**o Who may need to use data and in what way?**

Data: facts and statistics collected together for reference or analysis. In general, data is simply another word for information. But in computing and business (most of what you read about in the news when it comes to data – especially if it’s about Big Data), data refers to information that is machine-readable as opposed to human-readable.

Everyone needs to use data. For example accountants use data to calculate figures and manage firm’s financial funds; doctors use data to diagnose patients, improve healthcare (health record); school use data gathered from students, alumni, faculty to improve on facilities, staff, teaching approach, admission process; Us news gathered data from different colleges across America to update their rankings; the army use data to strengthen defense system; scientists use data to experiment in the lab; government use data to make changes on their management to ‘raise people’s level of happiness and utility’, companies use data to improve their customer services and cater for people’s demands, environmetalists use data to make changes reagarding to the protection of natural resources, wild habitat (animals) and environment, use data to find matching mates on online dating apps (tinder) based on your preferences.

Business departments priority is to leverage corporate data to make better business decisions and uncover opportunities for the organisation. IT departments priority is to keep the data secure, governed, centralised, and ensure compliance with applicable legislation.

They use data by transfer human readable info to computer readable data and let the computers generate calculations, run algorithms

Allow to see possibilities or endings, way to look at things optimistically, forecasting future

**Types of data**

Personal data is anything that is specific to you. It covers your demographics, your location, your email address and other identifying factors.

Lots of different companies collect your personal data (especially social media sites), anytime you have to put in your email address or credit card details you are giving away your personal data. Often they’ll use that data to provide you with personalized suggestions to keep you engaged. Facebook for example uses your personal information to suggest content you might like to see based on what other people similar to you like.

In addition, personal data is aggregated (to depersonalize it somewhat) and then sold to other companies, mostly for advertising and competitive research purposes. That’s one of the ways you get targeted ads and content from companies you’ve never even heard of.

Transactional data is anything that requires an action to collect. You might click on an ad, make a purchase, visit a certain web page, etc.

Transactional data is incredibly important for businesses because it helps them to expose variability and optimize their operations for the highest quality results. By examining large amounts of data, it is possible to uncover hidden patterns and correlations. These patterns can create competitive advantages, and result in business benefits like more effective marketing and increased revenue.

Web data is a collective term which refers to any type of data you might pull from the internet, whether to study for research purposes or otherwise.

Web data is important because it’s one of the major ways businesses can access information that isn’t generated by themselves. When creating quality business models and making important BI decisions, businesses need information on what is happening internally and externally within their organization and what is happening in the wider market.

Web data can be used to monitor competitors, track potential customers, keep track of channel partners, generate leads, build apps, and much more. It’s uses are still being discovered as the technology for turning unstructured data into structured data improves.

Sensor data is produced by objects and is often referred to as the Internet of Things. It covers everything from your smartwatch measuring your heart rate to a building with external sensors that measure the weather.

So far, sensor data has mostly been used to help optimize processes. For example, AirAsia saved $30-50 million by using GE sensors and technology to help reduce operating costs and increase aircraft usage. By measuring what is happening around them, machines can make smart changes to increase productivity and alert people when they are in need of maintenance.

**o Have you ever used data for any task? If yes, how it impact you?**

I used data gathered from common data set, usnews, niche, student forums (quora) to search for us colleges for the application last year. I made excel spreadsheet and columns with different categories to compare the schools and filter the schools based on my desired criterias

Use data from inbody machine to adjust diet and healthy balance workout

**o How can you use data in the future?**

I use data gathered from a survey or questionnaire to do research paper of write thesis

Forecast, concern, continue to look at data to shape your life

Use data in future career, future in many career paths

**o Do you think that data is used appropriately or responsibly? Please provide examples.**

**Benefits**

It is used appropriately and responsibly to some extent. For example, US Naval Officer Matthew Maury, turned years of old hand-written shipping logs (human-readable) into a large collection of coordinate routes (machine-readable). He was then able to process these routes en masse to reduce the average Naval journey by 33%. Data gathered from the hospital can help give more accurate diagnosis and treatments. School may use data for improving teaching qualitites and facilities by receiving feedbacks from students and faculty

As the world becomes smarter and smarter, data becomes the key to competitive advantage, meaning a company’s ability to compete will increasingly be driven by how well it can leverage data, apply analytics and implement new technologies. In fact, according to the International Institute for Analytics, by 2020, businesses using data will see $430 billion in productivity benefits over competitors who are not using data.

**Drawbacks**

However sometimes bad people manipulate the data for their own purposes and some websites make you enter your personal info and hack to get bank account information or to black mail/cyber bully. Children exposed to unsecured social platform without parental guidance could be tricked to give out personal info to strangers online. The latest blow to the new privacy-friendly Facebook facade came just last night as news of a data leak exposing the phone numbers linked to 419 million user accounts broke.

While not a type of data, the mosaic effect describes a phenomenon in which non- personally identifiable information” (PII) data can be combined with other available information in such a way as to pose a risk of identifying an individual.9

Without proper stewardship of city-collected data, controversies may erupt as data in or extracted from cumbersome public records becomes more accessible and linkable in unexpected ways. For example, a register of gun ownership in Westchester and Rockland counties in New York was transformed by a local newspaper into a data set, mapped and then published, creating a strong backlash.11 The publication triggered a number of concerns, which included the possibility that the map would identify potential targets for burglars.12

“Data democratisation means that everybody has access to data and there are no gatekeepers that create a bottleneck at the gateway to the data. It requires that we accompany the access with an easy way for people to understand the data so that they can use it to expedite decision-making and uncover opportunities for an organization. The goal is to have anybody use data at any time to make decisions with no barriers to access or understanding.” says Bernard Marr, bestselling author of Big Data in Practice.

**o How do you feel about your data being used by others?**

With my consent and being noticed first then I don’t care because I think those can be used in good purposes that will actually help my life, change my perceptions or realize bad habits, live healthier. But if my data is taken without knowing or asking and be manipulated to use in personal purposes then I would feel used, uncomfortable because of those illegal actions

**o Do you need to protect yourself and your data?**

Yes, because bad people can manipulate your data and distort the truth or black mail, cyber bully, stalk you. In this day and age data is a gold mine for anyone who knows how to extract and use it. For example, Facebook has been criticized for leaking user’s info or selling personal data to other business firms for profit

In 2015 we stand on the brink of an exciting and dynamic environment in which citizens will be able to perform the lion’s share of their work and other activities online. Everything from paying parking tickets to dissecting a city’s budget is at our fingertips. As stewards of the public’s information, it is our duty and responsibility to continue to ask questions about standards and ethical issues as well as privacy rights, so that we can provide transparency and promote accountability and also protect the privacy interests of our citizens.

**Suggestions: Why because don’t want work and identity to be tarnished**

**Can put how to protect data (optional) – why protect data is important, why data import**

<https://www.forbes.com/sites/forbestechcouncil/2018/05/16/big-data-is-changing-the-way-people-live-their-lives/#3cb9a1a63ce6>

Today data is everywhere, and more than ever businesses are relying on insights gleaned from data to build better products and services, make smarter business decisions, and compete in their respective industries.

“Only 4% of companies said they have the right resources to draw meaningful insights from data — and to act on them” — Bain & Company

According to consultancy.uk, $43 billion was spent on data analytics consulting services in 2017 and more than two thirds (67%) of the executives polled said they expect their organisation to increase analytics consulting spending in future.

A good data strategy is not about what data is readily or potentially available – it’s about what your business wants to achieve, and how data can help you get there.

Therefore, if companies want to avoid drowning in data, they need to develop a smart strategy that focuses on the data they really need to achieve their goals. To be truly useful in a business sense, data must address a specific business need, help the organisation reach its strategic goals, and generate real value. This means you need to define the key challenges and business-critical questions that need answering, and then collect and analyse the data that will help you address them.