

Tutorial 1: Lessig's Four Modalities Analysis, Globalization, The Digital Divide

Part 1

1. Discuss the impacts of **the rise of the Internet** by using Lessig's Four Modalities Analysis.

Social Norm (*How it impacts human behavior [impacts most of the people]?*)

- Online shopping - How and what we shop for (Shopee, Lazada).
- Communication pattern - use social media, instant messaging app and video call to communicate
- The rise of digital entertainment - watch Netflix, youtube online, online games
- Online learning to obtain certain skill sets (i.e programming, cooking skills) through online platform such as Youtube, Coursera, W3school, etc

Markets (*Supply to demand - social, Impact of this trend to the market*)

- The rise of online business (e-marketplace)
- Demand for software developers is increasing since every business requires mobile applications and websites to run the online business. For example, Shopee and Lazada developed mobile applications and websites to allow us to do online shopping.
- Happyfresh - mobile app, motorbike riders.
- Youtube & Netflix - mobile app, website, content (movies) to let us subscribe.
- Samsung / Apple - smartphone, tablets, laptops (smart devices)

Law (*What will happen to the law? - New or existing law enforcement*)

- Law to prevent Cybersecurity
- Law to prevent Cyberbullying
- Law to fight against Cybercrime - Computer Misuse Act (CMA), Computer Fraud & Abuse Act (CFAA)
- Law to protect personal data - Personal Data Protection Act (PDPA) 2012

Architecture (*Hardware and software to access Internet or perform human behavior*)

- Hardware - mobile phones, tablets, wifi, router, fiber optic cables that enable data to transmit in high speed, more telecom tower to boost connectivity and enhance Internet service in the area
- Improve the hardware such as the router to provide a more stable and faster internet connection.
- Internet connection improvement - upgrading the Internet to support higher bandwidth - network congestion since too many people are using the internet.
- Software - mobile apps e.g Shopee, website, Google Playstore, Appstore
- New architecture appears in the market such as new OS platforms (Android, iOS). Applications or software developed must be able to fit into this architecture.

2. Is it necessary for computing professionals to know laws related to IT? Justify your answer.

Yes, this is to prevent the computing professionals from getting caught and going to jail by committing offenses against the justice system. Computer professionals' actions change the world. As a result, they should obey the code of ethics that is designed to inspire and guide the ethical conduct of all computing professionals. In another word, they should perform their own duties professionally with normal guidance.

3. From your opinion, list and explain TWO (2) job categories where the number of jobs declined and increased drastically as a result of computerization.

Number of jobs that declined drastically

- Cashiers in fast food restaurants or supermarkets such as MCD, KFC, AEON as they switch to self-service kiosks to place orders and checkout.
- Factory Workers = replaced by robotics (machine automation)
- Customer service = replaced with AI chat bots

Number of jobs that increased drastically

- Delivery man (i.e Shopee, FoodPanda, GradFood requires more delivery rider)
- Computer programmer
- Data analyst

4. List and explain the pros and cons of **Bringing Your Own Device (BYOD)** to work.

Pros

- **Increased productivity**
 - The employees are more familiar with their own device. It can boost employee morale and increase their engagement.
- **No training required**
 - BYOD arrangement allows employees to use the devices they're most familiar and comfortable with, which eliminates the need for any additional training.
- **Cost savings**
 - BYOD policy can reduce organization expenses such as purchase or rent devices for each employee, provide training for using new devices and hire hardware and IT support teams.
- **Up-to-date technology**
 - People may not update company-owned devices regularly, worse, they may even choose to ignore any security updates which can put company

confidential data at risk. However, they are likely to keep their personal device up-to-date and install the latest available updates.

- **Take care of own device better**
- **Self bought device = the device quality is better**
 - They will do comparison for the device specification and capability before buying the device to ensure the quality of the device is good.

Cons

- **Damage**
 - Since the employees are bringing the personal device to work, if the device gets damaged, who's gonna pay the cost of repair? Most employees themselves will take their own risk since this is their own device.
 - **Increased distraction**
 - Bringing the personal device to work means that social media apps, games, and other distractions can interfere with the employees' productive hours
 - **Higher Security Risk**
 - When employees use their own device for work, they're likely to carry it back and forth between their home and office. It can significantly increase the risk of theft or misplacement. Most of the data breaches are caused by lost devices.
 - **Blurs the line between work and personal**
5. According to Martin Carnoy, “*Thanks to a communications and software revolution, we are more ‘connected’ than ever before—by cell phone, email, and video conferencing—yet more disconnected than in the past from social interaction*”. Do you agree?
- I agree with the statement.
 - We can utilize technology such as video conferencing technology and instant messaging applications to support online communication regardless of location and time.
 - However, people are also disconnected from society as they prefer to communicate with others by using digital devices through text-messaging or video conferencing tools rather than face-to-face communication. Thus, it causes

- people to feel shy when talking in front of others or hard to communicate with other people physically.
 - Furthermore, online communication platforms lack the ability for humans to gauge e.g body language, facial expression
6. Globalization creates a greater mobility of goods, services and capital around the world. Discuss how Lessig's Four Modalities Model may play a role here to affect the **globalization (process of creating worldwide network of businesses and markets / free movement of products and services)** process.

Law

- Taxation law - corporate income tax
- Law for data protection
- Sellers need to follow each of the country law about what they can sell in that country (i.e In Malaysia, the seller cannot sell drugs and weapon)

Social Norm

- Change the way of communication between people which makes it easier. For example, video call and instant messaging allows people to interact with others easily, even live far away from each other.
- We can buy items from overseas
- We can work for companies located outside of Malaysia
- Shell, Exxon, Microsoft, Intel, WD - International company provide us with job opportunities

Markets

- Sellers from overseas can sell their products on platforms such as Shopee and Lazada.
- Allows companies to find talents without being limited by geographical location.
- They will set up offices in Malaysia that will provide job opportunities to the local market.
- Lessig's Four Modalities Model states that the market plays a role of influencing customer's behavior. During globalization, the appearance of newer technology in the market will affect the lifestyle of the people. For example, the introduction of online shopping and the world-wide web in the market have changed how people spend their money.

Architecture

- Software - mobile application, website
- Hardware - smart devices (mobile phone, tablet, wifi, router, telco tower), logistic/transportation

- Improvement of internet connection - higher bandwidth to support fast-speed internet.

Part 2

7. *“YouTube acts as a platform for expression, a marketplace for media products, a place for debate, a navigable library of information and a source of inspiration, all at once. It reflects, highlights and amplifies popular culture and media.”*

Apply Lessig's Four Modalities to analyze how the FOUR (4) elements constrain the above mentioned phenomenon.

Law

1. Law to prevent copyright on creative works such as music, video. For example, a video that was uploaded by a youtuber is not allowed for other youtubers to take away and upload to YouTube to make the video as their own creative work.
2. Youtube has AI to scan the videos to check whether the video is against the law. If the AI can't make a final decision, it will send the video to the Youtube video staff for manual video filtering. As a result, the staff will block the inappropriate video that include sexual between human and animal, violent content, etc.

Social Norm

1. As a place for people to look at tech products / reviews / unboxing / features etc.
2. As a place for people to learn certain skills - cooking, language, programming language, how to fix air-conditioner, etc
3. Watch online video

Markets

1. Company will advertise market products on this platform.
2. Companies give tech items to these youtubers / influencers for reviews.
3. Increase of job market - youtuber

Architecture

1. Hardware - smart devices (mobile phone, tablet, wifi, router, telco tower),
2. Improvement of internet connection - upgrading the Internet to a higher bandwidth to support fast-speed internet connectivity.

8. Discuss the three (3) key stages that influence **digital inequality** worldwide.

Digital Inequality = People who can afford to buy tech vs those who can't. People who have access to tech and those who don't.
Digitally rich vs digitally poor

1. **Socioeconomic status** - rich and poor economically
2. **Education level**
3. **Advanced country vs third world country** - describe the developing countries of Africa, Asia, Latin America, and Australia/Oceania
4. **Visually impaired vs normal individuals**

Sample answer

Social divide

- Internet access creates relationships and social circles among people with shared interests. Social media platforms like Twitter and Facebook create online peer groups based on similar interests.
- More than ever internet usage has influenced social stratification which is evident in societies among those that are connected to the internet and those that are not. Non-connected groups are sidelined since they don't share in the internet benefits of the connected groups.

Gender divide

- The internet gender gap is striking especially in developing countries. Though mobile connectivity is spreading drastically, it is not spreading equally where women are still lagging.
- Men in low-income countries are 90% more likely to own a mobile phone than women. This translates to 184 million women who lack access to mobile connectivity. Even among women owning mobile phones, 1.2 billion women in low and mid-income countries have no access to the internet

Universal Access Divide

- Individuals living with physical disabilities are often disadvantaged when it comes to accessing the internet. They may have the necessary skills but cannot exploit the available hardware and software.
- Some parts of the world will remain segregated from the internet and its vast potential due to lack of digital literacy skills, low education levels, and inadequate broadband infrastructure

9. Do an online research, discuss the following:

a. Current status of digital divide in Malaysia

[Digital divide in Malaysia - Wikipedia.](#)

Lack of accessibility in rural areas

Urban and rural areas have a big accessibility gap. According to the Department of Statistics, Malaysia broadband penetration is at 90 per cent. However, much of this is actually through mobile data services. Fixed broadband penetration is actually at only 34.5 per cent, where Kelantan only has 12.2 per cent. Mobile broadband services penetration is high but most of the time the connectivity is limited in rural areas due to the lack of infrastructures. Telecommunications infrastructure in rural areas is very weak, it does not provide strong and uninterrupted internet connection. Some rural areas only have 3G mobile broadband internet while urban areas can have up to 1Gbps fiber broadband internet connection.

Rich-poor gap

Broadband subscription for the B40 group stands at only 49.3 per cent, compared with 90.7 per cent for the M40, and 99.7 percent for the T20. But, as with the M40 and T20, B40 children still need to be educated, B40 adults need to work, even delivery riders need Internet connectivity. But, access to a digital device and a fast enough broadband connection costs money, which the most vulnerable cannot afford

b. Measures taken/to be taken by the Malaysian government to solve the problem of digital divide.

Free 1GB Daily Internet Data

Since many Malaysians continue to work and learn from home as aligned with the government's short-term recovery plan due to Movement Control Order (MCO), the Malaysian Communications and Multimedia Commission (MCMC) has announced that the free 1GB daily internet data offer from the PRIHATIN stimulus package is extended till 31 December 2021. The mobile service providers such as Celcom, Digi, Maxis, U Mobile and Unifi Mobile are responsible for continuing to support the Malaysian's work and educational needs by providing free daily 1GB internet data. The MCMC hopes that this can help the people who are facing challenges in the new normal when it comes to online learning and work from home arrangements.

Improve digital infrastructure

As Malaysia is moving into the 5G era, the issue of Internet connectivity is still not solved, particularly in rural and remote locations where broadband services are unavailable or limited. For example, a Sabahan university student who had to climb trees to establish a stable Internet connection so she could take her final exam online. This issue shows the country's wide digital gap in terms of both geography (rural and urban) and social class (rich and poor). For better

Internet connectivity, the government must improve digital infrastructure which is critical for providing communication services, especially in rural and underserved areas. Perhaps the government should encourage telecommunications companies to enhance infrastructure or develop tower sharing partnerships in order to provide coverage to a larger area. At the same time, the training and facilities are necessary for government agencies' staff to prepare them when dealing with the digitization process. If the government doesn't take some actions to expand our telecommunications network to cover rural and remote locations, connectivity will remain a problem which can lead to digital divide.

Tutorial 2: Emergence and Convergence of Technologies

Part 1

1. Identify and discuss the positive and negative consequences brought by internet technology advancement.

Positive

1. Communication becomes more convenient. In the past, people communicated with each other by using postal service, but now they can communicate with each other using the Internet such as instant messaging applications.
2. Grow our economy by IoT, passing through trade and financial flow
3. Emergence of digital entertainment (i.e online gaming, video streaming)
4. More sources of data and information to facilitate research and data gathering purpose

Negative

1. Addiction to online gaming, social media that can lead to health issue such as obesity, deep vein thrombosis (DVT), sudden death, headache etc
 2. Cyberbullying and cybercrime cases increase. It causes a person to suffer depression including sadness, insecurity, poor self-esteem, academic decline, feelings of not belonging, suicidal thoughts and behavior and eventually commit suicide.
 3. Loss of human touch - decrease physical human interaction - lack of face-to-face communication
2. Discuss the differences between print media versus broadcast media.

Print Media = newspaper, books

Broadcast media = tv (RTM1, RTM2, TV3), radio

Print Media	Broadcast Media
Paper-oriented: Not environment friendly	Digital-oriented: Environment friendly
Static content, color (black and white in newspaper) - eyes to view the material.	Multisensory - see, hear - animation, sound, videos, etc. Interesting and allows users to understand the content better.
The news will be published tomorrow or later evening. (slower)	Quicker to share updated news
News may cover only certain localities.	News covers a broader area as it reports to the whole country.

Less expensive	More expensive (involved more technology to produce it out)
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3. Viewing video content using Internet streaming is quickly replacing over the air television broadcasts and cable television broadcasts as well. Discuss the **impacts of internet streaming (Netflix, Youtube TV)** using Lessig's Four Modalities Analysis Law

- Censorship policy. There are rules and regulations to check the suitability of the video content that are acceptable for public broadcast. Filter the sensitive, sexual, violent video.
- Copyright law for Internet streaming. For example, the streaming of illicit copies of films or TV shows, or premium sports content, without the copyright owner's permission might cause the person to go to jail since he/she violate the law.

Social norms

- People are always using the Internet frequently, especially social media where all the posting of video content is shared. Parents should ban their children from viewing video content using Internet streaming that is unhealthy to their lifestyle whereas the video content through television broadcasts are safe as the contents are already inspected.

Market

- Provide a wide variety of advertising services such as multiple channel, subscription-based services instead of solely relying on television advertising.
- Needs of wide resources of production companies to produce multiple channel

Architecture

- Improve the quality of the television broadcast
- Improve the encryption of digital broadcast
- Improvement of Internet connection for higher bandwidth to support Internet streaming

4. Identify advantages and disadvantages of mobile phones digitization.

Advantages

- Less power to broadcast and receive signals
 - Thus smaller in size, longer standby and connection times, wide areas coverage, increasing density of maximum number of connections within same area
- Digital signals can contain error-correction elements
- Smaller aerials

- Digital signals can be encrypted easily using public-key encryption protocols
avoid eavesdrop

Disadvantages

- Mobile phone infrastructure (transceiver stations) is very expensive to install
 - Existing company has to maintain both analogue and digital services
 - New entrants need high investment in infrastructure
 - Customers faced cost in upgrading handsets
 - Solution: operating companies offered digital handsets at subsidized prices (or free)
 - Replacing still working phones produces waste electrical products
 - Solution: recycling of working handsets to developing nations
5. More than 90% of personal computers run a version of the Microsoft Windows operating system.
- a. In what ways is this situation beneficial to computer users?
 - Easy to learn
 - Know how to use the OS anywhere since their operation are the same
 - Simpler file sharing between same OS
 - Software availability is plentiful compared to other OS
 - b. In what ways does this situation harm computer users?
 - Monopoly by one company - manipulate the market (they can mark up the price).
 - More virus/malware built to target window OS.

Part 2

6. Discuss two big challenges ahead in the emergence and convergence of technologies.
Give examples for each challenge.
- Technological changes almost always prompt social and economic changes as well.
 - E.g. The Internet allows small local businesses to compete with multinational companies.
 - E.g. the world is getting bigger and smaller
 - Social pressures due to technology are becoming the subject of major policy debates and public lobbying
 - Privacy
 - Content control
 - Intellectual property rights (copyright, patent, etc)

7. In the convergence of technologies, there are two forms of integration: horizontal integration and vertical integration. Differentiate between horizontal integration and vertical integration. 2 Identify advantages and disadvantages of horizontal & vertical integration

Horizontal Integration

Merging 2 or more companies in the same business vertical (same industry).
E.g Disney + Pixar, Facebook + WhatsApp + IG

Pros

1. **Reduce competitors by removing key rivals.** For instance, Grab merged with Uber to integrate Uber's ridesharing and food delivery business in the region into Grab's existing multi-modal transportation and fintech platform.
2. **Expand market/business.** For example, PETRONAS has offices in Malaysia, Turkey, Thailand while Shell has offices in the UK, Japan and Korea. By merging the two companies, they increased market share or market power in which they combined the product base, technology, and services that are available on the market.
3. **Offer more products or services.** For example, PETRONAS produces 3 kinds of petrol and 1 engine oil. Shell produces 3 kinds of petrol and 5 engine oil. By merging the two companies, the new organization now has access to more services and they can cross-sell each other.

Cons

1. **The company value reduces.** This happens because the synergies never materialize despite the costs of horizontal integration.
2. **Job lost.** For example, PETRONAS has 10 accountants while SHELL has 25 accountants. If both companies combine, some of the accountants will be fired to reduce salary expenses.
3. **Reduced flexibility.** This happens because the company is now a larger organization. The addition of more personnel and processes means the need for more transparency and, therefore, more accountability and red tape.
4. **Increased bureaucracy.** Both parties have their own style of policy or culture.

Vertical Integration

Reduce the number of steps in the chain from raw materials until eventual consumers in order to gain control over its suppliers or distributors to increase the firm's power in the marketplace.

E.g Apple → Materials, Production, Programming, Marketing, Sales

Pros

1. **Manage your supply** - Can control the supply by our own instead of relying on the supplier / third party.
2. **Maintain quality control** - Companies are not reliant on the quality of 3rd party suppliers, but they can control it by themselves. Companies that have more control over the production process are able to maintain higher quality standards.
3. Within the company, there will be many (GOOD) skill sets such as customer service, technology, research and developing, marketing, etc.

Cons

1. **High cost due to low volume**. If a company goes into manufacturing, they may not be able to keep costs as low as independent suppliers who sell to many other customers. Furthermore, they need to spend a lot of money to produce raw material to be assembled into the final product.
2. **Conflict in terms of skill sets**. Within an IT company, the programmers might argue about which programming technique or software development model is better and eventually lead to low productivity.
3. **Obsolescence due to new technologies** - Vertical integration could potentially hurt a company when new technologies evolve quickly and become available. The company is then forced to reinvest in the new technologies in order to stay competitive, which is costly and may require retraining of employees.

8. Do an online research, present the following

- a. A case study related to horizontal integration
 - Discuss in detail the advantages and disadvantages of horizontal integration in the case study.
 - b. A case study related to vertical integration
 - Discuss in detail the advantages and disadvantages of the vertical integration in the case study
9. Suggest a way for your company to successfully enter a mature market in order to move into a new field.
- Buy an existing business as we don't have to put much effort on building up the business
 - For example, Elon Musk - Tesla. He entered the social media market by buying Twitter.

PYQ 2 October 2021

- a) Food delivery apps, such as Foodpanda, GrabFood, have created a new social habit, offering a more convenient way for Malaysians to eat their favourite food in the comfort of their homes without the need to go to restaurants.

Apply Lessig's Four Modalities to analyze the above mentioned phenomenon. You need to analyze from the following perspectives:

- | | | |
|-------|--------------|-----------|
| (i) | Law | (4 marks) |
| (ii) | Market | (4 marks) |
| (iii) | Social norm | (4 marks) |
| (iv) | Architecture | (4 marks) |

Social Norm

- Change the customer purchase pattern. In the past, people would order the food physically or take away the food by going to the restaurant and grab the food physically. Nowadays, people can order food online by one click away without any physical interaction with the restaurant staff.

Market

- Demand for food delivery partners increased. This is because everyone prefers ordering food online which is convenient and this requires the delivery man to deliver the food to the customer.

Architecture

- Improvement of Internet connection. Ordering food online requires customers to browse the menu using the Internet. Without a good Internet connection, customers might get stuck at the payment processing page which might lead to unnecessary issues such as the payment page is blank or can't be displayed, eventually the customer can get frustrated.

Law

- Refund policy to protect the customer. Customers have the right to make a refund request with certain conditions such as delivery partners canceling deliveries, when wrong orders have been delivered, when food is spilled or when items are missing from the order list.

- b) "Globalization is a process that has no relationship with the advancement in information technology."

Comment on the statement above.

(9 marks)

- I do not agree with the statement above.
- Globalization is the process of creating a worldwide network between businesses and markets. It is impossible to achieve without information technology because globalization is connected with information technology.
- Take for example, telecommunication facilities have helped people to connect to different countries instantly.
- The Internet has transformed the way in which businesses conduct nowadays. All of them are switching to online business to expand their business to another area.
- With the help of technology, globalization causes a greater mobility of goods, services, and capital around the world.
- With information technology, we can make quick decision-making as the information can be obtained in a very short time.
- Thus, the process of globalization would be not effective without the advancement in information technology.

TikTok is a short-form, video-sharing app that allows users to create and share 15-second videos on any topic. Its creator, Bytedance, runs a different version of the app, Douyin, in its home market, China. Both versions of TikTok offer a wide selection of sounds and song snippets, along with the option to add special effects and filters. You can also add videos created on your phone. The company promotes the app as a video-sharing social network.

Quoted from Influencer MarketingHub. 2021

Discuss constraints of TikTok app by applying the Lessig's **FOUR (4) Modalities** analysis based on the above context. (12 marks)

Social norm

- Tik Tok can be used as a platform for learning. For example, people can learn the dancing videos posted by the dancer in it to learn while browsing the phone. Furthermore, there are other professionals such as doctors and teachers who utilize the tik tok to teach new things.

Market

- Offer a great opportunity for product/service advertising. Tik tok provides a low-cost and convenient platform for users to advertise their product.

Architecture

- Smartphone with wifi access to access the tik tok application.

Law

- Law to fight against copyright. Tik tok prohibit any kind of content no matter music, short video that infringed on third-party intellectual property.

Tutorial 3: Digital Entertainment

Part 1

1. **Digital entertainment** brings more benefits than harms. Do you agree with the above mentioned statement? Justify your answer by giving appropriate example(s).

Digital Entertainment - Youtube, PUBG, CALL-DUTY, Spotify, NETFLIX

Option 1

- I agree with the above statement.
- We can always stay updated by getting the latest news through online mobile application and website such as BBC News, CNN, WorldNews, etc
- We can play game or listen music to relax and relieve stress
- We can organize a family / friends movie night to improve the relationship among family members and friends.
- Digital entertainment helps us to build strategy / analytical thinking while we are playing games. In video games, players are confronted with complex problems for which they must formulate solutions and take appropriate action. Often, a number of different alternatives are presented to players, forcing them to make quick choices. This process sharpens vital critical thinking skills.
- Reflexes

Option 2

- I not agree with the above statement
- Addiction that can lead to health issues. For example, playing games continuously for a long time without sleeping can cause mental and physical problems such as obesity, sudden death, headache, aggression, sleep problems etc.
- Lessen face to face communication - might find it difficult to engage in normal conversation - reason: more used to text messaging - lack of practice with face-to-face interaction that can't be paused, edited or filtered

2. Do computer games fuel addiction to gambling? Justify your answer by giving appropriate examples.

- It depends on the individual.
- A study showed that computer games such as token wagering, real-money gaming, and social casino spending, are fueling addiction to gambling.
- The main reason is some people are willing to spend a lot of money to buy virtual items because they are competitive.
- They will use real money to buy virtual items within the game, causing them to lose the value of real money. For example, they feel like earning 10000 points as rewards or a hero's skin in a game is more important than real RM 10.

3. Do an online research, discuss the following:
 - a. Digital games that could help to reduce obesity issues
 - b. Digital games that could help to increase outdoor activities of game players
 - c. Other applications of digital games in addition to entertainment

Part 2

4. What is a patent? What is patentable? What are the conditions of patentability?

Patent

- A product or a process (invention) can be patented. Must be novel. Ideas CANNOT be patented.
- Get advice from a patent attorney to apply for MYIPO (The Intellectual Property Corporation of Malaysia). [US - US Patent Trademark Office]
- Last for 20 years
- Eg. Michael Jackson shoes
<https://www.thevintagenews.com/2018/01/18/anti-gravity-lean-shoes/?chrome=1>

Condition of patentability

- **Novelty** - new and never published elsewhere or by anyone before
- **Inventive** - must differ significantly from what already known
- **Industrial applicability** - with commercial value which can be utilized or implemented throughout the industry
- **Lawful** - the invention must be statutory and not violates Patent Act

Extra : Why is the patent important?

- It can increase value of the company
 - Before the invention patented, 40 employees, 10 million
 - 2 years of patent approval
 - Company value increase from 10 to 100 million

5. What is a copyright? How is a copyright obtained?

Protect creative works e.g books, music, paintings, computer codes, films etc. Ideas cannot be copyrighted.

- Identified with symbol ©

Ways

1. C 2011 LIM CHONG HUA & ASSOCIATES SDN BHD
 2. Statutory Declaration stamped by Commissioners of Oath.
 3. Register at MYIPO with the Statutory of Declaration
- Last for +50 years after author's death
 - E.g The Star Website

Copyrights are protected in Malaysia without any registration requirements. However, a copyright owner may register the copyright by filing a Copyright Voluntary Notification at MyIPO.

6. What is a trademark? How is a trademark obtained?
- A logo, brand, name, sound, color, or symbol that is not descriptive of the product.
 - Example: McDonalds Logo, Just Do It (Phrase from Nike)

How is a trademark obtained?

- Whenever a trademark is used in business. It is protected by the common law trademark right
- An organization needs to apply any Intellectual Property Corporation of Malaysia (MyIPO)
- Trademark must be not used by other company and must be in English or Malay
- Renewal of trademark in every 10 years to keep it active
- International Trademark can be obtained through the Madrid Protocol

7. Recently you have created a wonderful game for pre-school educational purposes. You have shown it to one of the preschool centers and the principal is very interested in using the game to teach their children. Suggest and explain how you can protect your game before and after selling to the center?

Storyline - copyright

Music - copyright

Programming codes - copyright

Game character / logo - trademark

Sign agreement with the pre-school, to have exclusive rights to distribute the game only in that school.

Optional Answer

- Register copyright after selling to the pre-school to get an original work of five rights. No one can copy the original work unless the author grants permission to the person.
- Inform the pre-school management that the game is protected under copyright law and sign an agreement to make sure the game is not copied and sold to others without permission.
- Before selling the games, registered for copyright declaration & protection. After selling the games, informed the public/parties that such work is under copyright.

8. There has been a controversy over the patentability of software. Do you think that software should be patentable? Why?

Yes

1. Protection - Patent gives the right to stop others from using, copying or selling without the owner's permission
2. Increase company's valuation - by keeping the competitive advantages through protecting the software from other competitors using them
3. Promote innovation as patents provide incentives / motivation
4. Creativity and innovations spirit should be protected and respected as these are the asset of the owner

No

1. Software is math (transcription of computer algorithm/ computer mathematics functions/ calculation – since math is not patent protected, so neither is software)
2. Hinders research and development eg. open source vs closed source
3. May prohibit distribution of few software eg. open source

9. Apple Corp. and Apple Inc. are two different companies owning the same trademark "Apple". Does this infringe the trade mark ownership? Why?

Apple Corp

Owned by the Beatles music band

Focuses on:

- Entertainment
- Mass Media

Apple Inc

Founded by Steve Jobs

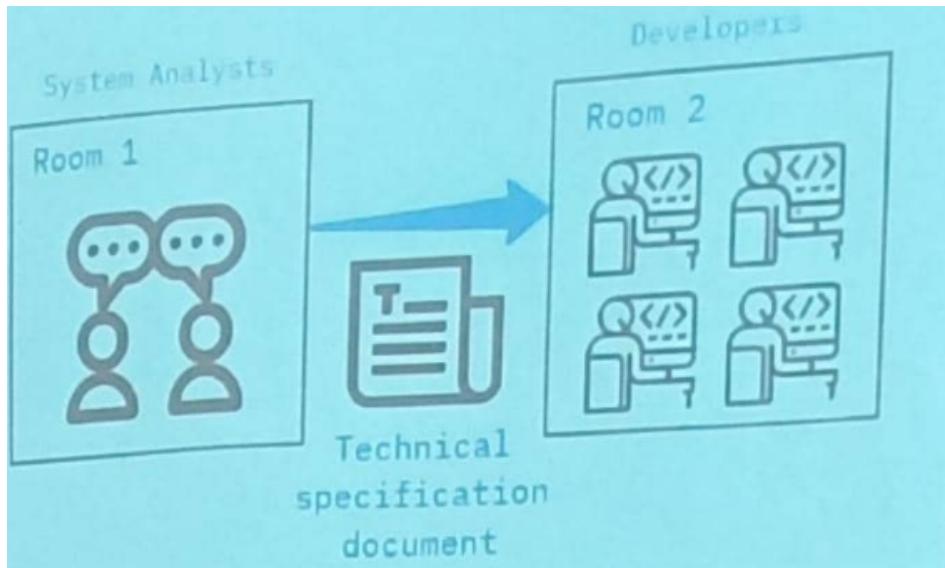
Focuses on:

- Consumer electronics
- Software services
- Online services

As both companies are selling different products and services (they are in different industries) thus it is allowed.

10. Explain how you can develop a software that is similar to an existing market product without violating the software patent?

Cleanroom development



Specifications

1. User is able to type words
2. User can bold the words
3. User can insert image
4. User can save the document
5. User can print the document

First team examines competitor's product and produces technical specification for new software product.

Second team is isolated from the first team and develops code and debug the new software solely based on the technical specification produced by the first team.

11. Jason copies the **entire last chapter** from the well-known fantasy novel named "**Harry Potter**" to his commercial blog without any additional commentary. By doing so, it seems like it did attract a lot of readers to visit his blog. Thus, it did shoot up traffic and page views on his commercial blog and he finally **gets paid income from the advertisers**.

Since Jason only used part of the copyrighted work, he claims that he would be protected under fair use clause. Do you agree? Justify.

Point 1: What is the purpose and character of use?

Educational use is more permissible than commercial use

Is this for educational or commercial use? What did he do? Did he earn money?
Commercial use, Jason uses this to get paid from advertisers. It is not fair use.

Point 2: What is the nature of the work being copied?

Non-fiction is permissible than fiction

Was the document copied fiction or nonfiction?
The document copied is fiction. It is not fair use.

Point 3: How much of the copyrighted work is being used?

Brief excerpts are permissible rather than entire chapter/

How much did he copy? Was it a few sentences or a significant amount?
He copies the entire last chapter of Harry Potter. It is not fair use.

Point 4: How will this use affect the market for copyrighted work?

Out-of-print material is permissible compared to readily available work.

Was the copy still ‘alive’ in terms of copyright? Will it affect the sales of books at shops or the author’s income?

The copyright of Harry Potter is still alive and this will affect the sales of books at shops.
Thus, it is not fair use.

All factors show that it is not a fair use case. Thus, Jason’s action, according to fair use, is inappropriate. In conclusion, his action is not fair use.

Tutorial 4: Governance of the Internet

1. Compare between the top-level domains (TLD) and country-code top-level domains (ccTLD) by giving appropriate examples.
thestar - domain name, second-level domain (company's name)

TLD - comes after the domain name. Identify the purpose of the sites.

Types of TLD and purpose:

.com - companies, commercial
.org - non profit organization
.gov - government related entity

ccTLD - 2 alphabet identifying the country-code of the sites.

Type of ccTLD:

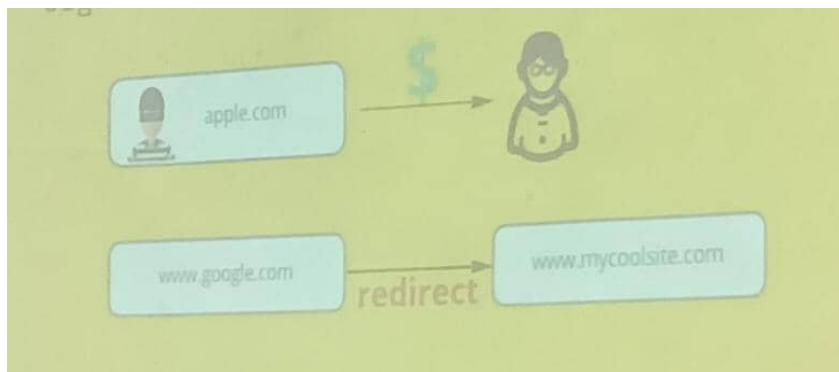
.my .sg .kr .tr

2. With the use of example, compare and contrast the following:

- Domain name hijacking
- Reverse domain name hijacking
- Typosquatting

Domain name hijacking

Registration of well known names for the purposes of selling them for profit or redirect traffic looking for other organizations to one's own site.



squadhelp website - buy domain at cheap, branding and sell at high for profit

Reverse domain name hijacking

Attempts to use legal processes to grab a legitimate domain name that an organization wishes it have the foresight to register first has become known as.



Typosquatting

Registering domains which are misspellings

Eg. google.com → googgle.com, goooggle.com, ggooggle.com

3. Many trademark holders were quite slow off in registering their trademark as a second-level domain in the .com which results in domain name hijacking. Using appropriate examples, discuss two problems caused by domain name hijacking and one legal way to grab the domain name

Company name = domain name?

Customer expects the company name will be a domain name, however it has been registered by another company or individual, eventually it might lose sales since the consumer can't find their website.

- Proton Sdn Bhd - www.proton.com
- Protoncars.com, newproton.com
- Confuse the users/ consumers
- Lose sales
- Proton.com owner, can sabotage [(为阻止敌人或对手成功而) 毁坏] you

Reverse domain name hijacking. Try to sue them to attempt to get it back.

4. Explain any THREE (3) the role of ICANN under Internet governance.

ICANN

The Internet Corporation for Assigned Names and Numbers

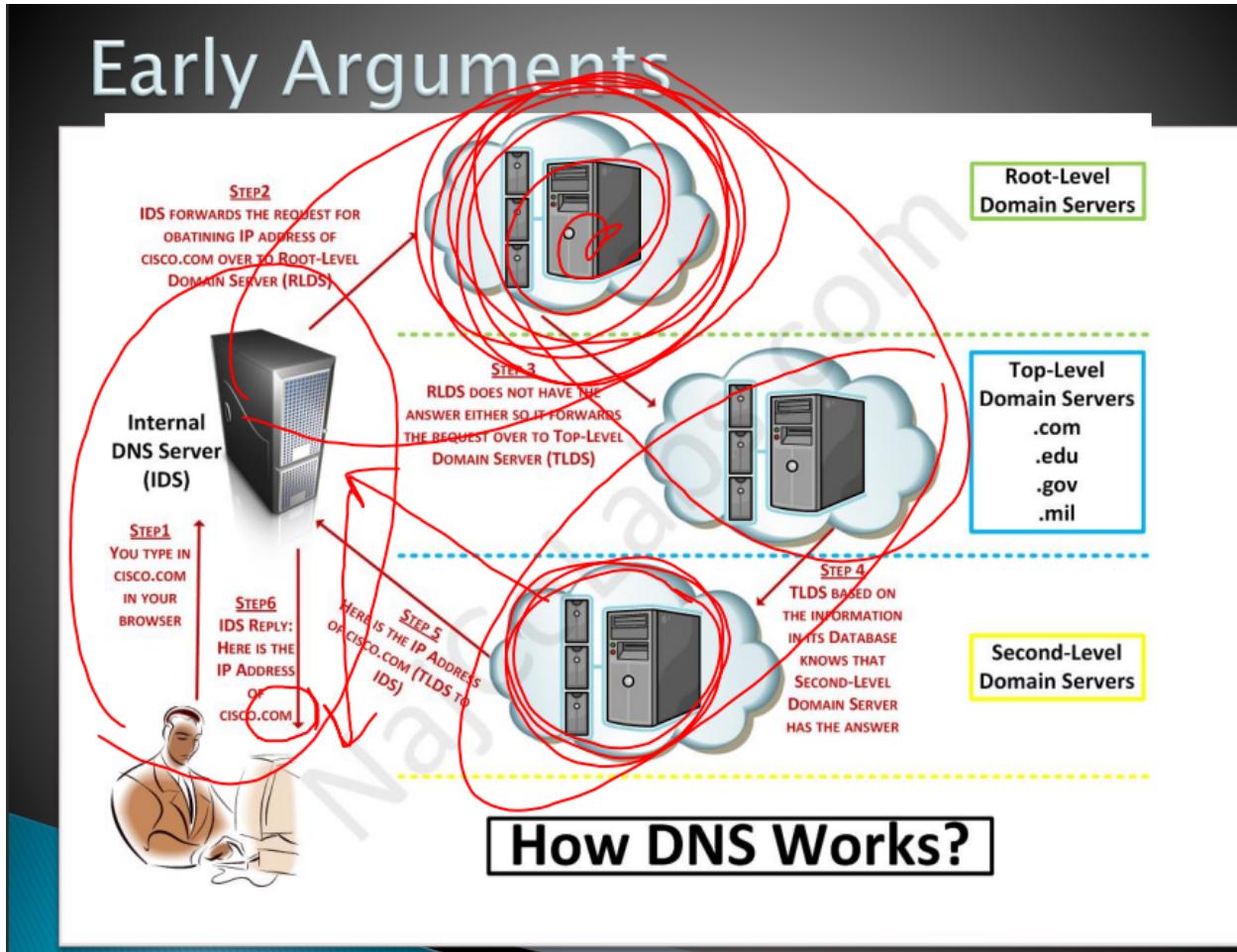


One World, One Internet

1. Non profit organization
2. Coordination of maintenance related to the namespaces

3. Ensuring the networks stable and secure operation
 4. Technical maintenance work - upgrading to IPv6
- <https://www.icann.org/resources>

5. Explain by using a diagram **how Domain Name Server (DNS) works.**



6. Differentiate the TWO (2) common types of Internet governance models:
multi-stakeholder model versus multilateral model.

Multi-stakeholder

People consists from many layers of the society of interest (ie government, doctor, professor, police, parents, etc) if the country's internet interest eg. policies

Multilateral model

Government discusses with another government (national level) controls of the rules and policy of the Internet to ensure interest in individual nations. (For example in Asia country, they can discussed the topic such as Shall child pornography be banned?)

Tutorial 5: Ethics and Professionalism of IT

1. Define in your own words, what the term “the ethical point of view” means.
 - An expression on how we deal with things or actions with the principle of morality.
 - Respecting your own and others goals and aspirations as well
 - Netflix - “I just killed my father”
 - <https://www.netflix.com/my-en/title/81290894>

2. Discuss the differences between Kantianism and Utilitarianism

Utilitarianism

Goal: An action is right if it results in greatest amount of happiness for the greatest number of people, regardless of your reason of action

Example of case:

Why a hostage-taker in Lebanon was hailed as a national hero

<https://edition.cnn.com/2022/08/12/middleeast/lebanon-bank-hostage-hero/index.html>

Kantianism

Goal: Focus on the true nature and intention of the actor - what's the motive? Do not use others as the means to your end. “Do unto others, how you want others to do unto you”.

Example: Donation = donate to help poor people? Donate because you want publicity?

3. Differentiate between act utilitarianism and rule utilitarianism

Act utilitarian	Rule Utilitarian
Your actions determine consequences, whether good or bad. Action is morally right if it brings a great number of happiness.	Following the rules will determine consequences, whether good or bad. Action by following the rules will be morally right if it brings a great number of happiness.
Example: If you break the red lights, it is ok, because your action causes the greatest happiness.	Example: You must follow the rule and wait for the red traffic light. Else, your action is considered morally wrong.

4. Naoki is a game developer. Three years ago, he produced a computer simulation game that was moderately well-received. Naoki's company is directing him to develop the second edition of this game based on gamer and market feedback which indicates that the game would gain popularity with improved 3D graphics and increased violent content. With the latest gaming technology, the game would be able to simulate violence to a level of realism that would provide players with an exciting immersive experience which guaranteeing its success. This achievement would benefit Naoki both financially and career-wise. Naoki refused to comply with his company's directive because producing violent games conflicted with his ethical philosophy. He was willing to resign from the company rather than compromise on his stand.

i. State which philosophy ethic Naoki subscribes to and explain how it influences his actions

What does he believe?

He has his own belief - Kantiansim

Does his belief align with developing violent video games?

No, he is even more willing to resign than developing the game. Strong standing on his side

ii. Consider the same scenario from a different philosophy ethic viewpoint. State which ethical stances you have selected and explain how a person with this stance might respond and why.

What if he ignores his intention?

No viewpoint, make others happy, Utilitarianism

Who will be happy?

The boss, gamers

What will he gain with this action?

He gains salary increment (carrier-wise)

5. Michelle works for a medical insurance company. She supervises the claims department and her main task is to improve efficiency there – each unit must process a minimum number of claims per day. In order to achieve this goal, she installs a software system which monitors:

- The number of claims processed by each clerk
- Number of keystrokes done by each clerk
- Log information on when each clerk is on or off his/her post

The system is being installed with the consent given by the insurance firm's management and the claims department staff were being informed and aware of such a system. The system allows Michelle to watch all the above information in real-time on her screen. Michelle can also see all emails sent by each clerk regardless of whether the email is

business-related or not. With the aid of the software, Michelle manages to improve the overall claims department work performance and operation efficiency. As a result, Michelle got a job promotion and salary increment as the boss likes her work very much.

i. Justify Michelle's action according to Ethical Egoism

Definition: Each person should focus exclusively on his or her self-interest

What is her main goal?

Monitor and increase efficiency, yes, she is doing her job

What did she do to achieve the main goal?

She installs a software systems to monitor employee

How will this benefit her?

Got a job promotion and sales increment

Is Michelle right in her action?

Yes

Thus, is her action morally justified?

Yes because she is a supervisor and her job is to increase efficiency of the department

ii. Justify Michelle's action according to Subjective Relativism (degree of level)

Principle: "What's right for you may not be right for me"

2 parties

What is the point of view of Michelle?

I am hired by the boss to monitor the efficiency of the staff, I'm just doing my job, you (the staff) cannot scold or blame me

What is the point of view of staff?

Because of this monitoring , I have no freedom as everything is being monitored.

Thus, are they right or wrong?

No right or wrong as this is their point of view/opinion.

Part 2

6. Jennifer and her husband are both senior software engineers. Recently they have a baby boy. Jennifer decided to hire a maid to help them in cleaning the house and take care of the baby since both of them are working. In order to ensure their safety, the couple have installed a surveillance system at their home. The surveillance system provides online monitoring of the house through a camera recording function. The maid was informed and agreed with the surveillance system with a condition that certain areas such as the maid's room and washroom are exempted from the surveillance.

a. Discuss whether Jennifer and her husband have violated the maid's privacy.

Where should you draw the line between privacy and surveillance in this case?

Violate maid's privacy

Locations/rooms that require surveillance?

Maid's room and washroom are exempted from the surveillance

Did the maid agree to the CCTV surveillance?

Yes, the maid agree to it

⇒ No, they did not violate the maid's privacy.

- b. Explain **Act Utilitarianism (based on individual action)** and analyze the act of Jennifer by using Act Utilitarianism and justify whether she is ethical or unethical.

Does the action cause utilitarianism and to whom?

Who benefits? Why?	Who feels harm? Why?
Jeniffer and husband - they can monitor the baby	Maid since she being monitored and no freedom
Jennifer and husband can monitor the maid whether she has do something that is wrong such as child abuse, stolen, etc	Maid - the turnover might be high as the maid feels stress under surveillance
The baby feel safe, if maid abuse, then Jeniffer and husband can notice of it	
If anything happens to the maid such as faints or robbery, Jeniffer can call the police or ambulance.	

Thus, Jeniffer's action is considered ethical.

- c. The software engineers that developed the surveillance system should practice the Software Engineering Code of Ethics in order to concern for the public interest. Explain how the software engineers can act consistently with the public interest
Inside lecture notes - 10 code of ethics, explain how se can apply this code of ethics

7. Jason works for a large automotive supplies company in the software quality assurance division. The company is developing the software for an anti-lock brake system (ABS) and vehicle stability system (VSS). He feels that the testing is not sufficient, but his boss disagrees and makes no changes to the testing system. Frustrated, Jason takes his concerns to the media who publish the allegations. Work is delayed on the project while extra testing is put in place, causing the company to lose their contract. No extra defects were ever found with the extra testing.

Based on the above statement, explain how **whistleblowing** occurs in the above situation and suggest a solution for the mentioned case.

Whistleblowing

You know a secret (bad), and you ‘share’ it to authorities or the public without the consent of the company. To ‘report’, but in a not-professional manner.

Suggest an action?

If his boss doesn’t want to listen, he can report to the CEO (someone that is higher in the company). Or he can tell his team and try to solve the issue together.

The goal is not to leak out info to the public and try to solve it internally.

Real case: volkswagen car emission scandal explained (bbc news)

8. You have been newly appointed as the IT manager to a local famous insurance firm to upgrade its customer health record system. The insurance firm’s management stressed that the new upgraded customer health record system should be secure, efficient and able to support the business’s future growth. List and explain FIVE (5) actions that you should take to establish your due diligence practice to defend yourself from a claim that you have allowed a fraud to occur.

Due diligence

When you do work or a certain task, you make sure everything you do is in proper order. If anyone want to check you, you have proper documents, work processes, etc

Suggest actions? (we can write on our own suggestion)

1. Make sure you and your team are qualified for the task

2. You have proper experience leading to IT manager
3. Proper documentation
4. Every milestone of the project, to get approval by boss
5. To buy certain software, get approval by boss

Tutorial 6

Part 1

1. "We have no privacy nowadays. We just have to get over it." Do you agree? Debate on the statement above.

Are we monitored through surveillance?

Are our activities recorded e.g social media?

What are the circumstances of your action long term?

Case 1:

Case 2:

2. Do an online research, discuss the following:

(i) How our privacy will be exposed when we perform online activities.

Surfing the internet

While browsing the internet you may think that you are not disclosing your personal information. However the fact is you are relaying personal information on websites, i.e. your IP address determines you, and online companies trace your IP address and examine your browsing behavior. Based on your browsing activities, they assess your choice/need and try to advertise you with their products. For example, if you searched for games on the internet, they will try to advertise you with new 3D games which appear as pop-up messages on the online page.

(ii) Privacy preserving techniques/methods that can be used for big data analytics. (No technical details required. Discuss the general concepts/approaches of the techniques for preserving privacy)

1. Commit to sharing less online.
2. Use strong, unique passwords and two-factor authentication.
3. Tighten privacy settings for your online accounts.
4. Purge unused mobile apps and browser extensions.
5. Block search engines from tracking you.
6. Browse online with a secure VPN.
7. Don't ignore software updates.
8. Disable ad and data tracking.
9. Use encryption to keep data from prying eyes.
10. Revoke unnecessary 3rd party app connections.

Part 2

3. Read the scenarios below and answer question 2:

Max Brown works in the Department of Alcoholism and Drug Abuse of a north-eastern state. The agency administers programs for individuals with alcohol and drug problems and maintains huge databases of information on the clients who use their services. Max has been asked to take a look at the track records of the treatment programs. He is to put together a report that contains information on the clients who use their services. Max has been asked to take a look at the track records of the treatment programs. He is to put together a report that contains information about such factors as **number of clients seen in each program each month for the past five years, length of each client's treatment, number of clients who return after completion of a program, criminal histories of clients**, and so on. In order to put together this report, Max has been given access to all files in the agency's mainframe computer. It takes Max several weeks to find the information he needs because it is located in a variety of places in the system. As he finds information he downloads it to the computer in his office; that is, he copies the information from the mainframe onto the hard disk of his office microcomputer. Under pressure to get the report finished by the deadline, Max finds that he is continuously distracted at work. He decides that he will have to work at home over the weekend in order to finish it on time. This will not be a problem. He copies the information (containing, among other things, personal information on clients) onto several disks and takes them home. He finishes the report over the weekend and decides to send it to his office computer by email and fax. He leaves the disks at home and forgets about them.

Was Max wrong in moving personal information from the mainframe to his office computer?
The client info is considered sensitive information, at best, he should not move the info from the mainframe to his office computer or anywhere.

Was Max wrong in leaving the disks containing personal information at home?
Wrong, he should not leave the disk at home as it contains important, sensitive information. Some unexpected circumstances might happen such as his roommate taking his hard disk to download the movie, or a thief coming to rob and steal the hard disk.

What might happen as a result of Max's treatment of the data?
Malicious actor might hack and hijack the disk in order to steal the information

Should the agency for which Max works have a policy on use of personal information stored in its system? What might such a policy specify?
Yes, they should have a policy. For example, the agency shall have a standard policy on how to safeguard data especially sensitive data

Example for other companies:

F-secure = bring/ use thumb drive, external hard disk

Intel = production factory, you cannot bring your handphone

(i) Describe opt-in and opt-out choices. How were they worded?

Opt-in - Consumer must explicitly give permission before the organization can share information

a. Opt-in

Contact information

Email

Email me with news and offers

Already have an account? [Log in](#)

Opt-out - The organization can share information until the consumer explicitly forbids it

Opt-out

Please tick this box if you are happy for us to email you with future promotion, offers and communication

Please tick this box if you do not want to receive future promotion, offers and communication from us

Please untick this box if you do not want to receive future promotion, offers and communication from us

Please do not untick this box if you do not want to receive future promotion, offers and communication from us

By submitting this form, you agree to be contacted forever and always about anything we feel like. We'll also sell your data relentlessly to any bidder, regardless of the price they offer

(ii) Why is information about individuals so important to organizations? Give examples of the uses of personal information by private and public organizations.

Types of public and personal info

Public record - Information about the incident or action that reported to the government with the purpose of informing the public such as birth certificates, motor vehicle records, marriage records, deed to property, etc

Private record - credit card purchase, purchase using loyalty card, post on social media sites, etc

What kind of data that companies can gather from individuals?

Information on a fitness watch, a user's IP address, past search queries, a user's location, and even the ads that someone clicks on online

What are they used for?

- Study the consumer purchasing behavior and perform direct marketing. (what they purchase, how they pay - use this info to sell to other organization)
- Checking online trail for records of behavior (what we do, what we spend on)
- Allows company to check your financial status for loans, etc (more for public information, when you want to buy house, the agent can help us to check whether we are qualified to buy the house)

(iii) In Malaysia context, briefly explain one legal act in place to protect users' privacy.

Legal act

Personal Data Protection Act 2010

Regulates the collection, recording, holding or storing of personal data, and carrying out any operation on personal data for commercial transaction.

(iv) Identify and proposed TWO (2) methods for protecting privacy in Malaysia

1. Encryption
2. Don't share the data unknowingly/ involuntarily
3. Don't share info with strangers

4. Compare and contrast between personal information rights and intellectual property rights.

Are they the same?

Personal information rights

Personal Data Protection Act 2010

Intellectual property rights

Copyright Act 1987

Conclusion: Are they the same?

No, one is info about you, another one is something you created such as you write a book, etc

5. Identify the current weaknesses of Malaysia's Personal Data Protection Act (PDPA).

1. Only for commercial transaction only
2. No extra-territory application
3. PDPA does not address targeted advertising directly

SPI Midterm Answer

Obtained mark: **50/50**

Question 1

Online games have become more and more popular especially among youngsters. Some studies related to Internet gaming addiction emerged, outlining the negative consequences of its prevalence, and risk factors for excessive gaming. The establishment of specialized treatment centers in the world reflects the growing need for professional help.

Using Lessig's Four Modalities Analysis to analyze the impacts of excessive online gaming. **(16 marks)**

Social Norm

- Negatively influence people to become addicted to online gaming. For example, they are playing games for a long time without sleeping which can lead to mental and physical health issues such as obesity, sudden death, headache, aggression, etc. Parents should control their children from excessive online gaming.
- Negatively influence people to become addicted to online gambling games. The online computer games such as token wagering, real-money gaming, and social casino spending help to develop gambling behavior as they can gamble at home. Some people are competitive to win the money but end up losing all the money.

Market

- Create a new market for specialized treatment centers for video game addiction treatment. At the same time, it causes the demand for the treatment consultant to increase to provide counseling sessions to the game-addicted person to quit online gaming.
- Creating demand for more gaming companies which expand the market for the gaming market industry. Many of the gaming companies have been established to develop more games for online gamers to access.

Law

- Create new law and policy to limit online video game time playing for young people to five hours a week. To illustrate, these new rules restrict online gaming for those under the age of 18 to 5 hours per week. This is to prevent them from becoming addicted to online gaming and encourage them to do physical activities such as exercising which can lead to a healthy lifestyle.
- Video game censorship policy has been established to limit access, censor content, or regulate video games due to the nature of their content. For example, the video game might contain inappropriate content such as violence, realistic sexual scene. Hence, the law is established to protect younger gamers from accessing these content and influenced by the inappropriate content negatively.

Architecture

- Generate computer code that meets the new law and policy. To explain, the developer has to make an effort to alter the code and use the power of code to regulate and keep the young online gamer under surveillance.
- Software such as native gaming mobile applications are developed using Kotlin, Java for Android while Swift or Objective-C for iOS. It will be available in Google play store (Android platform) or apple store (iOS platform) to be downloaded by others in order to access and start to play.

Question 2

Provide **THREE (3)** examples on how the advancement in IT has accelerated the process of globalization. **(9 marks)**

1. Telecommunication facilities have helped people to connect to different countries instantly. It builds the ability for humans to communicate with others regardless of the time and location which facilitate the process of globalization. With information technology, companies can expand their business by making quick decision-making as the information can be obtained online in a very short time.
2. The Internet has transformed the way in which businesses conduct themselves nowadays. All of the sellers are switching to online business to expand their business to another area (access to new market) by utilizing technology such as mobile applications, websites, wifi, etc
3. With the advancement in IT, it allows companies to find new talent that is not available in their current market. In another word, they can find new talent without being limited by geographical location. For instance, they can utilize job-finding websites to post job advertisements and use video conferencing tools as well as instant messaging applications (ie WhatsApp) to interview talent outside of their country.

In conclusion, we can see that the advancement in IT has accelerated the process of globalization which establishes global economies and creates a free movement of product, and services, and even provides global jobs.

Question 3

Assuming that the two leading game console makers, Sony and Microsoft, were to merge their game console business.

- a) Identify this type of integration (vertical integration or horizontal integration) by referring to the context above. Justify your answer. **(4 marks)**
- b) Discuss **THREE (3)** benefits that can be resulted from this integration. **(9 marks)**

a. Horizontal integration.

Horizontal integration refers to merging 2 or more related companies in the same business vertical, in another word, the same industry. By referring to the context above, we can see that the two leading game console makers, Sony and Microsoft, which are in the same industry (game industry) are going to merge their game console business. Hence, it can be considered as horizontal integration.

b.

- Reduce competitors by removing key rivals. For instance, Sony merged with Microsoft to become a major video game company. This can reduce the competition among major video game companies and result in a larger customer base (both of the company's customer bases will be merged into one major base).
- Expand market and business. By merging the two related companies, they increased market share or market power in which they combined the product base, technology, and services that are available on the market. Thus, it enhances the competitive advantages and the market can be expanded into a larger area.
- Offer more products or services. For example, Microsoft has 3 main famous game services while Sony has 2 main game services. By merging the two gaming companies, the new gaming organization (Sony and Microsoft) now has access to more services and they can cross-sell each other and increase revenue.

Question 4

Disney could soon lose exclusive rights to its most iconic cartoon character as Mickey Mouse's 95-year copyright is set to expire in two years.

Mickey will become available for the public domain in 2024 under U.S. copyright law that states intellectual property on artistic work expires 95 years after first publication.

Mickey Mouse first appeared in the 1920s and has become both the symbol for media conglomerate Disney and one of the most recognizable animated characters.

When he first appeared in 1928, Disney's copyright was protected for 56 years but as the beloved cartoon character approached the end of its copyright, Disney successfully lobbied for the Copyright Act of 1976 which extended protections to 75 years.

And then in 1998, Disney lobbied for a further extension, giving it protection for 95 years.

(Extracted from: <https://www.dailymail.co.uk/news/article-10978235/Mickey-Mouse-soon-leave-Disney-95-year-copyright-expiry-nears.html>)

- a) Can Mickey Mouse character be protected under patent instead of copyright? Explain your answer. **(4 marks)**
- b) Disney have registered the trademark over Mickey Mouse. Will Disney lose its Mickey Mouse trademark after the Mickey Mouse copyright expiration? Explain your answer. **(4 marks)**
- c) If Disney did not register to the US Copyright Office for the copyright of Mickey Mouse character, can Disney hold the copyright of Mickey Mouse character after it has been created by Disney? Explain your answer. **(4 marks)**
 - a. No, a fictional character cannot be patented. This is because one of the requirements to obtain a patent is that the product/services must be a patentable subject matter such as new inventions and processes. One good patentable example will be Michael Jackson shoes with a detailed explanation and implementation. The Mickey Mouse character is not an invention but more like a creative work (design), that should be protected under copyright law.
 - b. No, the Mickey Mouse trademark can be used as long as Disney can, as long as it can prove that they are continuously using it in commerce. Even after the Mickey Mouse copyright expiration, it is still protected under the trademark law. This is because the copyright is time-limited (Last for +50 years after the author's death), but trademarks are not. Trademarks can be renewed indefinitely on payment of additional fees after every 10 years to keep them active.

- c. Yes, Disney can hold the copyright of the Mickey Mouse character after it has been created by Disney. This is because creative work such as Mickey Mouse character design is automatically copyrighted under international law. Whoever created it will have the copyright in which it does not require applying for anything or filling anything for that to be protected under copyright law.

However, Disney can officially register the copyright for the Mickey Mouse character with the U.S. Copyright Office and the Library of Congress to give them more legal protection in case someone tries to steal their Mickey Mouse character design or use the character design without permission.

Tutorial 7: Online Crime and Real Punishment

Part I

1. Define and explain the following terms:

a. Smishing

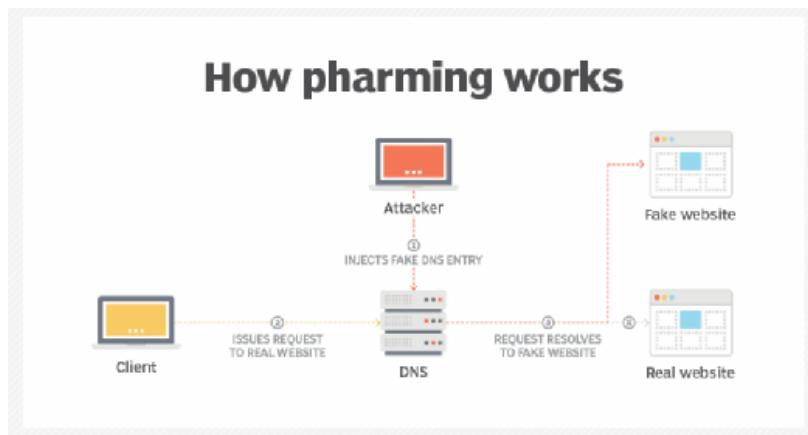
- SMS smishing
- Direct text message to recipient to visit a fake website or call a fake phone number

b. Malware

- A malicious software used to disrupt computer operations, gather sensitive information, or gain access to private computer systems
- [Media Prima hit by ransomware attack — sources | The Edge Markets](#)

c. Pharming

- Malicious code is installed on a personal computer or server, misdirecting users to fraudulent web sites without their knowledge or consent



d. Vishing

- Voice Phishing
- Macau Scam - It is a scam where people impersonate law enforcement agencies such as police, royal malaysia custom to obtain your personal banking credential.

2. In your opinion, what are the three factors that contribute to a system's security weaknesses? Do you agree that hiring a white hat hacker can help to improve a company's security? Justify your answer.

3 factors

- Complexity of the computer systems
- Hardware/software failure
- Economic and businesses factors
- Human nature

- Yes, I agree with the statement as the white hat hacker is an ethical hacker that will use their specialized knowledge which will help your company to discover security vulnerabilities within the system, report and make improvement recommendations.
3. Dave, a sophomore in high school, is an avid computer fan. He has learned how to program in several languages and spends a good deal of his free time accessing local public bulletin board systems on his father's computer. Dave's father has a computer in their home so that he can work in the evenings and on the weekends when needed. Dave's father has encouraged Dave to learn about computers and has even set up a separate account on CompuServe for his son so that he can play games. Although Dave uses CompuServe occasionally, he has become interested in other private systems.

Inside one of the private systems is a message board where hackers exchange information on their various exploits in attacking other private systems. Dave carefully reads these messages and often writes some, explaining step by step how to access a local power company's system. Dave often jokes about how he knows his father's electric bill before it is even received in the mail. Dave explores other private systems, though he never changes the systems or any of the files available online. He simply enjoys the challenge of figuring out how to "crack" systems protection

- a. Do you agree with Dave's actions?

Did he get permission to access?

Is he a white hacker that gets permission from the company?

In this case, he is not an employee and he just does this for fun.

- b. Is it ethical or legal for that action?

Did he do anything harmful?

He does not do anything harmful but for fun.

- c. Justify your answer with appropriate explanation

Is his actions ethical? Is it legal?

See how you justify [Ethical - he is learning the skills, Not ethical - he is not a white hacker that gain permission from the organization]

4. Discuss the following different types of hackers:

- a. Black hat hacker - **BAD**

- Unethical criminal that use their skills for personal gain
- destructive

- b. White hat hacker - GOOD
 - Use their skills to demonstrate system vulnerabilities and improve security
 - Ethical hacker
 - Eg. penetration tests and vulnerability assessments within a contractual agreement
- c. Gray hat hacker - IN BETWEEN
 - Combination of black and white hat hacker
 - Hack to find system vulnerabilities and offer to fix it for a fee

Part II

- 5. Explain how satellite technology can help in military warfare? How can the terrorists misuse the satellite technology in the warfare?
What can they do using satellites?

Example: Google maps <https://earth.google.com/web/>

What can they do with this?

- Planning
- Surveillance
- Communication

- 6. Compare the advancement of computing and communication technologies between today's war news reporter and the previous generation.

What do they use tech for?

- Digital camera
- Communication methods
- Handphone with cameras available by everyone - citizen reporters (they just use camera in the phone to capture the photo and share)

- 7. Do online research. Discuss the law in Malaysia that can be used to take legal action against the following offenses:

- a. Making obscene/indecent/false/menacing/offensive statements online
- b. Hacking
- c. Phishing
- d. Online harassment
- e. Online spreading of terrorist propaganda

Kahoot revision by Lecturer for final exam

A __ is having a high risk of obesity.

Next

▲ couch tomato ✖ ♦ couch potato ✓

▲ 5 ♦ 52 ✓ ● 1 ■ 0

Show media

— reduces the number of steps in the value chain.

Next

▲ Horizontal integration ✖ ♦ Vertical integration ✓

▲ 19 ♦ 25 ✓ ● 10 ■ 4

Show media

It is considered as a horizontal integration if AirAsia is merging with ...

Next

▲ 2

◆ 1

● 1

■ 52 ✓

Show media

▲ Panasonic



◆ Tesla



● BYD



■ Malaysian Airlines



A P2P network connects computers running the same networking program.

Next

▲ 48 ✓

◆ 8

Show media

▲ TRUE



◆ FALSE



Cause problem - copyright infringement - no centralized authority



Sharing copyrighted contents on a P2P network is legal.

Next

▲ 17

◆ 39 ✓

Show media

▲ TRUE



◆ FALSE



Copyright (Amendment) Act 1997

An Act to make better provisions in the law relating to copyright and for other matters connected therewith.

The Copyright (Amendment) Act 1997, which amended the Copyright Act 1987, came into force on the 1st of April 1999, to make unauthorised transmission of copyright works over the Internet an infringement of copyright. It is also an infringement of copyright to circumvent any effective technological measures aimed at restricting access to copyright works. These provisions are aimed at ensuring adequate protection of intellectual property rights for companies involved in content creation in the ICT and multimedia environment.

[Copyright Act 1987 \[Act 332\] \(online version as at 1 July 2012\)](#)

__ is the use of technology to control and manage access to copyrighted material.

Next

◀ ▶ 🔍

▲ 7 ◆ 13 ● 21 ✓ ■ 14

Show media

▲ DIP	X
◆ DDM	X
● DRM	✓
■ DAP	X

Encryption technology - use of correct key to open files - manage access to the copyrighted materials

When __ is used, a device can recognize a content as copy protected.

Next

◀ ▶ 🔍

▲ 0 ◆ 17 ✓ ● 20 ■ 17

Show media

▲ digital marketing	X
◆ digital marking	✓
● digital copying	X
■ digital labeling	X



DNS is needed due to __ .

Next

▲ 23

◆ 2

● 2

■ 30 ✓



Show media

▲ HTTPS



◆ SMTP



● POP3



■ TCP/IP



How to do the addressing? How to ensure the packet is forwarded?



__ focuses on his or her self-interest.

Next

▲ 3

◆ 30 ✓

● 11

■ 15



Show media

▲ Divine Command Theory



◆ Ethical Egoism



● Utilitarianism



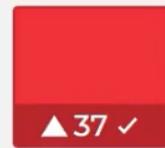
■ Kantianism





"Principle of utility" in Utilitarianism says ...

Next



Show media

▲ an action is right to the extent that it increases the total happiness



◆ an action is right if it provides self with maximum long-term benefits

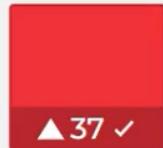


● an action is right if one thinks it is right



Act utilitarianism apply principle of utility on ...

Next



Show media

▲ individual actions



◆ moral rules





— focuses on the true nature or the intentions of the actor.

Next

▲ 6

◆ 46 ✓

● 1

Show media

▲ Egoism



◆ Kantianism



● Utilitarianism



— focuses on the consequences.

Next

▲ 31 ✓

◆ 12

● 8

Show media

▲ Utilitarianism



◆ Kantianism



● Ethical Ergoism



You need to do an evaluation [benefits or harms?] in utilitarianism

Kantianism believes that if one looks simply at benefit maximization or the consequences of one's act, then ...

Next

▲ 15

◆ 13

● 6

■ 19 ✓

Show media

▲ the society will be benefited generally



◆ the action will always be ethical



● there will be no respect to social contract



■ one will end up treating people as objects



Treat you like a human

According to ___, using someone just to get to an end is not ethical.

Next

▲ 13

◆ 9

● 31 ✓

Show media

▲ cultural relativism



◆ divine command theory



● Kantianism



— says "Act only from moral rules that you can at the same time will to be universal moral laws".

Next

▲ 36 ✓

◆ 15

Show media

▲ Kantianism First Formulation



◆ Kantianism Second Formulation



A birth certificate is an example of ...

Next

▲ 25 ✓

◆ 28

Show media

▲ public record



◆ private record





Purchases made with loyalty cards is considered as ...

Next

▲ 3

◆ 45 ✓

Show media

▲ public record



◆ private record



If a __ tag cannot be removed or disabled, it can become a tracking device.

Next

▲ 1

◆ 45 ✓

● 2

Show media

▲ name



◆ RFID



● price





Getting unauthorized access to a mobile phone using a malicious app
can be an offence under ...

Next

▲ 20 ✓

◆ 4

● 23

Show media

▲ Computer Crime Act 1997



◆ Communication and
Multimedia Act 1998



● Personal Data Protection Act
2010



Computer Crimes Act 1997

An Act to provide for offences relating to the misuse of computers.

The Computer Crimes Act 1997, effective as of the 1st of June 2000, created several offences relating to the misuse of computers. Among others, it deals with unauthorised access to computer material, unauthorised access with intent to commit other offences and unauthorised modification of computer contents. It also makes provisions to facilitate investigations for the enforcement of the Act.

[Computer Crimes Act 1997 \[Act 563\] \(online version as at 1 December 2011\)](#)

Phishing is governed under ...

Next

▲ 14 ✓ ♦ 18 ● 16

Show media

▲ Computer Crime Act 1997 ✓ ♦ Communication and Multimedia Act 1998 ✗

● Personal Data Protection Act 2010 ✗

Illegal interception of SMS messages is considered as an offence under ...

Next

▲ 45 ✓ ♦ 3 ● 0

Show media

▲ Communication and Multimedia Acts 1998 ✓ ♦ Digital Signature Act 1997 ✗

● ■COPYRIGHT ACT (AMENDMENT) 1997 ✗

Communications and Multimedia Act 1998

An Act to provide for and to regulate the converging communications and multimedia industries, and for incidental matters.

The Communications and Multimedia Act 1998 which came into effect on the 1st of April 1999, provides a regulatory framework to cater for the convergence of the telecommunications, broadcasting and computing industries, with the objective of, among others, making Malaysia a major global centre and hub for communications and multimedia information and content services. The Malaysian Communications and Multimedia Commission was appointed on the 1st November 1998 as the sole regulator of the new regulatory regime.

[Communications and Multimedia Act 1998 \[Act 588\]](#)

For a suspicious link in an email, you should ...

Next

▲ 1 ♦ 0 ● 44 ✓

Show media

▲ click on the link ✗ ♦ forward to friends ✗

● delete the email ✓

Ensure websites are trustworthy before entering credentials can prevent ...

Next



Show media

▲ credential harvesting



◆ virus infection



● DDoS attack

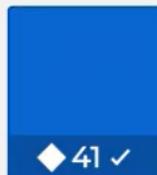


■ cyberbullying



Personal Data Protection Acts 2010 is applicable to ...

Next



Show media

▲ public records only



◆ personal data used in commercial transactions only



● personal data held by financial institutions only



Not protected if friend or government misuse it

References

[malaysian cyber laws.](#)

[How Well Does Cyber Law Safeguard Our Information? - ALSA Malaysia](#)