

# Measurement of digitalization in Hong Kong

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# Policy measures in view of digitalization

## □ Open data policy

- Announced in the Chief Executive's 2017 Policy Address
- Bureaux and departments (B/Ds) should endeavor to release data (except personal data) to the Public Sector Information (PSI) Portal, [DATA.GOV.HK](http://DATA.GOV.HK), for free public use
- Over 3 200 datasets under 18 categories in digital formats and 1 200 Application Programming Interfaces (APIs)
- B/Ds will draw up Annual Open Data Plans
- Datasets are provided in machine-readable formats



## Policy measures in view of digitalization (cont'd)

### □ Faster Payment System (FPS)

- Launched by the Hong Kong Monetary Authority in September 2018
- Enables the public to make real time cross-bank / stored value facilities (SVFs) payments
- User-friendly fund transfer with the use of mobile number, email address or QR code as account proxy for the payee
- Operates on 24x7 basis
- Supports payments in HKD and RMB
- 21 banks and 10 SVFs participated



## Digital statistics in Hong Kong

- ❑ Conceptual definition of the digital economy has not yet been developed, as it is still evolving in international community
- ❑ Yet, information and communication technology (ICT) sector is defined:
  - The ICT sector comprises a cluster of industries engaged in the supply of ICT goods and services which are primarily intended to fulfill or enable the functions of information processing and communication by electronic means, including transmission and display



## Digital statistics in Hong Kong (cont'd)

### □ Economic estimates of the ICT sector

- Value added amounted to HK\$137.6 billion in 2016, or 5.7% of GDP
- 17 300 business establishments in 2016
- 128 700 persons were engaged in 2016, representing 3.4% of the total employment
- Total exports of ICT goods amounted to HK\$2,386.3 billion in 2017



## Digital statistics in Hong Kong (cont'd)

- ❑ Statistics on Internet penetration, electronic commerce (e-commerce) and online purchases are obtained from:
  - Survey on information technology usage and penetration in the business sector
  - Thematic household survey on information technology usage and penetration



# Survey on information technology usage and penetration in the business sector

## □ Frequency:

- 2000 - 2009: conducted annually
- From 2013: conducted biennially

## □ Industry coverage:

- All major economic sectors except agriculture, forestry and fishing, and mining and quarrying sectors which are negligible in Hong Kong





# Survey on information technology usage and penetration in the business sector (cont'd)

## □ Sampling design

- Sampling frame is the Central Register of Establishments, which is a register maintained by Census and Statistics Department and updated by records of the Business Registration Office of the Inland Revenue Department
- A total of 5 500 establishments were selected in the 2017 survey



# Survey on information technology usage and penetration in the business sector – 2017 key survey results

## □ Business use of computers and the Internet

- 79.6% of business establishments used computers
  - Large establishments: 99.8%
  - Medium establishments: 97.8%
  - Small establishments: 76.9%
  
- 87.7% of business establishments used the Internet
  - Large establishments: 99.8%
  - Medium establishments: 99.1%
  - Small establishments: 86.0%



# Survey on information technology usage and penetration in the business sector – 2017 key survey results (cont'd)

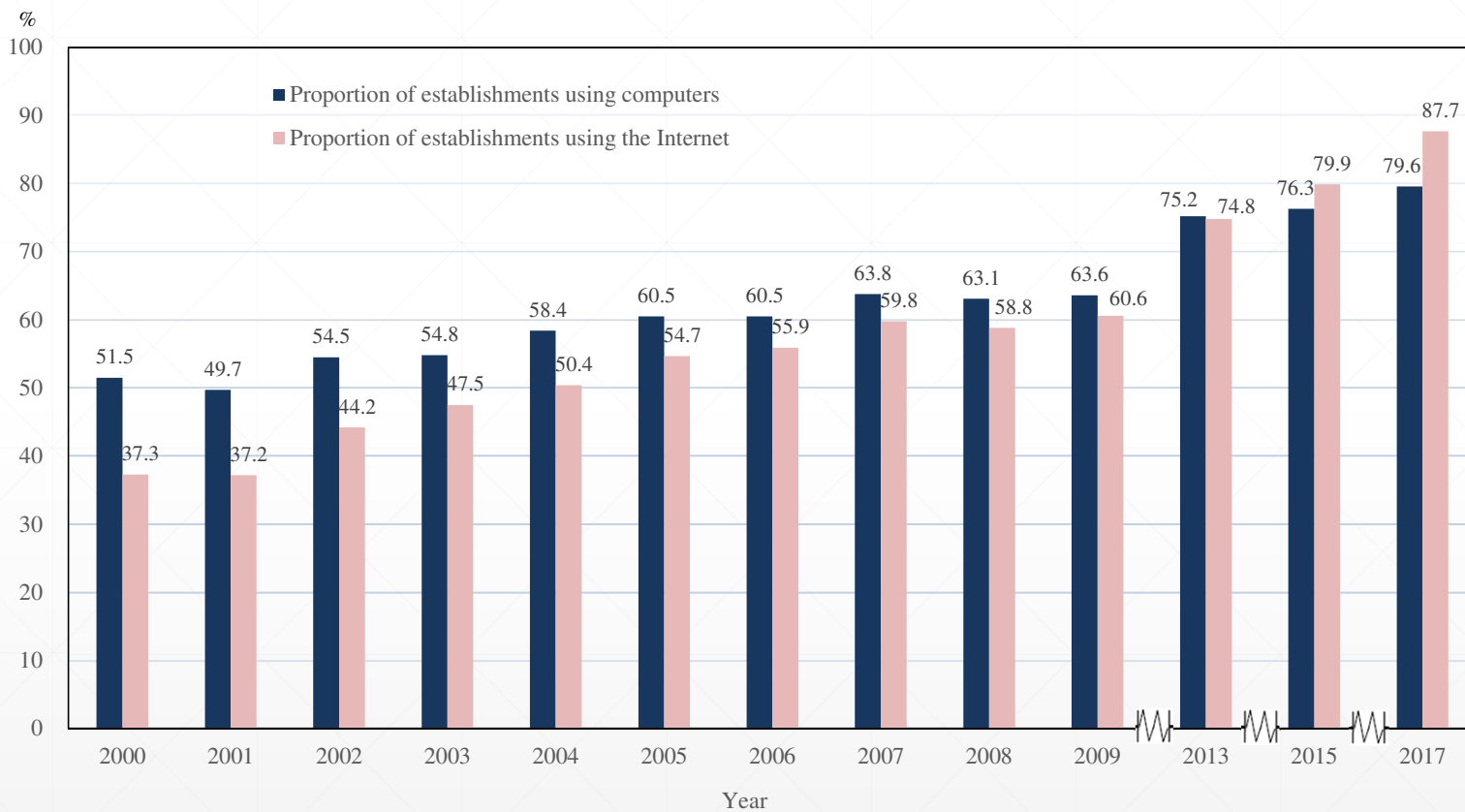
## □ Web presence\* of business

- 33.6% of business establishments with a web presence
  - Large establishments: 88.2%
  - Medium establishments: 72.8%
  - Small establishments: 27.6%

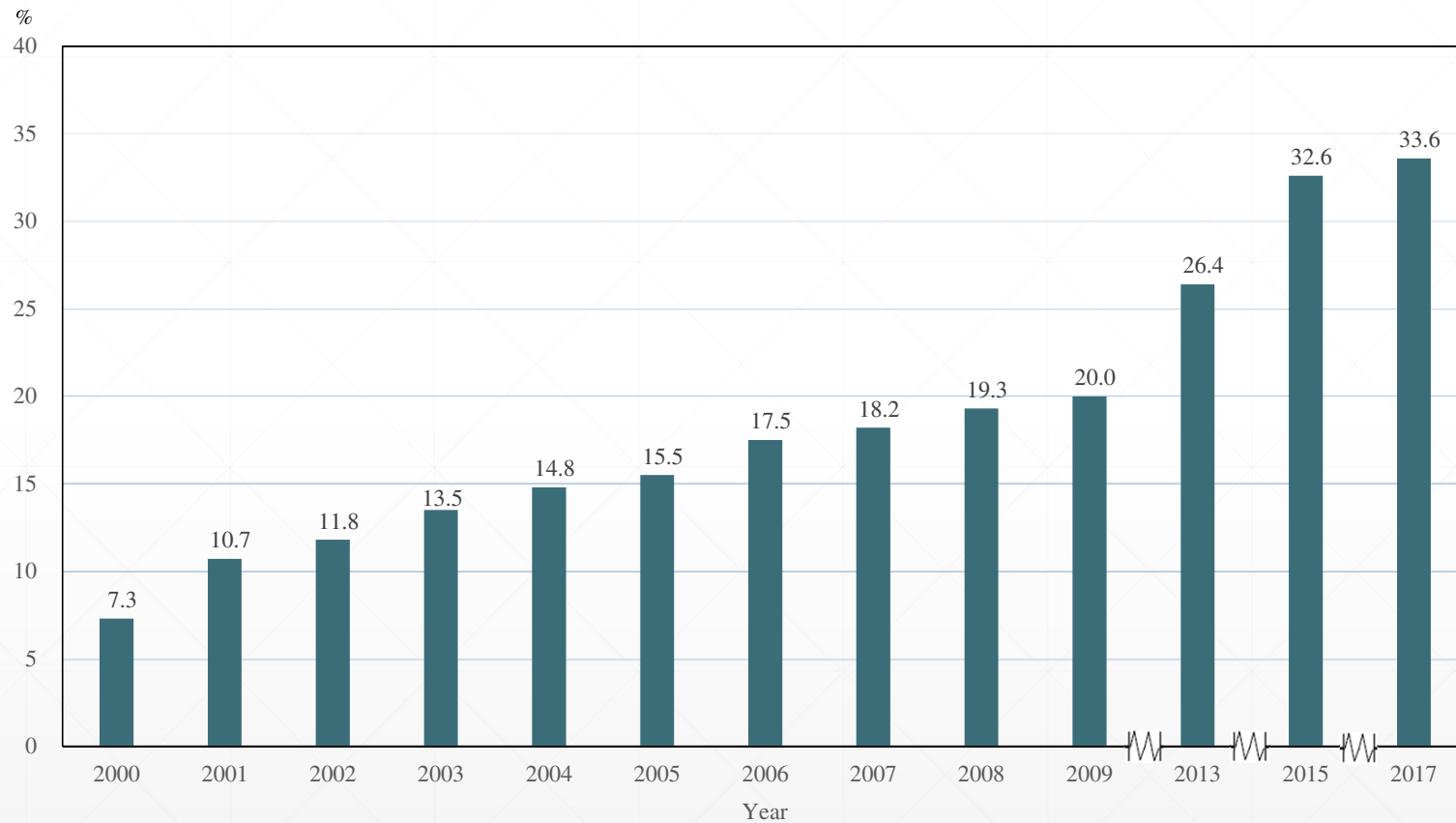
Note: \* Web presence refers to the situation whereby an establishment has a website/webpage or presence on another entity's website (including the website of a related business). Inclusion in an online directory and any other web pages where the establishment does not have substantial control over the content of the webpage are excluded.



# Chart 1: Proportion of establishments using computers and the Internet



## Chart 2: Proportion of establishments with a web presence



## Survey on information technology usage and penetration in the business sector – 2017 key survey results (cont'd)

- OECD definition of e-commerce is adopted
  - E-commerce transaction refers to sales or purchases of goods and services, conducted over computer networks by methods specifically designed for the purposes of receiving or placing of orders
  - The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online
  - Orders made by manually typed e-mails, telephone calls or facsimile are not regarded as e-commerce transaction



## Survey on information technology usage and penetration in the business sector – 2017 key survey results (cont'd)

### □ E-commerce sales

- 7.5% of establishments had received sales orders online in the 12 months before enumeration (e-commerce sales)
- Value of e-commerce sales in 2016 amounted to HK\$448 billion, representing 5.3% of total business receipts

# Thematic household survey on information technology usage and penetration

## □ Frequency:

- 2000 - 2009: conducted annually
- From 2012: conducted biennially
- Supplemented by simplified household survey on personal computer and Internet penetration in 2010, 2012, 2013, 2015 and 2017

## □ Survey method

- Some 10 000 households within a scientifically selected sample of quarters were successfully enumerated, constituting a response rate of about 75%





## Thematic household survey on information technology usage and penetration – 2017 key survey results

- ❑ Percentage of households with PC at home connected to the Internet: 80.2%
- ❑ Percentage of persons aged 10 and over who had smartphone: 88.6%
- ❑ Percentage of persons aged 10 and over who had used the Internet during the 12 months before enumeration: 89.4%



# Chart 3: Number of persons aged 15 and over who had used online purchasing services for personal matters and corresponding proportion



## Thematic household survey on information technology usage and penetration – 2016 key survey results

Typical type of goods / services purchased online	Proportion of persons aged 15 and over who had used online purchasing services for personal matters during the 6 months before enumeration
Daily necessities, clothes and footwear	65.0%
Travel arrangement	38.6%
Ticket reservation	21.1%



## Issues and challenges involved in measuring the digital economy

- ❑ Definition has not been internationally agreed
- ❑ Split of e-commerce from traditional sales
- ❑ International statistical classification standards may not evolve as fast as digital technology: mix of digital and non-digital components
- ❑ Household import of e-services e.g. digital downloads difficult to measure: residence of services supplier uncertain
- ❑ Production from peer-to-peer e-commerce (the sharing economy)
- ❑ Capturing of data from digital intermediaries



# Thank you

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