JORDAN ICT & ITES SECTOR STATISTICS

2017

Prepared by the Information and Communications Technology Association in Jordan- int@j in partnership with the Ministry of Digital Economy and Entrepreneurship

وزارة الاقتصاد الرقمي و الريادة

int@j
Information and Communications Technology Association - Jordan

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List of Abbreviations

ICT	Information and Communications Technology
IT	Information Technology
ITES	IT Enabled Services
int@j	Information and Communications Technology Association
MoICT	Ministry of Information & Communications Technology
ISIC	International Standard Industrial Classification
OECD	Organization for Economic Co-operation and Development
UNSTATS	United Nations Statistics Division
FDI	Foreign Direct Investment

Introduction

Jordan's information and communications technology (ICT) and IT Enabled Services (ITES)[1] sectors have come a long way in the past years and have achieved a great deal of accomplishments in which we can all take great pride. Today, the ICT ecosystem in Jordan is considered as one of the most developed and robust in the region. With internet penetration rate exceeding 65% and the expansion of new technologies, ICT and ITES are listed amongst the government's highest priorities, and are expected to continue to contribute to the Jordanian economy.

In spite of the rising regional competition and slower economic growth coupled with regional instability, the ICT sector continues to stand as one of Jordan's greatest strengths. To demonstrate the sector's growth in terms of numbers and to determine the growth in market size, exports, investments, and employment, the Information and Communications Technology Association of Jordan (int@j) in cooperation with the Ministry of Information and Communications Technology (MoICT) have completed the ICT and ITES Sector Classification and Statistics for the year 2017 aiming to provide clear and accurate references on Jordan's ICT and ITES sectors. Striving for continuous growth of this sector, is the single minded focus on the need for development and adoption of new technologies, Standardization, Research & Development and capacity building.

Executive Summary

Information and Communication Technology (ICT) is generally the combination of Information technology (IT) and digital telecommunication. Information technology focuses on computers and related devices, and digital telecommunications, including cellphones, the internet and other digital networks. The information and communication technology (ICT) sector has played an important role in Jordan's economic growth.

Jordan is one of the fastest-growing IT markets in the region. The rapid emergence of the Jordanian IT sector has transformed Jordan economy as well as its image from a slow-moving low technology economy to a high-tech land of innovative entrepreneurs.

The country's cost competitiveness in providing Information Technology (IT) services, continues to improve and stabilize the economy with a total revenue of $681,710,762 in 2017. This sector has evolved over the past few years with main focus on IT hardware & infrastructure installation, Software development, software licenses sale, IT hardware & infrastructure wholesale, telecommunications equipment and telephones wholesale, telecommunications equipment installation and telecommunications wireless services. According to the data collected and analyzed from 611 companies currently operating in Jordan, the industry exports revenue have yielded $268,577,218 and $413,133,545 in domestic revenue. Over the last few decades, top IT companies in Jordan have become global leaders in information technology (IT) sector and contributing to the growth of technology not only in Jordan but globally.

Similarly, the telecom sector has registered a phenomenal growth during the past few years and currently a leading market in the region with a subscriber base of 20,086,582 formed of Internet Subscribers, Mobile Subscribers and Fixed Line Subscribers.
Jordan's telecommunication sector has reached unlocking revenue of $1,402,328,032 in 2017 with 4,014 employments. It is predicted that imminent growth in telecom sector will be fueled by further and rapid

[1] IT enabled services are the services that make extensive use of information and communication technologies.

diffusion of smartphones, deployment of new and emerging technologies such as 5G, Internet of Things (IoT), Data Privacy, Automation, Artificial Intelligence (AI), Blockchain and Machine-to-Machine (M2M) etc. The Jordanian telecom industry has started witnessing consolidation thus increasing the industry's efficiency to share their network coverage assets.

The spurt in growth of ICT sector in Jordan and their significant contribution to the socio-economic development of the country has compelled the Government of Jordan to create a favorable policy and regulatory environment for the further growth of these sectors. Suitable policy prescriptions by the government are necessary for ICT to become one of the key engines of economic development in Jordan.

Classical Framework

The International Standard Industrial Classification of All Economic Activities (ISIC) is the international reference classification of productive activities. Its main purpose is to provide a set of activity categories that can be utilized for the collection and reporting of statistics according to such activities.

ISIC is not a classification of goods and services but rather a classification according to the kind of productive activity. It is distinctively different in nature and purpose from the classifications of goods and services, ownership, institutional units or other types of classifications.

All the ICT and ITES Sector classifications in this report were mapped to the fourth revision of ISIC (ISIC, Rev.4) which is the outcome of a review process that spanned over several years and involved contributions from several classification experts and users around the world. The fourth revision of ISIC provides substantially more details at all levels than the previous versions of the classification. This increased detail responds to requests by both producers and users of statistics.

Methodology

The 2017 ICT and IT Enabled Services (ITES) Sector Classification and Statistics Survey conducted between November and December 2017 represents a holistic assessment of Jordan's Information and Communications Technology (ICT) and IT Enabled Services (ITES) industry.

The Survey was designed based on the International Standard Industrial Classification, Version 4.0 (ISIC 4.0) to provide information on the following topics:

- IT and ITES revenue domestic and export
- IT and ITES employment
- IT and ITES investments

The survey followed a secure mechanism that ensured data confidentiality, collected by IPSOS Jordan. Data disclosed only to authorize representatives to allow aggregation and analysis of the data provided by companies. Entered data is split into two separate databases making it virtually impossible to link companies' information to their numbers for confidentiality purposes.

Survey Methodology:

- The survey followed the Organization for Economic Co-operation and Development (OECD) definition of the ICT Sector, according to which the guiding principle for what constitutes an ICT enterprise is: "The production (goods and services) of a candidate industry must primarily be

intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display"

- Based on the OECD definition of an ICT enterprise, ICT and ITES sector segments have been mapped to ISIC 4.0 sections.
- To ensure that the survey covers all ICT and ITES companies in Jordan (100% of the sector), comprehensive lists of companies with ICT and ITES related activities were obtained from the Ministry of Industry and Trade and all Industry and Trade Chambers in Jordan in order to identify ICT and ITES companies in Jordan (including int@j and non-int@j member companies)
- The survey was then launched and verified companies with ICT and ITES activities were visited to fill the questionnaire.
- During the survey, companies confirmed whether they are actually ICT and/or ITES related companies by examining a detailed list of activities and answering specific questions.
- The survey outcomes identified the companies considered as ICT and/or ITES companies.
- Companies are classified as part of the ICT and ITES Sector if their “principal” activities belong to ISIC 4.0 ICT and ITES classes, i.e. are within the ICT and ITES classification domain.
- According to UNSTATS "An activity that contributes most to the value added of the unit, or the activity the value added of which exceeds that of any other activity undertaken by the unit is called its “principal” activity. It is unnecessary that the principal activity account for 50% or more of the total value added of a unit”.
- Remaining companies, which did not complete the questionnaire, were approached individually, and asked questions, in order to identify their activities based on (ISIC 4.0) classification and provide actual number of employees. Besides, relying on historical data for companies which were not approachable at all.
- The revenues for companies which didn’t fill the survey were estimated by pro-rating total numbers based on the number of those who filled the survey compared to the total number of companies.
- For accuracy purposes, statistics of Telecommunications companies were obtained from the Telecommunications Regulatory Commission (TRC), the official organization in Jordan responsible for gathering and publishing Telecom statistics. IT & ITES numbers presented in this report are the results of analyzing the figures obtained from the 2017survey.
- All monetary values expressed in this report are in US Dollars. USD 1 = JD 0.708 is the official conversion rate when publishing this report.

Survey Sample Population

The survey initially identified 725 companies, of which 611 companies with ICT and ITES related activities in Jordan. Although there was lower than expected participation in the survey, the results presented are a reflection of the data collected from companies of the sector and aims to guide stakeholders on its performance for 2017, trends and prospects.

Summary of Participants

Survey Participants Summary	
Category	**Total**
Initial Identified Companies	725
Non-ICT/ITES or Not in Jordan Identified Companies	32
Total Targeted Companies to fill the questionnaire	611
Total ICT/ITES Identified Companies	611
Total Companies Completed the questionnaire	233
Total Companies Did Not Fill the questionnaire	378

Table 1: Survey Participants Summary

Participations by Economic Activity

Companies Activities			
ISIC Activity	**Group A**	**Group B**	**Total**
Telecommunications wired services (6110)	8	4	12
Telecommunications wireless services (6120)	2	3	5
Telecommunications satellite services (6130)	0	0	0
Telecommunications equipment and telephones wholesale (4652010)	13	12	25
Telecommunications equipment installation (332001)	11	22	33
Telecommunications equipment maintenance (951201)	8	0	8
Telecommunications voice over IP services (6190)	1	0	1
Telecommunications value added services (VAS-6311)	12	6	18
Other telecommunications services (6190)	2	5	7
Reproduction of recorded media from master copies of software and data on discs and tapes (182001)	0	1	1
Manufacture of electronic components and boards (2610)	2	4	6
Manufacture of computers and peripheral equipment (2620)	0	0	0
Manufacture of data communications equipment such as bridges routers and gateways (263001)	1	0	1
Manufacture of hard drive media (2680)	0	0	0
Manufacture of consumer electronics (2640)	0	0	0

Manufacture of fiber optic cables (2731)	0	0	0
Wholesale of software (465102)	15	0	15
IT Hardware & infrastructure wholesale (4651)	23	31	54
IT Hardware & infrastructure installation (332002)	21	16	37
Repair of computers and peripheral equipment (9511)	14	15	29
IT Networking equipment maintenance (951202)	8	5	13
Software development (6201)	91	240	331
Software licenses sale (4651)	40	28	68
Software licenses publishing (5820)	7	32	39
IT Outsourcing (9511)	4	0	4
ICT Consulting and Research (6202)	10	20	30
Other IT activities (6209)	29	37	66
Data processing and hosting related services (6311)	10	60	70
Online applications development (6201)	29	0	29
Online applications customization (6312)	9	4	13
Mobile applications development (6201)	24	6	30
Mobile applications customization (6312)	9	5	14
Web portals (6312)	11	33	44
e-Commerce business (6311)	11	4	15
Games Development (6201)	5	0	5
Call centers (8220)	2	1	3
Knowledge process outsourcing (8220)	1	1	2
Manufacture of consumer electronics (2640)	1	0	1
Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores (4741)	18	8	26
ICT Training	13	5	18
Other [ICTES related activity]	15	21	36
Other [Non-ICTES related activity]	45	13	58
Total	**525**	**642**	**1167**

Table 2: Companies Activities

Group A: Companies completed the survey & carried out this activity
Group B: Companies did not complete the survey
Note: Number of total activities is higher than total participating companies as companies have more than one activity.

2017 ICT & ITES Sector Statistics

The following data focuses on five areas:

- IT/ITES revenues
- Investment
- Telecommunications
- Employment
- Sector Activity

In 2017, the total revenue registered a growth of around 2.81% to $19 million increase compared to the year of 2016. The IT & ITES revenue comprises Telecom (67.29%), IT (32.47%), ICT Training (0.10%) and ITES (0.14%). The ICT sector is a leading employer in Jordan creating 17672 jobs in 2017.

IT & ITES Sector Statistics 2017			
	Domestic (USD)	Export (USD)	Total (USD)
Total IT/ITES Revenue	**413,133,545**	**268,577,218**	**681,710,762**
IT Revenue	**409,083,963**	**267,565,448**	**676,649,410**
ITES Revenue	**2,895,480**	**0**	**2,895,480**
ICT Training Revenue	**1,154,102**	**1,011,770**	**2,165,872**
Total Telecom Revenue			**1,402,328,032**
IT Imports			**742,745**
IT and ITES Sector Employment			**13,658**
Telecom Employment			**4,014**
ICT and ITES Sector Employment			**17,672**

Table 3: IT & ITES Sector Statistics 2017

Note: Numbers presented in the table above for the ICT & ITES Sector based on the results of the 2017 Survey.

1. IT Revenue Growth (2003 – 2017)

Over the past 5 years Jordan IT Sector have grown exponentially by 6.07% with $38,709,084 increase of revenue. In 2017, the sector yielded an impressive $676,649,410 in revenue, which is contributing to the sustainability and technological innovation of the sector.

Summary 2003 – 2007					
	2003	2004	2005	2006	2007
IT Export Revenue (USD)	**$69,728,000**	**$79,410,743**	**$162,619,518**	**$191,520,379**	**$196,907,691**
Growth %	74.16%	13.89%	105%	17.80%	2.81%
% of Total Revenues	24%	18%	28%	25.00%	22.30%
IT Domestic Revenue (USD)	**$226,183,000**	**$361,103,905**	**$418,254,125**	**$578,554,212**	**$686,063,063**
Growth %	20.02%	59.65%	15.80%	38.33%	18.58%
% of Total Revenues	76%	82%	72%	75.00%	77.70%
IT Total Revenue (USD)	**$295,910,000**	**$440,514,648**	**$580,873,643**	**$770,074,591**	**$882,970,754**

Growth %	29.51%	48.87%	31.86%	32.57%	14.66%
IT & ITES Emp.	**8,117**	**8,523**	**10,032**	**10,712**	**11,034**

Table 4: IT Growth Summary 2003 – 2007

Summary 2008 - 2012					
	2008	**2009**	**2010**	**2011**	**2012**
IT Export Revenue (USD)	**$226,863,277**	**$209,526,864**	**$202,275,754**	**$230,528,961**	**$299,915,978**
Growth %	15.21%	**-7.64%**	**-3.46%**	**13.97%**	**30.10%**
% of Total Revenues	23.57%	**23.41%**	**27.64%**	**31.23%**	**48.61%**
IT Domestic Revenue (USD)	**$735,571,817**	**$685,461,382**	**$529,571,537**	**$507,526,322**	**$317,110,284**
Growth %	7.22%	**-6.81%**	**-22.74%**	**-4.16%**	**-37.52%**
% of Total Revenues	76.43%	**76.59%**	**72.36%**	**68.77%**	**51.39%**
IT Total Revenue (USD)	**$962,435,094**	**$894,988,247**	**$731,847,291**	**$738,055,284**	**$617,026,263**
Growth %	9.00%	**-7.01%**	**-18.23%**	**0.85%**	**-16.40%**
IT & ITES Emp.	**10,294**	**11,334**	**9,858**	**11,235**	**11,360**

Table 5: IT Growth Summary 2008 – 2012

Summary 2013 - 2017					
	2013	**2014**	**2015**	**2016**	**2017**
IT Export Revenue (USD)	**$324,441,323**	**$178,116,633**	**$200,434,541**	**$207,418,148**	**$267,565,448**
Growth %	8.18%	-45.10%	12.53%	3.48%	29.00%
% of Total Revenues	50.86%	32.59%	32.66%	31.52%	39.54%
IT Domestic Revenue (USD)	**$313,499,003**	**$368,471,515**	**$413,297,567**	**$450,715,178**	**$409,083,963**
Growth %	-1.14%	17.54%	12.17%	9.05%	-9.24%
% of Total Revenues	49.14%	67.41%	67.34%	68.48%	60.46%
IT Total Revenue (USD)	**$637,940,326**	**$546,588,148**	**$613,732,108**	**$658,133,326**	**$676,649,411**
Growth %	3.39%	-14.32%	12.28%	7.23%	2.81%
IT & ITES Emp.	**11,637**	**12,080**	**12,634**	**13,187**	**13,658**

Table 6: IT Growth Summary 2013 – 2017

IT export revenue has reached ~$268 million in 2017 while domestic revenue stood at ~$409 million. This means 60.46% of the total revenue is from local economy and 39.54% relies on markets abroad. With a decline by 9.24% growth in IT domestic revenue in the last year, the export revenue growth has majorly increased by 29.00% requiring for the sector ecosystem to focus on maintaining their domestic revenue share in the coming years.

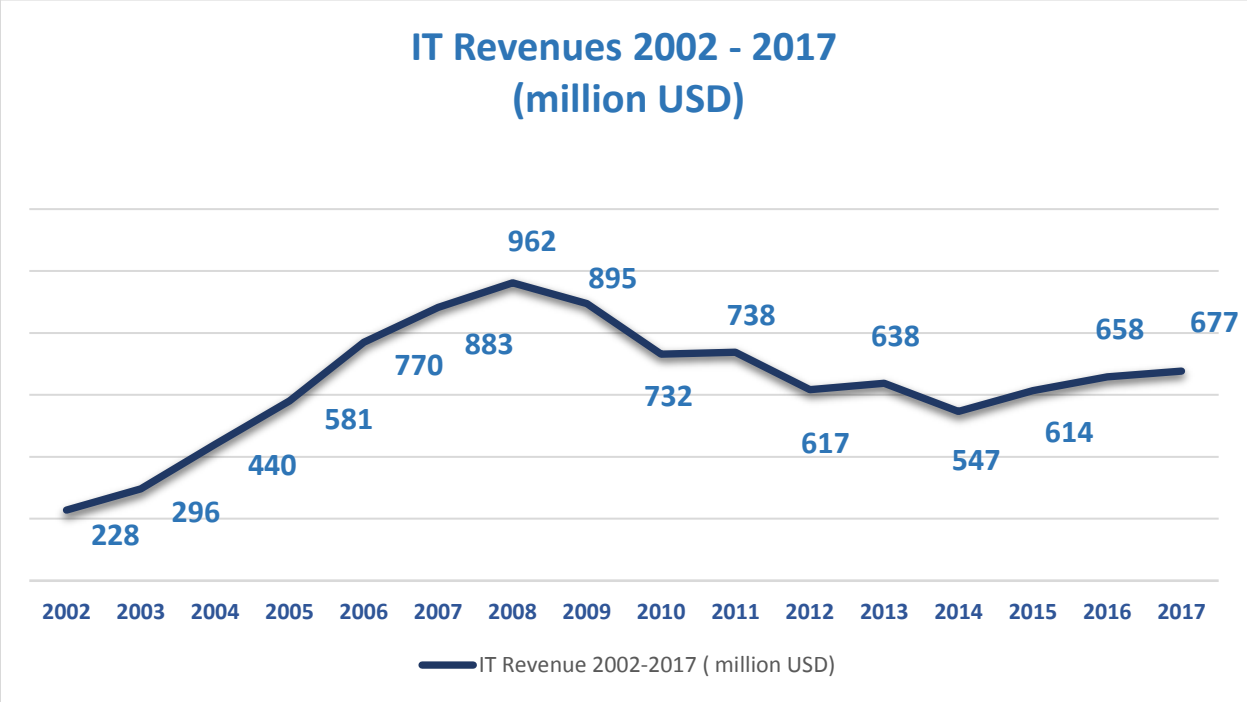

Figure 1: IT Total Revenues 2002 – 2017(million USD)

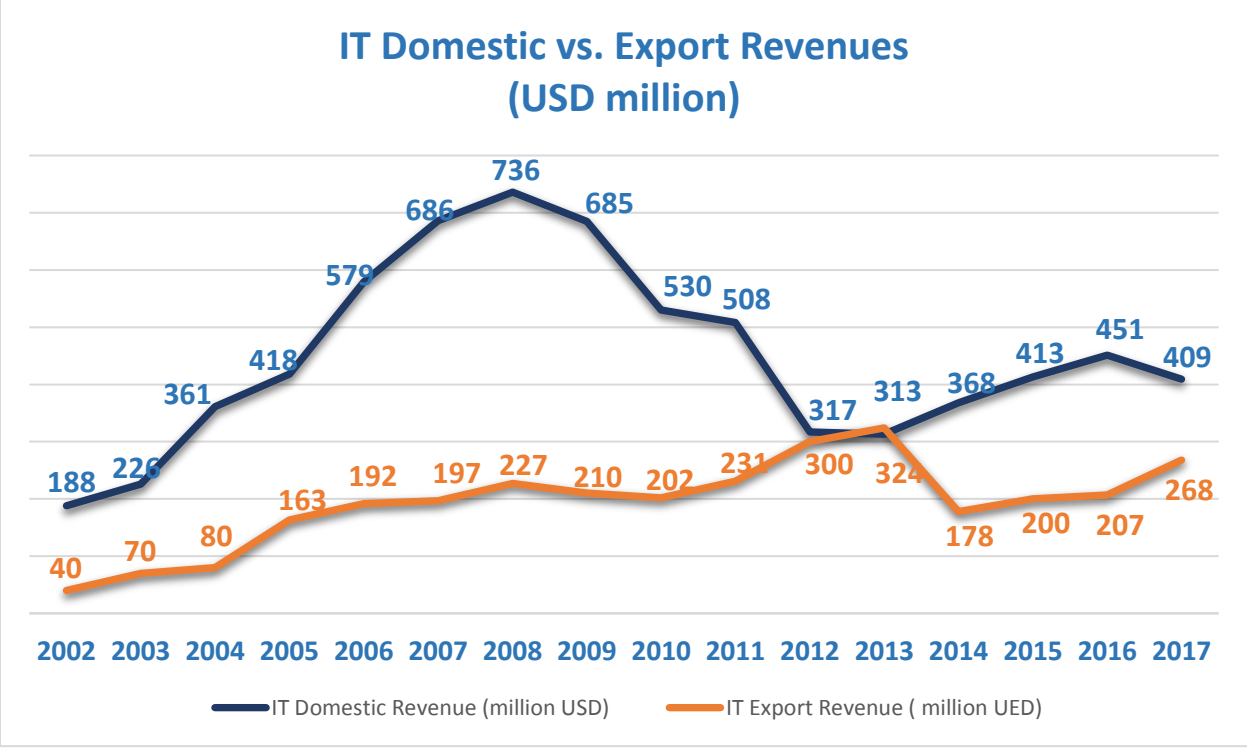

Figure 2: IT Domestic vs. Export Revenues 2002 – 2017 (Million USD)

2017 Telecom Sector Statistics

The telecom sector is one of the fastest growing sectors in Jordan that has undergone an innovative stage over the past few years and has become one of the largest telecommunications market in the region. The telecom sector has assumed the position of an essential infrastructure for socioeconomic development in Jordan's increasingly knowledge based economy. As per below table, the telecom services in Jordan can be divided into four broad segments, PSTN**,** Mobile, Internet and Others.

Telecom Statistics 2017					
Revenues in 2017					
PSTN					**$252,896,073**
Mobile					**$907,052,647**
Internet					**$117,304,096**
Other					**3$125,075,216**
Total					**$1,402,328,032**
Penetration and Number of Subscribers in 2017					
Fixed Line Subscribers	Fixed Line Penetration	Mobile Subscribers	Mobile Penetration	Internet Users	Internet Penetration
328,028	**3.00%**	**9,703,000**	**97%**	**10,055,554**	**100%**
Total Subscribers					**20,086,582**
Annual Investment (million USD)					**$212,016,192**
Employment					**4,014**

Table 7: Telecom Statistics 2017

1. Telecom Growth 2010 – 2017

As a result of growth decline over the last ten years in the telecom sector, Jordan is expected to put in place recovery initiatives which will continue recent revenue improvements of 2015-2017. Over the past 3 years Jordan Telecom Sector has grown by 3.61% with $48,845,749 increase of revenue. In 2017, the sector revenue is $1,402,328,032 which is contributing to becoming a digital economy.

Telecom Sector Statistics 2010 – 2017[1]								
Activity	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Total Revenues	**$1,571,181,525**	**$1,629,190,101**	**$1,669,919,468**	**$1,547,420,471**	**$1,462,801,223**	**$1,353,482,283**	**1,370,045,463**	**$1,402,328,032**
PSTN (USD)	$340,376,899	$334,889,521	$345,281,330	$323,302,868	$289,573,970	$250,738,206	**$274,388,912**	**$252,896,073**
Mobile (USD)	$977,947,900	$1,002,357,206	$1,009,096,545	$941,229,130	$902,406,696	$861,501,333	**$875,155,600**	**$907,052,647**
Internet (USD)	$102,193,097	$126,384,027	$121,305,277	$121,945,640	$120,780,044	$111,541,097	**$101,866,095**	**$117,304,096**
Other	$150,663,629	$165,559,347	$194,236,316	$160,942,833	$150,040,513	$129,701,647	**$112,091,852**	**$125,075,216**
Penetration								
Fixed Line Subscribers	485,000	424,000	401,000	379,000	376,000	369,000	356,000	**328,000**
Fixed Line Penetration	8.00%	6.80%	6.30%	5.20%	5.00%	4.00%	3.60%	**3.20%**
Mobile Subscribers	6,620,000	7,483,000	8,984,000	10,314,000	11,120,000	13,798,000	9,818,000	**9,703,000**
Mobile Penetration	108%	120%	140%	142%	147%	145%	100%	**97%**
Internet Subscribers	2,324,000	3,137,000	4,260,000	5,300,000	5,650,000	7,900,000	10,129,351	**9,135,455**

Internet Penetration	38%	51%	67%	73%	75%	83%	103%	**100%**
Annual Inv. (MUSD)	162.4	179.4	139.8	218.9	403.9	406.7	134.7	**212.0**
Employment	5317	4600	4596	4212	4304	4159	4225	**4014**

Table 8: Telecom Statistics 2010 – 2017

2. Telecom Revenues

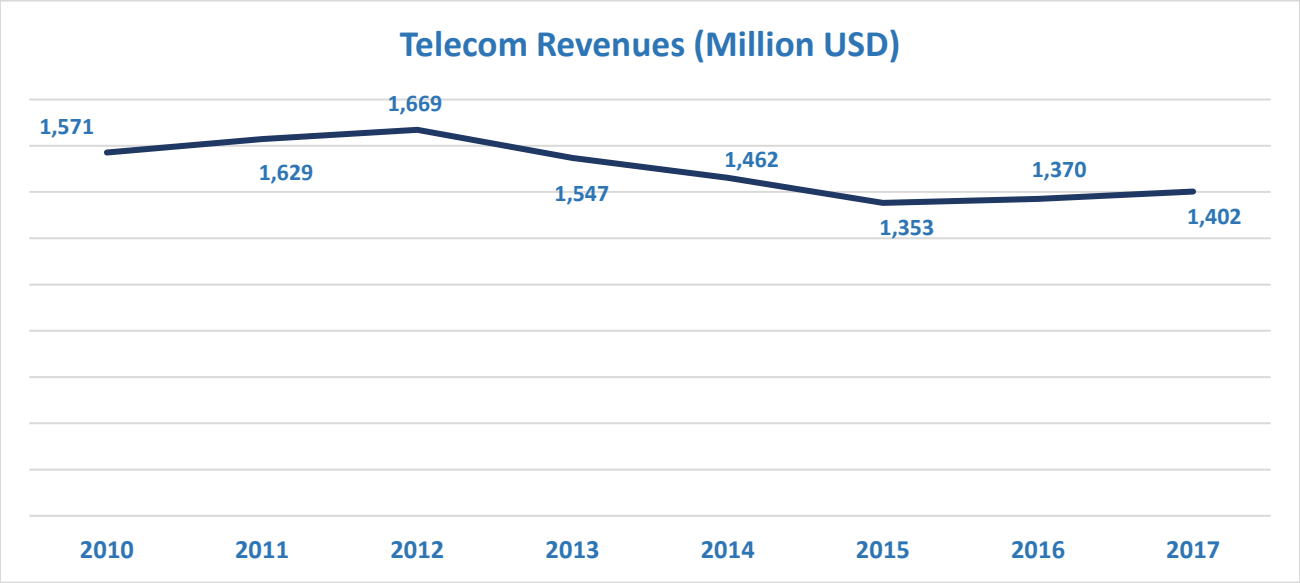

Figure 3: Telecom Revenues 2010 – 2017

3. Internet and Mobile Penetration

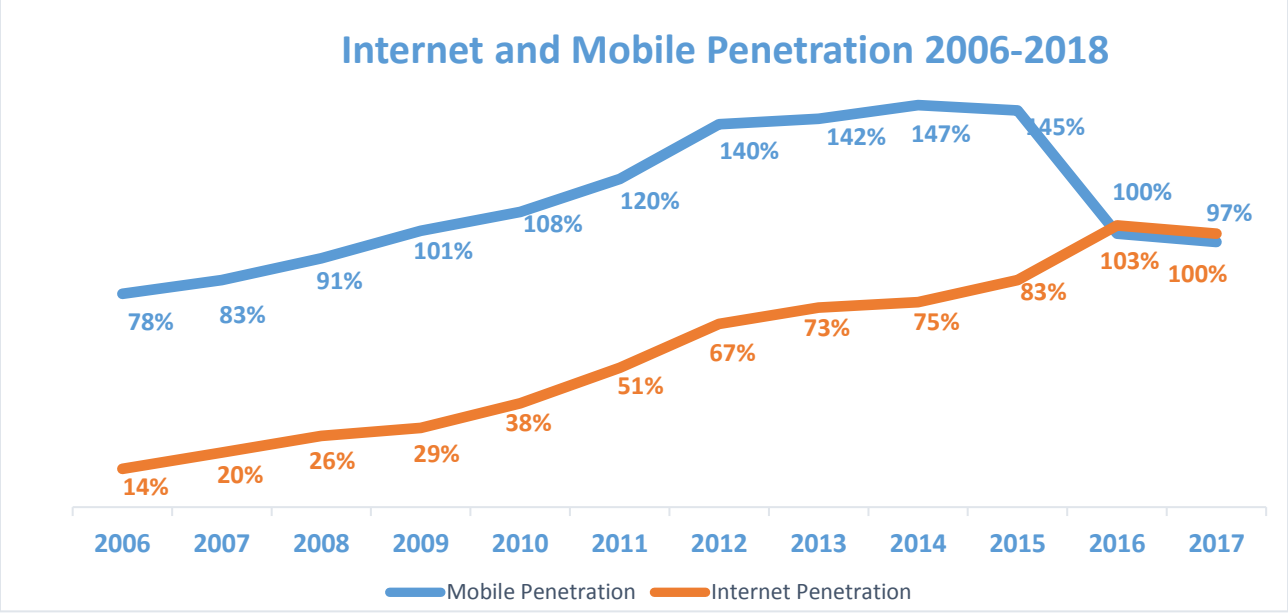

Figure 4: Internet and Mobile Penetration 2006– 2017

*Note: TRC, and due to inflated stats collected from operators, adopted a different criteria in data collection, analysis and calculation that reflect actual figures. This has caused in the sharp decline in mobile penetration.

4. Employment and Investment in Telecom

Despite the recent dip in investments, the Telecom sector has been employing an annual average of 4,677 people for the past decade. The low investments of 2016 could be associated with the regional instability and disrupted markets. As technological innovation is high on the agenda of the ICT sector increased investment opportunities will contribute to strengthening Jordan as a regional digital hub.

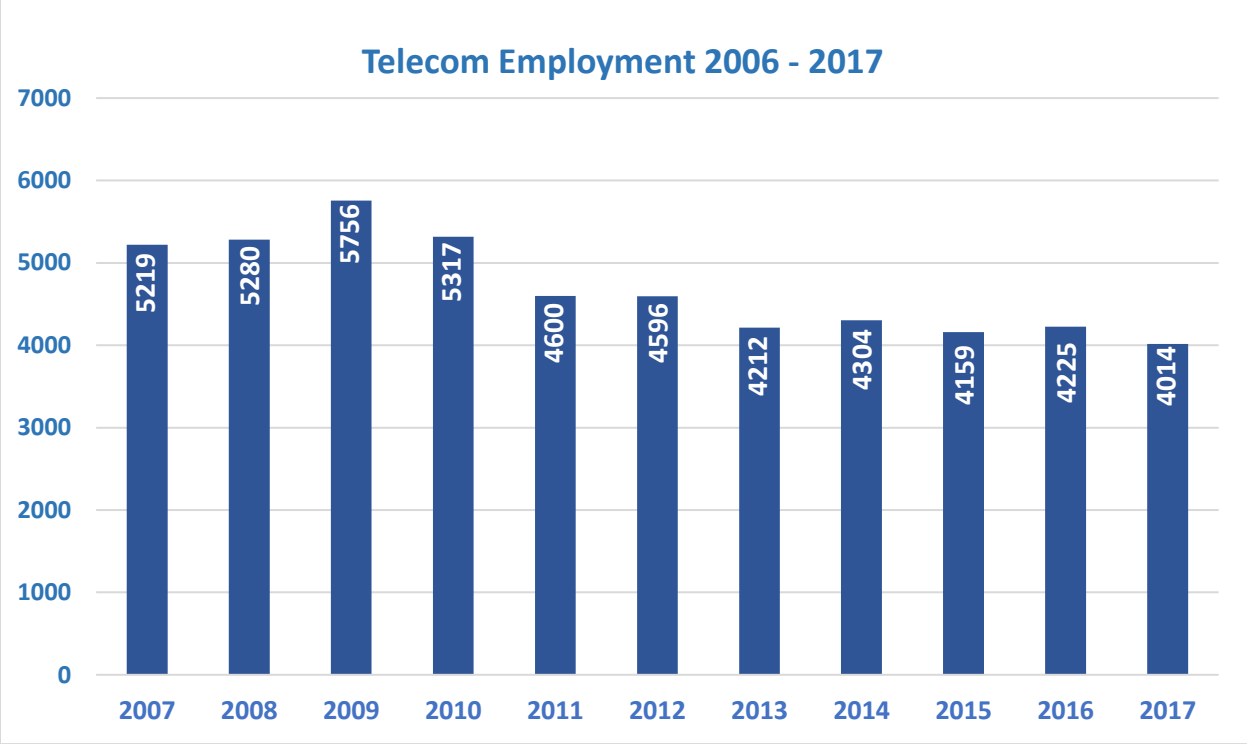

Figure 5: Telecom Employment 2007 – 2017

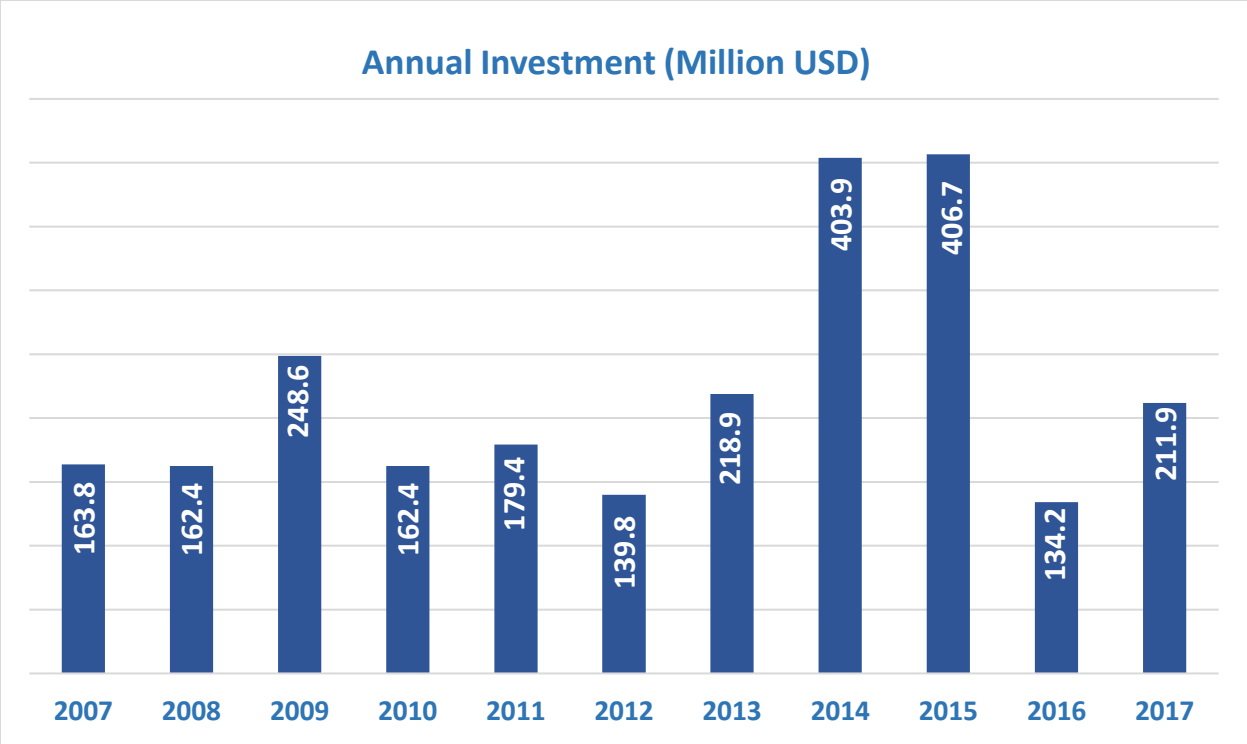

Figure 6: Annual Investment in Telecom 2007– 2017

IT and ITES Revenues by Economic Activity

The sector-wise breakup of the industry has been classified through identifying all economic activities (ISIC) of operating companies. The Software Development activity has led the charts with highest revenue in 2017 worth of $286,629,888, followed by IT Hardware & infrastructure wholesale, Other [ICTES related activity], Software licenses sale and Other IT activities respectively.

ISIC Activity	Total Revenue USD	%	Domestic Revenue USD	%	Export Revenue USD	%
Telecommunications wired services (6110)	$24,227,891	3.55%	$24,227,891	5.86%	$0	0.00%
Telecommunications wireless services (6120)	$26,836	0.00%	$26,836	0.01%	$0	0.00%
Telecommunications satellite services (6130)	$0	0.00%	$0	0.00%	$0	0.00%
Telecommunications equipment and telephones wholesale (4652010)	$20,285,916	2.98%	$18,174,334	4.40%	$2,111,582	0.79%
Telecommunications equipment installation (332001)	$19,749,560	2.90%	$16,183,788	3.92%	$3,565,772	1.33%
Telecommunications equipment maintenance (951201)	$612,941	0.09%	$612,941	0.15%	$0	0.00%
Telecommunications voice over IP services (6190)	$635,593	0.09%	$635,593	0.15%	$0	0.00%
Telecommunications value added services (VAS-6311)	$3,668,158	0.54%	$3,102,127	0.75%	$566,031	0.21%
Other telecommunications services (6190)	$13,576,054	1.99%	$13,576,054	3.29%	$0	0.00%
Reproduction of recorded media from master copies of software and data on discs and tapes (182001)	$0	0.00%	$0	0.00%	$0	0.00%
Manufacture of electronic components and boards (2610)	$1,223,246	0.18%	$1,029,233	0.25%	$194,013	0.07%

Manufacture of computers and peripheral equipment (2620)	$0	0.00%	$0	0.00%	$0	0.00%
Manufacture of data communications equipment such as bridges routers and gateways (263001)	$169,525	0.02%	$169,525	0.04%	$0	0.00%
Manufacture of hard drive media (2680)	$0	0.00%	$0	0.00%	$0	0.00%
Manufacture of consumer electronics (2640)	$0	0.00%	$0	0.00%	$0	0.00%
Manufacture of fiber optic cables (2731)	$0	0.00%	$0	0.00%	$0	0.00%
Wholesale of software (465102)	$3,864,475	0.57%	$2,366,525	0.57%	$1,497,949	0.56%
IT Hardware & infrastructure wholesale (4651)	$98,452,409	14.44%	$97,237,816	23.54%	$1,214,593	0.45%
IT Hardware & infrastructure installation (332002)	$7,406,352	1.09%	$7,363,236	1.78%	$43,116	0.02%
Repair of computers and peripheral equipment (9511)	$7,751,377	1.14%	$7,721,716	1.87%	$29,661	0.01%
IT Networking equipment maintenance (951202)	$1,645,480	0.24%	$1,645,480	0.40%	$0	0.00%
Software development (6201)	$286,629,888	42.05%	$64,443,411	15.60%	$222,186,477	82.73%
Software licenses sale (4651)	$41,815,574	6.13%	$24,810,892	6.01%	$17,004,682	6.33%
Software licenses publishing (5820)	$2,044,278	0.30%	$1,245,137	0.30%	$799,141	0.30%
IT Outsourcing (9511)	$45,198	0.01%	$24,011	0.01%	$21,186	0.01%
ICT Consulting and Research (6202)	$302,260	0.04%	$231,638	0.06%	$70,621	0.03%
Other IT activities (6209)	$32,891,234	4.82%	$30,931,336	7.49%	$1,959,898	0.73%
Data processing and hosting related services (6311)	$5,610,302	0.82%	$3,135,019	0.76%	$2,475,282	0.92%
Online applications development (6201)	$2,545,150	0.37%	$1,360,527	0.33%	$1,184,623	0.44%
Online applications customization (6312)	$123,588	0.02%	$102,401	0.02%	$21,186	0.01%
Mobile applications development (6201)	$1,825,141	0.27%	$1,036,582	0.25%	$788,559	0.29%
Mobile applications customization (6312)	$294,256	0.04%	$273,070	0.07%	$21,186	0.01%
Web portals (6312)	$2,933,457	0.43%	$981,521	0.24%	$1,951,936	0.73%
e-Commerce business (6311)	$1,107,580	0.16%	$1,001,883	0.24%	$105,697	0.04%
Games Development (6201)	$463,518	0.07%	$18,362	0.00%	$445,157	0.17%
Call centers (8220)	$2,895,480	0.42%	$2,895,480	0.70%	$0	0.00%
Knowledge process outsourcing (8220)	$141,243	0.02%	$141,243	0.03%	$0	0.00%
Manufacture of consumer electronics (2640)	$988,701	0.15%	$988,701	0.24%	$0	0.00%
Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores (4741)	$22,669,664	3.33%	$22,660,049	5.48%	$9,615	0.00%
ICT Training	$2,165,872	0.32%	$1,154,102	0.28%	$1,011,770	0.38%
Other [ICTES related activity]	$45,182,006	6.63%	$37,301,164	9.03%	$7,880,841	2.93%
Other [Non-ICTES related activity]	$25,740,561	3.78%	$24,323,920	5.89%	$1,416,641	0.53%
Total	$681,710,763	100%	$413,133,545	100%	$268,577,218	100%

Table 9: IT & ITES Revenues 2017

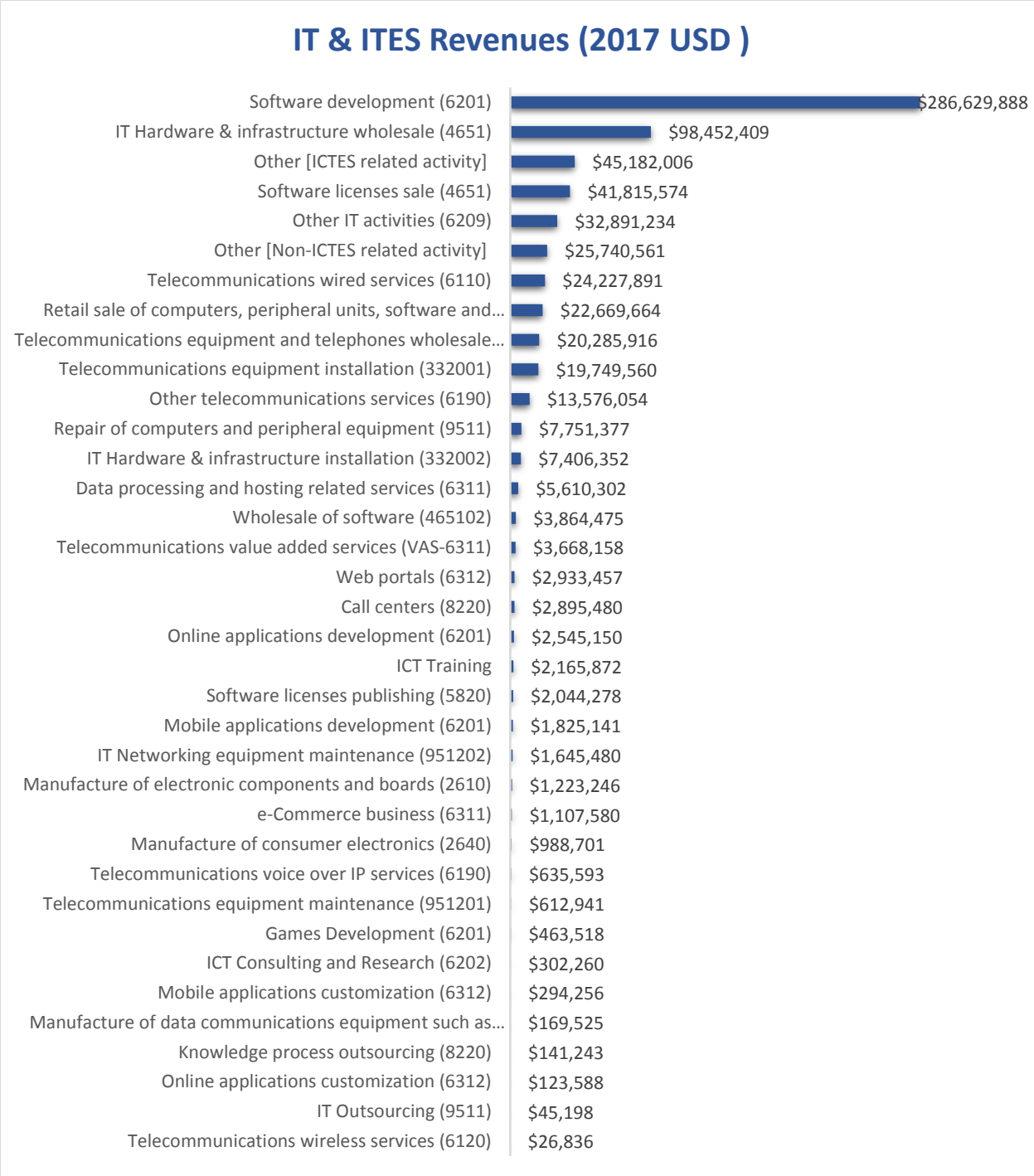

Figure 7: IT and ITES Revenues 2017 (USD)

Domestic Revenue for Various Activities in the Sector

The Size of the domestic market has become significant now in the IT Sector, though it largely remains export driven. As shown in below table, Domestic IT revenue stands at ~$413 million in 2017.

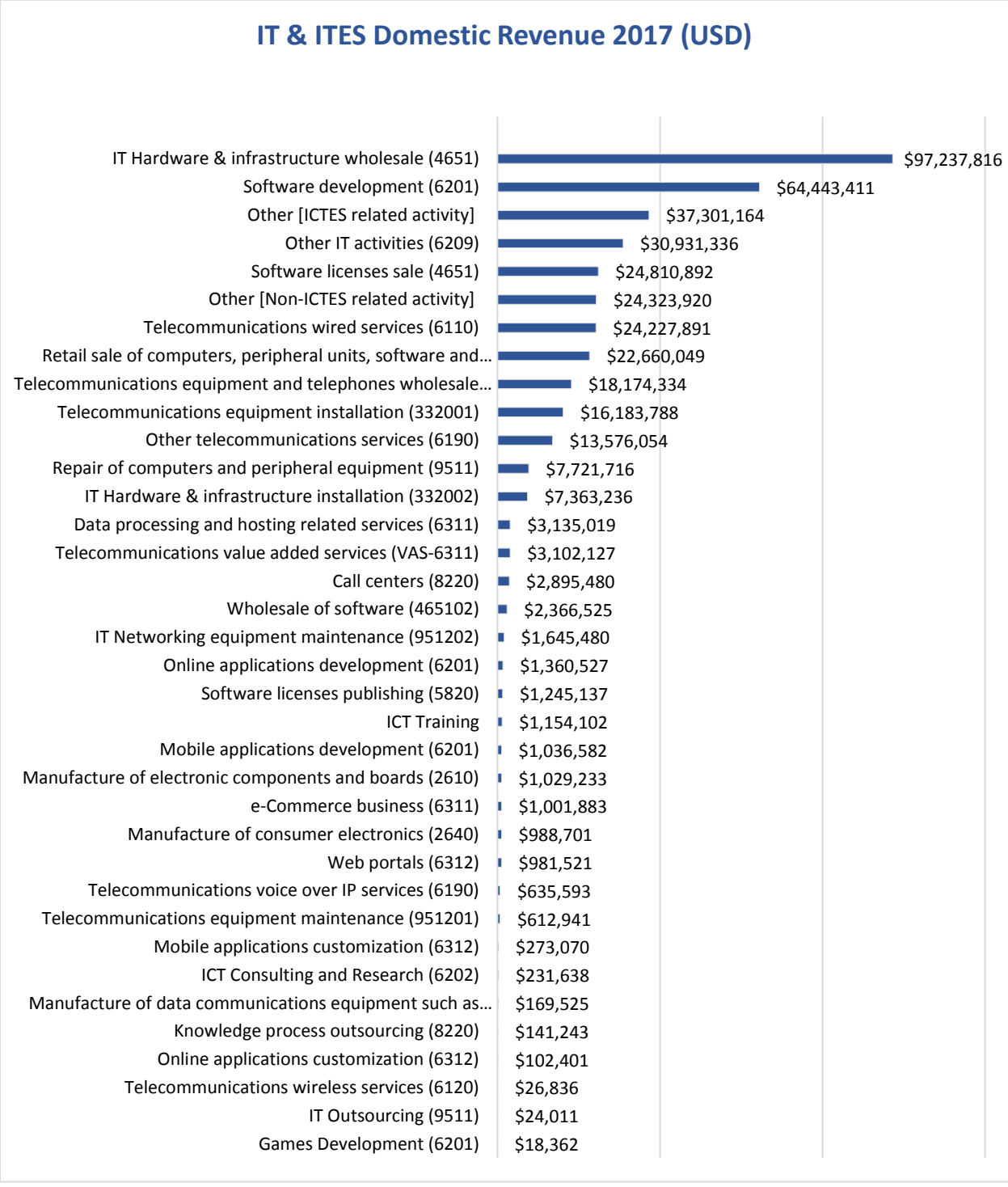

Figure 8: IT & ITES Domestic Revenue 2017 (USD

Export Revenue for Various Activities in the Sector

As per below figure, exports revenue from the sector services have a contribution of around 39.54% of the total revenue. The exports revenue generated from this segment grew to ~$268 million in 2017. The sector activities' revenues are illustrated in the figure below.

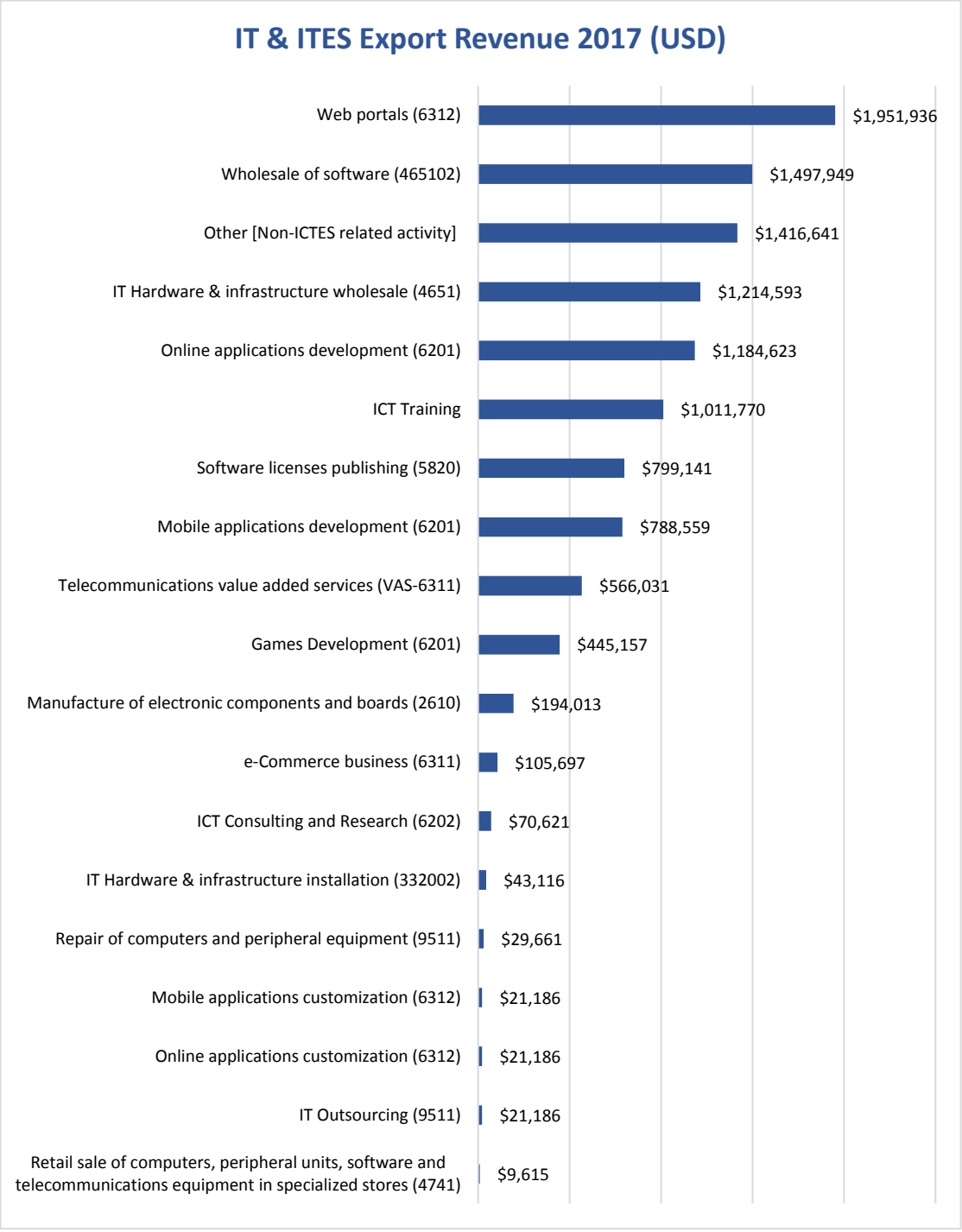

Figure 9: IT & ITES Export Revenue 2017 (USD)

ITES & ICT TRAINING REVENUE

The domestic revenue from ITES stood at $2,895,480 during the fiscal year 2017. The total revenue contribution from ICT Training is $2,165,872, comprises at 53.29% domestic revenue and 46.71% export revenue.

ITES Revenue 2017							
ISIC Activity	**Final ISIC**	**Total Revenue**	**%**	**Domestic Revenue**	**%**	**Export Revenue**	**%**
Activities of call centers	8220	$2,895,480	100%	$2,895,480	100%	$0	100%
Total		**$2,895,480**	**100%**	**$2,895,480**	**100%**	**$0**	**100%**

Table 10: ITES Revenue 2017

ICT Training

ICT Training Revenue 2017							
ISIC Activity	**Final ISIC**	**Total Revenue**	**%**	**Domestic Revenue**	**%**	**Export Revenue**	**%**
ICT Training	ICT Training	$2,165,872	100%	$1,154,102	100%	$1,011,770	100%
Total		**$2,165,872**	**100%**	**$1,154,102**	**100%**	**$1,011,770**	**100%**

Table 11: ICT Training Revenue 2017

IT Value Added Revenue

A simple approach was followed to calculate the IT revenue generated from "value-added" activities. While most of the services under IT were considered "high value-added" activities, activities associated with "significant import input" and "slight domestic processing" were considered "low value-added" activities. Accordingly, the activities identified in table 12 below were excluded from calculating the IT revenue generated from "high value-added" activities.

IT Revenue – Low Value Added Activities 2017	
ISIC Activity	**ISIC**
Telecommunications equipment and telephones wholesale	4652010
Wholesale of software	465102
IT Hardware & infrastructure wholesale	4651

Table 12: IT "Low Value Added" Activities Revenues

Table 13 below, shows the contribution of "high value-added" and "low value-added" activities to Total, Domestic, and Export IT Revenues.

	High Value Add	**%**	**Low Value Add**	**%**
Total IT Revenue (USD)	$559,107,963	82.02%	$122,602,799	17.98%
Domestic IT Revenue (USD)	$295,354,869	71.49%	$117,778,675	28.51%
Export IT Revenue (USD)	$263,753,094	98.20%	$263,753,094	1.80%

Table 13: IT Revenue Value-Add Breakdown

According to the figures above, more than (82%) of the total IT sector revenue is generated from "high value-added" activities, 98.20% of exports revenue results from "high value-added" IT activities, demonstrating that the IT industry brings high value to the Jordanian economy mainly in exports.

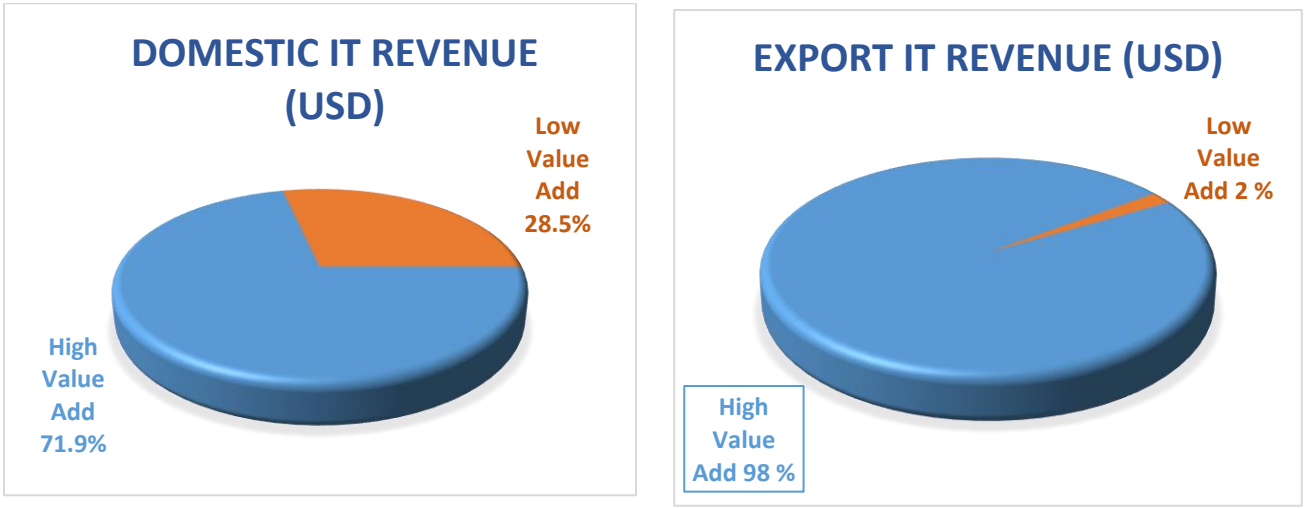

Figure 9 Contribution of Value-Added IT activities to Domestic and Export IT Revenues

IT Imports

Export and Import are the most important macro-economic indicators for a country. These indicators are the integral part of the total developmental effort and national growth of the Jordanian economy. The export growth would increase the import capacity of the country which would boost up industrialization as well as overall economic activities. Jordan is seeking to reduce import dependency on ICT components and promote indigenization. The total IT imports in 2017 is worth $74,484,316.

IT Imports 2017		
Total Imports	**Value (USD)**	**%**
Hardware	$51,483,540	69.12%
Software	$9,129,260	12.26%
IT Services	$3,757,061	5.04%
Licenses	$6,006,716	8.06%
Others	$4,107,740	5.51%
Total USD	$74,484,316	**100%**

Table 14: IT Imports 2017

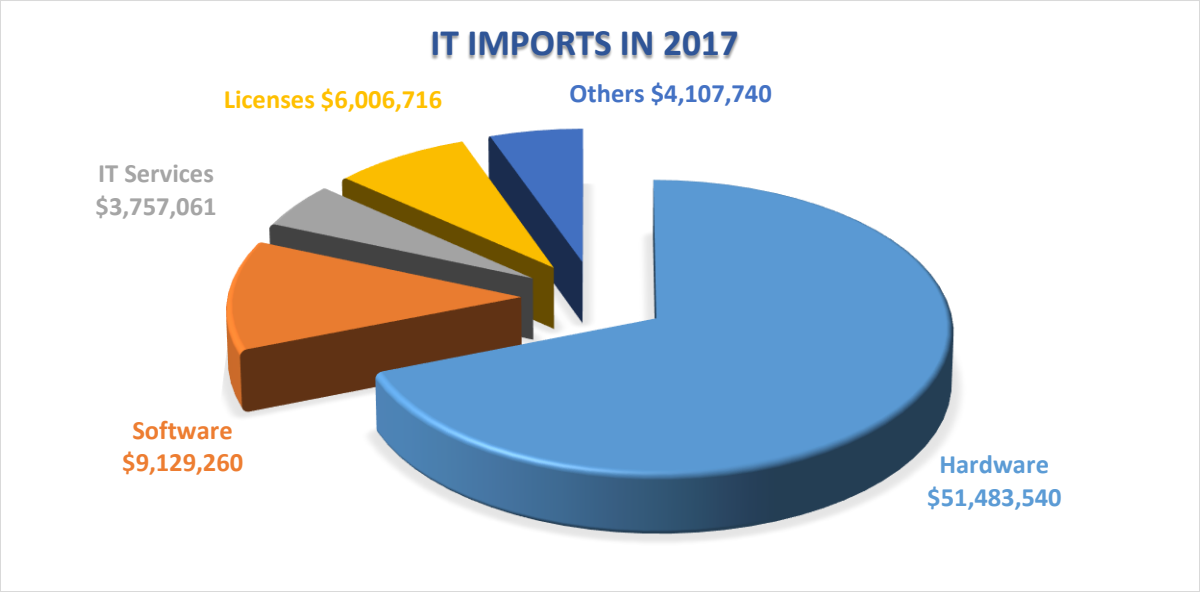

Figure 10: IT Imports in 2017

IT and ITES Exports

Jordan is striving to be a leading export market worldwide. Today about one fourth of total global production is exported. Understanding this transformative process is important as trade has generated gains, but it has also had important distributional consequences. Export volume revenues are reported by country in the below figure with Saudi Arabia leading the markets at $107,697,202 in 2017.

IT and ITES Exports Volumes by Country 2017

IT and ITES Exports Volumes by Country		
Sale Region	Total Export Revenue Prorated in USD	%
Saudi Arabia	107,697,202	40.10%
United Kingdom	46,860,576	17.45%
Netherlands	39,714,182	14.79%
Iraq	20,003,579	7.45%
United States of America	13,368,786	4.98%
United Arab Emirates	9,662,021	3.60%
Lebanon	3,382,052	1.26%
Armenia	3,061,572	1.14%
Sudan	3,033,944	1.13%
Qatar	2,863,407	1.07%
Bahrain	2,663,709	0.99%
Kuwait	2,417,417	0.90%
Oman	1,755,588	0.65%
Egypt	1,753,781	0.65%
Syria	1,446,864	0.54%
Germany	1,179,680	0.44%
Yemen	1,051,990	0.39%
Palestine	931,991	0.35%

Japan	827,849	0.31%
Libya	707,835	0.26%
France	587,822	0.22%
Canada	403,985	0.15%
Austria	353,075	0.13%
Kenya	342,896	0.13%
Australia	314,514	0.12%
Karabakh	249,824	0.09%
South Africa	246,885	0.09%
Algeria	241,874	0.09%
China	240,027	0.09%
Morocco	215,446	0.08%
Turkey	152,677	0.06%
Cyprus	146,955	0.05%
Tanzania	132,260	0.05%
Chad	75,927	0.03%
Singapore	74,835	0.03%
Nigeria	73,478	0.03%
Senegal	73,478	0.03%
Others	73,478	0.03%
Tunisia	69,804	0.03%
Hungary	68,305	0.03%
Pakistan	55,647	0.02%
Total	**268,577,217.9**	**100%**

Table 15: IT& ITES Exports Revenues by Country 2017

IT and ITES Exports Revenue by Country

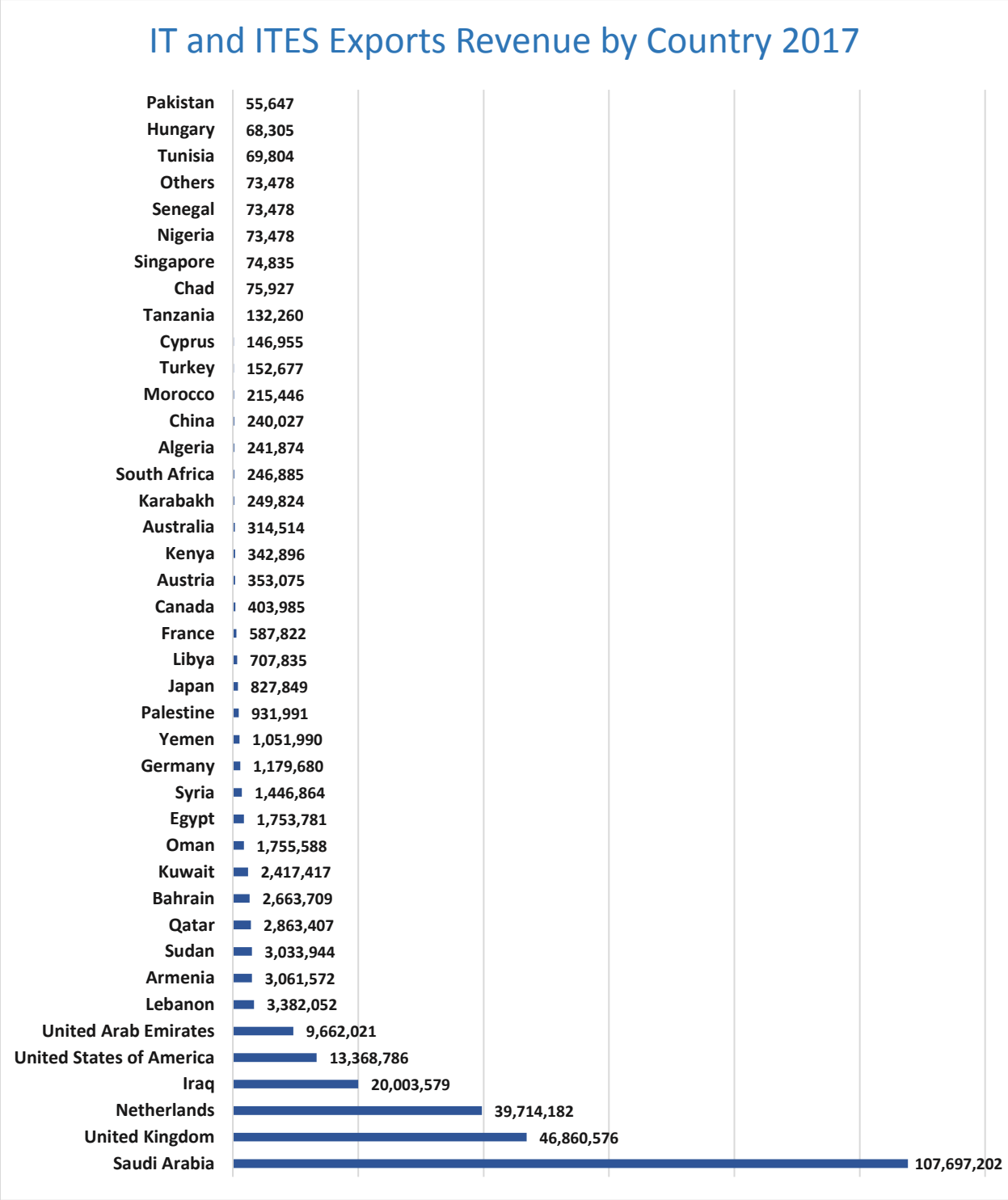

Figure 11: IT and ITES Exports Revenue by Country

IT Export Revenues 2002 – 2017

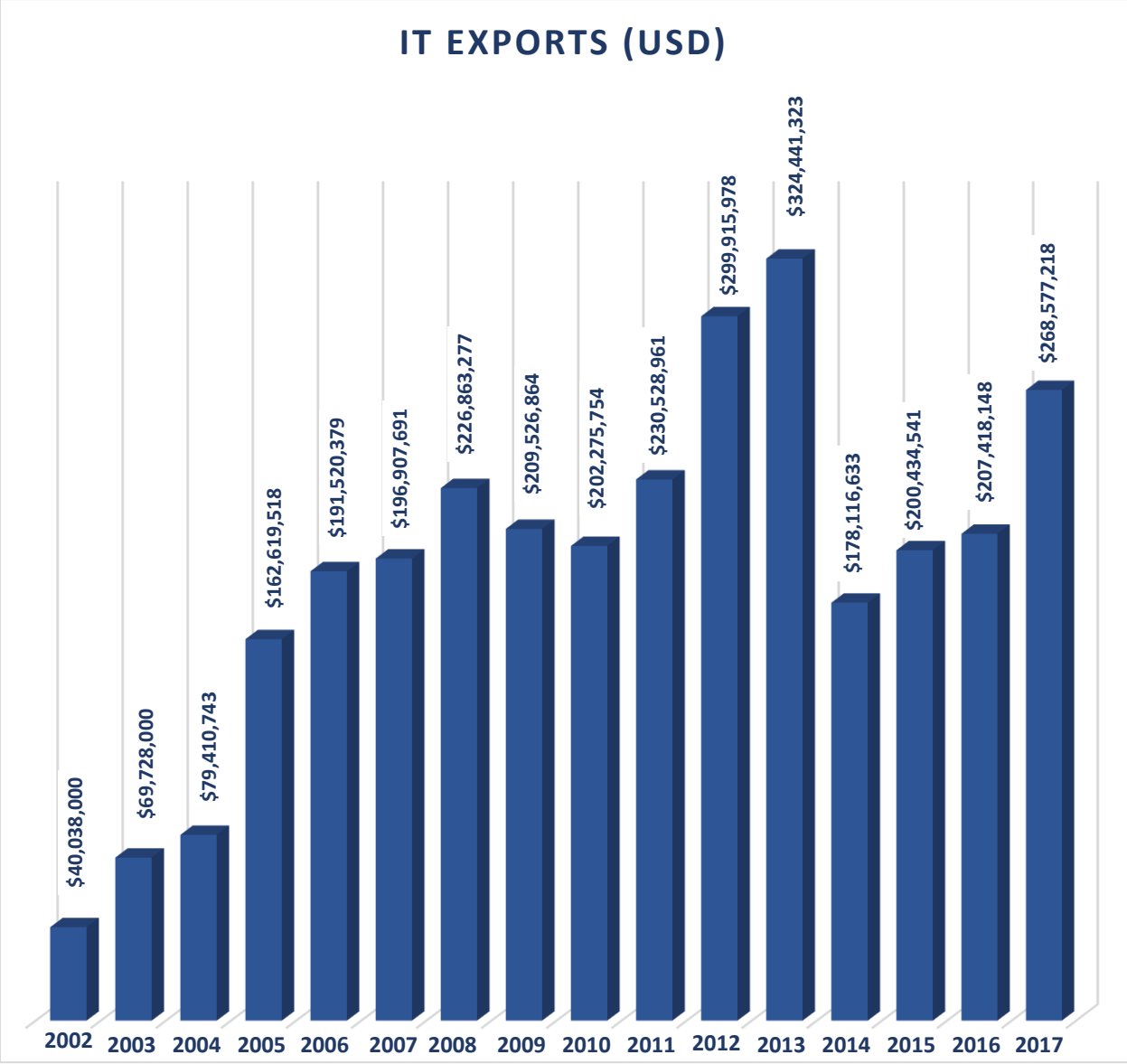

Figure 12: IT Exports Revenues 2002 – 2017

Top 10 Exports Markets 2017 vs. 2016

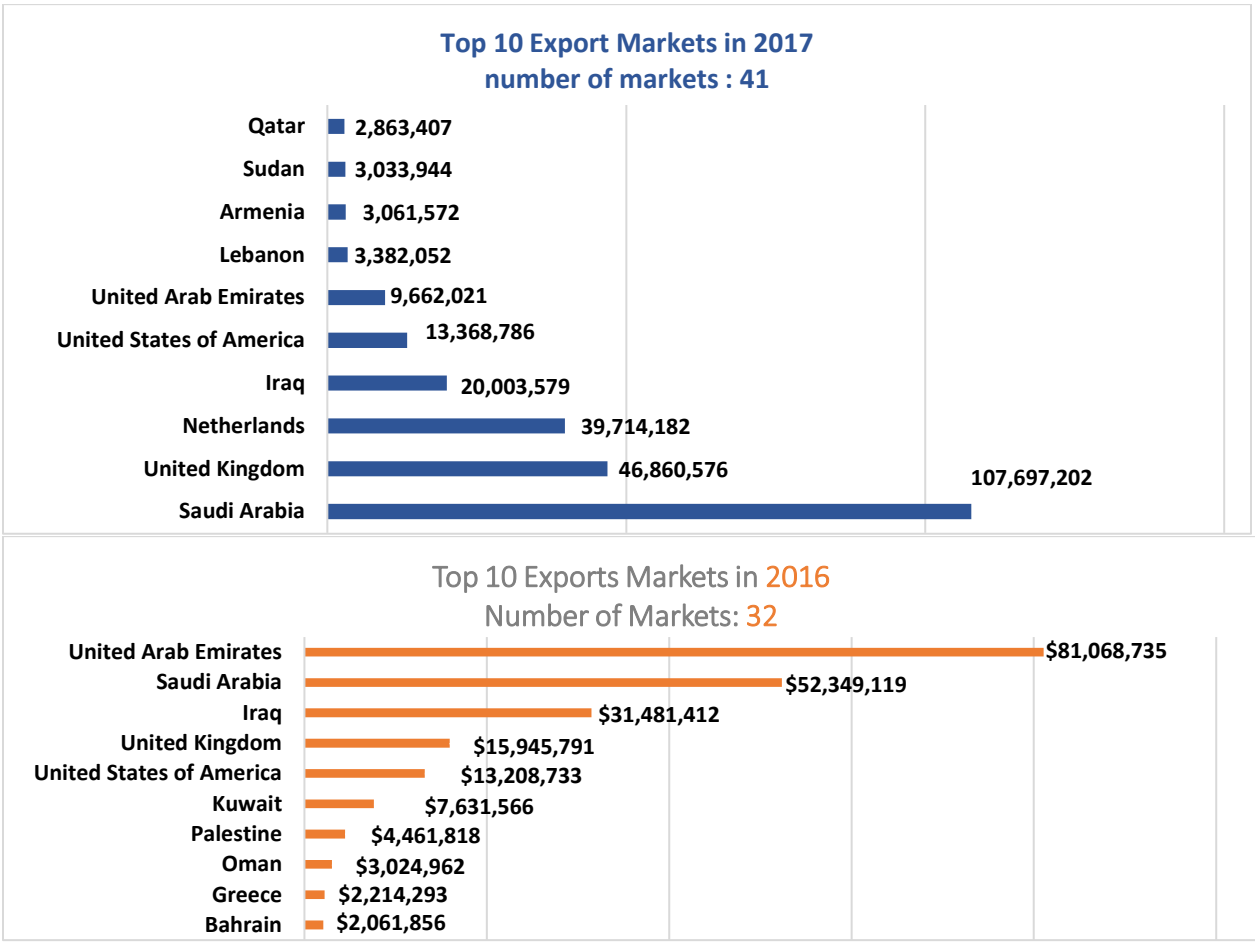

Figure 13: Top 10 Exports Markets and Number of Markets 2017 vs. 2016

IT and ITES Employment

1. Overall Employment Breakdown

Category	Jordanian/Foreign	Local/ Abroad	Male/ Female	Total	%
Management	Jordanian Employees	Local	Male	1430	10%
	Jordanian Employees	Local	Female	381	3%
	Foreign Employees	Local	Male	15	0%
	Foreign Employees	Local	Female	4	0%
	Jordanian Employees	Abroad	Male	36	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	6	0%
	Foreign Employees	Abroad	Female	4	0%
HR & Admin	Jordanian Employees	Local	Male	110	1%
	Jordanian Employees	Local	Female	201	1%
	Foreign Employees	Local	Male	4	0%
	Foreign Employees	Local	Female	0	0%
	Jordanian Employees	Abroad	Male	0	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	13	0%

	Foreign Employees	Abroad	Female	2	0%
Marketing	Jordanian Employees	Local	Male	201	1%
	Jordanian Employees	Local	Female	180	1%
	Foreign Employees	Local	Male	0	0%
	Foreign Employees	Local	Female	6	0%
	Jordanian Employees	Abroad	Male	4	0%
	Jordanian Employees	Abroad	Female	2	0%
	Foreign Employees	Abroad	Male	6	0%
	Foreign Employees	Abroad	Female	6	0%
Sales	Jordanian Employees	Local	Male	436	3%
	Jordanian Employees	Local	Female	220	2%
	Foreign Employees	Local	Male	8	0%
	Foreign Employees	Local	Female	0	0%
	Jordanian Employees	Abroad	Male	19	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	15	0%
	Foreign Employees	Abroad	Female	2	0%
Software Development	Jordanian Employees	Local	Male	2547	19%
	Jordanian Employees	Local	Female	977	7%
	Foreign Employees	Local	Male	19	0%
	Foreign Employees	Local	Female	8	0%
	Jordanian Employees	Abroad	Male	2	0%
	Jordanian Employees	Abroad	Female	2	0%
	Foreign Employees	Abroad	Male	15	0%
	Foreign Employees	Abroad	Female	0	0%
IT Support	Jordanian Employees	Local	Male	1318	10%
	Jordanian Employees	Local	Female	267	2%
	Foreign Employees	Local	Male	409	3%
	Foreign Employees	Local	Female	0	0%
	Jordanian Employees	Abroad	Male	25	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	0	0%
	Foreign Employees	Abroad	Female	0	0%
Network and Infrastructure	Jordanian Employees	Local	Male	222	2%
	Jordanian Employees	Local	Female	6	0%
	Foreign Employees	Local	Male	0	0%
	Foreign Employees	Local	Female	0	0%
	Jordanian Employees	Abroad	Male	0	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	0	0%
	Foreign Employees	Abroad	Female	0	0%
Other Technical	Jordanian Employees	Local	Male	555	4%
	Jordanian Employees	Local	Female	51	0%
	Foreign Employees	Local	Male	8	0%
	Foreign Employees	Local	Female	2	0%
	Jordanian Employees	Abroad	Male	0	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	0	0%
	Foreign Employees	Abroad	Female	0	0%
Technical Operations	Jordanian Employees	Local	Male	307	2%
	Jordanian Employees	Local	Female	95	1%
	Foreign Employees	Local	Male	0	0%
	Foreign Employees	Local	Female	0	0%
	Jordanian Employees	Abroad	Male	0	0%
	Jordanian Employees	Abroad	Female	0	0%

	Foreign Employees	Abroad	Male	2	0%
	Foreign Employees	Abroad	Female	0	0%
Customer Care	Jordanian Employees	Local	Male	1805	13%
	Jordanian Employees	Local	Female	1684	12%
	Foreign Employees	Local	Male	0	0%
	Foreign Employees	Local	Female	0	0%
	Jordanian Employees	Abroad	Male	2	0%
	Jordanian Employees	Abroad	Female	0	0%
	Foreign Employees	Abroad	Male	11	0%
	Foreign Employees	Abroad	Female	0	0%
Total				**13658**	**100%**

Table 16: Employment in the IT & ITES Sector

2. IT and ITES Employment by Category

IT and ITES Employment by Category			
Category		**Total**	**%**
Employment by Function	Management	1,877	14%
	HR & Admin	331	2%
	Marketing	407	3%
	Sales	701	5%
	Software Development	3,570	26%
	IT Support	2,019	15%
	Network and Infrastructure	229	2%
	Other Technical	617	5%
	Technical Operations	405	3%
	Customer Care	3,502	26%
Employment by Nationality	Jordanian Employees	13,090	96%
	Foreign Employees	568	4%
Employment by Location	Local	13,482	99%
	Abroad	176	1%
Employment by Gender	Male	9,554	70%
	Female	4,104	30%

Table 16: IT & ITES Employment by category

1. Employment by function

Employment Functions are the activities divided below for the production of final goods or services intended for the market or for third parties. Usually these functions make up the primary activity of the enterprise, but they may also include other activities if the enterprise considers these as part of its core functions.

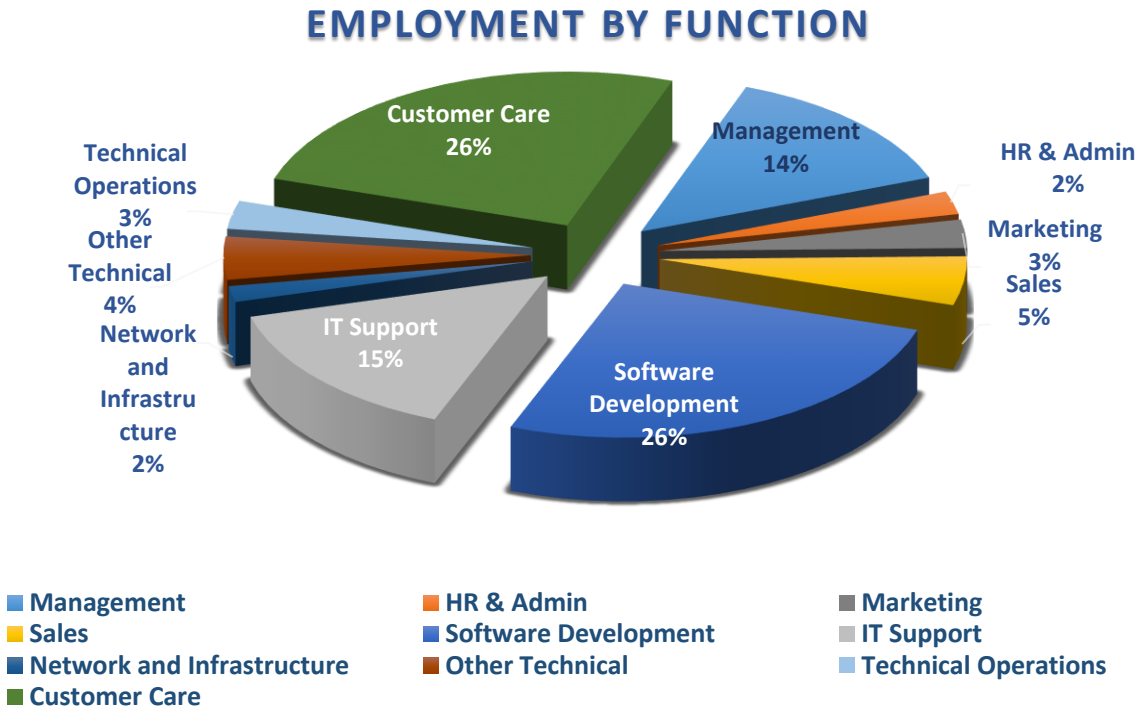

Figure 14: Employment by function

2. Employment by Nationality

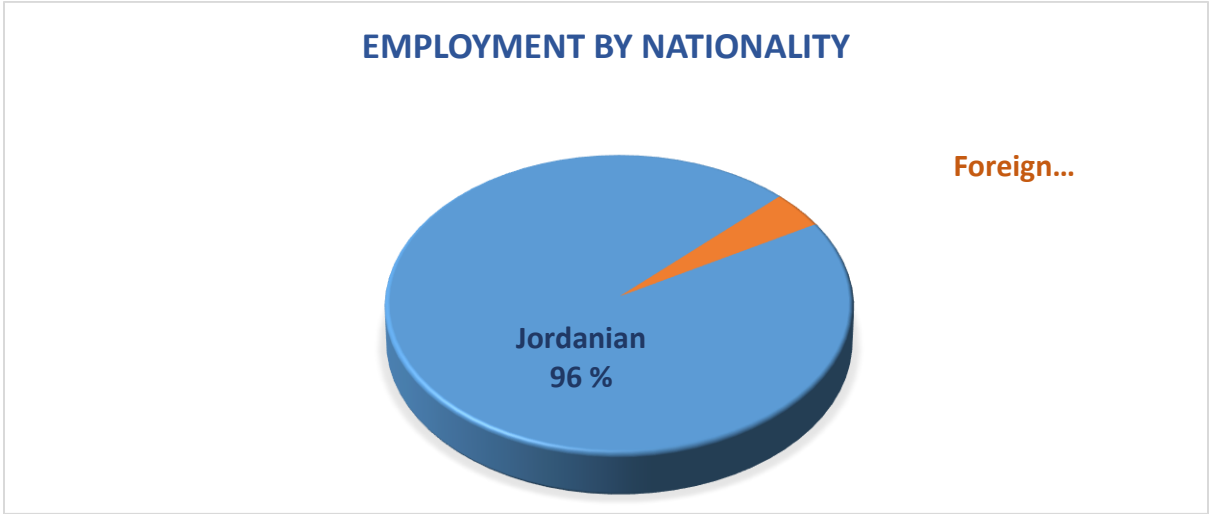

Figure 15: Employment by nationality

3. Employment by Location

With a total of 13,658 jobs, the sector have succeeded with 13,482 employments locally while 176 are employed abroad.

Figure 16: Employment by location

4. Employment by Gender

Of total employments by this sector, 70% of employees are males and 30% are females.

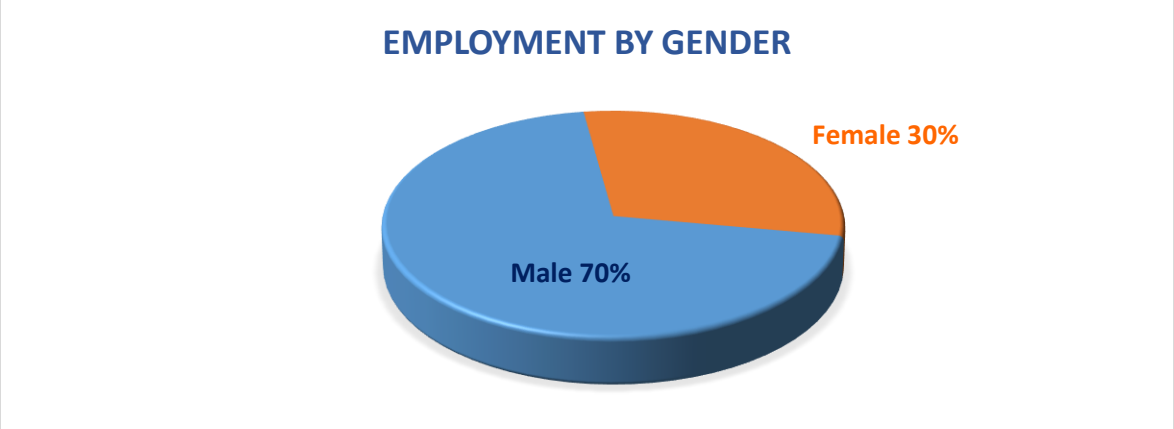

Figure 17: Employment by gender

5. IT & ITES Employment 2002 – 2017

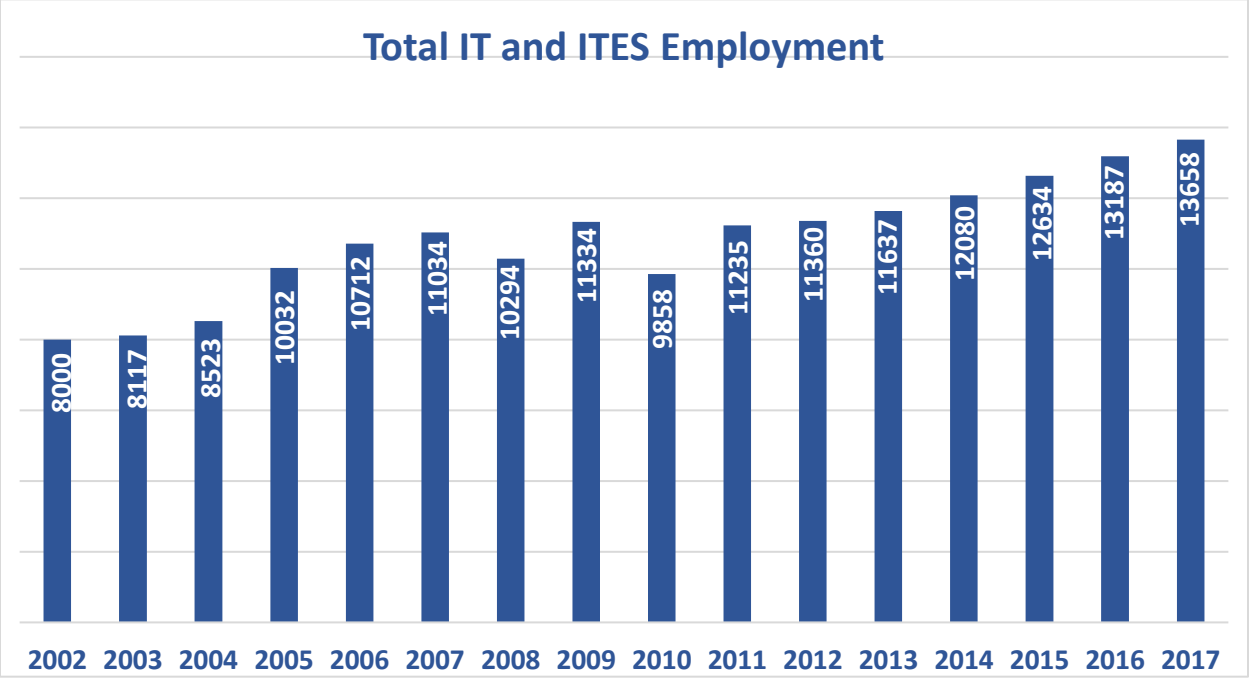

Figure 18: IT & ITES Employment 2002 – 2017

Appendices

Appendix A: ISIC 4.0 – ICT and ITES Economic Activities

ICT and ITES ISIC Definition		
Section	**Code**	**Description**
Section C - Manufacturing:	2610	Manufacture of electronic components and boards
	2620	Manufacture of computers and peripheral equipment
	263001	Manufacture of data communications equipment, such as bridges, routers, and gateways
	268001	Manufacture of hard drive media
	2731	Manufacture of fiber optic cables
	332002	Installation of communications equipment
	332002	Installation of mainframe and similar computers
	4651	Wholesale of computers, computer peripheral equipment and software
Section G – Wholesale & retail trade:	465201	Wholesale of telephone and communications equipment
	5820	Software publishing and deployment
Section J – Information & Communication:	6110	Wired telecommunications activities
	6120	Wireless telecommunications activities
	6130	Satellite telecommunications activities
Section J – Information & Communication:	6190	Other telecommunications activities
	6201	Computer programming activities
	6202	Computer consultancy and computer facilities management activities
	6209	Other information technology and computer service activities
	6311	Data processing, hosting and related activities
	6312	Web portals
	8220	Activities of call centers and business process outsourcing
Section N – Administrative & support service activities:	9511	Repair of computers and peripheral equipment
Section S – Other services activities:	951201	Repair of carrier equipment modems
	951202	Repair of communications transmission equipment (e.g. routers, bridges, modems)
	VAS-6311	Telecom value added services - VAS
	EC-6311	e-Commerce business

Table 17: ICT and ITES ISIC Definition

Information and Communications Technology Association - Jordan

JORDAN ICT & ITES SECTOR STATISTICS 2017

Information and Communications Technology Association in Jordan- int@j
Address: Amman, Swaifieh, 20 Salah Al Shaimat St, Park Plaza, Office 724
E: info@intaj.org
T: +962 (6) 581 2013

Information and Communications Technology Association - Jordan