

Experimental Estimates on Singapore's Digital Trade 2021 to 2024

by Andrew Goh, Goh Wei Ming, Nicholas Gan, and Soh Sing Pei
International Accounts Division
Singapore Department of Statistics

Introduction



Digital technology has transformed the way businesses and consumers buy and sell across borders. More transactions are now conducted online, for example, goods and services are digitally ordered and services are digitally delivered to consumers. Digital trade is a subset of total international trade in goods and services, covering the exports and imports of goods and services that were digitally ordered [1] and/ or delivered [2].

The Singapore Department of Statistics (DOS) has released experimental estimates on Singapore's digital trade [3], providing new insights into its scale and characteristics. This article highlights key trends in Singapore's digital trade and its contribution to the overall trade and economic landscape from 2021 to 2024.

Why is Measuring Digital Trade Important?

The rapid advancement of digital technologies has expanded the reach of trade beyond traditional geographical boundaries and revolutionised the way goods and services are traded. Transactions once bound by physical and geographical constraints can increasingly be conducted digitally, enabling consumers and businesses anywhere in the world to participate in international trade.

Singapore's digital trade estimates represent a significant step forward in measuring how digital trade contributes to Singapore's overall trade and economic landscape. These estimates offer an expanded dimension on Singapore's trade activities and facilitate international comparisons that help policymakers, analysts and businesses identify opportunities from the growing digital economy.

[1] Digitally ordered trade is defined as international sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders.

[2] Digitally delivered trade is defined as all international trade transactions that are delivered remotely over computer networks.

[3] Singapore's digital trade estimates are compiled based on the conceptual and measurement framework in the Handbook on Measuring Digital Trade, Second Edition (IMF *et al.*, 2023).

Transforming Real World Trade Data Into Real World Trade Evidence

Digital trade in goods and services represents transactions broken down by how the goods or services are ordered and delivered. Singapore’s digital trade estimates are primarily compiled through trade and industry surveys and supplemented by other data sources such as credit card transactions and household survey data.

The surveys conducted by DOS and the Infocomm Media Development Authority (IMDA) collect detailed information on digital trade transactions that are unavailable from administrative sources (Table 1). These include DOS’s International Trade in Services and Annual Industry Surveys, as well as IMDA’s Survey on Infocomm Usage by Enterprises.

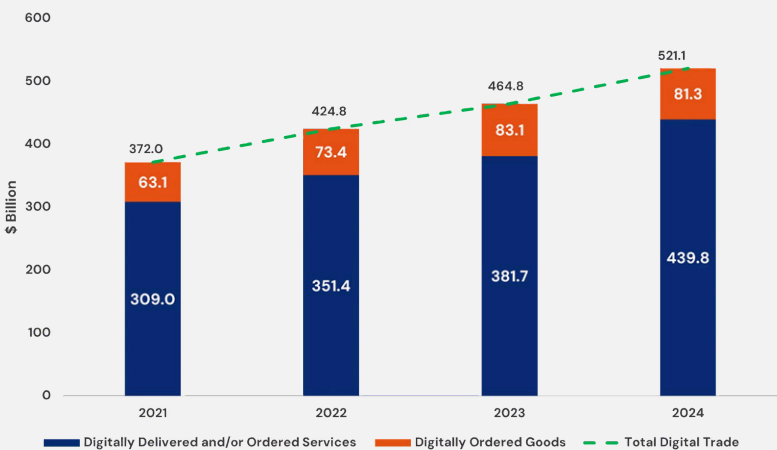
Table 1: How Digital Trade is Measured

Digital Trade Transaction	Transaction Details	Data Source
Digitally delivered services (whether digitally ordered or not)	Services digitally delivered to overseas customers and digitally provided by overseas suppliers	DOS’s Annual International Trade in Services Survey [4]
Digitally ordered goods Digitally ordered services that are not digitally delivered (e.g., booking a car rental overseas online)	Sales and purchases via e-commerce or digital platforms	DOS’s Annual Industry Survey [5] and IMDA’s Annual Survey on Infocomm Usage by Enterprises [6]

Digital Trade Grew from \$372.0 billion in 2021 to \$521.1 billion in 2024

Singapore’s digital trade, defined as the sum of exports and imports of goods and services that are digitally ordered and/ or digitally delivered, grew steadily from \$372.0 billion in 2021 to \$521.1 billion in 2024, at a compound annual growth rate (CAGR) of 11.9%. This outpaced the total trade growth rate of 7.4% over the same period [7] (Chart 1).

Chart 1: Total Digital Trade (\$ Billion)



[4] More details on the [Annual International Trade in Services survey](#) are available on the SingStat Website .

[5] More details on the [Annual Industry Survey](#) are available on the SingStat Website.

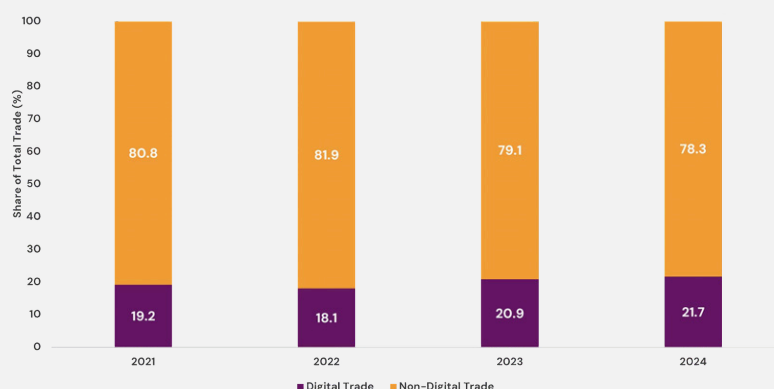
[6] More details on the [Annual Survey on Infocomm Usage by Enterprises](#) are available on IMDA’s website.

[7] Total trade, defined as the sum of goods and services exports and imports, grew from \$1.9 trillion in 2021 to \$2.4 trillion in 2024.

The expansion was largely fuelled by digitally delivered and/ or ordered services, which accounted for most of Singapore's digital trade and reflected the increasing digitalisation of Singapore's exports and imports of services. These services grew from \$309.0 billion in 2021 to \$439.8 billion in 2024 at a CAGR of 12.5%. Over the same period, digitally ordered goods increased from \$63.1 billion to \$81.3 billion at a CAGR of 8.8% (Chart 1).

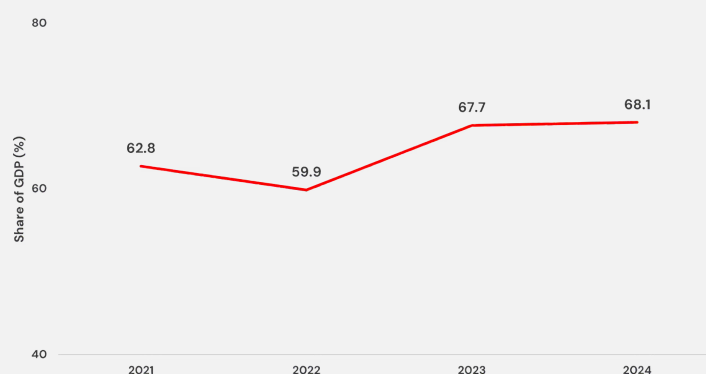
The share of digital trade in total trade also rose steadily from 19.2% to 21.7% between 2021 and 2024, reflecting the growing role of online ordering and digital delivery of services in facilitating Singapore's cross-border transactions (Chart 2).

Chart 2: Digital Trade as a Share of Total Trade



Similarly, digital trade as a share of Gross Domestic Product (GDP at market prices) increased from 62.8% to 68.1% between 2021 and 2024, suggesting the growing impact of digitalisation on the Singapore economy (Chart 3).

Chart 3: Digital Trade to GDP (%)

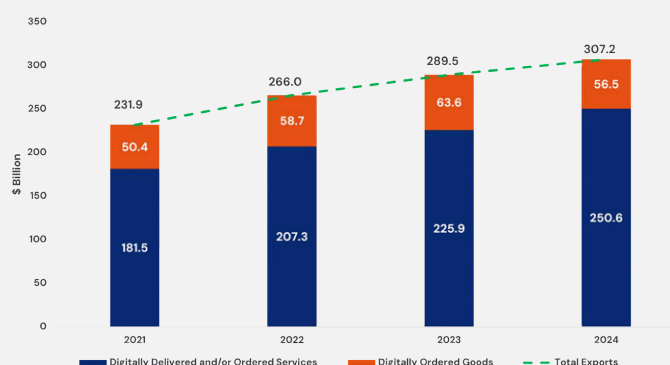


Digital Trade Exports and Imports Grew from 2021 to 2024

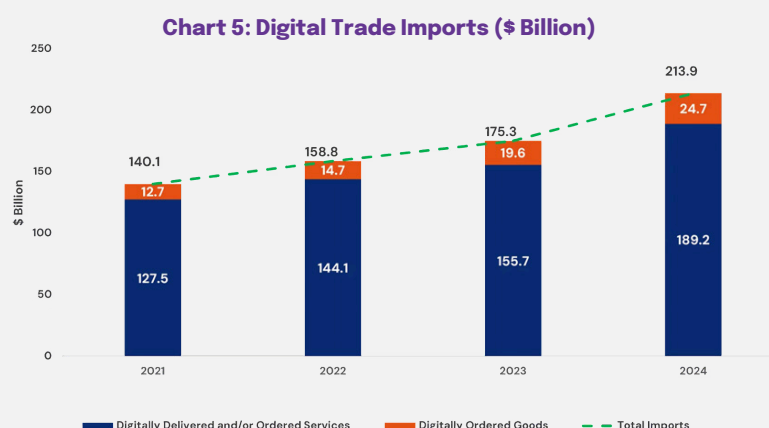
Singapore's digital trade exports grew from \$231.9 billion in 2021 to \$307.2 billion in 2024 at a CAGR of 9.8%. This was largely driven by exports of digitally delivered and/ or ordered services, which increased from \$181.5 billion in 2021 to \$250.6 billion in 2024, registering a CAGR of 11.4%.

Exports of digitally ordered goods grew at a more modest pace, rising from \$50.4 billion in 2021 to \$56.5 billion in 2024 at a CAGR of 3.9% (Chart 4).

Chart 4: Digital Trade Exports (\$ Billion)



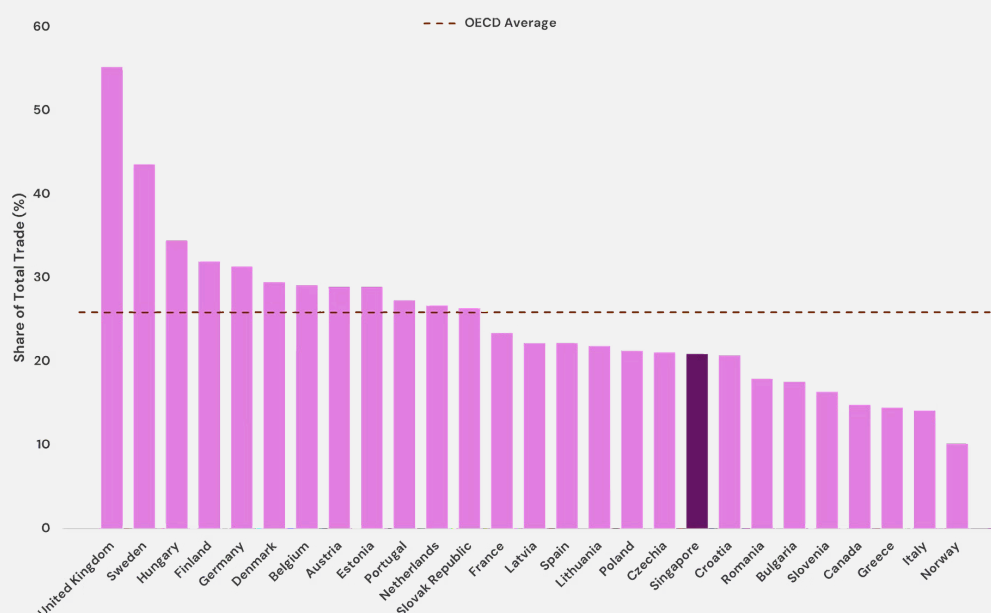
Digital trade imports expanded from \$140.1 billion in 2021 to \$213.9 billion in 2024 at a CAGR of 15.1%. Imports of digitally ordered goods almost doubled from \$12.7 billion in 2021 to \$24.7 billion in 2024, growing at a CAGR of 25.0%. Meanwhile, imports of digitally delivered and/or ordered services grew from \$127.5 billion in 2021 to \$189.2 billion in 2024, at a CAGR of 14.1% (Chart 5).



Singapore's Digital Trade: Strong Base for Further Gains

As of 2023, Singapore's digital trade share of 20.9% was below the Organisation for Economic Co-operation and Development (OECD) average of 25.9%, albeit higher than several OECD economies such as Canada (14.8%), Greece (14.5%), Italy (14.2%), and Norway (10.2%) (Chart 6) [8]. While Singapore trailed other OECD economies such as the United Kingdom (55.2%) and Sweden (43.6%), the concerted efforts to expand and deepen digital adoption in Singapore present opportunities for further growth in digital trade.

Chart 6: Digital Trade as a Share of Total Trade, 2023



Conclusion

Singapore's digital trade has seen strong growth from 2021 to 2024, supported by growth in digitally delivered services and digitally ordered goods. As digitalisation continues to reshape how goods and services are traded across borders, digital trade is poised to play an even greater role in Singapore's economy. The release of experimental digital trade estimates by DOS offers greater visibility into Singapore's trade activities, supporting policymakers and businesses in making informed decisions.

[8] OECD experimental estimates of digital trade as a share of total trade retrieved from the [OECD Going Digital Toolkit](#)