ICT - Enterprises 2021 Survey on E-commerce and ICT 2021 Before you begin, you will need.... Your CSO reference number (i) The form should take approximately 20 minutes to complete Enter your CSO reference number General information about ICT systems Does your enterprise use computers? Α1 (Computers include personal computers, portable computers, tablets and other handheld devices such as Smartphones) Only answer this question if A1 Contains Any 1 Yes A2 Average number of persons employed in Ireland during 2020 (as per P35)

Only answer this question if A1 Contains Any 1 Yes		
A3a Number of persons employed with internet access for business purposes:		
(Include fixed line and mobile connections)		
Only answer this question if (A1 Contains Any 1 Yes) And (A3a Greater than 0)		
A3b Number of persons employed using a portable device for mobile use of the internet for business purposes:		
Access and use of the internet		
Only answer this question if A1 Contains Any 1 Yes		
B1 Does your enterprise have access to the internet?		
Yes		

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)			
B2 Does your enterprise: Select all that apply			
Use any type of fixed broadband connection to the internet e.g. DSL, ADSL, SDSL, VDSL, fibre optics technology (FTTP), cable technology, etc. Provide a mobile broadband connection to the internet via a portable device using mobile telephone networks e.g. e.g. via portable computers or other portable devices such as smartphones. Devices using only Wi-Fi and Bluetooth are excluded. None of the above			
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (B2 Contains Any 1 Use any type of fixed broadband connection to the internet e.g. DSL, ADSL, SDSL, VDSL, fibre optics technology (FTTP), cable technology, etc.) Or (B2 Contains All 1 Use any type of fixed broadband connection to the internet e.g. DSL, ADSL, SDSL, VDSL, fibre optics technology (FTTP), cable technology, etc. or 2 Provide a mobile broadband connection to the internet via a portable device using mobile telephone networks e.g. e.g. via portable computers or other portable devices such as smartphones. Devices using only Wi-Fi and Bluetooth are excluded.)			
B3 What is the maximum contracted download speed of the fastest fixed line internet connection of your enterprise?			
Less than 30 Mb/sec At least 30 Mb/sec but less than 100 Mb/Sec			
At least 100 Mb/sec but less than 500 Mb/sec			
At least 500 Mb/sec but less than 1 Gb/sec			
At least 1 Gb/sec			

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)			
B4 Does your enterprise have a website?			
Yes No			
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (B4 Contains Any 1 Yes)			
B5 Does your website provide the following facilities? Select all that apply			
Description of goods or services and/or price information			
Possibility for visitors to customise or design online goods or services			
Online ordering/reservation/booking (e.g. shopping cart)			
Tracking or status of orders placed			
Personalised content on the website for regular/repeat visitors			
Links or references to the enterprise's social media profiles			

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)		
B6 Does your enterprise use any of the following social media?		
(Not solely used for paid adverts) Select all that apply		
Social networks (e.g. Facebook, LinkedIn, Xing, Viadeo, Yammer, etc.)		
Enterprise's blog or microblogs (e.g. Twitter, etc.)		
Multimedia content sharing websites (e.g. YouTube, Flickr, SlideShare, Instagram, Pinterest, Snapchat, etc.)		
Wiki based knowledge sharing tools (e.g. Wikipedia)		
None of the above		
E-commerce		
An e-commerce transaction is the sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders. Payment and delivery do not have to be conducted online. E-commerce transactions exclude orders made by manually typed emails.		
Sales via websites or apps		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)		
C1 Did your enterprise receive orders for goods or services via a website or apps during 2020?		
(Exclude manually typed emails)		
Yes No		

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C1 Contains Any 1 Yes)		
C2 What percentage of total turnover (by value) was represented by sales via a website or apps during 2020?		
(Please provide percentages to .1 decimal if less than 1%)		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C1 Contains Any 1 Yes)		
C3 Of the electronic sales ordered via a website or apps (question above), what percentage was represented by: Total must add up to 100% Percentage % Sales to other enterprises or public authorities? Sales to private consumers?		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C1 Contains Any 1 Yes)		
C4 From which websites or apps did your enterprise receive orders for goods or services during 2020: Select all that apply		
Your enterprise's website or apps? (include those of parent or affiliate enterprises, extranets)		
An e-commerce marketplace website or apps used by several enterprises for trading products? (e.g. Booking, eBay, Amazon, Alibaba, etc.)		

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C1 Contains Any 1 Yes) And (C6 Contains Any 2 Other EU countries)			
C8 Did your enterprise experience any of the following difficulties when selling to other EU countries via a website or apps during 2020? Select all that apply			
High costs of delivering or returning products			
Difficulties related to resolving complaints and disputes			
Adapting product labelling for sales			
Lack of knowledge of foreign languages for communicating with customers			
Restrictions from your business partners			
None of the above			
Sales via EDI			
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)			
C9 Did your enterprise receive orders for goods or services via EDI during 2020?			
Yes			
No No			
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C9 Contains Any 1 Yes)			
C10 What percentage of total turnover (by value) was represented by sales via EDI during 2020?			
(Please provide percentages to .1 decimal if less than 1%)			

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C9 Contains Any 1 Yes)		
C11 Did your enterprise receive orders placed via EDI from customers located in the following geographical areas during 2020? Select all that apply		
Ireland		
Other EU countries		
Rest of the world including UK		
Purchases via websites, apps or EDI		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)		
Did your enterprise place orders for goods or services via a website, apps or EDI during 2020?		
(Exclude manually typed emails)		
Yes No		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (C12 Contains Any 1 Yes)		
C13 What percentage of total purchases (by value) was represented by electronic purchases during 2020?		
(Please provide percentages to .1 decimal if less than 1%)		

Sharing of information electronically within the enterprise

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)			
D1	Does your enterprise use an ERP software package?		
	'es No		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)			
D2 Does your enterprise use CRM software package to: Select all that apply			
	collect, store and make available information on customers to various business functions?		
	analyse information on customers for marketing purposes? (e.g. setting prices, sales promotion, choosing distribution channels, etc.)		
	None of the above		

Internet of Things

The Internet of Things (IoT) refers to interconnected devices or systems, often called "smart" devices or systems. They collect and exchange data and can be monitored or remotely controlled via the internet.

Examples are:

"smart" meters, thermostats, lamps, alarm systems, smoke detectors, door locks, cameras
Sensors, RFID tags connected to a base station that allows them to be managed via the internet
Please exclude plain detection and sensors (e.g. motion, sound, temperature, smoke, etc.) and RFID tags that
cannot be monitored or remotely controlled via the internet.

Internet of Things may include various types of network connections via WAN, WiFi, LAN, Bluetooth, ZigBee, Virtual Private Networks (VPN) etc.

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)		
E1 Does your enterprise use interconnected devices or systems that can be monitored or remotely controlled via the internet (Internet of Things)?		
Yes		
No		
Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (E1 Contains Any 1 Yes)		
Does your enterprise use interconnected devices or systems that can be monitored or remotely controlled via the internet (Internet of Things) for any of the following? Select all that apply		
For energy consumption management (e.g. 'smart' meters, thermostats, lamps, lights)		
For premises' security (e.g. 'smart' alarm systems, smoke dectors, door locks, security cameras)		
For production processes (e.g. sensors or RFID tags that are monitored/controlled via the internet and use to monitor or automate the process)		
For logistics management (e.g. sensors monitored/controlled via the internet for tracking products or vehicles in warehouse management)		
For condition-based maintenance needs of machines or vehicles)		
For customer service (e.g. 'smart' cameras or sensors monitored /controlled via the internet to monitor customers activities or offer them a personalised shopping experience)		
For other purposes		

Use of cloud computing services

Cloud computing refers to paid ICT services that are used over the internet to access software, computing power, storage capacity, etc. where the services have all of the following characteristics:

- are delivered from servers of service providers
- can be easily scaled up or down (e.g. number of users or change of storage capability)
- can be used on-demand by the user, at least after the inital set up (without human interaction with the service provider
- are paid for (i.e. per user, by capacity used, or pre-paid)

Cloud computing may include connections via Virtual Private Networks (VPN).

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)		
F1 Does your enterprise buy any cloud computing services used over the internet?		
(e.g. Microsoft OneDrive, Apple iCloud, Dropbox. Exclude free of charge services)		
Yes No		

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (F1 Contains Any 1 Yes)			
	Which of the following cloud computing services does your enterprise buy for use over the internet?		
(Exclude free of charge services) Select all that apply			
E-mail			
Office software (e.g. word processors, spreadsheets, etc.)			
Hosting the enterprise's database(s)			
Storage of files			
Finance or accounting software applications			
Customer Relationship Management (CRM) software			
Computer power to run the enterprise's own software			
Enterprise Resourse Planning (ERP) software applications (as a cloud computing service)			
Security software applications (e.g. anti-virus program, network access control) as a cloud computing			
•	uting platform providing a hosted environment for application development, testing or deployment software modules, application programming interfaces (APIs)) (as a cloud computing service)		

Artificial Intelligence

Artificial intelligence refers to systems that use technologies such as: text mining, computer vision, speech recognition, natural language generation, machine learning, deep learning to gather and/or use data to predict, recommend or decide, with varying levels of autonomy, the best action to achieve specific goals.

Artifical intelligence systems can be purely software based, e.g.

- chatbots and business virtual assistants based on natural language processing
- face recognition systems based on computer vision or speech recognition systems
- machine translation software
- data analysis based on machine learning, etc. or embedded in devices, e.g.
- autonomous robots for warehouse automation or production assembly works
- autonomous drones for production surveillance or parcel handling, etc.

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes)			
G1 Does your enterprise use any of the following Artificial Intelligence technologies? Select all that apply			
Technologies performing analysis of written language (data mining)			
Technologies converting spoken language into machine-readable format (speech recognition)			
Technologies generating written or spoken language (natural language generation)			
Technologies identifying objects or person based on images (image recognition, image processing)			
Machine learning (e.g. deep learning) for data analysis			
Technologies automating different workflows or assisting in decision making (Artificial Intelligence based software robotic process automation)			
Technologies enabling physical movement of machines via autonomous decisions based on observation of surroundings (autonomous robots, self-driving vehicles, autonomous drones)			
None of the above			

Only answer this question if (A1 Contains Any 1 Yes) And (B1 Contains Any 1 Yes) And (G1 Contains None of 8 None of the above)			
G2	Does your enterprise use Artificial Intelligence software or systems for any of the following purposes?		
Select all that apply			
	keting or sales e.g. chatbots based on natural language processing for customer support, customer optimisation, personalised marketing offers, market analysis based on machine learning etc.		
For production processes e.g. predictive maintenance based on machine learning, tools to classify products or find defects in products based on computer vision, autonomous drones for production surveillance, security or inspection tasks, assembly works performed by autonomous robots, etc.			
For organisation of business administration processes e.g. business virtual assistants based on machine learning and/or natural language processing, voice to text conversion based on speech recognition for document drafting, automated planning or scheduling based on machine learning, machine translation, etc.			
For management of enterprises e.g. machine learning to analyse data and help make investment or other decisions, sales or business forecasting based on machine learning, risk assessment based on machine learning, etc.			
For logistics e.g. autonomous robots for pick and pack solutions in warehouses, route optimisation based on machine learning, autonomous robots for parcel shipping, tracing, distribution and sorting, autonomous drones for parcel delivery, etc.			
	security e.g. face recognition based on computer vision for authentication for ICT users, detection of cyber attacks based on machine learning, etc.		
For human resource management or recruiting e.g. candidates pre-selection screening, automation of recruiting based on machine learning, employee profiling or performance analysis based on machine learning, employee profiling or performance analysis based on machine learning, chatbots based on natural language processing for recruiting or supporting human resources management, etc.			
processing for	reciding of supporting numum resources munugement, etc.		

COVID-19 Impact

Only an average this averaging if D4 Contains Aver 4 Vec			
Only answer this question if B1 Contains Any 1 Yes			
H1 Did your enterprise do any of the following in response to the COVID-19 Pandemic			
Set up a website to facilitate online sales due to the pandemic?			
Provide a click & collect (reservation) service due to the pandemic?			
Experience an increase in sales via websites or apps during the COVID-19 pandemic?			
Set-up a new social media account? (e.g. Facebook, Instagram, Twitter, YouTube, LinkedIn, etc.)			
Increase use of social media? (e.g. Use Facebook/Instagram/Twitter to advertise products, interact with customers, for recruitment, etc.)			
Details of enterprise activity			
I1a What is the main activity of the enterprise?			
I1b Total turnover (in value terms, excluding VAT), for 2020 (Figures per most recent set of accounts will suffice, or best estimate.)			
I1c Total purchases of goods and services (in value terms, excluding VAT), for 2020 (Figures per most recent set of accounts will suffice, or best estimate.)			
Additional Information & Declaration			
How many minutes did it take you to collect the data for this form?			

Please add any comments that would help us to interpret the data provided and avoid further queries:			
Please note: Queries or future surveys from the CSO may be directed to the email or phone number provided by you. EQ ANNOTATION 1: Drop down list required for "Position" options include ('Accountant', 'Director', 'Executive', 'Financial Controller', 'Manager', 'Owner', 'Secretary', 'Other')			
Contact	Details		
Name:			
Position:			
Phone:			
Email:			
Website:			
Eircode:			

You will have the opportunity to view and print or save a copy of your answers after submitting this survey.