Digital SUTs framework:

Increasing the visibility of digitalisation in the national accounts

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Digital SUTs…… The journey

- Developed by the OECD **Informal Advisory Group** on Measuring GDP in a Digitalised Economy.
- The advisory group was created in 2017 to advance the **research agenda on digitalisation.**
- The work has evolved from a rough abstract at IARIW conference into a formalized **SNA guidance note and part of a revised SNA**.
- **Several countries** have produced estimates consistent with framework.
- "We reaffirm that the 2020 Roadmap can help ensure that **measurement of the digital economy remains a priority** in G20 countries and in International Organisations and that adequate resources are devoted to its implementation. **We value the contribution of sharing good practices**." *G20 Digital ministerial declaration* - (August 5 2021).

A Digital Economy? or has the Economy turned Digital?

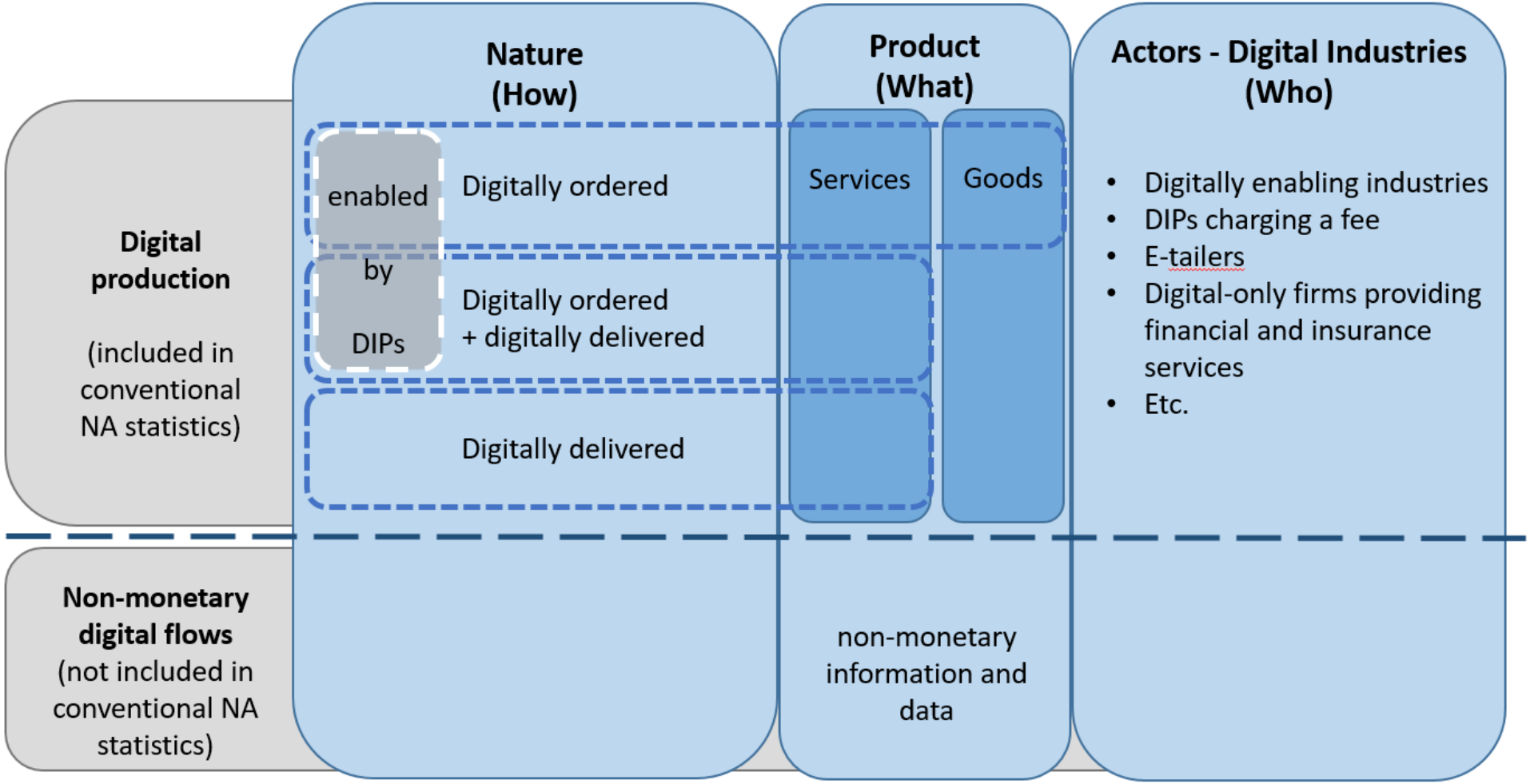
- **No Single definition** of the Digital Economy within the digital SUT framework. But fundamentally a focus on transactions that are either digitally ordered, digital delivered or platform enabled.
- **A suite of indicators,** reflecting the multi-dimensional nature of the digital economy.

Transactions: Digitally ordered / Digitally delivered / Via a platform

Products: ICT goods and digital services, specific products fundamental to the digital economy (Cloud – intermediation services)

Industries: Actors that are leveraging of the digital transformation

Digital SUT Framework



Benefits of a multi-dimensional approach to measurement of Digital economy

- A re-allocation rather than a new compilation
- Provides answers to a broad range of policy questions
- NSO's can compile the components for which they have data for.

Digital SUTs…… Final word on definitions

*"The Digital SUTs provide countries with some **flexibility** on the choice of definition, while also implying that **increasing the visibility** of digital transactions (and of the products and new digital industries involved in them) is a **more achievable** outcome in the short term than reaching an international agreement on a statistically implementable **aggregate definition**."*

Digital SUT framework, High Priority Indicators

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,** includes estimates of digital trade.

- **Provides a wide scope for countries** to begin producing estimates despite the various levels of data sources and resources available across countries.
- Help in **co-ordinating the initial results** that can be derived from the Digital SUTs.

Digital SUT compilation handbook

IAG currently compiling **a Digital SUTs compilation handbook**

- To define clearly the various **concepts used**, list the **high priority indicators** that will be targeted first, and **set out expectations** for compilers and users of Digital SUTs.
- To **document and share** the various work currently being undertaken by national and international organisations to make digitalisation more visible in macro-economic statistics. This work will **assist countries in their efforts** to populate the Digital SUTs.

Help countries take the step from ad-hoc digital indicators to more easily interpretable and comparable versions.

Digital SUT compilation handbook

Section 1 - **Understanding the Digital SUT framework**

- Describes the Digital SUTs conceptual framework and how it fits into the broader international economic statistical system.

Section 2 - **Creating digital indicators for use in the Digital SUTs**

- Explains the different perspectives of product types, nature of the transactions and digital industries.
- Presents examples of how countries collect and compile indicators associated with the three perspectives.

Section 3 – **Combining indicators with National Account data**

- Discusses compiling high priority indicators consistent with Digital SUT framework based on collected indicators.

Digital SUTs - published by Statistics Canada

	2017	2018	2019
	millions of dollars	millions of dollars	millions of dollars
Total, all industries	**1,991,534**	**2,079,869**	**2,157,352**
Total digital industries	103,298	111,384	117,788
Information and communications technology			
Hardware	6,536	7,012	7,243
Software	41,891	45,726	48,013
Telecommunications	36,166	37,175	37,460
Other services	9,912	10,669	11,511
Digital intermediary platforms	1,728	2,374	3,183
Data- and advertising-driven digital platforms	835	846	979
Online retailers and wholesalers	3,748	4,248	5,187
Digital-only firms providing finance and insurance services	2,340	2,752	3,392
Other producers only operating digitally	448	582	821

Digital SUTs - published by Statistics Netherlands

- Extensive information on **methodology**.
- Information on products and **mode of transaction**
- **Recommendations** on improvements to the framework

Table 6.1: Output and gross value added per Digital Industry, 2018, billion euros

	Output	GVA	Share	
			Output	GVA
All industries	1.514,5	692,6	100%	100%
Total digital industries	137,4	55,3	9%	8%
Digitally enabling industries	95,4	36,4	69%	66%
Digital intermediary platforms	16,3	5,4	12%	10%
Firms dependent on platforms	1,0	0,7	1%	1%
E-Tailers (Retail)	3,4	1,7	2%	3%
E-Tailers (Wholesale)	20,7	10,8	15%	20%
Digital only firms providing finance and insurance services	0,7	0,4	0%	1%
Other producers only operating digitally	NA	NA		

Digital SUTs – International comparison

Percentage of total Gross Value Added (GVA)

	Netherlands (2018)	Canada (2018)	USA (2020)
Digital intermediation platforms	0.8%	0.1%	-
E - Tailers	1.8%	0.2%	2.5%*
Digital enabling industries	5.3%	4.8%	7.6%*
Total digital industries	8.0%	5.4%	10.2%*

**GVA estimate based on production of specific products rather than units undertaking specific activities.*

Digital SUTs – International comparison

Percentage of total output (Supply side)

	Canada (2018)	Netherlands (2018)	Ireland (2020)
Digitally Ordered	6.8%	16.1%	19.3%
Digitally Delivered	2.4%	22.6%*	28.5%*

** Potentially digitally deliverable*

Digital SUTs – International comparison

Percentage of total gross output

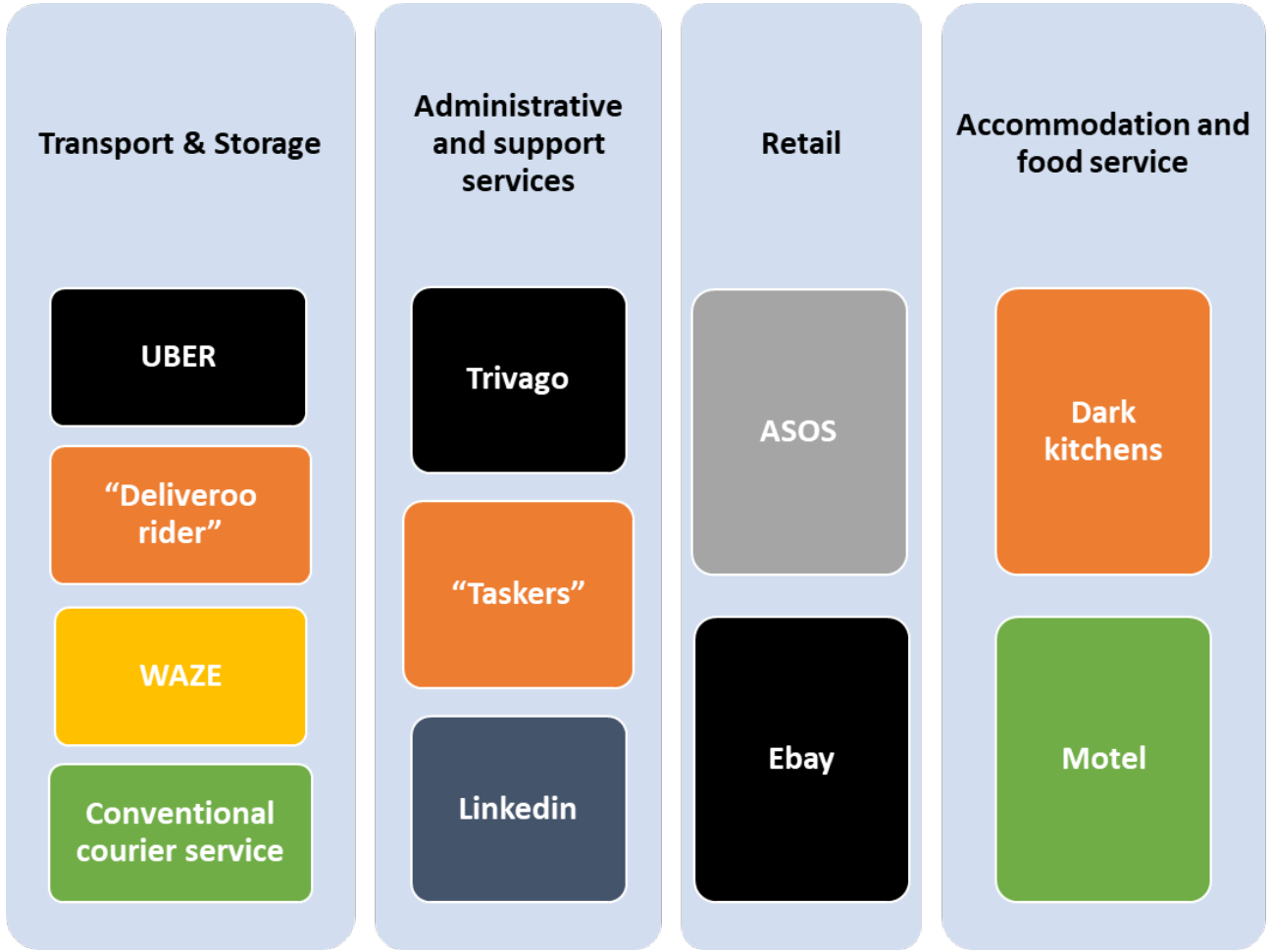
	Netherlands (2018)	Canada (2018)	USA (2020)	Ireland (2020)
Priced digital services (excluding cloud)	5.5%	--	4.0%	--
Cloud computing services	0.6%	0.2%*	0.4%	--
Total digital products	8.4%	--	9.1%	33.5%

* Percentage is output of data processing, hosting and related services (NAICS 51821)

Potential estimates, countries may achieve in the short term

- Re-allocate existing industries into digital industries
- Apply household or business survey information to national account aggregates
- Model specific products (Cloud / Intermediation Services)

Re-allocate up existing industries



From ISIC/NACE to "digital industries"

- Digital intermediary platforms charging a fee
- Firms dependent on intermediary platforms
- Data and advertising driven digital platforms
- E-Tailers
- Other producers operating digitally
- Remain in current industry classification

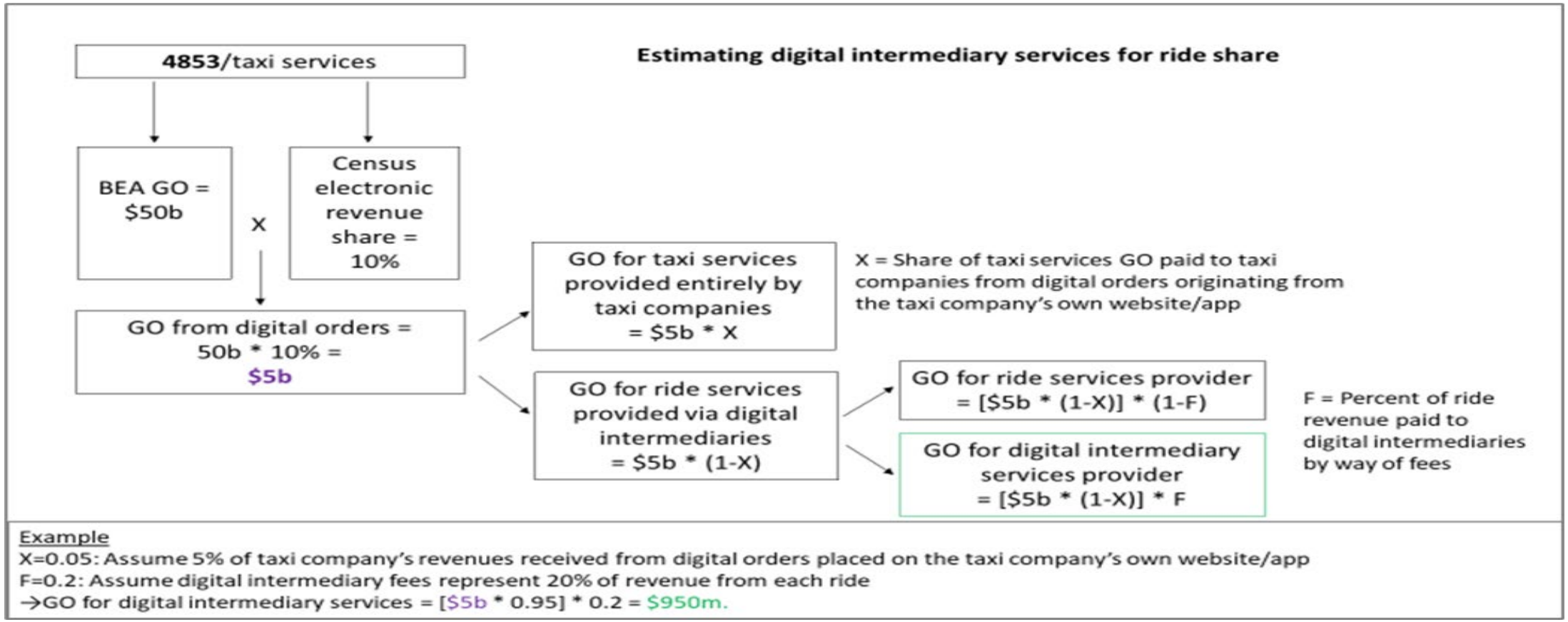
Apply household and business survey to national account estimates

Preliminary Digital Supply Table - Ireland 2020 - %

NACE	Agriculture	Industry	Construction	Acc,Dist and Transport	ICT	Financial Services	Real Estate	Professional, Admin and Support	Health,Education	Household Activities	Total	Digital Products
1. Digitally Ordered -Total	.....	8.8%	.....	47.8%	52.3%	.....	7.3%	17.8%	.....	26.2%	21.3%	38.2%
Goods	.....	8.2%	.....	0.8%	0.0%	.....	.....	0.0%	.....	0.0%	3.1%	
of which EDI	.....	4.0%	.....	0.3%	0.0%	.....	.....	0.0%	.....	.....	1.5%	
of which DIP	.....	0.2%	.....	0.0%	0.0%	.....	.....	0.0%	.....	.....	0.1%	
of which Website	.....	4.0%	.....	0.4%	0.0%	.....	.....	0.0%	.....	.....	1.5%	
Services	.....	0.6%	.....	47.0%	52.3%	.....	7.3%	17.8%	.....	26.2%	18.2%	
of which EDI	.....	0.3%	.....	19.8%	16.7%	.....	.....	11.4%	.....	.....	6.6%	
of which DIP	.....	0.0%	.....	2.9%	1.1%	.....	.....	0.2%	.....	.....	0.5%	
of which Website	.....	0.3%	.....	24.3%	34.5%	.....	.....	6.2%	.....	.....	10.5%	
2. Potentially Digitally Delivered Services	.....	1.3%	0.7%	0.1%	90.3%	98.5%	.....	44.1%	6.2%	30.0%	31.2%	
3. of which digitally ordered	.....	0.1%	.....	0.1%	47.3%	.....	.....	7.9%	.....	7.9%	11.3%	
4 = (1+2-3) Products transacted digitally	.....	10.0%	.....	47.8%	95.4%	.....	.....	54.1%	.....	48.3%	41.2%	
Products not transacted digitally.	.....	90.0%	99.3%	52.2%	4.6%	1.5%	92.7%	45.9%	93.8%	51.7%	57.4%	

Model Specific Products : Intermediation

Various data sources used to break up SUTs and create new outputs.



Digital SUTs

- Digital SUTs offer an **non-prescriptive framework**, that produces international **comparable** indicators, consistent with GDP.
- They can be used as a feedback loop, improving the core national accounts and GDP.
- They **provide evidence** to users regarding activities with low visibility.
- They will **continue to be developed and refined** (improved) due to greater level of country involvement and compilation material (*think distributional outputs*).

Digital SUTs…. the journey continues.