

Singapore's Experience in Developing Online Marketplaces SPPI

for

Cross-cutting topic on Data Gaps and Measurement Issues with Online Intermediary Platforms

**37th Voorburg Group Meeting on Services Statistics
September 2022**

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Introduction

- The Singapore Department of Statistics (DOS) has been compiling the Computer Consultancy and Information Services Price Index (CISPI) since 2016. In the rebasing of the CISPI from base year 2016 to base year 2021, DOS included online marketplace services into the index structure, after incorporating classification changes in the Singapore Standard Industrial Classification 2020.
- Online marketplaces are intermediary platforms that facilitate orders for goods or services between buyers and sellers usually on a fee or commission basis, without taking ownership of the goods or providing the services that are being sold through their online platforms (e.g., website, mobile application).
- This paper discusses Singapore's experience in the classification and development of a SPPI for online marketplace services.

Introduction

Some of the commonly used terms to describe intermediation services:

- Virtual marketplace
- Online marketplace
- Multi-sided marketplace (or platform)
- Two-sided marketplace (or platform)
- Electronic markets (used in NAICS, Australia and New Zealand industry classifications)

DOS uses the term “Online Marketplace” instead of “Intermediary Platforms” as it is:

- more commonly used in local media
- generally understood to refer to a website or application that facilitates transactions from different sources

Classification

- The Singapore Standard Industrial Classification 2020 (SSIC 2020) adopts the basic framework of the International Standard Industrial Classification of All Economic Activities Revision 4 (ISIC Rev.4) for international comparability, with appropriate modifications and updates to account for changes in Singapore's economy and users' requirements.
- In the SSIC 2020, a new 3-digit group 632 'Online Marketplaces' was created under Section J 'Information and Communications', with new five-digit Sub-classes.

Classification

Table 1: SSIC 2015, SSIC 2020 and ISIC Rev.4 Codes and Titles under Division 63

SSIC 2015 (ver 2018)	SSIC 2020	ISIC Rev. 4
63: Information Service Activities	63: Information Service Activities and Online Marketplaces	63: Information Service Activities
6311: Data Processing, Hosting and Related Activities	6311: Data Analytics Processing, Hosting and Related Activities 6312: Internet Search Engines 6320: Online Marketplaces	6311: Data Processing, Hosting and Related Activities
6312 – Web Portals	<ul style="list-style-type: none"> • 63201 – Online marketplaces for goods (including food) • 63202 – Online marketplaces for health services • 63203 – Online marketplaces for education services • 63204 – Online marketplaces for travel services • 63205 – Online marketplaces for real estate services • 63209 – Online marketplaces for services n.e.c. 	6312 – Web Portals

Classification

Given the growing importance of different forms of online marketplaces and in the absence of international guidance on classifying such intermediaries at the time of our review in 2019-2020, DOS explored several options during the stakeholder consultations with data source and policy agencies before deciding to create a new code for 'Online Marketplaces' under Division 63 in Section J 'Information and Communications'. Other options explored included:

1. Classify all online marketplace activities under SSIC 6312 'Web Portals' in Section J.
2. Classify to existing/ appropriate SSIC codes based on the industry the online marketplaces are supporting (e.g., wholesale, retail) and create new codes under each SSIC section, where appropriate for all other intermediation services.

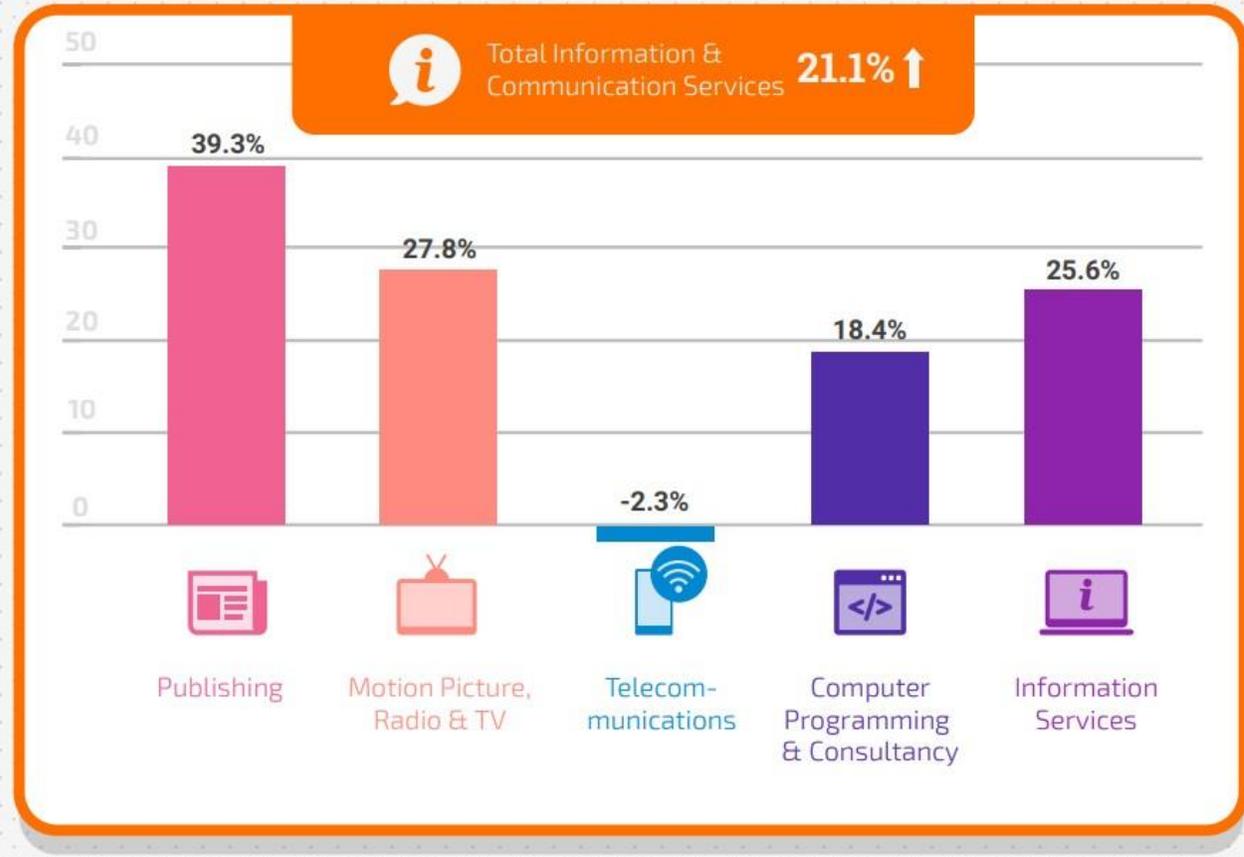
Market Conditions

Table 3: Establishments, Revenue and Value-added for 2020

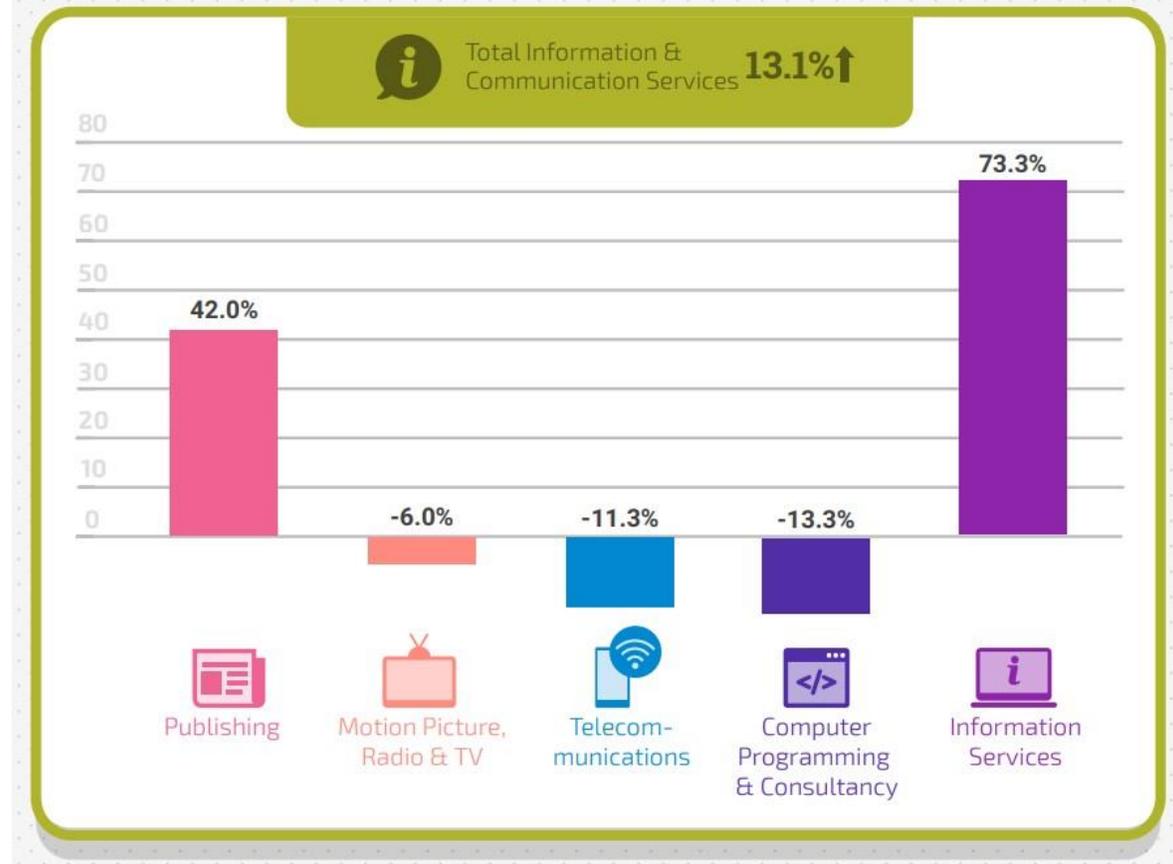
SSIC	Description	No. of Establishments	Operating Revenue (\$Mil)	Value Added (\$Mil)
58	Publishing	2,063	12,319	3,724
59 & 60	Motion Picture, Radio & TV	2,077	6,465	1,289
61	Telecommunications	917	14,578	4,681
62	Computer Programming & Consultancy	12,843	31,542	7,622
63	Information Services	1,177	63,636	8,934
	Total	18,717	128,539	26,250

Market Conditions

Year-on-Year Growth Rate of Operating Revenue between 2019 & 2020



Year-on-Year Growth Rate of Value Added between 2019 & 2020



Market Conditions

Table 6: OR Distribution within SSIC 632 for 2019 and 2020

SSIC	Description	2019 OR (%)	2020 OR (%)
63201	Online marketplaces for goods (including food)	62%	84%
63202	Online marketplaces for health services	<1%	<1%
63203	Online marketplaces for education services	<1%	<1%
63204	Online marketplaces for travel services	30%	10%
63205	Online marketplaces for real estate services	<1%	<1%
63209	Online marketplaces for services n.e.c.	7%	5%

SPPI for Online Marketplaces

2020

- Plan resources, timeline for developing SPPI
- Internet Research
- Industry Survey

2021

- Preliminary Price Surveys
- Clarify and refine survey items
- Determine pricing methods

2022

- Finalise firms, service products, and weights
- Compile 1Q2021 to 1Q2022
- Routine data collection and compilation

SPPI for Online Marketplaces

Model	Description	Examples
Commission	Commission is charged on each successful transaction. The platform operator then imposes either a fixed or variable fee on the product transacted	Amazon, eBay, Etsy, AirBnb
Subscription	Sellers and/or buyers are charged recurring fee to access the marketplace.	LinkedIn's B2B solutions
Freemium	Free of charge for usage for both buyers and sellers. Monetisation occurs by offering additional features, premium subscriptions, or cross selling other services	Unsplash
Listing	Sellers are charged for every offer they upload on the platform. Utilised when sellers list high-ticket items such as cars or houses	Trulia.com, Realtor.com
Featured Ad Placement	On top of other models such as commission or listing, seller can opt to pay an additional fee to have their listing displayed before others.	Classified division of eBay

SPPI for Online Marketplaces

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SINGAPORE DEPARTMENT OF STATISTICS
COMPUTER CONSULTANCY & INFORMATION SERVICES PRICE SURVEY

Survey Period
Jan 2021 - Sep 2021

1. Please provide specifications of the service model provided to companies who list/sell their products on your online marketplace. Use one Form per service model.
2. Please provide the subscription fees, platform fees, and/or commission rates where applicable for the service model or 1 customer within the model for the survey months indicated.

Online Marketplace Services

Name of Online Marketplace

Customer ID/Name of Service Model

Description of Service Model

	Please provide relevant information where applicable for the following months.								
	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021
Monthly Subscription Fees									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									
Selling/ Commission Fees									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									
Payment Platform/ Transaction Fees									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									

SPPI for Online Marketplaces

Product Listing/ Publishing Fees									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									
Other Service Item 1									
Other Service Item 1: Please Specify									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									
Other Service Item 2									
Other Service Item 2: Please Specify									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									
Other Service Item 3									
Other Service Item 3: Please Specify									
Unit Rate (Total Fee/Qty)									
Total Fee Charged									
Total Quantity Charged									
Currency									
Unit of Measurement									
Remark									

Possible Data Gaps and Measurement Issues

Definition/ Classification of Online Marketplaces

- Determining if the services provided by the respondents are online marketplaces (e.g., application stores, dating applications)
 - More research and discussion undertaken by the team before confirming if it's in-scope
- Wrongly classified establishments that should belong to other SSICs (e.g., internet search engines, travel agents)
 - Feedback internally within DOS to review if these establishments should be classified elsewhere
- Establishments that had online marketplaces but were classified in other SSIC codes.
 - Not included in the coverage but feedback provided internally within DOS to explore if there was a need to create a special division in SSIC 632
- Larger establishments may derive revenue from non-online marketplace activities, such as sale of own goods/services via their platforms.
 - Not considered materially impactful and weights assigned to products based on total revenue

Possible Data Gaps and Measurement Issues

Data Collection / Compilation

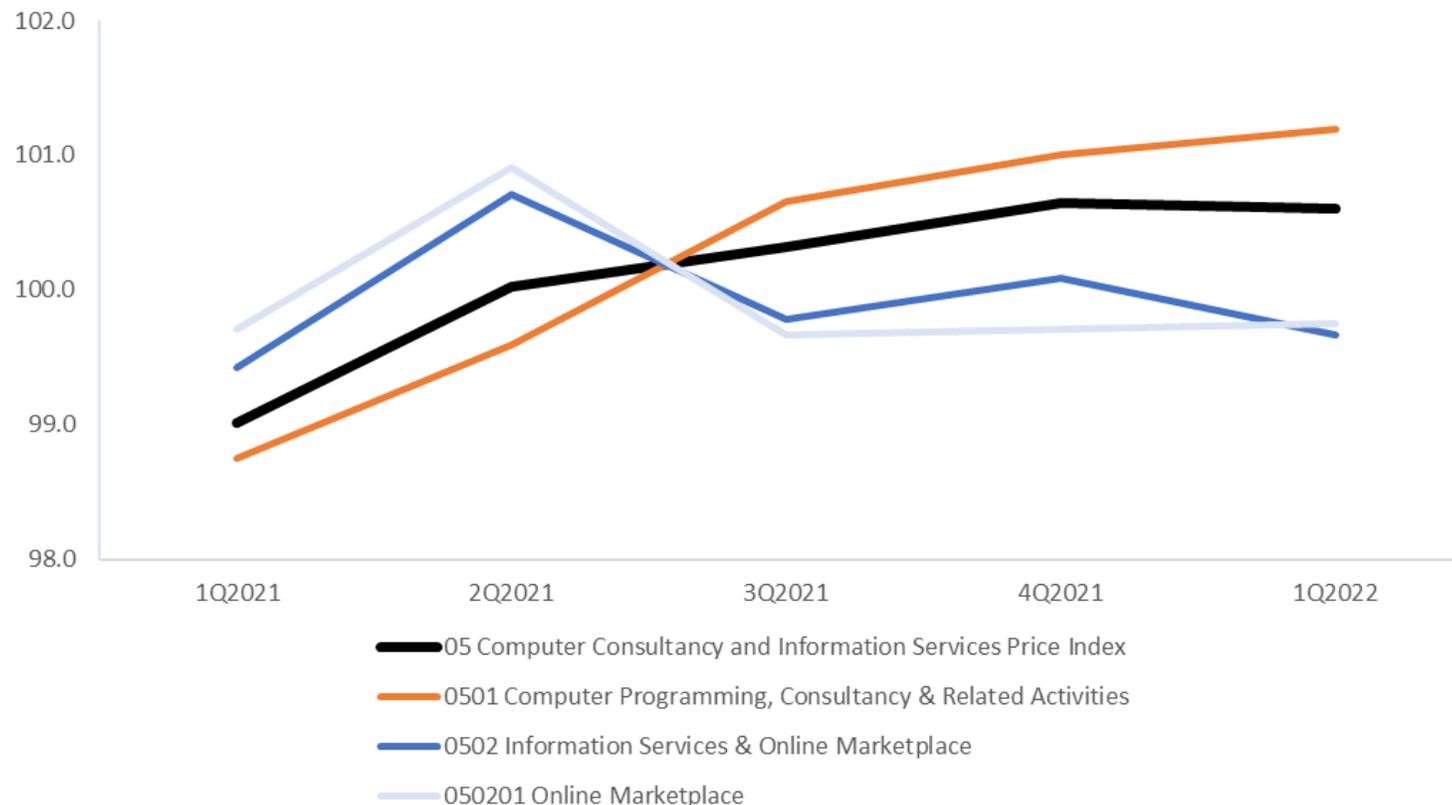
- For commission model, DOS is unable to efficiently utilise the survey returns provided by respondents by seller as the fees received vary drastically from month to month because of changes in products sold.
 - Had to switch to generic commission rates by product categories or unit value (for all clients).

Category	Sub-category & Commissions	
Electronics	Mobile Phones	3%
	Televisions	3%
	Large Appliances	3%
	Small Appliances	5%
	Desktops & Laptops	3%
	Gaming Consoles	3%
	Cameras	5%
	Electronic Accessories	5%
Mother & Baby	Diapers	3%
	Milk Powder	3%

Conclusion

DOS will monitor the existing products and prices, while looking towards engaging other online marketplace establishments to understand their service products and onboard them on the price surveys. More service products and prices are needed over a longer period to improve the methodology/ quality of this index and compile sub-indices by 5 digit SSIC.

Figure 7 : CISPI and relevant sub-indices from 1Q2021 to 1Q2022



Thank You

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We Deliver Insightful Statistics and Trusted Statistical Services that Empower Decision Making

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