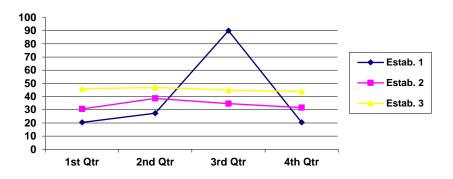
# THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA CENTRAL STATISTICAL AGENCY

# REPORT ON ICT ACCESS AND USE BY LARGE AND MEDIUM SCALE MANUFACTURING INDUSTRIES





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#### 1. INTRODUCTION AND OBJECTIVES OF THE SURVEY

#### 1.1 Introduction

Information Communications Technology (ICT) is the business of developing and using technology to process information and aid communication. It is all about the uses of digital technology that already exist to help individuals, businesses and organisations use information. The information accessed through digital technologies can promote innovation, increase productivity, advance trade and enrich the quality of lives. ICT helps unlock stores of information, making them accessible to all. It is a powerful tool for directing and expressing creativity.

ICT describes a range of technologies for gathering, storing, retrieving, processing, analysing, manipulating, and transmitting or receiving information electronically. It is a generic name for all of the technologies involved with communicating with computers. It includes any communication device or application, encompassing radio, television, cellular phones, networks, computers, other data processing and transmitting equipment, and software.

The potential for ICT to foster economic growth and reduce poverty is receiving increasing attention from the Ethiopian government and society. While ICT presents opportunities for economic and social development of the country, the digital divide within the country also causes confrontation with new challenges. Devising and executing ICT policies and strategies to prevail over the challenges entail proper knowledge of the state of ICT in the country, its use by organizations and individuals, and the impediments to such use. The measurement of ICT enables the formulation of such policies. As a result, measuring ICT for development is becoming a principal concern for the Ethiopian government. Thus, demand for ICT statistics in Ethiopia more urgent than ever.

Statistics on ICT access, use and impact enables appraisal and monitoring of the digital divide and the benefits of ICT in the country. It also helps policy makers and business people to make informed decisions about public policy measures and private investment. Policies, strategies and investments that enable to seize the benefits of ICT are better made with the guidance of statistical evidence. Reliable and timely indicators on ICT are needed to exploit its potential to promote economic and social development including poverty reduction, increase in education and health standards, generation of new industries and employment opportunities, and improvement in competitiveness.

With the growing use of ICT by the government, businesses and individuals in the country and the explicit recognition of the need for ICT statistics, the Central Statistical Agency (CSA) has found it imperative to assess ICT first in the manufacturing industries and then extend it to other businesses, and households. With this in mind, the CSA has been

conducting a survey on ICT usage in Large and Medium Scale Manufacturing Industries since 2019/20(2012 E.C) This is the fourth publication of its kind. Because of priority given to other data aspects of manufacturing industries by the Agency the processing of the report was preceded by the **Report on Large and Medium Scale Manufacturing Industries**. Hence, the deferred debut of the report.

# 1.2. Objectives of the Survey

The general objective of the ICT survey is to collect basic quantitative information on the status of ICT in the manufacturing sector of the economy in Ethiopia that is essential for planning, policy formulation, monitoring and evaluation of the performance and expansion of ICT in the country to accelerate the economic and social development.

The specific objective of the ICT survey on large and medium scale manufacturing industries is to provide numerical data on the number of establishments using computers, computers in use, number of establishments having internet connection, websites, local area network (**LAN**), number of employees having access to computers, internet, number of establishments reporting problems for not being connected to the internet, etc.

# 2. SURVEY METHODOLOGY, DATA COLLECTION AND PROCESSING

# 2.1 Scope, Coverage and Content of the Survey

The range of data items that this survey dealt with includes number of computers in use, internet subscribers, websites, LAN's, employees accessing computers and internet, and other related information in all establishments of large and medium scale manufacturing industries employing 10 or more persons and using power driven machinery all over the country.

The coverage of the survey was on the basis of complete enumeration of the same establishments that were operational in 2019/20 only and spread across all regions of the country. Both private and public manufacturing industries were also covered.

As a fourth attempt, the content of the survey is slightly improved over that of the previous major core indicators, which can be used further as a yardstick for enriching the substances of the ensuing surveys. Core indicators such as the percentages of establishments using computers, having internet connections, having own websites (web pages), reporting ICT benefits by industrial classification, percentages of employees having access to computers, internet by industry group, and other related data are presented in this report. Number of establishments without internet connection by reason and establishments using internet by purpose are also portrayed in these tables.

# 2.2 Concepts and Definition used in the Survey

Data items of ICT have to be clearly defined and identified so that the information about the items becomes useful. Stating data items and related terms correctly is a requirement for making standards and definitions for the collection and compilation of ICT data. The purpose of using standard concepts and definitions is to enumerate and measure the right items accurately and provide quality data to reflect the ICT situation in the manufacturing industries.

Standard concepts and definitions used in this survey to maintain consistent enumeration and measurement of the variables of interest are illustrated as follows.

<u>Computer</u>: - is a machine that manipulates data to a list of instructions. The ability of a computer to store and execute catalogues of instructions called programs makes a computer extremely versatile and distinguishes it from calculators.

Computer includes desk – top or hand held portable computer, minicomputer, and mainframe. It does not include equipment with some embedded computing abilities such as mobile phones or TV sets, computer controlled machinery.

Local Area Network (LAN) is a computer network that connects computers and devices in a limited geographical area such as home, school, computer laboratory, office building, and group of office buildings. It connects work stations and personal computers to provide access to printers and data. Each node (personal computer) in a LAN has its own CPU and can access data and devices such as printers anywhere in the LAN enabling many users to share information and facilities. LAN differs from Wide Area Network (WAN) by higher data transfer rates, smaller geographic area, and lack of a need for leased telecommunication lines and radio waves.

<u>Internet</u>: - is a global network of interconnected computers enabling users to share information along multiple channels. A computer that connects to the internet can access information from a vast array of available servers and other computers by moving information from them to the computer's local memory. The same connection allows that computer to send information to servers on the network.

<u>Website</u>: - is a collection of related web pages, images, video or other digital assets that are hosted on the web server usually accessible via internet. A web page is a document or resource of information that is suitable for the World Wide Web (WWW).

<u>ICT</u>: - Information Communications Technology (ICT) covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form. Example: PC, Internet, e-mail, digital television, robots, etc. ICT is also concerned with the storage, retrieval, manipulation, transmission or receipt of digital data.

<u>Infrastructure</u>: - refers to basic physical and organizational structures needed for the operation of a society or an establishment / enterprise. It is the services and facilities necessary for an economy (establishment) to function. It includes the technical structures that support an establishment or a society such as electricity, telecommunications, roads, etc.

# **Manufacturing** is t

he physical or chemical transformation of materials or components into new products, whether the work is performed by power – driven machines or by hand, whether it is done in a factory or the worker's home, and whether the products are sold at wholesale or retail.

<u>Large and Medium Scale Manufacturing Industries</u> are manufacturing industries that employ 10 or more persons and use power – driven machines for production.

**Establishment**: - is an economic unit producing goods and/or services and owning assets, incurring liabilities and involving in economic activities and in transactions with other economic entities. It is an economic entity performing transaction with autonomy in financial and investment decision making as well as allocating resources for the production

of goods and services. It may be engaged in one or more productive activities at one location.

**Employees**: - are all persons working for the business (not only clerical jobs) including working proprietors and partners as well as employees.

### 2.3 Methods of Data Collection

This ICT survey was conducted along with large and medium scale manufacturing industries survey. The questionnaire module was attached to the manufacturing industries survey questionnaire and the survey was carried out simultaneously. Before the survey, the field staff (enumerators and supervisors) drawn from all Branch Statistical Offices were trained for a week to reinforce their understanding of standard data collection procedures and the tasks to be performed in the survey so that data quality will be ensured.

Then, the field staff was assigned to all establishments categorized as large and medium scale manufacturing industries. The data was collected on the basis of complete enumeration by interviewing the respondents, in this case the manufacturing establishments. The data obtained was recorded in the form designed for this purpose. More than one hundred statisticians, supervisors and enumerators were involved in the survey which lasted 50 days.

# 2.4 Data Processing

Data editing plays an important role in ensuring the quality of the collected survey data by minimizing the effects of the error incurred during data collection. For this purpose, in addition to the editing and coding done in the field, the collected data was again edited, coded, and verified manually at the Head Office.

The data were then entered into personal computers and checked and cleaned using edit specification prepared earlier for this purpose. Finally, it was tabulated using CSPro (Census and Survey Processing System) to produce statistical tables as per the tabulation plan. The data entry and processing involved 35 staff members and lasted 35 days.

#### 3. SUMMARY OF SURVEY RESULTS

## **Computer Usage in the Manufacturing Business**

The first core indicator information was elicited on the use of computers in the manufacturing sector. The manufacturing businesses in - scope were asked whether they used computer during the last 12 - month reference period of 2019/20(2012 E.C)the result is revealed in the following table (Table 1).

Table 1 shows that the total number of manufacturing industries covered by the survey in 2019/20(2012 E.C) was 3559 which is 3% than that of the previous reference year. The table also shows that of all the manufacturing industries covered by the survey about 58.22% of them used computers during the reference period. When the data is dissected by industry group, it is the establishments theManufacture of coke and refined petroleum products, Manufacture of basic pharmaceutical products and pharmaceutical preparations (100% of them) that are ahead of the others in the use of computers followed byPrinting and reproduction of recorded media, (about 93.94% of them), and Manufacture of beverages (about 92.59% of them). Despite the variation in percentage, all the 22 industry groups used computers in the reference year of 2019/20.

Of all the computers (17588) in use by the in-scope businesses during the reference year. When compared among industry groups the highest percentage (more than 30.98%) was reported by Manufacture of food products followed by Manufacture of other non-metallic mineral products, Manufacture of beverages about 10.46%, and 7.43%, respectively. More than 26.58% of all the establishments had Local Area Network (LAN). When the data is analysed by industry group about 100% of the Manufacture of coke and refined petroleum productshad LAN followed by Manufacture of beverages (about 62.96%), and Manufacture of basic pharmaceutical products and pharmaceutical preparations (more than 60%).

Of all establishments during the reference year more than 39.7% of them had reported to have benefited from ICT. When the comparison is inspected by industry group, the Manufacture of coke and refined petroleum products and Manufacture of basic pharmaceutical products and pharmaceutical preparations reported the highest percentage (100%) followed by Manufacture of beverages (about 83.33%), andPrinting and reproduction of recorded media (about 73.72%). Users are reminded of the point that the benefits of ICT in this survey refer to the return obtained from the use of computers or **LAN** or internet or all three only.

# Table 1 Percent of Establishments using Computers, local area network (LAN) and Number of Computers in use by Industry Group, 2018/2019(2011 E.F.Y)

INDUSTRY GROUP	Total number of establish ments	Percent of establish ments using computer s	Numb er of compu ters in use	Percent of establish ments having LAN	Percent of establish ments reporting ICT benefits
Manufacture of food products	1,091	60.04	5,449	23.46	38.59
Manufacture of beverages	54	92.59	1,306	62.96	83.33
Manufacture of tobacco products	-	-	-	-	-
Manufacture of textiles	194	74.23	1,084	26.29	48.97
Manufacture of wearing apparel	142	53.52	478	18.31	40.85
Manufacture of leather and related products	96	77.08	591	29.17	55.21
Manufacture of wood and of products of wood & cork except furniture; manufacture of articles of straw and plaiting materials	142	43.66	532	26.06	30.28
Manufacture of paper and paper products	67	77.61	589	44.78	59.70
Printing and reproduction of recorded media	99	93.94	783	56.57	72.73
Manufacture of coke and refined petroleum products	1	100.00	34	100.00	100.00
Manufacture of chemicals and chemical products	125	70.40	793	46.40	54.40
Manufacture of basic pharmaceutical products and pharmaceutical preparations	5	100.00	58	60.00	100.00
Manufacture of rubber and plastic products	208	69.71	976	37.98	50.00

Manufacture of other non-metallic mineral products		41.3			
-	523		1,839	19.31	24.67
Manufacturing of basic metals		82.95			
	88		531	47	65
Manufacture of fabricated metal products except machinery and equipment		47.96			
	98		319	21	34
Manufacture of machinery and equipment n.e.c.	19	52.63			
			35	32	53
Manufacture of electrical equipment	20	60			
			113	25	40
Manufacture of computer electronic and optical products	5	80	137	60	80
Manufacture of motor vehicles trailers and semi-trailers	12	91.67	76	41.67	66.67
Manufacture of other transport equipment	0	0	0	0	0
Manufacture of furniture	385	31.69	714	9.09	19.48
Other manufacturing	185	71.35	1151	37.84	45.41
Total	3559	58.22	17588	26.58	39.7

Table 2 presents the percent of establishments covered by the survey which had internet connection, website, and provided information on their websites during the reference period. The proportion/percentage of establishments under study using internet is another basic core indicator that this report conveys to data users. It exhibits the percent of establishments which used the internet in 2019/20.

Of all the establishments covered by the survey about 37.23 % used internet in the year 2019/20(2012 E.C). When the data is examined by industry group, the highest percentage of (more than 100%) establishments using internet in the same year was reported by the Manufacture of basic pharmaceutical products and pharmaceutical preparation Manufacture of coke and refined petroleum products, followed by Manufacture of beverages (about 74.07%), and Printing and reproduction of recorded media (about 71.72%).

More than 18.12 % of the establishments under study had web presence during the year the survey referred to. The highest percentage of establishments which had Web presence (about 100%) during the reference year was reported by Manufacture of coke and refined petroleum products followed by Manufacture of basic pharmaceutical products and Manufacture of beverages about 80% and 55.56%, respectively.

Regarding the provision of information on own websites, about 17.14 % of all establishments covered by the survey offered information on their websites during the reference period. When the information is classified by industry group, virtually all the establishments which reported to have websites used their websites to furnish more information on their businesses.

Table 2 - Percent of Establishments having Internet connection and Websites by Industry Group, 2018/2019(2011 E.C)

INDUSTRY GROUP	Total number of establish ments	Percent of establish ments having internet connection	Percent of establish ments having websites	Percent of establishme nts providing information on websites
Manufacture of food products	1,091	33.82	18.42	16.41
Manufacture of beverages	54	74.07	55.56	50.00
Manufacture of tobacco products	-	-	-	-
Manufacture of textiles	194	47.42	22.16	21.13
Manufacture of wearing apparel	142	26.76	7.75	7.75
Manufacture of leather and related products	96	44.79	21.88	21.88
Manufacture of wood and of products of wood & cork except furniture; manufacture of articles of straw and plaiting materials	142	27.46	21.13	21.13
Manufacture of paper and paper products	67	58.21	34.33	34.33
Printing and reproduction of recorded media	99	71.72	22.22	22.22
Manufacture of coke and refined petroleum products	1	100.00	100.00	100.00
Manufacture of chemicals and chemical products	125	57.60	32.80	32.80
Manufacture of basic pharmaceutical products and pharmaceutical preparations	5	100.00	80.00	80.00
Manufacture of rubber and plastic products	208	55.29	25.00	24.52

Manufacture of other non-metallic mineral products				
Manufacture of other non-metanic numeral products	502	26.20	9.00	0.22
	523	26.20	8.99	8.22
Manufacturing of basic metals				
	88	70.45	36.36	36.36
Manufacture of fabricated metal products except machinery and equipment				
	98	28.57	14.29	13.27
Manufacture of machinery and equipment n.e.c.				
	19	42.11	15.79	15.79
Manufacture of electrical equipment				
• •	20	40.00	25.00	25.00
Manufacture of computer electronic and optical products				
• •	5	60.00	40.00	40.00
Manufacture of motor vehicles trailers and semi-trailers				
	12	50.00	33.33	25.00
Manufacture of other transport equipment				
	-	_	_	_
Manufacture of furniture				
	385	15.58	5.71	5.45
Other manufacturing				
	185	48.11	20.00	20.00
Total				
	3,559	37.23	18.12	17.14

Table 3 displays the percent of employees of the manufacturing industries under study who accessed computers and internet during the reference period. It generates another important indicator (the proportion/percentage of employees who used computer and internet) during the reference year. It also indicates the size of the workforce in the manufacturing industries under review which was about (370,201) during the survey year.

Out of all employees of the manufacturing industries about 32.59 % of them accessed computers regularly during the survey reference year. When the comparison is made by industry group the highest percentage (about 50.08%) of employees who accessed computer during the reference period was reported by the Manufacture of chemicals and chemical products, followed by the Other manufacturing 48.26%), and Manufacture of beverages (more than 45.44%) industry group.

About 29.83% of all the employees engaged in all manufacturing industries accessed the internet routinely during the reference period. When the analogy is done by industry group the highest percentage of employees who routinely used internet in the same period was reported by the Manufacture of chemicals and chemical products (about 48.41%) followed by the Manufacture of fabricated metal products except machinery and equipment (48.18%), and Manufacture of beverages (about 43.02%).

Table 3 - Percent of Employees Using Computers and Internet by Industry Group, 2018/2019(2011 E.C)

INDUSTRY GROUP	Total number of employees	Percent of employees having access to computer	Percent of employees having access to internet
Manufacture of food products	84,137	36.34	32.03
Manufacture of beverages	12,647	45.44	43.04
Manufacture of tobacco products	-	-	-
Manufacture of textiles	28,446	26.55	26.98
Manufacture of wearing apparel	7,321	24.54	17.19
Manufacture of leather and related products	9,319	36.46	30.03
Manufacture of wood and of products of wood & cork except furniture; manufacture of articles of straw and plaiting materials	18,526	15.00	13.91
Manufacture of paper and paper products	21,816	24.08	25.12
Printing and reproduction of recorded media	7,663	32.84	23.24
Manufacture of coke and refined petroleum products	251	34.00	17.00
Manufacture of chemicals and chemical products	11,765	50.08	48.41
Manufacture of basic pharmaceutical products and pharmaceutical preparations	478	17.42	27.15
Manufacture of rubber and plastic products	78,121	25.74	23.89

Manufacture of other non-metallic mineral products			
	33,918	36.35	35.77
Manufacturing of basic metals			
	10,776	22.51	16.50
Manufacture of fabricated metal products except machinery and equipment			
	5,091	49.24	48.18
Manufacture of machinery and equipment n.e.c.			
	374	13.30	6.87
Manufacture of electrical equipment	1 202	11.50	12.22
Manufacture of account a state of and activation to the	1,303	11.50	13.22
Manufacture of computer electronic and optical products	619	19.50	18.67
Manufacture of motor vehicles trailers and semi-trailers	017	17.50	10.07
Trialitation of motor ventores transfer and semi-transfer	728	8.62	6.54
Manufacture of other transport equipment			
	-	-	-
Manufacture of furniture			
	4,348	34.62	34.85
Other manufacturing			
	32,554	48.26	42.04
Total			
	370,201	32.59	29.83

Table 4 demonstrates the number and percent of establishments in the manufacturing industries without internet connection during the survey reference period by reason as reported by the respondents. The establishments were asked one question and assisted to choose one major reason only from a list of reasons for not using the internet during the reference period since the reasons for not using the internet can be many and different.

It is to be noted that 25% of all the establishments under study during the reference period did not use internet. Of all establishments which did not use internet during the reference period 38%, 11%, 8% were from the Manufacture of food products and Manufacture of other non-metallic mineral products, and Manufacture of furniture, respectively.

Out of all establishments which did not use internet during the reference period many of them gave various reasons for not using internet in the reference period. When the data is compared by industry group a majority of the establishments in the manufacturing sector did not state a major reason for not using internet during the reference year. Further details are available in the table.

Table 4 - Percent of Establishments Not Using Internet by Reason, 2018/2019(2011 E.C)

		Percent by Reason						
INDUSTRY GROUP	Total		Fina	Infrastr	Lack	No	Oth	NS
	Number	Can	ncial	ucture	of	Ben	er	
	of	man	Probl	Proble	Train	efit	reas	
	Establis	age	ems	ms	ed	fro	ons	
	hments	with			perso	m		
	Without	out			nnel	Inte		
	internet	inter				rnet		
	connecti	net						
	on							
Manufacture of food products								
	286.00	6.23	1.01	8.62	0.73	7.06	2.57	-
Manufacture of beverages								
	10.00	5.56	1.85	5.56	-	5.56	-	-
Manufacture of tobacco products								
	-	-	-	-	-	-	-	-
Manufacture of textiles								
	52.00	4.64	1.55	7.22	1.03	7.73	4.64	-
Manufacture of wearing apparel								
	38.00	11.2	1.41	7.75	-	4.23	2.11	-
		7						
Manufacture of leather and related products	21.00	7.20	1.04	10.50		0.20	2.00	
	31.00	7.29	1.04	12.50	-	9.38	2.08	-
Manufacture of wood and of products of wood & cork except	22.00	0.11	2.02	6.24	0.70	4.22		
furniture; manufacture of articles of straw and plaiting materials	23.00	2.11	2.82	6.34	0.70	4.23	-	-
Manufacture of paper and paper products	12.00	2.00		5.07		7.46	2.00	
	13.00	2.99	-	5.97	-	7.46	2.99	-
Printing and reproduction of recorded media	22.00	2.02	2.02	2.02	2.02	0.00	4.04	
	22.00	3.03	2.02	3.03	2.02	8.08	4.04	-
Manufacture of coke and refined petroleum products								
	-	-	-	-	-	-	-	-

	1			1	1		1	
Manufacture of chemicals and chemical products	16.00	2.40	4.00	2.40	_	0.80	3.20	_
Manufacture of basic pharmaceutical products and pharmaceutical	10.00	2.40	7.00	2.40	-	0.00	3.20	
preparations	_	_	_	_	_	_	_	_
Manufacture of rubber and plastic products	_	-	<del>-</del>		-	_	_	_
Walluracture of rubber and plastic products	30.00	2.88	_	3.37	0.48	6.73	0.96	-
Manufacture of other non-metallic mineral products								
	79.00	3.25	0.38	4.40	0.19	5.16	1.72	-
Manufacturing of basic metals								
_	11.00	6.82	1.14	3.41	-	1.14	_	-
Manufacture of fabricated metal products except machinery and								
equipment	19.00	5.10	-	4.08	1.02	9.18	_	-
Manufacture of machinery and equipment n.e.c.								
, , ,	2.00	_	_	5.26	-	_	5.26	_
Manufacture of electrical equipment								
<b>1 1</b>	4.00	5.00	-	5.00	-	10.0	-	-
Manufacture of computer electronic and optical products						U		
manufacture of computer electronic and optical products	1.00	_	_	20.00	_	_	_	_
Manufacture of motor vehicles trailers and semi-trailers	1.00			20.00				
Wandracture of motor venicles traners and semi-traners	5.00	8.33	_	16.67	_	16.6	_	_
	3.00	0.55		10.07		7		
Manufacture of other transport equipment						<u> </u>		
Trianguetare of outer transport equipment	_	_	_	_	_	_	_	_
Manufacture of furniture								
	62.00	4.68	0.78	4.42	_	5.71	0.52	_
Other manufacturing		1						
	43.00	2.70	_	3.78	0.54	6.49	9.73	_
Total	12.30					2		
	747.00	4.86	0.98	6.15	0.48	6.15	2.36	_
			2.70		5			

Table 5 illustrates the number and percent of establishments in the manufacturing industries which used internet and the purpose they used for. Here, again the respondents were asked one question and aided to choose only one answer (one major purpose) to the question from a list of purposes because the internet might be used for various purposes in the reference year.

Of all the manufacturing establishments under study 44% used internet during the reference year. About 28% and 10% of the manufacturing establishments which used internet in the reference period were from the Manufacture of food products, and, Manufacture of other non-metallic mineral products respectively.

When the percentage distribution of internet users is contrasted by purpose, more than 10.82% of all establishments in the manufacturing industries used internet for placing purchase orders, more than 3.93% used it for e-mailing, and about 10.96% used internet for internal use.

When the comparison is made by industry group, about 40% of the establishments in the Manufacture of basic pharmaceutical products and pharmaceutical preparations used internet for placing purchase orders in the reference year. Another 22.73% of the establishments in the Manufacturing of basic metals used internet for the same purpose. And 22.39% of the establishments in the Manufacture of paper and paper products used internet for placing purchase orders. More than 20% of the establishments in the Manufacture of computer electronic and optical products used internet for e-mailing.

The tables can be explored further for more details as and when the need for more information arises.

Table 5 - Percent of Establishments using Internet by Purpose and Industrial Group, 2018/2019(2011 E.C)

		Percent	t of Users	of Internet	by Pur	pose	
INDUSTRY GROUP	Total Number of Establishm ents With internet Connection	For placin g purcha se orders	For receivi ng purcha se orders	For advertise ment	For intern al use	For exchangin g informatio n with other establishm ents	For accessing informati on from governme nt organizati ons
Manufacture of food products	2.50	11.05	2 0 4	1.00	0.05	4.10	0.11
Manufacture of haveners	369	11.27	2.84	1.83	9.07	4.12	0.64
Manufacture of beverages	40	16.67	5.56	3.70	20.37	14.81	1.85
Manufacture of tobacco products	_	_	_	_	_	_	_
Manufacture of textiles	92	17.01	2.06	1.55	11.34	5.67	3.09
Manufacture of wearing apparel	38	4.23	1.41	2.11	10.56	2.11	1.41
Manufacture of leather and related products	43	5.21	5.21	4.17	6.25	6.25	-
Manufacture of wood and of products of wood & cork except furniture; manufacture of articles of straw and plaiting materials	39	12.68	0.70	-	6.34	0.70	-
Manufacture of paper and paper products	39	22.39	4.48	2.99	14.93	2.99	-
Printing and reproduction of recorded media	71	14.14	6.06	13.13	24.24	6.06	-
Manufacture of coke and refined petroleum products	1	-	-	-	-	100.00	-

Manufacture of chemicals and chemical products							
•	72	18.40	4.80	2.40	17.60	1.60	5.60
Manufacture of basic pharmaceutical products							
and pharmaceutical preparations	5	40.00	-	20.00	20.00	20.00	-
Manufacture of rubber and plastic products							
	115	13.94	5.29	3.85	15.87	1.92	2.88
Manufacture of other non-metallic mineral							
products	137	6.12	0.19	0.57	14.53	1.34	0.38
Manufacturing of basic metals							
	62	22.73	1.14	2.27	14.77	10.23	5.68
Manufacture of fabricated metal products except							
machinery and equipment	28	1.02	4.08	-	15.31	5.10	-
Manufacture of machinery and equipment n.e.c.							
	8	10.53	-	10.53	15.79	-	-
Manufacture of electrical equipment		10.00		10.00	15.00		
	8	10.00	-	10.00	15.00	-	-
Manufacture of computer electronic and optical		20.00			20.00		
products	3	20.00	-	-	20.00	-	-
Manufacture of motor vehicles trailers and semi-		0.22	0.22	16.67	16.67		
trailers	6	8.33	8.33	16.67	16.67	-	-
Manufacture of other transport equipment							
Manufacture of furniture	-	-	-	-	-	-	-
Mianuracture of furniture	60	4.16	0.52	1.82	2.08	2.34	1.56
Other manufacturing	00	4.10	0.32	1.82	2.08	2.34	1.30
Other manufacturing	89	17.84	3.24	4.32	9.19	5.95	1.62
Total	0)	17.04	3.44	7.32	2.17	J.7J	1.02
1 Utal	1,325	10.82	2.44	2.39	10.96	3.68	1.26
	1,343	10.04	<b>⊿.</b> ⊤⊤	4.37	10.70	3.00	1.40

Table 5 (Continued) Percent of Establishments using Internet by Purpose and Industrial Group, 2018/2019(2011 E.F.Y)

		Percent of Users of Internet by Purpose								
INDUSTRY GROUP	Total Number of Establishme nts With internet Connection	For providi ng Other servives To custome rs	For paymen ts	For e-maili	For Telephoni ng Over the Internet	For Instant Messagi ng	Non e			
Manufacture of food products	369	0.46	0.18	2.29	0.46	0.55	0.09			
Manufacture of beverages	40	-	1.85	9.26	-	-	-			
Manufacture of tobacco products	-	-	-	-	-	-	-			
Manufacture of textiles	92	-	1.03	5.15	-	-	0.52			

Manufacture of wearing apparel							
	38	-	1.41	3.52	-	-	-
Manufacture of leather and related products	43	2.08	3.13	12.50	-	-	-
Manufacture of wood and of products of wood & cork except furniture; manufacture of articles of straw and plaiting materials	39	-	-	7.04	-	-	-
Manufacture of paper and paper products	39	2.99	2.99	4.48	-	-	_
Printing and reproduction of recorded media	71	-	-	7.07	_	1.01	_
Manufacture of coke and refined petroleum products	1	-	-	-	-	-	-
Manufacture of chemicals and chemical products	72	-	0.80	6.40	-	-	_
Manufacture of basic pharmaceutical products and pharmaceutical preparations	5	-	-	-	-	-	-
Manufacture of rubber and plastic products	115	_	2.88	8.17	-	0.48	-
Manufacture of other non-metallic mineral products	137	0.38	-	2.49	0.19	-	-
Manufacturing of basic metals	62	-	4.55	6.82	-	2.27	-
Manufacture of fabricated metal products except machinery and equipment	28	1.02	-	2.04	-	-	-
Manufacture of machinery and equipment n.e.c.	8	-	-	5.26	-	-	-
Manufacture of electrical equipment	8	-	-	-	-	5.00	-
Manufacture of computer electronic and optical products	3	-	-	20.00	-	-	-
Manufacture of motor vehicles trailers and semi- trailers	6	-	-	-	-	-	_

Manufacture of other transport equipment							
	-	-	-	-	-	-	-
Manufacture of furniture							
	60	0.52	1.04	1.56	-	-	-
Other manufacturing							
_	89	-	1.08	4.86	-	-	-
Total							
	1,325	0.39	0.81	3.93	0.17	0.31	0.06

Table 6 portrays the number and percent of establishments in the manufacturing industries which had website and used websites for different purposes. The respondents were asked one question and aided to choose only one answer (one major purpose) to the question from a list of purposes they used the website for.

Of all manufacturing establishments under study in 2019/20(2012 E.C) more than 21% had websites (web presence). Comparing all establishments which reported web presence in the reference year by industry group about 31% and 8% were reported to be from theManufacture of food products, and Manufacture of rubber and plastic products, respectively.

When the use of web presence is scrutinized by purpose, of all establishments in the manufacturing industries with web presence about 8% used their web sites for placing product types and prices, more than 3% used their web presence for providing other information to their customers, more than 3% used it for placing purchase orders, and about 3% used it for receiving purchase orders.

When analysed by industry group, of all the establishments in the manufacturing industries reporting web presence, more than 100% of the establishments in the Manufacture of coke and refined petroleum products and another 26% of the establishments in the Manufacture of beverages, and 25% of the establishments in the Manufacture of paper and paper products used their web presence for placing product types and prices. More than 40% of establishments in the Manufacture of basic pharmaceutical products and pharmaceutical preparations, Manufacture of computer electronic and optical products used their web presence for providing other information to customers, and about 10% of establishments in the Manufacture of electrical equipment used their web presence for providing other information to customers and more than 9% of the establishments in the Manufacture of textiles and Manufacture of beverages also used their web presence for the same purpose as in the above. The table offers additional details.

Table 6 Percent of Establishments using Website by Purpose and Industrial Group, 2018/2019(2011 E.F.Y)

		Percei	nt of Us	sers of	Website	by Purpo	ose	
INDUSTRY GROUP	Total Number of Establis hments With Website	For placi ng prod uct types & price s	For placi ng purc hase orde rs	For recei ving purc hase order s	For introd ucing local cultur e & Langu age	For provid ing other inform ation to custo mers	No ne	NS
Manufacture of food products	201	8	3	3	_	2	2	_
Manufacture of beverages	30	26	6	9	_	9	6	_
Manufacture of tobacco products	-	_	_	_	_	-	_	_
Manufacture of textiles	43	9	1	2	-	9	1	_
Manufacture of wearing apparel	11	2	1	2	_	3	_	_
Manufacture of leather and related products	21	8	5	3	-	5	-	_
Manufacture of wood and of products of wood & cork except furniture; manufacture of articles of straw and plaiting materials	30	13	1	6	1	-	_	-
Manufacture of paper and paper products	23	25	3	3	-	3	-	-
Printing and reproduction of recorded media	22	13	4	3	-	2	-	-
Manufacture of coke and refined petroleum products	1	100	-	-	-	-	-	-

Manufacture of chemicals and chemical products								
	41	14	10	5	1	3	_	-
Manufacture of basic pharmaceutical products and pharmaceutical								
preparations	4	20	20	-	-	40	-	-
Manufacture of rubber and plastic products								
	52	11	6	4	-	3	0	-
Manufacture of other non-metallic mineral products								
	47	4	1	2	-	1	1	-
Manufacturing of basic metals								
	32	9	16	3	2	6	-	-
Manufacture of fabricated metal products except machinery and								
equipment	14	4	4	1	-	4	1	_
Manufacture of machinery and equipment n.e.c.								
	3	-	5	5	-	5	-	-
Manufacture of electrical equipment								
	5	15	-	_	-	10	_	_
Manufacture of computer electronic and optical products								
	2	-	-	_	-	40	_	_
Manufacture of motor vehicles trailers and semi-trailers								
	4	17	-	8	-	-	8	_
Manufacture of other transport equipment								
	-	-	-	_	-	-	_	_
Manufacture of furniture								
	22	4	0	1	_	1	0	-
Other manufacturing								
	37	9	5	3	_	3	-	_
Total								
	645	8	3	3	0	3	1	-

# Large and Medium Scale Manufacturing Industries Survey

PART IX ICT Access and Use by Large and Medium Scale Manufacturing Industries, 2019/2020(2012 E.C)

Serial		
No.	Questions	Code
1	Did the industry use computers during the survey year? $Yes = 1$ $No = 2$	
2	If the answer to question number 1 is yes, how many computers did the industry use	
	during the	
	survey year?	
3	If the answer to question number 2 is 2 or more, did the industry also have Local	
	Area	
4	Network (LAN) during the survey year? $Yes = 1$ No = 2	
4	If the answer to question number 1 is yes, what percentage of the workers used	
	computers routingly at work during the curvey year?	
5	routinely at work during the survey year?  If the answer to question number 1 is yes, did the industry use internet during the	
3	survey year?	
	Yes = 1 $No = 2$	
6	If the answer to question number 5 is yes, what percentage of the workers used	
	internet	
	routinely at work during the survey year?	
7	If the answer to question number 5 is yes, what did the industry mostly use the	
	internet for	
	during the survey year?	
	Placing purchase orders over the internet = 1	
	Receiving purchase orders over the internet $= 2$	
	Advertisement = 3	
	Internal use only $= 4$	
	Exchanging information with other industries = 5	
	Obtaining information from government organizations = 6	
	Providing other services to customers = 7 Payment purposes = 8	
	e-mail = 9	
	Telephoning over the internet $= 10$	
	Instant messaging = 11	
	None of the above $= 12$	
8	If the answer to question number 5 is no, what was the reason for not using the	
	internet during	
	the survey year?	
	Carrying out dealings in person (physically) = $1$	
	Financial problems = 2	
	Infrastructural problems = 3	
	Lack of trained personnel = 4	
	Industry did not benefit from internet = 5	
	Others (specify) = 6	

9	Did the industry have a Web presence (website) in the survey year? Yes = 1	
	No = 2	
10	If the answer to question number 9 is yes, what did the industry mostly use its	
	website for	
	during the survey year?	
	Placing the industry's product types and prices over the website = 1	
	Placing purchase orders over the website = 2	
	Receiving purchase orders over the website = 3	
	Introducing the local culture and language on the website = 4	
	Providing information other than the above to customers on the website	
	= 5	
	None of the above $= 6$	
11	Did the industry benefit from the use of ICT (computer, internet, and website) during	
	the	
	survey year? $Yes = 1$ $No = 2$	