

Data Notes

Methodology

Digital Business Indicators measure the laws, regulations, and bureaucratic processes that affect digital businesses in 21 pilot countries. Five topics are covered: connectivity, data privacy and security, logistics, payment, and digital market regulations. The indicators are based on information collected through questionnaires administered to experts in the private sector and public sector authorities, in each country. Once the data were collected, the study team analyzed the information in conjunction with publicly available data on agency websites and the texts of relevant laws and regulations. The data are current as of June 30, 2018, and do not reflect any changes to the laws or administrative procedures after that date.

Table 1. Connectivity

A measurement of the regulatory good practices that promote universal access to broadband, efficient spectrum management, and accessible and safe domain name registration.

INDICATOR	DESCRIPTION	WHAT IS MEASURED	HOW IT IS MEASURED	
Universal access	This indicator measures the laws and regulations that promote the availability, affordability, and accessibility of broadband for all citizens, regardless of their geographical location or status.	Does your country have a national broadband plan or policy to develop a high-speed access network?	Yes/No	
		If yes, does the plan or policy include blended finance or public-private partnership investment schemes for broadband expansion?	Yes/No	
		If yes, does the plan or policy include government investment in infrastructure to make broadband more broadly available?	Yes/No	
		If yes, what areas are the government investments targeting?		
		First mile	Yes/No	
		Middle mile	Yes/No	
		Last mile	Yes/No	
		Invisible mile	Yes/No	
		The time and cost data points rest on two assumptions: <ul style="list-style-type: none"> ▪ The company requesting broadband connection is an internet platform selling electronic goods from local and foreign merchants. ▪ The company requires a reliable high-speed wired internet connection of at least 10 Mbps 	Does your country mandate the financing of a universal service fund (USF) for services such as voice telephony services, fixed broadband internet access services, and terrestrial mobile communication services?	Yes/No
			Are fiscal incentives in place to accelerate internet deployment (e.g., accelerated depreciation for connectivity infrastructure investments, tax credits for research and development, or loans or subsidies for connectivity infrastructure)?	Yes/No
	Is equal access available to shared or government-owned infrastructure such as roads, railways, and water and power lines?		Yes/No	
	Does the law in your country require cable operators to provide open access for internet services?		Yes/No	
	Does the law provide for unbundling and line sharing rules?		Yes/No	
	What restrictions, if any, are placed on foreign ownership of domestic telecom operators?			
	No restrictions		Yes/No	
	Minimum local ownership mandated (e.g., equity caps)		Yes/No	
	Foreign ownership not allowed	Yes/No		
	Does your country's national broadband plan or policy set a performance target for minimum download speed Mbps?	Yes/No		
Does your country's national broadband plan or policy set coverage targets (e.g., percentage of population with	Yes/No			

	download speed with unlimited usage from a licensed broadband provider and is looking for the lowest price for that speed.	broadband, of businesses with broadband, of schools with broadband, of rural population, of population with mobile internet, of population with PC ownership, of population with digital identity, or of implementation of e-government services)?	
		Are fiscal incentives in place to increase access to broadband?	Yes/No
		Does your country's broadband plan or program include the rollout of free, public access points?	Yes/No
		Can a broadband connection request be completed entirely online?	Yes/No
		How much time is required to obtain internet connection service? ¹	Calendar days
		What is the average cost to request internet connection service? ²	US\$
		What is the average price for a month of business broadband connection with at least 10 Mbps download speed with unlimited data usage?	US\$
		Are there fees or penalties for switching broadband providers?	Yes/No
Spectrum management	This indicator measures the regulatory good practices that promote efficient spectrum management by examining the mechanisms through which spectrum is allocated.	Does your country assign spectrum on the basis of competitive auctions (e.g., evaluation of bid prices, speed of build-out, technology, or other criteria)?	Yes/No
		Does your country have policies and regulations that allow any of the following practices for spectrum allocation: spectrum shortage evaluations, voluntary spectrum trading, voluntary spectrum leasing, spectrum caps, and secondary markets for unlicensed spectrum (TVWS or other relevant frequency bands)?	Yes/No
Obtaining and protecting domain names	This indicator measures the regulatory good practices that facilitate domain registration and curb the illegitimate uses of domain names that negatively affect online business activities.	Which of the following are required to secure a country code top-level domain registration?	
		Trademark matching the domain name	Yes/No
		Legal name of entity	Yes/No
		Local business registration	Yes/No
		Local business address	Yes/No
		Business owner must be a national or permanent resident	Yes/No
		Which of the following are considered legitimate reasons for denial of domain name registration?	
		Type of domain name (.edu, .org) does not match type of entity	Yes/No
Attempt to divert consumers either for commercial gain or to disrupt or disparage another entity	Yes/No		

¹ The time required to obtain internet connection service is recorded in calendar days and represents the median duration for the procedure. A procedure's duration starts with the introduction of the request to establish an internet connection and ends once the company has obtained the internet connection. The minimum time for the procedure is one day.

² The internet connection service cost includes the total cost incurred by a company to establish an internet connection. The cost captures all official fees and taxes associated with the relevant licenses, permits, and certificates, along with their required documents.

<p>For the time and cost data points, this indicator rests on two assumptions:</p> <ul style="list-style-type: none"> The company registering for the domain name is a digital platform selling electronic goods from local and foreign merchants. The company uses a country code top-level domain at the lowest cost for its website from a registered registrar, and its domain name is not bundled with hosting. 	Financial gain with no intention to use the mark with the sale of goods or services (cyber-speculation)	Yes/No
	Domain name holder has previously registered and sold domain names without intending to use them in connection with the sale of goods or services (cyber-squatting)	Yes/No
	Provision of false information when applying for registration of domain name	Yes/No
	Can a company transfer the domain name to a new registrant?	Yes/No
	Are there laws or regulations on the following?	
	Bad faith in user registration	Yes/No
	Cyber-squatting	Yes/No
	Phishing, spam, or even distribution of malware	Yes/No
	Is an authority or regulator outside of the courts responsible for domain name disputes or complaints?	Yes/No
	How much time is required to secure a domain name? ³	Calendar days
What is the cost to request domain name registration service? ⁴	US\$	

Table 2. Data privacy and security

A measurement of both the regulatory good practices that promote the secure and ethical collection and dissemination of personal data, guaranteeing individual data subject rights, and the laws and regulations that promote the free movement of data across borders.

INDICATOR	DESCRIPTION	WHAT IS MEASURED	HOW IT IS MEASURED
Individual rights	This indicator measures the regulatory good practices that promote three main data subject rights (consent, access, and erasure) in the	Under which conditions can e-commerce platforms lawfully process the computerized personal data of adult customers?	
		The customer has given consent for the processing of his or her personal data for one or more specific purposes.	Yes/No
		Processing is necessary for the performance of a contract to which the customer is party.	Yes/No
		Processing is necessary for compliance with a legal obligation to which the controller is subject.	Yes/No

³ The time required to secure a domain is recorded in calendar days and represents a median duration for the procedure. A procedure's duration starts with the submission of the request and ends once the company has secured a domain name. The minimum time for the procedure is one day.

⁴ The domain registration request cost includes the total cost to request a domain name registration. The cost captures all official fees and taxes associated with the relevant licenses, permits, and certificates, along with their required documents.

collection, usage, storage, dissemination, and disposal of individuals' personal data.		Processing is necessary to protect the vital interests of the customer.	Yes/No
		Processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller.	Yes/No
		Processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party.	Yes/No
		What are the grounds under which e-commerce platforms can lawfully get their adult customers' consent when collecting their personal data?	
		There is no provision in the law that defines the concept of "consent."	Yes/No
		Consent must be freely given.	Yes/No
		Consent must be specific.	Yes/No
		Consent must be informed.	Yes/No
		Consent must be nonambiguous.	Yes/No
		Consent must be distinguishable from (or tied to) other matters.	Yes/No
		Consent must be obtained by a specific method.	Yes/No
		If an adult customer requests information on the processing of his or her personal data by an e-commerce platform firm and is ready to bear the cost of it, to what degree is an e-commerce platform obliged to provide it?	
		There is no legal obligation.	Yes/No
		The customer can access all his or her personal data with no conditions.	Yes/No
		The customer can access some of his or her personal data with no conditions.	Yes/No
		The customer can access all or part of his or her personal data but only under certain conditions.	Yes/No
		If an adult customer requests the deletion of his or her personal data from an e-commerce platform, to what degree is the latter obliged to comply?	
		There is no legal obligation.	Yes/No
		All personal data must be deleted (or erased) with no conditions.	Yes/No
		All personal data can be deleted (or erased) but only under certain conditions.	Yes/No
Cross-border data flows	This indicator measures the degree to which countries regulate data transfers and under which conditions these transfers are allowed in a way that promotes the free movement of data.	To what degree are e-commerce platforms allowed to transfer the personal data of local customers to nondomestic third parties?	
		Free with all countries	Yes/No
		Free with certain countries with no conditions	Yes/No
		Free with certain countries but subject to certain conditions	Yes/No
		If one of the answers above is "Free with certain countries but subject to certain conditions," what are the general conditions under which e-commerce platforms can transfer data trade to a nondomestic third party?	
	Adequacy approach ⁵	Yes/No	

⁵ The country in which a nondomestic third party is based has an "adequate level of protection," "an equivalent protection," "a sufficient level of protection," or any provision entailing an adequacy approach.

Data security and enforcement	This indicator measures the regulatory good practices that render data controllers and processors liable for data processing. It also examines the extent to which countries impose data security requirements on e-commerce platforms.	Accountability approach ⁶	Yes/No
		If subject to the adequacy approach, what circumstances constitute an “adequate level of protection” when transferring personal data to a third-party country?	
		The nature of the personal data	Yes/No
		The country of origin of the data	Yes/No
		The third country in question	Yes/No
		The purposes for which and period during which the data are to be processed	Yes/No
		The law in force in the third country	Yes/No
		The international obligations of the third country	Yes/No
		Any relevant codes of conduct or other rules enforceable in the third country	Yes/No
		Any security measures taken with respect to the data in the third country	Yes/No
		Do data controllers/processors have to comply with a legal or regulatory framework on data privacy?	Yes/No
		Do data controllers/processors have to process nonsensitive differently than sensitive personal data?	Yes/No
		Do e-commerce platforms, considered data controllers/processors, have to comply with any security requirements for automated personal data?	
		Pseudonymization and encryption of personal data	Yes/No
		Appointment of personal data processing manager	Yes/No
		Adoption of an internal policy for establishing procedures for preventing and detecting violations	Yes/No
		Performance of internal controls	Yes/No
		Assessment of the harm that might be caused by a data breach	Yes/No
		Awareness program among employees	Yes/No
Are e-commerce platforms that process personal data monitored by a supervisory authority?	Yes/No		
	Do e-commerce platforms have to comply with administrative procedures established by the supervisory authority to lawfully process personal data?		
	Notification of the supervisory authority	Yes/No	
	Registration through the supervisory authority	Yes/No	
	If yes, are fees applied by the supervisory authority?	Yes/No	

Table 3. Logistics

A measurement of the costs associated with the small parcel trade, covering *de minimis* thresholds, customs duties, as well as value added taxes (VAT) and goods and services taxes (GST).

INDICATOR	DESCRIPTION	WHAT IS MEASURED	HOW IT IS MEASURED
Logistics	This indicator measures the cost associated with	Is there (any type of) a <i>de minimis</i> threshold in your country?	Yes/No
		If yes, what is the threshold amount in local currency units (LCUs)—or in US\$ if stated in US\$ in the respective regulation?	LCUs

⁶ The original data controller remains accountable for compliance with the original privacy framework that applied when and where the data were collected.

importing a low-value product. The cost data points rest on several assumptions: <ul style="list-style-type: none"> ▪ The customer is located in the largest business city of the importing economy. ▪ The customer wants to purchase a computer charger (H.S. Code: 8504.40) through Electronics Inc. ▪ Electronics Inc. is an internet platform selling goods from local and foreign merchants. ▪ The computer charger has a value of US\$30 and is packaged in a small parcel (45 × 35 × 16 centimeters) and weighs 300 grams. 	If applicable, what is the basis of the <i>de minimis</i> threshold for imported products?	
	Value of consignment	Yes/No
	Weight of consignment	Yes/No
	Customs duty payable	Yes/No
	If applicable, does the scope of the <i>de minimis</i> threshold cover exemption from customs duties?	Yes/No
	Is there an import VAT/GST in your country?	Yes/No
	If applicable, does the scope of the <i>de minimis</i> threshold cover an exemption from the VAT/GST?	Yes/No
	If the <i>de minimis</i> threshold does not cover the VAT, is there a separate <i>de minimis</i> threshold for the VAT?	Yes/No
	If there is a separate <i>de minimis</i> threshold for the VAT, what is the amount of the <i>de minimis</i> threshold for the VAT (local currency or as specified in regulation)?	LCUs
	If there is a separate <i>de minimis</i> threshold for VAT, what is its basis?	
	Value of consignment	Yes/No
Weight of consignment	Yes/No	
Customs duty payable	Yes/No	

Table 4. Payment

A measurement of the online payment cycle, specifically observing the regulations that affect the online payments architecture, including the security of the system, the protection of consumers' rights and data, and the quality and speed of online payment services.

INDICATOR	DESCRIPTION	WHAT IS MEASURED	HOW IT IS MEASURED
Licensing of payment service providers (PSPs)	This indicator measures the regulatory requirements for PSPs that allow	According to the law, do PSPs have to establish at least one separate account with commercial banks to safeguard user funds?	Yes/No
		If yes, which of the following provisions are required for PSPs when managing the separate account(s)?	

	and shape online payment systems.	Ensure all received funds are placed in a ring-fenced account at a commercial bank exclusively dedicated for this purpose as approved by the central bank.	Yes/No
		Ensure that the account balance is not at any time less than the outstanding balance owed to users.	Yes/No
		Do not use the funds to engage in any lending activity, including (but not limited to) the provision of credit and overdraft facilities.	Yes/No
		Do not invest user funds in any type of financial asset.	Yes/No
		Do not transfer user funds to another account used for other business activities.	Yes/No
		Other	Yes/No
		According to the law, do PSPs have to hold and account for user funds separately from any other funds they hold for other business purposes?	Yes/No
		According to the law, do PSPs have to ensure that user funds are covered by an insurance policy or a guarantee from a credit institution?	Yes/No
		According to the law, do PSPs have to seek approval from the related authority before they outsource any operational functions?	Yes/No
		According to the law, which of the following provisions are required for PSPs when outsourcing any operational functions?	
		Do not outsource any critical operational functions that would impair the quality of internal controls.	Yes/No
		Do not outsource any critical operational functions that would impair the ability of the related authority to monitor and enforce compliance of the regulation.	Yes/No
		Ensure the outsourcing does not result in any delegation of compliance responsibilities of its senior management	Yes/No
		Ensure compliance with AML/CFT (anti-money laundering/combating financing of terrorism) and cybercrime laws.	Yes/No
		Maintain the relationship and obligations of PSPs toward their users.	Yes/No
		Remain compliant with the legal and licensing requirements.	Yes/No
		Ensure the financial performance of PSPs	Yes/No
Ensure the soundness and continuity of PSPs' digital payment services.	Yes/No		
Payment authorization and processing	This indicator measures the quality, safety, and speed of online payment systems. Specifically, it looks at the role	According to the law, do PSPs have a monthly load limit for a merchant through an issued payment instrument in your country? ⁷	Yes/No
		If yes, what is the load limit amount per month?	US\$
		According to the law, do PSPs have a single payment transaction limit for a merchant through an issued payment instrument in your country? ⁸	Yes/No
		If yes, what is the transaction limit amount?	LCUs

⁷ Load limits are the maximum amount of money that an end user can add to an online payment account.

⁸ Transaction limits represent the maximum value of a single online payment transaction.

Security	of PSPs in processing payments, as well as storing and transmitting customer and payment information.	What information must PSPs disclose to merchants upon the execution of a payment transaction?	
		A unique reference number enabling the payer/payee to identify the payment transaction	Yes/No
		Payment transaction amount	Yes/No
		Identity of the payer/payee	Yes/No
		Date on which the payment order was placed	Yes/No
		How long does it take for a merchant to receive online payments into its merchant account (i.e., settlement period)?	
	Domestic e-commerce	Calendar days	
	Cross-border e-commerce	Calendar days	
	This indicator measures the security of the online payment system.	According to the law, do PSPs have to provide two-factor authentication using standards (e.g., 3D Secure)?	Yes/No
		According to the law, do PSPs and users (e.g., internet platforms) have to comply with the Payment Card Industry Data Security Standard (PCI DSS)? ⁹	Yes/No
		According to the law, do PSPs and users (e.g., internet platforms) have to install Transport Layer Security (TLS) or its predecessor, Secure Sockets Layer (SSL), on their web page or internet browser? ¹⁰	Yes/No
		Does the legal framework on chargebacks apply to the following situations?	
		Fraudulent transactions	Yes/No
		Credit and service not processed	Yes/No
Good not received		Yes/No	
An error in the amount	Yes/No		
Do PSPs set a maximum predetermined threshold of the monthly chargeback rate for a merchant?	Yes/No		

Table 5. Digital market regulations

A measurement of the laws and regulations that promote digital transactions, transparent rules for sellers and consumers, and the safety and security of the digital marketplace. This measurement covers the regulatory tools to ensure the transfer of ownership on the internet (i.e., electronic signature), fostering consumers' trust through online consumer protection, as well as the inclusion of a balanced intermediary liability approach.

INDICATOR	DESCRIPTION	WHAT IS MEASURED	HOW IT IS MEASURED
Consumer protection	This indicator measures the regulatory good practices that help increase consumer trust in the digital economy by leveling the playing field between parties in online transactions.	Are merchants selling goods through an e-commerce platform legally mandated to comply with a legal framework on online consumer protection?	Yes/No
		Are merchants selling goods through an e-commerce platform legally mandated to comply with online information disclosure rules?	Yes/No
		What information are merchants on an e-commerce platform legally mandated to disclose to consumers prior their online purchase?	
		Full business address of the merchant	Yes/No
		Identity of the merchant	Yes/No
		Product information	Yes/No
		Delivery information	Yes/No

⁹ The Payment Card Industry Data Security Standard (PCI DSS) is a set of security standards designed to ensure that all companies that accept, process, store, or transmit credit card information maintain a secure environment.

¹⁰ SSL and TLS are cryptographic protocols that provide authentication and data encryption between servers, machines, and applications operating over a network (e.g., a client connecting to a web server).

		Information about payment processes	Yes/No
		Information about the existence of a right of withdrawal	Yes/No
		Information about complaint handling	Yes/No
		Information about the party bearing the cost of returning the goods in case of cancellation	Yes/No
		Information on out-of-court complaint and redress mechanism	Yes/No
		Are online information disclosure rules specified above applicable to mobile devices?	Yes/No
		Is a domestic merchant selling a computer charger on an e-commerce platform legally mandated to comply with the following general rules related to the right of withdrawal for online purchases?	
		Information duty	Yes/No
		Absence of reason	Yes/No
		Withdrawal period	Yes/No
		What is the period (in number of days) during which the customer of an e-commerce platform can withdraw (cancel) its purchase without any penalties and without giving any reason (so-called cooling-off period), if applicable?	Calendar days
		In a dispute between a domestic customer and a domestic merchant about a low-value sale, is an alternative dispute resolution (ADR) mechanism or online dispute resolution (ODR) platform legally available for the domestic consumer acting individually?	Yes/No
		If an ODR platform is available, is the domestic merchant legally mandated to disclose the name of the ODR provider to his or her customer prior to purchase?	Yes/No
		What is the maximum period during which the dispute must be resolved in ODR with a merchant on an e-commerce platform?	Calendar days
		Are merchants on an e-commerce platform legally mandated to comply with redress rules for the online purchase of goods?	Yes/No
		What types of remedies are legally enforced for the online purchase of goods?	
		Price reduction	Yes/No
		Refund	Yes/No
		Repair	Yes/No
		Replacement	Yes/No
Intermediary liability	This indicator measures the laws and regulations that determine when an online intermediary will be held liable for third party content. It examines the different degrees	Are e-commerce platforms considered internet intermediaries in your jurisdiction?	Yes/No
		If yes, what is the definition of an internet intermediary in your jurisdiction?	
		Mere conduit	Yes/No
		Caching provider	Yes/No
		Hosting provider	Yes/No
		Does the law provide for the liability status of internet intermediaries (e.g., fully liable, immune, or partially liable) regarding content infringing on local trademarks posted by third parties on their websites?	Yes/No

	of liability imposed on e-commerce platforms for infringing content and whether they can avoid liability under certain circumstances.	If partially liable, does the law shield internet intermediaries from liability in certain situations? ¹¹	Yes/No
Electronic signature	This indicator measures the extent to which regulations validate and promote the use of electronic signatures.	Does the law grant electronic signatures the same legal status as handwritten contracts?	Yes/No
		Does the use of a specific technology (e.g., PKI) grant additional legal benefits in terms of the legal recognition of the e-signature (e.g., validity in terms of burden of proof)?	Yes/No
		Does the signature have to be certified by a certification authority to be recognized as having full validity?	Yes/No
		Do a certification authority need a license to operate?	Yes/No

¹¹ This includes when they have no actual knowledge of the infringing content or if they remove or disable access to the infringing content upon obtaining actual knowledge or becoming aware of the likelihood of liability.