



A FRAMEWORK FOR DIGITAL SUPPLY – USE TABLES

State of play – October 2019

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Background

- Developed by the OECD **Informal Advisory Group** on Measuring GDP in a Digitalised Economy.
- The advisory group was created under the OECD Working Party on National Accounts (WPNA) to **advance the measurement agenda** in the area of digitalisation and to **develop indicators** that provide more insight in how digitalisation is affecting the economy.
- The advisory group continues its work to **progress the compilation** of digital SUTs.
- The work is feeding into work by the AEG digitalisation sub-group.



Digital Supply – Use Tables (SUTs)

1. Summary of recent publications by statistical organisations.
2. Work related to the Digital Supply–Use tables since last AEG meeting.
3. Outputs and next steps for the Digital SUTs.





SUMMARY OF RECENT PUBLICATIONS BY STATISTICAL ORGANISATIONS



Work by statistical offices on the digital economy

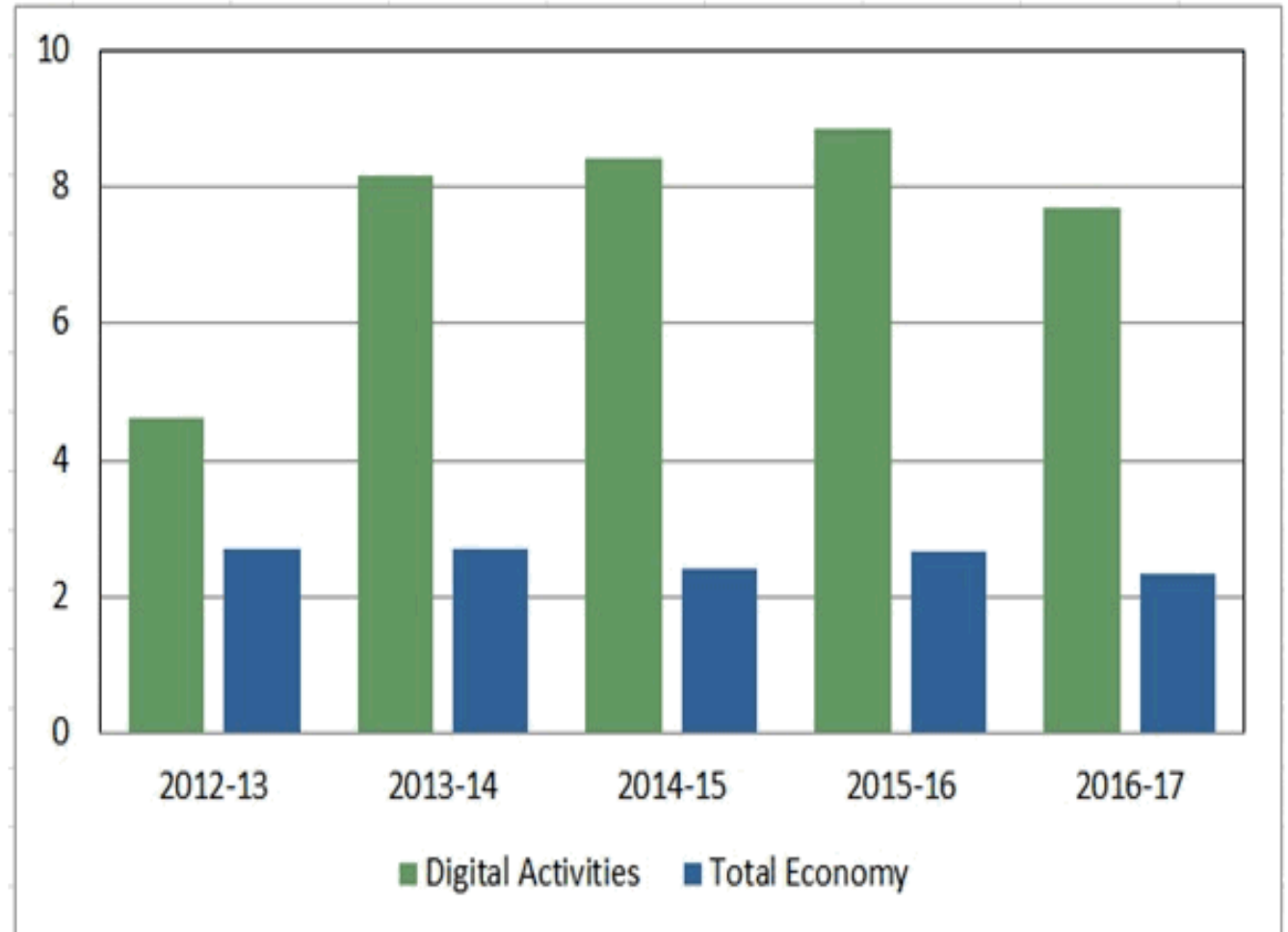
- Since the last AEG meeting, outputs from statistical organisations referring to the “digital economy” includes
 1. **ABS:** “*Measuring digital activities in the Australian economy*” - 1 March 2019.
 2. **BEA:** “*Measuring the Digital Economy: Incorporating Data from the 2018 Industry Economic Accounts*” - 2 April 2019. An update of the publication released a year earlier.
 3. **Statistics Canada:** “*Measuring digital economic activities in Canada, 2010 to 2017*” - 3 May 2019.



Work by statistical offices on the digital economy

Australia, average annual growth from 2012-13 to 2016-17.

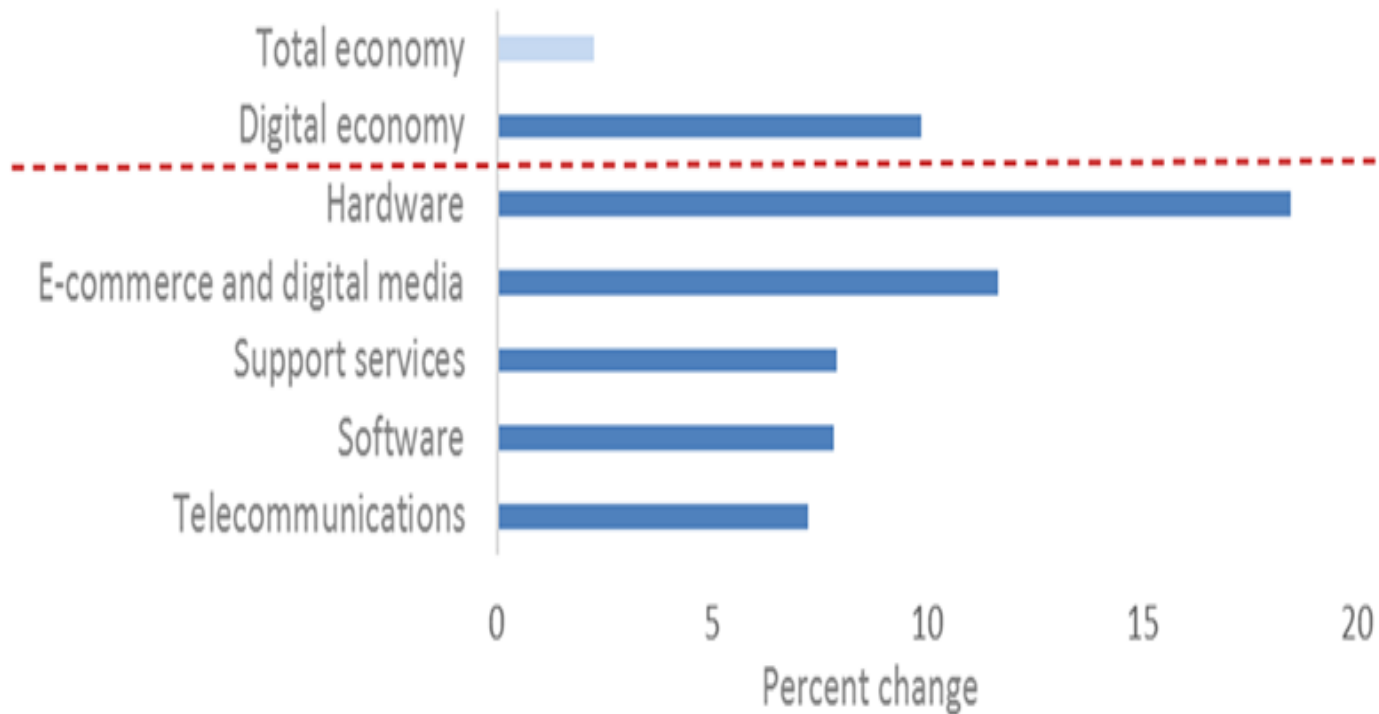
- “**Digital Economy**” growth at 7.5%
- Total economy at 2.5%





Work by statistical offices on the digital economy

Components of the Digital Economy:
Real Value-Added Average Annual Growth, 1998–2017



U.S. Bureau of Economic Analysis

United States, Average annual growth from 1998–2017.

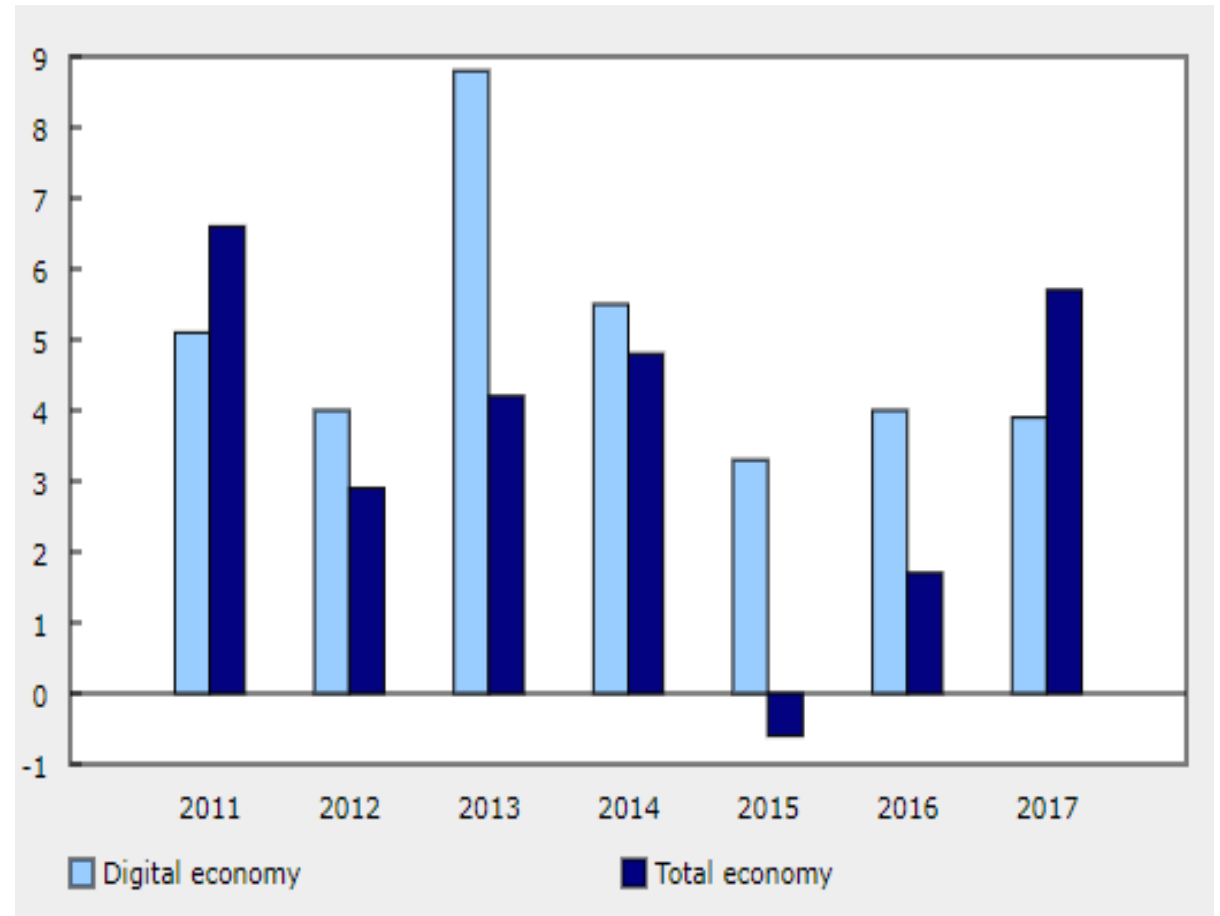
- “**Digital economy**” growth at 9.0%
- Total economy at 2.3%



Work by statistical offices on the digital economy

Canada, average annual growth from 2010-to 2017.

- “**Digital Economy**” growth at 5.7%
- Total economy at 4.0%





Work by statistical offices on the digital economy

- This work has taken the SUT tables (simplified below) and labelled certain products (and therefore parts of industries) in the SUT tables as digital.
- Digital economy = total GVA of proportion of industries making digital products

Supply & Use Tables		Industries								TOTALS
		Industry A	Industry B	Industry C	Industry D	Industry E	Industry F	Industry G	Industry H	
Product	Product 1									
	Product 2									
	Product 3		DIGITAL	DIGITAL		DIGITAL			DIGITAL	
	Product 4		DIGITAL						DIGITAL	
	Product 5									
	Product 6									
	Product 7									
	Product 8		DIGITAL			DIGITAL				
	Product 9									
	Product 10									
Totals			Total Digital GVA	Total Digital GVA		Total Digital GVA			Total Digital GVA	



Product 3,4 and 8 defined as digital



Sum of total Digital GVA = "Digital Economy"



Work by statistical offices on the digital economy

This work is an excellent start and will feed into the proposed digital SUTs. However limitations of the work include:

- “Digitalisation” is **limited to only (but all of) the total product row**.
 - Goods and services delivered by platform or other products only partly affected by digitalisation are not included.
- The **lack of agreed definitions and terminology** impacts the ability to compare outputs internationally.
 - only high level aggregates have been produced (i.e. total digital economy, type of digital activity.)
- Compiled using the **production approach only**.
 - limited information on consumption, import/export, etc.
- They **do not refer to any of the “other” digital issues**.
 - Zero cost consumer products, the use of data in production etc.



Response: Digital SUTs

- It does not provide one number as a country's "digital economy" estimate.

Rather it can provide a suite of indicators on digital activity:

- Total E-commerce in the economy.
 - Total expenditure on ICT goods and digital services by conventional industry.
 - Total imports and Exports of Digital services
- It does not measure the impact of digitalisation on a specific industry (e.g. digitalisation's impact on the production of orange juice).

This is not practically possible and is likely not useful.

- would be similar to trying to measure the impact of electricity or oil on an industry.

- It does not have all the answers regarding the measurement of products outside the current production boundary. (i.e. data)

It does provide a location for them to be included if and when countries begin to estimate the products.





WORK RELATED TO THE DIGITAL SUPPLY– USE TABLES SINCE LAST AEG MEETING



Digital SUTs since last AEG meeting

- As well as the AEG, the framework for digital SUTs was presented to several other fora, including:
 - ESCoE 2019 conference on economic measurement.
 - Various Eurostat and OECD working parties.
 - ECB seminar.
- Explicit feedback was obtained from the members of the informal advisory group.
- A final version of the framework was presented to the informal advisory group at its third meeting on July 1-2.
- This version has been sent to the members of the OECD WPNA for their endorsement.



Summary of main changes

Overview of the main feedback on initial version:

1. Agreement on the **need to include information on digitally delivered**.
2. Request for **greater clarity** regarding **what is and is not a digital service**.
3. Issue that some units may **meet the definition of several digital industries**.
4. Issue that results for **digital intermediary platform** may lose relevance as amount of units represented in this industry **could become quite large**.
5. Recommendations for **small changes to classifications names**.
6. Many countries currently do not have the **capability to produce** estimates in the table.



Digitally delivered

- Defined as “*transactions that are delivered remotely over ICT networks – i.e. over voice or data networks, including the internet, in an electronically downloadable format*” (OECD-WTO, Handbook on Digital Trade).
- Not only are the Digital SUTs now **consistent with digital trade** framework but they also **cover all ordering/delivery possibilities**.
- Represented in the Digital SUTs as **breakdowns of the columns** for;
 - total output,
 - total exports,
 - total imports.

Previously assumed to not occur, therefore excluded from previous version

	Digitally delivered	Non-digitally delivered
Digitally ordered	Digitally ordered, Digitally delivered.	Digitally ordered, Non-digitally delivered.
Non-digitally ordered	Non-digitally ordered, Digitally delivered.	Non-digitally ordered, Non-digitally delivered.





Digital services vs. services delivered digitally

- Countries requested **greater clarity** regarding what is and is not a digital service.
 - A service being delivered digitally **does not automatically** make that service a digital service.
 - The category *digital services* **covers all services** included in the alternative classification of **ICT products**.
 - Products not included within the list of ICT products, **remain in their initial product classification**, even if delivered digitally. e.g. programming and broadcasting services, gambling and betting services, education, etc.



Other changes

- Units possibly covered in more than one digital industry:
 - The **digitally enabling industry** covers units that are traditionally classified in the ICT sector, but some of these may also qualify for **other digital industries**.
 - Guidance was updated outlining a hierarchy - Unit should be placed in the digital industry **with a more specialised purpose or definition**.
- Concern that some digital industry classifications might be too large and become meaningless:
 - Guidance was updated to reiterate that countries are able to **compile additional splits** if the data is available and there is a demand for it.
 - Transactional splits for **additional products**,
 - Adding digital delivered for certain **industries**,
 - **Splitting intermediary platforms** based on the type of product being intermediated.
 - A reminder that the Digital SUTs are an attempt to find a **common classification and standard** that countries can leverage off.



OUTPUTS AND NEXT STEPS FOR THE DIGITAL SUPPLY-USE TABLES



Compilation of the framework

Many countries expressed that currently they would not have the capability to produce estimates in the table.

- The Digital SUTs are partly designed to **act as road maps** that help to motivate **the development of new data sources**.
- Many items included in the tables can be readily **produced from aggregations of current statistics**, and even partially completed tables will significantly help to fill the current information gaps.
- Digital SUTs will help to **provide momentum** for all countries in fostering the compilation of **internationally comparable data** on the digital economy.
- Some **initial indicators will be targeted first**.



High priority indicators

- Specific high priority indicators were discussed at the advisory group meeting on July 1-2, 2019.
 1. **Output, Gross Value Added (GVA)** and its components, of **digital industries**.
 2. Intermediate consumption of **Digital Intermediary Services (DIS)**, **Cloud Computing services (CCS)** and total ICT goods and digital services.
 3. Expenditures **split by nature of the transaction**.
- Provides a wide scope for countries to begin producing estimates despite the various levels of data sources and resources available across countries.



High priority indicators (cont.)

- Help in **co-ordinating the initial results** that can be derived from the Digital SUTs.
- Maximise its use as an **internationally comparable framework.**
- Allow for the Digital SUTs to remain as a **roadmap for co-ordinated development** with less advanced countries.
- Formal proposal sent to members of advisory group in September to **gage feasibility and timeframe.**
- Possibly start **collection of first experimental results**, focusing on high priority indicators, in the course of 2020.



Your view

The AEG is requested:

- To offer **their opinion on the proposed high priority indicators** chosen by the advisory group? Cognisant of the need for statistical organisations to populate these high priority indicators relatively quickly.
- To reflect on any **data sources, methods or compilation intelligence** that might be applied **to assist with, or speed up**, the compilation of the digital SUTs.



Questions?

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“The cricketers” Russell Drysdale, 1948