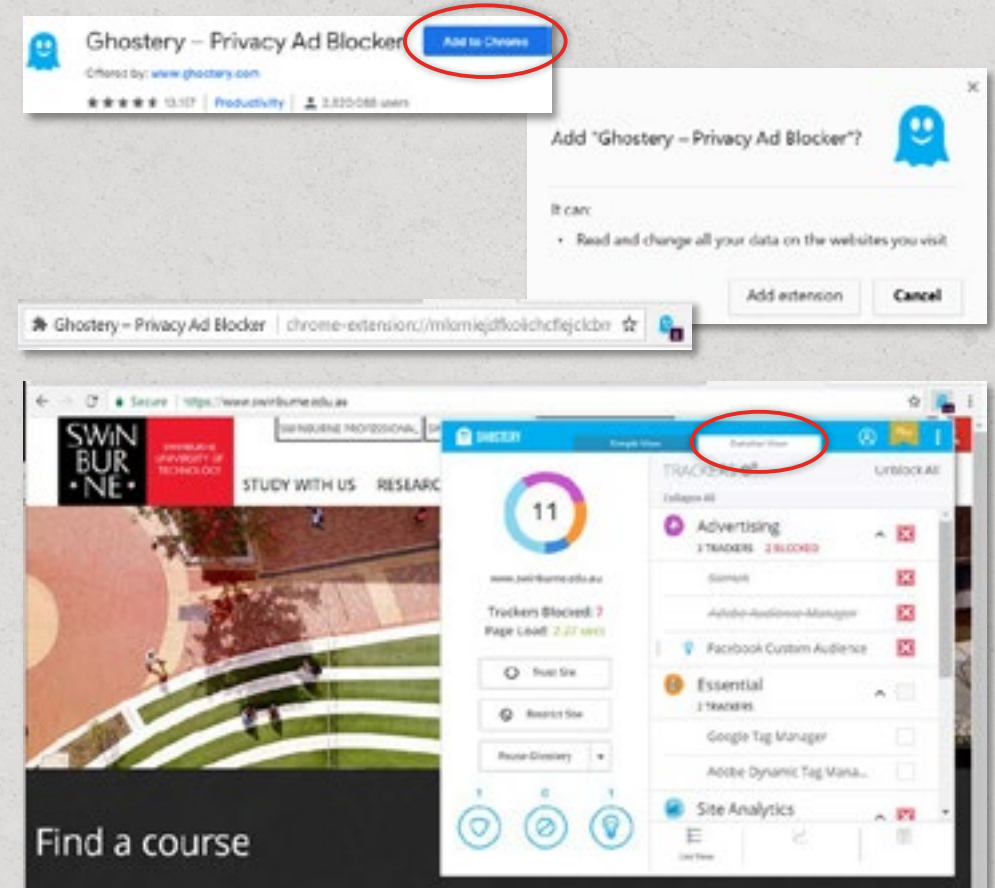
Web Development  
Minor (4 units)

If you prefer breadth in your studies, combine **Digital Advertising Technology** with up to 3 minors - or even choose individual elective units. Many, many potentially useful combinations - this is just one example.



# Activity – Tracking the Trackers (15min)

- **Swinburne Login**
  - **User name:** adocorp
  - **Password:** Swinav2018
- **Ghostery** Chrome extension
  - Open in Google Chrome: <http://goo.gl/j79VZI>
  - Follow the install process to add Ghostery to your browser.
  - Travel to <https://swin.edu.au> or a site of your choice.
  - Tap on the Ghostery logo on your browser's address bar.
  - Toggle the **Detailed View** tab in the Ghostery panel for a detailed breakdown of all tracking scripts attached to a web page.
  - Tap on individual trackers for more information on their use and purpose.





# Thank you

## Questions?



PHOTO ILLUSTRATION: GETTY IMAGES / SHUTTERSTOCK / CNNMONEY