



Non-survey based measurement of e-commerce and the digital economy

Development of Digital Supply-Use Tables of Georgia



WORKING GROUP ON MEASURING
E-COMMERCE AND THE DIGITAL ECONOMY
FOURTH MEETING
30 November-1 December 2023
Palais des Nations, Geneva

Main indicators and tables of National Accounts



National Accounts of Georgia

- Quarterly and annual GDP and other aggregates of National Accounts
- Flash Estimates of Economic Growth
- Supply-Use Tables (SUTs)
- Input-Output Table (IOT)
- Regional GDP
- Sequence of Accounts (Current Accounts and Capital Account)

Publication timetable



Data	Publication period
Monthly indicator of economic growth (MIEG)	30 th day from the completion of the reporting period
Quarterly GDP (production side)	80 th day
Quarterly GDP (expenditure and income sides), GNI	90 th day
Annual GDP	t+11 months
Supply and Use Tables	t+12 months
Input-Output Table	t+12 months
Regional GDP	t+12 months
Revision of Dynamic Time Series	Every 5 years

Data sources



Internal Data Sources:

- ✓ Surveys of non-financial corporations
- ✓ Survey of Non-Profit Institutions Serving Households (NPISH)
- ✓ Household survey
- ✓ Labor force survey
- ✓ Survey of Agricultural Holdings
- ✓ Price statistics (CPI, PPI, Export/Import price indices)
- ✓ External trade statistics
- ✓ Population Census
- ✓ Surveys on Non-observed economy

External Data:

- ✓ Government finance statistics
- ✓ Turnover of Value Added Tax payer companies
- ✓ Data on national and commercial banks
- ✓ Balance of Payments statistics
- ✓ Statistical indicators of insurance companies



Methodology and classifications

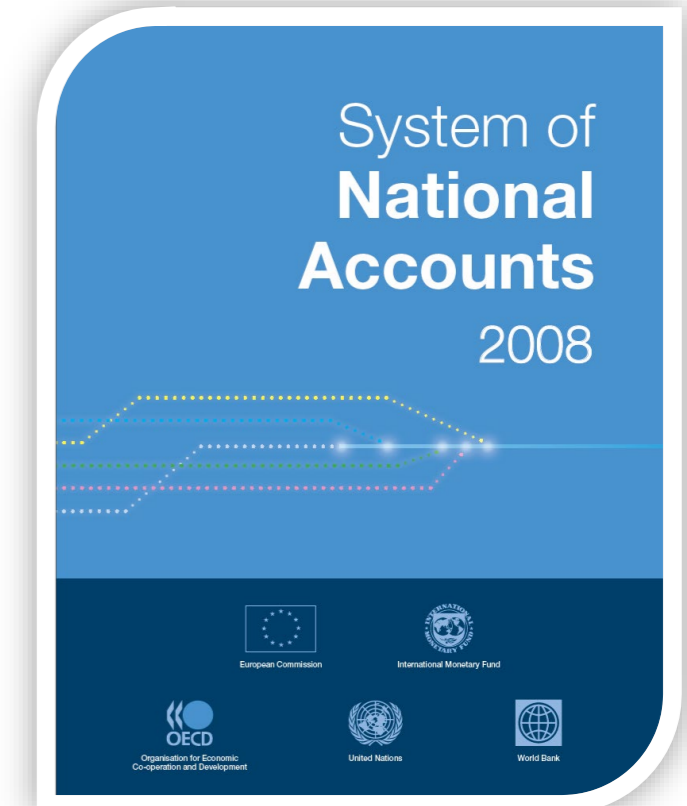


Methodological background

- ✓ Compilation of National Accounts in Georgia is based on the System of National Accounts 2008 (SNA 2008) methodology

Classifications used:

- ✓ Classification of Economic Activities (NACE rev.2)
- ✓ Classification of Products by Activity in the European Community (CPA 2008)
- ✓ The Classification of Individual Consumption by Purpose (COICOP)
- ✓ Commodity Nomenclature for External Economic Activities based on the Harmonized Commodity Coding and Description System (HS 2017)
- ✓ Classification by Broad Economic Categories (BEC rev.4)
- ✓ Classification of the functions of government (COFOG)



Metadata

<https://www.geostat.ge/en/modules/categories/110/national-accounts>

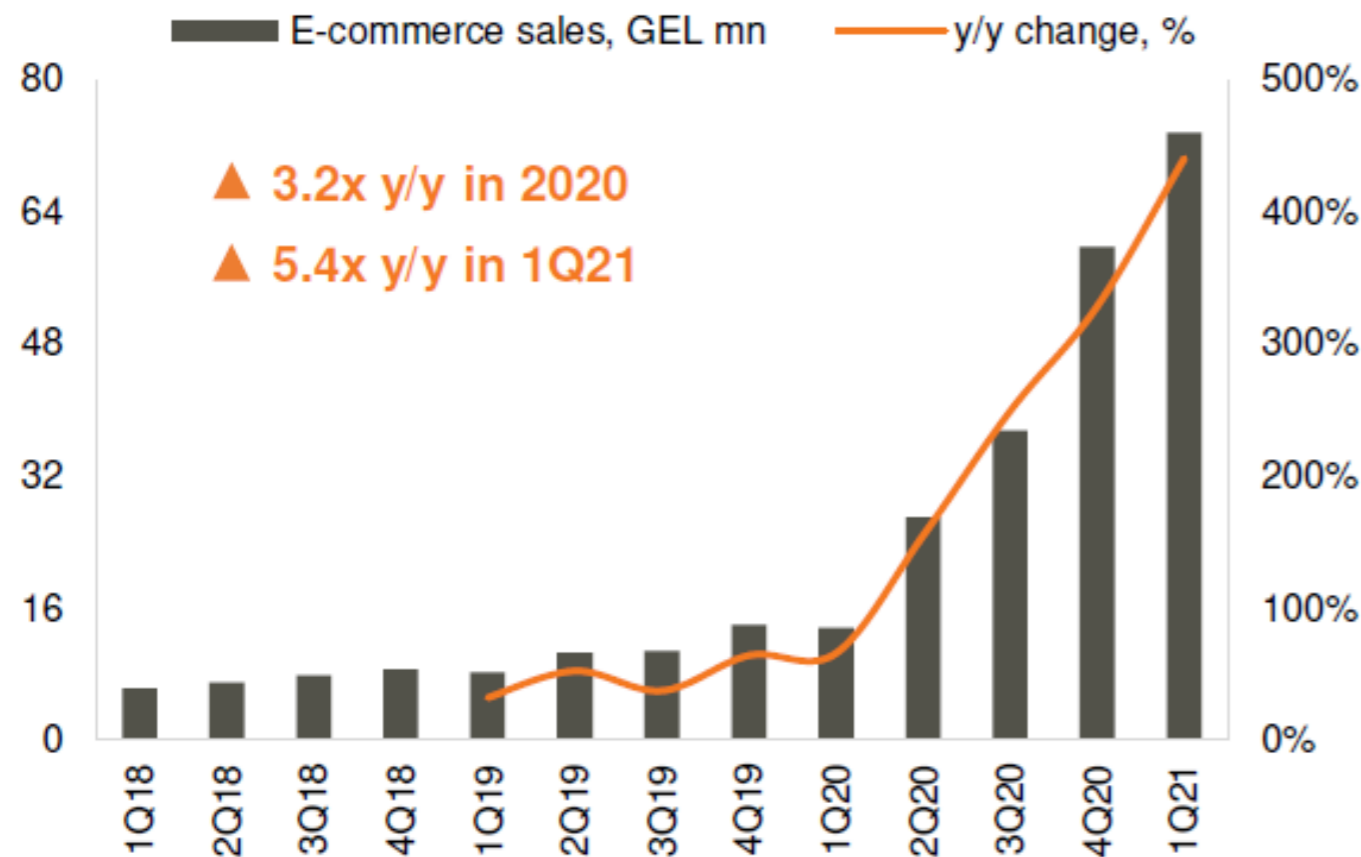
Trend of recent years



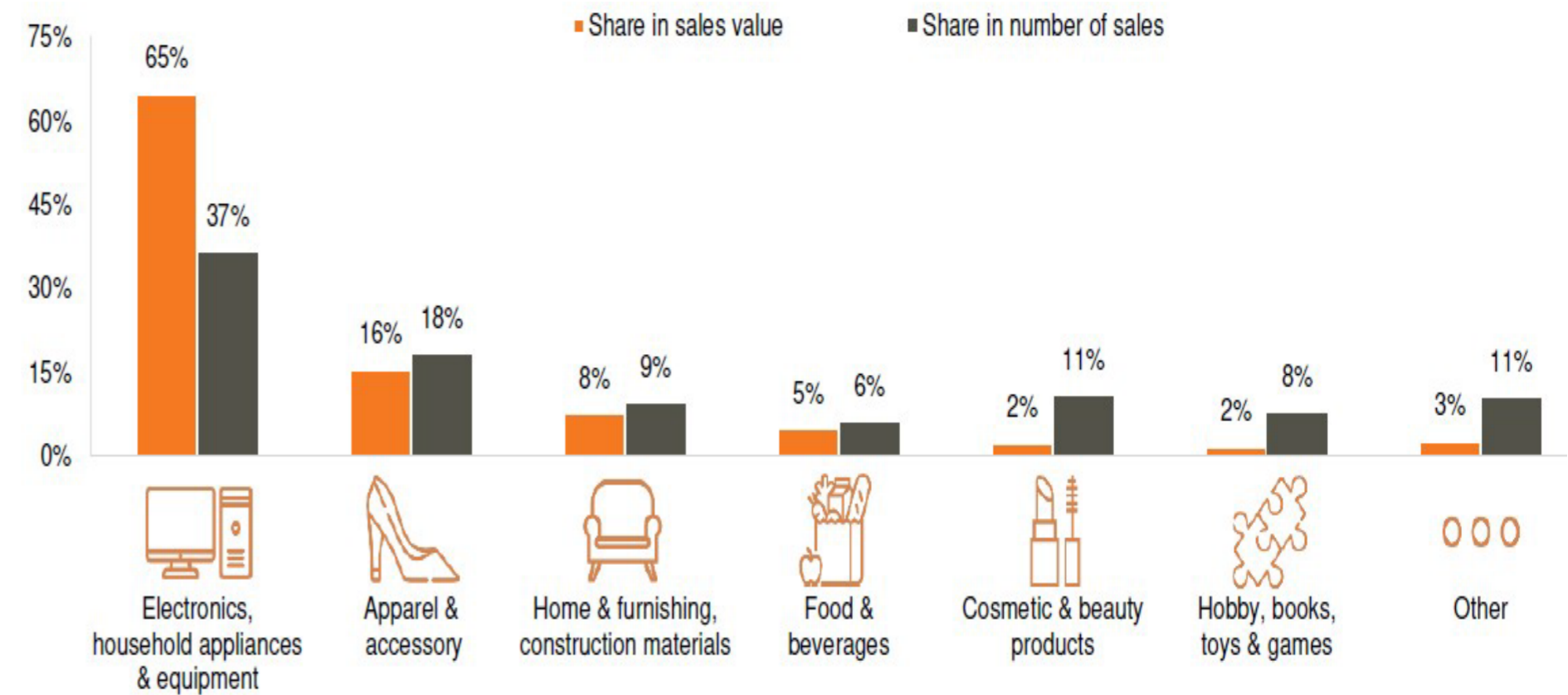
Consumption

A shift in consumer behavior in Georgia has been observed, as evidenced by skyrocketing e-commerce sales.

Size and annual growth of local E-commerce in Georgia, Q1 2018 - Q1 2021



Top Product Categories among online shoppers in Georgia, 2020



Source: Galt & Taggart (2021), *E-Commerce in Georgia*.
https://api.galtandtaggart.com/sites/default/files/2021-07/report/e-commerce-in-georgia_july-2021_eng.pdf

Trend of recent years

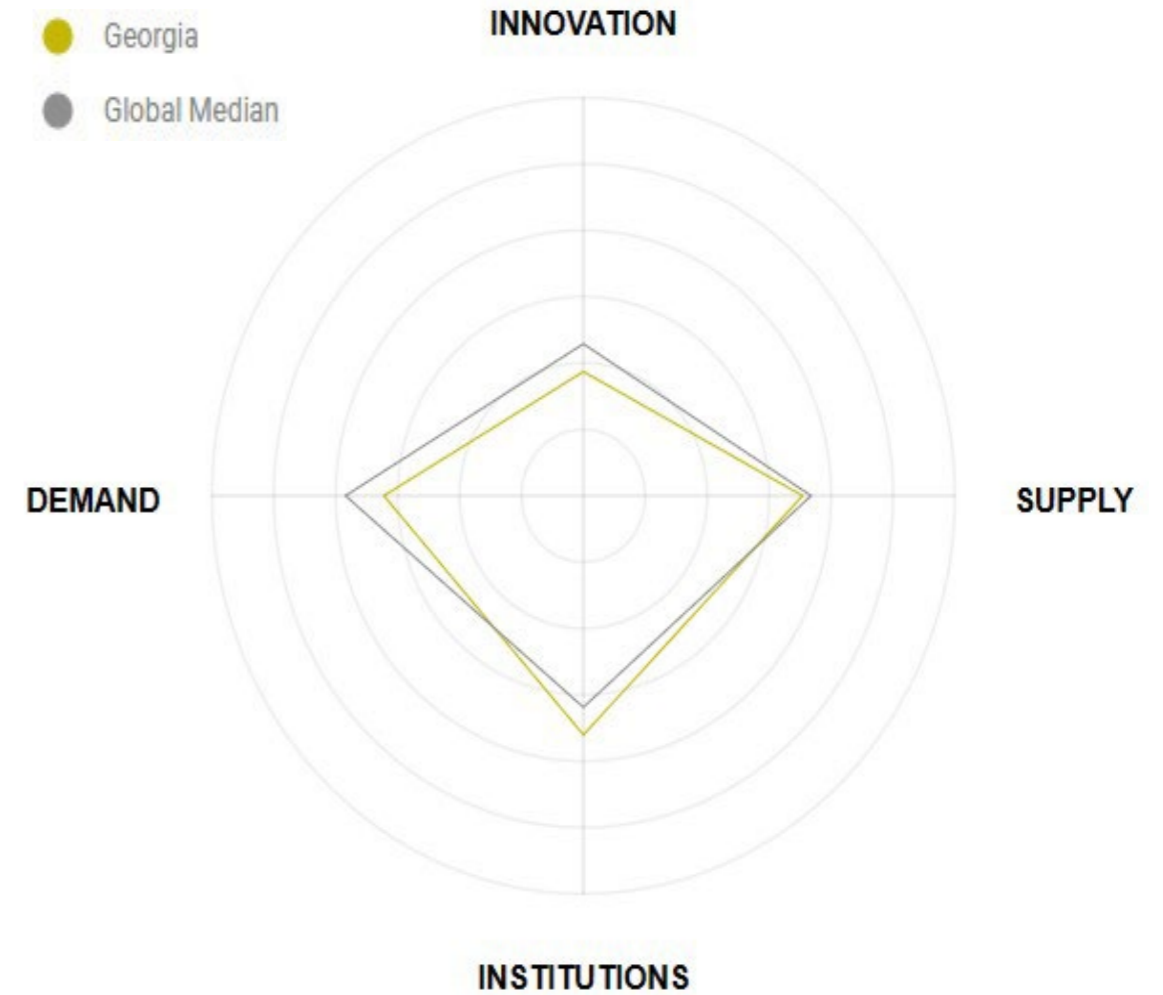


Georgia is placed in the “Break out” zone where digital evolution levels are not too high but fast-growing.

Digital Intelligence Index, 2020

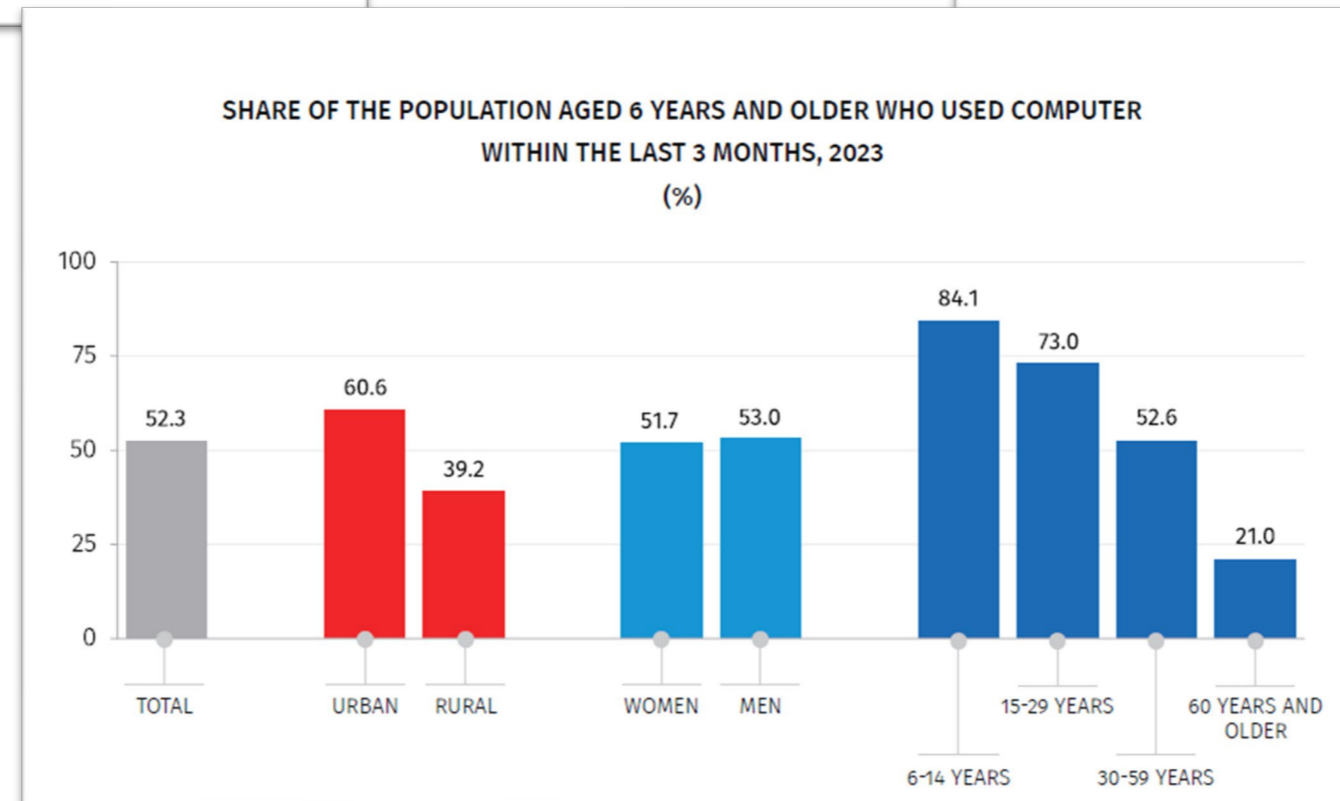
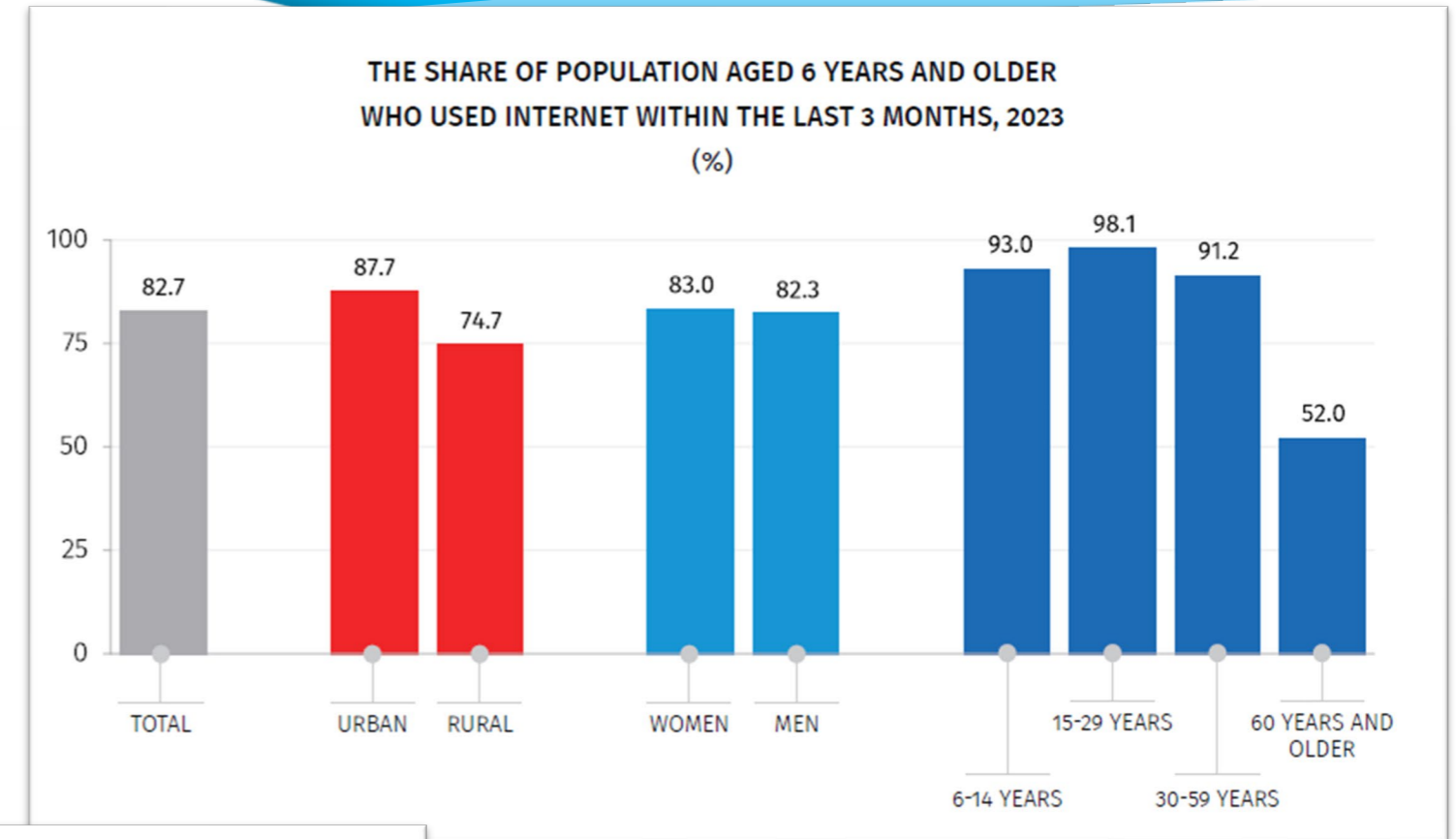
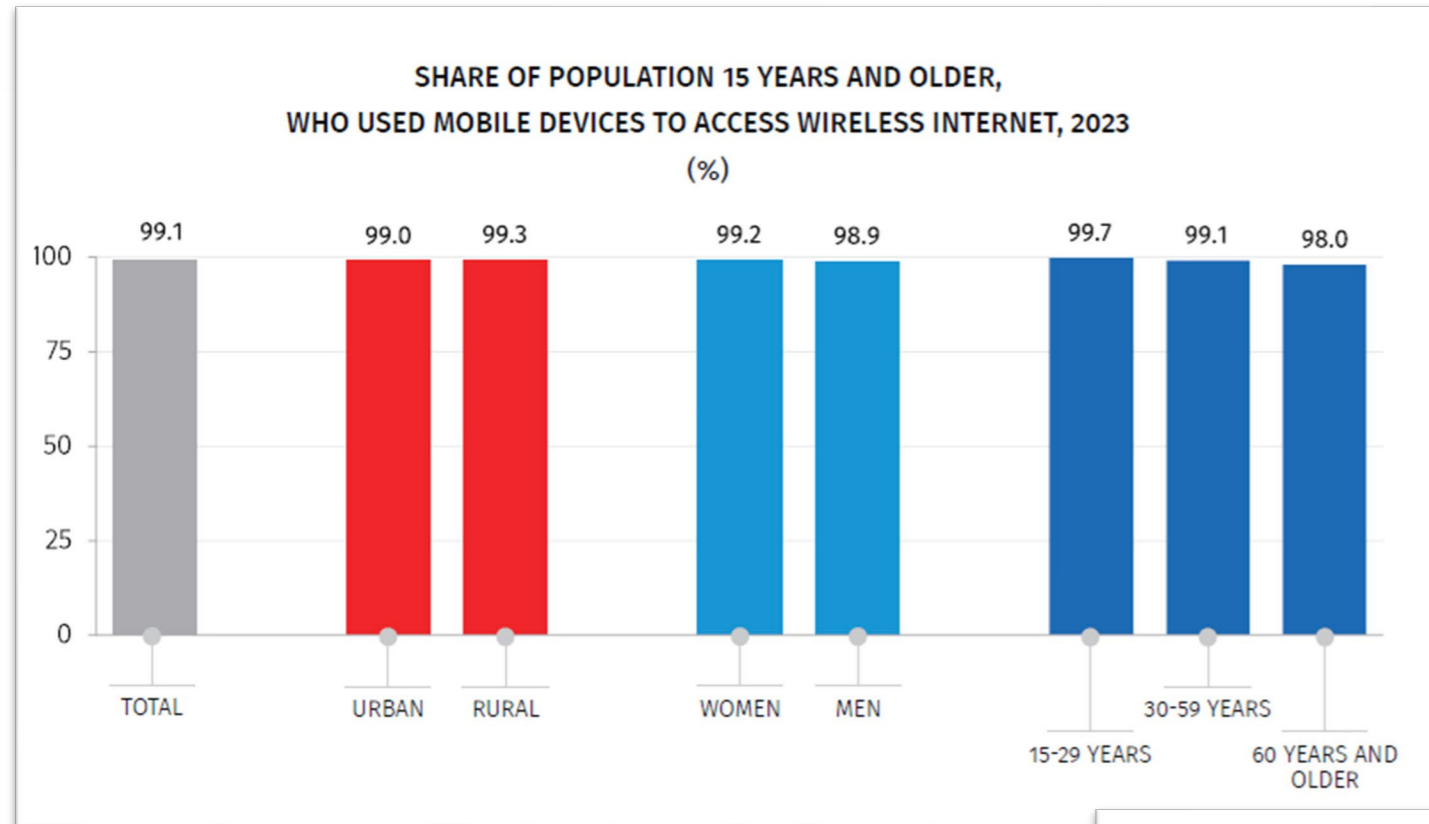


Key Drivers of Digital Evolution, 2020



Source: The Fletcher School at Tufts University (2020), *The Digital Intelligence Index*. https://api.galtandtaggart.com/sites/default/files/2021-07/report/e-commerce-in-georgia_july-2021_eng.pdf

Results of ICT surveys (households)



Results of ICT surveys (enterprises)



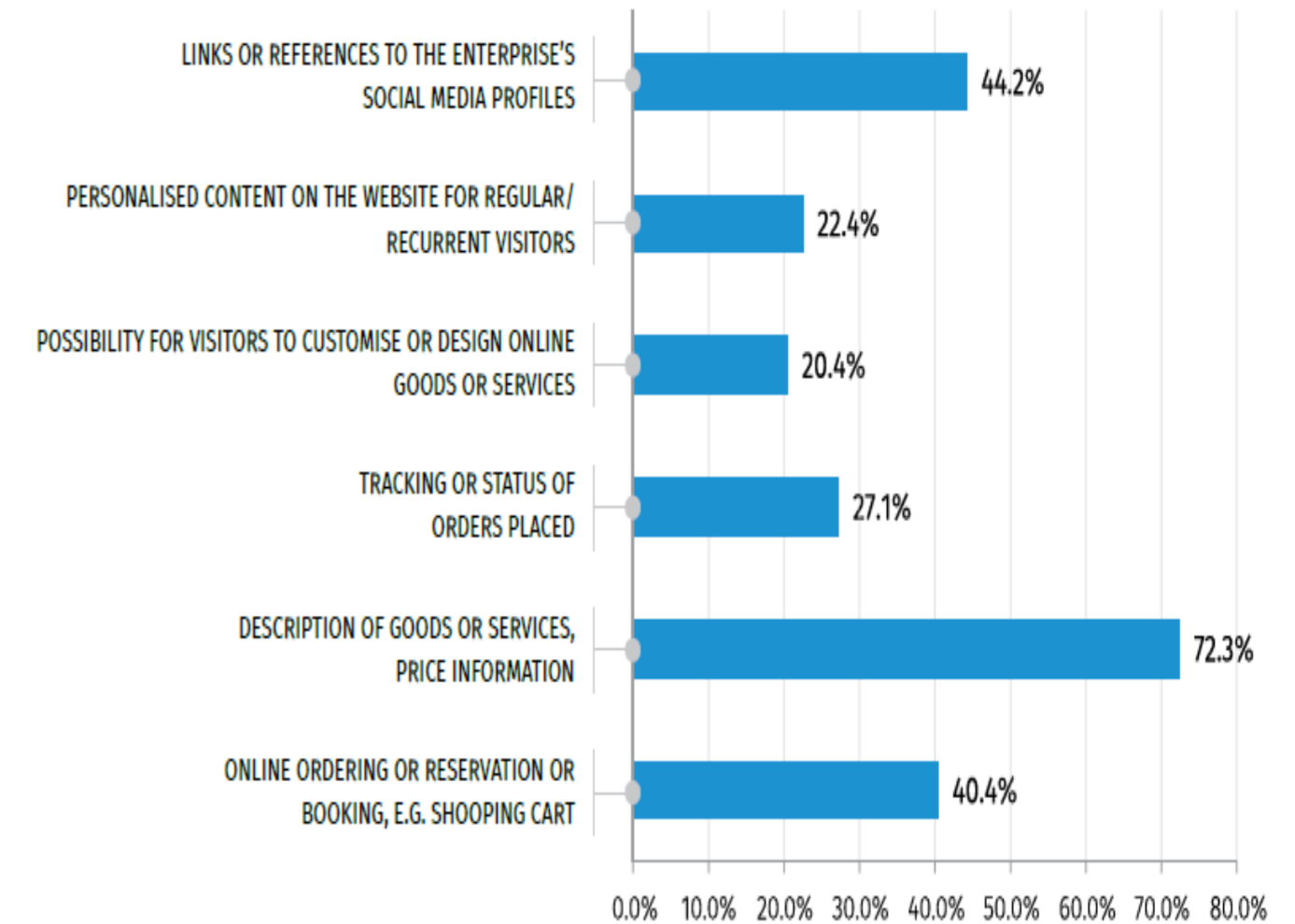
The share of enterprises that had access to the Internet by January 1st of the relevant year, %

		2016	2017	2018	2019	2020	2021	2022	2023
The share of enterprises that had access to the Internet	Total	97.5%	98.4%	98.5%	93.0%	94.0%	95.0%	84.2%	84.4%
	Of which:								
	Small	X	X	X	92.6%	93.0%	94.8%	83.7%	84.0%
	Medium	X	X	X	98.1%	99.6%	99.8%	99.4%	99.4%
Large	X	X	X	99.6%	100.0%	100.0%	99.6%	99.6%	

The share of enterprises that had web sales of goods / services, %

	2020	2021	2022
By enterprise's websites or apps (including extranets)	3.0%	2.7%	2.9%
By e-commerce marketplace websites or apps used by several enterprises for trading goods or services (e.g. MyMarket.ge, Wishlist.ge, Vendoo.ge, My.ge, Procurement.gov.ge, Booking.com, hotels.com, eBay, Amazon, Amazon Business, Alibaba and etc)	1.1%	1.9%	1.9%
Did not have	96.8%	96.0%	96.2%

FACILITIES OF WEB-PAGES AND WEB-SITES OF ENTERPRISES, 2022



Cooperation with ADB



“Development of New Statistical Resources and Building Capacity in New Data Sources and Technologies”
Knowledge and Support Technical Assistance 6856



From
the People of Japan

**Virtual Inception
Workshop**

10 February 2023

**Bilateral meeting:
GEOSTAT and ADB**

04 May 2023

**Virtual Introductory
Workshop**

26 to 27 July 2023

**In-country Mission
to Georgia**

16 to 27 October 2023

Why Digital SUTs



- The digital SUTs framework provides a way to measure elements of the digital economy and **make them visible in the national accounts** without relying on one single definition;
- The digital SUTs remain **consistent with the SNA framework** and the conventional SUTs by providing an alternative regrouping of industries and products to highlight the core aspects of the digitalization; Majority of digital industries and products are aggregated to other industries in the current classification systems; hence, preliminary estimates are relatively easy to generate;
- Digital SUTs are **NOT necessarily recompiled** from source data instead, **missing elements are filled and allocated from known elements** using information from available source data as disaggregates;
- **Outputs from the tables could assist in:**
 - ✓ Identifying the actors involved;
 - ✓ The various transactions related to digitalization; and
 - ✓ Provide additional economic indicators that would guide forecasting and policy decisions.
- Fully populating the tables could be an ambitious task to many economies, hence, the **tables are designed in a way that allows preliminary estimation** for countries to start compiling to produce measures of digital activities that are **internationally comparable** and also useful for informed policy-making;
- The tables are the foundation for the compilation of **Digital Economy Satellite Account (DESA)**.

Issues and challenges



Despite support from the international statistical community, there are considerable challenges for compiling economies:

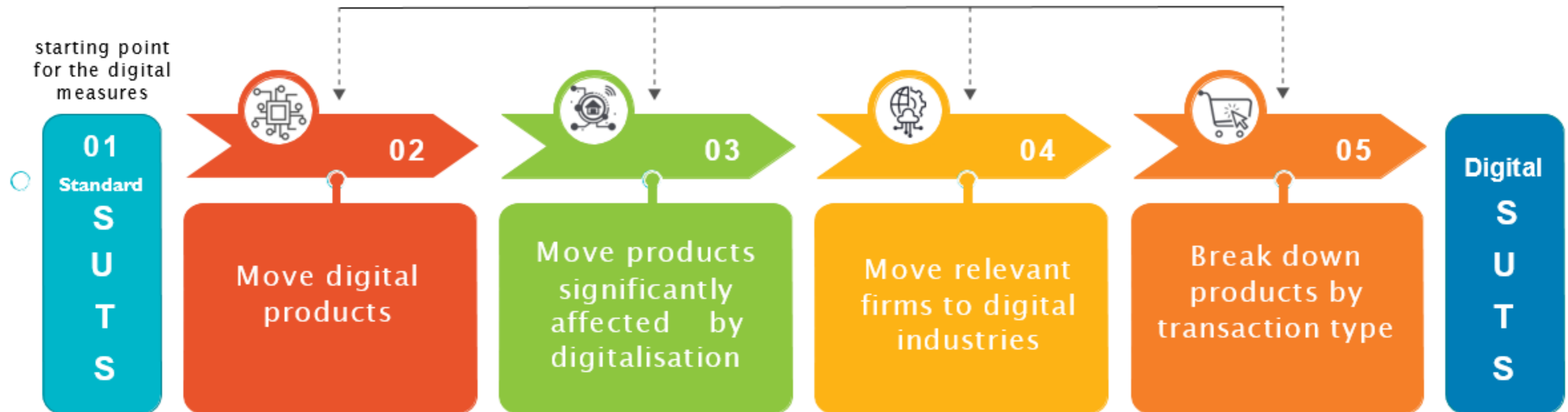
- **Limited availability** of the source data required to populate various cells within the tables (most common);
- Most methods used in compiling supply-use tables start from business surveys or administrative data that **do not currently lend themselves to providing additional information** on the nature of transactions;
- **Statistical business registers often lack the level of details** necessary to properly identify and move units to the newly identified digital industries from the broader industry classification.



From Standard to Digital SUTs



Apply disaggregators or indicators sourced from: Surveys, Censuses, Financial Statements, tax data, case studies, research projects, etc.



Digital industries



Digitally-enabling industries

Digital intermediary platforms (DIPs) charging a fee

Data and advertising driven digital platforms

Firms dependent on intermediary platforms

E-tailers

Digital only firms providing financial and insurance services

Other producers only operating digitally

ICT manufacturing industries

2610	Manufacture of electronic components and boards
2620	Manufacture of computers and peripheral equipment
2630	Manufacture of communication equipment
2640	Manufacture of consumer electronics
2680	Manufacture of magnetic and optical media

ICT trade industries

4651	Wholesale of computers, computer peripheral equipment and software
4652	Wholesale of electronic and telecommunications equipment and parts

ICT services industries

5820	Software publishing
61	Telecommunications
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6190	Other telecommunications activities
62	Computer programming, consultancy and related activities
6201	Computer programming activities
6202	Computer consultancy and computer facilities management activities
6209	Other information technology and computer service activities
631	Data processing, hosting and related activities; web portals
6311	Data processing, hosting and related activities
6312	Web portals
951	Repair of computers and communication equipment
9511	Repair of computers and peripheral equipment
9512	Repair of communication equipment

Firms that rely on online presence for revenues

ICT questionnaires



Data sources

- The surveys already used to measure business e-commerce are the natural starting point, e.g., E-commerce surveys, ICT usage surveys on businesses

B1	During 2022, did your enterprise have web sales of goods or services via:	Yes	No
B1.1	your enterprise's websites or apps? (including extranets)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
B1.2	e-commerce marketplace websites or apps used by several enterprises for trading goods or services? (e.g. MyMarket.ge, Wishlist.ge, Vendoo.ge, My.ge, Procurement.gov.ge, Booking, hotels.com, eBay, Amazon, Amazon Business, Alibaba and etc.)	1 <input type="checkbox"/>	2 <input type="checkbox"/>
If both B1.1 and B1.2 = "No", then go to B10			
B2	What was the value of your web sales? (please refer to the provided definition of web sales) (Please answer to B2.1 OR B2.2)		
B2.1	What was the value of your web sales of goods or services, in 2022?	Gel	/____/
B2.2	OR If you can't provide this value: What percentage of total turnover was generated by web sales of goods or services, in 2022? If you cannot provide the exact percentage an approximation will suffice.	%	/____/

B3	What was the percentage breakdown of the value of web sales in 2020 for the following: (Please refer to value of web sales you reported in B2) If you cannot provide the exact percentages an approximation will suffice.		
B3.1	via your enterprise's websites or apps? (including extranets)	%	/____/

B3.2	via e-commerce marketplace websites or apps used by several enterprises for trading goods or services? (e.g. MyMarket.ge, Wishlist.ge, Vendoo.ge, My.ge, Procurement.gov.ge, Booking, hotels.com, eBay, Amazon, Amazon Business, Alibaba and etc.)	%	/____/
B3.3	Total	%	100

Question B4 should be answered only if B1.2 = "Yes"				
B4	Via how many e-commerce marketplaces did you have web sales during 2022?	Via one 1 <input type="checkbox"/>	Via two 2 <input type="checkbox"/>	Via more than two 3 <input type="checkbox"/>
If B4 = "via one" then go to B6				
B5	Did more than half of your turnover from e-commerce marketplaces in 2020 come from only one e-commerce marketplace?	Yes 1 <input type="checkbox"/>	No 2 <input type="checkbox"/>	

ICT questionnaires



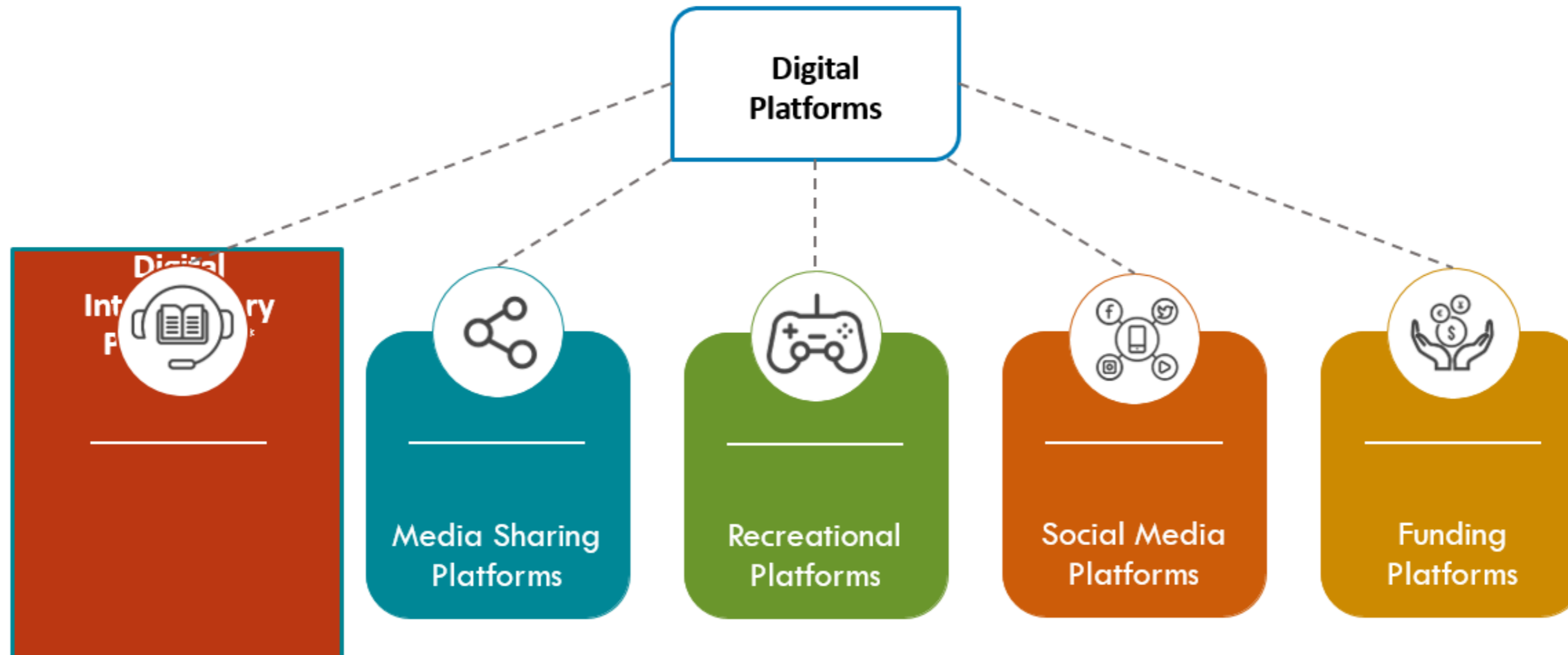
Data sources

- For imports and exports, potential sources may include merchandise trade data (for small-valued couriered items), and value-added tax remittances of non-resident retail platforms
 - ICT usage by enterprises survey include questions that capture digital-ordered trade, i.e. cross-border e-commerce transactions

B6	What was the percentage breakdown of the value of web sales in 2020 by type of customer: (Please refer to value of web sales you reported in B2) If you cannot provide the exact percentages an approximation will suffice.		
B6.1	Sales to private consumers (B2C)	/_____/	
B6.2	Sales to other enterprises (B2B)	/_____/	
B6.3	Sales to public sector (B2G)	/_____/	
B6.4	Total	100	
B7	During 2022, did your enterprise have web sales to customers located in the following geographic areas?		
		Yes	No
B7.1	Georgia	1 <input type="checkbox"/>	2 <input type="checkbox"/>
B7.2	EU countries	1 <input type="checkbox"/>	2 <input type="checkbox"/>
B7.3	CIS countries	1 <input type="checkbox"/>	2 <input type="checkbox"/>
B7.4	USA	1 <input type="checkbox"/>	2 <input type="checkbox"/>
B7.5	Other countries	1 <input type="checkbox"/>	2 <input type="checkbox"/>

The following question (B8) should only be answered if at least two of the above possible responses in question B7 are answered with "Yes" otherwise check next filter instruction before question B9		
B8	What was the percentage breakdown of the value of web sales in 2022 to customers located in the following geographic areas? (Please refer to value of web sales you reported in B2) If you cannot provide the exact percentages an approximation will suffice.	
B8.1	Georgia	/_____/
B8.2	EU countries	/_____/
B8.3	CIS countries	/_____/
B8.4	USA	/_____/
B8.5	Other countries	/_____/
The following question (B9) should only be answered if B7.2="Yes", otherwise go to B10.		

Digital Intermediary Platforms



Latest developments



Recap of the 2023 Mission for Georgia's DSUTs

1. Experimental Supply and Use Tables (330x64), with reference year 2018, is used as a starting point in constructing the DSUTs.
2. Business surveys and financial statements were used to obtain the disaggregators for both the digital industries and products
 - Clarifications and additional inquiries on these data sources were discussed and addressed with the various teams from GEOSTAT;
 - These data were processed using the processing template prepared by the ADB DE team; the mapping of the survey and financial statement items to their corresponding SNA items were also reviewed;
3. The GEOSTAT and the ADB team identified the list of Digital Intermediary Platforms that are operating in the Georgian economy
 - Tax identification numbers of the relevant firms were provided to the mission team for the access of the financial statements from the Reportal;
4. The mission team provided a demonstration of the application of the disaggregators to the standard SUTs to come up with the initial estimates for the DSUTs – both for the digital industries and products;
5. Additional and revised datasets provided by the GEOSTAT team were also processed by the mission team and incorporated to the initial estimates.

Next steps



1. GEOSTAT team to provide the additional data requests for the compilation of the DSUTs;
2. The ADB team to process and incorporate data that will be turned over to the preliminary estimates (Q4 2023 to Q1 2024);
2. Joint virtual ADB and GEOSTAT team validation and balancing activities (Q1-Q3 2024);
4. For confirmation: presentation of estimates in the regional closing conference of the TA.

Digital Economy of Georgia



Results (ADB Measurement Framework): Digital Economy of Georgia for 2018, 2020, and 2021

Terms	Description	Value		
		2018	2020	2021
1	Backward linkage	1,048,010	1,545,409	2,200,229
2	Forward linkage	1,810,524	2,986,588	2,868,632
3	Double-counted terms	(663,038)	(954,099)	(1,368,194)
4	Backward linkage of digital producers in non-digital assets	447,116	744,544	777,076
	Digital GDP	2,642,612	4,322,443	4,477,743
	Digital GDP % GDP	6.8%	10.0%	8.5%
	GDP	38,752,054	43,136,605	52,412,375



Thank you for your attention!

National Statistics Office of Georgia

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