

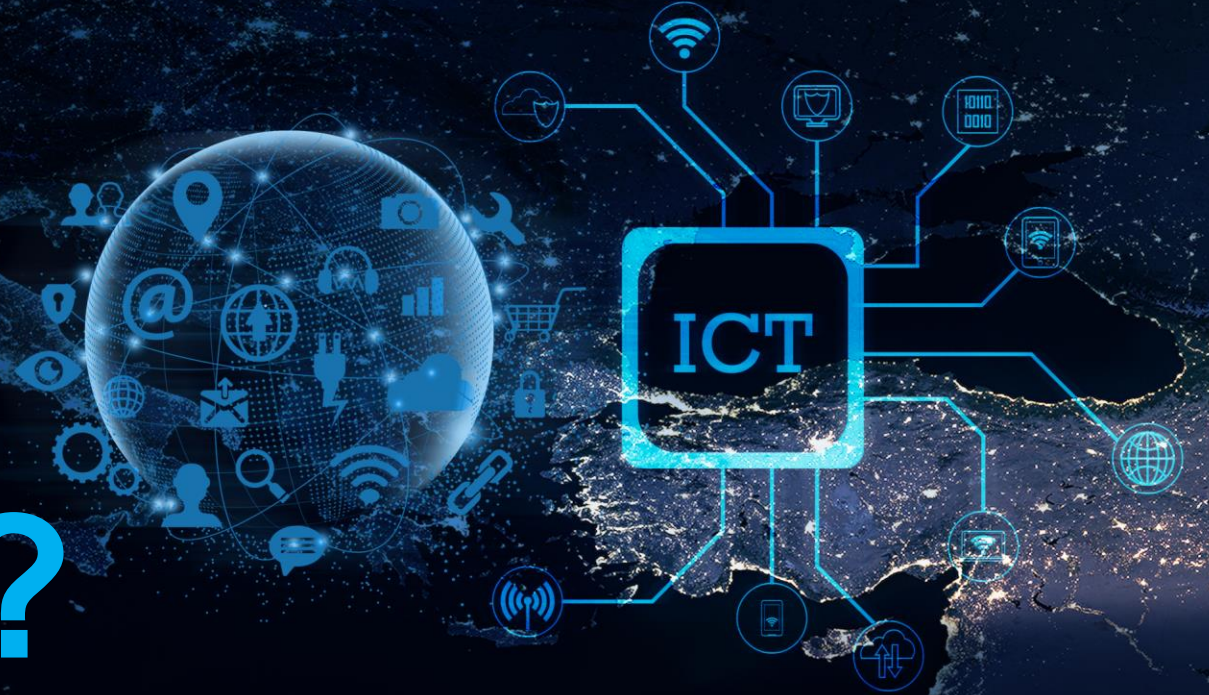


PRESIDENCY OF  
THE REPUBLIC OF TURKEY  
**INVESTMENT  
OFFICE**

# WHY INVEST IN TURKEY? ICT SECTOR?

INVEST.GOV.TR

AUGUST 2021



# AGENDA



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# Executive Summary



## FAVORABLE INVESTMENT ENVIRONMENT

- Strong macroeconomic growth with increasing income per capita and a burgeoning middle class
- Favorable demographics with a dynamic, young and online population supporting the industry
- Cost-competitive ICT skills and communication data infrastructure
- Strong government support through technology and innovation ecosystems as well as incentives that focus on R&D



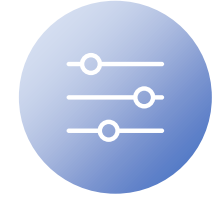
## STRONG INTERNATIONAL PRESENCE

- Global ICT companies have been present in Turkey with significant activities, using Turkey as a managerial hub to access regional markets
- Successful partnerships with local companies to grow in the region, capitalizing on locals' human capital, experience and networks



## MARKET POTENTIAL

- World-scale domestic demand and strong ICT skills offer ample opportunities in telecommunications, e-commerce, gaming, banking and finance, data analytics and AI, cloud & data center operations, digital transformation of the Turkish industry, public investments, e-government projects and ICT use in automotive, healthcare and hospitality sectors



## ROBUST GROWTH IN THE SECTOR

- Turkish ICT market surpassed USD 27 billion in 2020
- The backbone of the growth is the young and well-educated human capital that the country offers
- The ICT ecosystem is strongly backed by international and local companies, creating a diverse environment for all players

AGENDA

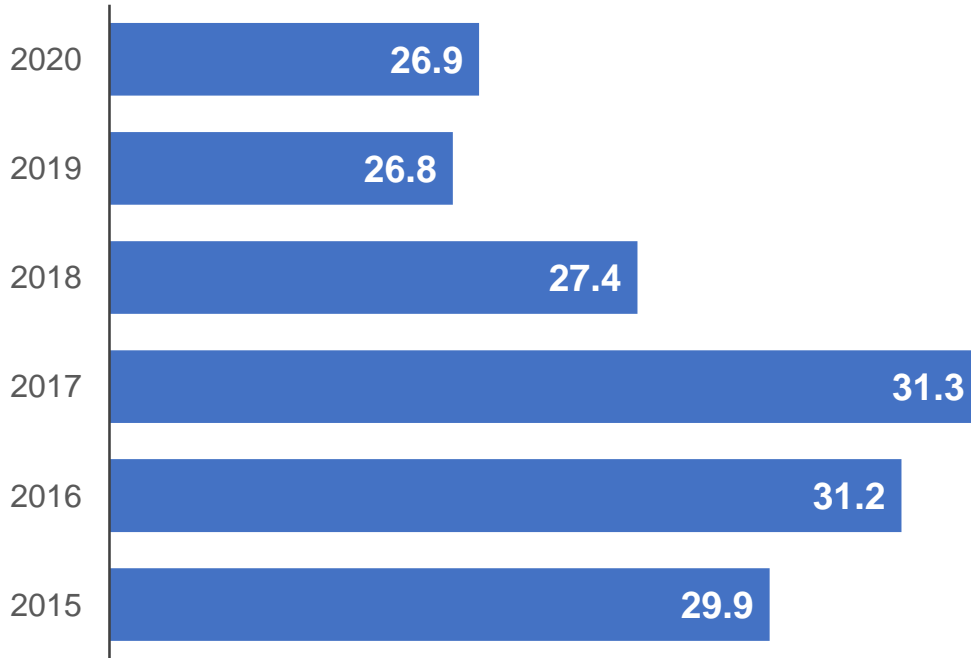


# Turkish ICT Sector Outlook



### ICT Market Size

(In billion USD)

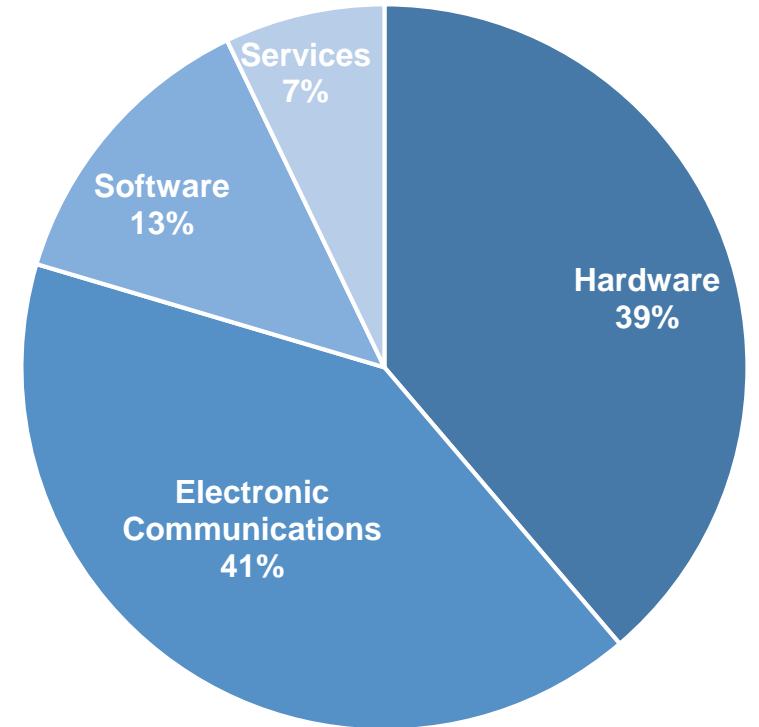


The drop is due to changing currency rates, although by TRY, it is recorded as an unprecedented average growth of 17% in 5 years

**TURKISH ICT MARKET HAS REACHED USD 27 BILLION MARKET SIZE AND A WORKFORCE OF ALMOST 160K IN THE LAST FIVE YEARS**

### 2020 ICT Market Breakdown

Shares of Subsectors

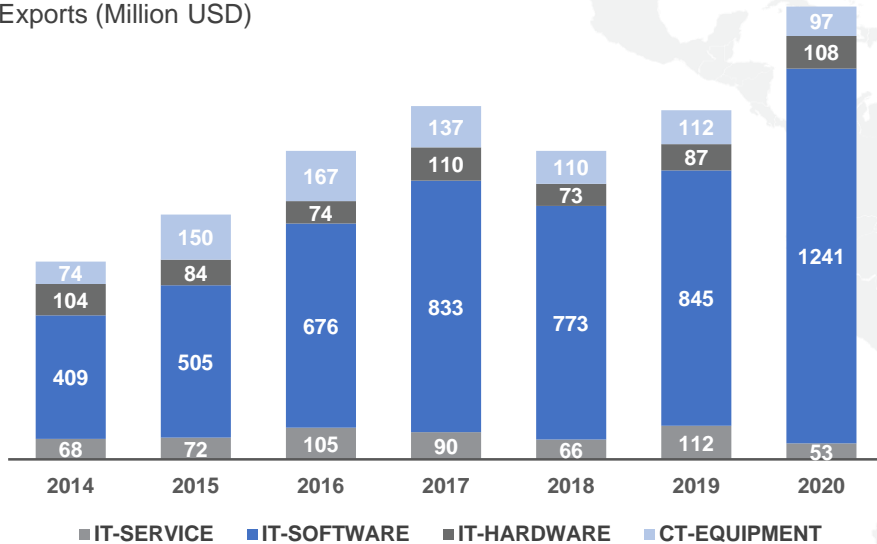


# TURKISH ICT SECTOR OUTLOOK

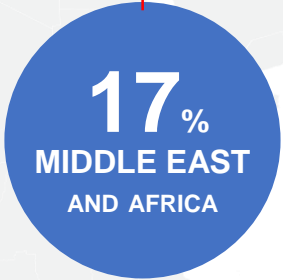
## FOREIGN TRADE



**ICT Exports**  
Exports (Million USD)



**TURKEY HAS DOUBLED ITS EXPORTS SINCE 2014 - REACHING OVER USD 1.5 BILLION WHILE BROADENING ITS EXPORT MARKETS**



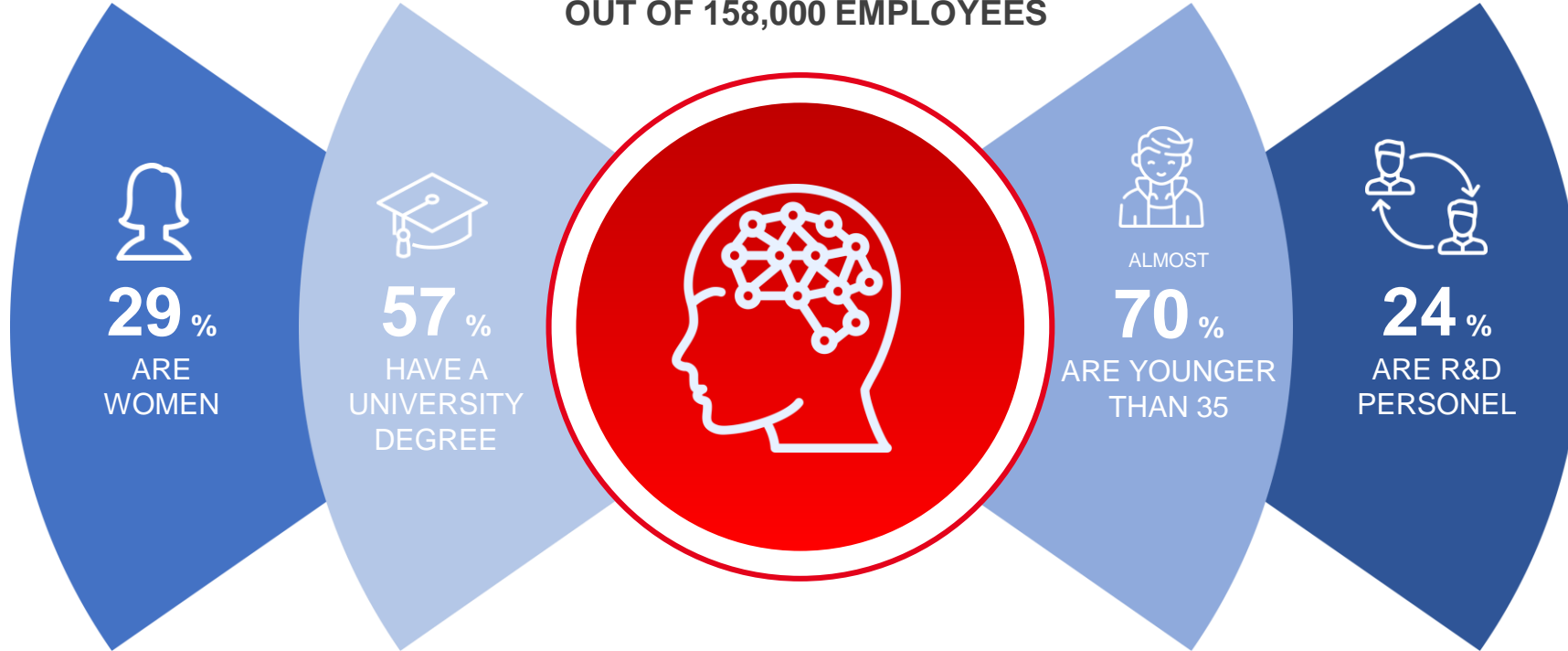
# TURKISH ICT SECTOR OUTLOOK

## MAJOR PLAYERS



OUT OF 158,000 EMPLOYEES

USD 18 BILLION OF INTERNATIONAL INVESTMENT ATTRACTED SINCE 2005



THERE ARE OVER 2,000 COMPANIES IN TURKISH ICT SECTOR WHERE BOTH LOCAL AND INTERNATIONAL PLAYERS ARE ACTIVE

### LARGE-SIZED LOCAL AND INTERNATIONAL COMPANIES IN THE ECOSYSTEM





# TURKISH ICT SECTOR OUTLOOK

## TURKISH ICT SECTOR IS POISED TO FURTHER GROW WITH M&As AND NEW ENTRANTS

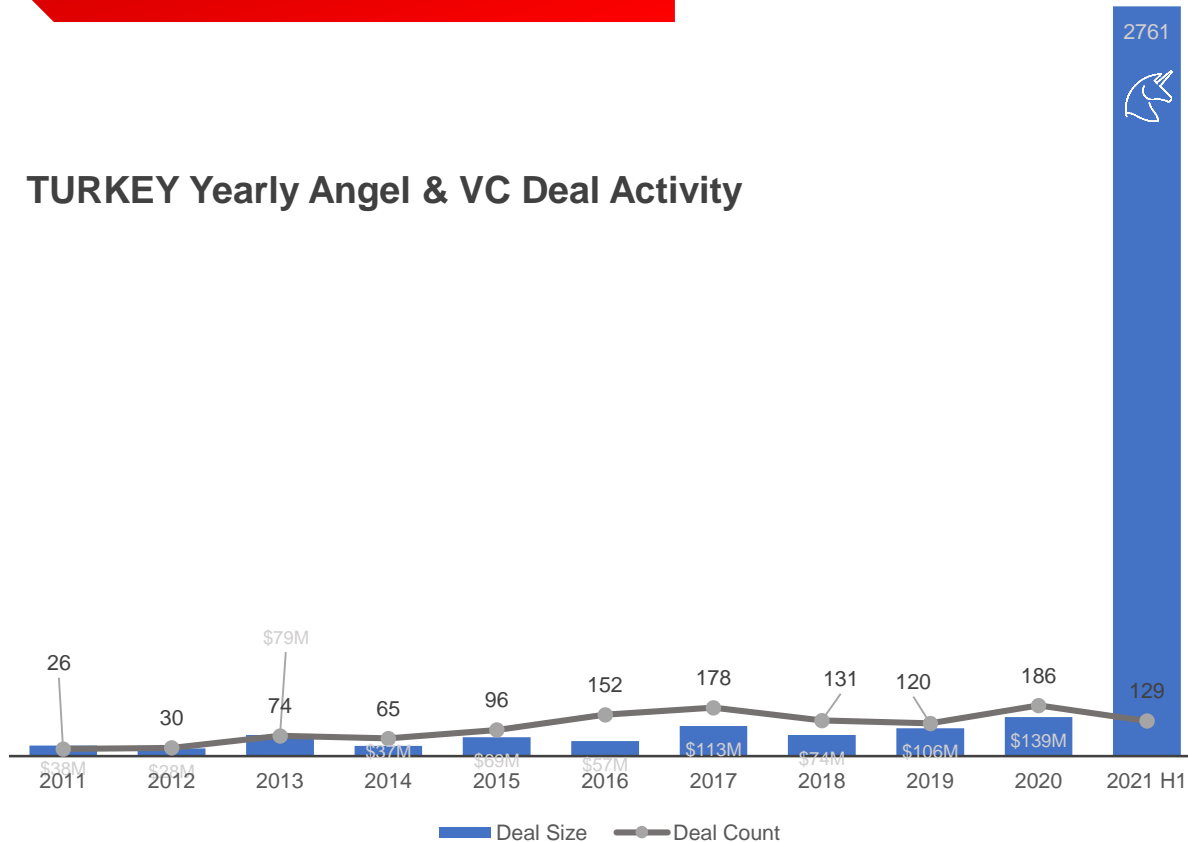


### EARLY STAGE INVESTMENTS IN ICT COMPANIES IN TURKEY ARE ON THE RISE

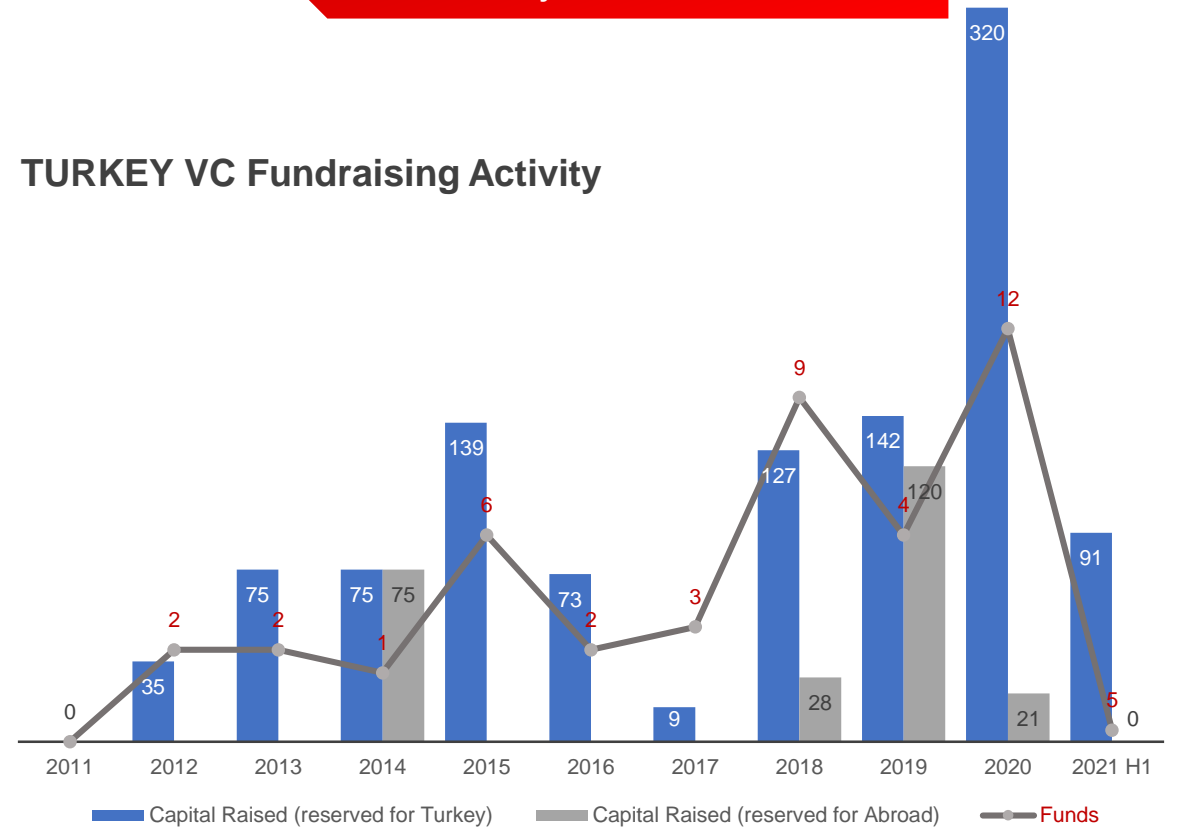
Hepsiburada, a top player in Turkey's fast-growing e-commerce sector, saw its market value hit more than \$4.2 billion after becoming the first Turkish firm to be listed on the NASDAQ stock exchange

Trendyol, Turkey's No. 1 e-commerce platform, has entered into agreements to raise \$1.5 billion, valuing the Company at \$16.5 billion. With this new funding, Trendyol becomes Turkey's first Decacorn.

TURKEY Yearly Angel & VC Deal Activity



TURKEY VC Fundraising Activity



# TURKISH ICT SECTOR OUTLOOK

## M&A MARKET



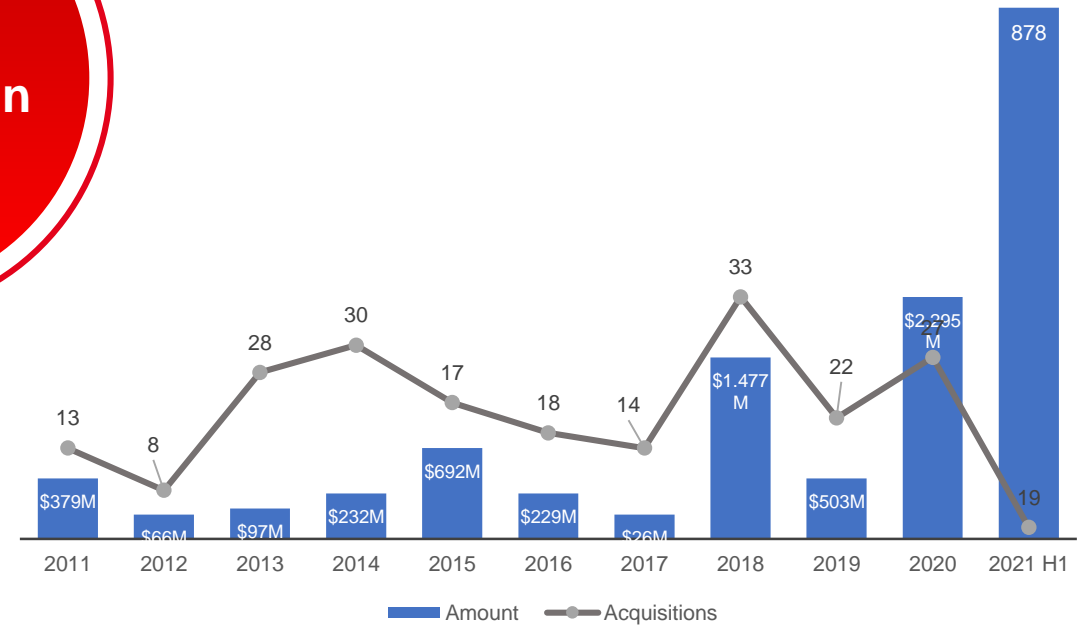
zynga  
peak \$ **1.8** BILLION

Alibaba.com  
trendyol \$ **728** MILLION

OpsGenie  
ATLASSIAN \$ **295** MILLION

Peak - the largest VC backed exit in Europe in 2020

### Acquisitions and Secondary Transactions



AGENDA



# Growth Drivers in Turkey



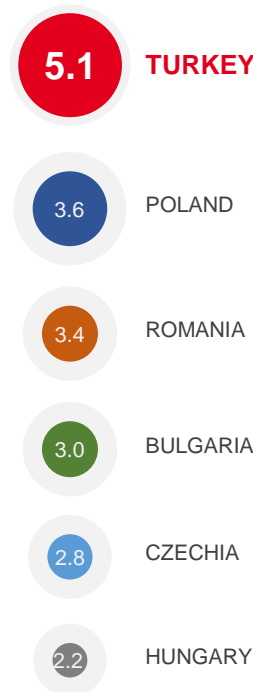


# 13<sup>th</sup> Largest Economy in the World

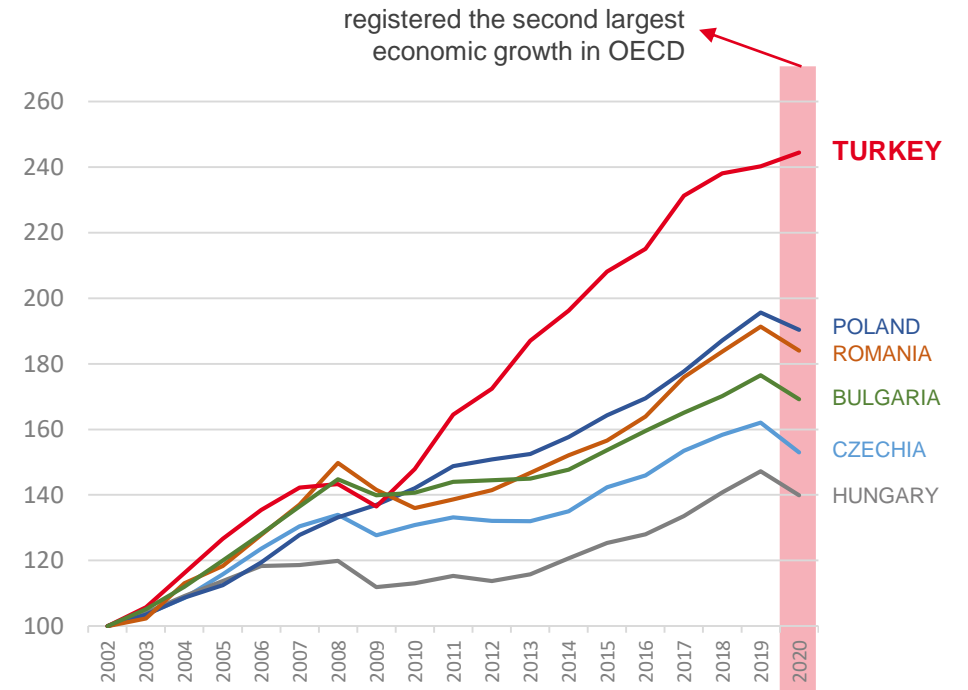
### RANKING OF ECONOMIES BY GDP AT PPP

2003	2019	2020
1. USA	1. CHINA	1. CHINA
2. CHINA	2. USA	2. USA
3. JAPAN	3. INDIA	3. INDIA
4. GERMANY	4. JAPAN	4. JAPAN
5. INDIA	5. GERMANY	5. GERMANY
6. RUSSIA	6. RUSSIA	6. RUSSIA
7. FRANCE	7. INDONESIA	7. INDONESIA
8. UK	8. BRAZIL	8. BRAZIL
9. BRAZIL	9. UK	9. FRANCE
10. ITALY	10. FRANCE	10. UK
11. MEXICO	11. MEXICO	11. <b>TURKEY</b>
12. INDONESIA	12. ITALY	12. ITALY
13. SPAIN	13. <b>TURKEY</b>	13. MEXICO
14. CANADA	14. S.KOREA	14. KOREA
15. S.KOREA	15. SPAIN	15. CANADA
16. S.ARABIA	16. CANADA	16. SPAIN
17. IRAN	17. S.ARABIA	17. S.ARABIA
18. <b>TURKEY</b>	18. IRAN	18. AUSTRALIA

### AVERAGE ANNUAL GDP GROWTH (%) 2002-2020



### REAL GDP GROWTH (INDEX: 2002=100)



# BOURGEONING MIDDLE CLASS

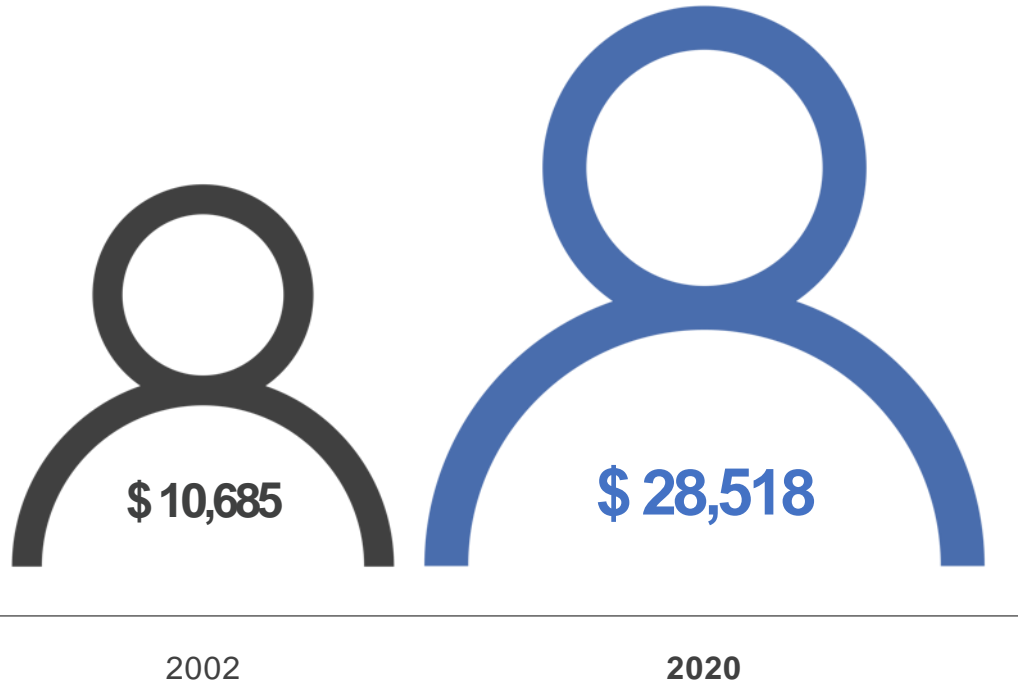
TURKEY'S ECONOMIC GROWTH HAS PAVED THE WAY FOR EMERGENCE OF A SIZEABLE MIDDLE-CLASS



Turkish economy has more than tripled over the past 16 years and is promising more growth in future

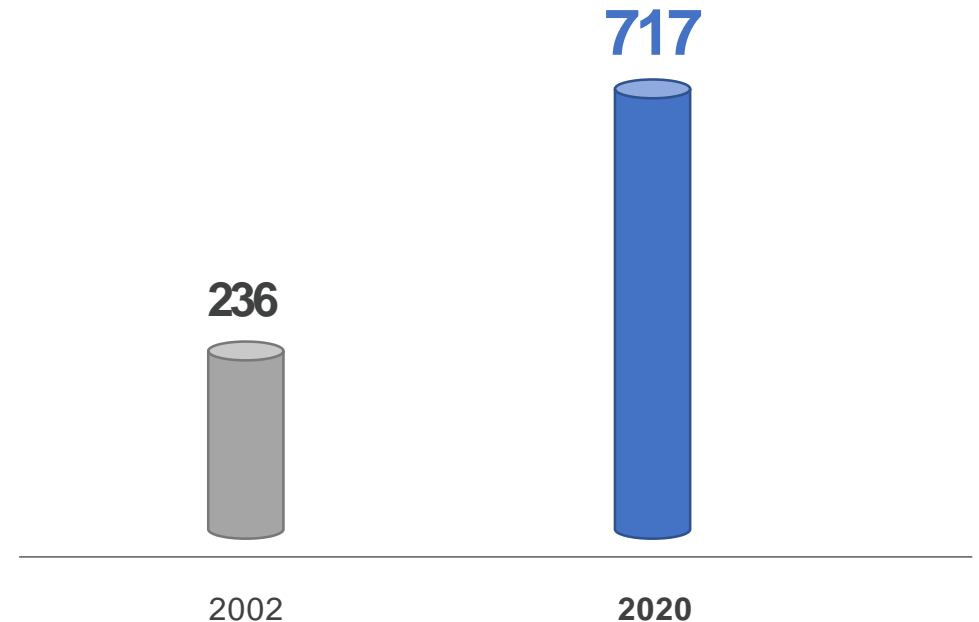
## Tripling Income Per Capita

(GDP per capita at purchasing power parity)



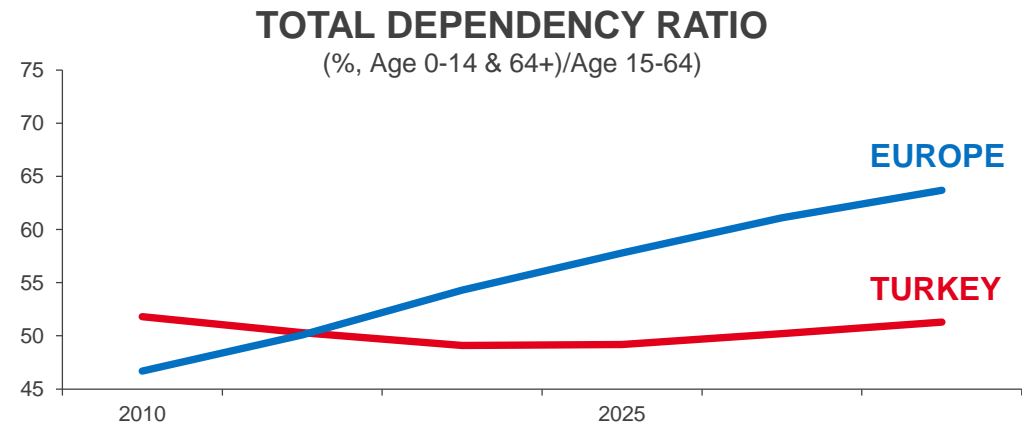
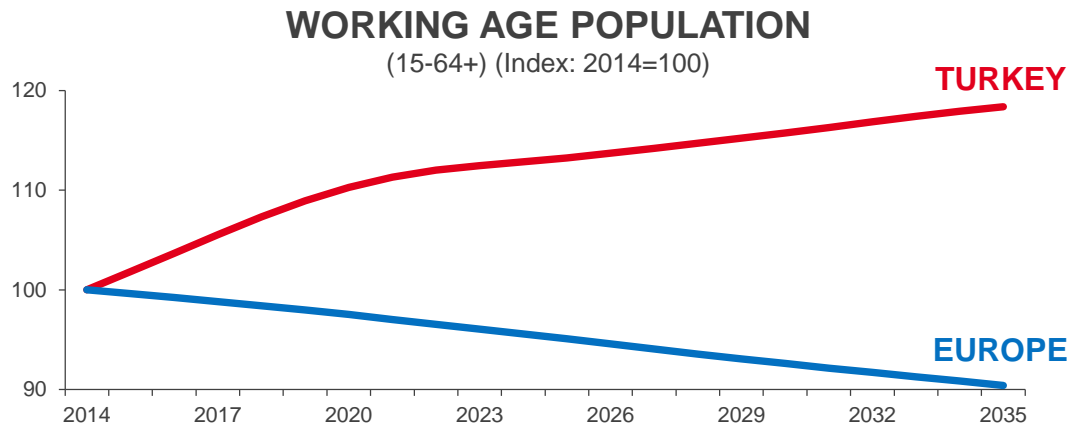
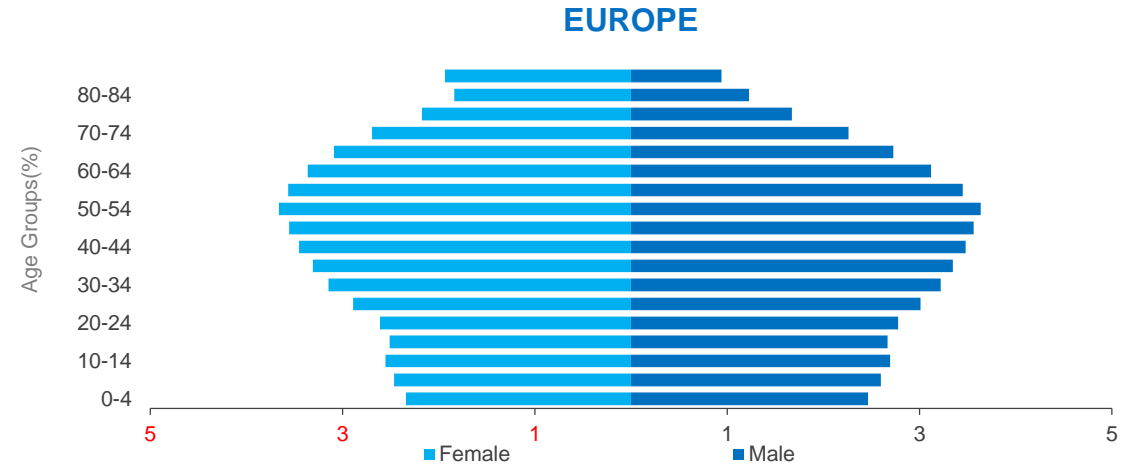
## Turkish Economy

(GDP at current prices, USD Billion)



# FAVORABLE DEMOGRAPHICS

HALF OF POPULATION UNDER AGE OF 32.7 CREATING DYNAMIC LABOR FORCE AND FISCAL DISCIPLINE

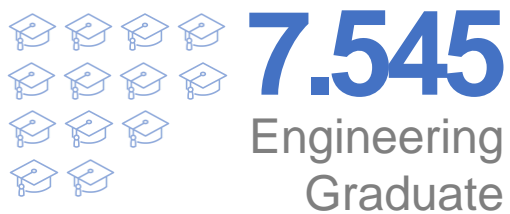
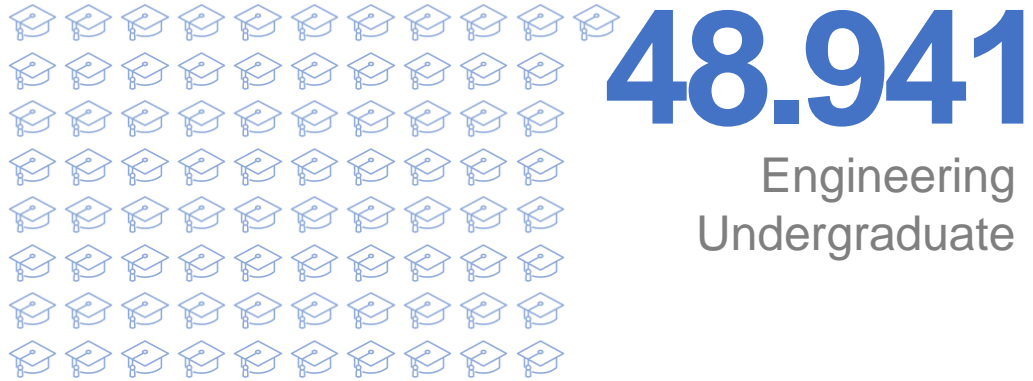


# SKILLED & COST-COMPETITIVE LABOR FORCE

TURKEY'S EDUCATION SYSTEM UPGRADED TO OFFER OUTSTANDING ACADEMIC PROGRAMS

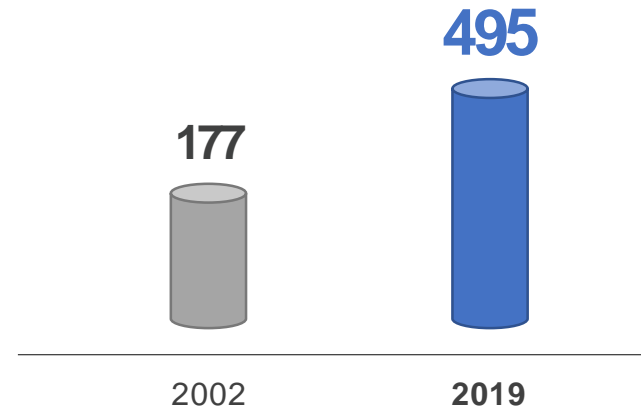


## Annual Number of University Grads in ICT & Engineering Fields

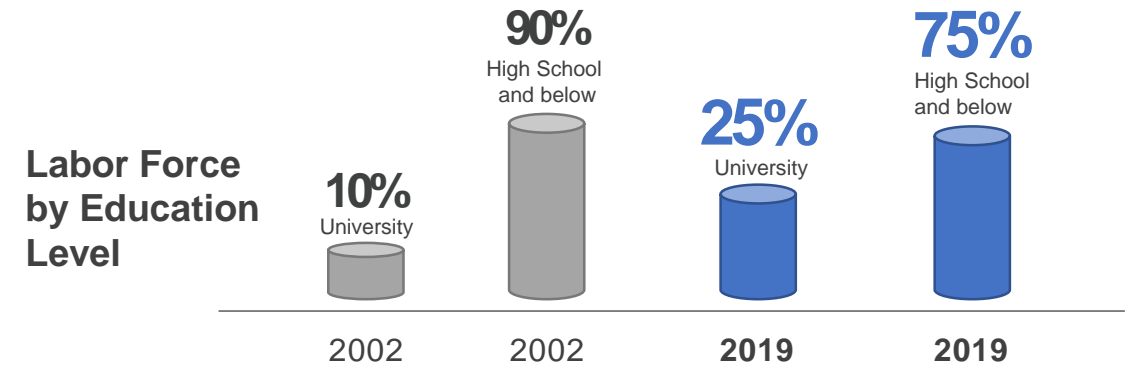


## Number of Grads from Vocational & Technical High Schools

(In Thousands)



Over 120K professional software developers in Turkey

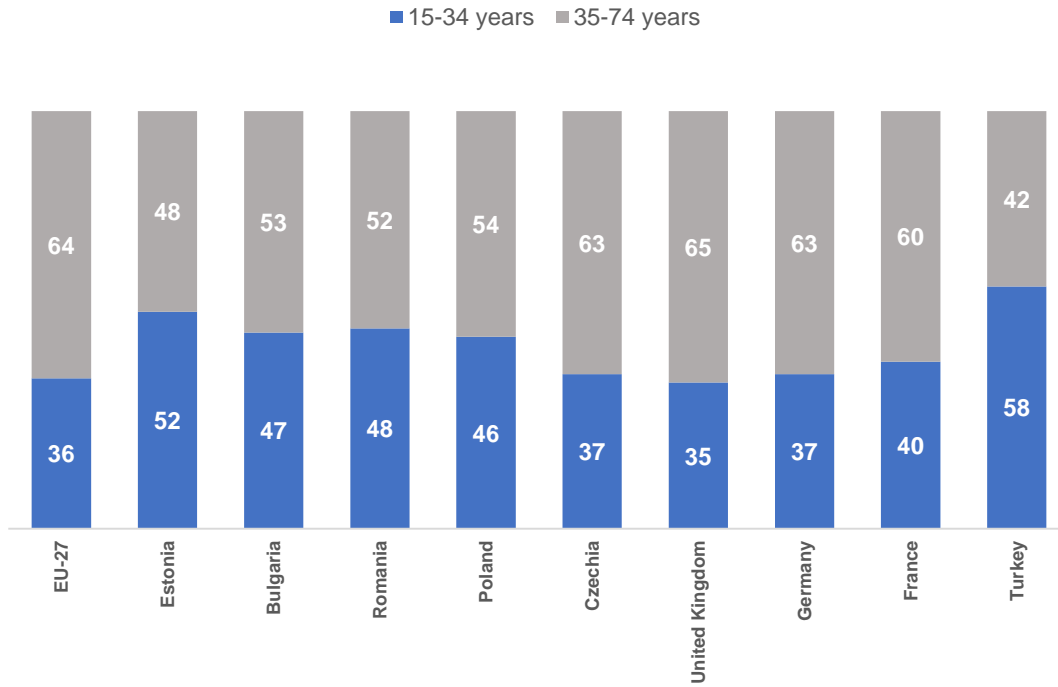


# SKILLED & COST-COMPETITIVE TALENT POOL

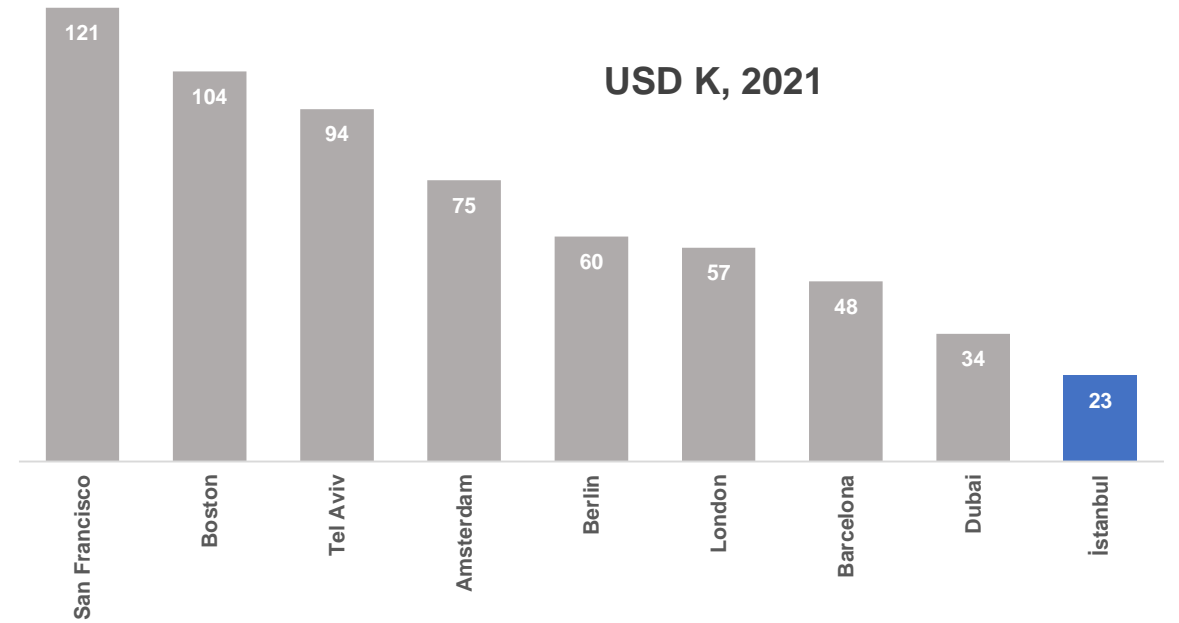
...TO SUPPORT A SKILLED ENGINEERING POOL AT COST-COMPETITIVE PRICES



**Distribution of ICT Specialist by Age (%)**  
Distribution of ICT specialist by age, 2019 (%)



**Average Salaries for Software Developers**  
(with 3-5 year experience)





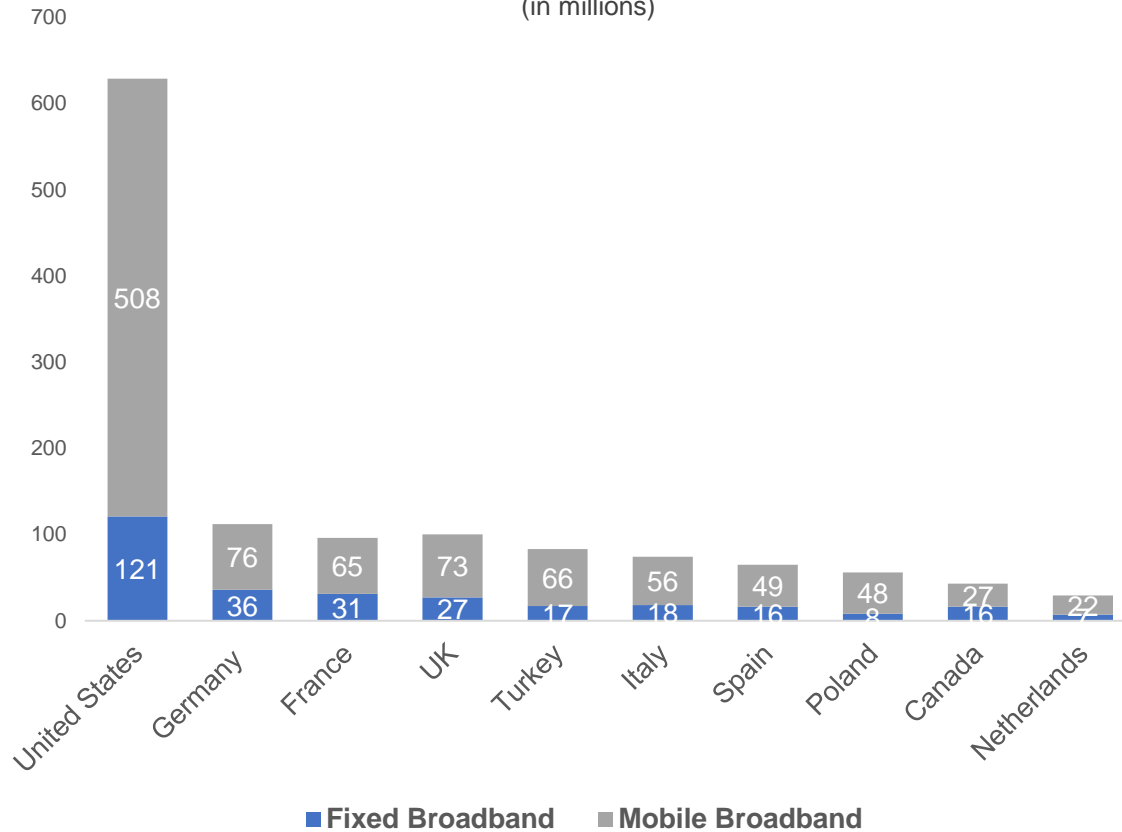
# DATA INFRASTRUCTURE

BROADBAND SUBSCRIPTIONS DOUBLED SINCE 2010 TO REACH 83 MILLION, EUROPE'S 4<sup>TH</sup> BIGGEST ONLINE POPULATION



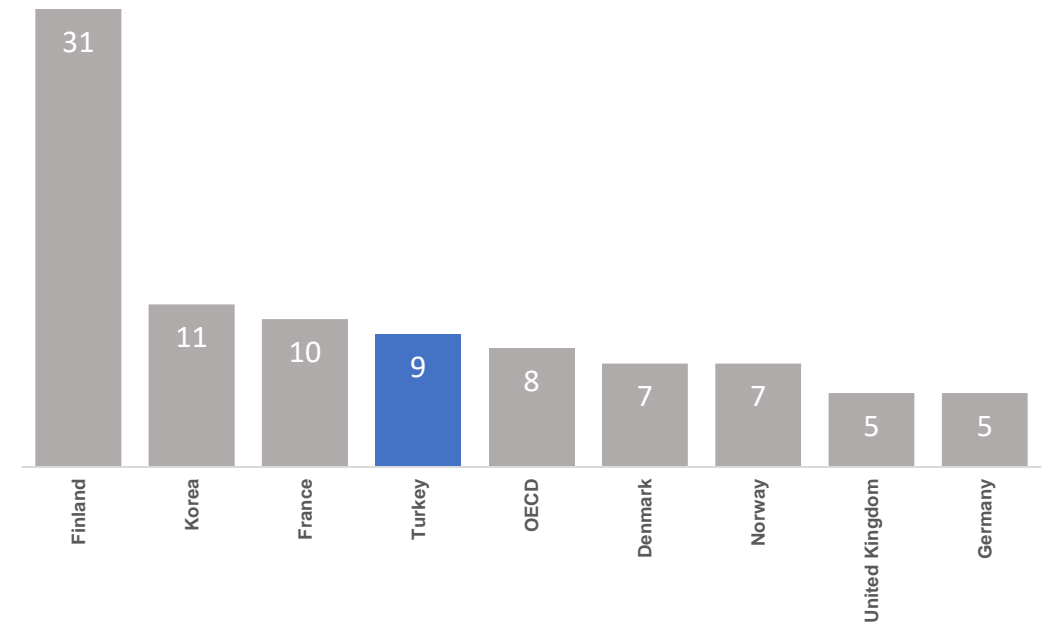
### Fixed and Mobile Broadband Subscriptions

(in millions)



### Mobile Data Usage

(GB per month, per mobile broadband subscription)



# TECHNOPARKS & R&D CENTERS

## TECHNOPARKS AND R&D CENTERS MAKE IMPORTANT CONTRIBUTIONS TO INNOVATION ECOSYSTEM AND TECHNOLOGY DEVELOPMENT



### TECHNOPARKS

- 72 Technoparks (an additional 14 underway)
- 67K employment in over 6,350 companies
- 5% international companies
- >1300 companies with academia partnership
- Total export is **USD 5.7 Billion**



### R&D CENTERS

- 1,242 R&D Centers
- 67K employment; 18% in ICT industry
- 16% international companies



### UNIVERSITIES

- 9 universities in Top 1000; 1 in Top 500 (QS World University Rankings 2021)
- Over 1450 academicians in ICT





### MINISTRY OF INDUSTRY AND TECHNOLOGY MAIN INCENTIVE TOOLS



#### TAX DEDUCTION:

Reduced tax rates for investor's income (50-90%) until the total deduction reaches to a certain percentage of capex. (15-65% of capex, in the case of project based incentives up to 200% of capex). For R&D investments, all R&D expenditures are deducted from tax base.



#### VAT EXEMPTION:

Investment machinery and equipment imported and/or locally provided within the scope of the incentive certificate will be VAT exempt.



#### CUSTOMS DUTY EXEMPTION:

Investment machinery and equipment imported within the scope of the incentive certificate will be customs duty exempt.



#### INTEREST RATE SUPPORT:

For investment loans, a certain portion of the interest share will be covered by government. (3-7% points for TL-denominated, 1-2% points for forex-denominated loans) (1M-1.8M TRY).



#### LAND ALLOCATION:

Government land will be allocated for the investments, if no land is available in OIZs.

#### Main Incentive Tools

Main Incentive Tools	General Incentives	Regional Incentives	Incentives for Strategic Investments	Project Based Incentives	R&D Incentives
Corporate Tax Reduction		●		●	●
VAT/Custom Duty Exemption	●	●		●	●
Social Security Premium Support		●		●	●
Income Tax Withholding Support*	●	●		●	
Interest Support**		●			
Land Allocation		●	●	●	
Qualified Personnel Support				●	
Infrastructure Support				●	
Energy Cost Support				●	

\*Provided that investments, except R&D, are made in Region 6,

\*\*Provided that investment, except R&D, are made in Regions 3, 4, 5 or 6 within the frame of the Regional Incentive Scheme

# INCENTIVES THROUGH INNOVATION LIFECYCLE

COMPREHENSIVE INCENTIVES PROGRAM WITH A WIDE RANGE OF INSTRUMENTS HELPS TO ACCELERATE THE RETURNS ON R&D INVESTMENTS



## START:

**Technostartup Incentives:**  
Cash support up to 200K TRY



## PRODUCT / PROJECT DEVELOPMENT

**TUBITAK programs:**  
Cash support up to 60-80% of the project budget

**Industrial PhD Fellowship Program:**  
Grants for PhD research scientist employed in private sector



## COMMERCIALIZATION

**Technoparks and R&D Centers:**  
Income Tax Exemption  
Tax cuts up to 20-30% of the personnel cost



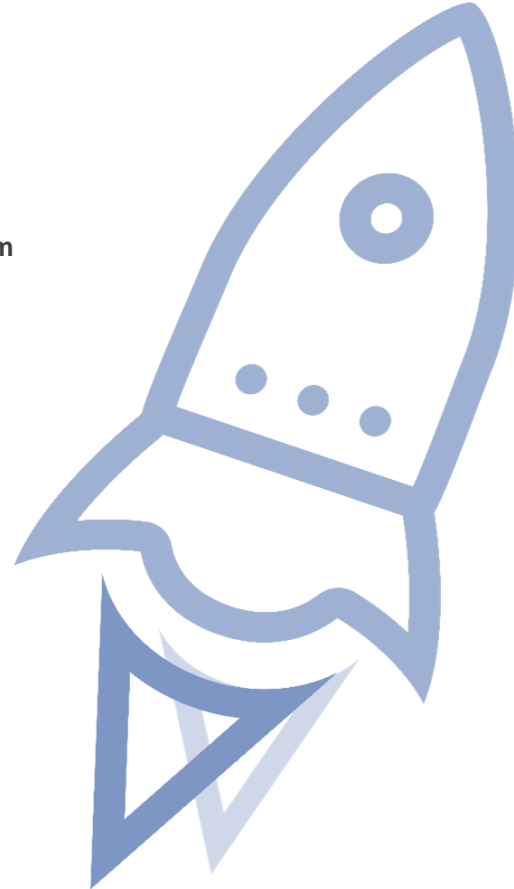
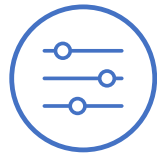
## MANUFACTURING

**Technology Focused Industrial Movement Program (HAMLE) Incentives:**  
Cash/credit support up to 5Million TRY for SMEs



## GROWTH & COMPETITION

**Patented sales:**  
Income Tax & VAT Exemption



ANGEL INVESTORS ARE EXEMPT FROM INCOME TAX BY 80-100% AT THE AMOUNT OF THEIR INVESTMENT



# 1514 VC

TÜBİTAK

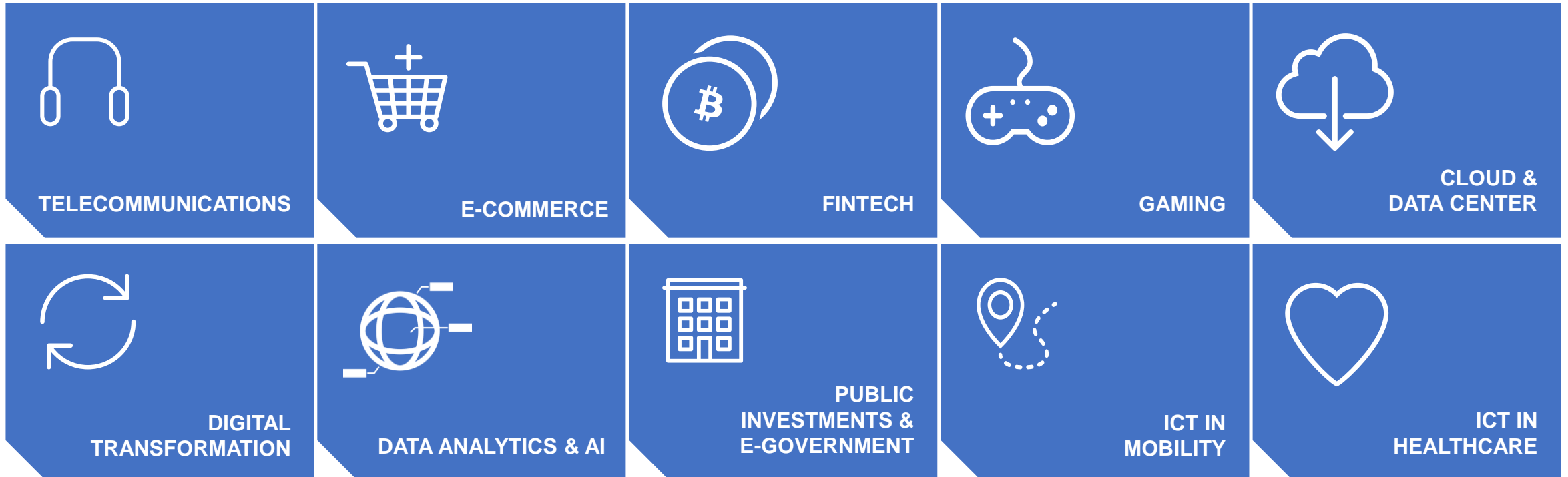
# Support Program is launched to support the VC ecosystem in Turkey



# Opportunities in Turkish ICT Sector

# OPPORTUNITIES IN SUB-SECTORS

TURKEY OFFERS SOLID FUNDAMENTALS FOR PROFITABLE INVESTMENTS IN THE ICT SUBSECTORS



# TELECOMMUNICATIONS

TURKEY'S TELECOMMUNICATIONS MARKET HAS REACHED TO 120 BILLION TRY - USD 17 BILLION IN 2020



Strong growth of the market – doubled to **120 Billion TRY** in the last 5 years



Growing export - **USD 97 Million in 2020**



Fixed and mobile broadband subscriptions in Turkey have exceeded **83 million** in 2020 - an impressive penetration rate of **90%**



**424,915 km** of fiber - optic with 4 million subscribers (as of 2020 Q4)



A high mobile / smartphone possession rate of **95.3%** - 14th in the world



Strong ecosystem with local and international players with a total of **33K employees**

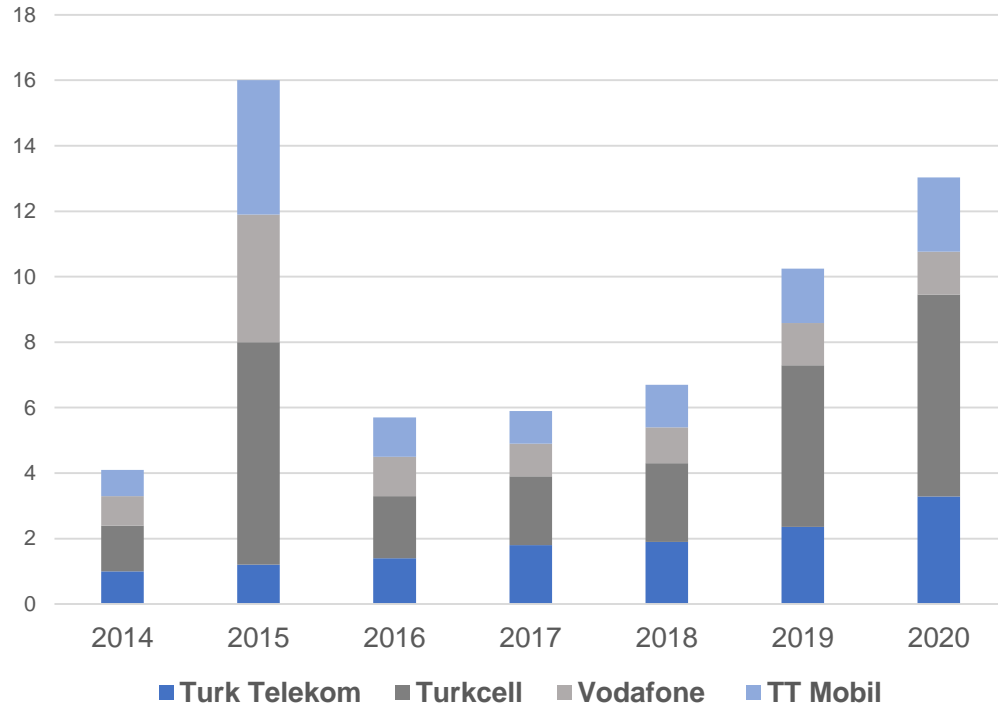


# TELECOMMUNICATIONS

TRY 48 BILLION HAS BEEN INVESTED ON TELECOM INFRASTRUCTURE SINCE 2014 (TENDER AMOUNTS FOR 2015 ARE INCLUDED IN YEAR 2015)



**Investments**  
(Billion TRY)



**Growth in the Sector is Driven by National Broadband Strategy Targets to Reach by 2023:**

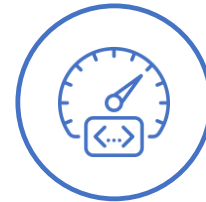


Fixed & Mobile broadband penetration rate

**130%**



Internet Usage Rate  
**80%** of population  
(between ages 16-74)



100Mbps speed for at least  
**100%** of households



Fiber Internet Subscription  
**10million**





## 5G WILL SHAPE ALL VERTICAL SECTORS



ENERGY



MANUFACTURING



HEALTHCARE



AUTOMOTIVE



TRANSPORTATION



FINANCE



Milat Network Management and Analysis System, which is the national and domestic network management infrastructure, is now in use.

**Ulak is now developing 5G Core Network Development project Çınar.**



5GTR Forum established to develop products, services and technologies that will take place in domestic and international market in next generation communication systems



5G and Beyond White Book published to set forth the road map on the way to 5G

5G and vertical Sectors Report prepared by BTK on the use of 5G and its effects on vertical sectors



**5G Valley Open Test Bed** created to be a platform for **R&D and Product development opportunities** for public, university, operator, and industry collaborations that work on 5G and Beyond Technologies



**5G and Beyond Joint Graduate Support Program** launched to upgrade qualified human resources to support all stakeholders



**End to End Domestic and National Communication Network Project** carried out by 16 members of Communication Technologies Cluster and 3 operators

# E - COMMERCE

TURKEY'S E-COMMERCE MARKET HAS REACHED 226 BILLION TRY IN 2020- OVER USD 32 BILLION



E-commerce market in Turkey continues to grow with **an annual growth of 66%**, reaching **TRY 226.2 Billion**



Fixed and mobile broadband subscriptions in Turkey have reached a **total of 78.3 million** in 2020 - an impressive penetration rate of **95%**



Enhanced use of internet and incremental number of online shoppers rate of **59%** - a population of **over 30 Million**



Potential in mobile phone shopping - a mobile shoppers rate of **63%**, which is higher than that of **USA, UK, Spain and Brazil**



**Turkey is home to global e-commerce giants** and received many international investments



Sales of e-commerce and online market applications **skyrocketed by 300%** amid coronavirus outbreak- the number of



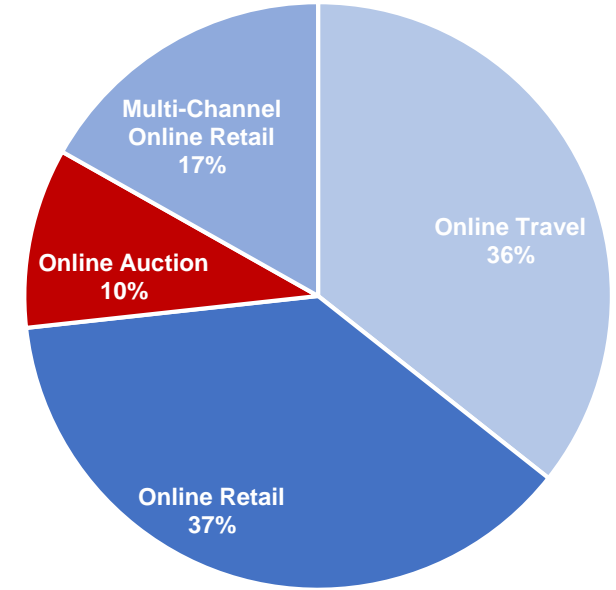
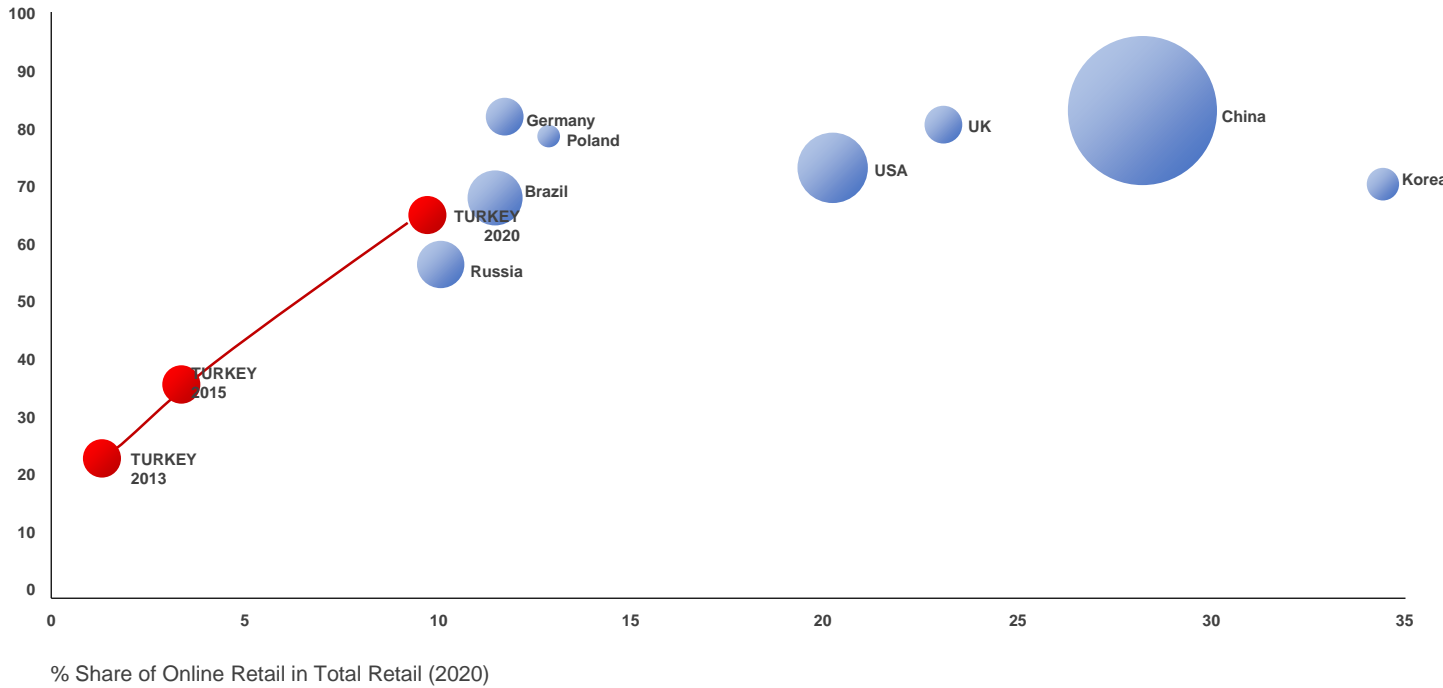
# E - COMMERCE

TURKEY'S ONLINE RETAIL RATIO IS 10.1% IN 2020, WHICH REPRESENTS A MINIMUM 2X GROWTH OPPORTUNITY:



## MARKET BREAKDOWN

### Online Shopping Penetration (2020)



Online retail/total retail ratio is calculated by dividing retail e-commerce size used in this study over total retail sector size in Turkey estimated that Euromonitor. Online and mobile shoppers are based on internet users who reported that they shopped online (desktop vs mobile) one month ago.

# FINTECH

TURKEY IS TRANSFORMING INTO A FINTECH HUB,  
WITH OVER 200 COMPANIES AND AN ONLINE  
PAYMENT MARKET OF OVER USD 35 BILLION



A strong banking system with an educated workforce



Europe's biggest credit and debit card market - 264 million (by 2020)



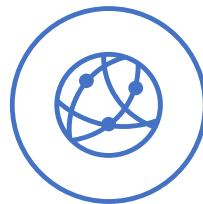
Total amount of card payments at around USD 162 Billion (in 2020)



Share of online payments is 22% with around USD 35 Billion

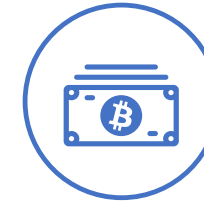


Turkey's strategic location within a 4-hour flight distance from London and Dubai



Turkey's vision of turning Istanbul into a regional finance center

**CAN TURKEY  
BE THE NEXT  
FINTECH  
HOTSPOT?**



Remote and Digital Customer Acquisition has been enabled for Banks and FinTechs.



The Instant and Continuous Transfer of Funds (FAST) System has made it possible to initiate instant retail payment service available 24/7



Legislation for Account Information Service(AISP) and Payment Initiation Service (PISP) enacted within the scope of open banking applications in line with the PSD 2 of EU



It is expected that the issuance of digital banking license will begin by the end of 2021



It is expected that equity-based and lending-based crowdfunding applications will begin by the end of 2021 Q3

# FINTECH

## fintechtime.

### TURKISH FINTECH ECOSYSTEM



# GAMING

TURKEY'S GAMING MARKET HAS PASSED  
USD 880M IN 2020, 18TH LARGEST REVENUE IN THE  
WORLD



Total generated game revenue in 2020 is

**USD 880 Million**

**USD 450 Million**  
in mobile

**USD 430 Million**  
in PC/console

**18<sup>th</sup>** highest in  
global revenue



Toon Blast and Toy Blast of Peak and Go Knots 3D and Tangle Master 3D of Rollic were among the top grossing games for US App Store for over two years



**TURKEY'S  
FIRST UNICORN!**



36 million active users in Turkey spending 70% of their gaming time (total game time spent) on PC



An ecosystem that consists of over **600 large & small companies** including indies - exports in 2020 exceeded **\$1.5 Billion**



# CLOUD & DATA CENTER

TURKEY'S PUBLIC CLOUD MARKET HAS REACHED USD 400 MILLION IN 2020



Public cloud market in Turkey is **USD 400 Million** in 2020, expected to double in next few years



Robust terrestrial **fiber** and **submarine cable** connectivity with international networks



14% of SMEs in Turkey use cloud computing services whereas this ratio increases to **40% for large size companies** (with >250 employees)



Regulation requires data systems for telecom companies and banks in the country



There are 43 Tier II and Tier III data centers (centers that belong to banks and private companies are excluded) and 2 Tier IV data centers



A total of 100,000m2 white space is estimated - 35,000m2 for data center operators, 10,000 m2 for banks, 35,000m2 for companies and 20,000m2 for public institutions



Data center investments are incentivized -lower energy costs, fiber optic infrastructure, land etc.

24 data Centers run by Operators - **40K m<sup>2</sup>** White space

**413,309 km** Fiber length

### VoD (Video-on-Demand) Market in Turkey

- Turkey to remain MEA market leader, with USD 293 Million in SVOD revenues in 2020, it is expected to show 10.3% GAGR resulting in a projected market volume of USD 480M by 2025
- Netflix** and **Amazon** in the market as well as Turkish VoD platforms like BluTV and PuhuTV
- Turkish content is widely popular in Eastern Europe, Middle East and Latin America - amounts for 25% of all TV show transactions around the world



# AI AND DATA ANALYTICS



Turkey is the lead AI investor in the MEA region with a total investment amounting to \$3.4 billion



Artificial intelligence (AI) and machine learning (ML) incorporated into Cloud services utilized for smart automation and predictive analytics



Digital Transformation Office is working out for National Artificial Intelligence Strategy in collaboration with universities, the private sector and NGOs.



**Financial services sector** is the pioneering industry for the exploitation of AI applications followed by retail



Machine learning is the most preferred AI tool for Turkish companies followed by data analytics and artificial neural networks



24 Turkish startups with published patent application in the field of AI and Data Analytics



Covid-19 pushed the use of AI and Cloud services to upgrade customer experience

Over 1,200 Academicians with research areas in AI

Top-notch universities offering undergraduate and graduate programs that focuses on the field of AI.

TUBITAK provided 1.7 billion TRY financing to over 1,700 R&D and Innovations projects in the last 10 years-  
Digital transformation of Industry, Digital transformation in commerce and Smart living and health were the most supported verticals







### DIGITAL TURKEY PROGRAMME



#### INFRASTRUCTURE

##### Improving data communication infrastructure

- 1 Gbps speed for 100% of industry zones and technology development zones
- Attendance to international studies on data communication standards
- Development of a national industrial cloud platform



#### SUPPLIERS

##### Supporting local technology suppliers

- 1000 medium and large sized digital technology suppliers
- USD 1 Billion capital investment for technology firms
- 10 Digital Technology Excellence Centers



#### TECHNOLOGY

##### Development of education infrastructure and raising qualified workforce

- Technology Roadmaps for Focus Technologies (Cloud, Big data, AI, Autonomous Robots etc.)
- 50 Applied Research Centers for Focus Tech
- 60K R&D personnel in Focus Technologies
- 2500 Digital Innovation Projects in R&D Centers
- 250 patents in Digital Technologies



#### HUMAN CAPITAL

##### Development of education infrastructure and raising qualified workforce

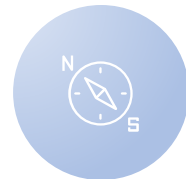
- 100 Thematic Technical Colleges
- 400 Digital Technology High School Teachers
- 100K Digital Technology High School Graduates
- 5K PhD Graduates in Digital Technology
- 30K PhD Students in Digital Technology
- 50 Continuous Education Centers in Digitalization
- 10K Companies to attend Digitalization Trainings
- 300K workforce to gain digital competence
- 1 M software developer training program



#### USERS

##### Supporting digital transformation of the industry

- 10 Digital Transformation Centers
- 81 Digital Transformation Information Centers
- 500 Consultants on Digital Transformation of the industry
- 7000 Companies to benefit from Transformation Centers
- 2500 Companies to develop high digital expertise



#### GOVERNANCE

##### Improving corporate governance

- Digital Transformation Platform to include all stakeholders
- Committees on education, data communication standards and focus technologies to be established

**1 MILLION SOFTWARE DEVELOPER TRAINING PROGRAM HAS BEEN LAUNCHED TO UPGRADE COUNTRY'S LABOR FORCE WITH REGARD TO ITS EVER-GROWING DIGITAL SECTORS**

# E-GOVERNMENT

## THE ELEVENTH DEVELOPMENT PLAN (2019-2023) ENVISIONS THE UPTAKE OF ELECTRONIC SERVICES TO 70% BY 2023



**Digital Transformation Office of Turkey** was established in 2018 to coordinate the digital transformation of the Turkish government, as well as develop strategies and oversee projects in **cyber security** and **AI**.



**Public ICT investments** have reached a total of 69 Billion TRY since 2002 - 3.7 Billion TRY in 2020



**Education, transportation-communication and energy** with **larger shares**



**FATİH project** is a comprehensive project that is designed to enhance education through technology and create equal opportunity base for students and schools - Includes hardware (interactive boards, tablets, printers), high speed internet for every school, data centers, management and content software and trainings



**In the wake of Covid-19 pandemic the average monthly login to E-government portal increased from 300 M to 500 M**

### Selected e-government services provided for businesses:

#### Start and grow

- Centralised Corporate Body Information System (MERSIS)
- Registration of a new company
- Commercial business and company interrogation
- Intellectual property rights
- Submission of data to statistical offices

#### VAT and Customs

- VAT declaration, electronic payments
- Corporate tax

#### Staff

- Social contribution payments for employees
- National council on occupational safety and health web portal

**Public Contracts - eProcurement**

**eMunicipality Information System**

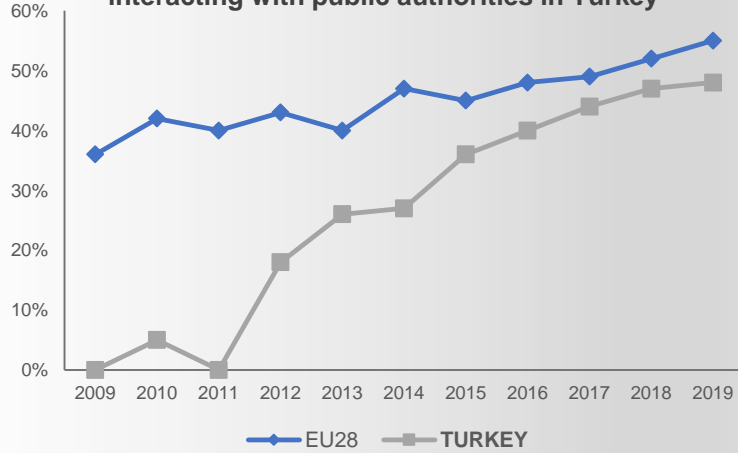
**Environment related permits**

# E-GOVERNMENT

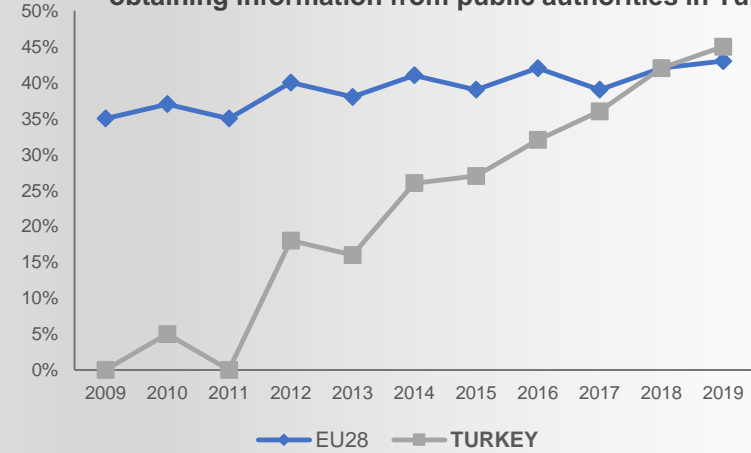
THE DIGITAL TURKEY PORTAL HAS REACHED OVER 53 MILLION USERS AND CURRENTLY, MORE THAN 5,600 SERVICES PROVIDED BY 750 INSTITUTIONS



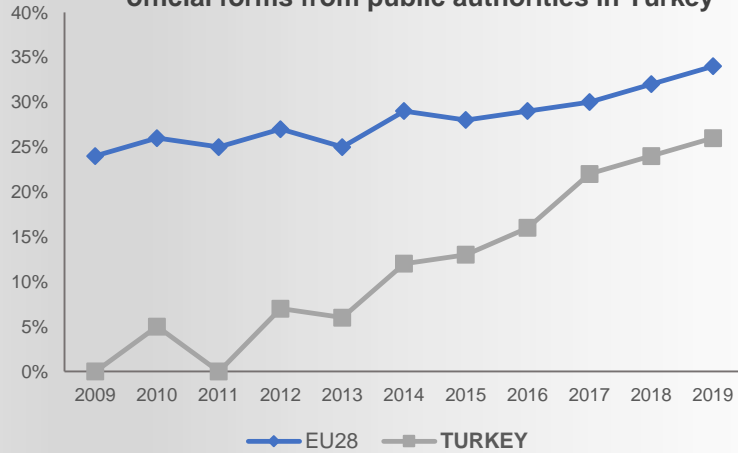
Percentage of individuals using the internet for interacting with public authorities in Turkey



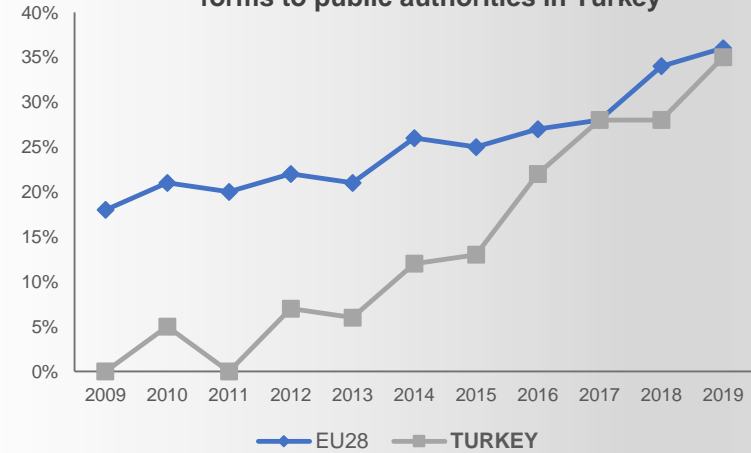
Percentage of individuals using the internet for obtaining information from public authorities in Turkey



Percentage of individuals using the internet for downloading official forms from public authorities in Turkey

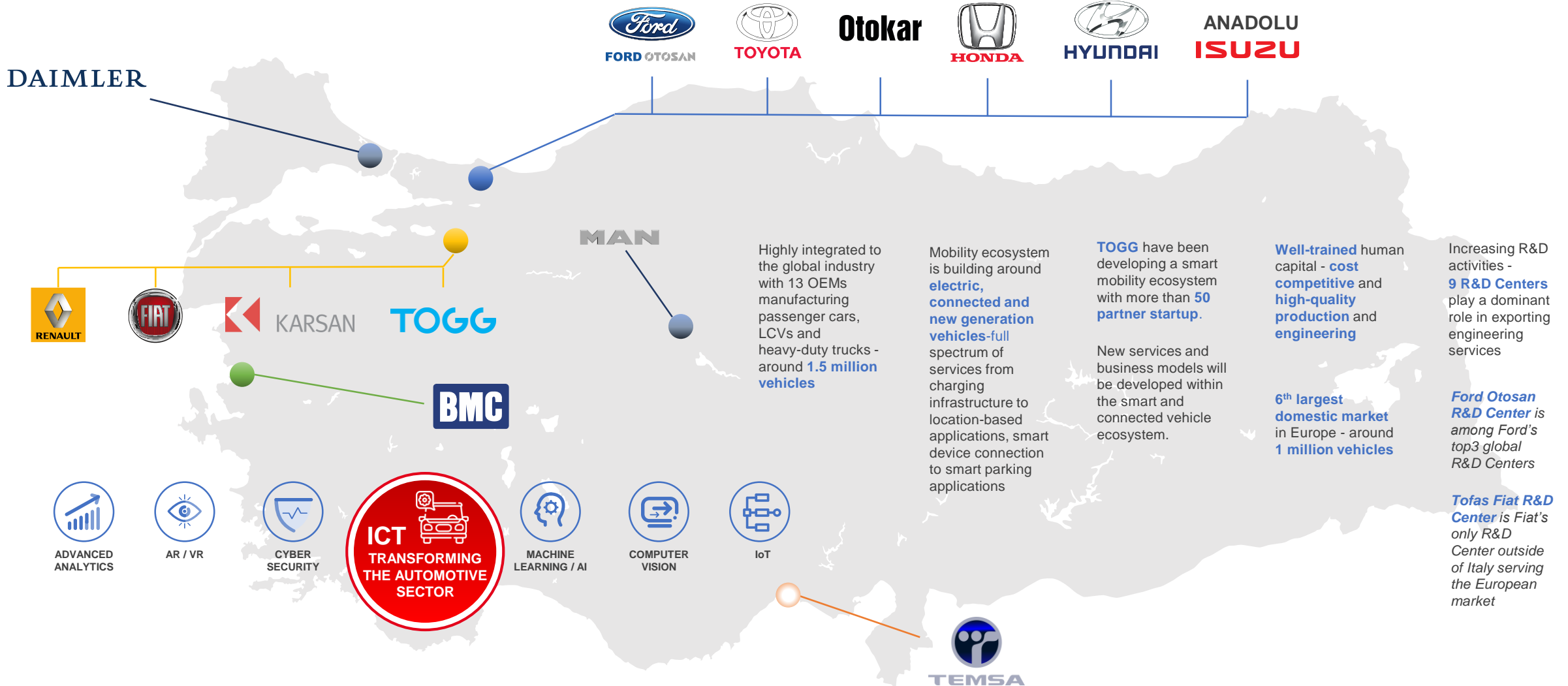


Percentage of individuals using the internet for sending filled forms to public authorities in Turkey



# ICT IN MOBILITY

TURKEY IS A MANUFACTURING AND ENGINEERING CENTER IN AUTOMOTIVE AND ALREADY AN EXPORT HUB FOR THE EUROPEAN AUTOMOTIVE INDUSTRY



# HEALTHTECH ECOSYSTEM

TURKEY IS A HUB FOR HEALTHTECH ECOSYSTEM  
LEVERAGING THE DEPTH, VARIETY AND QUANTITY  
OF DATA ACUMULATED IN THE NATIONAL HEALTH  
INFORMATION SYSTEM (NHIS) WITH 1 BILLION+  
EXAMINATION IN HEALTH INSTITUTIONS PER YEAR



## National Health Information System (NHIS)

The National Health Information System of Turkey (NHIS) is a nationwide infrastructure for collecting and to some extent sharing patients' Electronic Health Records (EHRs) since 2009.



It is a personal health record system where you can manage all your health information, regardless of where your examinations and treatments are conducted, and where you can access your medical background from one place.



SPREAD OF DIGITAL HEALTH SERVICES MOTIVATED BY THE GOVERNMENT'S AMBITIOUS HEALTH TRANSFORMATION PROGRAM IS PAVING THE WAY FOR HUNDREDS OF HEALTHTECH VENTURES

## Family Medicine Information System



The Pharmaceutical Track Trace System's (ITS) aim is to provide drug safety and prevent counterfeiting. System follows the supply chain from the production/importation to the end user - SINCE 2012.

## National Health Data Dictionary

Ministry of Health  
Tele-medicine  
System



Public & Private  
Telemedicine  
Platforms

AGENDA



# Start-up Ecosystem

# STARTUP ECOSYSTEM



ISTANBUL HAS BEEN RANKED AMONG THE TOP 20 OF THE WORLD'S 100 BEST "EMERGING ECOSYSTEMS» FOR STARTUPS

## BILLION DOLLAR CLUB



\$1B, Series B

hepsiburada.com

\$3.8B, IPO



\$7.5B, Series D

peak

\$1B, Acquisition

trendyol.com

\$16.5B, PE

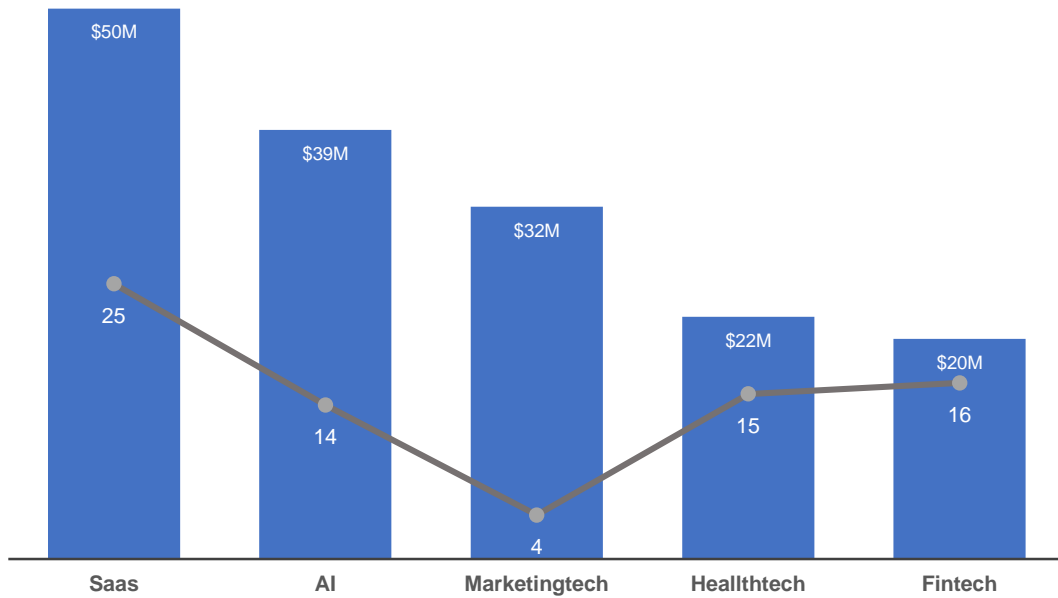
Angel & VC Deals  
Millions USD



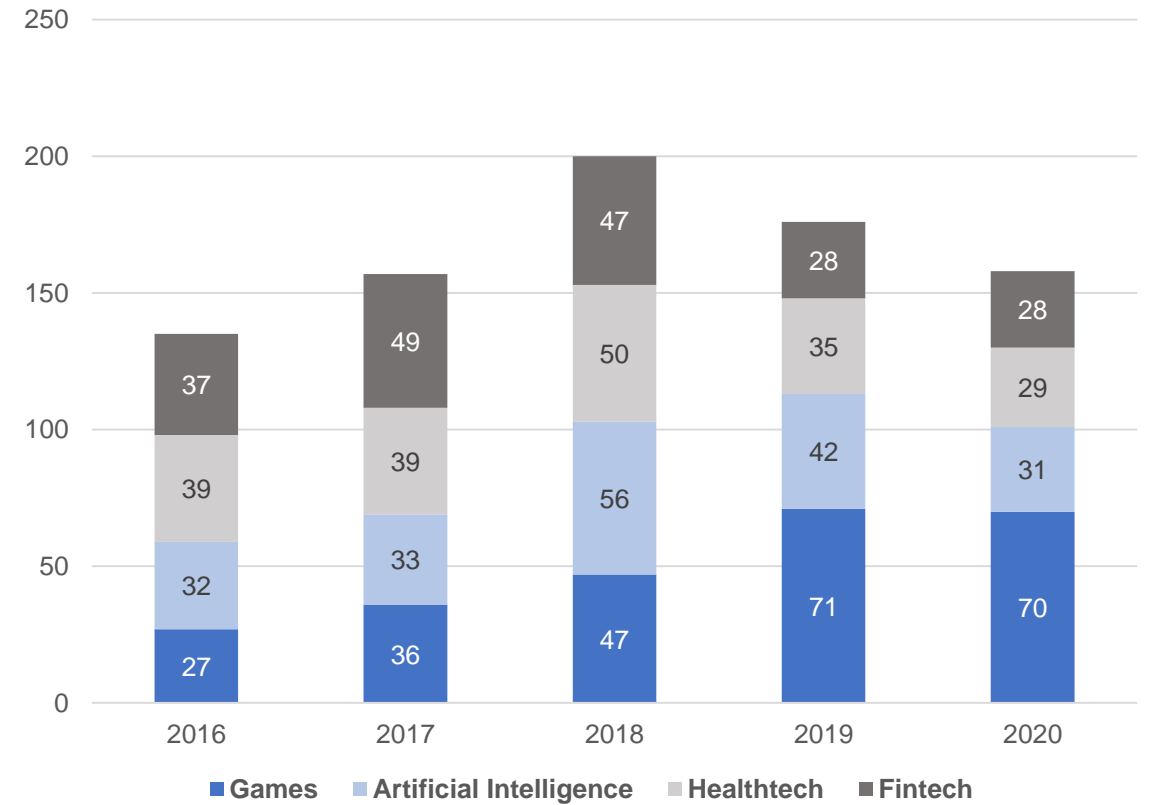
# STARTUP ECOSYSTEM



### Most Funded Verticals in 2020



### Most Founded Verticals by Entrepreneurs in Turkey





# SOME OF THE LARGEST DEALS IN 2010-2020

## EXIT ACTIVITY IN TURKEY V1.5 - OCTOBER 20, 2020



# SOME OF THE LARGEST DEALS IN 2010-2020

## EXIT ACTIVITY IN TURKEY V1.5 - OCTOBER 20, 2020



Source: Startups.Watch Notes : Only exits and secondary transactions above 50% are counted. Feel free to ask for updates : support@startups.watch

# STARTUP ECOSYSTEM MAP

## TURKISH STARTUP ECOSYSTEM MAP V6.5 - MARCH 9, 2021 [NON-EXHAUSTIVE]



### BUSINESS ANGEL NETWORKS (Accredited+Non-Accredited)



### BUSINESS ANGELS

595  
Accredited Business Angels  
(Including expired ones, As of January 15, 2021)

### CROWDFUNDING



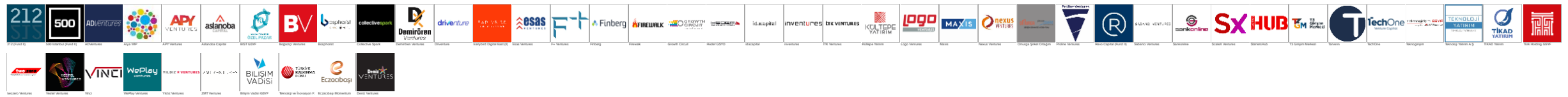
### TECH ACCELERATOR INVESTORS (Reside in Turkey)



### FI/DFI



### SEED & EARLY STAGE INVESTORS (Reside in Turkey)



### SEED & EARLY STAGE INVESTORS (Reside outside Turkey)



### LATE & MATURITY STAGE INVESTORS (Reside in Turkey)



### ACCELERATORS (With Investor Pitching Event)



\*: Only incubation centers having explicit startup list in their web sites are listed. This is by no means an exhaustive list, there are so many stakeholders that are not on this list. This is only our top picks. Feel free to ask for updates : support@startups.watch

# STARTUP ECOSYSTEM MAP

## TURKISH STARTUP ECOSYSTEM MAP V6.5 - MARCH 9, 2021 [NON-EXHAUSTIVE]



### VENTURE BUILDER



### LOCAL PLATFORMS



### COMMUNITY CENTERS



### LIVING LABS



### MENTOR PLATFORMS



### DEAL ROOMS & INVESTMENT PLATFORMS



### MEDIA (English)



### INVESTOR ANALYTICS



### TECHNOPARKS



### NGOS & ORGANIZATIONS



### GOVERNMENT



\*: Only incubation centers having explicit startup list in their web sites are listed. This is by no means an exhaustive list, there are so many stakeholders that are not on this list. This is only our top picks. Feel free to ask for updates : support@startups.watch

AGENDA



# Success Stories

# SUCCESS STORIES

## ICT GIANTS HAVE BEEN INVESTING IN TURKEY FOR DECADES



Founded in 1984, Cisco Systems, Inc. is an American multinational technology conglomerate that develops, manufactures and sells networking hardware, telecommunications equipment and other high-technology services and products. The largest networking company in the world, Cisco's FY'19 Revenue is USD 51.9 billion with an employee count of 77,500 globally.

Cisco has been present in Turkey for years and has invested in various areas, one of which is training programs in the tech industry through the Cisco Networking Academy Program. Trainings have been provided through this program since early 2000s.

In 2018, Cisco opened an **innovation center in Istanbul**, Turkey in a bid to develop solutions for the digital era.



American multinational information technology company that not only provides hosting and consulting services from computers to nanotechnology, but also manufactures and markets computer hardware, middleware and software.

IBM has been operating in Turkey since the 1930s, and since then has participated in various projects. Projects have included working together with Turkish local bodies, both governmental and NGO, to strengthen the governance practices of community organizations who are implementing a range of local initiatives that promote economic development and growth.



Ericsson, a world leader in communications technology and service, works in 180 countries and employs more than 111,000 experts in line with its vision of "the Networked Society". Ericsson's services, software, and infrastructure – particularly in mobility, broadband, and the cloud – enable the telecoms industry and other sectors to conduct better business, increase efficiency, improve user experience, and capture new opportunities.

Ericsson Turkey's R&D team, consisting of more than 550 R&D and technical support employees based in its Istanbul, Izmir and Ankara locations, provides services through innovative activities in various fields of information and telecoms technologies. In those centers, more than 140 R&D projects, 20 of which are supported by TÜBİTAK, are being implemented. Ericsson Turkey participates in many international R&D projects together with SMEs and universities in Turkey. Ericsson Research is a global organization that develops new patentable technologies and system concepts, which drive the standardization of future mobile systems, innovating and re-shaping the industry 5-10 years ahead. Ericsson Research has operations in eleven countries including Turkey



ZTE, Chinese multinational ICT solutions vendor **acquired nearly half of Turkish Netas'** shares in 2017. This is considered one of the biggest transactions in technology development investments in Turkey.

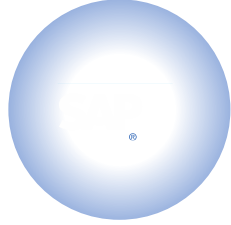
2020 was the year that started reaping the synergic benefits of ZTE and Netas working together. Netas achieved 170% growth in telecommunications technologies.

Localization efforts, conceived in 2019 with FTTx systems, endure with many other products of ZTE. The goal here is to undertake local production of ZTE staples by way of transferring the knowhow to Turkey.

Another joint step in this direction was for the IPTV technologies. Netas started building ZTE's new generation IPTV platform in Turkey

# SUCCESS STORIES

## ICT GIANTS HAVE BEEN INVESTING IN TURKEY FOR DECADES



SAP SE is a German-based European multinational software corporation that makes enterprise software to manage enterprise resources, business operations and customer relations.

Founded in 1972, SAP currently has operations in over **180 countries and has labs in only 20 countries**, one of which is in Turkey.

Within this context, a significant portion of the SAP Data Hub solution, which includes artificial intelligence and machine learning applications, is developed by Turkish engineers at the SAP Development Center and exported to the whole world.

SAP SE sees Turkey as the "main hub" for digital transformation and Turkish engineers carry out "mega" projects in Turkic republics, Russia, Africa, the Middle East and Europe



American multinational technology company that develops, manufactures, licenses, supports and sells computer software, consumer electronics, personal computers and related services.

Founded in 1975, in 2020, Microsoft reported revenue was 143 billion dollars with over 144,000 employees.

Microsoft Turkey is used as a managing center for the Middle East and Africa regions, composed of **79 countries**.

Microsoft acquired Citus Data Inc., a Software Development company that was founded in Turkey and then expanded internationally. Upon acquisition, Microsoft continued investing Citus's team in Turkey and expanded their responsibility by giving them additional products to develop that are core to Microsoft's Azure Data platform



Chinese multinational networking, telecommunications equipment, and services company.

Founded in 1987, Huawei is currently the largest telecommunications equipment manufacturer in the world, as well as the second largest smartphone manufacturer in the world.

Huawei began its operations in Turkey in 2002. Currently, in its Turkey office, Huawei has **over 1,500 employees**, an R&D center, training center, and a customers solutions and integration experience center.



Alibaba Group is the world's largest online and mobile commerce company. Alibaba describes its mission as to make it easy to do business anywhere.

In 2018, Alibaba group acquired the major shares of Turkey's leading e-commerce platform Trendyol which is serving over 16 million customers. It is also the fastest growing e-commerce company in the region with over 90 million monthly visits.

Trendyol is the largest internet employer in Turkey with a team over 2300 people. Trendyol has an R&D center with an ever-growing R&D team that focuses on NLP, real-time data analysis, machine and deep learning, data visualization and big data.



PRESIDENCY OF  
THE REPUBLIC OF TURKEY  
**INVESTMENT  
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