SYLLABUS

INTRODUCTION TO INFORMATION SOCIETY STATISTICS

ORGANISATION OF ISLAMIC COOPERATION
STATISTICAL ECONOMIC AND SOCIAL RESEARCH AND TRAINING CENTRE FOR ISLAMIC COUNTRIES
Title
Introduction to Information Society Statistics

Prerequisites
None

Overview
This section will familiarize learner with the coherent picture of the state of the information society in the world. It presents available statistical concepts, definitions; challenges and opportunities; data based on a core set of internationally agreed information and communication technology (ICT) indicators and ready them for effective academic and professional practice in the process of statistical research. Primary topics include Information society; E-commerce, e-business, e-government, e-learning, e-communications; ICT Sector, ICT Product classification (goods and services); ICT infrastructure and access; Trade in telecommunications equipment; Revenues, expenses and investment of operators; Core ICT indicators at household and individuals level; Use of ICT by businesses; ICT expenditure and investment; Measurement of ICT indicators; Statistical standards for measuring the information society; The ICT Development Index ; Strategic targets for the future information society; Big Data for official statistics; Challenges and opportunities on using Big Data; Some initiatives of Big Data; Big data for monitoring and for development.

These broad topics have been formed into two units upon which the section is organised. Each unit is developed keeping in mind, ushering learner along a path from elementary exposure to high-level application.

Required
Learner should know the basics of Information and communication technology. For help with acquiring the requisite skills, see:

- http://www.itdesk.info/handbook_basic_ict_concepts.pdf
- http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.44/2015/mtg1/S4-3_UNSDF_Snyder__P.pdf

LEARNING OBJECTIVES

- To develop within the learner an appreciation for the vital and pervasive role of information and communication technology.
- To give the learner a clear sense of how Big data should be analysed. To make familiar with the challenges, opportunities, and finally, how to use Big Data for official statistics.
- To foster the learner’s theoretic and practical understanding of the process of developing ICT indicators, and measuring information society.

CONTENT

The textbook will cover the following:

UNIT 1. INFORMATION SOCIETY

1.1. Introduction
1.2. Empowering society
1.3. E-commerce, e-business, e-government, e-learning, e-communications
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1.4. ICT Sector, ICT Product classification (goods and services)
1.5. ICT infrastructure and access
1.6. Trade in telecommunications equipment
1.7. Revenues, expenses and investment of operators
1.8. Core ICT indicators at household and individuals level
1.9. Use of ICT by businesses
1.10. ICT expenditure and investment
1.11. Measurement of ICT indicators
1.12. Statistical standards for measuring the information society
1.13. The ICT Development Index
1.14. Strategic targets for the future information society

Exercises

UNIT 2. BIG DATA FOR OFFICIAL STATISTICS

2.1. Introduction
2.2. Challenges and opportunities on using Big Data
2.3. Some initiatives of Big Data
2.4. Big data for monitoring and for development

Exercises

RESOURCES

ESSENTIAL READING


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OTHER REFERENCES

The following are possible alternatives to the main text

Measuring-the-Digital-Economy_A-New-Perspective, Corrigenda to OECD publications may be found on line at: www.oecd.org/about/publishing/corrigenda.htm. © OECD 2014
