



MALAYSIA

LAPORAN SURVEI PENGGUNAAN DAN CAPAIAN ICT OLEH INDIVIDU DAN ISI RUMAH

***ICT USE AND ACCESS BY INDIVIDUALS AND HOUSEHOLDS
SURVEY REPORT***

2020

Pemakluman / Announcement:

Dimaklumkan bahawa susulan pelaksanaan Perintah Kawalan Pergerakan Bersyarat (PKPB), Banci Penduduk dan Perumahan Malaysia 2020 (Banci Penduduk 2020) secara dalam talian (e-census) telah dibuka semula.

Please be informed that following the implementation of the Movement Control Order (MCO), Malaysia Population and Housing Census 2020 (Malaysia Census 2020) via online (e-census) has reopened.

Dimaklumkan Kerajaan Malaysia telah mengisytiharkan Hari Statistik Negara (MyStats Day) pada 20 Oktober setiap tahun.

Tema sambutan MyStats Day adalah
“Connecting the world with data we can trust”

*Please be informed that the Government of Malaysia has declared National Statistics Day (MyStats Day) on October 20 each year.
MyStats Day theme is
“Connecting the world with data we can trust”*

**JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS, MALAYSIA**

Diterbit dan dicetak oleh/ *Published and printed by:*

Jabatan Perangkaan Malaysia

Department of Statistics, Malaysia

Blok C6, Kompleks C,

Pusat Pentadbiran Kerajaan Persekutuan,

62514 Putrajaya,

MALAYSIA

Tel.	: 03-8885 7000
Faks	: 03-8888 9248
Portal	: https://www.dosm.gov.my
Facebook/ Twitter/ Instagram	: StatsMalaysia
Emel/ Email	: info@dosm.gov.my (pertanyaan umum/ <i>general enquiries</i>) data@dosm.gov.my (pertanyaan & permintaan data/ <i>data request & enquiries</i>)

Harga/ Price : RM20.00

Diterbitkan pada April 2021/ *Published on April 2021*

Hakcipta terpelihara/ All right reserved.

Tiada bahagian daripada terbitan ini boleh diterbitkan semula, disimpan untuk pengeluaran atau ditukar dalam apa-apa bentuk atau alat apa jua pun kecuali setelah mendapat kebenaran daripada Jabatan Perangkaan Malaysia.

Pengguna yang mengeluarkan sebarang maklumat dari terbitan ini sama ada yang asal atau diolah semula hendaklah meletakkan kenyataan berikut:

"Sumber: Jabatan Perangkaan Malaysia".

No part of this publication may be reproduced or distributed in any form or by any means or stored in data base without the prior written permission from Department of Statistics, Malaysia.

Users reproducing content of this publication with or without adaptation should quote the following:

"Source: Department of Statistics, Malaysia".

ISSN 2289 - 7240



KATA PENGANTAR

Laporan Survei Penggunaan dan Capaian ICT oleh Individu dan Isi Rumah 2020 membentangkan statistik mengenai penggunaan dan capaian ICT oleh individu dan isi rumah. Statistik yang diterbitkan dalam laporan ini adalah berdasarkan konsep dan garis panduan daripada *Manual for Measuring ICT Access and Use by Households and Individuals 2014 Edition* yang diterbitkan oleh *International Telecommunication Union* (ITU).

Statistik daripada laporan ini digunakan oleh agensi kerajaan dan pihak swasta sebagai input dalam perancangan, pembentukan dan pemantauan rancangan pembangunan ICT negara. Statistik ini juga digunakan oleh ahli ekonomi, ahli akademik serta individu lain bagi tujuan penyelidikan dan penganalisisan.

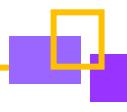
Laporan ini mengandungi tiga bahagian utama. Ringkasan penemuan dibentangkan di bahagian pertama manakala bahagian kedua memuatkan jadual terperinci mengenai statistik penggunaan dan capaian ICT. Aspek teknikal seperti konsep, definisi dan metodologi diterangkan di bahagian ketiga bagi memudahkan pengguna memahami statistik dan terma yang diterbitkan.

Jabatan merakamkan setinggi-tinggi penghargaan atas kerjasama yang diberikan oleh responden dan juga semua pihak yang telah menyumbang secara langsung atau tidak langsung dalam menjayakan survei ini. Setiap maklum balas dan cadangan untuk penambahbaikan laporan ini pada masa akan datang amat dihargai.

DATO' SRI DR. MOHD UZIR MAHIDIN

Ketua Perangkawan Malaysia

April 2021



PREFACE

The ICT Use and Access by Individuals and Households 2020 Survey Report presents statistics on the use and access of ICT by individuals and households. Statistics published in this report are based on the concepts and guidelines from the Manual for Measuring ICT Access and Use by Households and Individuals 2014 Edition published by the International Telecommunication Union (ITU).

Statistics from this report are primarily used by government and private agencies as an input in the planning, formulating and monitoring of national ICT development plans. These statistics can be used by economists, academicians and other individuals for research and analysis purposes.

This report consists of three main sections. Summary of findings is presented in the first section while second section contains detailed tables on the use and access of ICT statistics. Technical aspects such as concepts, definitions and methodologies are described in section three in order to facilitate users with better understanding pertaining to the published statistics.

The Department gratefully acknowledges the co-operation rendered by the respondents as well as all parties who have contributed either directly or indirectly in making this survey a success. Every feedback and suggestion towards improving the future reports is highly appreciated.

DATO' SRI DR. MOHD UZIR MAHIDIN

Chief Statistician Malaysia

April 2021



ISI KANDUNGAN CONTENTS

	Muka Surat <i>Page</i>
Kata Pengantar <i>Preface</i>	i
Senarai Jadual <i>List of Tables</i>	vii
Ringkasan Penemuan <i>Summary of Findings</i>	1
Kesan Pandemik COVID-19 Terhadap Aktiviti Internet Terpilih di Kalangan Rakyat Malaysia <i>The Impact of COVID-19 Pandemic to Selected Internet Activities Among Malaysian</i>	27
Jadual Statistik <i>Statistical Tables</i>	
Capaian ICT oleh Ibu Rumah <i>ICT Access by Households</i>	45
Penggunaan ICT oleh Individu <i>ICT Use by Individuals</i>	51
Statistik Terpilih Malaysia <i>Selected Statistics of Malaysia</i>	83
Tanda Aras ICT Negara Terpilih <i>ICT Benchmarks of Selected Countries</i>	89
Siri Masa <i>Time Series</i>	95
Ralat Piawai Relatif <i>Relative Standard Error</i>	121
Nota Teknikal <i>Technical Notes</i>	125

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



SENARAI JADUAL

LIST OF TABLES

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



SENARAI JADUAL *LIST OF TABLES*

Muka Surat
Page

1

Capaian ICT oleh Isi Rumah *ICT Access by Households*

- | | | |
|-----|---|----|
| 1.1 | Peratusan capaian telefon bimbit oleh isi rumah mengikut negeri, jenis dan strata, Malaysia, 2020
<i>Percentage of households with access to mobile phone by state, type and strata, Malaysia, 2020</i> | 45 |
| 1.2 | Peratusan capaian internet oleh isi rumah mengikut negeri, jenis perkhidmatan dan strata, Malaysia, 2020
<i>Percentage of households with internet access by state, type of service and strata, Malaysia, 2020</i> | 46 |
| 1.3 | Peratusan capaian isi rumah terhadap perkhidmatan dan peralatan ICT mengikut negeri dan strata, Malaysia, 2020
<i>Percentage of households with access to ICT services and equipment by state and strata, Malaysia, 2020</i> | 47 |

2

Penggunaan ICT oleh Individu *ICT Use by Individuals*

- | | | |
|-----|--|----|
| 2.1 | Peratusan penggunaan dan pemilikan telefon bimbit oleh individu mengikut negeri dan strata, Malaysia, 2020
<i>Percentage of individuals using and owning mobile phone by state and strata, Malaysia, 2020</i> | 51 |
| 2.2 | Peratusan individu menggunakan komputer mengikut negeri dan strata, Malaysia, 2020
<i>Percentage of individuals using computer by state and strata, Malaysia, 2020</i> | 52 |
| 2.3 | Peratusan individu menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020
<i>Percentage of individuals using computer by state, type of ICT skills and strata, Malaysia, 2020</i> | 53 |
| 2.4 | Peratusan belia menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020
<i>Percentage of youth using computer by state, type of ICT skills and strata, Malaysia, 2020</i> | 56 |
| 2.5 | Peratusan individu menggunakan komputer mengikut jenis kemahiran ICT dan jantina, Malaysia, 2020
<i>Percentage of youth using computer by type of ICT skills and sex, Malaysia, 2020</i> | 59 |



SENARAI JADUAL *LIST OF TABLES*

	Muka Surat <i>Page</i>
2.6 Peratusan individu menggunakan komputer mengikut jenis kemahiran ICT dan kumpulan umur, Malaysia, 2020 <i>Percentage of individuals using computer by type of ICT skills and age group, Malaysia, 2020</i>	60
2.7 Peratusan individu menggunakan internet mengikut negeri dan strata, Malaysia, 2020 <i>Percentage of individuals using the internet by state and strata, Malaysia, 2020</i>	61
2.8 Peratusan individu menggunakan internet mengikut negeri, jenis peranti mudah alih yang digunakan dan strata, Malaysia, 2020 <i>Percentage of individuals using the internet by state, type of portable devices use and strata, Malaysia, 2020</i>	62
2.9 Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020 <i>Percentage of individuals using the internet by state and type of activity, Malaysia, 2020</i>	63
2.10 Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020 <i>Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020</i>	69
2.11 Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020 <i>Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020</i>	75

3

Statistik Terpilih Malaysia *Selected Statistics of Malaysia*

3.1 Kadar penembusan perkhidmatan dan peralatan ICT bagi 100 penduduk, Malaysia, 2017 - ST3 2020 <i>ICT services and equipment penetration rate per 100 inhabitants, Malaysia, 2017 - Q3 2020</i>	83
3.2 Bilangan langganan jalur lebar dan kadar penembusan, Malaysia, 2017 - ST3 2020 <i>Number of broadband subscriptions and penetration rate, Malaysia, 2017 - Q3 2020</i>	84



SENARAI JADUAL *LIST OF TABLES*

	Muka Surat <i>Page</i>
3.3 Bilangan langganan selular mudah alih dan kadar penembusan, Malaysia, 2017 - ST3 2020 <i>Number of mobile-cellular subscriptions and penetration rate, Malaysia, 2017 - Q3 2020</i>	84
3.4 Bilangan langganan TV berbayar dan kadar penembusan, Malaysia, 2017 - ST3 2020 <i>Number of pay TV subscriptions and penetration rate, Malaysia, 2017 - Q3 2020</i>	85
3.5 Bilangan langganan telefon tetap dan kadar penembusan, Malaysia, 2017 - ST3 2020 <i>Number of fixed-telephone subscriptions and penetration rate, Malaysia, 2017 - Q3 2020</i>	85

4

Tanda Aras ICT Negara Terpilih *ICT Benchmarks of Selected Countries*

4.1 Peratusan capaian internet oleh isi rumah mengikut negara terpilih, 2017 - 2019 <i>Percentage of households with internet access by selected countries, 2017 - 2019</i>	89
4.2 Peratusan capaian komputer oleh isi rumah mengikut negara terpilih, 2017 - 2019 <i>Percentage of households with access to computer by selected countries, 2017 - 2019</i>	89
4.3 Peratusan individu menggunakan internet mengikut negara terpilih, 2017 - 2019 <i>Percentage of individuals using the internet by selected countries, 2017 - 2019</i>	90
4.4 Peratusan individu menggunakan komputer mengikut negara terpilih, 2017 - 2019 <i>Percentage of individuals using computer by selected countries, 2017 - 2019</i>	90
4.5 Peratusan individu menggunakan internet mengikut jantina dan negara terpilih, 2018 <i>Percentage of individuals using the internet by sex and selected countries, 2019</i>	91



SENARAI JADUAL *LIST OF TABLES*

	Muka Surat <i>Page</i>
4.6 Kedudukan indeks berkaitan ICT bagi negara terpilih, 2018 dan 2019 <i>Ranking of ICT-related indices for selected countries, 2018 and 2019</i>	91

5

Siri Masa *Time Series*

5.1 Peratusan capaian telefon bimbit oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with access to mobile phone by state and strata, Malaysia, 2017 - 2020</i>	95
5.2 Peratusan capaian internet oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with internet access by state and strata, Malaysia, 2017 - 2020</i>	96
5.3 Peratusan capaian komputer oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with access to computer by state and strata, Malaysia, 2017 - 2020</i>	97
5.4 Peratusan capaian siaran TV berbayar oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with access to pay TV channel by state and strata, Malaysia, 2017 - 2020</i>	98
5.5 Peratusan capaian televisyen oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with access to television by state and strata, Malaysia, 2017 - 2020</i>	99
5.6 Peratusan capaian radio oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with access to radio by state and strata, Malaysia, 2017 - 2020</i>	100
5.7 Peratusan capaian telefon talian tetap oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of households with access to fixed-line telephone by state and strata, Malaysia, 2017 - 2020</i>	101
5.8 Peratusan individu menggunakan telefon bimbit mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of individuals using mobile phone by state and strata, Malaysia, 2017 - 2020</i>	102



SENARAI JADUAL *LIST OF TABLES*

	Muka Surat <i>Page</i>
5.9 Peratusan individu memiliki telefon bimbit mengikut jantina, Malaysia, 2017 - 2020 <i>Percentage of individuals owning mobile phone by sex, Malaysia, 2017 - 2020</i>	103
5.10 Peratusan individu memiliki telefon bimbit mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of individuals owning mobile phone by state and strata, Malaysia, 2017 - 2020</i>	104
5.11 Peratusan individu menggunakan komputer mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of individuals using computer by state and strata, Malaysia, 2017 - 2020</i>	105
5.12 Peratusan individu menggunakan komputer mengikut negeri dan jenis kemahiran ICT, Malaysia, 2018 - 2020 <i>Percentage of individuals using computer by state and type of ICT skills, Malaysia, 2018 - 2020</i>	106
5.13 Peratusan belia menggunakan komputer mengikut negeri dan jenis kemahiran ICT, Malaysia, 2018 - 2020 <i>Percentage of youth using computer by state and type of ICT skills, Malaysia, 2018 - 2020</i>	108
5.14 Peratusan individu menggunakan internet mengikut negeri dan strata, Malaysia, 2017 - 2020 <i>Percentage of individuals using the internet by state and strata, Malaysia, 2017 - 2020</i>	110
5.15 Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 <i>Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020</i>	111

6

Ralat Piawai Relatif *Relative Standard Error*

6.1 Ralat piawai relatif bagi anggaran peratusan capaian perkhidmatan dan peralatan ICT oleh isi rumah mengikut strata, Malaysia, 2020 <i>Relative standard error of estimates for percentage of households with access to ICT services and equipment by strata, Malaysia, 2020</i>	121
6.2 Ralat piawai relatif bagi anggaran peratusan penggunaan perkhidmatan dan peralatan ICT oleh individu mengikut strata, Malaysia, 2020 <i>Relative standard error of estimates for percentage of individuals using ICT services and equipment by strata, Malaysia, 2020</i>	122

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



RINGKASAN PENEMUAN

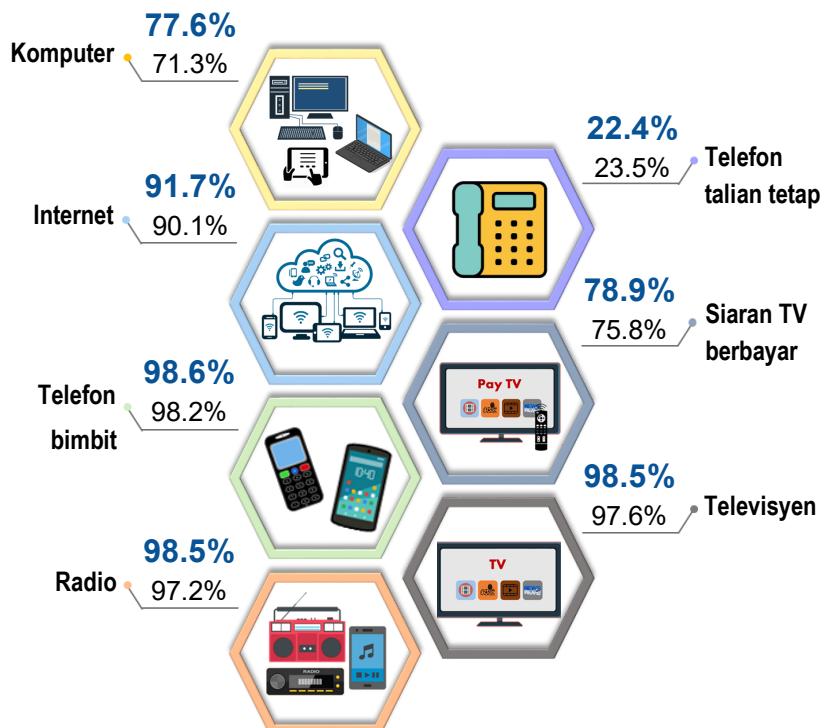
SUMMARY OF FINDINGS

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



CAPAIAN ICT OLEH ISI RUMAH 2020

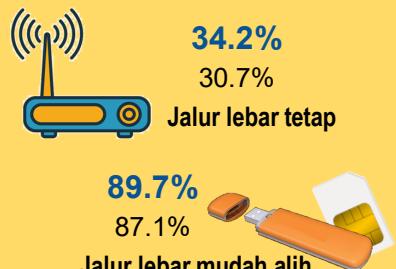
CAPAIAN PERKHIDMATAN DAN PERALATAN ICT



CAPAIAN TELEFON BIMBIT



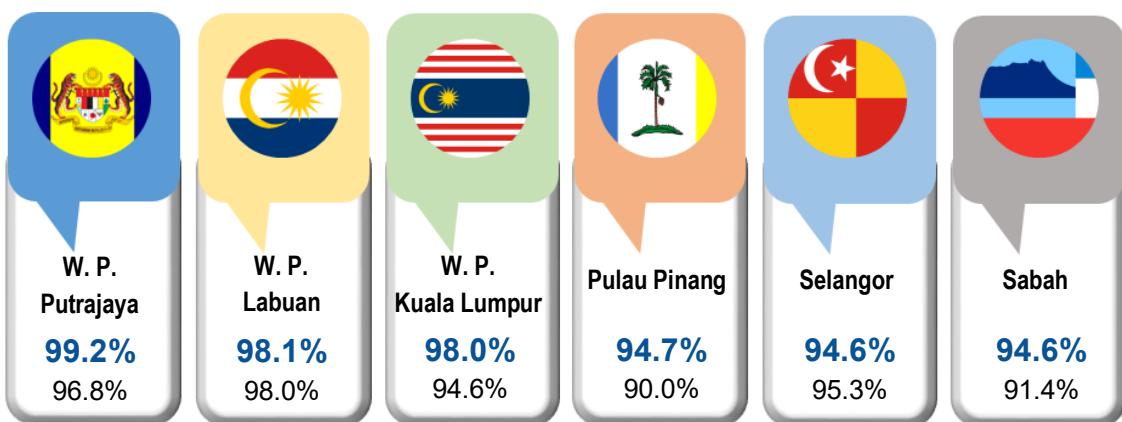
CAPAIAN INTERNET



CAPAIAN INTERNET MENGIKUT STRATA



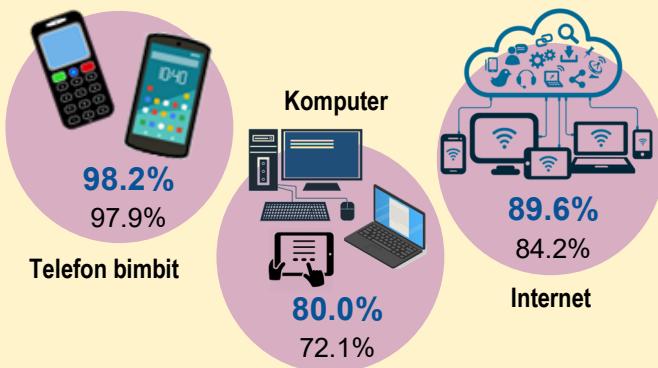
6 NEGERI DENGAN CAPAIAN INTERNET TERTINGGI





PENGGUNAAN ICT OLEH INDIVIDU 2020

PENGGUNAAN PERALATAN DAN PERKHIDMATAN ICT



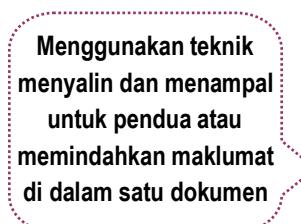
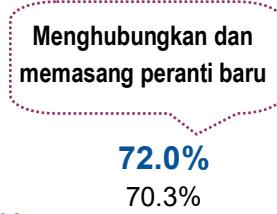
PENGGUNAAN INTERNET MENGIKUT JANTINA



5 AKTIVITI POPULAR PENGGUNAAN INTERNET



5 KEMAHIRAN ICT TERTINGGI

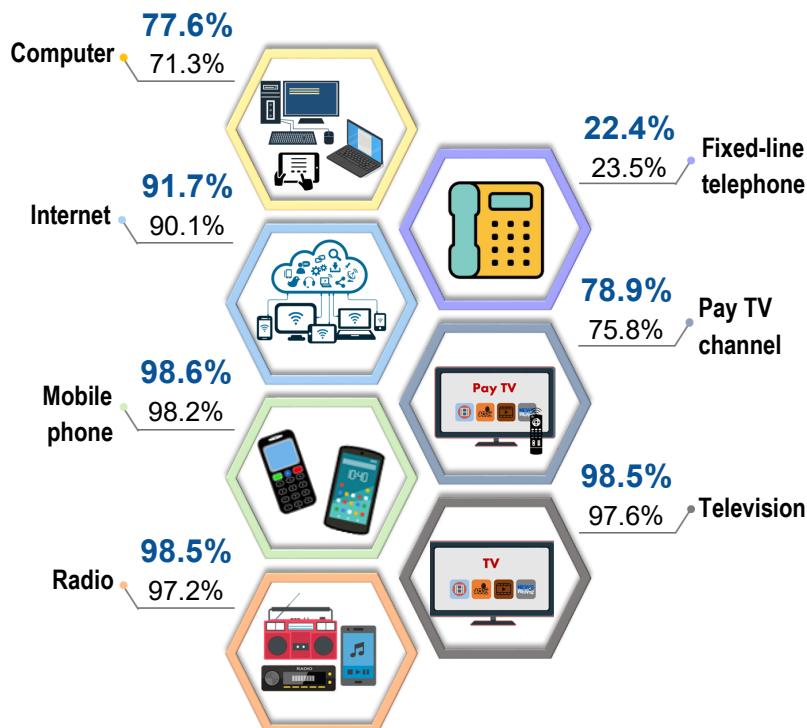


2020
2019

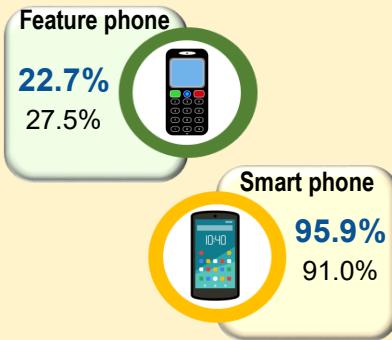


ICT ACCESS BY HOUSEHOLD 2020

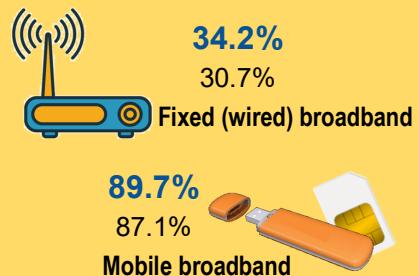
ACCESS TO ICT SERVICES AND EQUIPMENTS



ACCESS TO MOBILE PHONE



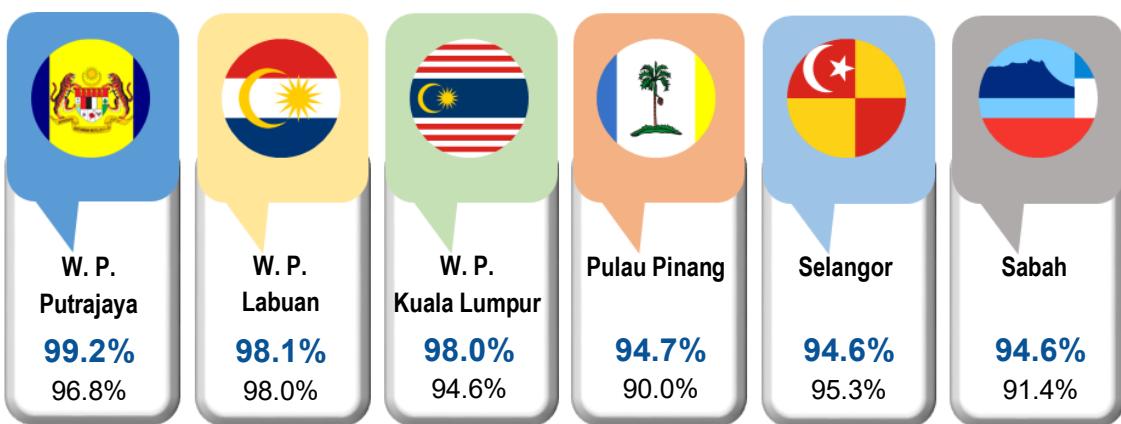
ACCESS TO INTERNET



INTERNET ACCESS BY STRATA



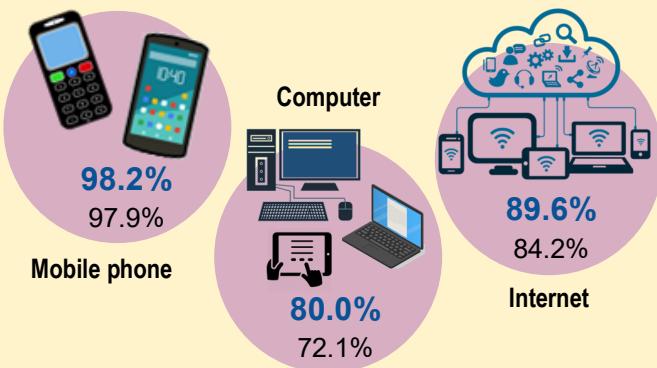
TOP 6 STATES WITH HIGHEST INTERNET ACCESS





ICT USE BY INDIVIDUALS 2020

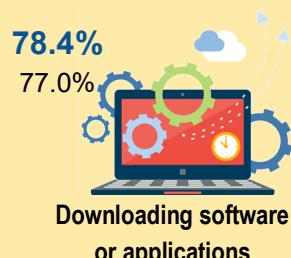
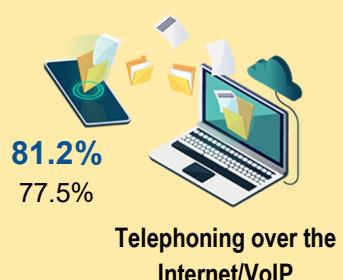
USE OF ICT SERVICES AND EQUIPMENT



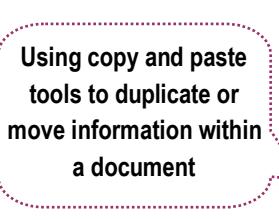
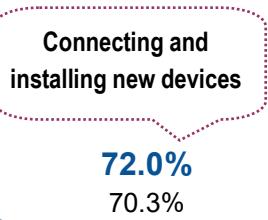
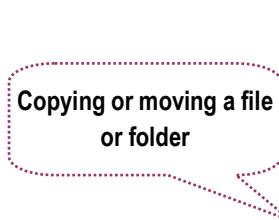
INTERNET USE BY SEX



5 POPULAR ACTIVITIES OF INTERNET USE



TOP 5 OF ICT SKILLS



2020
2019

1. PENGENALAN

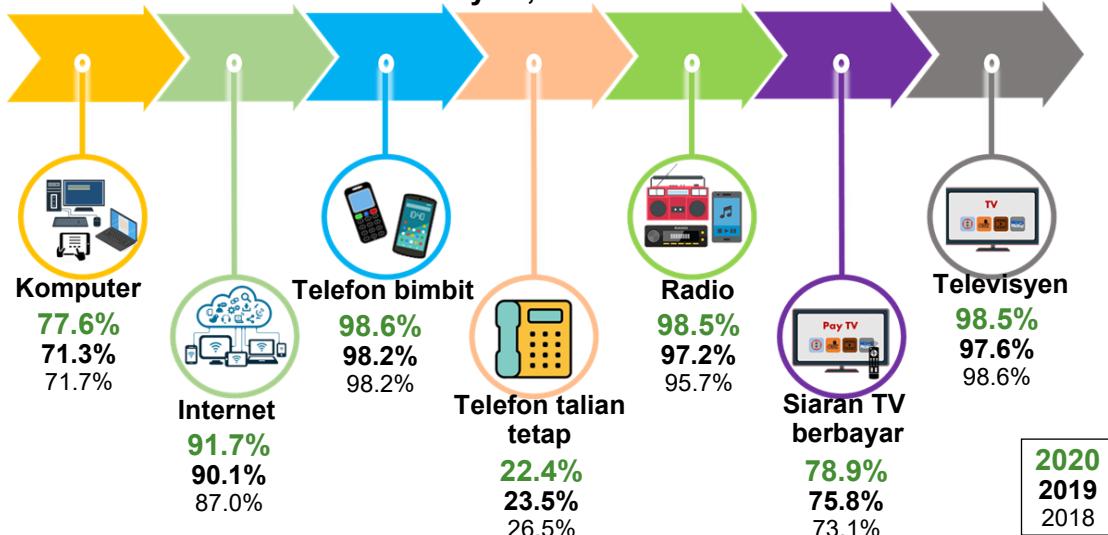
Laporan ini membentangkan hasil penemuan Survei Penggunaan dan Capaian ICT oleh Individu dan Isi Rumah (ICTHS) yang dilaksanakan pada 2020. Penemuan survei ini menyediakan statistik terkini mengenai capaian dan penggunaan perkhidmatan dan peralatan ICT oleh individu dan isi rumah. Garis panduan, konsep dan definisi yang digunakan dalam laporan ini adalah berdasarkan *Manual for Measuring ICT Access and Use by Households and Individuals 2014 Edition* yang diterbitkan oleh *International Telecommunication Union* (ITU). ICTHS 2020 dilaksanakan semasa pandemik COVID-19, yang mana teknologi digital digunakan secara meluas dalam aktiviti sehari-hari. Oleh itu, penemuan survei dapat memberi informasi mengenai peralihan dan penerimaan isi rumah dan individu terhadap penggunaan ICT yang membantu kerajaan dalam menyediakan negara ke arah masyarakat digital.

2. CAPAIAN PERKHIDMATAN DAN PERALATAN ICT OLEH ISI RUMAH

Sesebuah isi rumah dianggap mempunyai capaian kepada perkhidmatan dan peralatan ICT sekiranya ia masih boleh digunakan semasa temu ramah dijalankan. Berdasarkan penemuan survei, peratusan capaian isi rumah menunjukkan peningkatan terhadap capaian telefon bimbit (98.6%), televisyen (98.5%), radio (98.5%), internet (91.7%), siaran TV berbayar (78.9%) dan komputer (77.6%). Manakala peratusan capaian isi rumah terhadap telefon talian tetap menurun kepada 22.4 peratus.

“Capaian komputer dan siaran TV berbayar masing-masing meningkat 6.3 mata peratus dan 3.1 mata peratus berbanding 2019”

Paparan 1: Peratusan capaian perkhidmatan dan peralatan ICT oleh isi rumah, Malaysia, 2018 - 2020



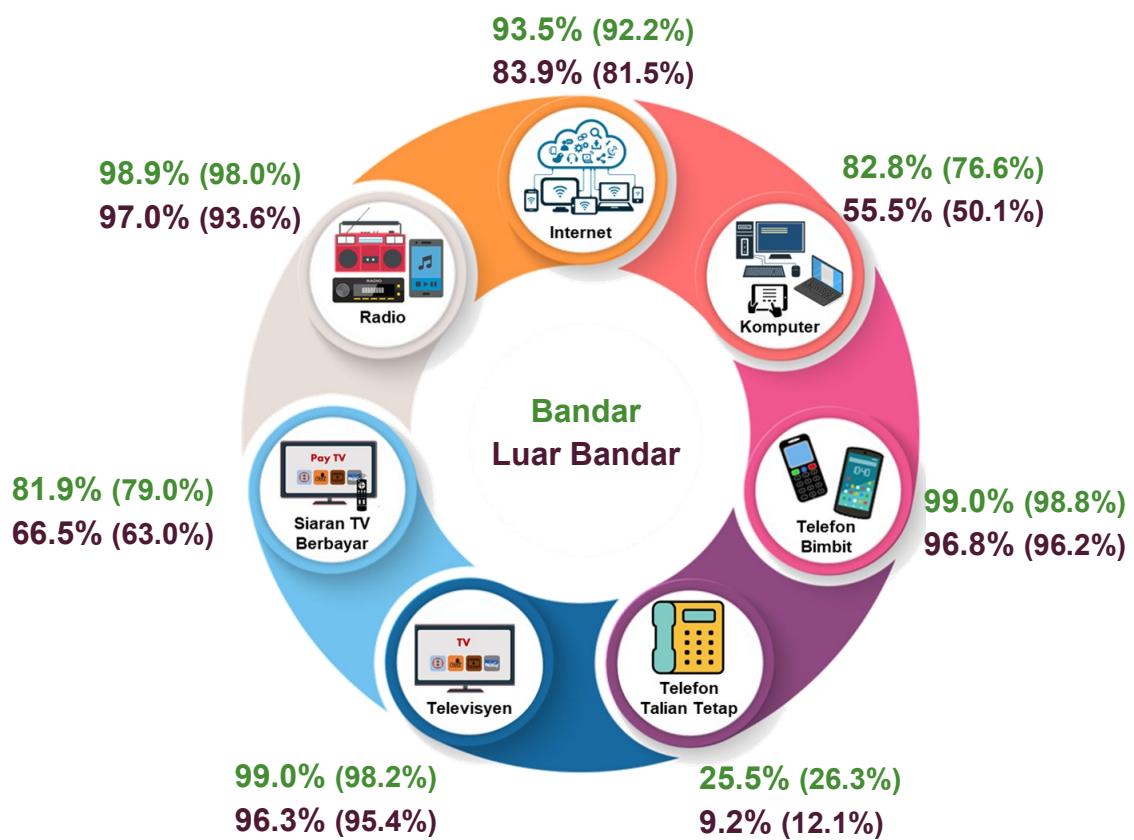


2.1 CAPAIAN PERKHIDMATAN DAN PERALATAN ICT OLEH ISI RUMAH MENGIKUT STRATA

Isi rumah di bandar menunjukkan peningkatan dalam capaian bagi kesemua perkhidmatan dan peralatan ICT iaitu telefon bimbit (99.0%), televisyen (99.0%), radio (98.9%), internet (93.5%), komputer (82.8%) dan siaran TV berbayar (81.9%).

Begitu juga isi rumah di luar bandar yang turut menikmati peningkatan dalam capaian perkhidmatan dan peralatan ICT. Manakala capaian telefon talian tetap oleh isi rumah menunjukkan penurunan di kawasan bandar (25.5%) dan luar bandar (9.2%).

Paparan 2: Peratusan capaian perkhidmatan dan peralatan ICT oleh isi rumah mengikut strata, Malaysia, 2020



Nota: Angka di dalam kurungan merujuk tahun 2019

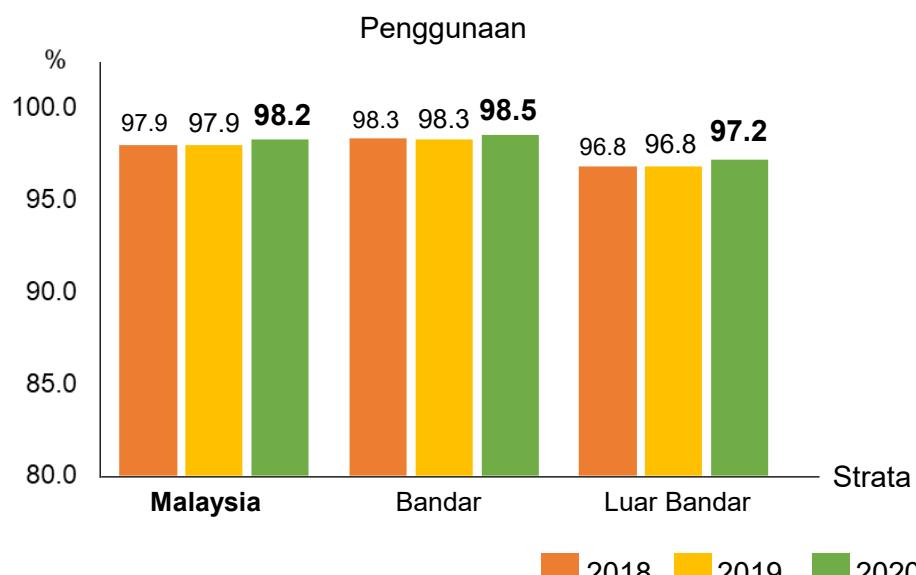
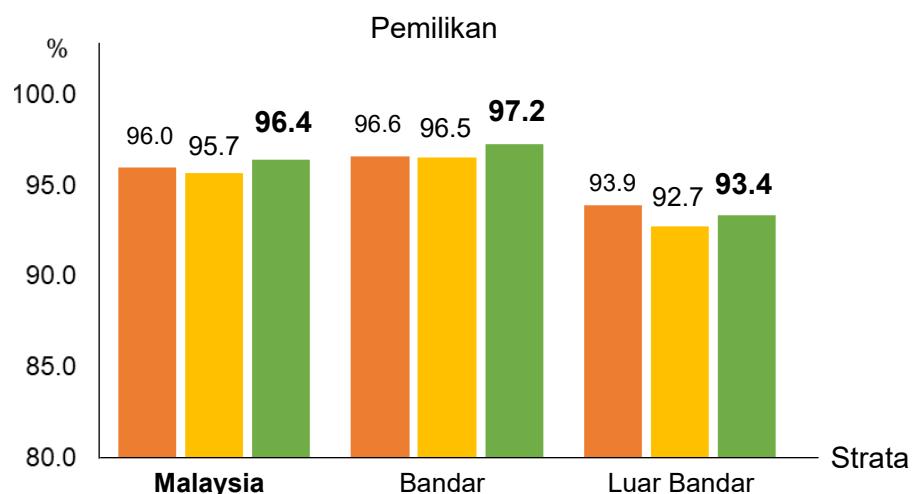
3. PENGGUNAAN PERKHIDMATAN DAN PERALATAN ICT OLEH INDIVIDU

3.1 Pemilikan dan Penggunaan Telefon Bimbit

Pemilikan telefon bimbit di Malaysia menunjukkan kenaikan daripada 95.7 peratus kepada 96.4 peratus. Di kawasan bandar, pemilikan telefon bimbit adalah 97.2 peratus, lebih tinggi berbanding di kawasan luar bandar (93.4%).

Dari segi penggunaan, individu yang menggunakan telefon bimbit mencapai 98.2 peratus. Penggunaan telefon bimbit di kawasan bandar adalah 98.5 peratus berbanding 97.2 peratus yang direkodkan bagi kawasan luar bandar.

Carta 1: Peratusan pemilikan dan penggunaan telefon bimbit oleh individu mengikut strata, Malaysia, 2018 - 2020

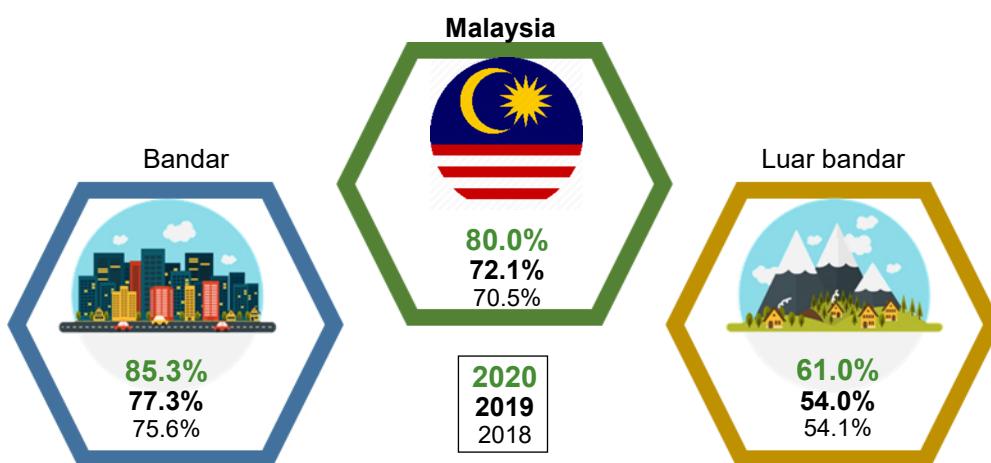




3.2 Penggunaan Komputer

Komputer merujuk kepada komputer peribadi, komputer riba atau tablet. Berdasarkan penemuan survei, penggunaan komputer menunjukkan peningkatan yang ketara daripada 72.1 peratus pada 2019 kepada 80.0 peratus (+7.9 mata peratus) pada 2020. Kedua-dua kawasan bandar dan luar bandar masing-masing meningkat kepada 85.3 peratus (+8.0 mata peratus) dan 61.0 peratus (+7.0 mata peratus).

Paparan 3: Peratusan penggunaan komputer oleh individu mengikut strata, Malaysia, 2018 - 2020

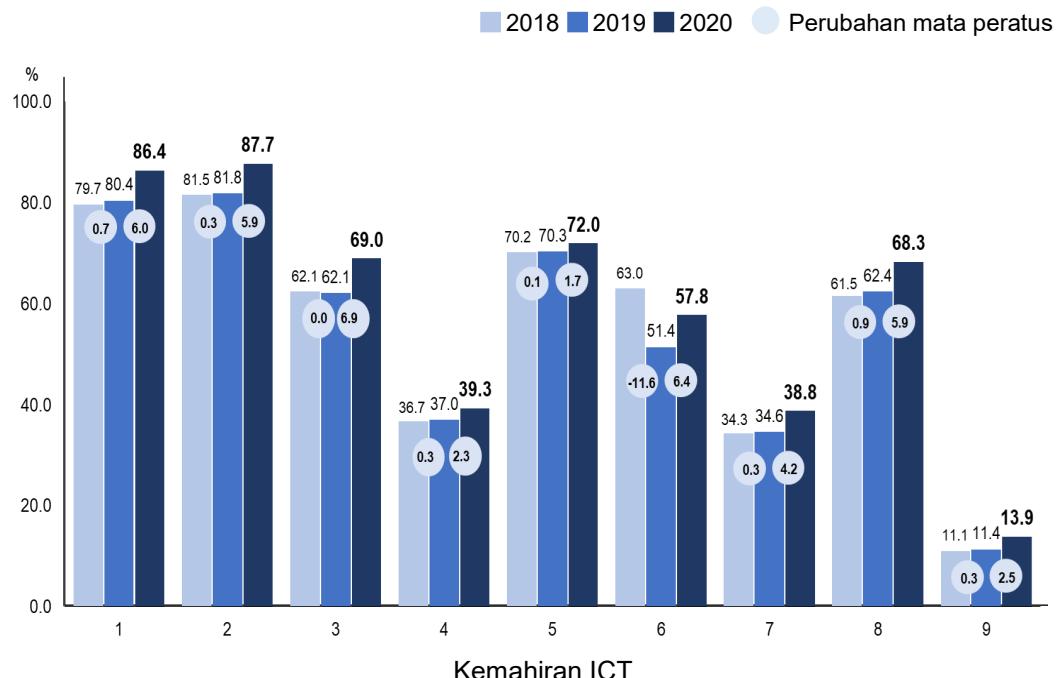


3.3 Kemahiran ICT

Kemahiran komputer merupakan salah satu indikator dalam pemantauan Matlamat Pembangunan Mampan (SDG): Matlamat 4 (Memastikan pendidikan berkualiti, menyeluruh dan saksama serta menggalakkan peluang pembelajaran sepanjang hayat untuk semua). Aktiviti berkaitan penggunaan komputer oleh individu digunakan untuk mengukur kemahiran ICT.

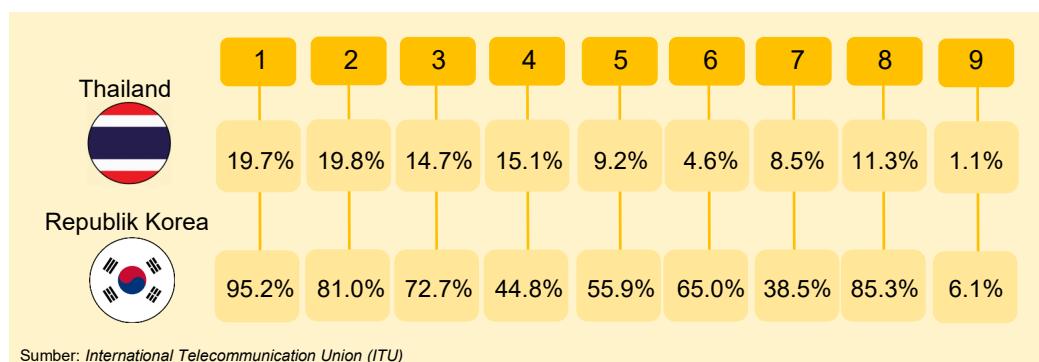
Lima aktiviti yang menunjukkan peratusan tertinggi pada 2020 adalah menggunakan teknik menyalin dan menampal untuk pendua atau memindahkan maklumat di dalam satu dokumen (87.7%). Ini diikuti oleh aktiviti menyalin atau memindahkan fail atau folder (86.4%), menghubungkan dan memasang peranti baru (72.0%), menghantar e-mel berserta fail (69.0%) dan memindahkan fail di antara komputer dan peranti mudah alih lain (68.3%).
[Carta 2]

Carta 2: Peratusan penggunaan komputer oleh individu mengikut kemahiran ICT, Malaysia, 2018 - 2020



1. Menyalin atau memindahkan fail atau folder	2. Menggunakan teknik menyalin dan menampal untuk mendua atau memindahkan di dalam satu dokumen			3. Menghantar e-mel berserta fail
4. Menggunakan teknik aritmetik asas di dalam lembaran kerja	5. Menghubungkan dan memasang peranti baru		6. Mencari, memuat turun, memasang dan mengkonfigurasi perisian	7. Membuat persebahan elektronik dengan menggunakan perisian komputer
8. Memindahkan fail di antara komputer dan peranti mudah alih lain		9. Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus		

Kemahiran komputer bagi dua negara terpilih, 2019



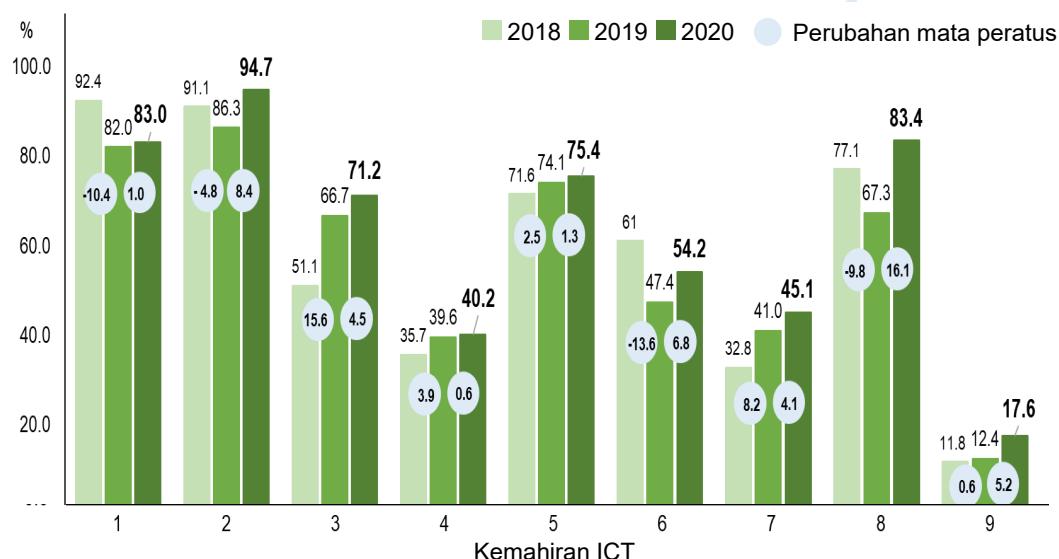


3.4 Kemahiran ICT oleh Belia

Kemahiran ICT dikategorikan mengikut tiga tahap kemahiran komputer iaitu asas, pertengahan dan lanjutan. Belia merujuk kepada individu berumur 15 hingga 24 tahun.

Secara keseluruhan, prestasi kemahiran ICT belia berada di tahap asas dan pertengahan, manakala prestasi kemahiran lanjutan masih berada di tahap rendah. Berdasarkan penemuan survei, daripada keseluruhan belia yang menggunakan komputer, 94.7 peratus menjalankan aktiviti menggunakan teknik menyalin dan menampal untuk pendua atau memindahkan maklumat di dalam satu dokumen. Bagi tahap pertengahan, 75.4 peratus menjalankan aktiviti menghubungkan dan memasang peranti baru. Sementara itu, aktiviti kompleks iaitu menulis program komputer menggunakan bahasa pengaturcaraan yang khusus mencatatkan 17.6 peratus.

Carta 3: Peratusan penggunaan komputer oleh belia mengikut kemahiran ICT, Malaysia, 2018 - 2020



1. Menyalin atau memindahkan fail atau folder	2. Menggunakan teknik menyalin dan menampal untuk mendua atau memindahkan di dalam satu dokumen	3. Menghantar e-mel berserta fail
4. Menggunakan teknik aritmetik asas di dalam lembaran kerja	5. Menghubungkan dan memasang peranti baru	6. Mencari, memuat turun, memasang dan mengkonfigurasi perisian
8. Memindahkan fail di antara komputer dan peranti mudah alih lain		7. Membuat persembahan elektronik dengan menggunakan perisian komputer
9. Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus		

Nota:

1. Kemahiran asas: 1,2,3,8; Kemahiran pertengahan: 4,5,6,7; dan Kemahiran lanjutan: 9

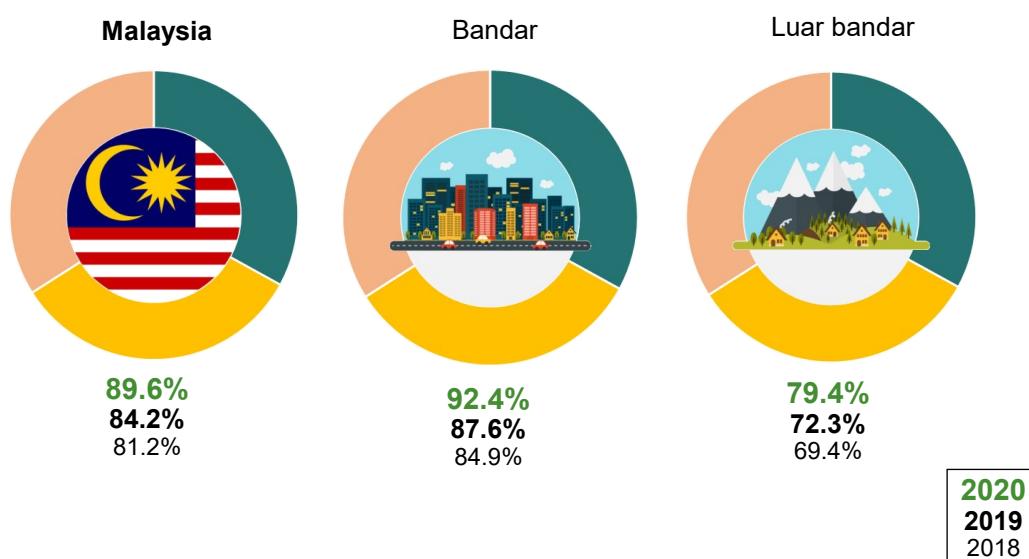
2. Individu boleh memilih lebih daripada satu kemahiran ICT

Sumber: *Measuring Digital Development: Facts and Figures 2019 by ITU*

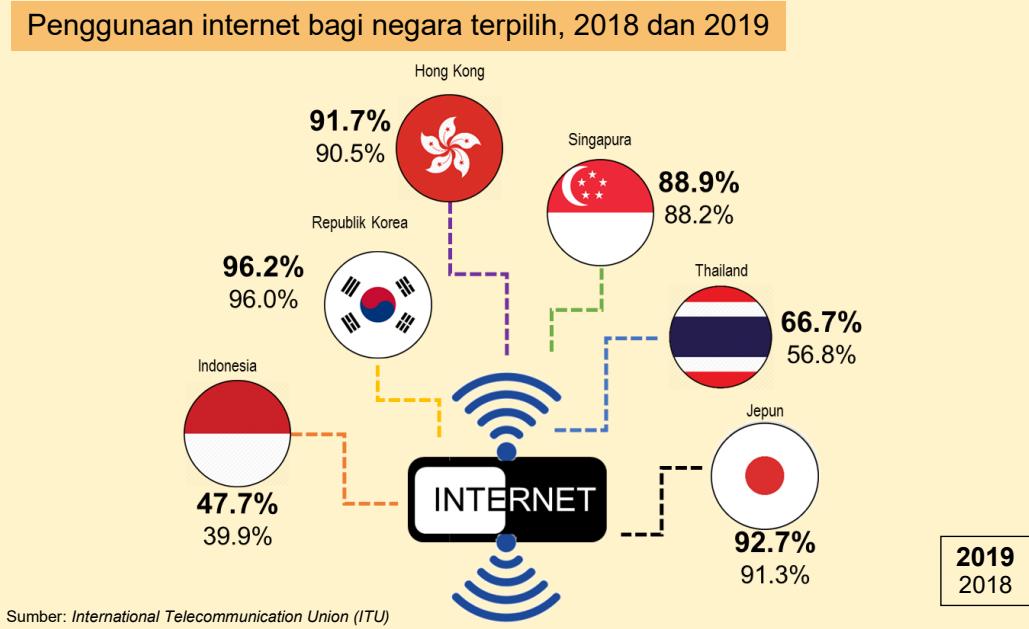
3.5 Penggunaan Internet

Pada 2020, pengguna internet di Malaysia meningkat 5.4 mata peratus kepada 89.6 peratus berbanding tahun 2019 (84.2%). Pengguna internet di kawasan bandar meningkat kepada 92.4 peratus (2019: 87.6%). Manakala di luar bandar meningkat kepada 79.4 peratus berbanding 72.3 peratus pada tahun sebelumnya.

Paparan 5: Peratusan penggunaan internet oleh individu mengikut strata, Malaysia, 2018 - 2020



Berdasarkan kepada enam negara terpilih, Republik Korea mencatatkan pengguna internet tertinggi iaitu 96.2 peratus. Ini diikuti oleh Jepun (92.7%), Hong Kong (91.7%), dan Singapura (88.9%).

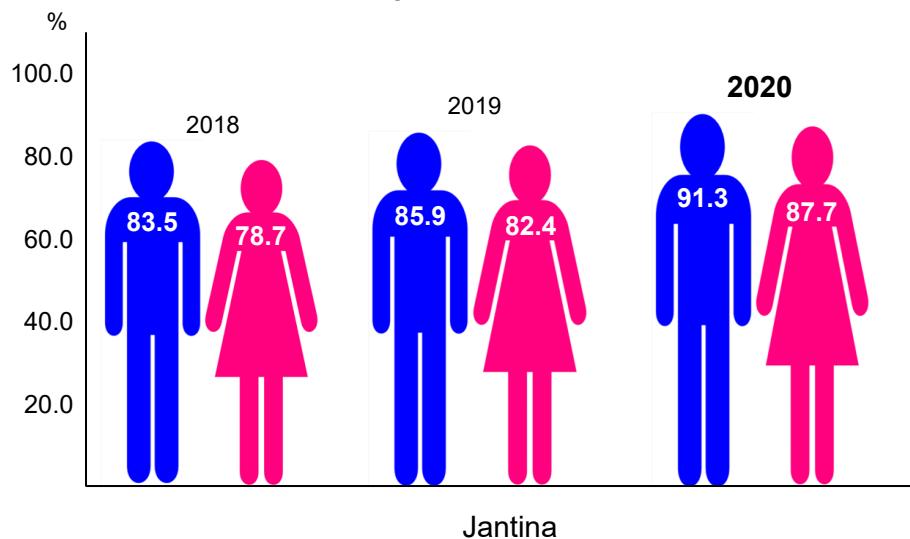




3.6 Penggunaan Internet Mengikut Jantina

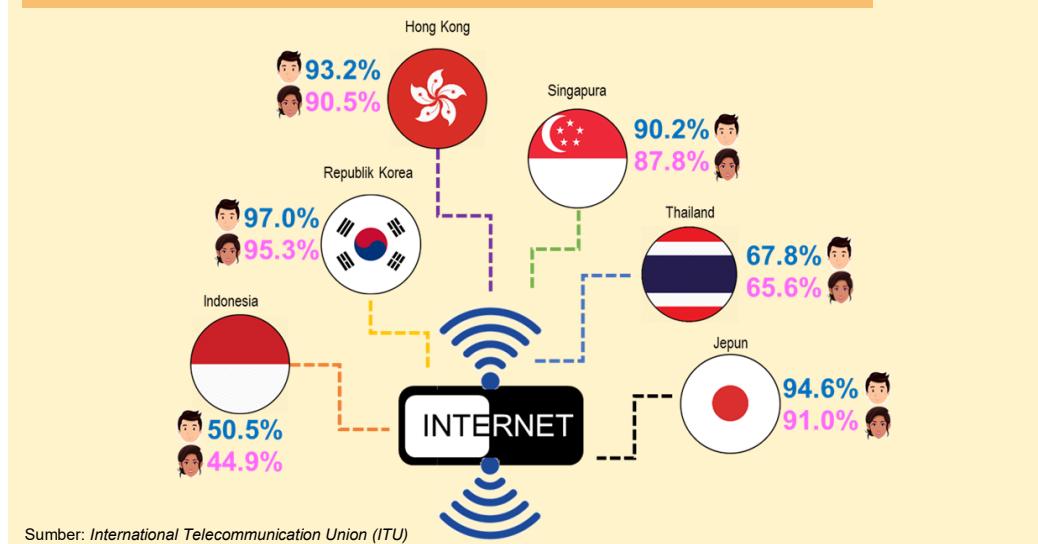
Berbanding 2019, penggunaan internet dalam kalangan lelaki dan perempuan masing-masing terus meningkat kepada 91.3 peratus dan 87.7 peratus. Ini menunjukkan jurang pengguna internet mengikut jantina adalah 3.9 peratus pada 2020.

Carta 4: Peratusan penggunaan internet oleh individu mengikut jantina, Malaysia, 2018 - 2020



Berdasarkan enam negara terpilih, penggunaan internet di kalangan lelaki adalah lebih tinggi berbanding perempuan.

Penggunaan internet mengikut jantina bagi negara terpilih, 2019



Nota:

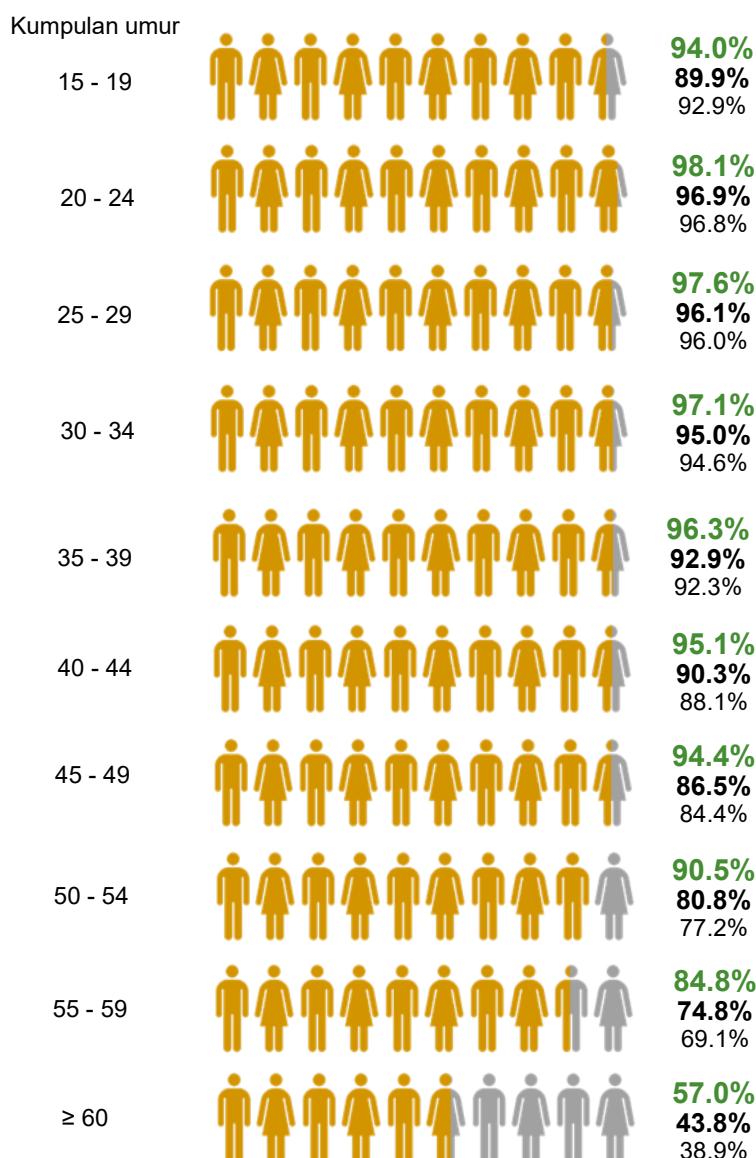
- Jurang digital mengikut jantina atau jurang pengguna internet mengikut jantina:
1. Jurang jantina mewakili perbezaan antara kadar penembusan pengguna internet bagi lelaki dan perempuan relatif kepada kadar penembusan pengguna internet bagi lelaki, dinyatakan sebagai peratusan
 2. Kadar penembusan merujuk kepada jumlah perempuan/lelaki yang menggunakan internet, sebagai peratusan dari jumlah populasi perempuan/lelaki masing-masing

Sumber: *Measuring Digital Development: Facts and Figures 2019* by ITU

3.7 Penggunaan Internet Mengikut Kumpulan Umur

Penggunaan internet berbeza mengikut peringkat umur. Individu dalam kumpulan umur 20 hingga 24 tahun merekodkan peratusan tertinggi sebanyak 98.1 peratus. Seiring dengan peningkatan umur, penggunaan internet semakin berkurangan, dengan kumpulan umur 60 tahun dan ke atas mencatatkan peratusan paling rendah iaitu 57.0 peratus pada 2020.

Paparan 6: Peratusan penggunaan Internet oleh individu mengikut kumpulan umur, Malaysia, 2018 - 2020



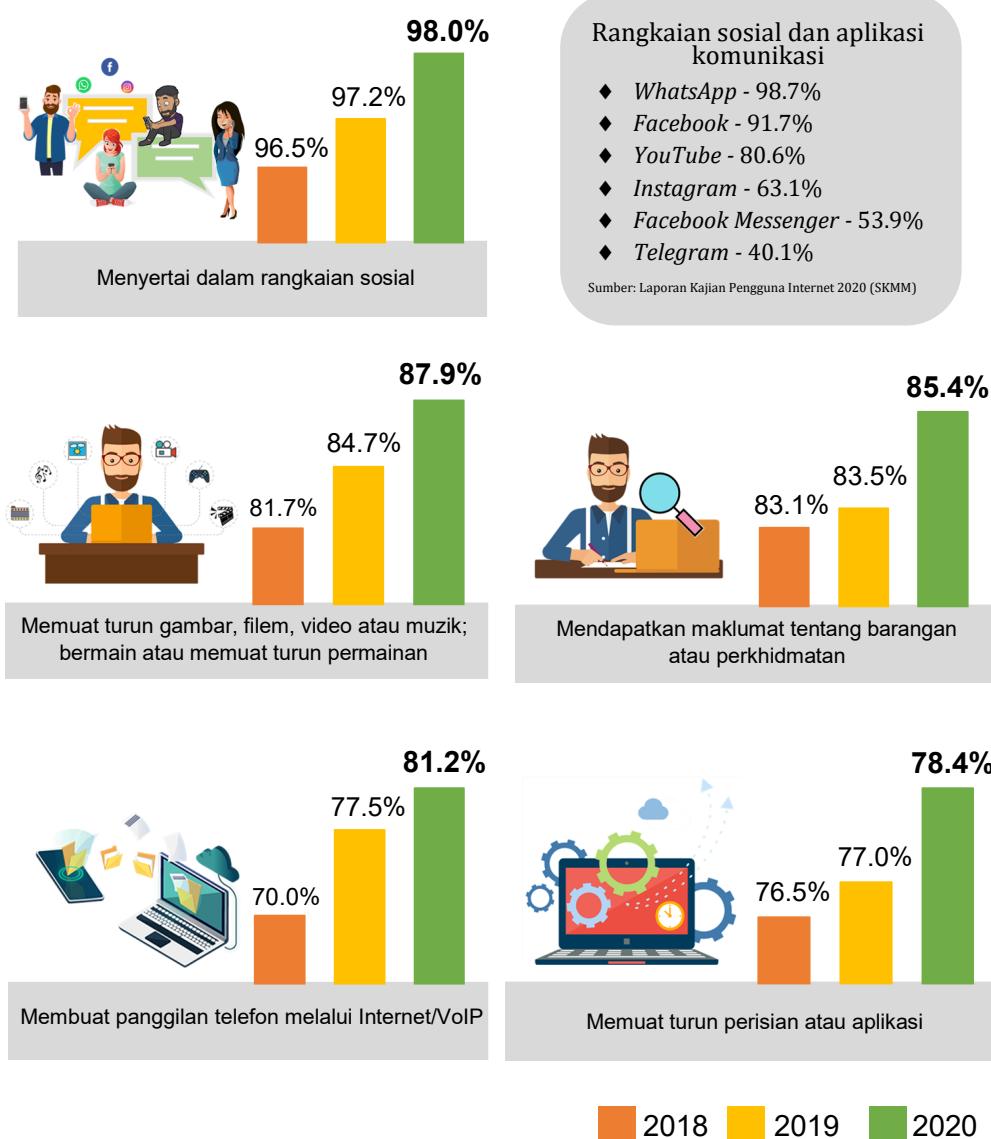
2020
2019
2018



3.8 Aktiviti Penggunaan Internet

Aktiviti pengguna internet yang paling popular ialah menyertai dalam rangkaian social (98.0%). Ini diikuti oleh aktiviti memuat turun gambar, filem, video atau muzik; bermain atau memuat turun permainan (87.9%), mendapatkan maklumat tentang barang atau perkhidmatan (85.4%), membuat panggilan telefon melalui Internet/VoIP (81.2%) dan memuat turun perisian atau aplikasi (78.4%).

Paparan 7: Peratusan penggunaan internet oleh individu mengikut lima aktiviti internet tertinggi, Malaysia, 2018 - 2020



Nota: Individu boleh memilih lebih daripada satu aktiviti internet

1. INTRODUCTION

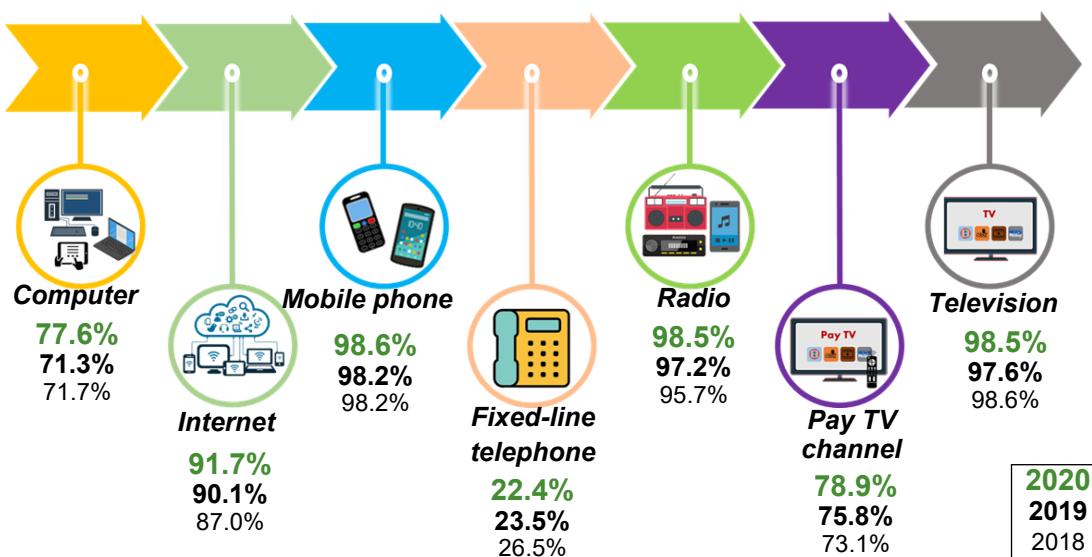
This report presents findings from the ICT Use and Access by Individuals and Households Survey (ICTHS) conducted in 2020. These findings provide the latest statistics on the access & use of ICT services and equipment by individuals & households. The guidelines, concepts and definitions used in this report are based on the Manual for Measuring ICT Access and Use by Households and Individuals 2014 Edition published by the International Telecommunication Union (ITU). ICTHS 2020 was carried out during the COVID-19 pandemic, where digital technology widely used in daily activities. Therefore, the findings can provide information on the transition and acceptance of households and individuals towards the use of ICT, which assist the government in preparing the country towards a digital society.

2. ACCESS TO ICT SERVICES AND EQUIPMENT BY HOUSEHOLDS

A household is considered to have access to ICT services and equipment if they are usable during the interview. Based on the survey findings, percentage of households access showed an increase in access to mobile phones (98.6%), television (98.5%), radio (98.5%), internet (91.7%), pay TV channel (78.9%), and computer (77.6%). Meanwhile the percentage of household access to fixed-line telephones decreased to 22.4 per cent.

"Access to computer and pay TV channel rose 6.3 percentage points and 3.1 percentage points respectively compared to 2019"

Exhibit 1: Percentage of households with access to ICT services and equipment, Malaysia, 2018 - 2020



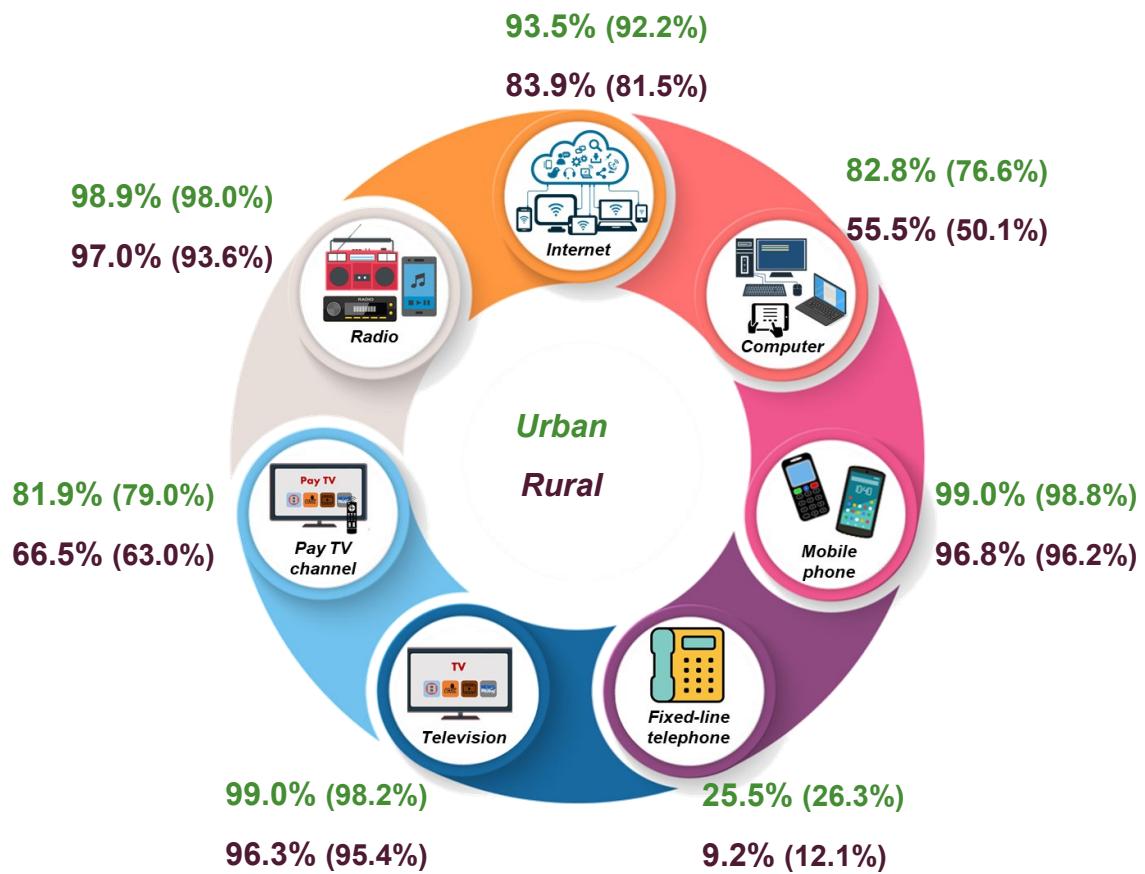


2.1 ACCESS TO ICT SERVICES AND EQUIPMENT BY STRATA

Urban households showed an increase in access to all ICT services and equipment, namely mobile phone (99.0%), television (99.0%), radio (98.9%), internet (93.5%), computer (82.8%) and pay TV channel (81.9%).

Similarly, rural households are also enjoying an increase in access to ICT services and equipment. Meanwhile, access to fixed-line telephone by households showed a decrease in urban (25.5%) and rural (9.2%) areas.

Exhibit 2: Percentage of households with access to ICT services and equipment by strata, Malaysia, 2020



Note: Figures in bracket refers to year 2019

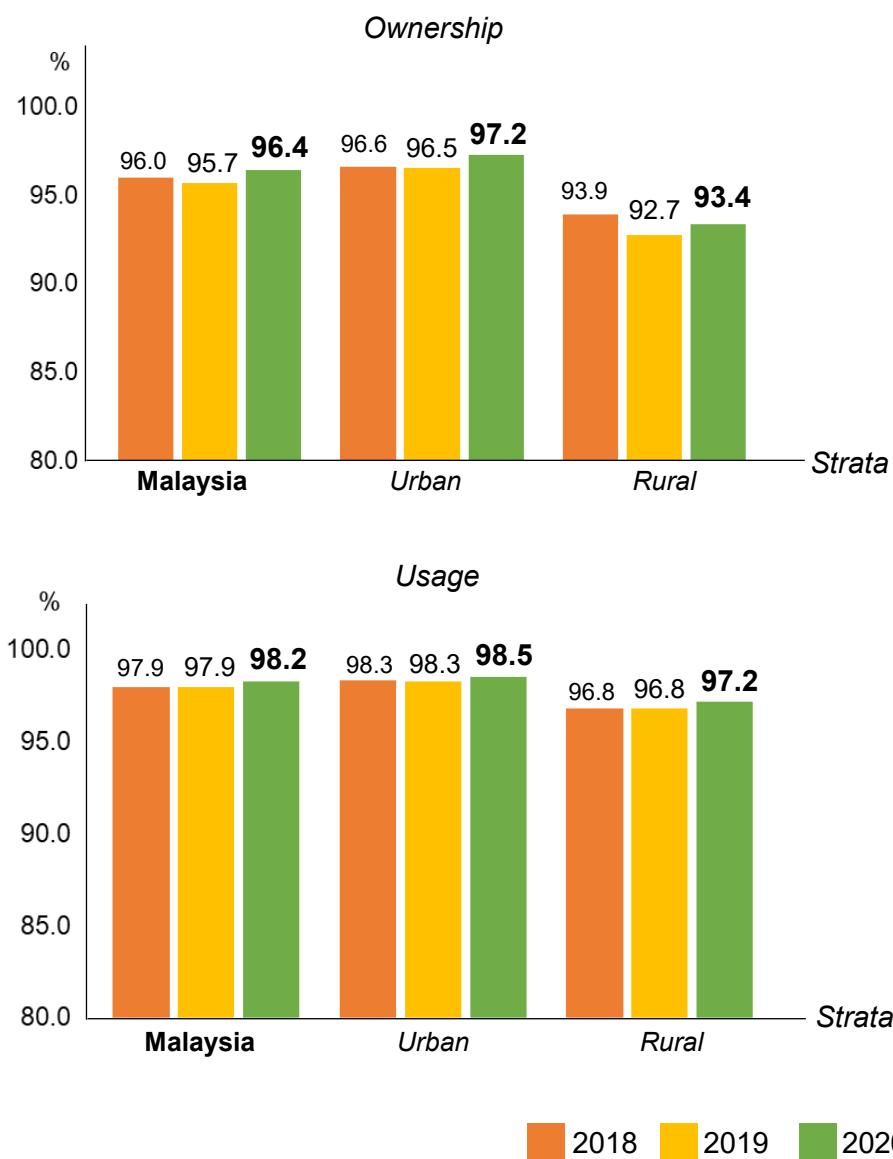
3. USE OF ICT SERVICES AND EQUIPMENT BY INDIVIDUALS

3.1 Mobile Phone Ownership and Usage

Mobile phone ownership in Malaysia showed an increase from 95.7 per cent in 2019 to 96.4 per cent in 2020. In urban area, mobile phone ownership was 97.2 per cent, higher than the rural area (93.4%).

In terms of usage, individuals who use mobile phone has reached 98.2 per cent. The usage of mobile phone in urban area were 98.5 per cent as compared to 97.2 per cent recorded for rural area.

Chart 1: Percentage of individuals owning and using mobile phone by strata, Malaysia, 2018 - 2020

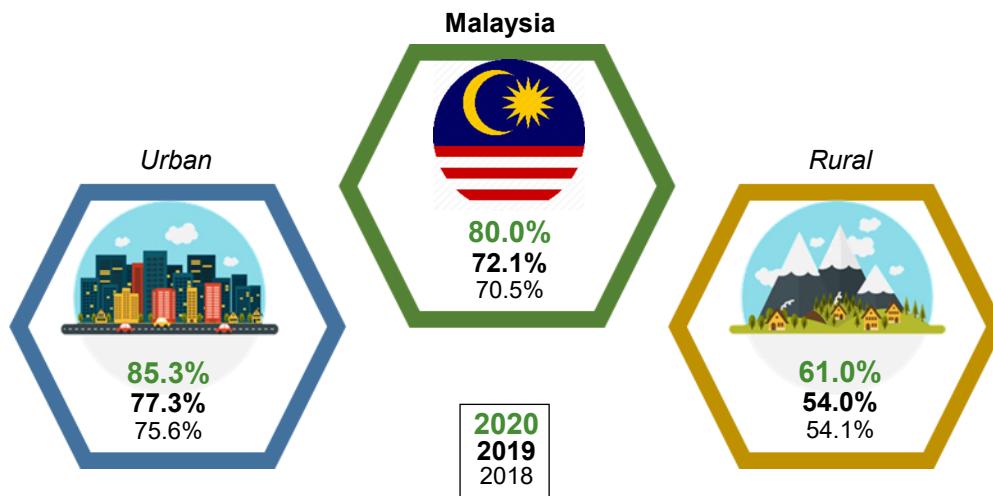




3.2 Computer Usage

A computer refers to a personal computer, a laptop or a tablet. Based on survey findings, computer usage showed a significant increase from 72.1 per cent in 2019 to 80.0 per cent (+7.9 percentage points) in 2020. Both urban and rural area were increased to 85.3 per cent (+8.0 percentage points) and 61.0 per cent (+7.0 percentage points) respectively.

Exhibit 3: Percentage of individuals using computer by strata, Malaysia, 2018 - 2020

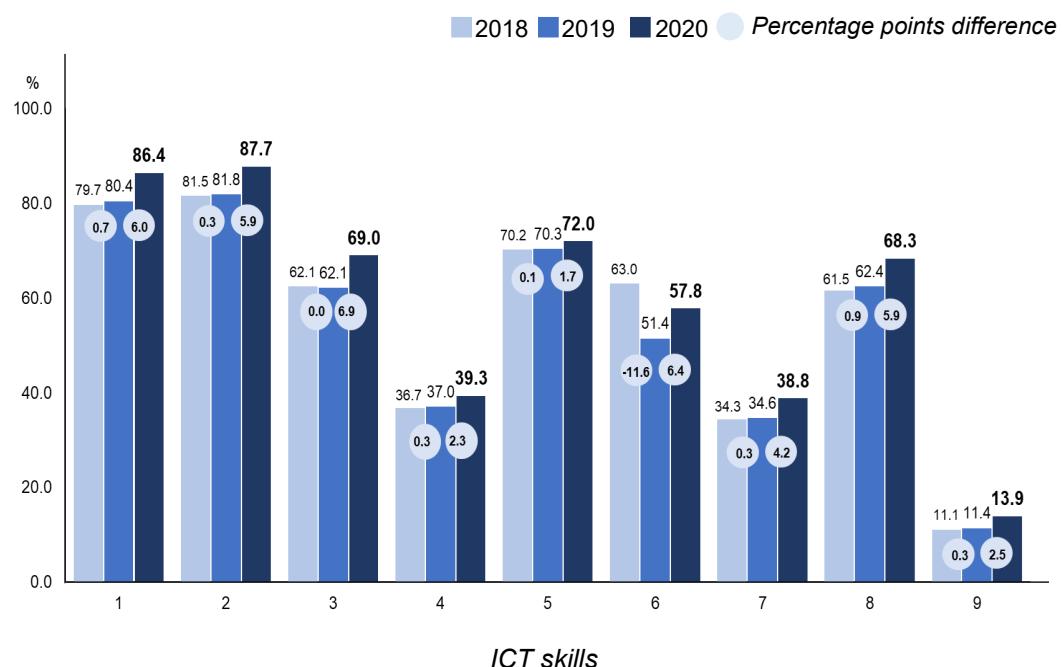


3.3 ICT Skills

Computer skills is one of the indicator in monitoring the Sustainable Development Goals (SDG): Goals 4 (Ensure inclusive and equitable education and promote lifelong learning opportunities for all). Activities in related to computer usage by individual used to measure the ICT skills.

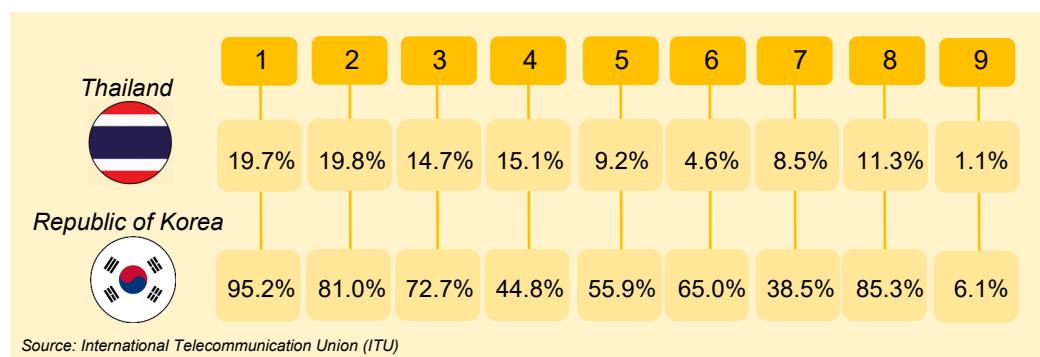
The activity that showed highest percentage in 2020 was using copy and paste tools to duplicate or move information within a document (87.7%). This is followed by copying or moving a file or folder (86.4%), connecting and installing new devices (72.0%), sending an e-mail with attached files (69.0%) and transferring files between a computer and other mobile devices (68.3%).
[Chart 2]

Chart 2: Percentage of individuals using computer by ICT skills, Malaysia, 2018 - 2020



1. Copying or moving a file or folder	2. Using copy and paste tools to duplicate or move information within a document	3. Sending an e-mail with attached files
4. Using basic arithmetic formulas in a spreadsheet	5. Connecting and installing new devices	6. Searching, downloading, installing and configuring software
8. Transferring files between a computer	9. Writing a computer program using a specialised	7. Creating electronic presentations using computer software

ICT skills for two selected countries, 2019



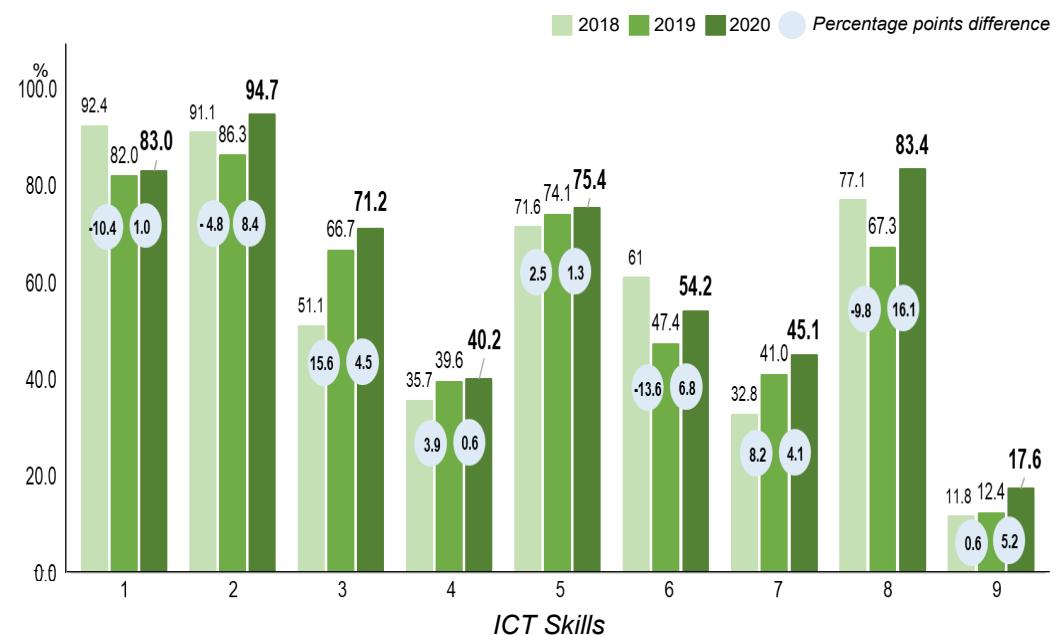


3.4 ICT Skills by Youth

The ICT skills are classified according to three levels of computer skills namely basic, standard and advanced. Youth refers to individuals aged 15 to 24 years old.

Overall, the performance of youth ICT skills is at basic and standard levels, while the performance of advanced skills is still at a low level. Based on the computer usage survey findings, 94.7 per cent among the youth were to carry out activities of using copy and paste tools to duplicate or move information within a document. As for the standard level, 75.4 per cent run activities of connecting and installing new devices. Meanwhile complex activities such as writing a computer program using specialised programming language recorded 17.6 per cent.

Chart 3: Percentage of youth using computer by ICT skills, Malaysia, 2018 - 2020



1. Copying or moving a file or folder	2. Using copy and paste tools to duplicate or move information within a document	3. Sending an e-mail with attached files
4. Using basic arithmetic formulas in a spreadsheet	5. Connecting and installing new devices	6. Searching, downloading, installing and configuring software
7. Creating electronic presentations using computer software		8. Transferring files between a computer and other mobile devices
9. Writing a computer program using a specialised programming language		

Notes:

1. Basic skills: 1,2,3,8; Standard skills: 4,5,6,7; and Advanced skills: 9

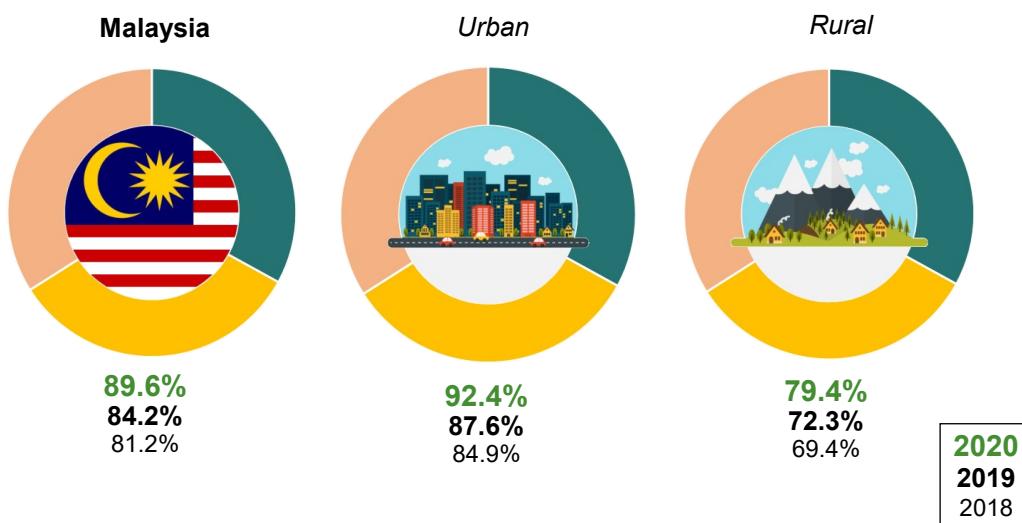
2. Each individuals can choose more than one ICT skills

Source: Measuring Digital Development: Facts and Figures 2019 by ITU

3.5 Internet Usage

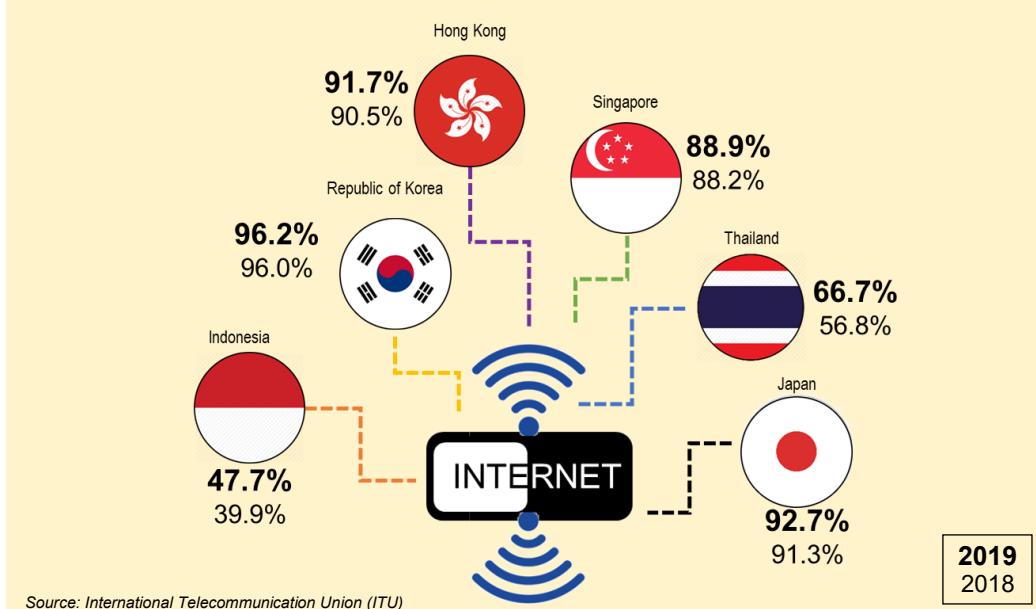
In 2020, internet user in Malaysia increased 5.4 percentage points to 89.6 per cent as compared to 2019 (84.2%). Internet user in urban increased to 92.4 per cent (2019: 87.6%) while in rural area increased to 79.4 per cent (2019: 72.3%).

Exhibit 5: Percentage of individuals using the internet by strata, 2018 - 2020



Based on six selected countries, Republic of Korea recorded the highest internet user, 96.2 per cent. This is followed by Japan (92.7%), Hong Kong (91.7%) and Singapore (88.9%).

Internet usage for selected countries, 2018 and 2019

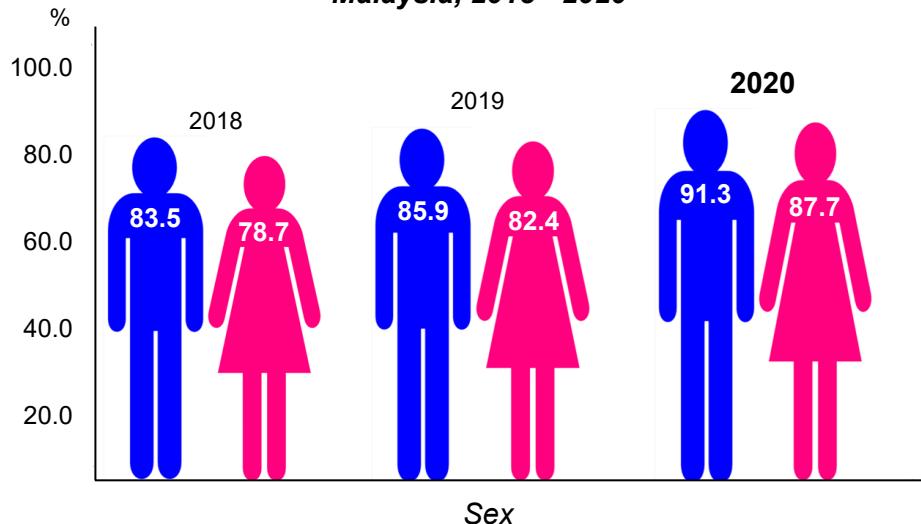




3.6 Internet Usage by sex

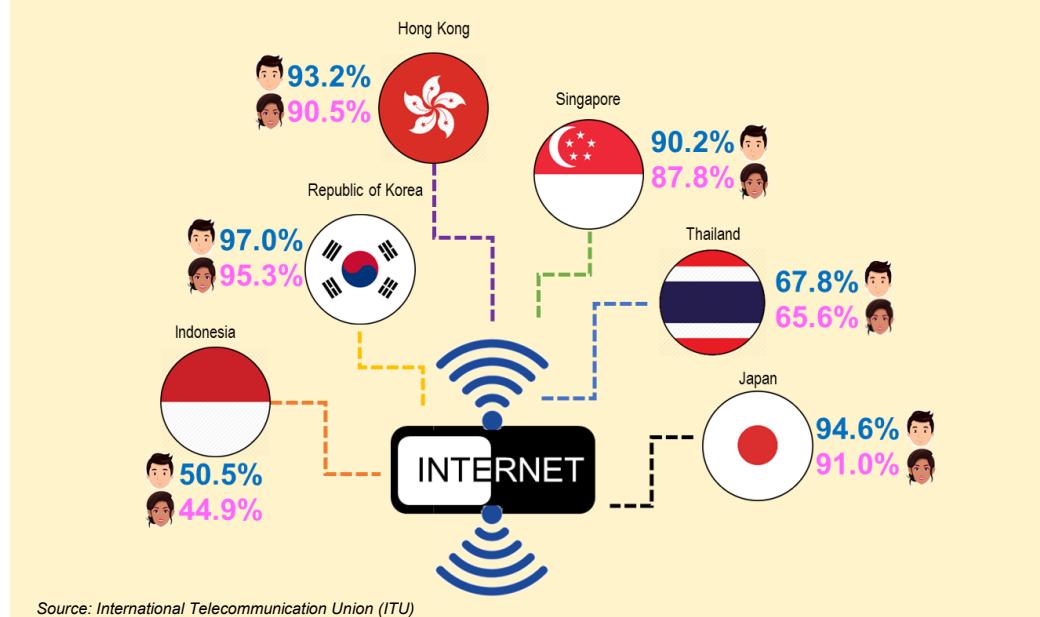
As compared to 2019, the usage of internet among males and females has increased to 91.3 per cent and 87.7 per cent respectively. This showed the internet user gender gap for the year of 2020 was 3.9 per cent.

Chart 4: Percentage of individuals using the internet by sex, Malaysia, 2018 - 2020



Based on six selected countries, internet usage was higher among males compared to females.

Internet usage by sex for selected countries, 2019



Notes:

Digital gender gap or internet user gender gap:

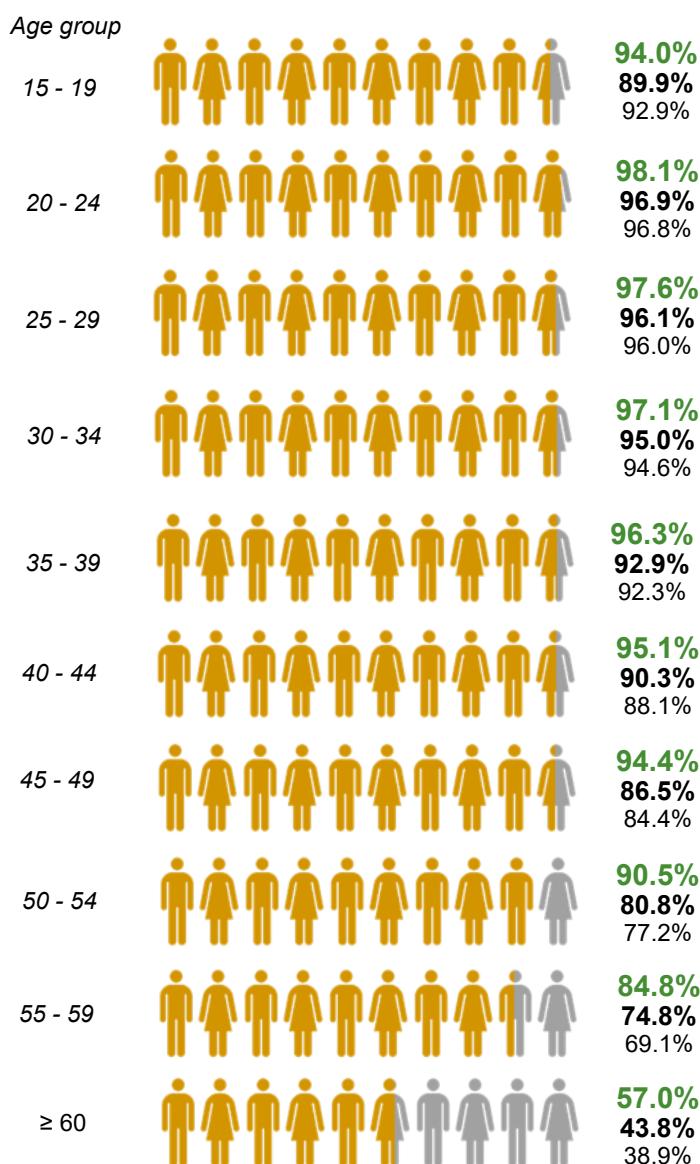
1. The gender gap represents the difference between the Internet user penetration rates for males and females relative to the Internet user penetration rate for males, express as a percentage
2. Penetration rates refer to the number of female/male that use the Internet, as a percentage of the respective total female/male population

Source: Measuring Digital Development: Facts and Figures 2019 by ITU

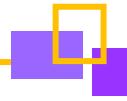
3.7 Internet Usage by Age Group

The internet usage varies across age group. Individuals in the age group of 20 to 24 years old, recorded a highest percentage of 98.1 per cent. As the age increased, the usage of internet lessened, with the age group of 60 years old and above registering the lowest at 57.0 per cent in 2020.

Exhibit 6: Percentage of individuals using the internet by age group, Malaysia, 2018 - 2020



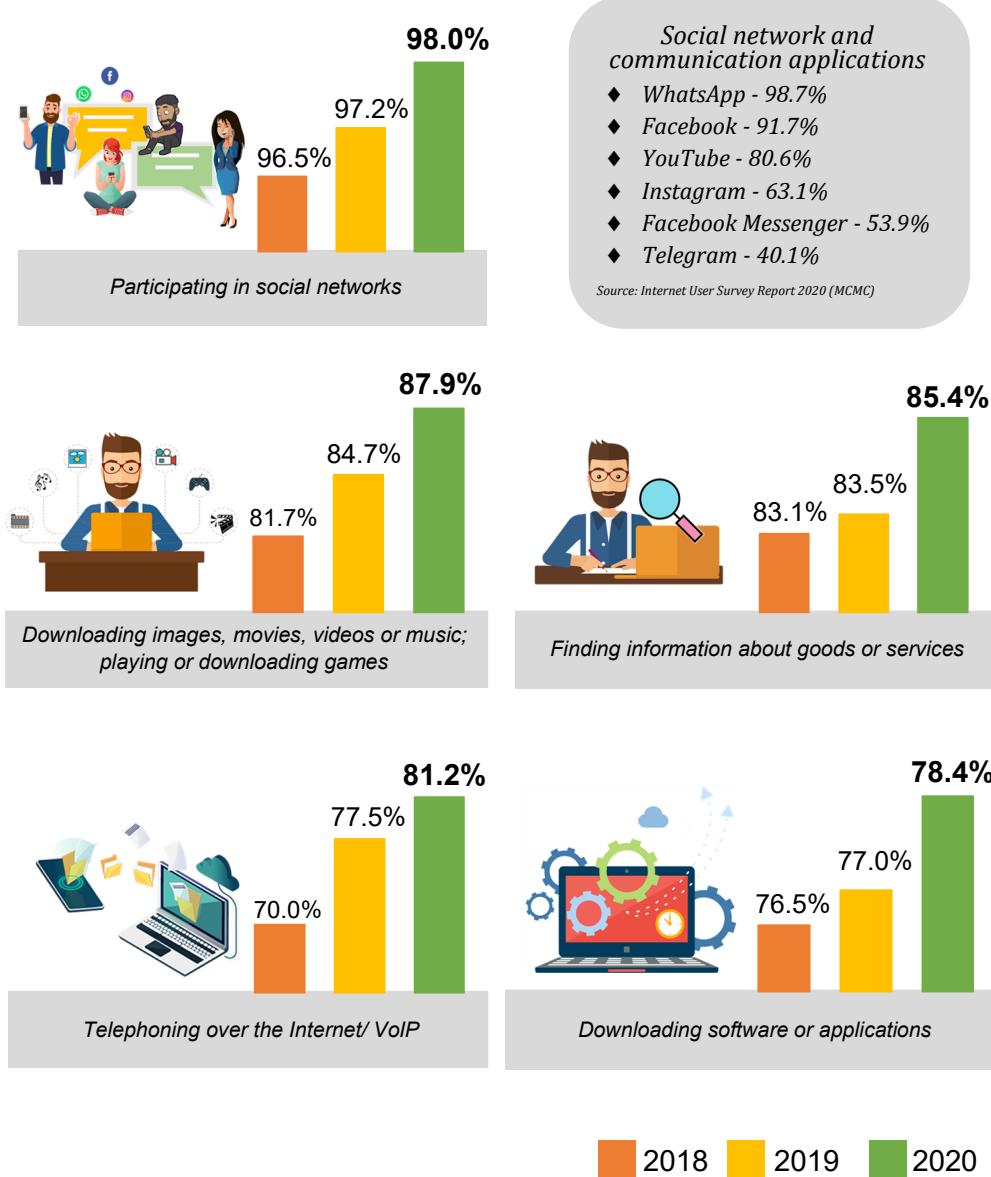
2020
2019
2018



3.8 Internet Usage Activities

The most popular internet user activities in 2020 was participating in social networks (90.0%). This is followed by downloading images, movies, videos, or music; playing or downloading games (87.9%), finding information about goods and services (85.4%), make a phone call over the internet/ VoIP (81.2%) and downloading software or applications (78.4%).

Exhibit 7: Percentage of individuals using the internet by top five internet activities, Malaysia, 2018 - 2020



Note: Each individuals can choose more than one internet activities



KESAN PANDEMIK COVID-19 TERHADAP AKTIVITI INTERNET TERPILIH DI KALANGAN RAKYAT MALAYSIA

*THE IMPACT OF COVID-19
PANDEMIC TO SELECTED
INTERNET ACTIVITIES
AMONG MALAYSIAN*

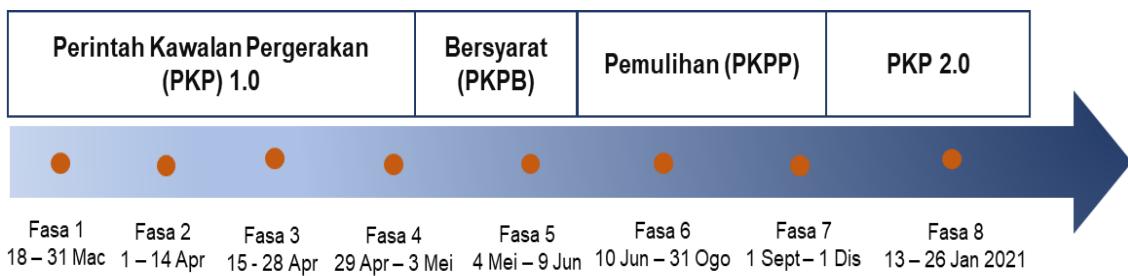
Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



KESAN PANDEMIK COVID-19 TERHADAP AKTIVITI INTERNET TERPILIH DI KALANGAN RAKYAT MALAYSIA

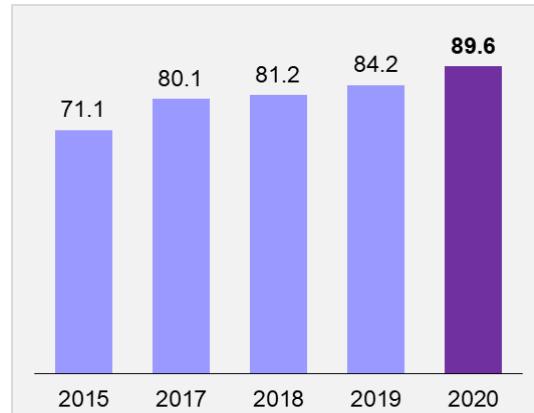
Pandemik COVID-19 telah mengubah landskap sosioekonomi dunia secara keseluruhan sejak dikesan pertama kali pada akhir 2019. Pandemik COVID-19 juga telah mengubah corak penggunaan internet di kalangan masyarakat Malaysia terutama ketika Perintah Kawalan Pergerakan (PKP) dilaksanakan di seluruh negara. Sejak Mac 2020, terdapat kira-kira lapan fasa PKP telah dilaksanakan yang mendorong kepada penggunaan internet bagi kebanyakan aktiviti masyarakat di Malaysia.

Paparan 1: Lapan fasa PKP di Malaysia



Carta 1: Peratusan individu penggunaan internet, Malaysia 2015 - 2020

Penggunaan internet dapat digambarkan sebagai aktiviti yang dilakukan oleh individu yang menggunakan internet melalui pelbagai medium yang membolehkan mereka mengakses rangkaian dari mana-mana lokasi. Pada 2020, penggunaan internet di kalangan masyarakat Malaysia yang berumur 15 tahun dan ke atas meningkat dengan ketara kepada 89.6 peratus (2019: 84.2%).



Sumber: Laporan Survei Penggunaan dan Capaian ICT oleh Individu dan isi Rumah

Aktiviti internet yang paling popular di Malaysia adalah menyertai rangkaian sosial. Walau bagaimanapun, penggunaan internet semasa pandemik COVID-19 meningkat dengan ketara bagi perkhidmatan yang berkaitan dengan aktiviti pembelajaran, e-Kesihatan, e-Kerajaan, e-Dagang dan hiburan (Jadual 1). Penulisan ini akan memberi tumpuan kepada corak aktiviti internet terpilih yang meningkat dengan ketara (melebihi 7.0 mata peratus) dari segi ciri-ciri kumpulan umur dan jantina pengguna internet. Aktiviti tersebut adalah membuat pesanan barang atau perkhidmatan atas talian; mendapatkan maklumat berkaitan kesihatan; menggunakan perbankan internet; menjalani kursus tidak formal atas talian; menjalani kursus formal atas talian; membeli barang atau perkhidmatan melalui e-Dagang; menonton televisyen secara atas talian; dan mendapatkan maklumat daripada organisasi kerajaan.

Jadual 1: Kategori Aktiviti Internet, Malaysia, 2019 - 2020

Aktiviti Internet	2019	2020
1. Mendapatkan maklumat		
Mendapatkan maklumat barang/ perkhidmatan	83.5	85.4
Membaca akhbar/ majalah online	66.2	69.0
2. Profesional		
Memohon pekerjaan	20.9	21.4
Menyertai rangkaian profesional	8.5	10.6
Bekerja dari rumah	11.0	16.1
3. Komunikasi		
Menyertai rangkaian sosial	97.2	98.0
Menghantar emel	76.3	76.3
Membuat panggilan telefon melalui internet	77.5	81.2
Memuat naik kandungan ke laman web	6.4	9.2
Mengurus laman web persendirian	3.5	5.4
Menguruskan blog	2.6	4.1
Mengakses perbincangan atas talian	23.1	22.4
4. Lain-lain perkhidmatan atas talian		
Melaksanakan tugas jana pendapatan	3.3	8.3
Menggunakan perkhidmatan berkaitan perjalanan/ penginapan	27.5	31.6
Menjual barang/ perkhidmatan	4.0	10.6
Menggunakan perbankan internet	50.5	61.9
Menggunakan perisian untuk menyunting teks	20.1	26.3
Memuat turun perisian/ aplikasi	77.0	78.4
Membuat pesanan barang/ perkhidmatan atas talian	22.5	54.4
5. Aktiviti Pembelajaran		
Menjalani kursus formal atas talian	8.1	18.0
Merujuk laman web untuk pembelajaran formal	39.9	40.3
Menjalani kursus tidak formal atas talian	9.5	20.8
6. Hiburan		
Mendengar radio seara atas talian	50.8	53.8
Menonton televisyen secara atas talian	47.9	55.5
Muat turun gambar/ filem/permainan	84.7	87.9
7. Ruang penyimpanan		
Menggunakan ruang simpanan di internet	52.5	53.5
8. e-Kesihatan		
Mendapatkan maklumat kesihatan	45.3	61.9
Membuat temujanji kesihatan	4.5	10.7
9. e-Kerajaan		
Mendapatkan maklumat daripada organisasi kerajaan	45.6	52.9
Berinteraksi dengan organisasi kerajaan	39.4	35.2
10. Sivik dan politik		
Memberi pendapat/ undi	17.3	23.5
11. e-Dagang		
Membeli barang/ perkhidmatan melalui e-Dagang	35.2	45.0
Menjual barang/ perkhidmatan melalui e-Dagang	2.0	5.9
12. Keselamatan dan perlindungan online		
Mempunyai peralatan keselamatan dalam talian	36.4	36.9

Sumber: Laporan Survei Penggunaan dan Capaian ICT oleh Individu dan isi Rumah



Membuat Pesanan Barang atau Perkhidmatan Atas Talian

Pesanan barang atau perkhidmatan secara atas talian merujuk kepada pembelian yang dilakukan dalam talian melalui panggilan telefon, Facebook, WhatsApp dan lain-lain. Situasi norma baharu yang menghadkan bilangan orang ramai di sesbuah premis menyebabkan pengguna mula mengubah cara pembelian dan perbelanjaan mereka. Hasilnya, pembelian melalui atas talian telah meningkat daripada 22.5 peratus pada 2019 kepada 54.4 peratus pada 2020.

Analisis mengikut jantina menunjukkan peratusan perempuan (59.0%) lebih tinggi daripada lelaki (50.4%). Sementara itu, individu dalam kumpulan umur 25 hingga 29 tahun secara keseluruhan mencatatkan peratusan tertinggi bagi membuat pesanan barang atau perkhidmatan atas talian (67.2%).

Carta 2: Peratusan individu membuat pesanan barang atau perkhidmatan atas talian mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020



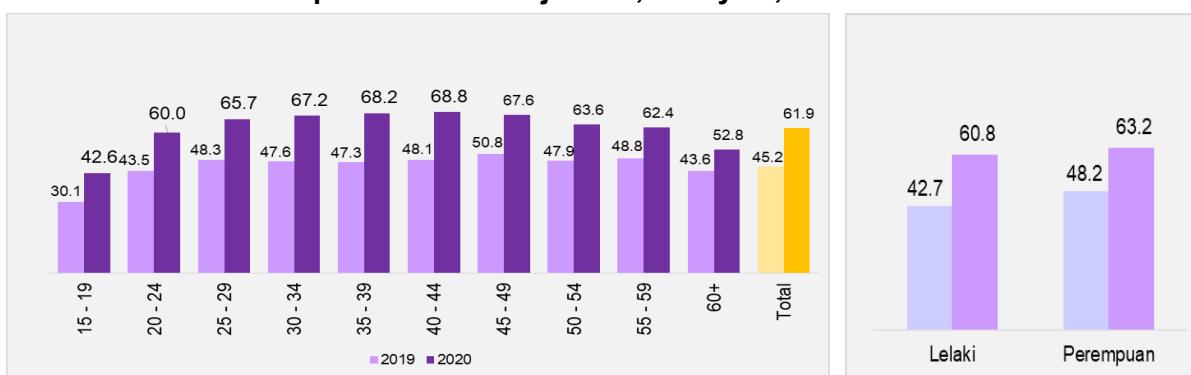
Mendapatkan Maklumat Berkaitan Kesihatan

Semasa pandemik COVID-19, penggunaan internet untuk mencari maklumat berkaitan kesihatan atau perkhidmatan telah meningkat sebanyak 12.0 mata peratus pada 2020, dengan 61.9 peratus individu berusia 15 tahun dan ke atas mencari maklumat berkaitan kesihatan atau perkhidmatan berbanding 45.3 peratus pada 2019.

Analisis mengikut kumpulan umur menunjukkan peratusan tertinggi adalah kumpulan umur 40 hingga 44 tahun (68.8%). Sementara itu, peratusan perempuan (63.2%) lebih tinggi berbanding lelaki (60.8%) dalam mendapatkan maklumat kesihatan. (Carta 3)

Penemuan survei juga menunjukkan sebahagian individu berumur 60 tahun dan ke atas menggunakan internet untuk mendapatkan maklumat kesihatan. Peningkatan ini mungkin disumbangkan oleh penggunaan aplikasi MySejahtera yang dibangunkan oleh Kerajaan untuk memantau pandemik COVID-19 dalam negara. Aplikasi ini juga telah meningkatkan penggunaan saluran digital terutama kepada generasi lebih berusia.

Carta 3: Peratusan individu mendapatkan maklumat kesihatan mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020



Menggunakan Perbankan Internet

Perbankan internet membolehkan pengguna melakukan aktiviti perbankan di mana-mana lokasi dan tidak mengira masa melalui internet tanpa perlu berada di bank untuk melakukan transaksi perbankan. Peratusan pengguna internet yang menggunakan perbankan internet meningkat daripada 50.5 peratus pada 2019 kepada 61.9 peratus pada 2020.

Analisis mengikut jantina menunjukkan peratusan perempuan (62.9%) lebih tinggi daripada lelaki (61.0%). Sementara itu, individu dalam kumpulan umur 25 hingga 29 tahun mencatatkan peratusan tertinggi bagi menggunakan perbankan internet (75.3%).

Carta 4: Peratusan individu menggunakan perbankan internet mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020

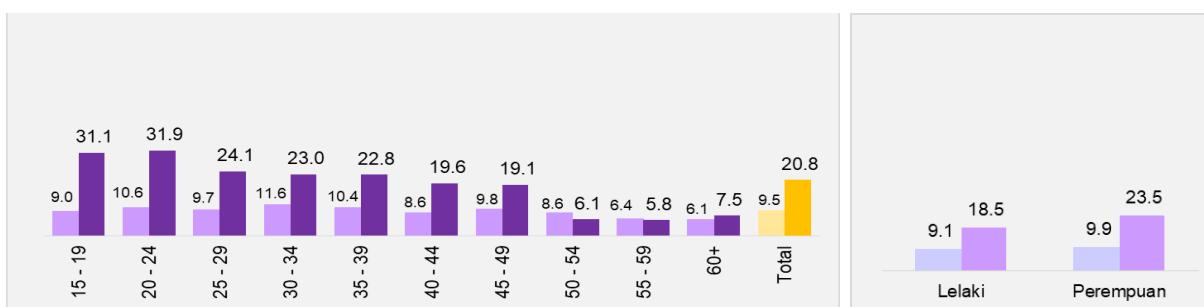


Menjalani Kursus Tidak Formal Atas Talian

Pembelajaran dalam talian merupakan satu bentuk saluran pembelajaran yang dilaksanakan melalui internet. Individu yang menghadiri kursus tidak formal secara atas talian meningkat daripada 9.5 peratus pada 2019 kepada 20.8 peratus pada 2020.

Analisis mengikut jantina menunjukkan peratusan perempuan (23.5%) lebih tinggi daripada lelaki (18.5%). Sementara itu, individu dalam kumpulan umur 20 hingga 24 tahun mencatatkan peratusan tertinggi bagi menghadiri kursus tidak formal atas talian (31.9%). (Carta 5)

Carta 5: Peratusan individu menjalani kursus tidak formal atas talian mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020

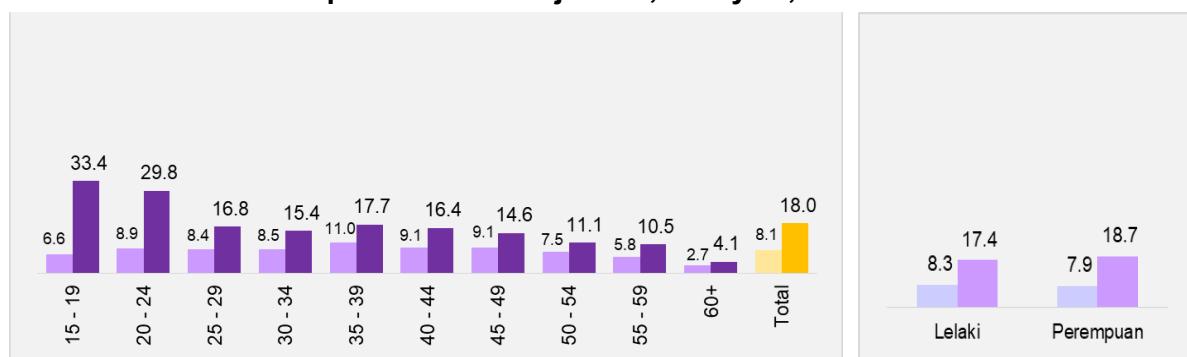


Menjalani Kursus Formal Atas Talian

Penemuan survei melaporkan peningkatan yang ketara dalam aktiviti menghadiri kursus formal atas talian daripada 8.1 peratus pada 2019 kepada 18.0 peratus pada 2020.

Analisis mengikut kumpulan umur menunjukkan peratusan tertinggi adalah kumpulan umur 15 hingga 19 tahun (33.4%). Sementara itu, peratusan perempuan (18.7%) mengikuti kursus formal atas talian lebih tinggi berbanding lelaki (17.4%).

Carta 6: Peratus individu menjalani kursus formal atas talian mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020

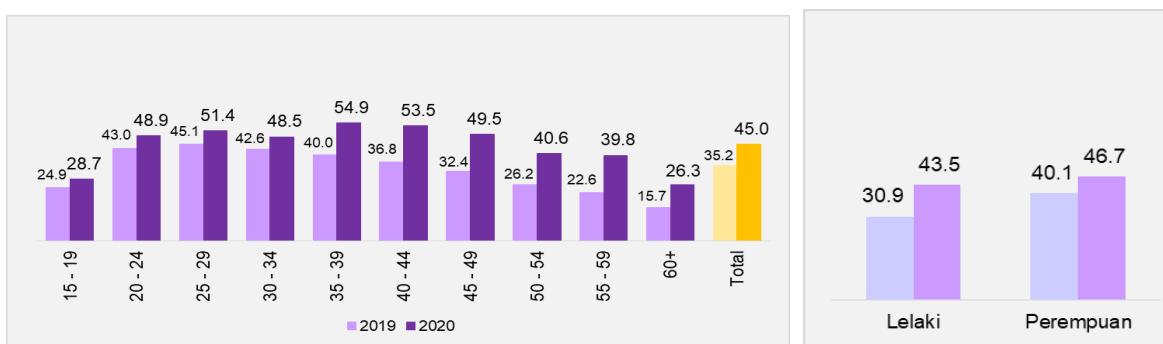


Membeli Barang atau Perkhidmatan Melalui e-Dagang

Pembelian barang atau perkhidmatan melalui e-Dagang merujuk kepada pembelian melalui platform dalam talian seperti Shoppe, Lazada dan Grab. Berdasarkan penemuan survei, pembelian melalui e-Dagang telah meningkat daripada 35.2 peratus pada 2019 kepada 45.0 peratus pada 2020.

Analisis mengikut kumpulan umur menunjukkan peratusan tertinggi adalah kumpulan umur 35 hingga 39 tahun (54.9%). Sementara itu, peratusan perempuan (46.7%) adalah lebih tinggi berbanding lelaki (43.5%) dalam membeli barang atau perkhidmatan melalui e-Dagang. (Carta 7)

Carta 7: Peratusan individu membeli barang atau perkhidmatan secara atas talian mengikut kumpulan umur dan jantina , Malaysia, 2019 - 2020

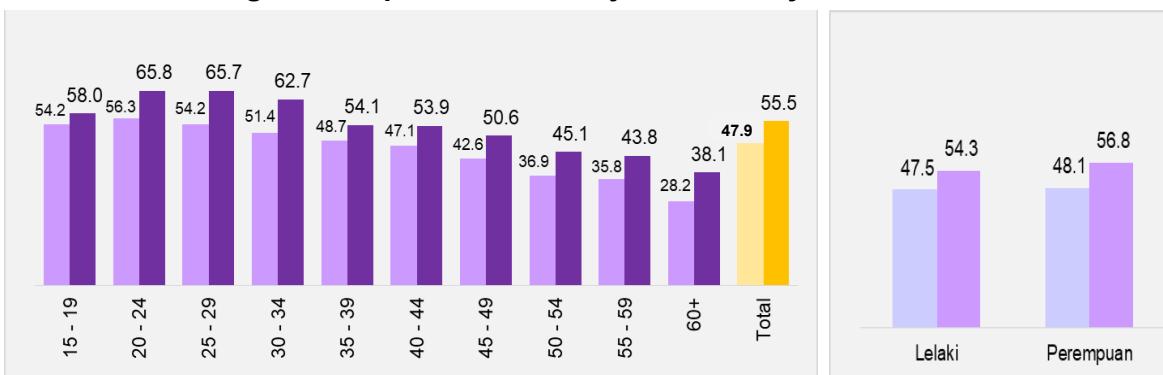


Menonton Televisyen Secara Atas Talian

Pada masa kini, mendapatkan hiburan di web bukan lagi perkara baharu. Ini dapat ditunjukkan melalui peningkatan menonton televisyen atas talian daripada 47.9 peratus pada 2019 kepada 55.5 peratus pada 2020.

Analisis mengikut jantina menunjukkan peratusan perempuan (56.8%) lebih tinggi berbanding lelaki (54.3%). Sementara itu, individu yang berumur 20 hingga 24 tahun mencatatkan peratusan tertinggi bagi menonton televisyen atas talian (65.8%).

Carta 8: Peratusan individu menonton televisyen secara atas talian mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020

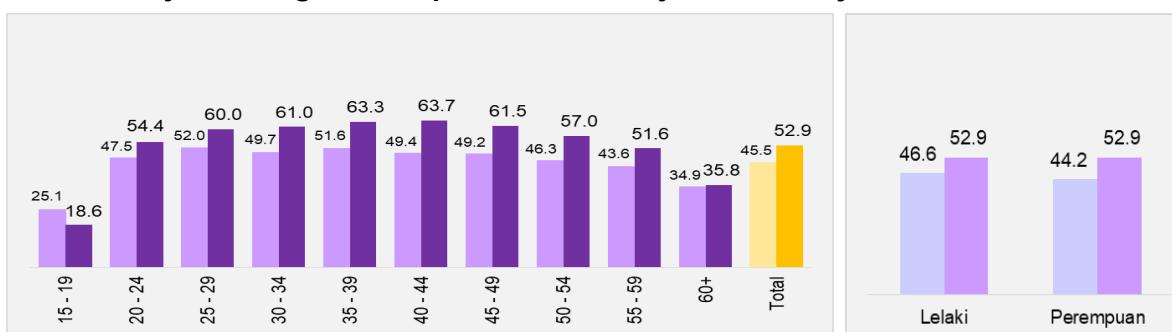


Mendapatkan Maklumat Daripada Organisasi Kerajaan

Kerajaan telah menyediakan saluran dalam talian untuk orang ramai mendapatkan maklumat. Saluran ini dikenali sebagai e-Kerajaan. Hasilnya, peratusan mendapatkan maklumat dari organisasi kerajaan telah meningkat daripada 45.5 peratus pada 2019 kepada 52.9 peratus pada 2020.

Analisis mengikut kumpulan umur menunjukkan peratusan tertinggi adalah kumpulan umur 40 hingga 44 tahun (63.7%). Sementara itu, kedua-dua peratusan perempuan dan lelaki mencatatkan 52.9 peratus. (Carta 9)

Carta 9: Peratusan individu mendapatkan maklumat daripada organisasi kerajaan mengikut kumpulan umur dan jantina, Malaysia, 2019 - 2020

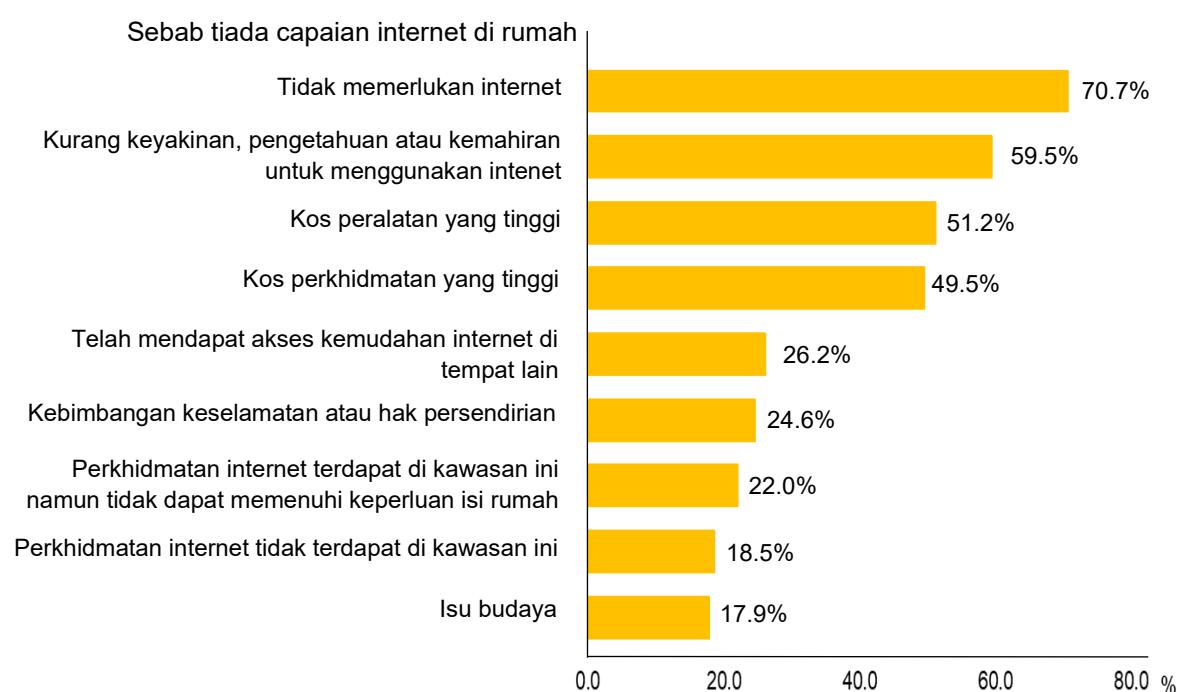


Secara keseluruhan berdasarkan analisis, penggunaan internet di kalangan masyarakat Malaysia menunjukkan peningkatan dalam aktiviti terpilih bagi tempoh 2019 - 2020. Peningkatan ini disumbang oleh ciri-ciri pengguna internet dan juga kesan pandemik COVID-19.

Sebab-sebab tiada capaian internet di rumah

Berdasarkan penemuan survei, capaian internet oleh isi rumah di Malaysia mencapai 91.7 peratus pada 2020 iaitu meningkat 1.6 mata peratus daripada 2019. Ini menunjukkan masih terdapat isi rumah yang tidak mempunyai capaian internet di tempat kediaman. Tiga sebab utama isi rumah tidak mempunyai capaian internet di tempat kediaman adalah tidak memerlukan internet (70.7%), kurang keyakinan, pengetahuan atau kemahiran untuk menggunakan internet (59.5%) dan kos peralatan yang tinggi (51.2%) seperti ditunjukkan dalam Carta 10.

Carta 10: Peratusan isi rumah tiada capaian internet di rumah, Malaysia, 2020



Nota: Isi rumah boleh memilih lebih daripada satu sebab tidak mempunyai capaian internet di tempat kediaman

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



THE IMPACT OF COVID-19 PANDEMIC TO SELECTED INTERNET ACTIVITIES AMONG MALAYSIAN

The COVID-19 pandemic has changed the world's socio economic landscape as a whole since it was first detected at the end of 2019. COVID-19 pandemic has also changed the internet usage pattern among Malaysian especially when the Movement Control Order (MCO) was implemented throughout the country. Since March 2020, there are about eight phases of MCO were implemented where encourage the use of internet in most of human activities in Malaysia.

Exhibit 1: Eight phases of MCO in Malaysia

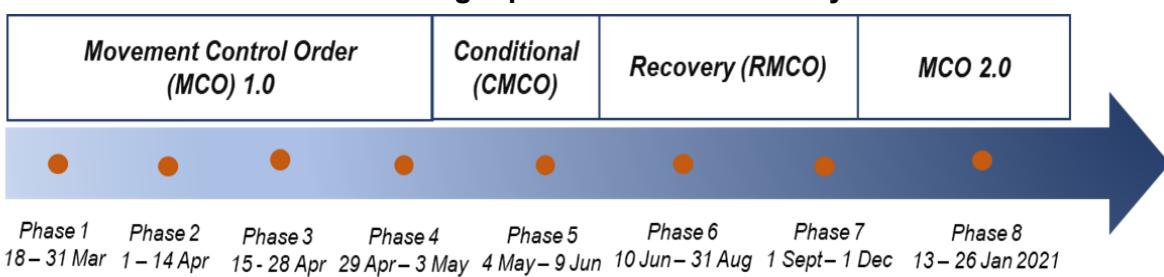
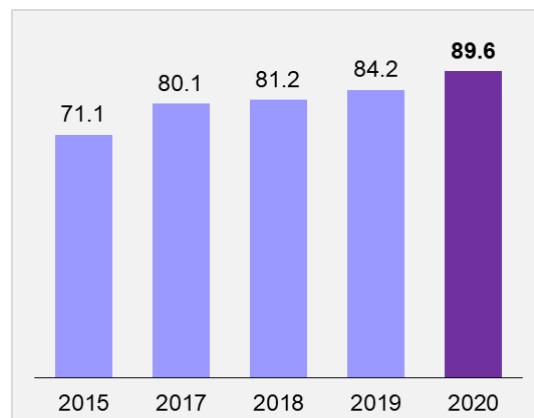


Chart 1: Percentage of internet usage by individuals, Malaysia, 2015 - 2020

Internet usage can be described as any activities perform by individuals on the use of internet through various mediums that allow them to access the network from any location. In 2020, the use of internet among Malaysian aged 15 and above was increased significantly to 89.6 per cent (2019: 84.2%).



Source: ICT Use and Access by Individuals and Households Survey Report

The most popular internet activities in Malaysia is participating in social networks. However, during the pandemic the use of internet significantly increased for the services related to learning activities, e-Health, e-Government, e-Commerce and entertainment (Table 1). This paper will be focused on the pattern of selected internet activities, which were significantly increased (above 7.0 percentage points) in terms of characteristic of internet users by age group and gender. Those activities are ordering goods or services online; seeking health information; using internet banking; doing an informal online course; doing a formal online course; purchasing goods or services via e-Commerce; watching television online; and getting information from government organisations.

Table 1: Categories of Internet Activities, Malaysia, 2019 - 2020

Internet Activities	2019	2020
1. Access to Information		
<i>Finding information about goods/ services</i>	83.5	85.4
<i>Reading newspaper/ magazines online</i>	66.2	69.0
2. Professional		
<i>Applying for jobs</i>	20.9	21.4
<i>Participating in professional networks</i>	8.5	10.6
<i>Work from home</i>	11.0	16.1
3. Communication		
<i>Participating in social networks</i>	97.2	98.0
<i>Sending e-mail</i>	76.3	76.3
<i>Telephoning over the Internet</i>	77.5	81.2
<i>Uploading content to a website</i>	6.4	9.2
<i>Managing personal homepage</i>	3.5	5.4
<i>Managing blog</i>	2.6	4.1
<i>Accessing online discussion</i>	23.1	22.4
4. Other Online Services		
<i>Performing tasks to generate income</i>	3.3	8.3
<i>Using services related to travel/ accommodation</i>	27.5	31.6
<i>Selling goods/ services</i>	4.0	10.6
<i>Using Internet banking</i>	50.5	61.9
<i>Using software for editing texts</i>	20.1	26.3
<i>Downloading software/ applications</i>	77.0	78.4
<i>Ordering goods/ services online</i>	22.5	54.4
5. Learning Activities		
<i>Doing a formal online course</i>	8.1	18.0
<i>Consulting websites for formal learning purposes</i>	39.9	40.3
<i>Doing an informal online course</i>	9.5	20.8
6. Entertainment		
<i>Listening to radio online</i>	50.8	53.8
<i>Watching television online</i>	47.9	55.5
<i>Downloading images/ movie/ games</i>	84.7	87.9
7. Storage Space		
<i>Using storage space on the Internet</i>	52.5	53.5
8. e-Health		
<i>Seeking health information</i>	45.3	61.9
<i>Making a medical appointment</i>	4.5	10.7
9. e-Government		
<i>Getting information from government organisations</i>	45.6	52.9
<i>Interacting with government organisations</i>	39.4	35.2
10. Civic and Politics		
<i>Posting opinions/ voting</i>	17.3	23.5
11. e-Commerce		
<i>Purchasing goods/ services via e-Commerce</i>	35.2	45.0
<i>Selling goods/ services via e-Commerce</i>	2.0	5.9
12. Safety and Online Protection		
<i>Owning online security tools</i>	36.4	36.9

Source: ICT Use and Access by Individuals and Households Survey Report

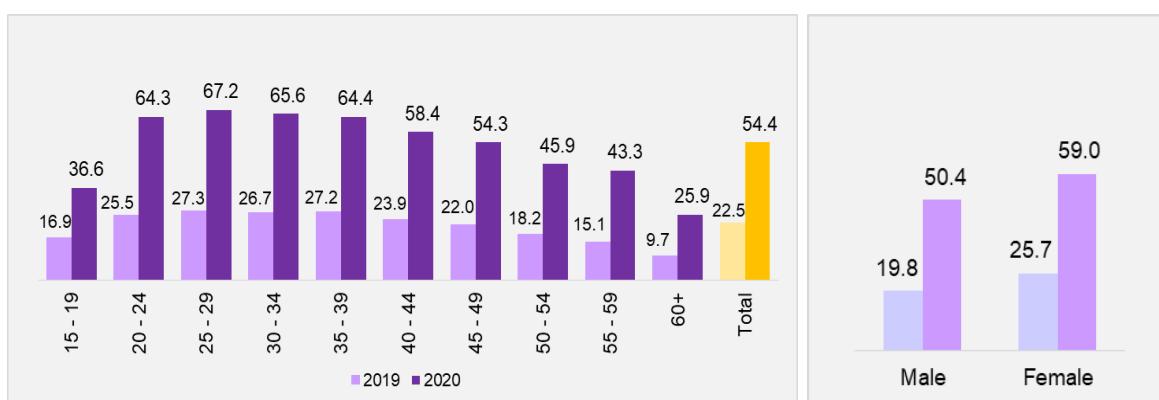


Ordering Goods or Services Online

Ordering goods or services online refers to purchasing via online through phone call, Facebook, WhatsApp and others. Due to the new norm situation that limiting the number of persons in a premise, many consumers have start to alter their purchasing and shopping behaviors. As a result, purchasing via online has increased from 22.5 per cent in 2019 to 54.4 per cent in 2020.

Analysis by gender shows percentage of female (59.0%) is higher than male (50.4%). Meanwhile, individuals in the age group of 25 to 29 years old recorded a highest percentage of ordering goods or services online (67.2%).

Chart 2: Percentage of individuals ordering goods or services online by age group and gender, Malaysia, 2019 - 2020



Seeking Health Information

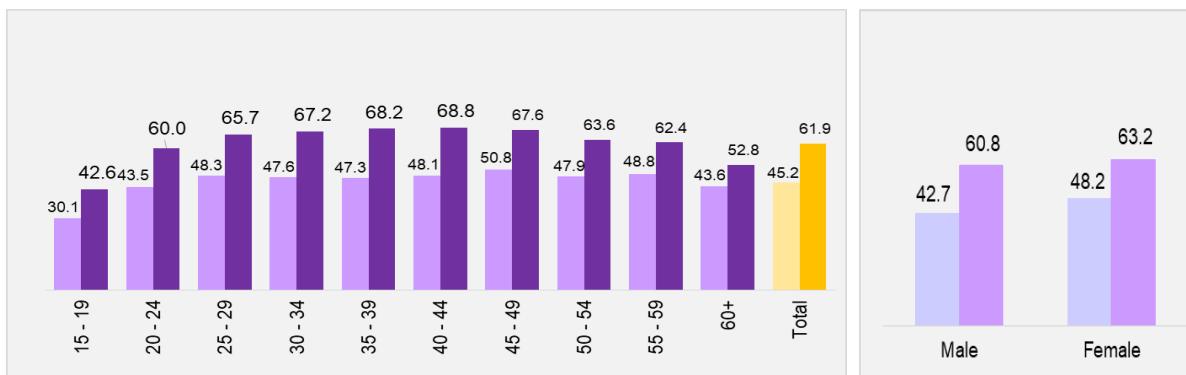
During the COVID-19 pandemic, use of the internet for seeking health related information or services has increased by 12.0 percentage points in 2020, with 61.9 percent of persons aged 15 years old and above seeking health related information or services as compared to 45.2 per cent in 2019.

Analysis by age group shows the highest percentage was age group 40 to 44 years old (68.8%). Meanwhile, percentage of female (63.2%) seeking health information higher as compared to male (60.8%). (Chart 3)

Findings from survey also showed half of individual aged 60 years old and above using internet for seeking health information. This increased may be contributed by the use of the MySejahtera application which is developed by the Government to monitor COVID-19 outbreak in the country. This application has also increased the usage of digital platforms especially for the older generations.



Chart 3: Percentage of individuals seeking health information by age group and gender, Malaysia, 2019 - 2020



Using Internet Banking

Internet banking allows consumers to perform banking activities anywhere and anytime via the internet without having to personally be in the bank to carry out banking deals. The percentage of internet users using internet banking was increased from 50.5 per cent in 2019 to 61.9 per cent in 2020.

Analysis by gender shows percentage of female (62.9%) is higher than male (61.0%). Meanwhile, individuals in the age group of 25 to 29 years old recorded a highest percentage of using internet banking (75.3%).

Chart 4: Percentage of individuals using internet banking by age group and gender, Malaysia, 2019 - 2020

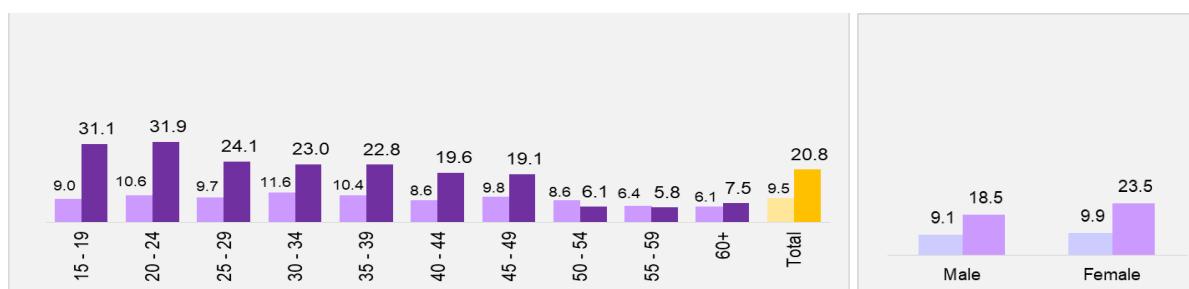


Doing an Informal Online Course

Online learning is any platform of learning conducted over the internet. The individuals who are attending an informal online course increased from 9.5 per cent in 2019 to 20.8 per cent in 2020.

Analysis by gender shows percentage of female (23.5%) is higher than male (18.5%). Meanwhile, individuals in the age group of 20 to 24 years old recorded a highest percentage of attending an informal online course (31.9%). (Chart 5)

Chart 5: Percentage of individuals doing an informal online course by age group and gender, Malaysia, 2019 - 2020

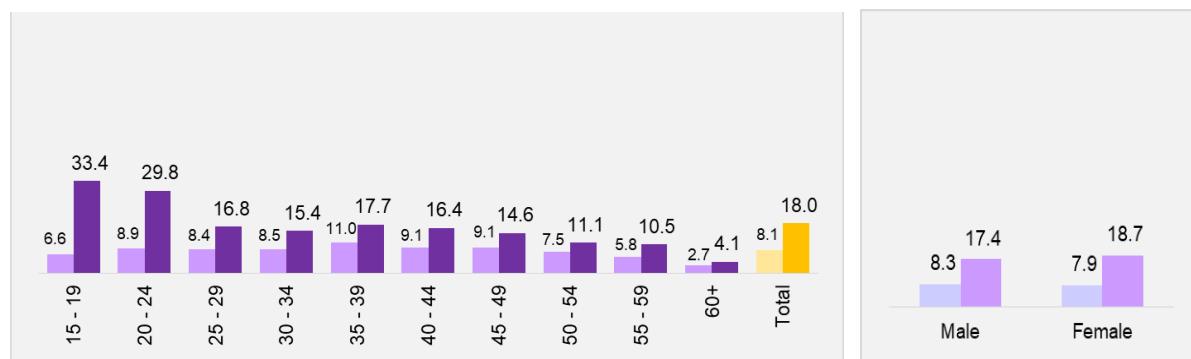


Doing a Formal Online Course

Survey findings reported a significant increased in the percentage of individuals who are attending a formal online course from 8.1 per cent in 2019 to 18.0 per cent in 2020.

Analysis by age group shows the highest percentage was age group 15 to 19 years old (33.4%). Meanwhile, percentage of female (18.7%) participating formal online course higher as compared to male (17.4%).

Chart 6: Percentage of individuals doing a formal online course by age group and gender, Malaysia, 2019 - 2020



Purchase Goods or Services via e-Commerce

Purchase goods or services via e-Commerce refers to purchasing through online platform such as Shoppe, Lazada and Grab. Based on survey findings, the purchasing via e-Commerce has increased from 35.2 per cent in 2019 to 45.0 per cent in 2020.

Analysis by age group shows the highest percentage was age group 35 to 39 years old (54.9%). Meanwhile, percentage of female (46.7%) purchase goods or services via e-Commerce higher as compared to male (43.5%). (Chart 7)



Chart 7: Percentage of individuals purchase goods or services via e-Commerce by age group and gender, Malaysia, 2019 - 2020

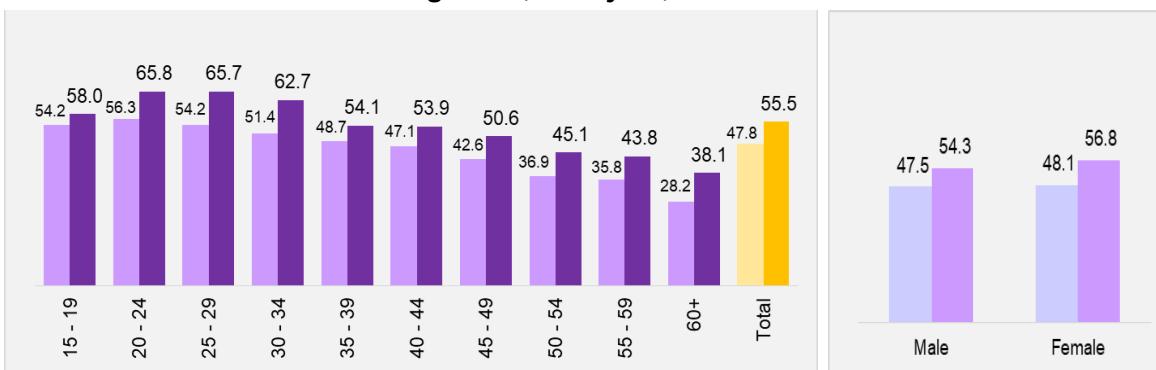


Watching Television Online

Nowadays, getting entertainment on the web is no longer a new thing. This is indicated by the increasing in watching television online from 47.8 per cent in 2019 to 55.5 per cent in 2020.

Analysis by gender shows percentage of female (56.8%) is higher than male (54.3%). Meanwhile, individuals in the age group of 20 to 24 years old recorded a highest percentage of watching television online (65.8%).

Chart 8: Percentage of individuals watching television online by age group and gender, Malaysia, 2019 - 2020

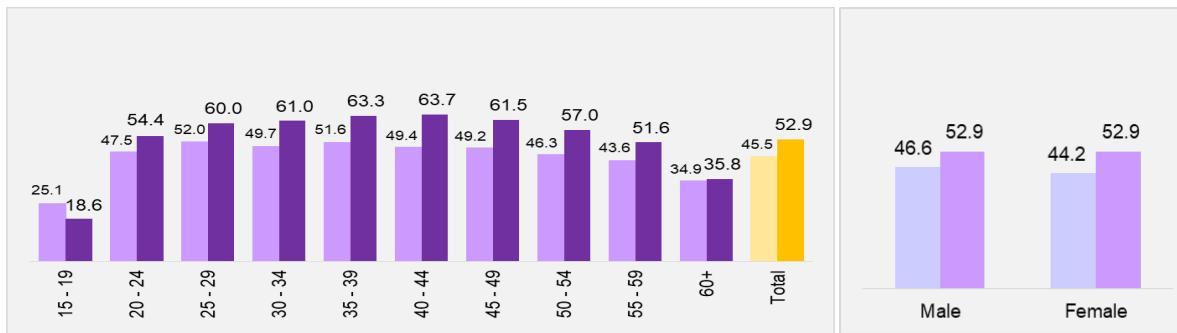


Getting Information from Government Organisations

The government has provided an online platform for public to obtain the information. This platform is known as e-Government. As a result, percentage of getting information from government organisations has increased from 45.5 per cent in 2019 to 52.9 per cent in 2020.

Analysis by age group shows the highest percentage was age group 40 to 44 years old (63.7%). Meanwhile, both percentage of female and male recorded 52.9 per cent. (Chart 9)

Chart 9: Percentage of individuals getting information from government organisations by age group and gender, Malaysia, 2019 - 2020

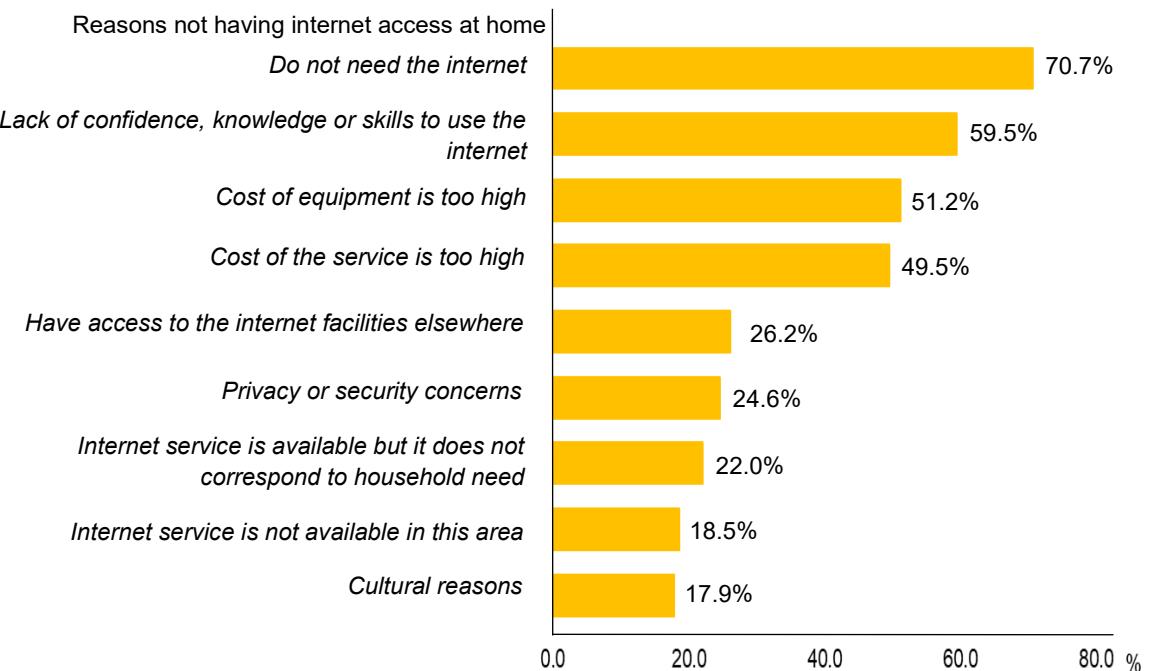


Overall based on the analysis, internet usage among Malaysian shows an increased in selected activities for the period of 2019 - 2020. This increase was contributed by the characteristics of the internet users as well as the effects of pandemic COVID-19.

Reasons not having internet access at home

Based on survey findings, Internet access by households in Malaysia reached 91.7 per cent in 2020, an increase of 1.6 percentage points from 2019. This indicates that there are still households with no internet access at home. The three main reasons for households not having internet access at home are do not need the internet (70.7%), lack of confidence, knowledge or skills to use internet (59.5%) and cost of equipment is too high (51.2%) as shown in Chart 10.

Chart 10: Percentage of households for not having internet access at home, Malaysia, 2020



Note: Each households can choose more than one reason for not having internet access at home

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



STATISTIK CAPAIAN ICT OLEH ISI RUMAH

*STATISTICS OF ICT ACCESS
BY HOUSEHOLDS*

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

Jadual 1.1 : Peratusan capaian telefon bimbit oleh isi rumah mengikut negeri, jenis dan strata, Malaysia, 2020
 Table 1.1 : Percentage of households with access to mobile phone by state, type and strata, Malaysia, 2020

Negeri State	Jumlah Total	Telefon bimbit Mobile phone		Telefon biasa Feature phone		Telefon pintar Smart phone		(%)	
		Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural
MALAYSIA	98.6	99.0	96.8	22.7	20.1	33.7	95.9	97.1	91.0
Johor	99.4	99.5	99.1	18.9	17.2	25.8	98.9	99.0	98.5
Kedah	98.6	98.7	98.0	28.0	24.2	39.2	93.9	95.2	90.3
Kelantan	97.3	98.2	96.3	34.8	32.1	38.0	93.0	94.0	91.8
Melaka	98.5	98.5	97.0	25.8	26.0	22.7	96.1	96.1	94.9
Negeri Sembilan	98.4	99.4	95.3	13.9	11.8	21.2	96.9	99.0	89.8
Pahang	98.0	98.7	96.9	27.3	23.6	33.7	92.1	94.3	88.3
Pulau Pinang	98.9	98.9	98.1	15.7	15.4	24.4	97.3	97.3	95.3
Perak	97.4	97.6	96.1	34.6	34.0	37.2	92.0	92.2	90.8
Perlis	97.7	97.6	97.8	24.9	21.1	33.8	94.4	95.8	91.2
Selangor	99.3	99.4	98.7	18.6	18.1	28.7	97.8	98.0	94.7
Terengganu	98.2	98.4	97.6	36.9	37.2	36.2	94.3	94.9	92.9
Sabah	98.6	98.8	98.2	26.1	21.4	34.3	96.4	97.8	93.8
Sarawak	96.6	99.0	92.8	24.1	16.0	37.2	91.9	97.8	82.1
W.P. Kuala Lumpur	99.5	99.5	n.a.	9.9	9.9	n.a.	99.1	99.1	n.a.
W.P. Labuan	98.6	98.6	99.2	21.7	21.1	27.2	99.1	99.0	99.2
W.P. Putrajaya	99.5	99.5	n.a.	10.1	10.1	n.a.	99.7	99.7	n.a.

Nota: Telefon bimbit meliputi telefon biasa dan telefon pintar
 Note: Mobile phone includes feature phone and smart phone

Jadual 1.2 : Peratusan capaian internet oleh isi rumah mengikut negeri, jenis perkhidmatan dan strata, Malaysia, 2020
 Table 1.2 : Percentage of households with internet access by state, type of service and strata, Malaysia, 2020

Negeri State	Jumlah Total	Internet			Jalur lebar mudah alih Mobile broadband			Jalur lebar tetap Fixed broadband		
		Jumlah Total		Bandar Urban	Luar bandar Rural	Jumlah Total		Bandar Urban	Luar bandar Rural	Jumlah Total
		Bandar Urban	Luar bandar Rural					Bandar Urban	Luar bandar Rural	
MALAYSIA	91.7	93.5	83.9			89.7	91.6	82.1	34.2	39.2
Johor	92.9	93.7	89.5	91.1	92.1	86.7	30.3	31.9	30.3	23.7
Kedah	90.8	92.1	86.9	90.6	92.0	86.4	18.2	21.6	21.6	8.8
Kelantan	89.3	91.2	87.1	88.8	90.5	86.9	13.5	19.3	19.3	6.7
Melaka	93.1	93.2	91.6	92.3	92.4	89.5	39.9	40.3	40.3	28.9
Negeri Sembilan	93.3	95.8	85.0	91.0	93.5	82.6	33.5	37.7	37.7	19.0
Pahang	86.8	88.7	83.6	84.4	85.9	81.9	22.3	27.5	27.5	13.4
Pulau Pinang	94.7	94.8	92.3	94.3	94.4	90.6	37.1	37.7	37.7	20.2
Perak	81.1	82.5	74.5	76.3	77.4	71.6	25.6	28.1	28.1	14.4
Perlis	93.0	94.7	89.2	89.4	91.2	85.2	28.5	34.1	34.1	15.7
Selangor	94.6	94.9	88.9	94.0	94.3	88.4	52.3	53.1	53.1	38.6
Terengganu	90.5	91.0	89.4	88.0	89.3	84.9	23.6	27.7	27.7	14.4
Sabah	94.6	96.6	91.0	94.2	96.3	90.4	n.a.	11.9	15.8	5.2
Sarawak	85.4	95.8	68.5	83.3	94.2	65.4	23.2	34.4	34.4	4.8
W.P. Kuala Lumpur	98.0	98.0	n.a.	90.1	90.1	n.a.	68.2	68.2	68.2	n.a.
W.P. Labuan	98.1	98.1	n.a.	97.2	97.1	97.6	32.8	34.0	34.0	22.4
W.P. Putrajaya	99.2	99.2	n.a.	88.6	88.6	n.a.	61.7	61.7	61.7	n.a.

Note: Internet meliputi jalur lebar mudah alih dan jalur lebar tetap

Note: Internet includes mobile broadband and fixed broadband

Jadual 1.3 : Peratusan capaian isi rumah terhadap perkhidmatan dan peralatan ICT mengikut negeri dan strata, Malaysia, 2020
 Table 1.3 : Percentage of households with access to ICT services and equipment by state and strata, Malaysia, 2020

Negeri State	Jumlah Total	Komputer Computer		Siaran TV berbayar Pay TV channel		Televisyen Television		(%)
		Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	
MALAYSIA	77.6	82.8	55.5	78.9	81.9	66.5	98.5	99.0
Johor	81.4	85.9	62.9	78.6	80.1	72.3	99.7	99.4
Kedah	62.1	65.8	51.6	69.7	73.9	57.5	99.1	99.2
Kelantan	56.6	68.5	42.7	63.1	67.4	58.0	98.2	98.4
Melaka	87.2	87.2	87.8	89.7	90.3	75.8	99.0	99.1
Negeri Sembilan	74.1	80.9	50.7	82.2	84.6	73.9	99.2	99.7
Pahang	71.2	77.1	60.9	79.6	80.8	77.5	98.1	98.7
Pulau Pinang	86.7	87.2	72.6	80.3	80.7	67.9	99.0	99.0
Perak	69.0	71.7	57.1	74.8	76.9	65.6	99.0	99.4
Perlis	70.6	75.0	60.5	74.5	76.2	70.6	96.5	96.6
Selangor	91.4	91.8	83.6	86.4	86.6	81.5	98.9	99.0
Terengganu	74.2	81.1	58.4	80.7	81.8	78.2	98.9	99.5
Sabah	60.7	67.2	49.4	70.9	77.5	59.3	95.4	97.5
Sarawak	64.8	74.0	49.7	68.7	72.9	61.9	96.2	97.8
W.P. Kuala Lumpur	94.5	94.5	n.a.	91.4	91.4	n.a.	99.9	99.9
W.P. Labuan	89.3	90.0	84.0	92.0	91.4	97.6	98.2	98.1
W.P. Putrajaya	99.2	99.2	n.a.	96.5	96.5	n.a.	99.5	99.5

Jadual 1.3 : Peratusan capaian isi rumah terhadap perkhidmatan dan peralatan ICT mengikut negeri dan strata, Malaysia, 2020 (samb.)
 Table 1.3 : Percentage of households with access to ICT services and equipment by state and strata, Malaysia, 2020 (cont'd)

Negeri State	Radio			Telefon talian tetap Fixed-line telephone			Jumlah Total	Luar bandar Rural	Bandar Urban	Luar bandar Rural	(%)
	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural					
MALAYSIA	98.5	98.9	97.0	22.4	25.5	9.2					
Johor	99.0	99.2	98.5	18.8	20.1	13.4					
Kedah	97.9	98.4	96.4	14.0	16.4	7.1					
Kelantan	98.0	98.7	97.1	7.7	10.7	4.2					
Melaka	98.5	98.5	96.9	36.3	36.9	23.7					
Negeri Sembilan	98.4	99.1	95.8	30.7	33.5	21.2					
Pahang	97.8	98.7	96.2	15.1	18.2	9.8					
Pulau Pinang	99.4	99.4	98.6	31.9	32.0	29.6					
Perak	97.6	97.6	97.4	20.9	21.8	16.5					
Perlis	97.7	98.3	96.2	24.4	27.7	16.8					
Selangor	99.2	99.3	96.7	28.1	28.4	23.5					
Terengganu	97.0	96.6	97.8	13.0	15.7	6.9					
Sabah	97.2	98.2	95.5	9.2	12.7	3.0					
Sarawak	98.7	99.2	97.9	15.0	22.6	2.5					
W.P. Kuala Lumpur	99.9	99.9	n.a.	42.7	42.7	n.a.					
W.P. Labuan	99.1	99.0	99.2	36.6	37.3	30.4					
W.P. Putrajaya	99.5	99.5	n.a.	36.1	36.1	n.a.					



STATISTIK PENGGUNAAN ICT OLEH INDIVIDU

*STATISTICS OF ICT USE
BY INDIVIDUALS*

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

Jadual 2.1 : Peratusan penggunaan dan pemilikan telefon bimbit oleh individu mengikut negeri dan strata, Malaysia, 2020
 Table 2.1 : Percentage of individuals using and owning mobile phone by state and strata, Malaysia, 2020

Negeri State	Penggunaan / Usage			Jumlah Total	Luar bandar Rural	Bandar Urban	Pemilikan / Ownership (%)
	Jumlah Total	Bandar Urban	Luar bandar Rural				
MALAYSIA	98.2	98.5	97.2	96.4	97.2	97.2	93.4
Johor	98.7	99.0	97.6	98.8	99.2	99.2	97.3
Kedah	97.4	97.8	96.2	93.7	94.8	94.8	91.0
Kelantan	97.8	97.5	98.2	93.2	95.2	95.2	90.9
Melaka	97.2	97.3	95.6	95.7	95.9	95.9	93.7
Negeri Sembilan	97.4	97.8	96.3	95.3	96.4	96.4	91.8
Pahang	98.5	98.8	98.1	96.0	97.8	97.8	93.1
Pulau Pinang	97.4	97.5	96.7	96.8	96.8	96.8	95.3
Perak	97.1	97.3	96.2	94.5	95.3	95.3	91.4
Perlis	97.3	97.7	96.5	95.7	96.0	96.0	95.1
Selangor	99.0	99.1	97.1	98.1	98.2	98.2	96.0
Terengganu	97.4	97.7	96.6	95.9	95.8	95.8	96.3
Sabah	99.0	99.1	98.7	95.7	95.9	95.9	95.4
Sarawak	97.1	98.3	95.3	94.5	97.4	97.4	89.9
W.P. Kuala Lumpur	99.6	99.6	n.a.	99.2	99.2	99.2	n.a.
W.P. Labuan	99.7	99.7	99.6	99.5	99.6	99.6	99.0
W.P. Putrajaya	99.8	99.8	n.a.	99.6	99.6	99.6	n.a.

Jadual 2.2 : Peratusan individu menggunakan komputer mengikut negeri dan strata, Malaysia, 2020
 Table 2.2 : Percentage of individuals using computer by state and strata, Malaysia, 2020

Negeri State	Jumlah Total	Luar bandar Rural	
		Bandar Urban	Luar bandar Rural
MALAYSIA	80.0	85.3	61.0
Johor	86.9	90.7	73.5
Kedah	68.5	70.6	63.1
Kelantan	73.2	82.0	62.6
Melaka	86.1	86.5	81.1
Negeri Sembilan	74.7	80.1	58.3
Pahang	79.2	85.7	68.9
Pulau Pinang	87.1	87.5	77.6
Perak	76.8	79.5	65.4
Perlis	76.8	80.6	68.5
Selangor	93.2	93.7	84.8
Terengganu	82.4	88.5	69.2
Sabah	59.3	67.7	44.1
Sarawak	69.8	81.8	50.7
W.P. Kuala Lumpur	94.3	94.3	n.a.
W.P. Labuan	88.4	90.0	80.4
W.P. Putrajaya	99.9	99.9	n.a.

Jadual 2.3 : Peratusan individu menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020
Table 2.3 : Percentage of individuals using computer by state, type of ICT skills and strata, Malaysia, 2020

Negeri State	Menyalin atau memindahkan fail Copying or moving a file or folder		Menggunakan teknik menyalin dan menampal untuk pendua atau memindahkan maklumat di dalam satu dokumen Using copy and paste tools to duplicate or move information within a document		Menghantar e-mel berserta fail Sending an e-mail with attached files			
	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural	Bandar Urban	Luar bandar Rural
MALAYSIA								
Johor	86.4	88.0	78.4	87.7	88.7	82.4	69.0	72.2
Kedah	86.3	87.9	79.2	86.4	86.2	87.4	65.7	68.0
Kelantan	82.5	84.0	78.3	80.4	81.8	76.5	67.4	72.4
Melaka	76.5	79.3	72.0	81.8	84.5	77.5	62.7	74.0
Negeri Sembilan	88.7	88.9	86.8	81.1	80.8	85.8	65.1	65.2
Pahang	85.4	86.0	83.0	86.1	90.1	69.3	63.6	66.3
Pulau Pinang	86.1	86.6	85.2	88.8	89.3	87.8	63.6	69.9
Perak	78.6	78.6	79.8	80.6	80.6	80.6	65.1	65.7
Perlis	85.4	86.3	81.1	90.9	91.1	90.1	68.9	70.7
Selangor	86.2	91.4	73.0	89.3	93.4	79.0	61.0	62.8
Terengganu	89.9	90.9	72.6	91.8	92.1	87.6	76.5	77.4
Sabah	87.2	89.9	79.7	83.3	89.0	67.6	61.9	64.7
Sarawak	86.0	89.9	75.0	88.5	87.6	91.0	63.3	69.1
W.P. Kuala Lumpur	88.6	91.5	80.9	87.8	92.8	74.7	65.8	70.8
W.P. Labuan	89.5	89.5	n.a.	91.6	91.6	n.a.	82.0	82.0
W.P. Putrajaya	96.3	96.3	85.2	85.4	94.6	98.5	72.8	75.9

Jadual 2.3 : Peratusan individu menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020 (samb.)

Table 2.3 : Percentage of individuals using computer by state, type of ICT skills and strata, Malaysia, 2020 (cont'd)

Negeri/ State	Menggunakan teknik aritmetik asas di dalam lembaran kerja Using basic arithmetic formulas in a spreadsheet			Menghubungkan dan memasang peranti baru Connecting and installing new devices			Mencari, memuat turun, memasang dan mengkonfigurasi perisian Searching, downloading, installing and configuring software		
	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural
MALAYSIA	39.3	41.9	25.8	72.0	73.2	65.7	57.8	60.9	42.4
Johor	30.3	32.1	22.6	70.0	71.1	65.6	48.7	50.5	40.6
Kedah	31.2	34.0	23.1	69.1	70.1	66.2	51.1	55.1	39.6
Kelantan	28.9	35.4	18.7	63.5	69.2	54.5	46.2	47.5	44.1
Melaka	41.3	42.3	25.2	71.6	72.6	56.7	45.0	44.9	46.7
Negeri Sembilan	39.1	40.4	33.8	72.9	75.8	60.8	57.9	60.1	48.9
Pahang	35.3	39.6	27.0	68.1	67.5	69.4	49.0	56.2	34.9
Pulau Pinang	40.8	41.1	31.4	72.9	73.1	67.5	59.1	59.6	46.1
Perak	35.6	37.5	26.2	67.8	69.3	60.4	56.4	57.8	49.2
Perlis	25.3	24.8	26.6	75.0	76.2	72.0	54.4	60.1	39.9
Selangor	51.0	51.8	35.6	75.6	75.9	71.3	69.0	70.3	44.9
Terengganu	28.1	29.4	24.4	66.7	68.2	62.7	51.3	55.6	39.8
Sabah	36.0	38.4	29.4	73.7	72.4	77.5	54.3	59.3	40.5
Sarawak	33.7	37.7	23.5	70.2	73.6	61.5	57.3	61.9	45.4
W.P. Kuala Lumpur	50.9	50.9	n.a.	78.7	78.7	n.a.	70.5	70.5	n.a.
W.P. Labuan	46.4	45.3	52.7	76.3	77.0	72.0	60.4	57.6	75.5
W.P. Putrajaya	67.4	67.4	n.a.	87.9	87.9	n.a.	77.8	77.8	n.a.

Jadual 2.3 : Peratusan individu menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020 (samb.)
Table 2.3 : Percentage of individuals using computer by state, type of ICT skills and strata, Malaysia, 2020 (cont'd)

Negeri/ State	Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus						Writing a computer program using a specialised programming language	
	Memindahkan fail di antara komputer dan peranti mudah alih lain			Transferring files between a computer and other devices				
	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural		
MALAYSIA	38.8	41.0	28.0	68.3	69.8	60.5	13.9	
Johor	29.7	30.5	26.3	59.2	60.2	54.8	9.9	
Kedah	35.9	37.3	31.7	69.9	72.5	62.2	8.0	
Kelantan	28.3	29.8	26.0	53.6	60.3	43.0	11.3	
Melaka	32.8	33.0	29.1	65.0	65.0	65.0	14.7	
Negeri Sembilan	43.1	45.2	34.2	63.8	66.3	53.4	13.3	
Pahang	33.1	38.4	22.6	68.8	68.6	69.0	10.5	
Pulau Pinang	40.3	40.8	27.3	61.7	61.6	66.1	16.4	
Perak	37.2	38.5	30.7	69.1	70.7	60.7	10.6	
Perlis	38.6	41.8	30.5	61.7	64.8	54.0	12.5	
Selangor	45.4	45.7	39.8	73.8	74.6	60.1	15.4	
Terengganu	32.9	36.3	23.6	63.5	68.6	49.6	15.2	
Sabah	36.6	39.6	28.2	74.1	72.7	77.9	13.9	
Sarawak	33.1	36.4	24.5	70.2	73.5	61.5	10.5	
W.P. Kuala Lumpur	58.8	58.8	n.a	75.0	75.0	n.a	27.4	
W.P. Labuan	45.4	48.4	28.6	75.9	76.7	71.5	21.1	
W.P. Putrajaya	69.7	69.7	n.a	95.6	95.6	n.a	46.2	

Jadual 2.4 : Peratusan belia menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020
 Table 2.4 : Percentage of youth using computer by state, type of ICT skills and strata, Malaysia, 2020

Negeri / State	Menggunakan teknik menyalin dan menampal untuk pendua atau memindahkan maklumat di dalam satu dokumen						Menghantar e-mel berserta fail		
	Menyalin atau memindahkan fail			Copying or moving a file or folder			Using copy and paste tools to duplicate or move information within a document		
	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural
MALAYSIA	83.0	86.5	70.7	94.7	95.1	93.2	71.2	74.7	59.0
Johor	89.4	94.1	74.5	97.4	97.3	97.8	69.0	70.4	64.5
Kedah	71.2	71.7	69.9	98.1	98.8	96.4	75.0	80.8	60.3
Kelantan	56.4	57.3	55.1	93.7	91.8	96.3	67.7	76.0	56.5
Melaka	83.5	82.6	91.2	96.4	96.7	93.5	75.8	76.7	69.3
Negeri Sembilan	92.6	91.9	95.0	96.5	96.8	95.2	80.0	81.1	75.7
Pahang	87.6	88.1	86.6	92.8	93.2	91.8	62.2	65.3	55.9
Pulau Pinang	84.0	83.4	98.1	97.9	97.9	98.9	79.2	80.0	61.3
Perak	80.9	83.4	71.0	95.2	94.8	96.9	72.3	74.9	61.8
Perlis	88.7	94.0	76.8	95.5	97.6	90.8	63.9	66.6	58.0
Selangor	88.7	89.1	83.2	91.1	90.7	96.8	76.2	76.1	78.0
Terengganu	83.5	92.5	62.7	86.8	97.8	61.3	69.1	72.8	60.5
Sabah	75.7	85.7	53.3	95.5	94.9	96.9	61.5	65.9	51.5
Sarawak	91.3	95.2	82.9	96.1	98.4	91.2	66.5	73.5	51.1
W.P. Kuala Lumpur	93.7	93.7	n.a	96.9	n.a	85.2	85.2	n.a	n.a
W.P. Labuan	94.5	95.7	86.4	91.9	99.4	40.8	79.2	79.6	76.1
W.P. Putrajaya	100.0	100.0	n.a	100.0	100.0	n.a	70.3	70.3	n.a

Jadual 2.4 : Peratusan belia menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020 (samb.)

: Percentage of youth using computer by state, type of ICT skills and strata, Malaysia, 2020 (cont'd)

Negeri/ State	Menggunakan teknik aritmetik asas di dalam lembaran kerja Using basic arithmetic formulas in a spreadsheet			Menghubungkan dan memasang peranti baru Connecting and installing new devices			Mencari, memuat turun, memasang dan mengkonfigurasi perisian Searching, downloading, installing and configuring software		
	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural	Jumlah Total	Bandar Urban	Luar bandar Rural
								57.0	44.5
MALAYSIA	40.2	44.4	25.0	75.4	77.6	67.5	54.2	57.0	44.5
Johor	41.8	46.5	27.1	73.9	75.3	69.6	47.2	47.7	45.8
Kedah	27.9	28.5	26.4	68.5	70.7	63.1	52.6	55.3	45.7
Kelantan	26.8	35.2	15.5	57.9	63.9	49.9	40.8	35.5	47.9
Melaka	34.6	36.1	22.2	83.9	86.1	66.3	20.0	15.7	55.1
Negeri Sembilan	49.1	47.3	56.0	92.5	92.9	91.0	61.3	59.7	67.8
Pahang	40.4	44.1	32.8	71.3	72.9	68.1	50.8	61.8	28.3
Pulau Pinang	54.3	54.4	51.8	83.2	83.0	88.0	65.1	65.3	61.4
Perak	47.4	53.5	22.6	81.9	86.2	64.3	57.5	56.8	60.7
Perlis	19.7	15.1	30.0	78.0	74.4	85.9	51.1	56.2	39.7
Selangor	59.3	60.4	44.6	84.8	84.5	88.5	65.5	66.8	47.0
Terengganu	24.7	25.9	22.0	61.5	62.7	58.7	35.8	39.2	27.9
Sabah	24.2	25.4	21.6	75.3	67.1	93.5	46.4	52.3	33.2
Sarawak	30.8	37.5	16.2	60.7	69.3	42.1	65.2	70.7	53.2
W.P. Kuala Lumpur	48.3	48.3	n.a	88.6	88.6	n.a	69.9	69.9	n.a
W.P. Labuan	34.4	34.9	31.1	89.2	90.0	84.2	45.9	42.9	66.1
W.P. Putrajaya	38.0	38.0	n.a	79.5	79.5	n.a	68.6	68.6	n.a

Jadual 2.4 : Peratusan belia menggunakan komputer mengikut negeri, jenis kemahiran ICT dan strata, Malaysia, 2020 (samb.)

Table 2.4 : Percentage of youth using computer by state, type of ICT skills and strata, Malaysia, 2020 (cont'd)

Negeri/ State	Membuat persembahan elektronik dengan menggunakan perisian komputer						Memindahkan fail di antara komputer dan peranti mudah alih lain Transferring files between a computer and other devices						Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus Writing a computer program using a specialised programming language												
	Jumlah Total			Luar bandar Urban			Jumlah Total			Bandar Urban			Luar bandar Rural			Jumlah Total			Bandar Urban			Luar bandar Rural			
MALAYSIA	45.1	47.7	35.6	83.4	86.6	71.9	71.9	71.6	71.6	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	
Johor	41.7	41.8	41.4	91.3	98.4	68.8	68.8	18.5	18.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	21.5	
Kedah	44.2	43.5	46.1	90.1	91.7	86.0	86.0	10.8	10.8	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	24.1	
Kelantan	33.1	33.7	32.2	47.1	57.0	33.7	33.7	13.0	13.0	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	6.7	
Melaka	51.5	53.1	38.6	67.5	65.7	82.3	82.3	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0
Negeri Sembilan	54.5	53.7	57.7	73.1	73.5	71.3	71.3	13.6	13.6	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	29.9	
Pahang	39.3	41.2	35.5	82.7	80.4	87.5	87.5	13.5	13.5	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	26.1	
Pulau Pinang	53.5	53.9	44.8	70.2	69.2	92.2	92.2	22.4	22.4	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	18.8	
Perak	48.8	52.3	34.9	88.3	94.2	64.3	64.3	17.2	17.2	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	27.3	
Perlis	42.5	43.8	39.6	68.8	68.3	70.0	70.0	14.9	14.9	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	18.5	
Selangor	57.5	57.3	60.5	94.2	95.1	82.2	82.2	18.5	18.5	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	41.2	
Terengganu	40.3	44.6	30.3	74.5	90.1	38.3	38.3	27.7	27.7	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	24.1	
Sabah	32.5	35.0	26.9	85.1	80.8	94.6	94.6	11.0	11.0	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	5.3	
Sarawak	32.2	36.5	23.0	87.2	91.3	78.4	78.4	19.7	19.7	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	13.7	
W.P. Kuala Lumpur	66.4	66.4	n.a	85.1	85.1	n.a	n.a	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	n.a	
W.P. Labuan	39.5	44.7	4.4	91.0	91.9	84.7	84.7	33.5	33.5	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	35.9	17.1	
W.P. Putrajaya	52.8	52.8	n.a	100.0	100.0	n.a	n.a	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	n.a	

Jadual 2.5 : Peratusan individu menggunakan komputer mengikut jenis kemahiran ICT dan jantina, Malaysia, 2020
 Table 2.5 : Percentage of individuals using computer by type of ICT skills and sex, Malaysia, 2020

Jenis Kemahiran ICT Type of ICT Skills	Jantina / Sex		
	Jumlah Total	Lelaki Male	Perempuan Female
Jumlah / Total	80.0	79.0	81.1
Menyalin atau memindahkan fail <i>Copying or moving a file or folder</i>	86.4	89.1	83.5
Menggunakan teknik menyalin dan menampal untuk pendua atau memindahkan maklumat di dalam satu dokumen <i>Using copy and paste tools to duplicate or move information within a document</i>	87.7	92.9	82.2
Menghantar e-mel berserta fail <i>Sending an e-mail with attached files</i>	69.0	72.6	65.3
Menggunakan teknik aritmetik asas di dalam lembaran kerja <i>Using basic arithmetic formulas in a spreadsheet</i>	39.3	41.6	36.8
Menghubungkan dan memasang peranti baru <i>Connecting and installing new devices</i>	72.0	80.3	63.1
Mencari, memuat turun, memasang dan mengkonfigurasi perisian <i>Searching, downloading, installing and configuring software</i>	57.8	62.4	52.8
Membuat persembahan elektronik dengan menggunakan perisian komputer <i>Creating electronic presentations using computer software</i>	38.8	39.4	38.2
Memindahkan fail di antara komputer dan peranti mudah alih lain <i>Transferring files between a computer and other devices</i>	68.3	75.2	60.9
Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus <i>Writing a computer program using a specialised programming language</i>	13.9	14.2	13.6

Jadual 2.6 : Peratusan individu menggunakan komputer mengikut jenis kemahiran ICT dan kumpulan umur, Malaysia, 2020
 Table 2.6 : Percentage of individuals using computer by type of ICT skills and age group, Malaysia, 2020

Jenis Kemahiran ICT Type of ICT Skills	Kumpulan Umur / Age Group							(%)		
	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 55	55 - 59	60+
Jumlah / Total	94.1	91.9	86.9	86.5	85.4	84.5	84.3	79.7	75.0	42.5
Menyalin atau memindahkan fail <i>Copying or moving a file or folder</i>	69.8	96.3	94.0	92.8	93.6	93.0	89.4	83.7	79.7	58.1
Menggunakan teknik menyalin dan menampal untuk pendua atau memindahkan maklumat di dalam satu dokumen <i>Using copy and paste tools to duplicate or move information within a document</i>	93.2	96.2	91.5	90.6	91.8	89.9	86.6	80.8	77.8	58.8
Menghantar e-mel berserta fail <i>Sending an e-mail with attached files</i>	59.1	83.4	78.3	75.7	72.0	74.5	69.0	63.6	57.6	37.5
Menggunakan teknik aritmetik asas di dalam lembaran kerja <i>Using basic arithmetic formulas in a spreadsheet</i>	28.8	51.6	42.7	43.3	46.9	44.5	39.7	34.5	32.8	13.3
Menghubungkan dan memasang peranti baru <i>Connecting and installing new devices</i>	61.6	89.3	84.3	83.6	83.0	81.0	63.8	57.4	54.6	26.8
Mencari, memuat turun, memasang dan mengkonfigurasi perisian <i>Searching, downloading, installing and configuring software</i>	37.7	70.9	67.5	65.5	66.2	63.5	58.2	54.6	46.1	30.9
Membuat persembahan elektronik dengan menggunakan perisian komputer <i>Creating electronic presentations using computer software</i>	32.1	58.1	44.8	42.7	44.6	41.6	33.8	29.5	27.5	11.6
Memindahkan fail di antara komputer dan peranti mudah alih lain <i>Transferring files between a computer and other devices</i>	85.2	81.6	80.0	77.7	79.9	77.9	48.1	42.1	38.6	20.6
Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus <i>Writing a computer program using a specialised programming language</i>	10.9	24.4	15.5	15.4	16.6	13.1	11.0	9.0	7.6	5.3

Jadual 2.7 : Peratusan individu menggunakan internet mengikut negeri dan strata, Malaysia, 2020
 Table 2.7 : Percentage of individuals using the internet by state and strata, Malaysia, 2020

Negeri State	Jumlah Total	(%)	
		Bandar Urban	Luar bandar Rural
MALAYSIA	89.6	92.4	79.4
Johor	93.9	95.3	89.2
Kedah	82.9	84.8	77.8
Kelantan	81.6	85.3	77.2
Melaka	92.2	92.3	90.8
Negeri Sembilan	88.9	92.7	77.4
Pahang	88.8	93.3	81.6
Pulau Pinang	90.2	90.2	88.2
Perak	87.5	88.6	82.9
Perlis	90.2	93.9	82.3
Selangor	96.1	96.8	85.8
Terengganu	84.2	85.8	80.5
Sabah	85.8	88.6	80.7
Sarawak	81.3	91.0	65.8
W.P. Kuala Lumpur	97.3	97.3	n.a.
W.P. Labuan	95.9	98.3	84.2
W.P. Putrajaya	99.7	99.7	n.a.

Jadual 2.8 : Peratusan individu menggunakan internet mengikut negeri, jenis peranti mudah alih yang digunakan dan strata, Malaysia, 2020

Table 2.8 : Percentage of individuals using the internet by state, type of portable devices used and strata, Malaysia, 2020

(%)

Negeri State	Telefon bimbit Mobile phone				Papan elektronik mudah alih Tablet				Komputer mudah alih Portable computer				Lain-lain peranti mudah alih Other portable devices			
	Jumlah Total		Bandar Urban		Jumlah Total		Bandar Urban		Jumlah Total		Bandar Urban		Jumlah Total		Bandar Urban	
			Luar bandar Rural				Luar bandar Rural				Luar bandar Rural			Luar bandar Rural		
MALAYSIA	99.6	99.6	99.7	14.1	16.0	6.4	37.8	41.7	21.5	7.4	8.5	2.7				
Johor	99.8	99.7	99.8	10.4	10.6	9.4	32.5	33.4	29.0	2.3	2.4	2.2				
Kedah	99.6	99.6	99.7	5.3	6.0	3.2	25.7	28.0	19.3	3.2	3.9	1.1				
Kelantan	99.6	99.5	99.6	4.4	4.9	3.7	22.0	25.9	16.9	2.4	3.2	1.2				
Melaka	99.5	99.6	99.0	10.8	10.9	9.1	36.8	37.5	26.5	6.7	7.0	2.9				
Negeri Sembilan	99.5	99.4	99.8	14.1	16.0	7.3	34.7	37.7	23.5	4.1	5.0	0.8				
Pahang	99.4	99.4	99.5	9.1	10.8	6.1	31.9	38.2	20.5	2.5	3.2	1.2				
Pulau Pinang	99.7	99.7	99.5	12.4	12.3	15.0	40.9	41.5	27.7	10.4	10.3	13.2				
Perak	99.2	99.2	99.3	15.1	16.3	9.8	33.4	35.6	23.6	1.5	1.6	1.0				
Perlis	99.7	99.8	99.4	12.7	16.4	3.7	37.8	42.3	26.7	3.5	4.5	1.0				
Selangor	99.8	99.8	99.9	21.4	21.8	14.2	52.2	52.8	41.2	12.1	12.2	10.4				
Terengganu	99.6	99.5	99.8	15.2	17.9	9.0	37.2	41.8	26.5	6.5	8.0	3.2				
Sabah	99.7	99.6	99.8	8.6	11.2	3.3	24.0	29.2	13.5	4.6	5.3	3.1				
Sarawak	99.6	99.6	99.7	11.0	14.0	4.3	32.1	38.6	17.8	12.3	16.6	2.8				
W.P. Kuala Lumpur	98.9	98.9	n.a.	29.9	n.a.	62.0	62.0	n.a.	17.2	17.2	n.a.					
W.P. Labuan	99.5	99.5	99.7	33.0	32.8	34.3	49.7	53.5	27.3	27.0	25.7	34.8				
W.P. Putrajaya	99.8	99.8	n.a.	35.9	35.9	n.a.	70.7	70.7	n.a.	28.6	28.6	n.a.				

Jadual 2.9

: Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020
Table : Percentage of individuals using the internet by state and type of activity, Malaysia, 2020

Negeri State	Mendapatkan Maklumat Access to Information	Profesional Professional	
		Menyertai rangkaian profesional Participating in professional networks	Bekerja dari rumah Work from home
MALAYSIA	85.4	69.0	21.4
Johor	86.1	58.9	21.9
Kedah	88.2	63.8	22.2
Kelantan	84.9	59.5	22.1
Melaka	90.3	74.1	20.1
Negeri Sembilan	87.4	68.6	26.8
Pahang	86.7	50.9	19.5
Pulau Pinang	89.8	68.9	15.6
Perak	81.5	74.8	16.8
Perlis	84.1	71.5	22.3
Selangor	91.4	82.6	21.6
Terengganu	93.4	75.0	26.7
Sabah	70.0	55.9	17.7
Sarawak	75.6	60.2	22.5
W.P. Kuala Lumpur	93.6	90.4	30.4
W.P. Labuan	94.2	61.7	15.4
W.P. Putrajaya	94.2	91.5	26.3
			16.1

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti
Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.9

: Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table : Percentage of individuals using the internet by state and type of activity, Malaysia, 2020 (cont'd)

Negeri State	Menyertai rangkaian sosial Participating in social/networks	Komunikasi Communication				
		Menghantar emel Sending e-mail	Membuat panggilan telefon melalui internet Telephoning over the internet	Memuat naik kandungan ke laman web Uploading content to a website	Mengurus laman web persendirian Managing personal homepage	Mengakses perbincangan atas talian Accessing online discussion
MALAYSIA	98.0	76.3	81.2	9.2	5.4	4.1
Johor	98.1	74.2	77.0	6.9	1.1	1.6
Kedah	98.5	71.5	77.2	1.5	0.6	0.7
Kelantan	98.6	70.8	85.9	1.7	0.9	1.3
Melaka	95.6	70.9	78.6	12.5	9.2	7.7
Negeri Sembilan	97.8	73.8	86.6	7.6	2.5	2.5
Pahang	97.6	72.5	72.3	5.2	1.8	1.5
Pulau Pinang	99.0	73.0	67.8	13.6	8.6	10.5
Perak	97.9	66.7	82.8	6.7	2.9	3.5
Perlis	98.3	74.3	84.9	4.4	1.5	1.0
Selangor	98.0	82.7	80.0	17.4	14.4	5.9
Terengganu	100.0	81.2	88.5	10.6	3.3	3.0
Sabah	98.2	75.9	89.6	3.3	1.3	0.9
Sarawak	98.0	67.0	82.4	4.9	0.9	1.2
W.P. Kuala Lumpur	96.4	96.4	86.3	17.2	9.2	15.1
W.P. Labuan	99.1	93.5	98.1	3.7	0.9	1.3
W.P. Putrajaya	99.4	98.5	82.5	18.2	21.0	9.8
						37.6

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.9

: Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table : Percentage of individuals using the internet by state and type of activity, Malaysia, 2020 (cont'd)

Negeri/ State	Lain-lain Perkhidmatan Atas Talian Other Online Services					Membuat pesanan barang/ perkhidmatan/ atas talian Ordering goods/ services online	
	Melaksanakan tugas/jana pendapatan Performing tasks to generate income	Menggunakan perkhidmatan berkaitan perjalanan/ penginapan Using services related to travel/ accommodation	Menjual barang/ perkhidmatan Selling goods/ services	Menggunakan perbankan internet Using internet banking	Menggunakan perisian untuk menyunting teks Using software for editing texts		
MALAYSIA	8.3	31.6	10.6	61.9	26.3	78.4	54.4
Johor	3.9	23.7	8.5	58.2	15.9	69.4	51.1
Kedah	4.7	30.7	5.4	60.3	23.3	73.2	55.8
Kelantan	6.8	10.6	10.0	49.2	14.4	81.3	52.5
Melaka	7.9	40.0	16.0	69.8	23.1	68.5	69.1
Negeri Sembilan	5.9	21.5	9.1	65.4	24.3	77.8	41.9
Pahang	3.2	17.5	5.7	56.2	18.4	75.6	43.4
Pulau Pinang	8.1	46.8	8.8	70.2	25.5	78.5	58.6
Perak	5.6	25.4	10.0	57.4	17.9	70.7	52.6
Perlis	7.2	20.9	9.6	51.1	24.3	79.3	63.0
Selangor	14.2	41.2	14.5	73.4	41.9	87.1	59.7
Terengganu	16.2	55.1	19.2	73.3	35.8	79.8	73.8
Sabah	7.8	22.4	9.7	42.5	16.2	83.1	46.0
Sarawak	4.5	17.3	6.5	49.0	17.3	75.5	44.1
W.P. Kuala Lumpur	11.7	61.0	13.9	83.2	49.0	79.9	68.0
W.P. Labuan	4.2	16.9	5.9	64.5	28.1	85.1	18.0
W.P. Putrajaya	16.7	51.9	13.2	86.3	44.2	88.8	72.3

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.9 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.9 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2020 (cont'd)

Negeri / State	Aktiviti Pembelajaran / Learning Activities				Hiburan / Entertainment			
	Menjalani kursus formal atas talian Doing a formal online course	Merujuk laman web untuk pembelajaran formal Consulting websites for formal learning purposes	Menjalani kursus tidak formal atas talian Doing an informal online course	Mendengar radio secara atas talian Listening to radio online	Menonton televisyen secara atas talian Watching television online	Muat turun gambar/ filem/ permainan Downloading images/ movie/ games		
MALAYSIA	18.0	40.3	20.8	53.8	55.5	87.9		
Johor	10.3	39.6	17.9	64.7	44.8	85.7		
Kedah	19.7	34.9	14.5	53.5	42.4	91.4		
Kelantan	12.9	37.2	14.5	43.9	36.6	87.8		
Melaka	22.9	32.7	17.5	49.6	57.9	89.4		
Negeri Sembilan	19.2	45.0	26.6	78.0	49.7	85.0		
Pahang	8.9	30.4	10.4	33.6	44.8	84.3		
Pulau Pinang	16.0	31.8	17.4	69.6	70.3	90.0		
Perak	15.3	39.1	17.0	49.9	54.0	81.1		
Perlis	19.6	37.0	34.6	67.6	38.9	84.3		
Selangor	25.4	60.6	37.5	49.0	63.3	89.7		
Terengganu	18.1	38.6	18.7	61.0	75.7	91.5		
Sabah	10.4	24.2	12.5	40.9	46.0	89.4		
Sarawak	11.0	26.8	9.0	47.2	66.5	86.7		
W.P. Kuala Lumpur	39.1	45.9	25.4	74.6	69.0	90.6		
W.P. Labuan	9.0	18.0	6.0	84.2	73.0	95.6		
W.P. Putrajaya	69.0	62.3	32.1	86.2	76.6	92.2		

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.9 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.9 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2020 (cont'd)

Negeri/ State	Ruang Penyimpanan Storage Space	e-Kesihatan e-Health		e-Kerajaan e-Government	
		Mendapatkan maklumat kesihatan Seeking health information	Membuat temuanji kesihatan Making a medical appointment	Mendapatkan maklumat daripada organisasi kerajaan Getting information from government organisations	Berinteraksi dengan organisasi kerajaan Interacting with government organisations
MALAYSIA	53.5	61.9	10.7	52.9	35.2
Johor	53.2	46.1	12.1	50.5	35.9
Kedah	42.7	68.0	6.6	43.9	25.2
Kelantan	35.0	45.8	1.6	43.6	21.1
Melaka	53.2	52.4	12.9	52.7	40.3
Negeri Sembilan	63.3	60.2	8.3	55.7	36.9
Pahang	54.3	42.1	4.0	52.0	32.3
Pulau Pinang	53.2	56.9	11.2	51.3	34.2
Perak	33.0	53.0	3.8	45.1	28.4
Perlis	54.1	65.8	4.3	59.5	28.4
Selangor	72.4	77.4	18.9	63.8	42.0
Terengganu	55.5	70.6	11.5	59.6	44.0
Sabah	35.1	66.6	3.7	38.4	25.5
Sarawak	45.8	59.2	7.3	49.1	29.7
W.P. Kuala Lumpur	75.4	72.1	22.1	73.1	59.2
W.P. Labuan	57.1	64.1	4.4	33.2	21.0
W.P. Putrajaya	75.8	89.8	24.6	74.2	65.7

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.9 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2020 (samb.)
Table 2.9 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2020 (cont'd)

Negeri/ State	Sivik dan Politik Civic and Politics	e-Dagang e-Commerce		Keselamatan dan Perlindungan Online Safety and Online Protection	
		Memberi pendapat/ undi Posting opinions/ voting	Membeli barang/ perkhidmatan melalui e-Dagang Purchasing goods/ Services via e-Commerce	Menjual barang/ perkhidmatan melalui e-Dagang Selling goods/ services via e-Commerce	Mempunyai peralatan keselamatan dalam talian Owning online security tools
MALAYSIA	23.5	45.0	5.9	36.9	
Johor	15.5	40.8	2.2	41.7	
Kedah	18.6	52.3	3.2	36.9	
Kelantan	24.2	27.5	4.6	22.6	
Melaka	22.4	48.9	15.1	42.7	
Negeri Sembilan	10.1	45.7	4.6	20.3	
Pahang	13.4	38.2	2.2	30.6	
Pulau Pinang	25.8	53.3	6.8	47.9	
Perak	21.4	41.2	4.7	25.0	
Perlis	26.6	49.7	6.1	28.9	
Selangor	30.5	55.6	7.2	49.2	
Terengganu	34.8	45.5	15.6	27.5	
Sabah	20.6	27.1	6.5	23.7	
Sarawak	11.0	36.2	2.9	22.0	
W.P. Kuala Lumpur	48.5	66.2	9.2	58.2	
W.P. Labuan	7.8	23.5	4.0	58.2	
W.P. Putrajaya	64.3	78.6	13.9	72.0	

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical/notes page 150 - 153 for detailed activities

Jadual 2.10 : Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020
 Table 2.10 : Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020

Jantina Sex	Jumlah Total	Mendapatkan Maklumat Access to Information		Professional Professional	
		Mendapatkan maklumat barang/ perkhidmatan <i>Finding information about goods/ services</i>	Membaca akhbar/ majalah online <i>Reading newspaper/ magazines online</i>	Menyertai rangkaian profesional <i>Applying for jobs</i>	Menyertai rangkaian profesional <i>Participating in professional networks</i>
Jumlah / Total	89.6	85.4	69.0	21.4	10.6
Lelaki / Male	91.3	84.9	68.8	22.5	10.5
Perempuan / Female	89.6	86.1	69.2	20.0	10.8
					15.7

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti
 Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.10 : Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.10 : Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020 (cont'd)

Jantina Sex		Komunikasi Communication				
		Menyertai rangkaian sosial Participating in social networks	Menghantar emel Sending e-mail	Membuat panggilan telefon melalui internet Telephoning over the internet	Memuat naik kandungan ke laman web Uploading content to a website	Mengurus laman web persendirian Managing personal homepage
Jumlah / Total	98.0	76.3	81.2	9.2	5.4	4.1
Lelaki / Male	98.0	79.4	81.1	9.6	8.3	4.2
Perempuan / Female	98.0	72.7	81.3	8.8	8.2	4.0
						22.4

Nota: Rujuk nota teknikal muka surat 135 137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.10 : Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.10 : Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020 (cont'd)

Lain-lain Perkhidmatan Atas Talian Other Online Services						
Jantina Sex	Melaksanakan tugas/jana pendapatan <i>Performing tasks to generate income</i>	Menggunakan perkhidmatan berkaitan perjalanan/ penginapan <i>Using services related to travel/ accommodation</i>	Menjual barang/ perkhidmatan <i>Selling goods/ services</i>	Menggunakan perbankan internet <i>Using internet banking</i>	Menggunakan perisian untuk menyunting teks <i>Using software for editing texts</i>	Memuat turun perisian/ aplikasi <i>Downloading software/ applications</i>
Jumlah / Total	8.3	31.6	10.6	61.9	26.3	78.4
Lelaki / Male	8.3	31.4	10.6	61.0	25.3	78.4
Perempuan / Female	8.2	31.9	10.5	62.9	27.3	78.5

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.10 : Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.10 : Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020 (cont'd)

Jantina Sex		Aktiviti Pembelajaran Learning Activities		Hiburan Entertainment	
		Menjalani kursus formal atas talian <i>Doing a formal online course</i>	Merujuk laman web untuk pembelajaran formal <i>Consulting websites for formal learning purposes</i>	Menjalani kursus tidak formal atas talian <i>Doing an informal online course</i>	Mendengar radio separa atas talian <i>Listening to radio online</i>
Jumlah / Total		18.0	40.3	20.8	53.8
Lelaki / Male		17.4	38.6	18.5	53.9
Perempuan / Female		18.7	42.1	23.5	53.6
					55.5
					87.9

Nota: Rujuk nota teknikal muka surat 135 137 untuk perincian aktiviti
 Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.10 : Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020 (samb.)
Table 2.10 : Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020 (cont'd)

Jantina Sex	Ruang Penyimpanan Storage Space	e-Kesihatan e-Health	e-Kerajaan e-Government		
		Menggunakan ruang simpanan di internet Using storage space on the internet	Mendapatkan maklumat kesihatan Seeking health information	Membuat temujanji kesihatan Making a medical appointment	Berinteraksi dengan organisasi kerajaan Interacting with government organisations
Jumlah / Total	53.5	61.9	10.7	52.9	35.2
Lelaki / Male	56.7	60.8	10.4	52.9	36.1
Perempuan / Female	49.9	63.2	11.1	52.9	34.2

Nota: Rujuk nota teknikal muka surat 135 137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.10 : Peratusan individu menggunakan internet mengikut jantina dan jenis aktiviti, Malaysia, 2020 (samb.)
Table 2.10 : Percentage of individuals using the internet by sex and type of activity, Malaysia, 2020 (cont'd)

		Sivik dan Politik Civic and Politics		e-Dagang e-Commerce		Keselamatan dan Perlindungan Online Safety and Online Protection	
Jantina Sex		Memberi pendapat/ undi		Membeli barang/ perkhidmatan melalui e-Dagang		Menjual barang/ perkhidmatan melalui e-Dagang	
		Posting opinions/ voting		Purchasing goods/ Services via e-Commerce		Selling goods/ services via e-Commerce	
	Jumlah / Total	23.5		45.0		5.9	36.9
Lelaki / Male		24.2		43.5		5.7	37.4
Perempuan / Female		22.7		46.7		6.1	36.3

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.11 : Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020
 Table 2.11 : Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020

Kumpulan Umur Age Group	Jumlah Total/	Mendapatkan Maklumat Access to Information		Professional Professional	
		Mendapatkan maklumat maklumat barang/ perkhidmatan Finding information about goods/ services	Membaca akhbar/ majalah online Reading newspaper/ magazines online	Menyertai rangkaian profesional Participating in professional networks	Bekerja dari rumah Work from home
Jumlah / Total	89.6	85.4	69.0	21.4	10.6
15 - 19	94.0	80.6	44.4	11.5	2.7
20 - 24	98.1	89.2	73.5	40.5	9.7
25 - 29	97.6	89.0	76.7	41.7	14.0
30 - 34	97.1	87.8	77.1	29.9	14.5
35 - 39	96.3	89.2	76.0	22.1	14.8
40 - 44	95.1	87.2	74.6	13.1	13.9
45 - 49	94.4	87.7	74.5	9.8	10.6
50 - 55	90.5	84.0	70.0	9.4	10.2
55 - 59	84.8	82.5	67.4	7.9	9.5
60+	57.0	72.0	50.9	4.4	3.0
					6.2

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.11 : Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.11 : Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020 (cont'd)

Kumpulan Umur Age Group	Menyertai rangkaian sosial Participating in social networks	Komunikasi Communication			
		Menghantar emel Sending e-mail	Membuat panggilan telefon melalui internet Telephoning over the internet	Memuat naik kandungan ke laman web Uploading content to a website	Menguruskan laman web persendirian Managing personal homepage
Jumlah / Total	98.0	76.3	81.2	9.2	5.4
15 - 19	97.6	69.0	79.7	7.2	3.7
20 - 24	99.3	89.9	88.6	9.5	4.4
25 - 29	99.4	85.8	89.0	10.0	5.7
30 - 34	99.0	83.2	89.3	10.8	6.9
35 - 39	98.9	83.3	87.1	12.2	7.6
40 - 44	98.5	80.5	84.0	10.4	6.1
45 - 49	98.4	76.3	80.3	10.4	6.5
50 - 55	97.8	70.1	76.8	6.1	4.3
55 - 59	96.5	63.7	69.1	7.2	4.7
60+	92.7	43.4	51.5	5.6	3.3
					2.1

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.11 : Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020 (samb.)
 Table 2.11 : Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020 (cont'd)

Lain-lain Perkhidmatan Atas Talian Other Online Services						
Kumpulan Umur Age Group	Melaksanakan tugas/jana pendapatan Performing tasks to generate income	Menggunakan perkhidmatan berkaitan perjalanan/ penginapan Using services related to travel/ accommodation	Menjual barang/ perkhidmatan Selling goods/ services	Menggunakan perbankan internet Using internet banking	Menggunakan perisian untuk menyunting teks Using software for editing texts	Memuat turun perisian/ aplikasi Download/ software/ applications
Jumlah / Total	8.3	31.6	10.6	61.9	26.3	78.4
15 - 19	4.6	16.4	3.1	27.6	13.8	81.6
20 - 24	8.4	30.7	10.6	68.2	39.5	95.7
25 - 29	11.5	38.0	14.1	75.3	32.4	84.4
30 - 34	12.8	39.3	14.9	73.0	33.1	84.1
35 - 39	13.2	39.3	16.4	73.9	32.5	80.8
40 - 44	11.9	36.4	12.6	69.5	31.4	76.9
45 - 49	4.7	36.1	14.5	66.7	29.3	75.1
50 - 55	3.3	30.2	4.8	59.9	21.6	72.9
55 - 59	3.0	28.0	4.5	55.7	8.5	66.6
60+	1.9	15.5	3.6	37.7	4.2	49.0

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti

Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.11 : Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020 (samb.)
Table 2.11 : Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020 (cont'd)

Kumpulan Umur Age Group		Aktiviti Pembelajaran Learning Activities		Hiburan Entertainment	
		Menjalani kursus formal atas talian Doing a formal online course	Merujuk laman web untuk pembelajaran formal Consulting websites for formal learning purposes	Menjalani kursus tidak formal atas talian Doing an informal online course	Mendengar radio se secara atas talian Listening to radio online
Jumlah / Total		18.0	40.3	20.8	53.8
15 - 19	33.4	88.8	31.1	51.1	58.0
20 - 24	29.8	56.5	31.9	50.1	65.8
25 - 29	16.8	30.0	24.1	51.4	65.7
30 - 34	15.4	30.9	23.0	57.1	62.7
35 - 39	17.7	32.0	22.8	58.5	54.1
40 - 44	16.4	32.6	19.6	58.7	53.9
45 - 49	14.6	32.0	19.1	59.1	50.6
50 - 55	11.1	31.8	6.1	53.1	45.1
55 - 59	10.5	28.6	5.8	52.0	43.8
60+	4.1	27.9	7.5	45.5	38.1
					69.7

Note: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti
Note: Refer to technical/notes page 150 - 153 for detailed activities

Jadual 2.11 : Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020 (samb.)
Table 2.11 : Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020 (cont'd)

Kumpulan Umur Age Group	Ruang Penyimpanan Storage Space	e-Kesihatan e-Health		e-Kerajaan e-Government	
		Menggunakan ruang simpanan di internet Using storage space on the internet	Mendapatkan maklumat kesihatan Seeking health information	Membuat temujanji kesihatan Making a medical appointment	Mendapatkan maklumat daripada organisasi kerajaan Getting information from government organisations
Jumlah / Total	53.5	61.9	10.7	52.9	35.2
15 - 19	37.5	42.6	2.6	18.6	14.3
20 - 24	64.9	60.0	7.5	54.4	23.0
25 - 29	65.8	65.7	10.8	60.0	33.7
30 - 34	67.1	67.2	14.0	61.0	47.2
35 - 39	69.2	68.2	19.4	63.3	52.1
40 - 44	64.9	68.8	20.4	63.7	42.7
45 - 49	45.4	67.6	12.4	61.5	38.3
50 - 55	37.4	63.6	5.0	57.0	38.5
55 - 59	33.6	62.4	5.5	51.6	37.6
60+	21.1	52.8	4.2	35.8	23.6

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti
Note: Refer to technical notes page 150 - 153 for detailed activities

Jadual 2.11 : Peratusan individu menggunakan internet mengikut kumpulan umur dan jenis aktiviti, Malaysia, 2020 (samb.)
Table 2.11 : Percentage of individuals using the internet by age group and type of activity, Malaysia, 2020 (cont'd)

Kumpulan Umur Age Group	Sivik dan Politik Civic and Politics	e-Dagang e-Commerce		Keselamatan dan Perlindungan Online Safety and Online Protection	
		Memberi pendapat/ undi	Posting opinions/ voting	Membeli barang/ perkhidmatan melalui e-Dagang	Purchasing goods/ Services via e-Commerce
Jumlah / Total	23.5	45.0	5.9	36.9	
15 - 19	17.5	28.7	3.5	25.3	
20 - 24	24.4	48.9	4.7	34.7	
25 - 29	26.4	51.4	7.4	38.3	
30 - 34	27.9	48.5	7.4	39.3	
35 - 39	25.7	54.9	8.1	43.0	
40 - 44	26.8	53.5	6.0	42.3	
45 - 49	25.0	49.5	7.5	38.4	
50 - 55	22.0	40.6	4.6	37.1	
55 - 59	21.5	39.8	5.1	38.6	
60+	13.7	26.3	3.1	31.4	

Nota: Rujuk nota teknikal muka surat 135/137 untuk perincian aktiviti
Note: Refer to technical notes page 150 - 153 for detailed activities



STATISTIK TERPILIH MALAYSIA

*SELECTED STATISTICS OF
MALAYSIA*

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

Jadual 3.1 : Kadar penembusan perkhidmatan dan peralatan ICT bagi 100 penduduk, Malaysia, 2017 - ST3 2020
 Table : ICT services and equipment penetration rate per 100 inhabitants, Malaysia, 2017 - Q3 2020

	Perkhidmatan dan Peralatan ICT ICT Services and Equipment					(%)
	2017	2018	2019	ST1/Q1 2020	ST2/Q2 2020	ST3/Q3 2020
Jalur lebar <i>Broadband</i>	117.3	121.1	131.7	127.4	n.a.	n.a.
Mudah alih <i>Mobile</i>	n.a.	n.a.	n.a.	n.a.	116.7	117.4
Tetap <i>Fixed</i>	n.a.	n.a.	n.a.	n.a.	34.5	35.6
Selular mudah alih <i>Mobile-cellular</i>	131.2	130.2	135.4	134.2	132.8	132.8
TV berbayar <i>Pay TV</i>	83.2	87.3	86.3	87.3	87.6	88.1
Telefon tetap <i>Fixed-telephone</i>	20.4	22.8	22.6	22.8	22.9	22.8

Sumber: Komunikasi dan Multimedia, Buku Maklumat Statistik (Suruhanjaya Komunikasi dan Multimedia Malaysia)
 Source: Communications and Multimedia, Pocket Book of Statistics (Malaysian Communications and Multimedia Commission)

Nota: TV berbayar merujuk kepada kadar penembusan bagi 100 isi rumah
 Note: Pay TV refers to penetration rate per 100 households

Jadual 3.2 : Bilangan langganan jalur lebar dan kadar penembusan, Malaysia, 2017 - ST3 2020
 Table : Number of broadband subscriptions and penetration rate, Malaysia, 2017 - Q3 2020

	2017	2018	2019	ST1/Q1 2020	ST2/Q2 2020	ST3/Q3 2020
Jalur lebar Broadband						
Mudah alih Mobile	35,256.6	36,794.5	40,430.9	38,669.7	38,118.8	38,369.5
Tetap Fixed	2,588.4	2,655.4	2,947.0	3,035.9	3,096.9	3,199.4
Kadar penembusan bagi 100 penduduk (%) Penetration rate per 100 inhabitants (%)	117.3	121.1	131.7	127.4	n.a.	n.a.

	2017	2018	2019	ST1/Q1 2020	ST2/Q2 2020	ST3/Q3 2020
Selular mudah alih Mobile-cellular						
Prabayar Prepaid	32,107.3	30,837.1	31,259.0	30,262.7	29,968.2	29,959.4
Pascabayar Postpaid	10,231.2	11,576.3	13,341.7	13,503.2	13,412.0	13,460.3
Kadar penembusan bagi 100 penduduk (%) Penetration rate per 100 inhabitants (%)	131.2	130.2	135.4	134.2	132.8	132.8

Sumber: Komunikasi dan Multimedia, Buku Maklumat Statistik (Suruhanjaya Komunikasi dan Multimedia Malaysia)
 Source: Communications and Multimedia, Pocket Book of Statistics (Malaysian Communications and Multimedia Commission)

Nota: Bermula 2017, kadar penembusan mudah alih adalah berdasarkan data sekunder
 Note: Commencing 2017, the mobile-cellular penetration rate is based on secondary data

Jadual 3.4 : Bilangan langganan TV berbayar dan kadar penembusan, Malaysia, 2017 - ST3 2020
 Table : Number of pay TV subscriptions and penetration rate, Malaysia, 2017 - Q3 2020

		2017	2018	2019	ST1/Q1 2020	ST2/Q2 2020	ST3/Q3 2020
TV berbayar <i>Pay TV channel</i>							
Jumlah langganan isi rumah <i>Total household subscriptions</i>	6,542.3	7,062.2	7,103.4	7,168.9	7,202.0	7,247.0	
Kadar penembusan bagi 100 isi rumah (%) <i>Penetration rate per 100 households (%)</i>	83.2	87.3	86.3	87.3	87.6	88.1	

Jumlah langganan isi rumah
Total household subscriptions

7,247.0
('000)

Kadar penembusan bagi 100 isi rumah (%)
Penetration rate per 100 households (%)

88.1
(%)

Nota: Televisyen berbayar termasuk IPTV

Note: Pay TV is inclusive of IPTV

Jadual 3.5 : Bilangan langganan telefon tetap dan kadar penembusan, Malaysia, 2017 - ST3 2020
 Table : Number of fixed-telephone subscriptions and penetration rate, Malaysia, 2017 - Q3 2020

		2017	2018	2019	ST1/Q1 2020	ST2/Q2 2020	ST3/Q3 2020
Telefon tetap <i>Fixed-telephone</i>							
Jumlah langganan <i>Total subscriptions</i>	6,580.8	7,429.0	7,446.1	7,450.2	7,469.8	7,443.5	
Kadar penembusan bagi 100 penduduk (%) <i>Penetration rate per 100 inhabitants (%)</i>	20.4	22.8	22.3	22.8	22.9	22.8	

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



TANDA ARAS ICT NEGARA TERPILIH

*ICT BENCHMARKS OF
SELECTED COUNTRIES*

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

Jadual 4.1
Table

: Peratusan capaian internet oleh isi rumah mengikut negara terpilih, 2017 - 2019
: Percentage of households with internet access by selected countries, 2017 - 2019

Tahun / Year	Malaysia	Singapura Singapore	Thailand	Republik Korea Republic of Korea	Jepun Japan	Hong Kong	Indonesia
2019	90.1	98.4	74.6	99.7	96.9	94.1	73.7
2018	87.0	97.7	67.7	99.5	95.7	92.3	66.2
2017	85.7	91.1	64.4	99.5	98.5	80.2	57.3

Jadual 4.2
Table

: Peratusan capaian komputer oleh isi rumah mengikut negara terpilih, 2017 - 2019
: Percentage of households with access to computer by selected countries, 2017 - 2019

Tahun / Year	Malaysia	Singapura Singapore	Thailand	Republik Korea Republic of Korea	Jepun Japan	Hong Kong	Indonesia
2019	71.3	88.8	15.9	71.7	74.6	77.6	18.8
2018	71.7	88.7	20.9	72.4	75.1	75.3	20.1
2017	74.1	86.5	24.8	74.7	76.4	80.9	19.1

Sumber/ Source: International Telecommunication Union (ITU)

Jadual 4.3

: Peratusan individu menggunakan internet mengikut negara terpilih, 2017 - 2019

: Percentage of individuals using the internet by selected countries, 2017 - 2019

Tahun / Year	Malaysia	Singapura Singapore	Thailand	Republik Korea Republic of Korea	Jepun Japan	Hong Kong	Indonesia
2019	84.2	88.9	66.7	96.2	92.7	91.7	47.7
2018	81.2	88.2	56.8	96.0	91.3	90.5	39.9
2017	80.1	84.4	52.9	95.1	84.6	89.4	32.3

Jadual 4.4

: Peratusan individu menggunakan komputer mengikut negara terpilih, 2017 - 2019

: Percentage of individuals using computer by selected countries, 2017 - 2019

Tahun / Year	Malaysia	Singapura Singapore	Thailand	Republik Korea Republic of Korea	Jepun Japan	Hong Kong	Indonesia
2019	72.1	73.5	25.3	83.0	75.5	82.7	14.5
2018	70.5	n.a.	28.3	82.0	n.a.	80.3	19.1
2017	69.8	73.5	30.7	79.3	75.5	79.8	n.a.

Sumber/ Source : *International Telecommunication Union (ITU)*

Jadual 4.5 : Peratusan individu menggunakan internet mengikut jantina dan negara terpilih, 2018
 Table : Percentage of individuals using the internet by sex and selected countries, 2018

Jantina Sex	Malaysia	Singapura Singapore	Thailand	Republik Korea Republic of Korea	Jepun Japan	Hong Kong	Indonesia
Lelaki / Male	91.3	90.2	67.8	97.0	93.7	n.a.	50.5
Perempuan / Female	89.6	87.8	65.6	95.3	89.0	n.a.	44.9

Jadual 4.6 : Kedudukan indeks berkaitan ICT bagi negara terpilih, 2017 dan 2020

Table : Ranking of ICT-related indices for selected countries, 2017 and 2020

Kedudukan Rank	Malaysia	Singapura Singapore	Thailand	Republik Korea Republic of Korea	Jepun Japan	Hong Kong	Indonesia
ICT Development Index (IDI) 2017 ¹	63	18	78	2	10	6	111
E-Government Development Index (EGDI) 2020 ²	47	11	57	2	14	n.a.	n.a.

Sumber/ Source:

¹ Measuring the Information Society Report 2017 Volume 1, International Telecommunication Union (ITU)

² United Nation e-Government Survey 2020, United Nation

Note:

ICT Development Index (IDI) is a unique benchmark of the level of ICT development in countries across the world. The IDI combines 11 indicators on ICT access, use and skills, capturing key aspects of ICT development in one measure that allows for comparisons to be made between countries and over time. IDI 2017 covers 176 economies worldwide.

E-Government Development Index (EGDI) is a composite index based on the weighted average of three normalize indices. One-third is derived from a Telecommunication Infrastructure Index (TII) based on data provided by the International Telecommunication Union (ITU), one-third from a Human Capital Index (HCI) based on data provided by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), and one-third from the Online Service Index (OSI), based on data collected from an independent survey questionnaire, conducted by UNDESA. The EGDI is used to measure the readiness and capacity of national institutions to use ICTs to deliver public services. This measure is useful for government official, policy maker, researchers and representatives of civil society and the private sector to gain a deeper understanding of the relative position of a country in utilising e-Government for the delivery of public services.

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



SIRI MASA

TIME SERIES

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

Jadual 5.1
Table

: Peratusan capaian telefon bimbit isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of households with access to mobile phone by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
	Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural	
MALAYSIA	98.1	98.4	96.6	98.2	98.6	96.5	98.2	98.8
Johor	97.8	97.9	97.6	98.6	98.8	98.2	99.3	99.5
Kedah	97.2	97.1	97.2	96.7	97.4	94.9	97.1	97.7
Kelantan	96.9	97.2	96.6	98.3	98.8	97.7	97.2	98.3
Melaka	97.6	97.7	95.9	97.0	97.0	95.9	97.4	97.5
Negeri Sembilan	96.7	97.4	94.9	97.0	97.9	94.1	98.4	98.8
Pahang	96.8	97.7	95.5	95.5	97.0	93.2	97.9	98.5
Pulau Pinang	98.3	98.4	97.0	97.9	97.9	97.8	97.7	97.7
Perak	95.3	96.2	92.1	97.0	97.1	96.7	97.0	97.7
Perlis	99.6	99.5	99.6	98.9	99.1	98.6	98.4	98.6
Selangor	99.5	99.6	99.3	99.4	99.4	98.0	99.5	99.5
Terengganu	99.0	98.9	99.1	98.7	99.0	98.0	97.7	98.3
Sabah	98.4	99.0	97.4	98.6	99.2	97.6	98.1	98.7
Sarawak	97.6	98.7	96.0	97.7	99.2	95.4	96.3	98.5
W.P. Kuala Lumpur	99.5	99.5	n.a.	99.4	99.4	n.a.	99.2	n.a.
W.P. Labuan	100.0	100.0	100.0	99.0	99.1	98.6	98.4	98.3
W.P. Putrajaya	100.0	100.0	n.a.	100.0	100.0	n.a.	99.7	99.7

Jadual **5.2**
Table

: Peratusan capaian internet oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of households with internet access by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural
MALAYSIA	85.7	87.8	77.7	87.0	89.1	78.9	90.1	92.2
Johor	86.9	87.9	83.5	88.3	89.6	83.4	94.1	95.1
Kedah	80.1	82.7	73.3	80.7	82.0	77.2	82.6	84.3
Kelantan	80.7	84.6	76.8	81.7	84.8	78.4	83.4	86.9
Melaka	87.2	87.9	76.3	87.6	88.1	79.7	88.8	89.1
Negeri Sembilan	84.7	87.0	78.1	85.4	87.3	79.8	90.8	92.5
Pahang	81.1	86.1	73.5	81.2	85.0	75.3	85.2	89.0
Pulau Pinang	90.7	90.8	87.8	88.8	88.8	88.3	90.0	90.0
Perak	78.4	80.4	70.7	81.5	82.2	78.7	83.0	83.9
Perlis	97.0	95.9	99.0	91.4	92.6	89.0	92.2	93.0
Selangor	89.2	89.4	86.2	90.4	90.8	83.6	95.3	95.8
Terengganu	88.8	90.0	86.3	89.6	91.8	85.1	91.2	93.1
Sabah	89.0	91.3	85.3	90.7	93.0	87.0	91.4	94.9
Sarawak	77.8	85.9	66.0	80.8	91.2	64.9	83.4	91.5
W.P. Kuala Lumpur	89.4	89.4	n.a.	92.6	92.6	n.a.	94.6	n.a.
W.P. Labuan	85.4	85.7	83.3	88.4	88.9	83.7	98.0	98.3
W.P. Putrajaya	100.0	100.0	n.a.	99.7	99.7	n.a.	96.8	96.8

Jadual 5.3
Table

: Peratusan capaian komputer oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of households with access to computer by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
	Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural	
MALAYSIA	74.1	78.4	57.7	71.7	77.0	50.9	71.3	76.6
Johor	72.7	74.2	67.0	70.2	73.8	56.5	71.7	75.9
Kedah	60.3	63.8	51.1	56.6	60.9	45.1	59.6	66.1
Kelantan	60.0	67.9	52.0	59.2	67.9	49.9	58.2	68.1
Melaka	70.5	71.4	56.9	72.6	73.5	56.3	73.3	74.2
Negeri Sembilan	63.1	65.8	55.1	64.2	69.2	48.9	61.7	66.9
Pahang	59.9	66.7	49.7	58.3	67.5	43.7	59.7	71.9
Pulau Pinang	81.4	81.8	73.3	75.5	75.6	73.7	76.9	77.1
Perak	69.1	73.3	53.2	68.8	71.0	60.2	66.9	69.5
Perlis	69.6	71.5	66.0	67.6	71.4	60.0	68.2	71.9
Selangor	89.0	89.9	75.3	88.5	90.3	56.6	86.2	87.8
Terengganu	83.0	84.4	80.1	74.0	79.8	61.9	71.3	76.7
Sabah	61.6	67.7	52.0	59.8	68.1	46.1	59.8	65.8
Sarawak	68.6	77.6	55.4	63.8	75.2	46.5	63.6	72.9
W.P. Kuala Lumpur	84.6	84.6	n.a.	77.1	77.1	n.a.	77.0	77.0
W.P. Labuan	69.6	70.4	63.5	70.3	70.5	68.8	71.3	71.7
W.P. Putrajaya	96.3	96.3	n.a.	96.4	96.4	n.a.	94.2	94.2

Jadual 5.4
Table

: Peratusan capaian siaran TV berbayar oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of households with access to pay TV channel by state and strata, Malaysia, 2017 - 2020

Negeri State	Jumlah Total	2017		2018		2019		2020	
		Bandar Urban	Rural	Bandar Total	Urban	Bandar Total	Urban	Bandar Total	Urban
MALAYSIA									
Johor	72.3	75.1	62.0	73.1	76.0	62.1	75.8	79.0	63.0
Kedah	67.6	68.1	65.6	74.3	75.5	69.8	78.8	79.9	74.4
Kelantan	59.7	63.5	50.0	51.5	54.3	44.1	56.5	59.3	48.9
Melaka	62.8	67.0	58.6	58.7	61.8	55.4	62.1	67.9	55.7
Negeri Sembilan	78.5	78.9	70.9	82.5	82.9	74.2	81.2	81.7	72.3
Pahang	81.8	83.0	78.3	81.3	82.1	78.7	81.6	83.4	75.6
Pulau Pinang	78.0	81.2	73.3	76.6	80.0	71.3	76.7	78.7	73.5
Perak	77.1	77.7	64.0	78.8	79.2	69.3	79.9	80.2	72.5
Selangor	66.3	67.8	60.8	67.8	68.7	64.2	70.1	72.1	61.7
Terengganu	74.5	77.2	69.5	74.3	77.6	67.8	72.9	75.8	66.7
Sabah	72.6	73.5	70.8	70.2	71.2	68.1	72.2	73.1	70.1
Sarawak	66.5	71.5	58.6	66.5	72.2	57.2	68.4	76.6	54.5
W.P. Kuala Lumpur	84.8	84.8	n.a.	84.4	84.4	n.a.	89.3	89.3	n.a.
W.P. Labuan	92.8	93.1	90.5	92.9	93.1	91.5	88.3	88.3	88.2
W.P. Putrajaya	90.1	90.1	n.a.	91.3	91.3	n.a.	96.1	96.1	n.a.

Jadual **5.5**
Table

: Peratusan capaian televisyen oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of households with access to television by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural
MALAYSIA	98.5	98.8	97.3	98.6	99.0	96.9	97.6	98.2
Johor	99.4	99.5	99.2	99.3	99.1	98.7	99.0	97.4
Kedah	98.9	99.1	98.3	99.1	98.4	98.3	99.0	96.3
Kelantan	98.6	99.0	98.2	98.7	98.8	98.6	95.7	96.8
Melaka	98.6	98.6	97.5	99.2	98.5	97.8	97.8	97.0
Negeri Sembilan	99.0	98.9	99.4	98.8	99.2	97.6	98.7	98.9
Pahang	97.4	98.6	95.7	97.5	99.3	94.6	97.8	98.5
Pulau Pinang	99.1	99.1	99.4	99.1	99.1	99.6	97.0	96.9
Perak	96.6	96.6	96.6	98.8	98.9	98.5	96.7	96.8
Perlis	99.9	100.0	99.6	99.7	99.7	99.8	96.9	96.4
Selangor	98.8	98.8	98.6	98.9	99.0	98.7	98.5	98.6
Terengganu	99.5	99.9	98.5	99.6	100.0	98.8	98.9	99.8
Sabah	96.5	98.3	93.6	96.5	98.5	93.1	95.2	96.9
Sarawak	98.1	98.5	97.6	97.2	98.3	95.6	95.3	96.4
W.P. Kuala Lumpur	99.4	99.4	n.a.	99.4	99.4	n.a.	99.6	n.a.
W.P. Labuan	100.0	100.0	100.0	98.7	98.6	99.3	97.9	97.8
W.P. Putrajaya	99.7	99.7	n.a.	98.8	98.8	n.a.	98.7	98.7

Jadual 5.6
Table

: Peratusan capaian radio oleh isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of households with access to radio by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
	Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural	
MALAYSIA	94.9	95.6	92.6	95.7	96.6	92.0	97.2	98.0
Johor	95.9	95.7	96.8	97.6	97.7	97.3	99.0	99.2
Kedah	94.3	94.5	93.8	94.1	94.9	92.0	96.1	96.8
Kelantan	90.3	89.8	90.7	90.7	90.1	91.3	95.5	95.7
Melaka	93.8	93.7	94.8	94.2	94.2	95.5	93.8	94.0
Negeri Sembilan	96.6	96.7	96.2	97.5	97.7	97.0	98.8	99.0
Pahang	92.8	93.1	92.4	93.7	94.5	92.6	97.1	98.6
Pulau Pinang	99.8	99.9	98.3	98.9	98.9	98.5	97.7	97.7
Perak	90.6	90.3	91.9	94.1	94.5	92.2	94.5	95.4
Perlis	97.2	97.0	97.5	97.2	97.1	97.6	98.0	98.1
Selangor	97.7	97.8	97.0	97.2	97.5	92.3	99.2	99.3
Terengganu	98.5	98.6	98.2	98.6	98.9	97.9	98.7	99.1
Sabah	85.0	87.1	81.6	87.2	91.9	79.3	90.6	94.9
Sarawak	97.3	98.2	96.0	97.1	97.8	96.0	97.8	99.0
W.P. Kuala Lumpur	98.0	98.0	n.a.	99.2	99.2	n.a.	99.2	n.a.
W.P. Labuan	88.3	89.2	81.7	93.4	93.1	95.7	97.0	95.6
W.P. Putrajaya	97.5	97.5	n.a.	98.2	98.2	n.a.	99.7	99.7

Jadual 5.7

: Peratusan capaian telefon tetap isi rumah mengikut negeri dan strata, Malaysia, 2017 - 2020
 Table : Percentage of households with access to fixed-line telephone by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural
MALAYSIA	28.6	32.3	14.6	26.5	29.9	13.2	23.5	26.3
Johor	36.7	39.4	27.0	37.3	39.7	28.3	26.8	27.6
Kedah	22.9	27.9	10.0	14.2	16.5	7.9	12.4	14.6
Kelantan	13.4	19.6	7.0	10.0	16.2	3.4	10.4	14.5
Melaka	35.1	35.7	26.1	37.7	38.0	32.5	32.3	32.5
Negeri Sembilan	32.4	32.8	31.1	28.9	28.0	31.7	33.1	35.5
Pahang	29.2	34.2	21.6	16.3	18.4	12.9	17.3	18.5
Pulau Pinang	45.6	46.6	24.3	32.5	32.5	33.7	28.4	28.9
Perak	34.5	37.2	24.3	29.5	31.7	20.4	24.3	26.1
Perlis	30.9	35.5	22.6	16.9	19.5	11.8	18.2	20.8
Selangor	33.2	34.2	17.1	32.0	32.5	22.0	28.0	28.5
Terengganu	19.6	22.7	13.5	18.4	22.8	9.2	18.3	21.7
Sabah	11.9	16.0	5.4	11.9	16.7	4.2	12.0	16.0
Sarawak	18.1	26.5	5.7	19.3	27.2	7.3	22.9	33.1
W.P. Kuala Lumpur	25.2	25.2	n.a.	36.8	36.8	n.a.	29.7	29.7
W.P. Labuan	23.1	23.2	23.0	23.2	23.0	24.8	31.4	32.2
W.P. Putrajaya	28.5	28.5	n.a.	18.0	18.0	n.a.	26.8	26.8

Jadual 5.8
Table

: Peratusan individu menggunakan telefon bimbit mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of individuals using mobile phone by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
	Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural	
MALAYSIA	97.7	98.1	96.4	97.9	98.3	96.8	97.9	98.3
Johor	97.6	97.7	97.2	97.9	98.2	96.8	98.2	98.5
Kedah	97.5	97.7	97.2	98.1	98.6	96.9	96.9	97.5
Kelantan	97.4	97.9	96.9	97.9	98.3	97.6	97.0	97.4
Melaka	98.2	98.3	96.6	98.3	98.4	97.4	96.7	96.9
Negeri Sembilan	97.4	98.1	95.2	97.6	98.3	95.7	96.7	97.1
Pahang	97.1	97.8	96.3	97.3	97.9	96.6	98.5	98.8
Pulau Pinang	97.4	97.5	96.2	97.9	97.9	98.2	96.9	96.9
Perak	94.8	95.4	93.1	95.4	95.4	95.1	97.0	97.3
Perlis	98.1	98.2	97.9	98.4	98.6	98.1	96.7	97.0
Selangor	98.9	99.0	98.0	99.1	99.2	97.4	98.9	99.0
Terengganu	99.0	98.9	99.2	98.9	98.9	98.9	97.0	97.4
Sabah	97.7	98.5	96.6	97.9	98.0	97.8	98.9	99.2
Sarawak	96.4	97.3	95.0	96.6	97.8	94.9	96.8	97.7
W.P. Kuala Lumpur	99.2	99.2	n.a.	99.1	99.1	n.a.	99.6	n.a.
W.P. Labuan	99.1	99.2	98.2	99.2	99.3	98.6	99.7	99.8
W.P. Putrajaya	100.0	100.0	n.a.	99.9	99.9	n.a.	99.7	n.a.

Jadual 5.9 : Peratusan individu memiliki telefon bimbit mengikut jantina, Malaysia, 2017 - 2020
 Table : Percentage of individuals owning mobile phone by sex, Malaysia, 2017 - 2020

Negeri / State	2017	2018	2019	2020
Jumlah / Total	95.5	96.0	95.7	96.4
Lelaki / Male	96.6	96.7	96.8	97.7
Perempuan / Female	94.4	95.1	94.8	95.0

Goal 5: Achieve gender equality and empower all women and girls
Target 5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
Indicator 5.b.1: Proportion of individuals who own a mobile telephone, by sex

Jadual 5.10
Table : Peratusan individu memiliki telefon bimbit mengikut negeri dan strata, Malaysia, 2017 - 2020

: Percentage of individuals owning mobile phone by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020		Luar bandar Rural	Jumlah Bandar Total	Jumlah Bandar Urban	Luar bandar Rural	Jumlah Bandar Total	Jumlah Bandar Urban	Luar bandar Rural
	Jumlah Total	Jumlah Urban	Jumlah Total	Jumlah Urban	Jumlah Total	Jumlah Urban	Jumlah Total	Jumlah Urban							
MALAYSIA	95.5	96.1	93.7	96.0	96.6	93.9	95.7	96.5	92.7	96.4	97.2	93.4			
Johor	95.4	95.4	95.3	96.0	96.6	94.1	97.3	97.6	96.2	98.8	99.2	97.3			
Kedah	94.8	95.3	93.5	95.2	95.8	93.7	93.5	94.5	90.8	93.7	94.8	91.0			
Kelantan	94.6	95.7	93.6	95.5	96.3	94.7	92.6	94.1	90.9	93.2	95.2	90.9			
Melaka	96.5	96.7	94.6	96.1	96.2	94.7	94.4	94.7	90.2	95.7	95.9	93.7			
Negeri Sembilan	94.6	95.2	93.0	95.2	96.0	93.1	93.9	94.6	91.6	95.3	96.4	91.8			
Pahang	95.0	95.8	93.9	95.3	96.2	94.1	95.5	97.2	92.7	96.0	97.8	93.1			
Pulau Pinang	95.5	95.6	93.0	95.6	95.6	95.6	95.7	95.8	95.0	96.8	96.8	95.3			
Perak	91.8	92.4	90.0	93.4	93.7	92.4	93.7	94.3	91.3	94.5	95.3	91.4			
Perlis	96.5	96.8	96.0	96.8	97.1	96.1	94.4	95.4	92.4	95.7	96.0	95.1			
Selangor	97.5	97.5	96.6	97.8	98.0	95.1	97.8	98.0	93.8	98.1	98.2	96.0			
Terengganu	95.8	95.3	96.8	95.9	95.7	96.3	95.7	95.4	96.2	95.9	95.8	96.3			
Sabah	94.7	95.9	93.0	95.2	96.1	93.9	95.2	95.9	94.3	95.7	95.9	95.4			
Sarawak	94.7	95.8	93.2	94.8	96.2	92.7	93.5	95.9	89.7	94.5	97.4	89.9			
W.P. Kuala Lumpur	98.9	98.9	n.a.	98.7	98.7	n.a.	98.6	98.6	n.a.	99.2	99.2	n.a.			
W.P. Labuan	98.8	99.2	96.5	96.7	96.8	96.5	99.0	99.5	97.0	99.5	99.6	99.0			
W.P. Putrajaya	98.5	98.5	n.a.	99.8	99.8	n.a.	98.8	98.8	n.a.	99.6	99.6	n.a.			

Jadual 5.11
Table

: Peratusan individu menggunakan komputer mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of individuals using computer by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020	
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban
	Luar bandar Rural		Luar bandar Rural		Luar bandar Rural		Luar bandar Rural	
MALAYSIA	69.8	75.0	53.2	70.5	75.6	54.1	72.1	77.3
Johor	68.8	70.9	61.7	69.5	72.2	60.3	75.5	78.9
Kedah	60.9	65.0	50.6	59.0	62.7	49.8	61.7	65.5
Kelantan	61.3	68.6	54.2	60.3	65.2	55.5	62.4	69.3
Melaka	77.0	77.8	64.8	77.2	77.8	68.3	80.7	81.2
Negeri Sembilan	68.8	73.9	54.3	68.9	73.8	55.2	69.6	75.2
Pahang	65.5	75.8	52.1	66.2	72.3	58.3	69.7	77.2
Pulau Pinang	75.8	76.3	67.3	75.9	76.1	71.8	75.9	76.3
Perak	64.1	68.2	50.7	65.1	67.8	56.5	67.5	70.7
Perlis	72.2	75.2	67.1	72.6	75.7	67.4	70.8	74.2
Selangor	86.2	87.2	71.1	87.0	87.9	74.3	85.1	85.6
Terengganu	70.4	73.4	64.9	71.0	74.5	64.1	74.5	79.3
Sabah	52.7	60.6	41.5	55.8	63.9	43.9	55.5	63.2
Sarawak	60.3	65.8	52.6	61.4	71.9	46.5	64.1	74.8
W.P. Kuala Lumpur	82.9	82.9	n.a.	83.0	83.0	n.a.	86.7	86.7
W.P. Labuan	78.7	79.5	73.9	79.6	81.7	68.0	78.6	80.7
W.P. Putrajaya	97.9	97.9	n.a.	97.8	97.8	n.a.	99.2	99.2

Jadual 5.12 : Peratusan individu menggunakan komputer mengikut negeri dan jenis kemahiran ICT, Malaysia, 2018 - 2020

Table 5.12 : Percentage of individuals using computer by state and type of ICT skills, Malaysia, 2018 - 2020

Negeri State		Menyalin atau memindahkan fail Copying or moving a file or folder									Menggunakan teknik aritmetik asas di dalam lembaran kerja Using basic arithmetic formulas in spreadsheet
		2018	2019	2020	2018	2019	2020	2018	2019	2020	
Menyalin dan menampal untuk pendaua atau memindahkan maklumat di dalam satu dokumen Using copy and paste tools to duplicate or move information within a document											
MALAYSIA	79.7	80.4	86.4	81.5	81.8	87.7	62.1	62.1	69.0	36.7	37.0
Johor	78.2	78.2	86.3	79.1	78.1	86.4	59.2	61.0	65.7	31.0	29.3
Kedah	76.2	77.9	82.5	76.9	80.2	80.4	56.4	60.4	67.4	21.3	29.0
Kelantan	76.5	75.7	76.5	76.7	74.9	81.8	49.7	54.9	62.7	24.5	27.1
Melaka	79.8	79.4	88.7	82.0	73.9	81.1	56.4	58.2	65.1	32.8	28.7
Negeri Sembilan	78.1	76.4	85.4	79.2	80.5	86.1	60.6	57.9	63.6	32.0	32.8
Pahang	79.5	78.6	86.1	82.2	83.5	88.8	55.8	57.7	63.6	27.9	32.4
Pulau Pinang	73.2	75.4	78.6	75.5	76.7	80.6	61.3	58.6	65.1	34.4	36.6
Perak	77.8	76.7	85.4	80.6	83.0	90.9	59.0	59.8	68.9	37.0	32.1
Perlis	79.9	79.8	86.2	83.7	83.1	89.3	54.9	55.6	61.0	24.6	23.1
Selangor	83.9	86.5	89.9	86.9	86.5	91.8	70.8	69.0	76.5	51.2	51.0
Terengganu	82.2	80.2	87.2	80.8	79.0	83.3	55.7	54.9	61.9	16.9	24.6
Sabah	80.5	78.2	86.0	80.3	82.6	88.5	58.3	55.5	63.3	33.7	33.4
Sarawak	76.0	80.6	88.6	78.8	82.1	87.8	61.1	58.9	65.8	35.6	33.2
W.P. Kuala Lumpur	82.0	83.2	89.5	83.0	83.4	91.6	69.6	74.3	82.0	43.1	46.3
W.P. Labuan	82.7	81.5	85.2	84.2	87.1	94.6	64.3	63.0	75.9	29.8	36.4
W.P. Putrajaya	96.9	96.2	96.3	97.1	97.2	97.1	87.3	82.5	84.9	62.9	61.6
											67.4

Goal 4 : Ensure inclusive and equitable education and promote lifelong learning opportunities for all

Target 4.4 : By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Indicator 4.4.1 : Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

Jadual 5.12
Table : Percentage of individuals using computer by state and type of ICT skills, Malaysia, 2018 - 2020 (cont'd)

: Peratusan individu menggunakan komputer mengikut negeri dan jenis kemahiran ICT, Malaysia, 2018 - 2020 (%)

Negeri State		2018					2019					2020					2018					2019					2020						
		Menghubungkan dan memasang peranti baru Connecting and installing new device					Mencari, memuat turun, memasang dan mengkonfigurasi perisian Searching, downloading, installing and configuring software					Membuat persembahan elektronik dengan menggunakan perisian komputer Creating electronic presentations using computer software					Memindahkan fail di antara komputer dan peranti mudah alih lain Transferring files between a computer and other devices					Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus Writing a computer program using a specialised programming language					2018						
MALAYSIA		70.2	70.3	72.0	49.2	51.4	57.8	34.3	34.6	38.8	61.5	62.4	68.3	11.1	11.4	13.9																	
Johor	68.8	69.6	70.0	46.2	45.9	48.7	30.8	28.7	29.7	58.7	56.8	59.2	6.7	8.6	9.9																		
Kedah	65.2	64.1	69.1	41.0	43.4	51.1	20.0	25.7	35.9	56.2	60.7	69.9	3.1	6.2	8.0																		
Kelantan	62.2	63.1	63.5	38.4	37.7	46.2	20.5	18.4	28.3	53.6	52.4	53.6	5.7	5.8	11.3																		
Melaka	63.8	68.2	71.6	38.9	35.7	45.0	28.8	25.3	32.8	57.7	54.9	65.0	8.1	10.2	14.7																		
Negeri Sembilan	67.6	72.0	72.9	51.5	56.1	57.9	35.4	40.0	43.1	58.3	56.1	63.8	4.0	12.9	13.3																		
Pahang	61.3	64.9	68.1	37.2	44.9	49.0	22.5	27.8	33.1	53.8	60.7	68.8	5.0	8.0	10.5																		
Pulau Pinang	69.6	72.2	72.9	44.8	49.7	59.1	30.3	34.5	40.3	58.3	51.3	61.7	7.4	8.3	16.4																		
Perak	67.8	65.6	67.8	49.9	52.9	56.4	30.6	30.2	37.2	58.7	59.6	69.1	4.6	8.9	10.6																		
Perlis	66.1	69.4	75.0	43.1	45.9	54.4	21.0	30.0	38.6	57.5	54.7	61.7	8.9	8.6	12.5																		
Selangor	75.3	71.3	75.6	58.5	62.8	69.0	49.7	46.1	45.4	67.4	68.5	73.8	20.9	14.1	15.4																		
Terengganu	68.0	70.0	66.7	41.7	43.0	51.3	24.7	28.8	32.9	57.4	58.0	63.5	1.4	8.7	15.2																		
Sabah	73.1	75.9	73.7	45.1	43.4	54.3	27.7	32.6	36.6	66.4	73.9	74.1	8.9	10.8	13.9																		
Sarawak	71.4	71.3	70.2	49.2	53.1	57.3	31.6	27.9	33.1	61.0	62.2	70.2	13.4	10.4	10.5																		
W.P. Kuala Lumpur	72.5	75.1	78.7	58.6	59.8	70.5	40.4	46.2	58.8	64.3	65.2	75.0	17.9	23.8	27.4																		
W.P. Labuan	68.6	69.6	76.3	55.6	63.0	60.4	30.0	40.9	45.4	63.9	72.3	75.9	13.3	21.9	21.1																		
W.P. Putrajaya	85.0	86.4	87.9	72.8	76.1	77.8	56.1	65.9	69.7	87.2	93.6	95.6	24.6	37.6	46.2																		

Goal 4 : Ensure inclusive and equitable education and promote lifelong learning opportunities for all

Target 4.4 : By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Indicator 4.4.1 : Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

Jadual 5.13 : Peratusan belia menggunakan komputer mengikut negeri dan jenis kemahiran ICT, Malaysia, 2018 - 2020

Table 5.13 : Percentage of youth using computer by state and type of ICT skills, Malaysia, 2018 - 2020

Negeri State		Menyalin atau memindahkan fail Copying or moving a file or folder									Menggunakan teknik aritmetik asas di dalam lembaran kerja Using basic arithmetic formulas in spreadsheet	
		2018	2019	2020	2018	2019	2020	2018	2019	2020		
Menyalin dan menampal untuk pendedua atau memindahkan maklumat di dalam satu dokumen Using copy and paste tools to duplicate or move information within a document												
MALAYSIA	92.4	82.0	83.0	91.1	86.3	94.7	51.1	66.7	71.2	35.7	39.6	40.2
Johor	91.9	78.1	89.4	90.3	86.8	97.4	48.7	68.3	69.0	30.3	35.8	41.8
Kedah	91.4	85.1	71.2	88.7	98.1	36.9	60.4	75.0	14.8	34.1	27.9	
Kelantan	93.1	77.2	56.4	91.9	80.1	93.7	38.1	57.8	67.7	29.6	29.9	26.8
Melaka	94.0	85.7	83.5	92.3	83.2	96.4	42.4	65.9	75.8	36.9	34.6	34.6
Negeri Sembilan	95.0	78.9	92.6	92.0	84.6	96.5	55.1	59.1	80.0	36.0	34.0	49.1
Pahang	92.5	84.9	87.6	92.7	89.3	92.8	47.7	67.6	62.2	29.7	36.1	40.4
Pulau Pinang	89.2	87.0	84.0	89.2	78.7	97.9	64.0	70.9	79.2	37.9	48.1	54.3
Perak	94.6	83.4	80.9	93.4	88.0	95.2	51.0	64.8	72.3	44.1	37.6	47.4
Perlis	96.4	81.5	88.7	96.1	86.8	95.5	48.1	61.1	63.9	20.6	16.7	19.7
Selangor	93.2	88.4	88.7	94.2	90.3	91.1	64.7	77.1	76.2	54.5	54.2	59.3
Terengganu	92.1	82.5	83.5	84.5	83.8	86.8	35.7	65.6	69.1	10.6	23.3	24.7
Sabah	89.9	76.3	75.7	87.4	85.7	95.5	38.9	57.2	61.5	21.7	31.6	24.2
Sarawak	91.4	81.2	91.3	89.7	85.3	96.1	54.9	62.3	66.5	35.8	36.7	30.8
W.P. Kuala Lumpur	94.9	71.9	93.7	93.5	83.1	96.9	66.8	77.4	85.2	57.0	58.8	48.3
W.P. Labuan	94.3	76.3	94.5	92.8	98.2	91.9	50.4	59.0	79.2	22.9	35.9	34.4
W.P. Putrajaya	100.0	86.2	100.0	100.0	100.0	100.0	62.9	72.2	70.3	50.7	63.7	38.0

Goal 4 : Ensure inclusive and equitable education and promote lifelong learning opportunities for all

Target 4.4 : By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Indicator 4.4.1 : Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

Jadual 5.13
Table : Peratusan belia menggunakan komputer mengikut negeri dan jenis kemahiran ICT, Malaysia, 2018 - 2020 (samb.)

: Percentage of youth using computer by state and type of ICT skills, Malaysia, 2018 - 2020 (cont'd)

Negeri State		Menghubungkan dan memasang peranti baru Connecting and installing new device						Mencari, memuat turun, memasang dan mengkonfigurasi perisian Searching, downloading, installing and configuring software						Membuat persembahan elektronik dengan komputer Creating electronic presentations using computer software						Memindahkan fail di antara komputer dan peranti mudah alih lain Transferring files between a computer and other devices						Menulis program komputer menggunakan bahasa pengaturcaraan yang khusus Writing a computer program using a specialised programming language					
		2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020						
MALAYSIA		71.6	74.1	75.4	61.0	47.4	54.2	32.8	41.0	45.1	77.1	67.3	83.4	11.8	12.4	17.6															
Johor	71.4	70.9	73.9	58.8	46.1	47.2	31.0	37.2	41.7	78.7	67.4	91.3	8.9	11.9	18.5																
Kedah	62.1	71.1	68.5	49.7	43.1	52.6	14.4	36.4	44.2	68.4	67.0	90.1	2.5	8.3	10.8																
Kelantan	65.4	74.3	57.9	50.3	33.5	40.8	23.8	21.4	33.1	69.9	55.4	47.1	5.6	7.5	13.0																
Melaka	69.2	73.4	83.9	63.9	38.0	20.0	28.6	34.9	51.5	76.3	70.7	67.5	10.0	15.5	4.6																
Negeri Sembilan	76.9	72.7	92.5	72.5	53.4	61.3	41.1	44.5	54.5	80.2	56.1	73.1	5.4	15.6	13.6																
Pahang	63.2	64.9	71.3	50.2	42.4	50.8	22.2	32.0	39.3	72.4	59.2	82.7	6.4	9.5	13.5																
Pulau Pinang	84.5	69.1	83.2	68.9	52.6	65.1	34.9	48.9	53.5	87.2	51.6	70.2	8.3	10.8	22.4																
Perak	71.9	65.2	81.9	70.3	51.9	57.5	37.2	36.8	48.8	81.6	68.4	88.3	6.3	10.3	17.2																
Perlis	66.5	81.0	78.0	53.8	42.2	51.1	22.4	34.1	42.5	81.5	53.4	68.8	7.3	9.7	14.9																
Selangor	79.9	79.2	84.8	75.5	55.4	65.5	53.6	59.2	57.5	81.6	77.7	94.2	23.9	14.7	18.5																
Terengganu	60.5	78.9	61.5	41.1	39.6	35.8	14.0	35.1	40.3	64.3	60.7	74.5	1.0	10.7	27.7																
Sabah	64.2	76.8	75.3	43.5	38.7	46.4	17.5	34.4	32.5	72.1	79.2	85.1	7.1	10.0	11.0																
Sarawak	70.9	74.7	60.7	57.2	57.6	65.2	30.6	31.2	32.2	78.2	71.3	87.2	14.1	10.6	19.7																
W.P. Kuala Lumpur	80.9	87.6	88.6	82.3	46.0	69.9	47.0	59.0	66.4	81.1	49.3	85.1	30.3	29.9	42.4																
W.P. Labuan	66.2	69.3	89.2	64.9	51.9	45.9	24.3	43.0	39.5	78.1	67.4	91.0	14.6	16.7	33.5																
W.P. Putrajaya	80.0	86.9	79.5	91.2	73.1	68.6	48.8	70.0	52.8	82.6	85.2	100.0	20.0	35.0	38.4																

Goal 4 : Ensure inclusive and equitable education and promote lifelong learning opportunities for all

Target 4.4 : By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Indicator 4.4.1 : Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

Jadual 5.14
Table

: Peratusan individu menggunakan internet mengikut negeri dan strata, Malaysia, 2017 - 2020
: Percentage of individuals using the internet by state and strata, Malaysia, 2017 - 2020

Negeri State	2017		2018		2019		2020		Luar bandar Rural/ Banda rural
	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	Jumlah Total	Bandar Urban	
MALAYSIA	80.1	84.0	68.0	81.2	84.9	69.4	84.2	87.5	72.7
Johor	82.7	84.2	77.4	83.2	84.6	78.3	89.6	91.7	82.2
Kedah	70.0	73.8	60.8	72.3	75.9	63.1	75.6	78.5	68.0
Kelantan	70.4	77.4	63.7	71.3	77.9	64.7	73.9	77.9	69.1
Melaka	84.2	84.7	76.1	85.4	85.9	77.6	85.6	85.7	84.5
Negeri Sembilan	80.1	82.8	72.3	80.3	83.1	72.3	81.3	83.3	75.5
Pahang	78.9	87.9	67.0	79.1	85.5	70.7	81.8	87.1	73.5
Pulau Pinang	86.3	86.8	77.6	86.7	86.9	83.1	86.7	86.9	82.9
Perak	74.2	76.2	67.7	74.5	76.7	67.6	80.6	82.4	74.1
Perlis	83.3	85.4	79.9	83.4	85.6	79.7	83.8	84.9	81.6
Selangor	90.1	90.8	78.7	91.0	91.9	79.4	91.7	92.4	78.4
Terengganu	77.8	80.2	73.2	78.2	81.3	72.2	81.0	83.6	74.7
Sabah	73.1	77.8	66.5	76.7	80.9	70.6	80.0	84.5	73.3
Sarawak	73.5	81.5	62.3	73.6	82.7	60.6	76.4	85.0	63.0
W.P. Kuala Lumpur	86.5	86.5	n.a.	87.4	87.4	n.a.	93.4	93.4	n.a.
W.P. Labuan	88.8	91.1	76.1	89.1	91.1	77.9	94.9	98.2	82.5
W.P. Putrajaya	99.5	99.5	n.a.	99.6	99.6	n.a.	98.4	98.4	n.a.

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020
Table : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020

: Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020
: Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020

Negeri State	Mendapatkan Maklumat										Menyertai rangkaian profesional					Bekerja dari rumah		
	Mendapatkan maklumat barang/ perkhidmatan					Membaca akhbar/ majalah online					Mewujudkan pekerjaan			Participating in professional networks		Work from home		
	Finding information about goods/ services		Access to Information			Reading newspaper/ magazines online		Applying for jobs			Professional		Professional					
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
MALAYSIA	83.1	83.5	85.4	65.6	66.2	69.0	19.8	20.9	21.4	5.5	8.5	10.6	7.8	11.0	16.1			
Johor	83.3	86.0	86.1	62.7	58.8	58.9	16.2	19.1	21.9	5.1	6.8	5.7	7.9	7.4	10.8			
Kedah	82.4	87.3	88.2	54.2	54.9	63.8	15.7	16.2	22.2	2.6	8.5	11.1	2.9	6.8	13.8			
Kelantan	71.8	81.9	84.9	55.6	57.1	59.5	18.2	19.2	22.1	2.0	7.4	8.7	2.6	6.4	11.6			
Melaka	92.1	85.9	90.3	80.1	73.5	74.1	17.5	21.3	20.1	2.8	5.6	5.7	6.6	5.9	13.3			
Negeri Sembilan	87.6	83.7	87.4	60.0	61.4	68.6	17.1	25.5	26.8	2.4	5.1	6.5	3.8	10.6	14.2			
Pahang	82.2	87.1	86.7	51.5	44.0	50.9	18.6	20.3	19.5	2.4	7.2	10.7	4.5	7.6	14.5			
Pulau Pinang	75.4	80.8	89.8	56.1	66.5	68.9	11.0	11.5	15.6	4.2	4.6	10.8	9.0	10.9	18.1			
Perak	81.2	79.0	81.5	72.5	71.7	74.8	14.3	16.6	16.8	1.8	3.7	6.6	4.6	7.6	10.5			
Perlis	87.9	81.7	84.1	80.2	68.5	71.5	18.9	23.8	22.3	3.5	1.2	4.3	5.9	6.2	13.8			
Selangor	89.8	89.3	91.4	70.5	80.1	82.6	24.8	26.2	21.6	9.6	14.7	16.7	11.7	15.9	21.1			
Terengganu	90.0	87.8	93.4	73.9	65.8	75.0	23.7	23.8	26.7	0.8	4.6	6.0	4.6	7.6	12.1			
Sabah	73.4	69.3	70.0	61.0	55.1	55.9	16.3	15.0	17.7	3.6	2.2	4.7	5.6	7.8	10.9			
Sarawak	75.6	74.5	75.6	63.0	56.8	60.2	22.7	23.7	22.5	3.3	4.7	6.8	4.0	10.1	15.6			
W.P. Kuala Lumpur	92.9	93.3	93.6	84.6	90.2	90.4	32.1	28.3	30.4	16.6	22.6	26.6	19.6	25.7	34.3			
W.P. Labuan	83.0	93.9	94.2	56.6	53.4	61.7	18.4	13.9	15.4	7.3	3.1	6.5	6.7	9.8	13.7			
W.P. Putrajaya	96.4	92.3	94.2	85.8	91.4	91.5	31.1	27.0	26.3	12.2	24.0	43.7	28.9	28.3	41.9			

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table 5.15 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

Negeri State	Menyertai rangkaian sosial Participating in social networks	Komunikasi Communication						Menghantar emel Sending e-mail	Membuat panggilan telefon melalui internet Telephoning over the internet	Memuat naik kandungan ke laman web Uploading content to a website	Mengurus laman web persendirian Managing personal homepage	
		2018	2019	2020	2018	2019	2020					
MALAYSIA	96.5	97.2	98.0	74.8	76.3	70.0	77.5	81.2	6.6	6.4	3.4	3.5
Johor	95.9	97.5	98.1	72.1	76.5	74.2	60.3	76.4	77.0	7.0	6.9	2.3
Kedah	96.3	97.5	98.5	70.4	69.7	71.5	54.1	79.7	77.2	0.7	3.2	1.1
Kelantan	96.3	96.1	98.6	67.0	64.0	70.8	69.5	76.2	85.9	2.0	3.4	0.6
Melaka	92.2	95.0	95.6	76.4	69.8	70.9	75.8	76.1	78.6	4.4	12.2	1.5
Negeri Sembilan	97.6	96.2	97.8	72.2	72.1	73.8	82.6	87.2	86.6	15.2	8.5	1.7
Pahang	96.3	98.0	97.6	68.9	70.0	72.5	84.8	63.8	72.3	11.0	3.6	0.9
Pulau Pinang	95.2	94.7	99.0	73.1	69.8	73.0	73.3	61.6	67.8	5.1	5.0	1.1
Perak	96.8	96.6	97.9	71.2	64.9	66.7	63.0	76.0	82.8	3.9	2.1	0.9
Perlis	97.6	94.2	98.3	74.4	80.2	74.3	76.0	84.3	84.9	3.4	12.0	1.5
Selangor	95.9	98.0	98.0	79.3	84.8	82.7	71.3	78.3	80.0	8.3	6.3	1.1
Terengganu	96.6	96.4	100.0	82.0	80.2	81.2	88.3	79.2	88.5	1.9	5.0	0.5
Sabah	98.9	97.7	98.2	76.7	78.3	75.9	78.8	84.5	89.6	6.9	6.1	1.3
Sarawak	97.1	97.3	98.0	68.1	70.0	67.0	71.7	75.7	82.4	1.1	6.9	0.9
W.P. Kuala Lumpur	97.6	97.2	96.4	84.5	91.7	96.4	77.2	84.8	86.3	15.3	15.2	1.3
W.P. Labuan	96.6	98.9	99.1	80.5	84.8	93.5	66.0	97.1	98.1	2.5	0.3	0.9
W.P. Putrajaya	98.9	98.7	99.4	94.1	93.0	98.5	68.0	72.9	82.5	3.0	24.2	2.9
												21.0

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table 5.15 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

Negeri State	Menguruskan blog Managing blog	Komunikasi Communication						Lain-lain Perkhidmatan Atas Talian Other Online Services							
		Mengakses perbincangan atas talian Accessing online discussion			Melaksanakan tugasan jana pendapatan Performing tasks to generate income			Menggunakan perkhidmatan berkaitan perjalanan/ penginapan Using services related to travel/ accommodation			Menjual barang/ perkhidmatan Selling goods/ services				
		2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020		
MALAYSIA	3.0	2.6	4.1	17.9	23.1	22.4	2.2	3.3	8.3	25.8	27.5	31.6	4.0	4.0	10.6
Johor	2.8	2.7	1.6	13.7	14.4	9.9	2.5	2.2	3.9	21.3	31.5	23.7	3.9	3.4	8.5
Kedah	0.3	1.1	0.7	11.8	23.3	17.4	0.8	1.7	4.7	17.8	16.9	30.7	2.1	2.0	5.4
Kelantan	0.9	1.0	1.3	4.0	6.8	11.2	1.0	2.8	6.8	10.3	12.8	10.6	2.9	3.6	10.0
Melaka	3.7	1.9	7.7	27.0	20.1	12.1	3.5	2.8	7.9	25.7	26.2	40.0	4.7	6.8	16.0
Negeri Sembilan	0.9	4.5	2.5	3.3	19.1	16.5	2.6	2.8	5.9	24.7	39.2	21.5	2.9	4.7	9.1
Pahang	1.2	2.2	1.5	8.8	34.6	19.1	1.6	2.8	3.2	17.7	34.9	17.5	2.7	3.3	5.7
Pulau Pinang	3.2	1.4	10.5	12.1	9.9	30.8	2.3	0.9	8.1	30.5	17.8	46.8	4.9	4.1	8.8
Perak	0.8	1.3	3.5	5.4	9.9	15.4	0.9	2.0	5.6	17.8	18.2	25.4	2.8	3.0	10.0
Perlis	0.6	8.0	1.0	1.0	10.1	21.0	1.6	3.5	7.2	44.3	7.1	20.9	2.1	3.3	9.6
Selangor	2.9	3.0	5.9	25.7	37.6	32.3	3.0	5.0	14.2	33.9	38.1	41.2	4.3	3.9	14.5
Terengganu	0.4	0.7	3.0	2.0	13.0	11.2	1.1	2.5	16.2	21.9	30.7	55.1	5.5	3.9	19.2
Sabah	2.7	0.8	0.9	33.6	18.4	20.6	2.2	1.6	7.8	22.7	8.3	22.4	2.5	2.4	9.7
Sarawak	0.7	1.6	1.2	9.2	11.6	23.6	1.1	2.0	4.5	12.9	19.5	17.3	2.1	2.2	6.5
W.P. Kuala Lumpur	17.8	9.9	15.1	37.6	52.2	45.6	3.2	10.8	11.7	56.1	55.8	61.0	11.9	13.1	13.9
W.P. Labuan	0.4	0.1	1.3	5.4	1.9	2.1	0.6	0.0	4.2	16.0	24.6	16.9	3.4	1.2	5.9
W.P. Putrajaya	4.4	3.3	9.8	31.2	58.3	37.6	10.9	3.4	16.7	66.4	47.2	51.9	6.1	4.2	13.2

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

: Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

Negeri State	Lain-lain Perkhidmatan Atas Talian Other Online Services										Aktiviti Pembelajaran Learning Activities
	Menggunakan perbankan internet Using internet banking					Menggunakan perisian untuk menyunting teks Using software for editing texts					
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019
(%)											
MALAYSIA	42.3	50.5	61.9	17.8	20.1	26.3	76.5	77.0	78.4	17.3	22.5
Johor	40.3	46.9	58.2	16.1	15.8	15.9	74.3	74.9	69.4	14.3	20.3
Kedah	26.6	39.3	60.3	5.4	13.9	23.3	74.8	66.7	73.2	8.2	10.7
Kelantan	29.5	31.6	49.2	8.5	11.0	14.4	67.8	77.1	81.3	10.9	11.6
Melaka	44.7	50.4	69.8	15.9	17.0	23.1	79.9	58.0	68.5	16.0	19.6
Negeri Sembilan	38.1	56.9	65.4	15.5	17.1	24.3	77.9	77.6	77.8	11.0	16.6
Pahang	34.1	53.9	56.2	10.4	17.1	18.4	67.4	84.8	75.6	16.3	23.3
Pulau Pinang	42.1	43.5	70.2	13.9	19.0	25.5	74.4	70.8	78.5	10.5	9.6
Perak	36.2	39.9	57.4	16.6	11.0	17.9	75.7	60.6	70.7	13.4	14.4
Perlis	28.2	36.7	51.1	26.6	16.7	24.3	72.9	74.2	79.3	10.5	13.9
Selangor	58.5	70.4	73.4	31.1	29.6	41.9	83.0	90.2	87.1	25.5	35.6
Terengganu	40.0	51.8	73.3	6.4	23.9	35.8	77.9	79.0	79.8	16.4	28.4
Sabah	31.0	33.5	42.5	11.5	13.9	16.2	77.8	75.4	83.1	14.4	14.3
Sarawak	29.0	36.9	49.0	10.5	14.8	17.3	68.5	74.8	75.5	13.5	10.5
W.P. Kuala Lumpur	66.7	72.6	83.2	30.4	40.2	49.0	79.8	78.7	79.9	34.6	52.8
W.P. Labuan	34.5	63.0	64.5	10.4	24.0	28.1	82.6	81.9	85.1	8.9	4.8
W.P. Putrajaya	80.9	80.5	86.3	45.5	37.5	44.2	92.5	82.7	88.8	33.6	48.2

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table 5.15 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

Negeri State	Merujuk laman web untuk pembelajaran formal Consulting websites for formal learning purposes	Aktiviti Pembelajaran Learning Activities				Hiburan Entertainment				Menonton televisyen secara atas talian Watching television online	Muat turun gambar/ filem/ permainan Downloading images/ movie/ games	
		2018	2019	2020	2018	2019	2020	2018	2019	2020		
MALAYSIA	41.6	39.9	40.3	n.a.	9.5	20.8	47.3	50.8	53.8	41.3	47.9	55.5
Johor	43.5	48.4	39.6	n.a.	9.1	17.9	47.4	53.5	64.7	31.8	46.2	44.8
Kedah	30.5	32.0	34.9	n.a.	2.0	14.5	33.8	47.2	53.5	40.3	44.5	42.4
Kelantan	41.5	45.3	37.2	n.a.	7.2	14.5	48.0	40.9	43.9	47.0	42.6	36.6
Melaka	22.9	19.9	32.7	n.a.	4.6	17.5	41.1	49.1	49.6	37.4	39.0	57.9
Negeri Sembilan	48.4	40.3	45.0	n.a.	5.2	26.6	45.2	68.1	78.0	39.9	56.1	49.7
Pahang	29.0	32.7	30.4	n.a.	2.6	10.4	37.5	39.4	33.6	27.6	41.6	44.8
Pulau Pinang	32.9	30.8	31.8	n.a.	8.7	17.4	46.0	68.9	69.6	38.1	67.1	70.3
Perak	37.9	35.7	39.1	n.a.	6.4	17.0	34.9	41.0	49.9	32.7	41.2	54.0
Perlis	31.6	37.6	37.0	n.a.	39.1	34.6	52.8	46.4	67.6	38.4	47.3	38.9
Selangor	59.6	51.4	60.6	n.a.	19.8	37.5	52.0	52.2	49.0	49.7	53.3	63.3
Terengganu	38.9	41.8	38.6	n.a.	8.0	18.7	69.6	65.4	61.0	46.3	60.8	75.7
Sabah	28.1	28.7	24.2	n.a.	2.6	12.5	38.1	41.5	40.9	33.6	26.8	46.0
Sarawak	39.4	32.4	26.8	n.a.	5.0	9.0	46.4	42.8	47.2	40.0	43.1	66.5
W.P. Kuala Lumpur	42.2	44.6	45.9	n.a.	13.5	25.4	75.0	63.5	74.6	64.9	68.6	69.0
W.P. Labuan	26.2	11.0	18.0	n.a.	1.4	6.0	39.8	62.6	84.2	41.2	69.1	73.0
W.P. Putrajaya	69.6	76.8	62.3	n.a.	9.8	32.1	77.1	70.7	86.2	68.6	74.7	76.6

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table 5.15 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

Negeri State	Ruang Penyimpanan Storage Space	Ruang Penyimpanan di Internet Using storage space on the Internet					e-Kesihatan e-Health					e-Kerajaan e-Government					
		2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	
Menggunakan ruang simpanan di Internet <i>Using storage space on the Internet</i>		Mendapatkan maklumat kesihatan <i>Seeking health information</i>					Membuat temujanji kesihatan <i>Making a medical appointment</i>					Mendapatkan maklumat daripada organisasi kerajaan <i>Getting information from government organisations</i>					
Ruang Penyimpanan <i>Storage Space</i>		e-Kesihatan <i>e-Health</i>					e-Kerajaan <i>e-Government</i>					Berinteraksi dengan organisasi kerajaan <i>Interacting with government organisations</i>					
MALAYSIA		45.3	52.5	53.5	41.8	45.3	61.9	2.1	4.5	10.7	46.4	45.6	52.9	41.8	39.4	35.2	
Johor	47.0	54.4	53.2	36.8	44.3	46.1	2.3	2.7	12.1	40.6	45.3	50.5	35.8	39.4	35.9	35.9	
Kedah	26.4	37.6	42.7	20.0	46.7	68.0	0.8	2.1	6.6	34.3	34.5	43.9	30.7	29.9	25.2	25.2	
Kelantan	28.9	33.5	35.0	28.4	48.9	45.8	0.3	1.7	1.6	32.6	39.6	43.6	26.9	35.2	21.1	21.1	
¹⁶ Melaka	52.9	44.1	53.2	35.1	28.0	52.4	2.6	3.6	12.9	46.2	44.2	52.7	41.8	40.2	40.3	40.3	
Negeri Sembilan	48.5	59.7	63.3	40.9	49.5	60.2	1.9	4.3	8.3	42.9	47.6	55.7	38.5	43.6	36.9	36.9	
Pahang	37.2	56.1	54.3	33.2	43.6	42.1	1.5	2.0	4.0	40.2	55.1	52.0	35.5	46.2	32.3	32.3	
Pulau Pinang	52.3	49.2	53.2	37.3	40.1	56.9	2.9	1.9	11.2	46.1	43.6	51.3	40.7	39.4	34.2	34.2	
Perak	32.5	32.7	33.0	50.9	37.1	53.0	0.7	1.2	3.8	38.5	35.5	45.1	33.7	24.7	28.4	28.4	
Perlis	70.7	56.1	54.1	64.5	43.5	65.8	0.9	0.6	4.3	54.0	50.3	59.5	47.7	30.7	28.4	28.4	
Selangor	58.9	73.1	72.4	46.0	49.4	77.4	2.8	8.6	18.9	57.9	53.9	63.8	54.8	45.7	42.0	42.0	
Terengganu	33.0	57.2	55.5	56.4	45.7	70.6	0.9	1.5	11.5	75.3	53.2	59.6	62.7	41.5	44.0	44.0	
Sabah	42.3	34.7	35.1	48.9	38.8	66.6	0.9	2.4	3.7	35.0	30.5	38.4	30.7	26.5	25.5	25.5	
Sarawak	27.8	43.5	45.8	36.3	34.7	59.2	0.6	0.9	7.3	38.0	40.3	49.1	32.7	38.7	29.7	29.7	
W.P. Kuala Lumpur	61.4	69.1	75.4	53.1	71.9	72.1	6.7	16.4	22.1	66.8	66.1	73.1	64.0	62.7	59.2	59.2	
W.P. Labuan	45.0	54.2	57.1	23.0	53.8	64.1	0.6	3.1	4.4	33.7	26.1	33.2	31.1	23.5	21.0	21.0	
W.P. Putrajaya	78.5	72.1	75.8	65.9	72.5	89.8	13.4	15.9	24.6	76.4	73.6	74.2	75.7	69.6	65.7	65.7	

Jadual 5.15 : Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 Table 5.15 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

: Peratusan individu menggunakan internet mengikut negeri dan jenis aktiviti, Malaysia, 2018 - 2020 (samb.)
 : Percentage of individuals using the internet by state and type of activity, Malaysia, 2018 - 2020 (cont'd)

Negeri State	Memberi pendapat/ undi Posting opinions/ voting	Sivik dan Politik Civic and Politics				e-Dagang e-Commerce				Keselamatan dalam talian Owning online security tools			
		Membeli barang/ perkhidmatan melalui e-Dagang Purchasing goods/ services via e-Commerce				Menjual barang/ perkhidmatan melalui e-Dagang Selling goods/ services via e- Commerce				Mempunya peralatan keselamatan dalam talian Safety and Online Protection			
		2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
MALAYSIA	12.9	17.3	23.5	24.8	35.2	45.0	1.2	2.0	5.9	30.7	36.4	36.9	
Johor	10.8	22.0	15.5	19.6	31.8	40.8	1.3	1.1	2.2	56.1	62.7	41.7	
Kedah	7.4	15.1	18.6	13.1	20.9	52.3	0.2	0.6	3.2	4.7	20.2	36.9	
Kelantan	7.3	7.3	24.2	15.2	21.9	27.5	0.5	1.2	4.6	17.4	37.6	22.6	
Melaka	18.4	22.2	22.4	24.6	34.8	48.9	1.9	2.8	15.1	36.2	46.5	42.7	
Negeri Sembilan	16.3	14.6	10.1	21.0	30.6	45.7	0.8	1.3	4.6	45.8	17.6	20.3	
Pahang	2.4	22.0	13.4	20.8	38.5	38.2	1.2	1.0	2.2	16.3	41.1	30.6	
Pulau Pinang	7.3	17.6	25.8	18.7	27.3	53.3	1.4	1.1	6.8	30.6	16.1	47.9	
Perak	2.0	5.4	21.4	21.3	26.7	41.2	1.0	1.1	4.7	7.6	13.4	25.0	
Perlis	0.9	13.1	26.6	14.3	24.0	49.7	0.6	0.7	6.1	21.8	15.3	28.9	
Selangor	21.5	23.2	30.5	37.7	53.1	55.6	1.3	2.6	7.2	45.3	46.7	49.2	
Terengganu	21.8	20.9	34.8	25.5	36.4	45.5	0.5	1.5	15.6	3.3	22.5	27.5	
Sabah	10.8	9.9	20.6	15.4	21.8	27.1	1.3	1.5	6.5	17.0	27.1	23.7	
Sarawak	4.2	6.3	11.0	16.9	23.0	36.2	0.3	1.0	2.9	5.9	21.8	22.0	
W.P. Kuala Lumpur	28.1	31.6	48.5	47.5	59.9	66.2	3.4	8.9	9.2	62.2	54.3	58.2	
W.P. Labuan	0.3	4.1	7.8	23.2	22.9	23.5	0.4	0.4	4.0	37.9	60.4	58.2	
W.P. Putrajaya	42.3	47.2	64.3	60.5	62.6	78.6	0.5	2.8	13.9	40.0	54.9	72.0	

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



RALAT PIAWAI RELATIF

RELATIVE STANDARD ERROR

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

Jadual
6.1

: Ralat piawai bagi anggaran peratusan capaian perkhidmatan dan peralatan ICT oleh isi rumah mengikut strata, Malaysia, 2020
Table : Relative standard error of estimates for percentage of households with access to ICT services and equipment by strata, Malaysia, 2020

Perkhidmatan dan peralatan ICT /ICT services and equipment	Peratusan capaian ICT oleh isi rumah		Ralat piawai bagi anggaran		Peratusan capaian ICT oleh isi rumah pada 95% selang keyakinan								
	Percentage of ICT access by households		Standard error of estimates (%)		Percentage of ICT access by households at 95% confidence interval								
	Malaysia	Bandar Urban	Nilai relatif Relatively value	Ralat piawai Standard error	Luar bandar Rural	Bandar Urban	Malaysia	Bandar Urban	Luar bandar Rural	Bandar Urban	Malaysia	Bandar Urban	Luar bandar Rural
Internet	91.7	93.5	83.9	0.2	0.3	0.5	0.2	0.2	0.3	0.4	91.3 - 92.1	93.0 - 94.0	83.1 - 84.8
Komputer Computer	77.6	82.8	55.5	0.4	0.4	1.0	0.3	0.4	0.6	76.9 - 78.2	82.0 - 83.5	54.4 - 56.6	
Telefon bimbit Mobile phone	98.6	99.0	96.8	0.1	0.1	0.2	0.1	0.1	0.2	98.4 - 98.7	98.8 - 99.2	96.4 - 97.2	
Siaran TV berbayar Pay TV channel	78.9	81.9	66.5	0.4	0.5	0.8	0.3	0.4	0.6	78.3 - 79.6	81.1 - 82.7	65.4 - 67.6	
Televisyen Television	98.5	99.0	96.3	0.1	0.1	0.2	0.1	0.1	0.2	98.3 - 98.7	98.8 - 99.2	95.8 - 96.7	
Radio	98.5	98.9	97.0	0.1	0.1	0.2	0.1	0.1	0.2	98.4 - 98.7	98.7 - 99.1	96.6 - 97.4	
Telefon talian tetap Fixed-line telephone	22.4	25.5	9.2	1.7	1.9	3.3	0.4	0.5	0.3	21.6 - 23.1	24.5 - 26.4	8.6 - 9.8	

Jadual 6.2 : Ralat piawai relatif bagi anggaran peratusan penggunaan perkhidmatan dan peralatan ICT oleh individu mengikut strata, Malaysia, 2020
 Table 6.2 : Relative standard error of estimates for percentage of individuals using ICT services and equipment by strata, Malaysia, 2020

Perkhidmatan dan peralatan ICT /ICT services and equipment	Peratusan penggunaan ICT oleh individu Percentage of individuals using ICT		Ralat piawai bagi anggaran Standard error of estimates (%)		Peratusan penggunaan ICT oleh individu pada 95% selang keyakinan Percentage of individuals using ICT at 95% confidence interval			
			Nilai relatif Relative value		Ralat piawai Standard error			
	Malaysia	Bandar Urban	Luar bandar Rural	Malaysia	Bandar Urban	Malaysia	Bandar Urban	Luar bandar Rural
Internet	88.5	91.1	79.0	0.6	0.7	1.2	0.6	0.7
Komputer Computer	79.7	85.0	60.9	0.6	0.6	1.6	0.5	0.5
Telefon bimbit Mobile phone	97.9	98.1	97.3	0.3	0.4	0.1	0.3	0.4



NOTA TEKNIKAL

TECHNICAL NOTES

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

1. PENGENALAN

Statistik yang diterbitkan dalam laporan ini adalah hasil dapatan Survei Penggunaan dan Capaian ICT oleh Individu dan Isi Rumah (ICTHS) 2020. Ianya menyediakan data di peringkat nasional, negeri dan daerah pentadbiran. Garis panduan, konsep dan definisi yang digunakan dalam penerbitan ini adalah berdasarkan daripada *Manual for Measuring ICT Access and Use by Households and Individuals 2014 Edition* yang diterbitkan oleh *International Telecommunication Union (ITU)*.

ICTHS telah dijalankan pada tahun rujukan 2013, diikuti pada 2015 dan 2017. Bermula tahun 2018, survei ini dijalankan secara tahunan. Nota teknikal ini membantu pengguna untuk memahami dengan lebih jelas berkaitan data yang diterbitkan.

2. OBJKTIF SURVEI

Objektif utama adalah seperti berikut:

- i. mengumpul maklumat yang lengkap dan terkini berkenaan penggunaan dan capaian ICT oleh individu dan isi rumah (IR);
- ii. menjadi input dalam penyusunan Akaun Satelit ICT (ICTSA); dan
- iii. mengira penunjuk ICT bagi mengukur pembangunan ICT negara dan penjanaan Ekonomi Digital.

3. KAEADAH PENGUMPULAN DATA

- 3.1 Survei ini menggunakan kaedah temu ramah bersemuka dengan menggunakan borang soal selidik bagi mendapatkan maklumat daripada responden. Dalam tempoh survei, penemuramah yang dilatih akan melawat IR di tempat kediaman (TK) terpilih bagi mengumpul maklumat berkaitan demografi ahli isi rumah dan maklumat terperinci berkaitan penggunaan dan capaian peralatan dan perkhidmatan ICT.



- 3.2 Semakan kualiti data akan dibuat oleh pegawai berpengalaman dari DOSM Negeri bagi mengesan dan membetulkan sebarang kesilapan atau maklumat yang tertinggal ketika survei dilaksanakan. Proses semakan semula juga dilaksanakan bagi IR terpilih untuk memastikan kualiti pungutan data.

4. TEMPOH RUJUKAN

ICTHS 2020 dilaksanakan selama tiga bulan iaitu pada Oktober hingga Disember 2020. Tempoh rujukan bagi penggunaan ICT oleh individu adalah merujuk kepada tiga bulan yang lalu sebelum temu ramah. Contoh, sekiranya bulan survei adalah Oktober 2020, maka tempoh rujukan yang diukur adalah mulai 1 Julai 2020 sehingga 30 September 2020.

5. SKOP DAN LIPUTAN

- 5.1 Pemilihan sampel bagi survei ini telah mengambil kira kedua-dua kawasan bandar dan luar bandar dalam daerah pentadbiran bagi semua negeri di Malaysia.
- 5.2 Liputan survei meliputi IR yang tinggal di TK persendirian dan tidak termasuk mereka yang tinggal di TK institusi seperti asrama, hotel, hospital, rumah orang tua, berek tentera dan polis, penjara dan rumah kebajikan.
- 5.3 Survei ini meliputi ahli isi rumah yang berumur lima tahun dan ke atas. Walau bagaimanapun, bagi membolehkan perbandingan dibuat dengan survei terdahulu, analisis bagi penggunaan ICT hanya melibatkan individu berusia 15 tahun dan ke atas sahaja.

6. RANGKA PENSAMPELAN

- 6.1 Rangka yang digunakan bagi pemilihan sampel ICTHS 2020 adalah berdasarkan Rangka Pensampelan Isi Rumah yang terdiri daripada blok penghitungan (BP) yang diwujudkan untuk Banci Penduduk dan Perumahan 2010 yang dikemaskini dari semasa ke semasa.

BP merupakan suatu kawasan muka bumi yang diwujudkan untuk tujuan pelaksanaan operasi survei yang secara puratanya mengandungi antara 80 hingga 120 TK. Semua BP dibentuk dalam lingkungan sempadan yang diwartakan iaitu di dalam daerah pentadbiran, mukim atau kawasan pihak berkuasa tempatan.

- 6.2 BP dalam rangka pensampelan dikelaskan mengikut kawasan bandar dan luar bandar. Kawasan bandar ialah kawasan yang diwartakan serta kawasan tepu bina yang bersempadan dengannya dan gabungan kedua-dua kawasan ini mempunyai jumlah penduduk seramai 10,000 atau lebih semasa Banci Penduduk dan Perumahan 2010. Kawasan selainnya yang diwartakan dan mempunyai jumlah penduduk kurang daripada 10,000 orang serta kawasan yang tidak diwartakan dikelaskan sebagai kawasan luar bandar.
- 6.3 Kawasan tepu bina adalah kawasan yang terletak bersebelahan kawasan yang diwartakan dan mempunyai sekurang-kurangnya 60 peratus penduduk (berumur 15 tahun dan ke atas) yang terlibat di dalam aktiviti bukan pertanian.
- 6.4 Definisi kawasan bandar juga mengambil kira kawasan pembangunan khusus iaitu kawasan pembangunan yang tidak diwartakan dan boleh dikenalpasti serta terpisah dari kawasan yang diwartakan atau kawasan tepu bina melebihi lima kilometer dan mempunyai penduduk sekurang-kurangnya 10,000 orang dengan 60 peratus penduduk (berumur 15 tahun dan ke atas) yang terlibat dalam aktiviti bukan pertanian.
- 6.5 Pembandaran merupakan proses yang dinamik dan sentiasa berubah mengikut kemajuan dan pembangunan. Oleh itu, kawasan bandar bagi Banci Penduduk dan Perumahan 2000 dan 2010 tidak semestinya merujuk kepada kawasan yang sama kerana kawasan yang memenuhi kriteria bandar akan terus bertambah dan berkembang mengikut masa.



6.6 Klasifikasi kawasan mengikut strata yang digunakan adalah seperti berikut:

Strata	Jumlah penduduk dalam kawasan yang diwartakan, tpu bina dan kawasan pembangunan khusus
Metropolitan	75,000 dan ke atas
Bandar besar	10,000 hingga 74,999
Bandar kecil	1,000 hingga 9,999
Luar bandar	Kawasan selebihnya

- 6.7 Bagi tujuan pensampelan, klasifikasi kawasan seperti di perkara 6.6 adalah digunakan untuk semua negeri serta Wilayah Persekutuan. Bagi Sabah dan Sarawak, memandangkan masalah kesukaran untuk akses ke kawasan pedalaman, strata luar bandar dikembangkan lagi berdasarkan kepada jangka waktu yang diambil untuk sampai ke sesuatu tempat dari pusat bandar yang terdekat.
- 6.8 Bagi tujuan penjadualan laporan, strata-strata dicantumkan seperti berikut:

$$\begin{array}{lll} \text{Bandar} & = & \text{Metropolitan + bandar besar} \\ \text{Luar bandar} & = & \text{Bandar kecil + keseluruhan luar bandar} \end{array}$$

7. REKA BENTUK PENSAMPELAN

- 7.1 Reka bentuk pensampelan berstrata dua peringkat (*two-stage stratified sampling*) telah digunakan dalam ICTHS 2020. Unit pensampelan peringkat pertama adalah BP, dipilih secara rawak menggunakan kaedah *Probability Proportionate to Size Sampling*.
- 7.2 BP dipilih secara berasingan mengikut strata seperti berikut:

Strata pertama	Negeri
Strata kedua	Bandar/ luar bandar mengikut negeri

7.3 Seterusnya unit pensampelan peringkat kedua adalah TK dan sampel TK dipilih dari BP yang terpilih menggunakan kaedah *Systematic Random Sampling* melalui penjanaan nombor rawak dan menetapkan selang pemilihan supaya setiap TK mempunyai kebarangkalian yang sama untuk terpilih. Prosedur ini dilaksanakan secara teratur dan saintifik untuk menghasilkan sampel yang tidak pincang (*unbiased*) dan boleh mewakili keseluruhan populasi IR di Malaysia.

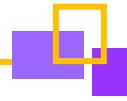
8. SAIZ SAMPEL

8.1 Saiz sampel ICTHS 2020 mewakili populasi mengikut peringkat analisis yang ditetapkan. Saiz sampel ini telah mengambil kira faktor-faktor berikut:

- i. statistik terpilih daripada ICTHS 2020;
- ii. peringkat reka bentuk pensampelan; dan
- iii. ralat yang disasarkan.

8.2 Agihan saiz sampel ICTHS 2020 adalah seperti berikut:

Negeri	Bilangan BP terpilih	Bilangan TK terpilih
Johor	257	2,056
Kedah	238	1,904
Kelantan	218	1,744
Melaka	186	1,416
Negeri Sembilan	191	1,526
Pahang	246	1,968
Pulau Pinang	192	1,533
Perak	224	1,714
Perlis	142	1,135
Selangor	304	2,407
Terengganu	205	1,640
Sabah	321	2,597
Sarawak	248	1,994
W.P. Kuala Lumpur	110	879
W.P. Labuan	45	360
W.P. Putrajaya	50	400
MALAYSIA	3,177	25,273



9. PENILAIAN DATA

9.1 Data yang diperoleh daripada survei yang dijalankan secara sampel berkebarangkalian ini tertakluk kepada dua jenis ralat iaitu ralat pensampelan dan ralat bukan pensampelan.

i. Ralat pensampelan

Ralat pensampelan berpunca daripada anggaran data yang terhasil daripada sampel berkebarangkalian. Ralat ini boleh diukur dengan menganggarkan Ralat Piawai Relatif dan dinyatakan dalam bentuk peratusan. Ia digunakan sebagai penunjuk kepada kepersisan anggaran parameter yang dikaji. Ini memberi gambaran tahap variasi anggaran pembolehubah yang dianggarkan melalui survei berbanding dengan parameter populasi.

Sebagai contoh, penemuan ICTHS 2020 mendapati peratusan capaian isi rumah terhadap Internet bagi Malaysia adalah 91.7 peratus dengan Ralat Piawai Relatif 0.2 peratus. Dalam erti kata lain, peratus Ralat Piawai adalah 0.2 peratus. Berasaskan 95 peratus selang keyakinan ($\alpha=0.05$), peratusan capaian isi rumah terhadap Internet berada dalam batasan antara 91.3% - 92.1%.

ii. Ralat bukan pensampelan

Ralat ini boleh berpunca daripada liputan survei yang tidak lengkap, kelemahan rangka, ralat maklumbalas, tiada respons dan kesilapan semasa prosesan seperti di peringkat penyuntingan, pengekodan dan tangkapan data. Bagi memastikan kualiti data berada pada tahap yang tinggi, beberapa langkah pentadbiran telah diambil supaya **ralat bukan pensampelan** berada di tahap minimum. Antaranya, latihan intensif kepada penyelia dan penemuramah. Selain daripada itu, penyeliaan yang rapi dan semakan rambang dijalankan ke atas isi rumah yang telah diliputi oleh penemuramah untuk memastikan kesahihan maklumat yang direkodkan.

Bagi mengatasi kes tiada respons yang berpunca daripada beberapa sebab seperti TK kosong, tiada penghuni di rumah, enggan bekerjasama atau TK tidak layak diliputi dalam survei, maka penganggaran saiz sampel ICTHS 2020 telah mengambil kira semua kemungkinan tersebut.

Pengemaskinian rangka pensampelan yang dilaksanakan dari semasa ke semasa telah dapat mengurangkan kadar tiada respons yang berpunca daripada TK kosong. Publisiti yang meluas dilaksanakan melalui media elektronik serta media cetak bagi mengurangkan kes tiada penghuni di rumah dan enggan bekerjasama.

Selain daripada itu, di peringkat prosesan data, semakan konsistensi bagi setiap pembolehubah dan proses validasi telah dilaksanakan secara sistematik bagi meminimumkan kesemua ralat bukan pensampelan.

10. KONSEP DAN DEFINISI

10.1 TEMPAT KEDIAMAN

Tempat kediaman adalah suatu struktur yang dibina **berasingan** dan **bebas** yang lazimnya digunakan untuk tempat tinggal.

- i. **Berasingan:** Struktur dianggap sebagai berasingan jika ia dikelilingi oleh dinding, pagar dan lain-lain serta ditutupi oleh bumbung.
- ii. **Bebas:** Struktur dikatakan bebas apabila ia mempunyai jalan masuk terus dari laluan umum, tempat lalu lintas atau ruang lapang (iaitu penghuni boleh masuk atau keluar dari TK mereka tanpa melalui perkarangan orang lain).



10.2 ISI RUMAH

Isi rumah ditakrifkan sebagai seseorang atau sekumpulan orang yang bersaudara atau tidak bersaudara yang biasanya tinggal bersama dalam satu TK serta membuat peruntukan (perbelanjaan) secara bersama untuk makanan dan keperluan hidup yang lain.

10.3 KETUA ISI RUMAH

Ketua IR ditakrifkan sebagai seorang ahli biasa sama ada lelaki atau perempuan yang dianggap sebagai ketua oleh ahli IR yang lain. Ketua IR mesti seorang penerima pendapatan dan berumur 15 tahun dan lebih.

10.4 CAPAIAN DAN PENGGUNAAN ICT

10.4.1 Capaian ICT oleh isi rumah: Sesebuah isi rumah dianggap mempunyai capaian kepada perkhidmatan dan peralatan ICT sekiranya ia masih boleh digunakan ketika temu ramah dijalankan.

10.4.2 Penggunaan ICT oleh individu:

- Penggunaan perkhidmatan dan peralatan ICT oleh seorang atau beberapa individu atau beberapa individu di dalam sesebuah isi rumah, sama ada digunakan di TK atau di tempat lain;
- Individu di sesebuah isi rumah yang berusia 15 tahun dan ke atas; dan
- Penggunaan peralatan telefon bimbit, komputer dan perkhidmatan Internet bagi tempoh tiga bulan yang lalu.

10.4.3 Indikator Utama ICT

i. Radio

Radio didefinisikan sebagai peranti yang mampu menerima isyarat penyiaran radio, menggunakan frekuensi biasa seperti FM, AM, LW dan SW. Radio boleh menjadi peranti yang berdiri sendiri, atau termasuk radio set bersepadu dengan alat yang lain seperti jam penggera, pemain audio, telefon bimbit atau komputer. Ia juga termasuk radio dalam kereta.

$$\frac{(\text{bilangan IR terpilih yang memiliki radio})}{(\text{jumlah IR terpilih})} \times 100$$

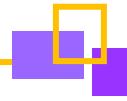
ii. Televisyen

Televisyen (TV) adalah alat yang mampu menerima isyarat siaran televisyen, menggunakan akses popular seperti *over-the-air*, kabel dan satelit. Satu set televisyen lazimnya merupakan peranti yang berdiri sendiri, namun ia boleh juga termasuk fungsi TV yang bersepadu dengan peranti lain, seperti komputer atau telefon bimbit.

$$\frac{(\text{bilangan IR terpilih yang memiliki televisyen})}{(\text{jumlah IR terpilih})} \times 100$$

iii. Telefon talian tetap

Telefon talian tetap merujuk kepada talian telefon yang menyambungkan peralatan terminal pelanggan (contohnya set telefon, mesin faksimili) kepada Rangkaian Telefon Bersuis Awam (PSTN) dan yang mempunyai sebuah port pada pertukaran telefon. Istilah ini adalah sinonim dengan stesen istilah utama atau Pertukaran Talian Terus (DEL) yang biasanya digunakan dalam dokumen



telekomunikasi. Ia mungkin tidak sama seperti akses dalam talian atau langganan.

$$\frac{(\text{bilangan IR terpilih yang memiliki telefon talian tetap})}{(\text{jumlah IR terpilih})} \times 100$$

iv. **Telefon bimbit**

Telefon bimbit merujuk kepada telefon mudah alih yang melanggan kepada satu perkhidmatan telefon mudah alih awam menggunakan teknologi selular yang menyediakan akses bagi PSTN. Ini termasuk sistem selular analog dan digital, serta teknologi seperti IMT-2000 (3G) dan IMT-Advanced. Ia adalah termasuk akaun bagi kedua-dua pelangan pascabayar dan prabayar.

$$\frac{(\text{bilangan IR terpilih yang memiliki telefon bimbit})}{(\text{jumlah IR terpilih})} \times 100$$

v. **Komputer**

Komputer merujuk kepada *desktop*, komputer riba atau papan elektronik mudah alih. Ia tidak termasuk peralatan dengan beberapa *embedded computing ability* seperti telefon bimbit, *Personal Digital Assistant* (PDA) atau set TV.

$$\frac{(\text{bilangan IR terpilih yang memiliki komputer})}{(\text{jumlah IR terpilih})} \times 100$$

vi. Internet

Internet adalah rangkaian komputer awam di seluruh dunia. Ia menyediakan akses kepada beberapa perkhidmatan Komunikasi termasuk *World Wide Web* dan membawa e-mel, berita, hiburan dan fail data, tanpa mengira peranti yang digunakan (tidak dianggap hanya melalui komputer - ia juga boleh dibuat melalui telefon bimbit, PDA, mesin permainan, TV digital dan sebagainya). Mengakses Internet juga boleh dibuat melalui rangkaian talian tetap atau telefon bimbit.

$$\frac{(\text{bilangan IR terpilih yang memiliki Internet})}{(\text{jumlah IR terpilih})} \times 100$$

vii. Aktiviti Penggunaan Internet

Aktiviti penggunaan Internet dikategorikan seperti berikut:

a) Mendapatkan maklumat

- Mendapatkan maklumat tentang barang atau perkhidmatan
- Membaca atau memuat turun akhbar atau majalah *online*, buku elektronik

b) Komunikasi

- Menyertai dalam rangkaian sosial (Cth: *Facebook*, *WhatsApp*, *Instagram*, *Twitter* dll)
- Menghantar atau menerima e-mel
- Membuat panggilan telefon melalui Internet / VoIP
- Memuat naik kandungan yang dicipta sendiri ke laman web
- Menguruskan laman web persendirian



- *Blogging*: Menyelenggara atau menambah kandungan ke dalam blog
- Mengakses laman perbualan, blog, kelompok berita atau perbincangan atas talian

c) Profesional

- Mencari pekerjaan atau menghantar permohonan kerja
- Mengambil bahagian dalam rangkaian professional
- Mengakses sistem pengkomputeran pejabat untuk tujuan membuat kerja pejabat dari rumah

d) Sivik dan Politik

- Mengemukakan pendapat atau mengundi berkenaan isu-isu politik atau sivik (Cth: blog, media sosial, laman web)

e) Lain-lain Perkhidmatan Atas Talian

- Melaksanakan tugas yang boleh menjana Pendapatan secara atas talian
- Menggunakan perkhidmatan berkaitan perjalanan atau penginapan perjalanan
- Menjual barang atau perkhidmatan
- Membeli atau membuat pesanan barang atau perkhidmatan selain e-Dagang
- Perbankan Internet
- Menggunakan perisian melalui Internet untuk menyunting teks pada dokumen, lembaran kerja atau persembahan
- Memuat turun perisian atau aplikasi

f) Ruang Penyimpanan

- Menggunakan ruang simpanan di Internet untuk menyimpan dokumen, gambar, muzik, video atau fail lain (Cth: *Google Drive*, *Dropbox*, *Window SkyDrive*, *iCloud*, *Amazon Cloud Drive*)

g) Aktiviti Pembelajaran

- Menjalani kursus formal atas talian
- Merujuk kepada wiki (*Wikipedia* dsb.), ensiklopedia atas talian atau laman web lain untuk tujuan pembelajaran formal
- Menjalani kursus/ latihan tidak formal atas talian

h) e-Kesihatan

- Mendapatkan maklumat berkaitan kesihatan atau perkhidmatan kesihatan (Cth: berkaitan penyakit, kecederaan, nutrisi dll.)
- Membuat temu janji dengan pengamal perubatan melalui laman web

i) e-Kerajaan

- Mendapatkan maklumat daripada organisasi kerajaan
- Berinteraksi dengan organisasi kerajaan

j) Hiburan

- Mendengar radio secara atas talian
- Menonton televisyen secara atas talian
- Memuat turun gambar, filem, video atau muzik; bermain atau memuat turun permainan

k) e-Dagang

- Membeli atau membuat pesanan barang atau perkhidmatan selain e-Dagang
- Menjual barang atau perkhidmatan melalui e-Dagang

l) Keselamatan & Perlindungan *Online*

- Mempunyai peralatan keselamatan & mengambil langkah perlindungan dalam talian yang mencukupi



10.4.4 Statistik Terpilih Malaysia daripada Suruhanjaya Komunikasi dan Multimedia Malaysia (SKMM)

i. Jalur lebar

Kadar penembusan jalur lebar bagi 100 penduduk dikira dengan membahagi jumlah langganan jalur lebar tetap dan jalur lebar mudah alih dengan jumlah penduduk dan didarab dengan 100. Langganan Wi-Fi awam tidak diambil kira.

ii. Selular mudah alih

Kadar penembusan selular mudah alih dikira sebagai jumlah langganan dibahagi jumlah penduduk dan didarabkan dengan 100. Penembusan yang melebihi 100% boleh berpunca daripada pelanggan yang melangan melebihi daripada satu langganan.

iii. Talian tetap

Kadar penembusan talian tetap dikira sebagai jumlah langganan dibahagi dengan jumlah penduduk dan didarabkan dengan 100.

iv. TV berbayar

Kadar penembusan TV berbayar bagi 100 isi rumah dikira dengan membahagi jumlah langganan isi rumah dengan jumlah isi rumah dan didarab dengan 100.

10.5 PEMBUNDARAN ANGGARAN

Pengiraan bagi sesuatu kategori mungkin tidak sentiasa sama antara jadual disebabkan oleh pembundaran secara bebas. Walau bagaimanapun, perbezaan ini adalah tidak ketara.

Peratusan yang ditunjukkan dalam jadual adalah diperoleh daripada angka sebenar dan tidak semestinya memberikan jumlah genap 100 peratus disebabkan pembundaran, walaupun jumlah yang ditunjukkan adalah 100 peratus.

10.6 NOTA DAN SIMBOL

W.P. Wilayah Persekutuan

n.a. Tidak berkenaan

ICT Teknologi Maklumat dan Komunikasi

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

1. INTRODUCTION

The statistics released in this report are findings of the ICT Use and Access by Individuals and Households Survey (ICTHS) 2020. It provides data at national, state and administrative district levels. The guidelines, concepts and definitions used in this publication are based on the Manual for Measuring ICT Access and Use by Households and Individuals 2014 Edition published by the International Telecommunication Union (ITU).

ICTHS was carried out starting reference year 2013, followed by 2015 and 2017. Since 2018, this survey is conducted annually. These technical notes will facilitate users with better understanding pertaining to the published statistics.

2. OBJECTIVES OF SURVEY

The main objectives are as follows:

- i. to collect the latest and specific information on ICT use and access by individuals and households (HH);
- ii. to serve as an input in the compilation of ICT Satellite Account (ICTSA); and
- iii. to calculate ICT indicators to measure development of national ICT and Digital Economy.

3. METHOD OF DATA COLLECTION

- 3.1 ICTHS uses the personal interview method using the questionnaire form to obtain information from respondents. During the survey period, trained interviewers visit households in selected living quarters (LQs) to collect demographic information on all household members and detailed information on the use and access of ICT equipment and services.



- 3.2 Quality check were done by experienced officers from the DOSM State office to detect and correct any possibility of errors or omissions at the time when the survey is conducted. The review processes were also implemented for selected HH to ensure the quality of the data collected.

4. REFERENCE PERIOD

ICTHS 2020 was conducted for three months from October to December 2020. The reference period for ICT use by individuals was for the last three months prior to interview. Example, if the survey month is in October 2020, then the reference period for individuals is calculated from 1st July 2020 until 30th September 2020.

5. SCOPE AND COVERAGE

- 5.1 The selection of the sample of this survey has taken into consideration both urban and rural areas in administrative district for all states in Malaysia.
- 5.2 The coverage of the survey is HH living in private LQs only and excluding those who are living in residential institutions such as hostels, hotels, hospitals, old folk's homes, military barracks and police, prisons, welfare homes and other institutions.
- 5.3 This survey involved individuals aged five years and above. However, to enable the comparison to be made with the previous survey, the analysis for the use of ICT only involves individuals aged 15 years and above.

6. SAMPLING FRAME

- 6.1 The sampling frame used for the selection of ICTHS 2020 sample are based on the Household Sampling Frame which is made up of enumeration blocks (EBs) created for the 2010 Population and Housing Census which was updated from time to time.

EBs are geographical contiguous areas of land with identifiable boundaries created for survey operation purposes, which on average, contains about 80 to 120 LQs. All EBs are formed within gazette boundaries i.e. within administrative, districts or local authority areas.

- 6.2 *The EBs in the sampling frame is classified by urban and rural areas. Urban areas are defined as in 2010 Population and Housing Census. Urban areas are gazetted areas with their adjoining built-up areas which had a combined population of 10,000 or more. Meanwhile, gazetted area with population less than 10,000 and not gazetted area are classified as rural area.*
- 6.3 *Built-up areas are the areas contiguous to a gazetted area and has at least 60 per cent of their population (aged 15 years and above) engaged in non-agricultural activities.*
- 6.4 *The definition of urban areas also takes into account the special development areas i.e. areas that are not gazetted and development can be identified and separated from the gazetted areas or built-up area of more than five kilometres and has a population of at least 10,000 people with 60 per cent of the population (aged 15 years and above) engaged in non-agricultural activities.*
- 6.5 *Urbanisation is a dynamic process and keeps changing with development and growth. Thus, the urban areas for 2000 and 2010 Population and Housing Censuses do not necessarily refer to the same areas, as areas fulfilling the above criteria of urban continue to expand and grow within the time.*



6.6 *The classification of areas by strata is as follows:*

Strata	Population of gazetted, built-up areas and special development area
<i>Metropolitan</i>	<i>75,000 and above</i>
<i>Urban large</i>	<i>10,000 to 74,999</i>
<i>Urban small</i>	<i>1,000 to 9,999</i>
<i>Rural</i>	<i>All other areas</i>

6.7 *For sampling purposes, classification of areas as stated in item 6.6 is used for all states and federal territories. For Sabah and Sarawak, due to inaccessibility, the rural strata had to be further stratified based on the time taken to reach the area from the nearest urban centre.*

6.8 *For the purpose of tabulation, the strata reclassified were combined as follows:*

$$\begin{array}{lcl} \text{Urban} & = & \text{Metropolitan + urban large} \\ \text{Rural} & = & \text{Urban small + all rural} \end{array}$$

7. SAMPLE DESIGN

7.1 *The two-stage stratified sampling design was used in ICTHS 2020. The first level sampling unit were EBs, randomly selected using Probability Proportionate to Size Sampling.*

7.2 *EBs were selected separately according to the following strata:*

<i>Primary strata</i>	<i>State</i>
<i>Secondary strata</i>	<i>Urban/ rural area by state</i>

7.3 Next, the second level sampling unit were LQs and sample for LQs were selected from the EBs by using Systematic Random Sampling method that generates random number and interval class to ensure every LQs have an equal probability to be selected as a sample. This procedure is performed systematically and scientifically to produce an unbiased sample and can represent the entire populations of HH in Malaysia.

8. SAMPEL SIZE

8.1 The sample of ICTHS 2020 represents the population of the analysis level. The sample size calculation has taken into account the following elements:

- i. selected statistics from ICTHS 2020;
- ii. the level of sampling design; and
- iii. desired error.

8.2 The distribution of sample size for ICTHS 2020 is as follows:

State	Number of selected EBs	Number of selected LQs
Johor	257	2,056
Kedah	238	1,904
Kelantan	218	1,744
Melaka	186	1,416
Negeri Sembilan	191	1,526
Pahang	246	1,968
Pulau Pinang	192	1,533
Perak	224	1,714
Perlis	142	1,135
Selangor	304	2,407
Terengganu	205	1,640
Sabah	321	2,597
Sarawak	248	1,994
W.P. Kuala Lumpur	110	879
W.P. Labuan	45	360
W.P. Putrajaya	50	400
MALAYSIA	3,177	25,273



9. DATA EVALUATION

9.1 Data obtained from probability sample survey are subject to two types of error i.e. sampling error and non-sampling error.

i. Sampling Error

Sampling error is a result of estimating data based on a probability sampling. This error can be measured by estimating the Relative Standard Error (RSE) and expressed as a percentage. It is used as an indicator of the precision of the estimated parameters studied. This estimate reflects the level of variation that was estimated through a survey variables compared with the population parameter.

For instance, in ICTHS 2020, the percentage of Internet access by household for Malaysia was 91.7 per cent with RSE of 0.2 per cent. In other words, the standard error (SE) is approximately 0.2 per cent. Based on a 95 per cent confidence level ($\alpha=0.05$), the percentage of Internet access by household was found to be in the range of 91.3% - 92.1%.

ii. Non-Sampling Error

*These errors may arise through incomplete survey coverage, weaknesses in the frame, response errors, non-response errors and also errors during processing such as editing, coding and data capture. To ensure high quality data, several administrative procedures were taken to keep **non-sampling errors** to a minimum. Intensive training was conducted for the supervisors and enumerators. In addition, close supervision and random checks were carried out on households which were covered by the enumerators to ensure the validity of the information recorded.*

In order to resolve the case of non-response error due to several reasons such as vacant house, no one at home, refusal to co-operate or not qualified LQ, the sample size estimation for ICTHS 2020 has taken into account all the possibilities.

The survey frame is updated regularly to overcome the problem of non-response due to vacant home. Wide publicity was carried out through electronic and printed media to minimise the case of ‘no one at home’ and refusal to cooperate.

In addition, at the data processing stage, each variable’s consistency checking and validation process has been systematically implemented in order to minimise the non-sampling error.

10. CONCEPTS AND DEFINITIONS

10.1 LIVING QUARTERS

*Living quarters are defined as **independent** and **separate** structures, and are usually used as place of abode. The terms separate and independent mean the following:*

- i. **Separate:** A structure is considered separate if it is surrounded by walls, fence, etc. and is covered by roof.
- ii. **Independent:** A structure is said to be independent if it has direct access via public path, communal passageway or space (that is, occupants can come in or go out of their LQs without passing through others’ premises).



10.2 HOUSEHOLD

A person or group of people whether related or unrelated who usually live together in a living quarter and make provisions (expenses) for food and necessities of life together.

10.3 HEAD OF HOUSEHOLD

Head of household is defined as any members whether male or female which is considered as head of HH by other members. Head of HH must be an income recipient and is aged 15 years and above.

10.4 ICT ACCESS AND USAGE

10.4.1 *ICT access by households:* *In order for a household to have access to ICT services or equipment, it should be able to be used during interview.*

10.4.2 *ICT use by individuals:*

- *Use of ICT services and equipment by one or more individuals in a household, either it was used in LQ or elsewhere;*
- *Individuals in a household aged 15 years and above; and*
- *Use of mobile phone, computer and Internet for the last three months.*

10.4.3 *Core ICT Indicators*

i. Radio

A radio is defined as a device capable of receiving broadcast radio signals, using common frequencies, such as FM, AM, LW and SW. A radio may be a stand-alone device, or it may be integrated with another device, such as an alarm clock, an audio player, a mobile phone or a computer. It includes radio in a car.

$$\frac{(\text{number of in-scope household with a radio})}{(\text{total number of in-scope households})} \times 100$$



ii. Television

A television (TV) is a device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. A television set is typically a stand-alone device, but it may also be integrated with another device, such as a computer or a mobile phone.

$$\frac{(\text{number of in-scope household with a television})}{(\text{total number of in-scope households})} \times 100$$

iii. Fixed-line telephone

A fixed telephone refers to a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the Public Switched Telephone Network (PSTN) and which has a dedicated port on a telephone exchange. This term is synonymous with the terms main station or Direct Exchange Line (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscription.

$$\frac{(\text{number of in-scope household with a fixed-line telephone})}{(\text{total number of in-scope households})} \times 100$$

iv. Mobile phone

A mobile phone refers to a portable telephone subscribing to a public mobile phone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems and technologies such as IMT-2000 (3G) and IMT-Advanced. Users of both postpaid subscriptions and prepaid accounts are included.

$$\frac{(\text{number of in-scope household with a mobile phone})}{(\text{total number of in-scope households})} \times 100$$



v. Computer

A computer refers to a desktop, a laptop (portable) computer or a tablet (or similar handheld computer). It does not include equipment with some embedded computing ability such as mobile phones, Personal Digital Assistant (PDA) or a TV set.

$$\frac{(\text{number of in-scope household with a computer})}{(\text{total number of in-scope households})} \times 100$$

vi. Internet

The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files, irrespective of the device used (not assumed to be only via a computer - it may also be by mobile phone, tablet, PDA, games machine, digital TV and etc.). Internet can be accessed via a fixed or mobile network.

$$\frac{(\text{number of in-scope household with a Internet})}{(\text{total number of in-scope households})} \times 100$$

vii. Internet Activities

Internet activities are categorised as follows:

a) Access to information

- Finding information about goods or services
- Reading or downloading online newspaper or magazines, electronic books

b) Communication

- *Participating in social networks (e.g. Facebook, WhatsApp, Twitter etc.)*
- *Sending or receiving e-mail*
- *Telephoning over the Internet/ VoIP*
- *Uploading self created content to a website*
- *Managing personal homepage*
- *Blogging: Maintaining or adding contents to a blog*
- *Accessing chat sites, blogs, newsgroups or online discussions*

c) Professional

- *Looking for a job or submitting a job application*
- *Participating in professional networks (e.g. LinkedIn and Xing)*
- *Accessing office's computing system for the purpose of doing work from home*

d) Civic and Politics

- *Posting opinions or voting on civic or political issues (e.g. blogs, social networks, websites)*

e) Other Online Services

- *Performing tasks online to generate income*
- *Using services related to travel or travel-related accommodation*
- *Selling goods or services (via Mudah, Facebook, WhatsApp etc.)*
- *Purchasing or ordering goods or services other than e-Commerce (via Mudah, Facebook, WhatsApp etc.)*
- *Internet Banking*
- *Using software run over the Internet for editing text documents, spreadsheets or presentations*
- *Downloading software or applications*



f) *Storage Space*

- *Using storage space on the Internet to save documents, pictures, music, video or other files (e.g. Google Drive, Dropbox, Window Sky Drive, iCloud, Amazon Cloud Drive)*

g) *Learning Activities*

- *Doing a formal online course*
- *Consulting wikis (Wikipedia etc.), online encyclopedias or other websites for formal learning purposes*
- *Doing an informal online course/ assessment*

h) *e-Health*

- *Seeking health related information or services related information (e.g. on disease, injuries, nutrition etc.)*
- *Making an appointment with a health practitioner via a website*

i) *e-Government*

- *Getting information from government organisations*
- *Interacting with government organisations*

j) *Entertainment*

- *Listening to radio online*
- *Watching television online*
- *Downloading images, movies, videos or music; playing or downloading games*

k) *e-Commerce*

- *Purchasing or ordering goods or services (e-Commerce)*
- *Selling goods or services via e-commerce*

I) Safety and Online Protection

- Owning online security tools & adopt measures to ensure online protection

10.4.4 Selected Statistics of Malaysia from Malaysian Communications and Multimedia Commission (MCMC)**i. Broadband**

The broadband penetration rate per 100 inhabitants is calculated by dividing the sum of fixed and mobile-broadband subscriptions by total number of population and multiplying by 100. Public Wi-Fi subscriptions are not taken into account.

ii. Mobile-cellular

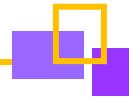
The mobile-cellular penetration rate refers to the total subscriptions divided by total number of population and multiplied by 100. A penetration rate over 100% can occur because of multiple subscriptions.

iii. Fixed-telephone

The fixed-telephone penetration rate refers to the total subscriptions divided by total number of population and multiplied by 100.

iv. Pay TV

The pay TV penetration rate per 100 households is calculated by dividing the number of household subscriptions by the number of households and multiplied by 100.



10.8 ROUNDING OF ESTIMATES

The calculation of certain categories may not always be the same between tables due to independent rounding. However, the differences were insignificant.

Percentages shown in the tables were computed from actual absolute figures and may not always add up exactly to 100 per cent due to rounding, although the totals were shown as 100 per cent.

10.9 NOTES AND SYMBOLS

W.P. *Wilayah Persekutuan*

n.a. *Not applicable*

ICT *Information and Communication Technology*

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank

**PERTANYAAN BERHUBUNG DENGAN PENERBITAN INI BOLEH JUGA DIBUAT DI PEJABAT
PERANGKAAN NEGERI SEPERTI BERIKUT:**

Pengarah,
Jabatan Perangkaan Malaysia Negeri Johor,
Tingkat 14, Menara Tabung Haji,
Jalan Air Molek,
80000 Johor Bahru, Johor.
Tel. : 07-225 3700
Faks : 07-224 9972
E-mel : jpjohor@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Kedah,
Aras 1, Zon C, Wisma Persekutuan,
Pusat Pentadbiran Kerajaan Persekutuan,
Bandar Muadzam Shah,
06550 Anak Bukit, Alor Setar, Kedah.
Tel. : 04-700 1240
Faks : 04-733 8412
E-mel : jpkedah@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Kelantan,
Tingkat 8, Bangunan Persekutuan,
Jalan Bayam,
15514 Kota Bharu, Kelantan.
Tel. : 09-741 9449
Faks : 09-748 2142
E-mel : jpkelantan@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Melaka,
Aras 7 & 8, Wisma Persekutuan,
Jalan MITC, Hang Tuah Jaya,
75450, Ayer Keroh,
Melaka.
Tel. : 06-252 2725
Faks : 06-252 2711
E-mel : jpmelaka@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Sembilan,
Tingkat 12, Wisma Persekutuan,
Jalan Dato' Abdul Kadir,
70000 Seremban,
Negeri Sembilan.
Tel. : 06-765 5000
Faks : 06-765 5002
E-mel : jpnsembilan@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Pahang,
Tingkat 7, Bangunan Persekutuan,
Jalan Gambut,
25000 Kuantan, Pahang.
Tel. : 09-516 3931/7
Faks : 09-514 4636
E-mel : jppahang@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Pulau Pinang,
Tingkat 6, Bangunan Persekutuan,
10400 Jalan Anson,
Pulau Pinang.
Tel. : 04-226 6244
Faks : 04-229 9499
E-mel : jppulaupinang@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Perak,
Tingkat 3, Blok A,
Bangunan Persekutuan Ipoh,
Jalan Dato' Seri Ahmad Said (Greentown),
30450 Ipoh, Perak.
Tel. : 05-255 4963
Faks : 05-255 1073
E-mel : jpperak@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Perlis,
Tingkat 1, Bangunan Perodua Kangar,
No. 2C, Persiaran Jubli Perak
01000 Kangar, Perlis.
Tel. : 04-976 7381/9025
Faks : 04-976 8950
E-mel : jpperlis@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Selangor,
Tingkat 9, Bangunan Darul Ehsan,
Jalan Indah, Seksyen 14,
40000 Shah Alam, Selangor.
Tel. : 03-5515 0200
Faks : 03-5518 0408
E-mel : jpselangor@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Terengganu,
Tingkat 9, Wisma Persekutuan,
Jalan Sultan Ismail,
20200 Kuala Terengganu, Terengganu.
Tel. : 09-622 3062
Faks : 09-622 9659
E-mel : jpterengganu@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Sabah,
Tingkat 1-3, Blok C,
Kompleks Pentadbiran Kerajaan Persekutuan Sabah,
Jalan UMS, Beg Berkunci No. 2046,
88999 Kota Kinabalu, Sabah.
Tel. : 088-484 602
Faks : 088-484 659
E-mel : jpsabah@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Sarawak,
Tingkat 7 & 8, Bangunan Tun Datuk Patinggi
Tuanku Haji Bujang, Jalan Simpang Tiga,
93514 Kuching, Sarawak.
Tel. : 082-240 287
Faks : 082-242 609
E-mel : sarawak@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia
Wilayah Persekutuan,
Tingkat 14 & 15, Wisma FGV,
Jalan Raja Laut,
50350 Kuala Lumpur.
Tel. : 03-2267 2400
Faks : 03-2274 5075
E-mel : jpwplk@stats.gov.my

ENQUIRIES ABOUT THIS PUBLICATION CAN ALSO BE MADE AT THE FOLLOWING STATE STATISTICS OFFICES:

Director,
Department of Statistics, Malaysia, Johor,
14th Floor, Menara Tabung Haji,
Jalan Air Molek,
80000 Johor Bahru, Johor.
Tel. : 07-225 3700
Fax : 07-224 9972
Email : jpjohor@stats.gov.my

Director,
Department of Statistics, Malaysia, Kedah,
1st Floor, Zon C, Wisma Persekutuan,
Pusat Pentadbiran Kerajaan Persekutuan,
Bandar Muadzam Shah,
06550 Anak Bukit, Alor Setar, Kedah.
Tel. : 04-700 1240
Fax : 04-733 8412
Email : jpkedah@stats.gov.my

Director,
Department of Statistics, Malaysia, Kelantan,
8th Floor, Bangunan Persekutuan,
Jalan Bayam,
15514 Kota Bharu, Kelantan.
Tel. : 09-741 9449
Fax : 09-748 2142
Email : jpkelantan@stats.gov.my

Director,
Department of Statistics, Malaysia, Melaka,
7th & 8th Floor, Wisma Persekutuan,
Jalan MITC, Hang Tuah Jaya,
75450, Ayer Keroh,
Melaka.
Tel. : 06-252 2725
Fax : 06-252 2711
Email : jpmelaka@stats.gov.my

Director,
Department of Statistics, Malaysia, Negeri Sembilan,
12th Floor, Wisma Persekutuan,
Jalan Dato' Abdul Kadir,
70000 Seremban,
Negeri Sembilan.
Tel. : 06-765 5000
Fax : 06-765 5002
Email : jpnsembilan@stats.gov.my

Director,
Department of Statistics, Malaysia, Pahang,
7th Floor, Bangunan Persekutuan,
Jalan Gambut,
25000 Kuantan, Pahang.
Tel. : 09-516 3931/7
Fax : 09-514 4636
Email : jppahang@stats.gov.my

Director,
Department of Statistics, Malaysia, Pulau Pinang,
6th Floor, Bangunan Persekutuan,
10400 Jalan Anson,
Pulau Pinang.
Tel. : 04-226 6244
Fax : 04-229 9499
Email : jppulaupinang@stats.gov.my

Director,
Department of Statistics, Malaysia, Perak,
3rd Floor, Block A,
Bangunan Persekutuan Ipoh,
Jalan Dato' Seri Ahmad Said (Greentown),
30450 Ipoh, Perak.
Tel. : 05-255 4963
Fax : 05-255 1073
Email : jpperak@stats.gov.my

Director,
Department of Statistics, Malaysia, Perlis,
1st Floor, Bangunan Perodua Kangar,
No. 2C, Persiaran Jubli Perak
01000 Kangar, Perlis.
Tel. : 04-976 7381/9025
Fax : 04-976 8950
Email : jpperlis@stats.gov.my

Director,
Department of Statistics, Malaysia, Selangor,
9th Floor, Bangunan Darul Ehsan,
Jalan Indah, Seksyen 14,
40000 Shah Alam, Selangor.
Tel. : 03-5515 0200
Fax : 03-5518 0408
Email : jpselangor@stats.gov.my

Director,
Department of Statistics, Malaysia, Terengganu,
9th Floor, Wisma Persekutuan,
Jalan Sultan Ismail,
20200 Kuala Terengganu, Terengganu.
Tel. : 09-622 3062
Fax : 09-622 9659
Email : jpterengganu@stats.gov.my

Director,
Department of Statistics, Malaysia, Sabah,
Level 1-3, Block C,
Kompleks Pentadbiran Kerajaan Persekutuan Sabah,
Jalan UMS, Beg Berkunci No. 2046,
88999 Kota Kinabalu, Sabah.
Tel. : 088-484 602
Fax : 088-484 659
Email : jpsabah@stats.gov.my

Director,
Department of Statistics, Malaysia, Sarawak,
7th & 8th Floor, Bangunan Tun Datuk Patinggi
Tuanku Haji Bujang, Jalan Simpang Tiga,
93514 Kuching, Sarawak.
Tel. : 082-240 287
Fax : 082-242 609
Email : sarawak@stats.gov.my

Director,
Department of Statistics, Malaysia,
Federal Territories,
14th & 15th Floor, Wisma FGV,
Jalan Raja Laut,
50350 Kuala Lumpur.
Tel. : 03-2267 2400
Fax : 03-2274 5075
Email : jpwpkl@stats.gov.my