

IMC 401

FOUNDATION OF INFORMATION COMMUNICATION TECHNOLOGY

CHAPTER 1 : INTRODUCTION TO ICT

CONCLUSION

- The advancement of ICT have changed human life in various aspects.
- It does help for better improvement of human daily activities and enhance the process of decision making
- On top of that, ICT technology also helps to improve the quality of work and life
- However, all the changes needs to be managed and the society must be literate enough to ensure that they are able to make full use of the technology.

EVOLUTION OF COMMUNICATION

- Communication has improved and evolved to facilitate our daily activities.
- In the 21st century, everything related to communication utilizes technology to 'send out' or disseminate information to a wider audience.
- Information can be 'sent out' in many ways.
- The inventions of cellular phones, television and other electronic devices are important in enhancing communication.



PIGEON



MORSE
CODE



CORDLESS
PHONE



INTERNET



MOBILE
PHONE



PDA



NETWORK

WHAT IS ICT?

- ICT is the technology required for information processing, in particular, the use of electronic computers, communication devices and software applications to convert, store, protect, process, transmit and retrieve information from anywhere, anytime



Information
(Reading books)



Communication
(Share with friends)



Technology
(E-mail findings)

INFORMATION

- Information refers to the knowledge obtained from reading, investigation, study or research.
- The tools to transmit information are the telephone, television and radio.
- We need information to make decisions and to predict the future. For example, scientists can detect the formation of a tsunami using the latest technology and warn the public to avoid disasters in the affected areas.
- Information is knowledge and helps us to fulfill our daily tasks. For example, forecasting the stock exchange market.

COMMUNICATION

- Communication is an act of transmitting messages.
- It is a process whereby information is exchanged between individuals using symbols, signs or verbal interactions.
- Previously, people communicated through sign or symbols, performing drama and poetry.
- With the advent of technology, these 'older' forms of communication are less utilized as compared to the use of the Internet, e-mail or video conferencing.
- Communication is important in order to gain knowledge. With knowledge, we are more confident in expressing our thoughts and ideas.

TECHNOLOGY

- Technology is the use of scientific knowledge, experience and resources to create processes and products that fulfill human needs.
- Technology is vital in communication.

WHAT IS DIGITAL LITERACY?

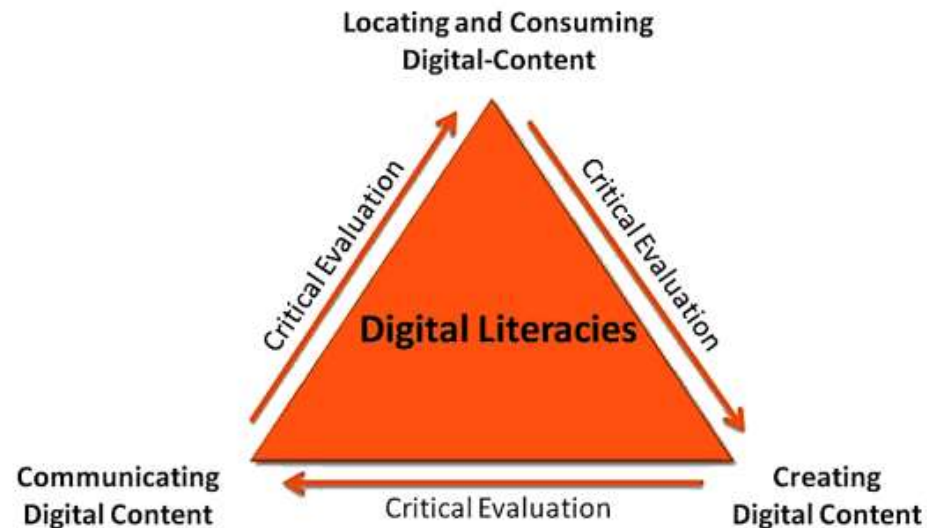
- **Digital Literacy** is a relatively new concept that emerged in the 1990s during the era of the Internet revolution. Before that, people talked more about “computer literacy.” But in 1997, Paul Gilster, a historian and educator first coined the term “digital literacy,” arguing that digital literacy went beyond just skills in using technology.
- It is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers.
- Digital literacy involves any number of digital reading and writing techniques across multiple media forms, including: words, texts, visual displays, motion graphics, audio, video, and multimodal forms.



CATEGORIES OF DIGITAL LITERACY

Spires and Bartlett (2012) have divided the various intellectual processes associated with digital literacy into three categories:

- (a) locating and consuming digital content,
- (b) creating digital content
- (c) communicating digital content



CATEGORIES OF DIGITAL LITERACY

1. Locating and Consuming Digital Content

- It is essential to develop the skills to locate, comprehend and consume digital content on the Web.
- There is consensus that effective Web search skills must be developed for a digital society, and instruments checklist being developed to ensure that they have the necessary prerequisite Web search skills

2. Creating Content

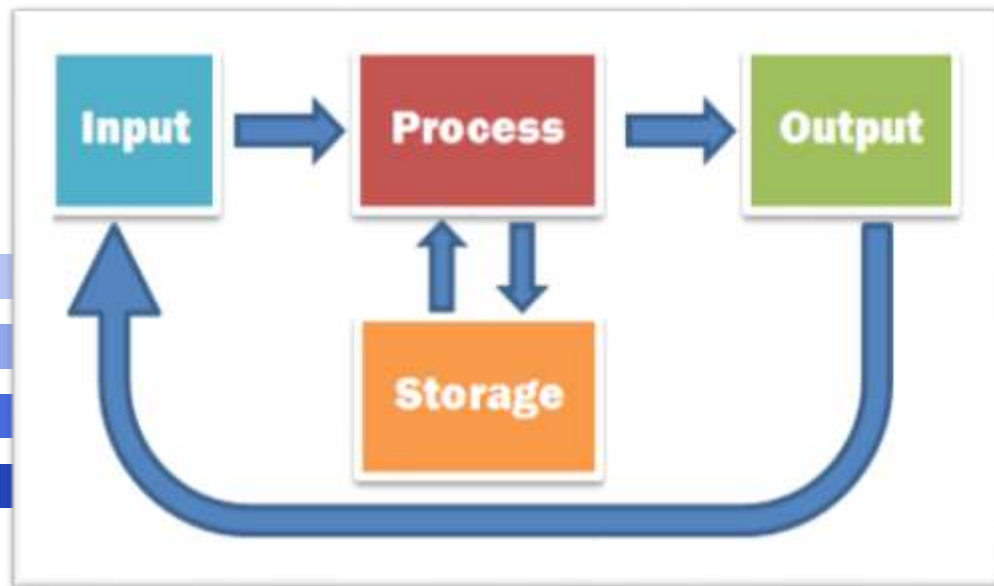
- The implementation of digital content may be an important and effective method to embrace the 21st century skills that are expected to master.

3. Communicating Digital Content

- Digital content must be communicated effectively in order to be a useful
- Using social networking sites like Facebook, Twitter, and Instagram requires users to understand and manipulate information in multiple formats.
- Web 2.0 tools are social, participatory, collaborative, easy to use, and facilitate the creation of online communities which enable to communicate digital content using mobile devices such as cellphones and tablets that provides convenience and immediacy to the communication process for everyone.

WHAT IS COMPUTER?

- ✓ A **computer** is an electronic device, operating under the control of instructions stored in its own memory.
- ✓ A **computer** accept data , process the data accordingly, produce information and store it for future use.



ADVANTAGES OF COMPUTER

1. Speed

Computer offering the speed of carrying out the given instruction logically and numerically

2. Accuracy

Computer calculates very accurately and computer never does mistake although we often hear about the false results of computers. This may be due to the error in data entry or due to poorly designed program.

3. Versatility

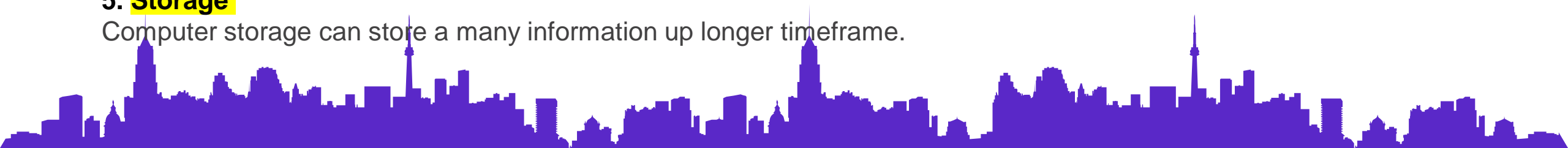
Previously, the computer was thought as only a calculating machine, but a computer can also carry out logical operations. Any job can be computerized with the help of appropriate software.

4. Reliability

The information stored in computer is in digital forms. The information can be stored for long time and have long life. If maintained properly, at least data processing and storage components are guaranteed for several years

5. Storage

Computer storage can store a many information up longer timeframe.



ADVANTAGES OF COMPUTER

6. Automatically

A computer performs automatically in user friendly and menu driven program

7. Compactness

Nowadays, the size of the computer has reduced drastically. The modern computers are laptop and tabletop computers. They do not occupy more space and provide mobility to the computer.

8. Repetitiveness

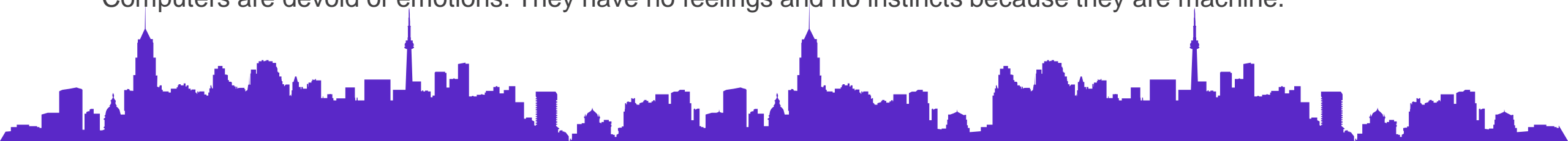
Computer can be used repetitively to process information. It does not feel mental fatigue as in case of human being.

9. Diligence

A computer is an electronics device. It does not suffer from the human traits of lack of concentration. So, the results will be continuously of the same standard.

10. No Feelings

Computers are devoid of emotions. They have no feelings and no instincts because they are machine.



MAIN ADVANTAGES OF USING COMPUTER



Speed	data, instructions, and information flow along electronic circuits in a computer at incredibly fast speeds.
Reliability	dependable and reliable because they rarely break or fail.
Consistency	produce the same results — consistently, generate error-free results
Storage	store enormous amounts of data and make this data available for processing anytime it is needed.
Communications	computers can communicate with other computers, often wirelessly, and allow users to communicate with one another.

DISADVANTAGES OF COMPUTER



Violation of privacy

Public safety

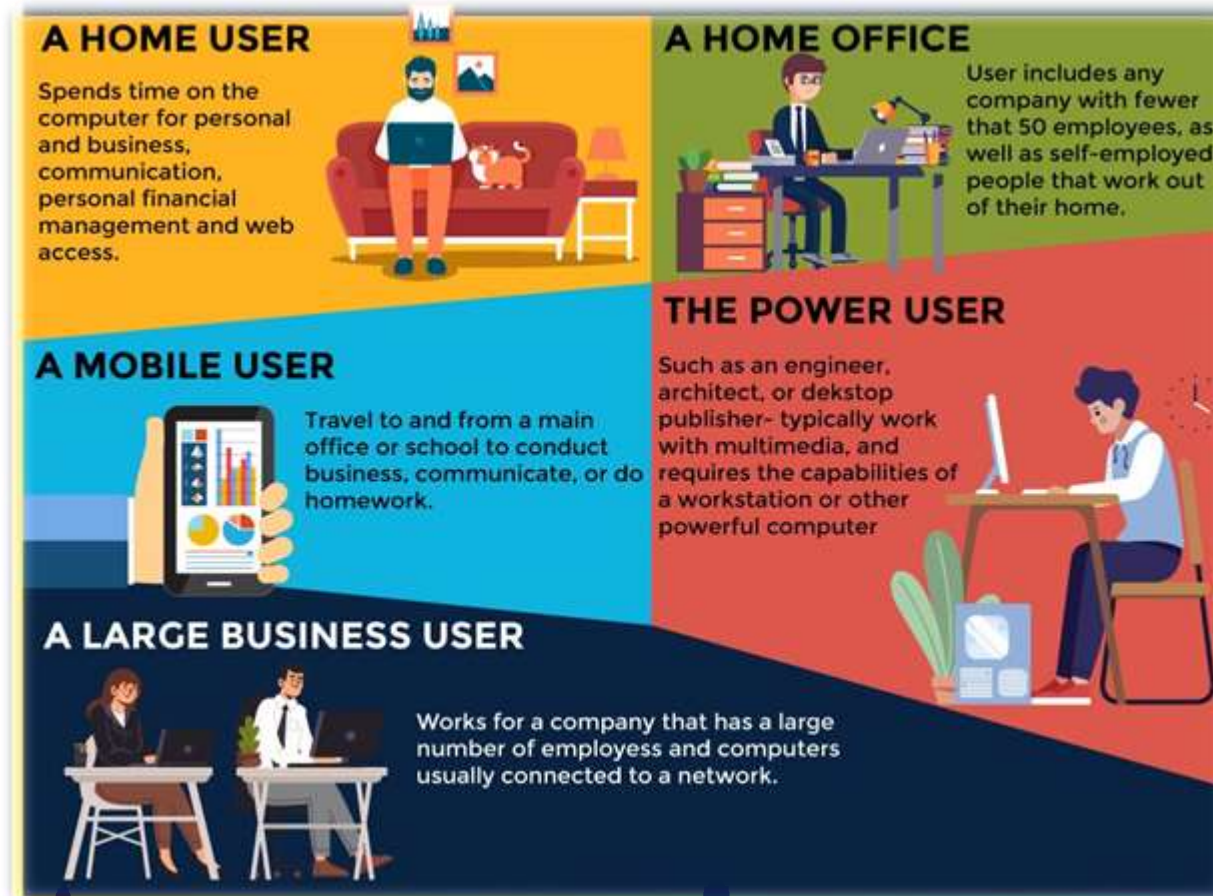
Impact on labour force

Impact on environment

On top of that, computer also provide health risks to its users such as:

- Carpal tunnel syndromes
- Vision problems
- Backache
- Headache

COMPUTER USERS



COMPUTER APPLICATION IN THE SOCIETY

Education

Government

Finance

Retail

Entertainment

Health Care

Science

Travel

Publishing

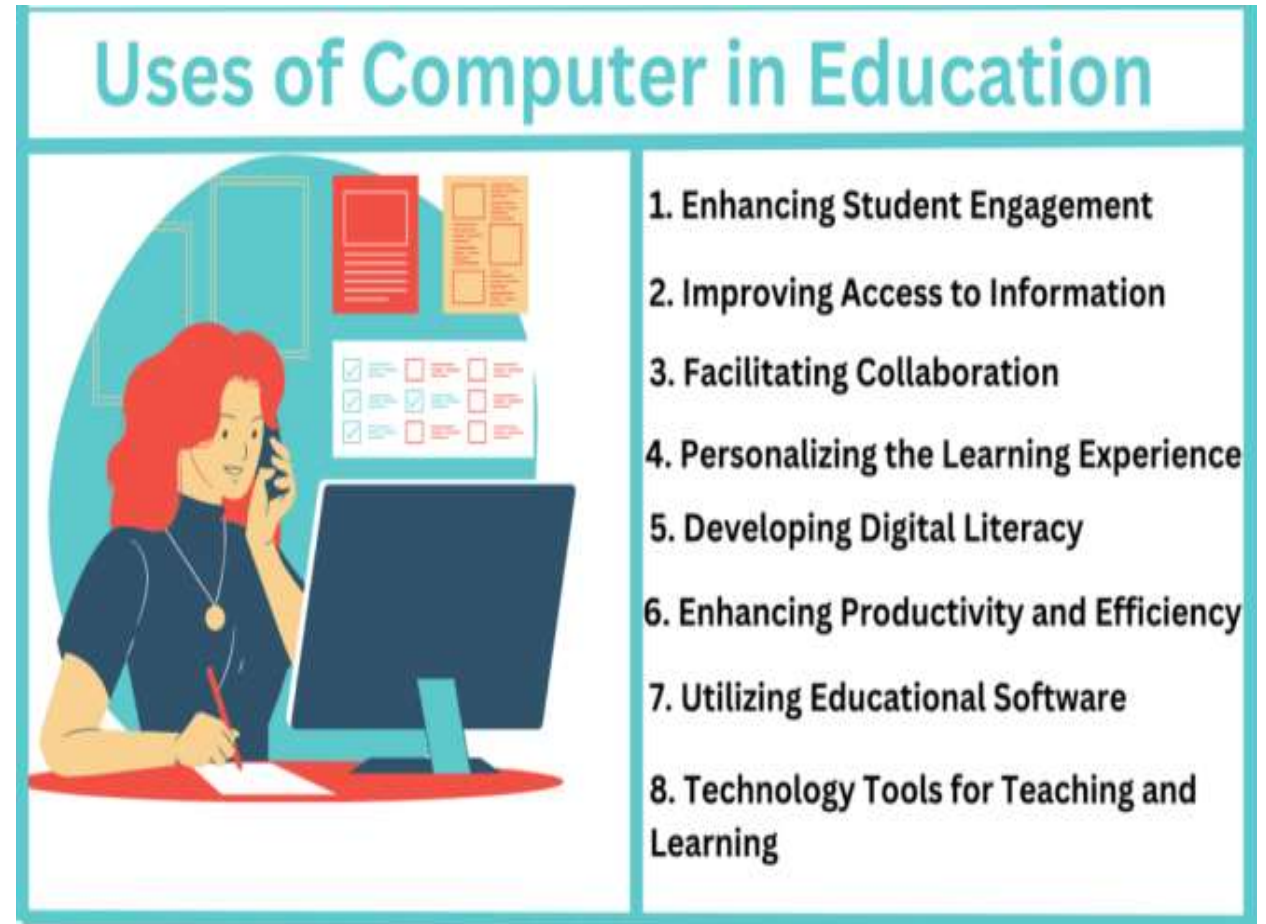
Manufacturing

Agriculture

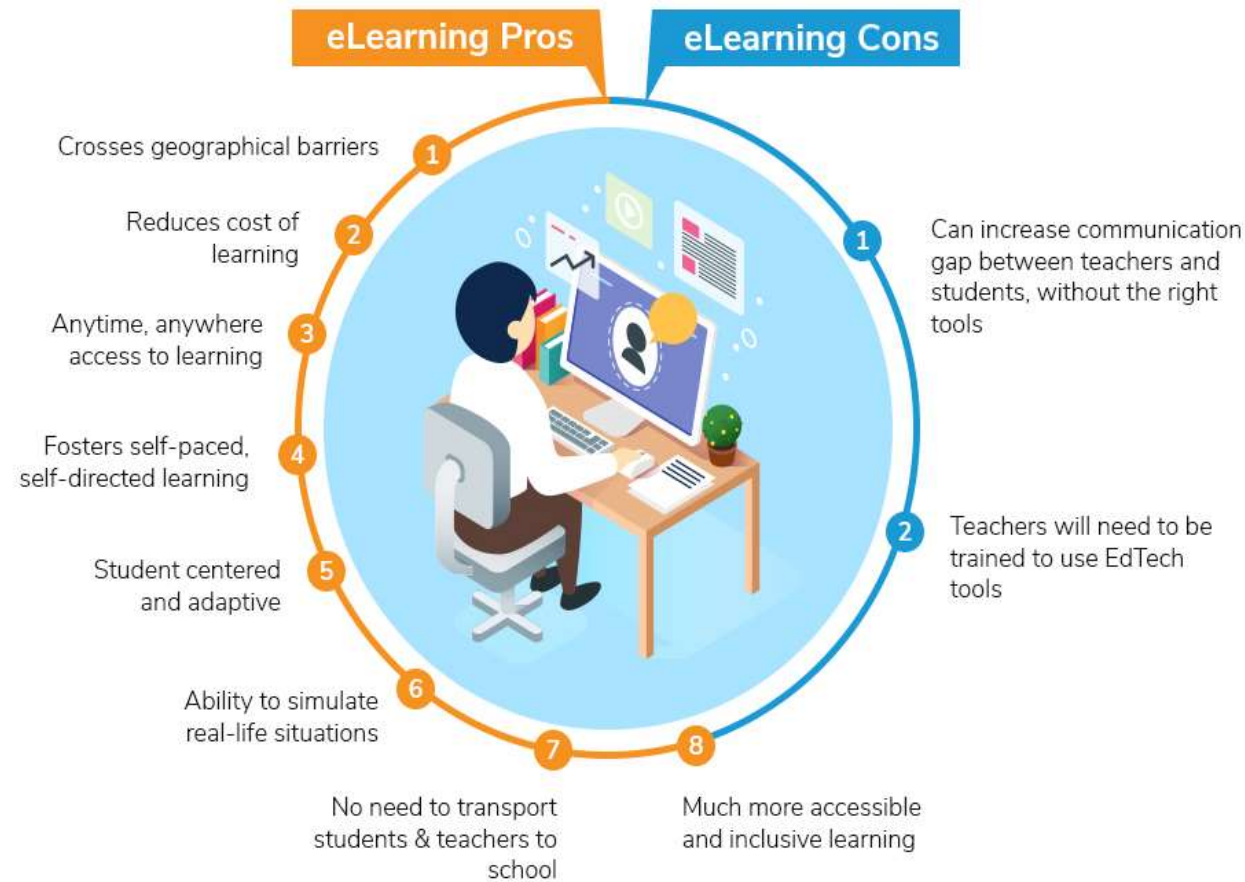


COMPUTER FOR EDUCATION

1. Computers are excellent tools for helping students learn specific skills, such as how to properly research online, create online content, and use digital tools for collaboration.
2. Computers can also be used to provide students with real-world experience that helps them to explore and apply their skills.



COMPUTER FOR EDUCATION



COMPUTER FOR GOVERNMENT

Computers play an important roles in government. Some major fields in this category are:

- Budgets
- Sales tax department
- Income tax department
- Male/Female ratio
- Computerization of voters lists
- Computerization of driving licensing system
- Weather forecasting



COMPUTER FOR GOVERNMENT

PRIME MINISTER'S DEPARTMENT
MALAYSIAN ADMINISTRATIVE MODERNIZATION AND MANAGEMENT PLANNING UNIT
(MAMPU)

The Government of Malaysia's Official Gateway

MyGovernment Portal

Based On Life Events

- Managing Personal Identification**
(National Registration Department, Road Transport Department)
- Getting Formal Education**
(Ministry of Education, Ministry of Higher Education)
- Managing Business**
(Securities Commission)
- Managing Family Institution**
(Qiyasat Court, Islamic Affairs Division)
- Building Careers And Retirement**
(Public Services Commission, Education Service Commission)
- Managing Finance And Taxation**
(Inland Revenue Board, Royal Malaysian Customs Department)
- Obtaining Facilities, Welfare & Health Care**
(Ministry of Health, Department of Social Welfare)
- Getting Tourism Information**
(Ministry of Tourism, Arts And Culture)
- Getting IT And Digital Information**
(Ministry of Communications And Multimedia)

More Information:
www.malaysia.gov.my

MAMPU

Official Portal for
Malaysian Government eProcurement

Portal last updated on 30 March 2018 11:11:45 AM

HOME ABOUT eP eP USERS VALUE ADDED SERVICES HELP AND REFERENCE DOWNLOADS QUICK LINKS SEARCH

ALERT / NOTICE : Garis Panduan Penyediaan Spesifikasi Bagi Pembelian Terus, Sebut Harga Dan Tender

English

Quick Links

1. Log Masuk

- Login To ePerolehan
- New Supplier Registration
- Contract Circulars Listing
- Catalogue Listing
- Quotation / Tender Notice
- Item Code Search
- Company Profile/ Market Research Access Application
- ePerolehan Online Learning
- Resend Activation Email (Supplier)
- Self-Request New ID And Password (Supplier)
- Reactivate Basic Account
- Replace Supplier Admin

Upcoming Events

29 March 2018

- Taklimat Penggunaan Sistem ePerolehan kepada Pembekal pada 3 April di Kompleks

24 Hours Customer Service Helpdesk

Supplier	Government
+603 7985 7777	+603 7985 7888
+603 7787 1001	+603 7787 1001
bantuan@eperolehan.gov.my	bantuanptj@eperolehan.gov.my

Announcements

Malaysia

TINDAKAN SEGERA:
Pengemaskinian Maklumat Bank Di Dalam Sistem ePerolehan (eP) Oleh

» More Announcements

Tag Cloud

eperolehan policy kerajaan government sistem eperolehan sistem pembekal

COMPUTER FOR FINANCE

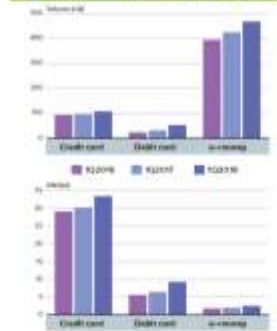


1. Computer is now mostly used in offices as one of the equipment in financial institutions. And this computer performs many functions apart from calculating function.
2. It also performs different functions as data analysis, prediction, the identification of trend and even the creation of new approaches and ideas.



COMPUTER FOR FINANCE

1 E-payment usage continues to grow



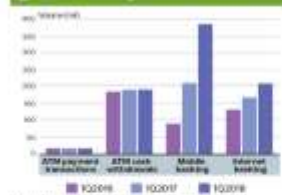
E-money saw the largest volume of transactions in Q3 2018 at RM46.68 billion, followed by credit card transactions (RM38.13 billion) and debit card transactions (RM3.36 billion). In terms of value, credit cards led the way with RM13.26 billion of transactions, followed by debit card transactions (RM2.21 billion) and e-money (RM2.48 billion).

2 E-money accounted for more than half of transaction volume in 2017 (%)



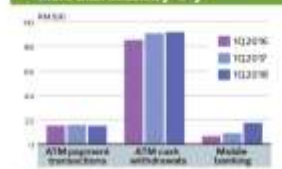
E-money accounted for the bulk of transactions in 2017 at 58.1%, followed by internet banking (15.9%) and credit cards (12.7%).

3 Mobile banking transaction volume surged



Mobile banking transactions surged 82% y-o-y to RM6.54 billion, while internet banking transactions grew 25% y-o-y. During the same period, transactions and withdrawals via automated teller machines (ATMs) were stagnant at 17.67 billion and RM2.38 billion respectively.

4 Mobile banking transaction value more than doubled y-o-y

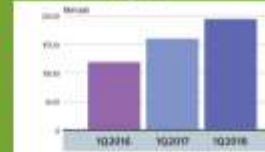


Mobile banking transactions more than doubled in value in Q3 2018 to RM6.26 billion, from RM2.96 billion in Q3 2017.

THE PROGRESS SO FAR TOWARDS A CASHLESS MALAYSIA

More Malaysians are making cashless payments based on Bank Negara Malaysia's payments data for the first quarter of 2018. Over the first three months of the year, the volume of transactions through credit cards, debit cards and e-money grew 13.5% year-on-year to 629.57 million. The value of transactions grew 16.9% to RM44.95 billion.

5 Internet banking transaction value continues to grow



Internet banking, the largest payment channel by transaction value, grew 22% to RM1.94 billion from RM1.58 billion in the previous year.

6 Internet banking penetration breaches 80%



In January, internet banking penetration breached the 80% mark, with 80.7% penetration of the population. As at end-April, internet banking penetration stood at 84.2%.

7 Boom to grow in mobile banking penetration



Meanwhile, there is still much room for growth in mobile banking, as only 27.5% of the population use mobile services, while the penetration rate among mobile subscribers stood at 28.3% as at end-April.

8 CIC growth rate declining



Although cash in circulation (CIC) is still growing, the growth rate has slowed down to 8.1% from 12.7% in 2015.

9 Cheque usage continues to fall



The usage of cheques has been declining over the years and Bank Negara's push towards e-payments. The central bank had in 2017 announced that the cheque processing fee will be increased to RM10 effective from January 2021, while the 50 sen instant transfer fee on e-payments will be waived effective July 1, 2018.

COMPUTER FOR RETAIL

1. Computers can be **used to buy and sell products online** – this enables sellers to reach a wider market with low overheads, and buyers to compare prices, read reviews, and choose delivery preferences.
2. It **offers a global address and makes it easy for both businesses and customers to deal with each other.**



COMPUTER FOR RETAIL



COMPUTER FOR ENTERTAINMENT

1. Computers are also playing very important role for the entertainment of human beings
2. Nowadays, computer can be used to watch television programs on the Internet
3. People can also watch movies, listen music, and play games on the computer.
4. Many computer games and other entertainment materials of different kinds are available on the Internet.





1. Every area of the medical field uses computers such as laboratories, research offices, scanning, monitoring, pharmacy etc. which are helping the doctors to diagnose diseases and many other purposes e.g.
 - Maintain patient history and other records
 - ICU (Intensive Care Unit)
 - Operation Theater
 - Recovery Room
 - Medical Ward
 - ECG
 - Diagnosis of Diseases
 - Telemedicine
 - Computer-aided surgery

COMPUTER FOR HEALTHCARE

Benefit	Comments
Improved quality of care	Order entry, data handling, billing, documentation, monitoring, dispensing, testing, imaging, alerting, reporting
Decreased costs	Linking to electronic records, reducing work times, improving communication, organizing schedules
Uniformity	Integration of health care systems, referencing, databases, updating, use of terminology
Patient knowledge	Involving patients in care, offering visual images, education, answering questions
Internet capability	Telemedicine, telepharmacy, use of sensory and input devices in emergencies
Patient accessibility	Social networking, daily health monitoring, patient–provider interactions



COMPUTER FOR SCIENCE

1. One of the most important advantages of computers is in the field of science for research and development
2. The computers have played a major role in most of what we know about ourselves and the universe
3. The satellites, the telescope and almost all research tool make use of computers in some or the other way.
4. The huge calculations required for space science, safe communication between scientist, storage of all gathered information are some of the computers uses in science and technology.



COMPUTER FOR TRAVEL

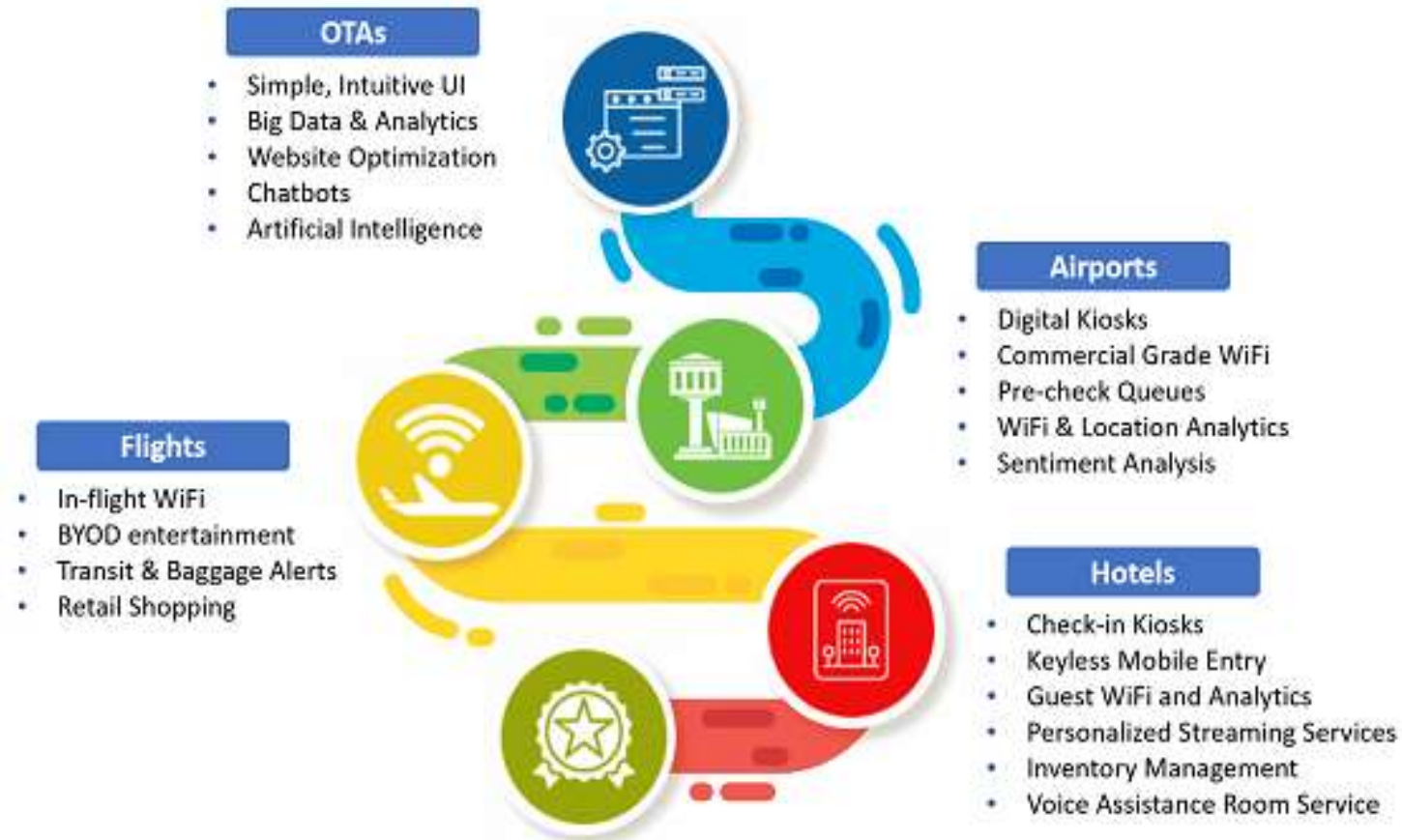
1. Online travel agencies such as **expedia.com**, are a large contribution to **how the travel and tourism industries have changed due to technology.**
2. These online agencies **help users plan and book trips and provide comparisons of hotels, flights, vacation packages, prices and more, all in one place.**

Computers in Tourism

- On-line reservation systems
- Navigation systems
- Airline bookings
- Computerized Agent
- Car Rentals
- Tour Scheduling



COMPUTER FOR TRAVEL



SNAPSHOT OF HOW TECHNOLOGY HAS TRANSFORMED THE TRAVEL AND HOSPITALITY INDUSTRY

Technology is a Part of How We Travel

49%

of travelers will use social media more if they have free WiFi while traveling.

88%

of respondents take mobile devices with WiFi or 3G capabilities while on

68%

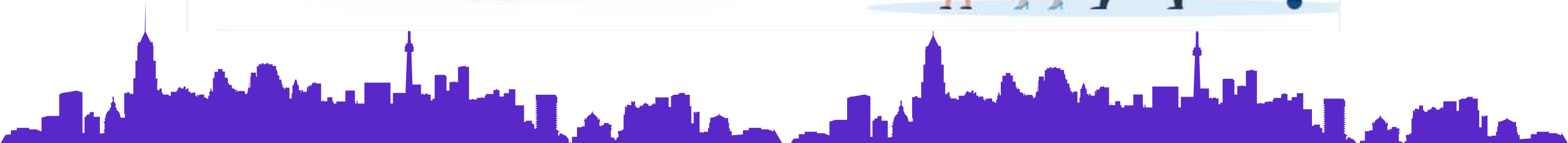
of travelers globally use mobile devices to connect with friends and family; 22% use them to do work-related tasks.

OVER 50%

of travelers will "pack" travel apps on their devices before going on

OVER 1/3

of travelers will share vacation-related online content if they think friends or family will

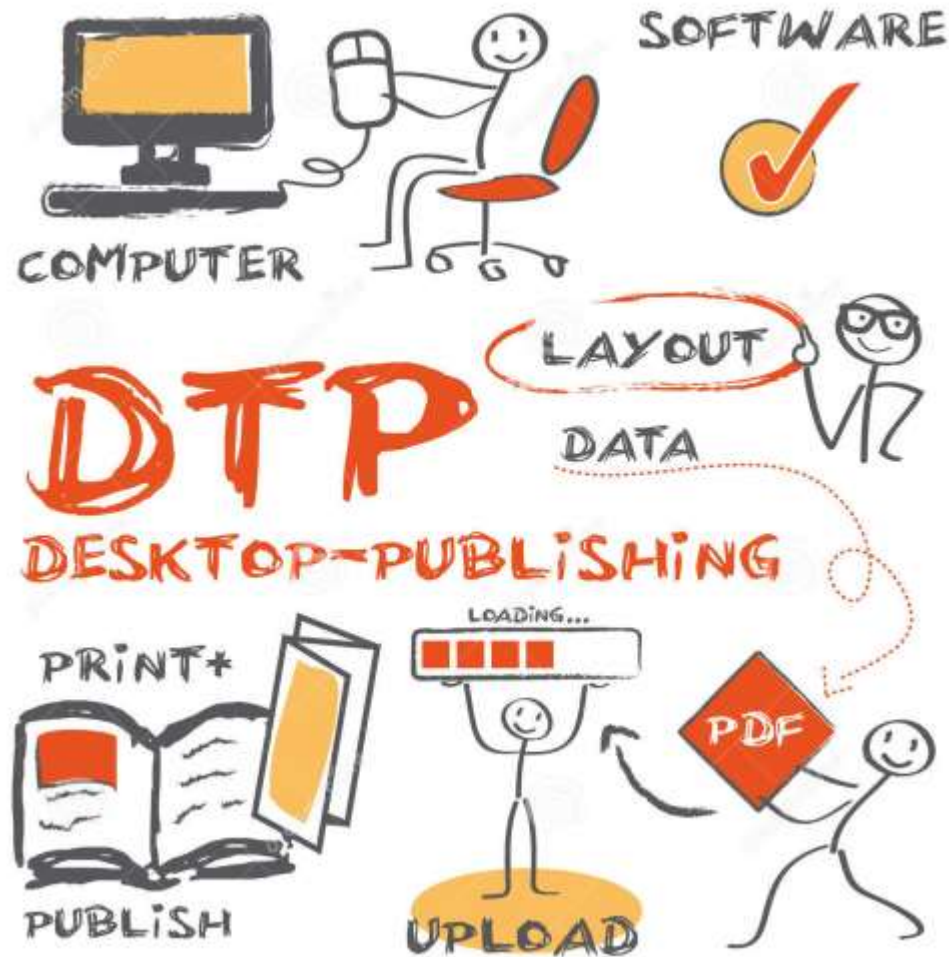


COMPUTER FOR PUBLISHING

1. Publishers use computers to design and produce hard-copy books and e-books, market books to readers and track sales. Readers download books and magazines to their phones, laptops and tablets to read wherever they go.
2. Reporters use the Internet to gather research
3. Many newspaper produce Web versions
4. Textbook was produced entirely on computer workstation



COMPUTER FOR PUBLISHING



1. Desktop publishing is the production of printed matter by means of a printer linked to a desktop computer, with special software.
2. The system enables reports, advertising matter, etc., to be produced cheaply with a layout and print quality similar to that of typeset books.
3. For example, desktop publishing is utilized to create printed material, such as book covers, brochures, catalogs, flyers, magazines, and posters.

COMPUTER FOR MANUFACTURING

1. The role of computer in manufacturing may be broadly classified into two groups :
 - Computer monitoring and control of the manufacturing process
 - Manufacturing support applications, which deal essentially with the preparations for actual manufacturing and post-manufacture operations
2. **Embedded computers** are extensively used in many manufacturing applications, especially for the control of production processes.



COMPUTER FOR MANUFACTURING

