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Paper 2

For examination from 2024

SPECIMEN INSERT

1 hour 30 minutes

READ THESE INSTRUCTIONS FIRST

This Insert contains the passages for comprehension.

This document consists of **4** printed pages.



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Passage 1. *An author explores the possible benefits of collecting personal data.*

- 1 A single ant or bee isn't smart, but their colonies are. The study of swarm intelligence is providing insights that can help us create complex management systems, from the routing of delivery vehicles to the controlling of groups of robots or containing the spread of epidemics.
- 2 Swarm intelligence is defined as the collective behaviour of decentralised, self-organised systems. The agents in these systems interact randomly and their interactions contribute to the emergence of 'intelligent' communal behaviour. A colony can solve problems that are far beyond the abilities of a single ant. These include problems of survival such as defending the colony or discovering the best route to a food source. There is no single decision-maker: each ant adjusts its behaviour based on countless interactions with others in its community. 5
- 3 Keen to harness the power of swarm intelligence, academics have been investigating possible human applications of this natural phenomenon. After many studies, they have concluded that people are smart but groups are even smarter. Each one of us has a massive internalised database of contextual information about our world, having deep instincts and intuition about everything from patient health to economic conditions. However, human groups often have a difficult time reaching optimised decisions, getting bogged down when individuals get entrenched in their positions. 'Human swarming' has been shown to enable groups to reach optimised decisions, prioritisations, and forecasts in significantly less time than traditional methods. Just like biological swarms, groups of people outperform their individual members and achieve optimal outcomes. 10 15
- 4 Using the power of connection for the various purposes of survival, as demonstrated through bee pheromones or whales singing to one another, is not just something limited to the animal kingdom. Anyone who has an online presence or a mobile phone connected to the internet is continuously receiving information and broadcasting their personal data. This data might be their current physical location or choices of goods and services ordered and consumed. Some of this data is freely offered by the user and the rest is gathered as a matter of course in the non-stop stream between the service provider and user. Take the scenario of thousands of passengers gathered and stationary in one location due to a broken-down train breaking down: instantly and automatically, many passengers will use their phone to communicate their situation to others, while their phones will send data signals tracking their location. Messages posted by these stranded people to social media sites will warn others about the incident, providing real-time updates that may change the course of people's journeys. Taxi and bus companies pick up on this spike in demand via global positioning systems and dispatch more vehicles to the area. Both the independent actions of passengers and the constant streaming of their personal data produce swarm intelligence that is used to benefit everyone, and 'human swarming' is in action. 20 25 30 35
- 5 During emergencies, our personal internet devices will still function and we now have the power at our fingertips to 'swarm' in a disaster. The more information that is collected, the more powerful the 'swarm' response can be. We willingly share our personal views and information, and it is only right that it should be used for the greater good of society. It is only through collecting data that 'the whole is greater than the sum of all its parts' (Aristotle). So, if we are looking for a role model in a world of chaos and uncertainty, we could certainly do worse than to copy the humble ant. 40

Passage 2. *An author writes about the negative aspects of sharing personal data.*

- 1 Our unquenchable thirst to share every aspect of our lives on social media translates to ample commercial opportunities for exploitation. Most social media sites do not charge their users any fees, yet are now worth billions of dollars. Many sites have flourished to the point where over a billion people now regularly use them. The evidence suggests this is a business model that works. 5
- 2 Although users may be aware that apps collect information about their location, demographics, behaviour and habits, they are usually ignorant as to how it will be employed or who has access to it. This lack of transparency is worsened by the fact that the terms of service on many social media sites run to tens of thousands of words and are not written for the general public's consumption. Most sites have such broad licensing terms, allowing the host company free use of our personal material while still paying lip service to our 'ownership' of it. Your treasured holiday photos that were posted on such a site could end up being featured in a hotel chain's global advertising campaign. You would be none the wiser, and receive no remuneration, while the website would pocket license fees for using your material. Would users disclose their lives so freely if they knew that their creative output could be used without their consent? 10 15
- 3 The collection and exploitation of personal data is not a new phenomenon. To cite only one example, since the early 1990s, many stores have launched loyalty cards. Such stores are happy to take our money for their goods, while constantly monitoring our choices in an attempt to sell us further products through the use of targetted advertising. We gladly sign up to these programmes all in return for a tiny discount or voucher to spend, once again, at their store. 20
- 4 So why is there heightened concern about our privacy now? The simple reason is that nothing matches the tentacles of the internet for its insidious spread and reach. Even if you delete your account on social media or other websites, once your personal information is out there, there really is no way to stop it from being circulated or used. 25

Passage 3. *A researcher writes about their experience of requesting all the data held about them online.*

- 1 I decided to try to reconstruct my own data doppelganger – to come face-to-face with myself as I exist in data, and so to understand a little more about how companies have built a version of ... well, myself.
- 2 Whether through design or neglect, learning about this world was a frequently frustrating process. I spent more than a month issuing data access requests to as many different companies as I could, around 80 in total. My greatest impression was how unwelcome I felt in this world. We have rights to reclaim our data, but some companies did not even respond when I issued a legally enforceable request to get my data back. Eventually, around 20 companies sent back my personal data, and if printed, it would stretch to about 7000 pages in length. 5 10
- 3 About 1500 of those pages was data derived from other data that had been collected about me using statistical models and based on likelihoods. It is easy to find data on this scale a little alarming, but most of it I found more silly than sinister. My household was found to have no 'regular interest in book reading', yet I have written a book. At one moment I was a go-getter, an idea-seeker. Then I was a love aspirer, a disengaged worker, part of a group called budgeted stability or, simply, downhearted. 15
- 4 If this was a reflection of myself, I did not recognise it.

Copyright Acknowledgements:

Passage 3 © Adapted; Carl Miller; *Would you recognise yourself from your data?*; from BBC News at bbc.co.uk/news/technology-48434175; 29 May 2019

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