

## Digital trade

October 2019

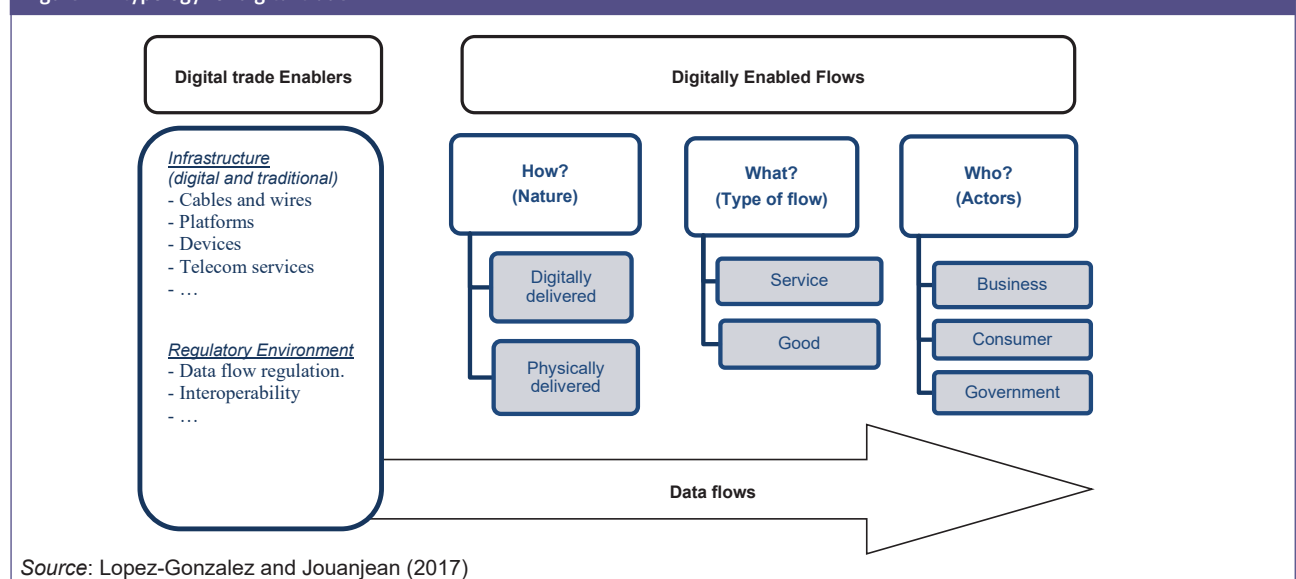
- › Digitalisation has made it easier to engage in trade, co-ordinate GVCs, and diffuse ideas, changing how firms organise international trade, what they sell and to whom.
- › Data is the lifeblood of digital trade, but concerns about its ubiquitous exchange have given rise to new regulations that condition its movement across borders.
- › Existing WTO rules and agreements cover digital trade, but there are questions about how well adapted current frameworks are to digital trade.
- › Barriers that affect digitally-traded services remain, and have even been increasing in recent years.

### What's the issue?

Digitalisation has reduced the cost of engaging in international trade, connected a greater number of businesses and consumers globally, helped diffuse ideas and technologies, and facilitated the co-ordination of global value chains (GVCs). Today, more small parcels and lower-value digital services (applications) are being traded internationally; a greater number of services are becoming tradable and goods and services are increasingly being bundled into 'smart' products.

As these changes unfold, new challenges for trade policy makers are emerging. These go beyond managing digital disruption and involve ensuring that the opportunities and benefits from digital trade can be realised and shared more inclusively.

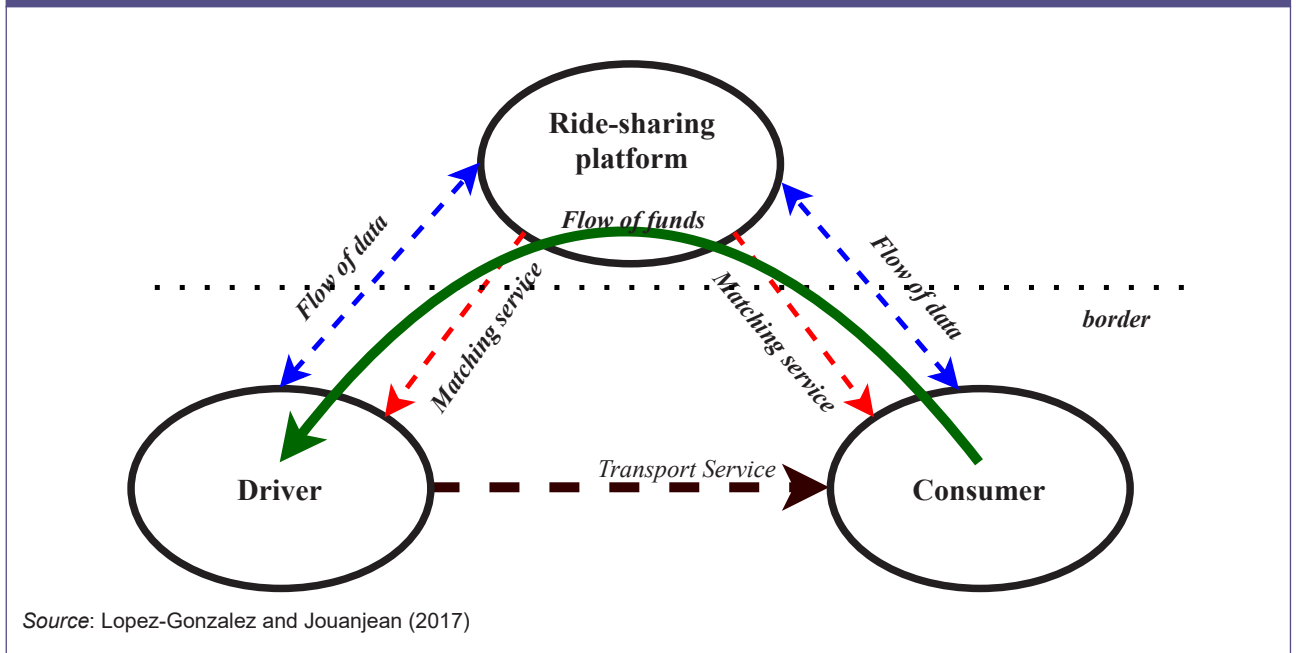
Figure 1. A typology for digital trade



Source: Lopez-Gonzalez and Jouanjean (2017)



Figure 2. Transactions involved in ride-hailing service



### What is digital trade?

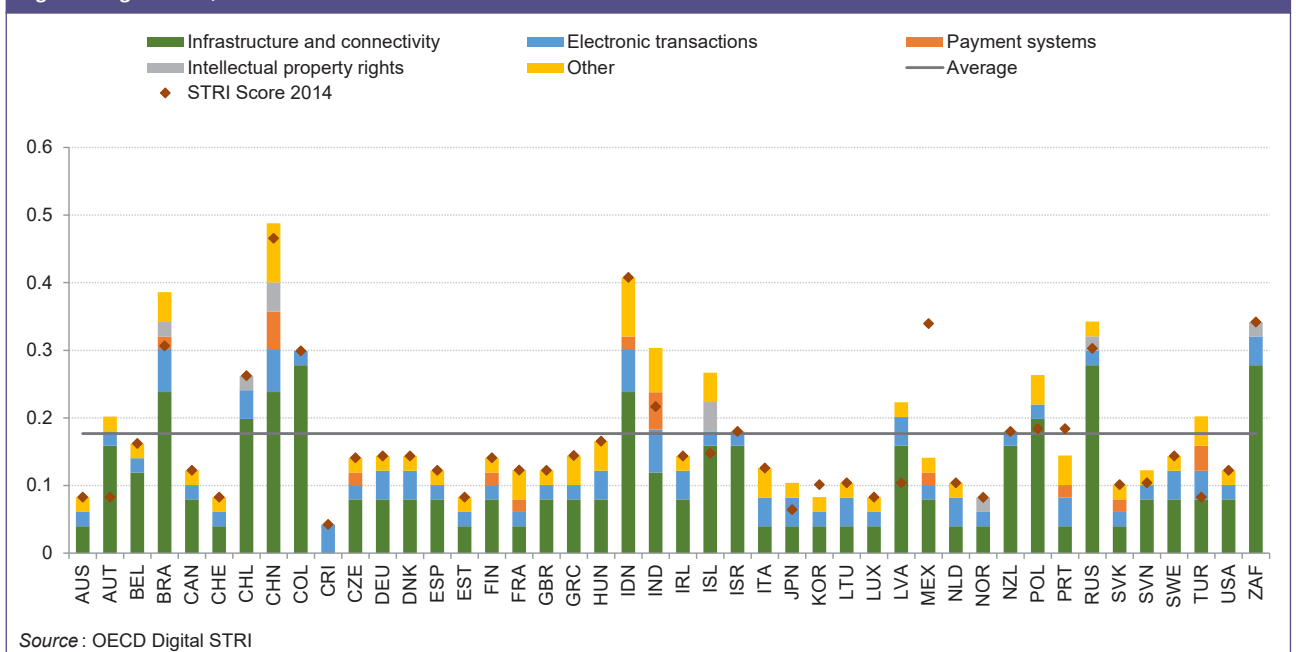
Although there is no single, recognised, and accepted definition of digital trade, there is a growing consensus that it encompasses digitally enabled transactions in trade in goods and services that can be digitally or physically delivered. This includes digitally delivered software, e-books, data or database services; and digitally enabled but physically delivered goods and services, such as a purchase of a good on an online marketplace or the booking of a hotel through a matching service. Digital trade involves business-to-business transactions within

GVCs, as well as transactions between consumers or businesses purchasing from each other through online platforms. All of these transactions are underpinned by data, which is the lifeblood of digital trade (Figure 1).

### How has digitalisation changed trade?

Digitalisation has changed both the “how” and “what” of international trade. Changes in the “how” of trade are reflected in the emergence of new data-driven business models, altering how goods and services are produced and traded – for example the growing use of digital

Figure 3. Digital STRIs, 2018



intermediaries (platforms) to trade internationally. Changes in the “what” of trade relate to the emergence of new digitally delivered services like Internet banking, and new bundled goods and services that are constantly connected – e.g. ‘smart’ speakers.

Some of the changes that digitalisation brings to trade can be illustrated using an example of a ride-hailing service delivered through a mobile application (Figure 2). In the offline world, a customer would hail a taxi and pay for the ride in cash. In the digital world, the customer no longer needs to wait until she sees a taxi nor carry cash in hand; the application delivers a matching service, manages payment and provides insurance cover.

Although in both online and offline cases the nature of the service provided by the driver is the same, in the online case the “what” of trade has changed. A new and previously non-tradable service – ride-hailing – has become tradable. The “how” of trade has also changed with a growing role for data and a bundling of services (e.g. the joint provisions of payment and insurance services delivered digitally) in support to the delivery of the transport service.

### What issues does digital trade raise for policy?

While it has never been easier to engage in international trade, the adoption of new business models has given rise to more complex international trade transactions and policy issues. Existing multilateral trade rules, which are technologically neutral, continue to apply to digital trade transactions. However, there can be uncertainty about which rules apply to which transactions.

Trade rules are predicated on identifying whether products are goods or services and the borders they cross. However, in the digital era, these distinctions are increasingly blurred. For example, a 3D printing trade transaction involves a design service crossing a border, but at the moment of consumption it is a good, so should GATT rules for goods apply or those negotiated for services under GATS? If the transaction is made from a server in the UK but the intellectual property belongs to a company in Germany, what is the origin of the product?

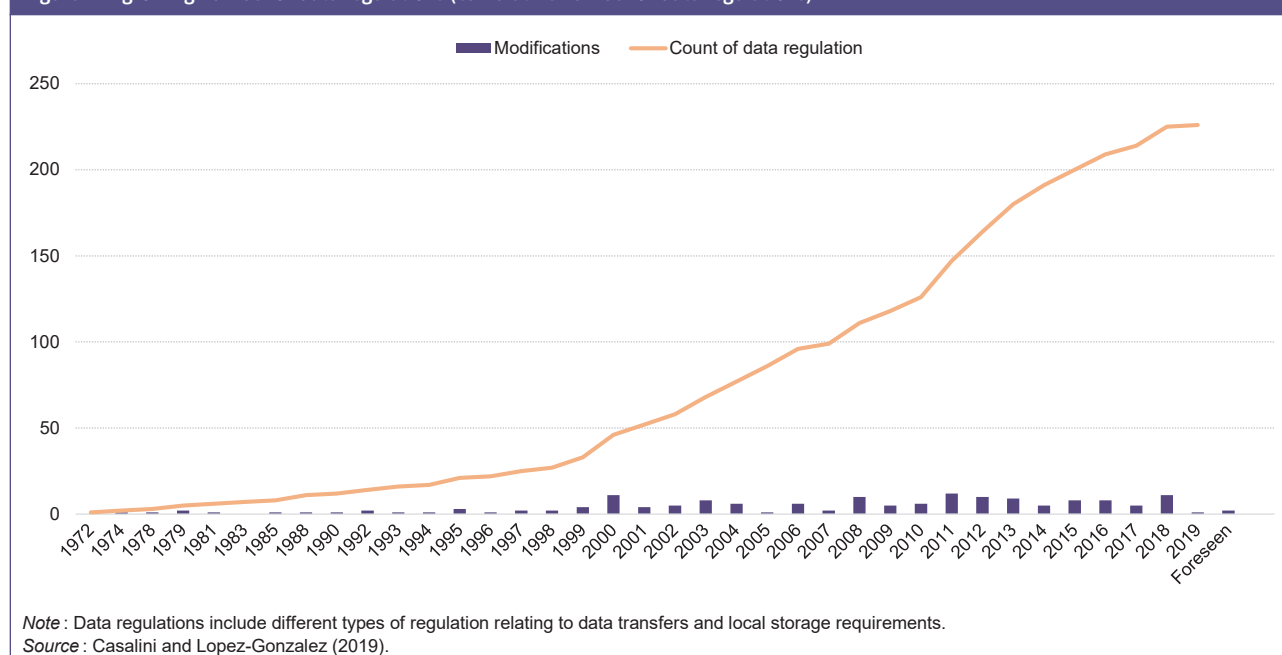
Since progress updating or clarifying international trade rules in the multilateral trading system has been slow, global governance of digital trade has progressed under bilateral and regional trade agreements (RTAs). These are increasingly covering broader issues including the permanent prohibition of customs duties on electronic transmissions and non-discriminatory treatment in terms of domestic regulation, to electronic authentication to data protection and paperless trade.

### What does all this mean for market openness?

With growing interconnectedness and greater demand for just-in-time delivery, trade needs to be faster and more reliable than ever before. But for trade to become more agile, and therefore better adapted to the demands of the 21st century, new approaches to market openness are needed.

Today, a simple digital trade transaction rests on a series of trade-related factors that enable or support the transaction. For instance, the ability to order an e-book depends on the cost of access to the Internet, the efficiency of e-payments systems and the tariff and non-tariff barriers faced by the physical device used to read the e-book. A barrier on one of these linked transactions will affect the need or the ability to undertake the

Figure 4. A growing number of data regulations (Cumulative number of data regulations)





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other transactions. This means that market openness needs to be approached more holistically, taking into consideration the full range of measures, across both goods and services, that affect the ability to undertake any particular transaction.

### Restrictions to digitally enabled services are growing

Services play a crucial role in enabling digital trade transactions. Removing trade barriers for services is therefore essential to promote market openness in the digital era. The OECD recently created a Digital Services Trade Restrictiveness Index (STRI), which identifies, catalogues and quantifies cross-cutting barriers that affect trade in digitally enabled services across 44 countries, covering the period from 2014 to 2018 with data available for every year.

The Digital STRI shows a diverse and complex regulatory environment affecting trade in digitally enabled services (Figure 3). It highlights that some of the most common measures relate to policies that impede access to communication infrastructure and movement of information across networks. Less common are barriers affecting electronic transactions and payments. However, other impediments such as the obligation to establish a local presence before engaging in digital trade are common across the board as well. A key emerging challenge is that the regulatory environment for digital trade has increasingly tightened, particularly with regard to measures affecting infrastructure and connectivity, among which are measures affecting the movement of data.

### Further attention to trade and cross-border data flows is also needed

Today, trade and production are heavily dependent on moving, storing and using digital information (data), increasingly across borders. Data enables the co-ordination of international production processes through GVCs, helps small firms reach global markets, can be an asset that can be traded, or a conduit for delivering services, and is a key component for automation in trade facilitation.

However, the ubiquitous exchange of data across borders has given rise to concerns by governments and citizens about some of the negative side effects of so much information being collected, transferred and used, often without the knowledge of data subjects. Concerns related to privacy and security, amongst others, have led to growing calls for deeper and more widespread regulation of the Internet and its underlying data flows. As a result, governments are updating data-related regulations and increasingly conditioning the transfer of data across borders or requiring that data be stored locally (Figure 4).

Restrictions on data flows can have trade consequences, when, for instance, they affect the movement of data that is critical for the co-ordination of global value chains or for an SME to trade. While digital infrastructures such as the Internet were born global, and offer new

opportunities for firms of all sizes, they also raise considerable challenges for policy in a world where borders and regulatory differences between countries remain.

As governments approach the question of how to regulate cross-border data flows, it will be increasingly important that the international and trade dimensions of data regulations are carefully examined, to ensure that objectives such as market openness, the protection of personal data and of intellectual property, are all comprehensively understood, considered, and balanced.

### Looking forward

Digital trade promises new opportunities for firms of all sizes and for individuals to benefit, but is also raises new challenges, especially for policy-making. With growing complexity of transactions and greater demand for just-in-time and 24/7 delivery of goods and services, trade needs to take place faster in order to deliver the benefits it promises. Understanding the drivers of this new paradigm for trade is key in getting the policy mix right and making digital trade more inclusive for all.



#### Further reading

- López González, J. and M. Jouanjean (2017), “Digital Trade: Developing a Framework for Analysis”, *OECD Trade Policy Papers*, No. 205, OECD Publishing, Paris, <https://doi.org/10.1787/524c8c83-en>
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