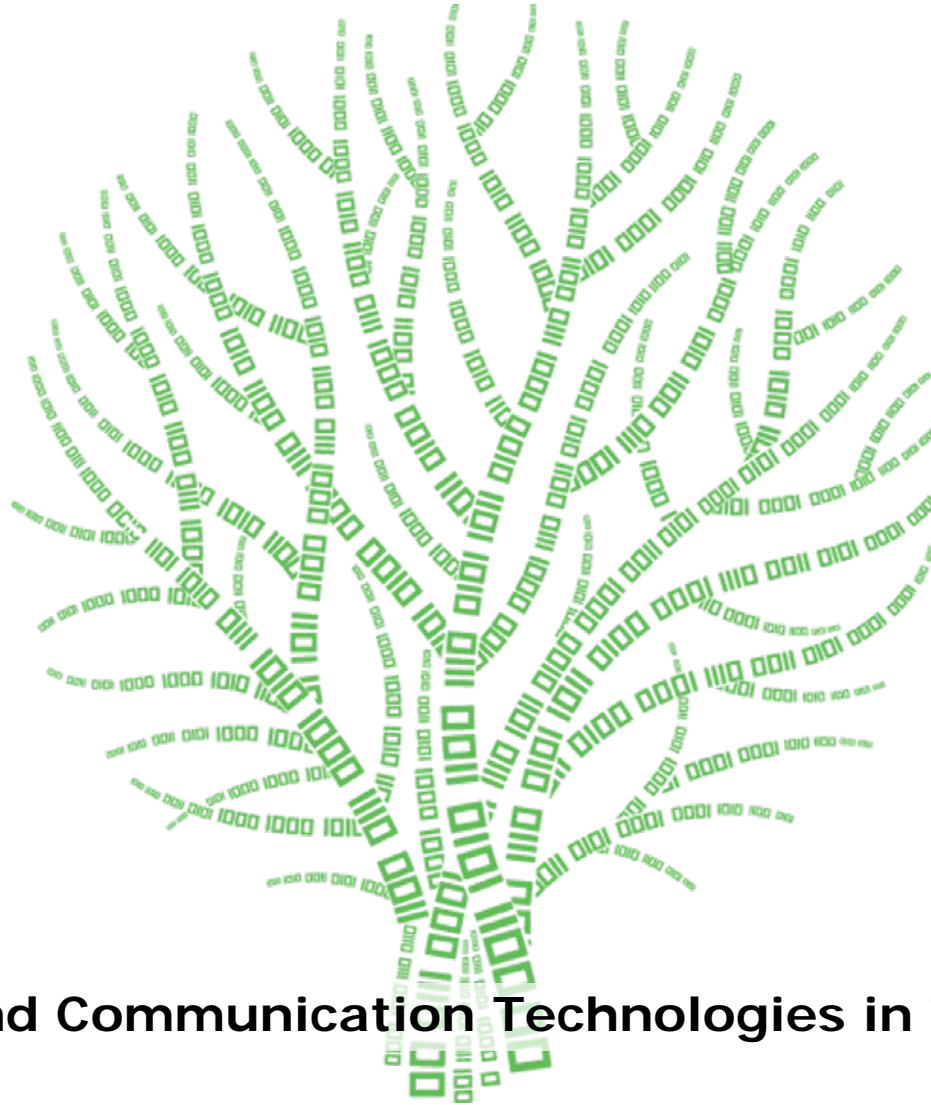




**TÜBİSAD**  
INFORMATICS INDUSTRY ASSOCIATION



# Information and Communication Technologies in Turkey

## 2016 Market Data

May 11, 2017  
Istanbul

**Deloitte.**

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Turkish Information and Communication Technologies Sector total market size for 2016

## **4 MARKET SIZE BY SUBSECTORS**

Sizes of subcategories including Information Technologies Hardware, Software, Services; Communications Equipment and Electronic Communications

## **5 OTHER SECTOR DATA**

Exports, origins of product and services, types and value of incentives utilized, factors driving growth, major issues faced in the sector, etc.

# Project stakeholders

Project Partner



*TOBB Telecommunications Council*

Project Consultant

**Deloitte.**

*Deloitte Consulting*

Project Data Providers



*BTK – Information and  
Communication Technologies  
Authority*



*Context*

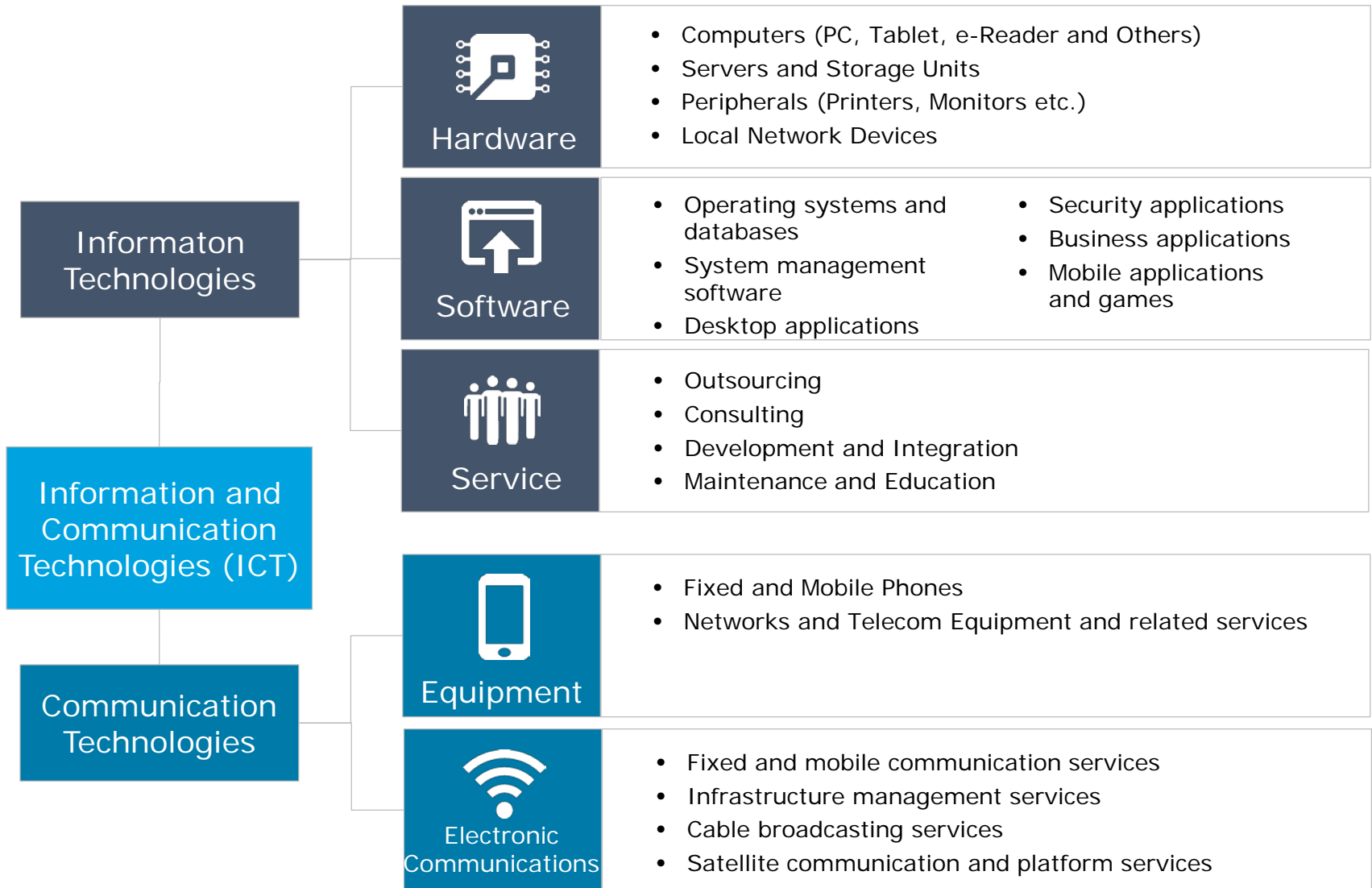


*SASAD – Defense and Aerospace  
Industry Manufacturers Association*

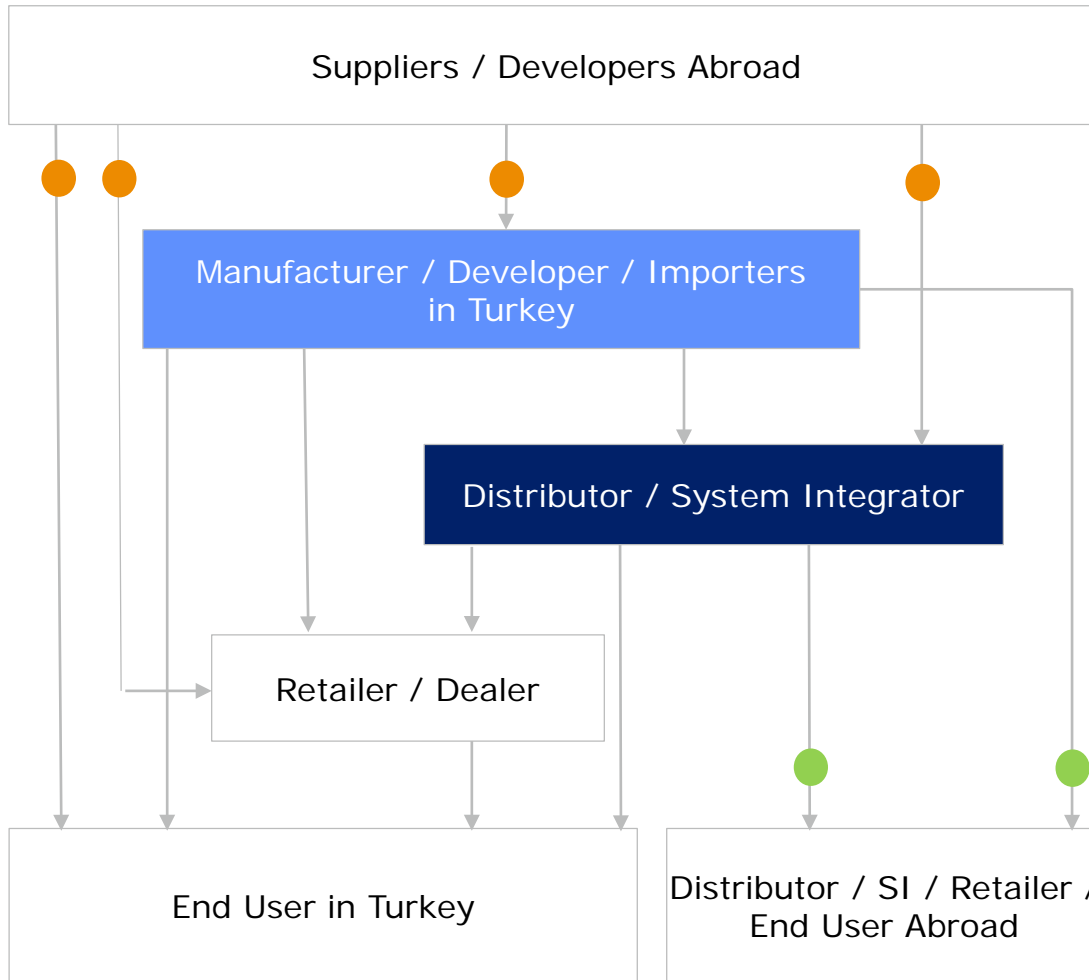


*TGBD – Association of  
Technoparks*

# Project Scope



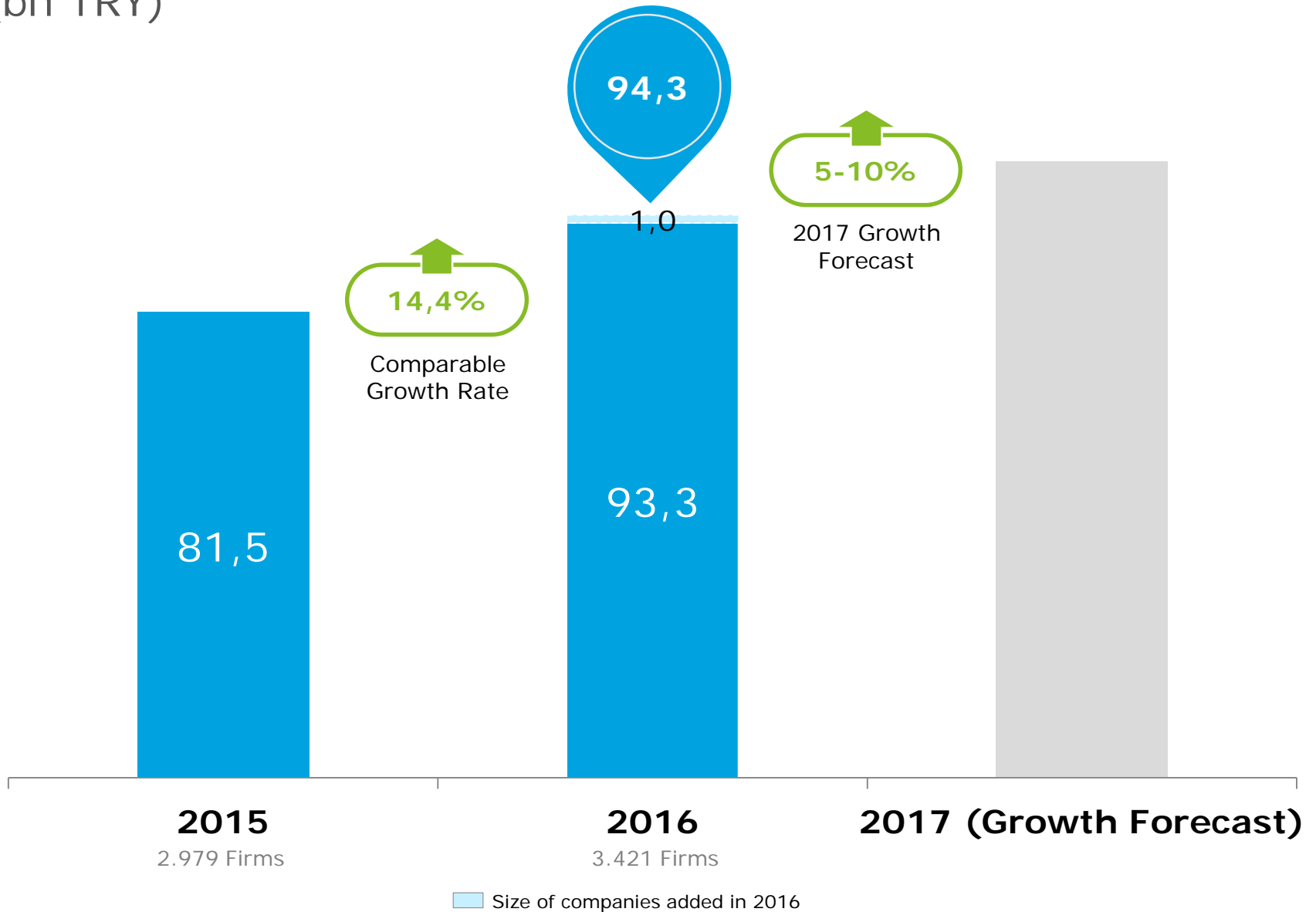
# Dimensioning methodology



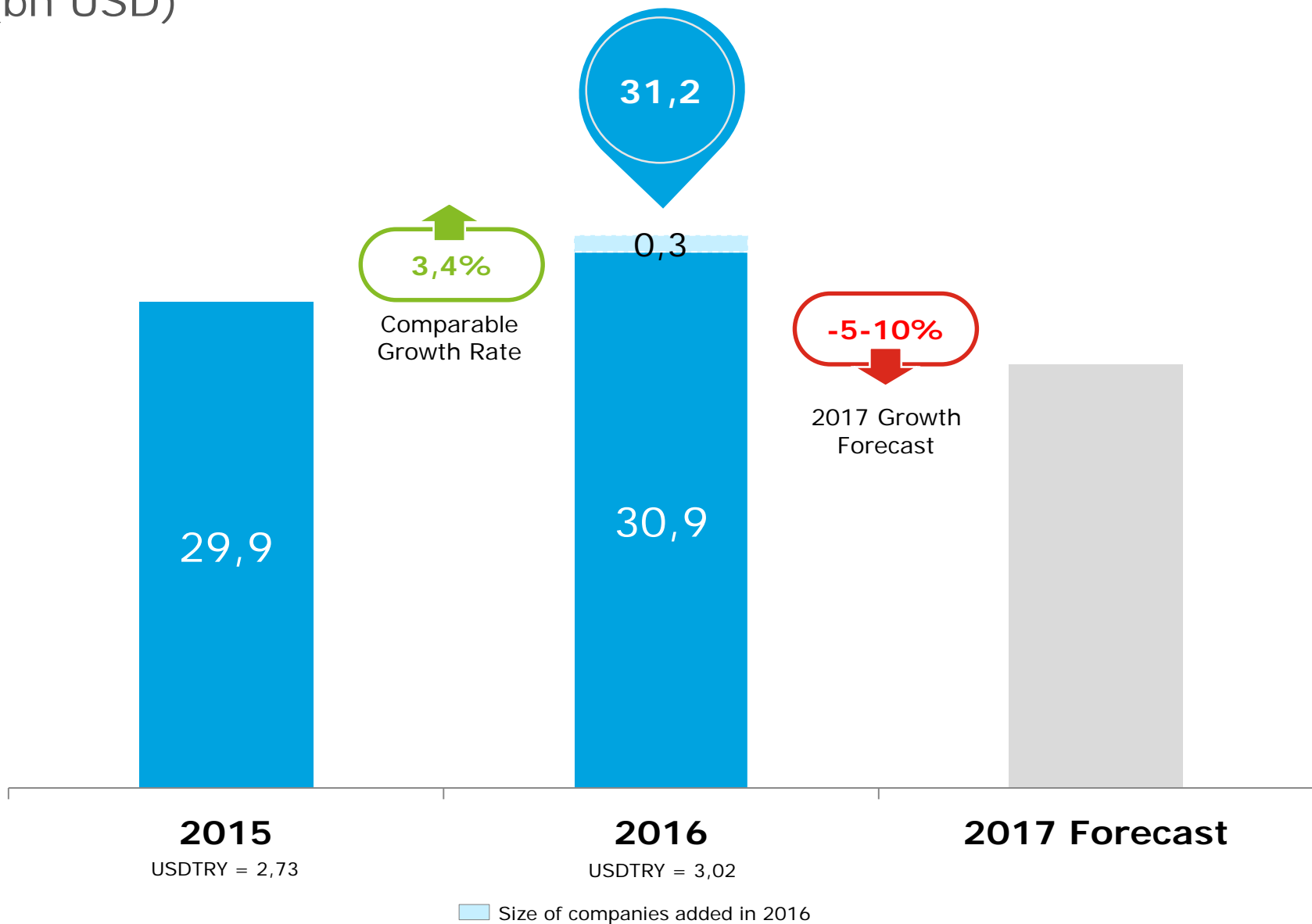
- Sector size is separated in order to prevent any duplicate calculations
- Firm sizes are gathered together with different breakdowns
  - End user and sale on consignment
  - Import vs export
  - Origin of products and services
  - R&D center share

- = Import
- = Export

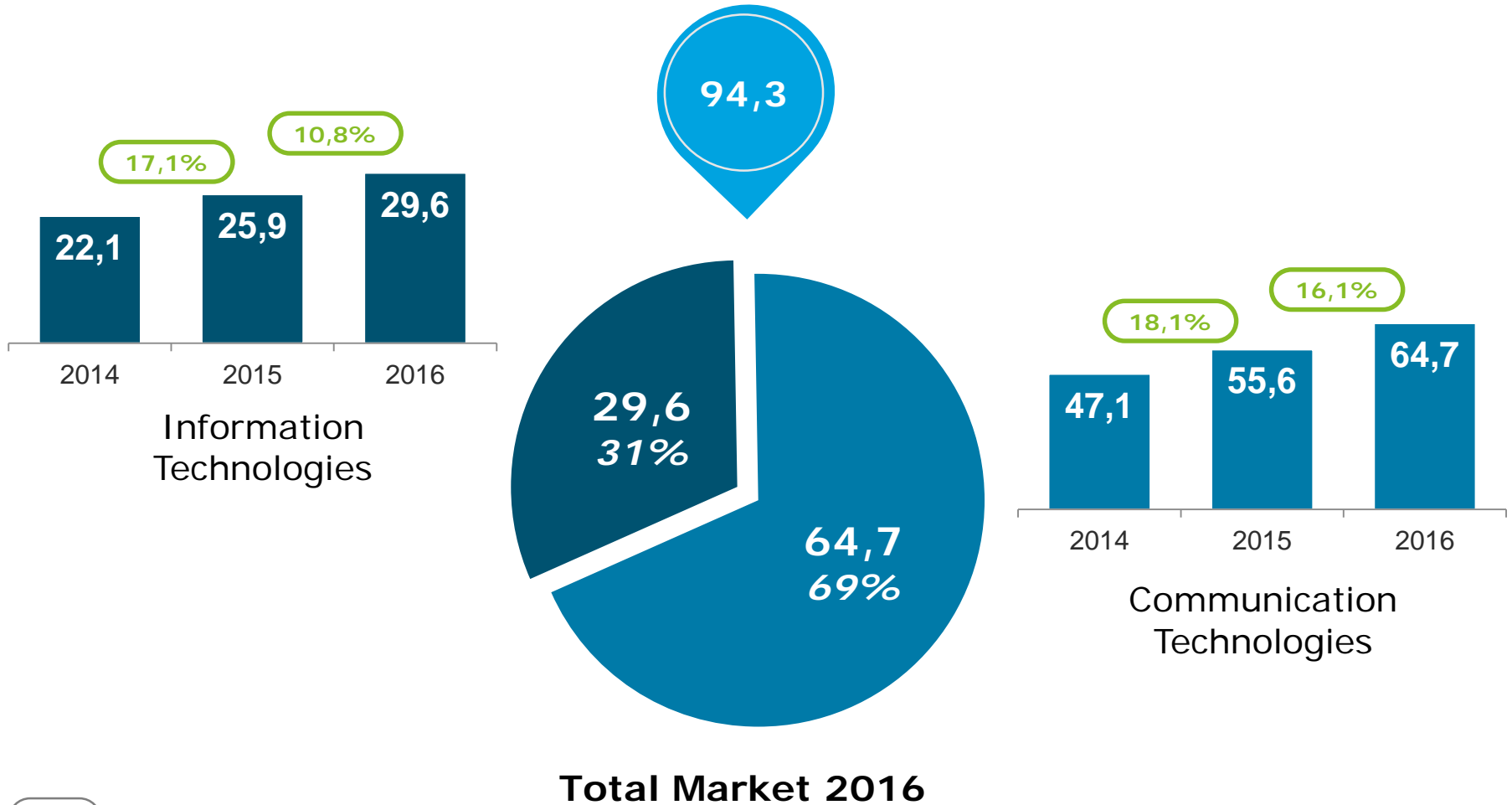
# Total ICT market size in Turkey (bn TRY)



# Total ICT market size in Turkey (bn USD)



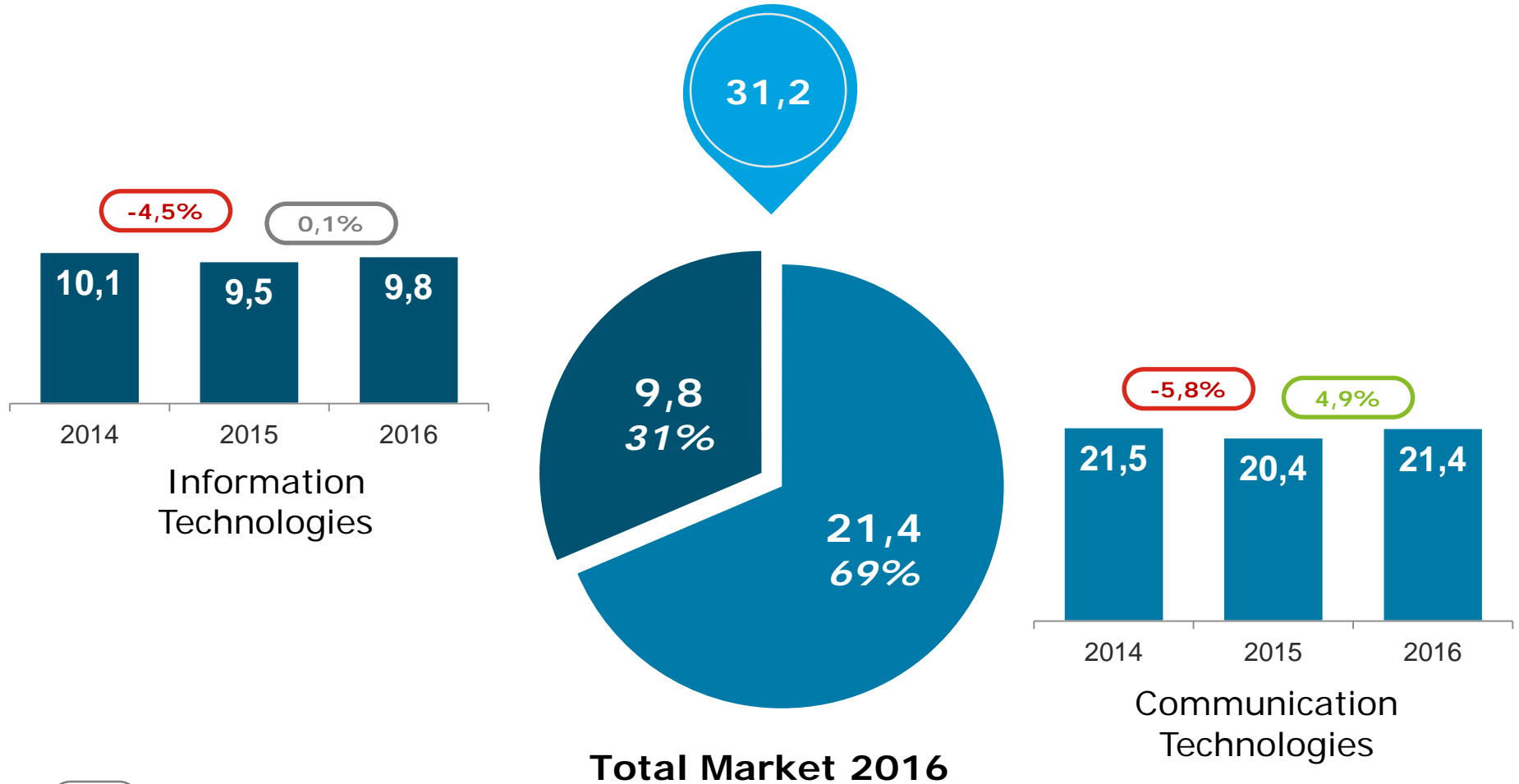
# ICT market breakdown (bn TRY)



**%** = Comparable % Change



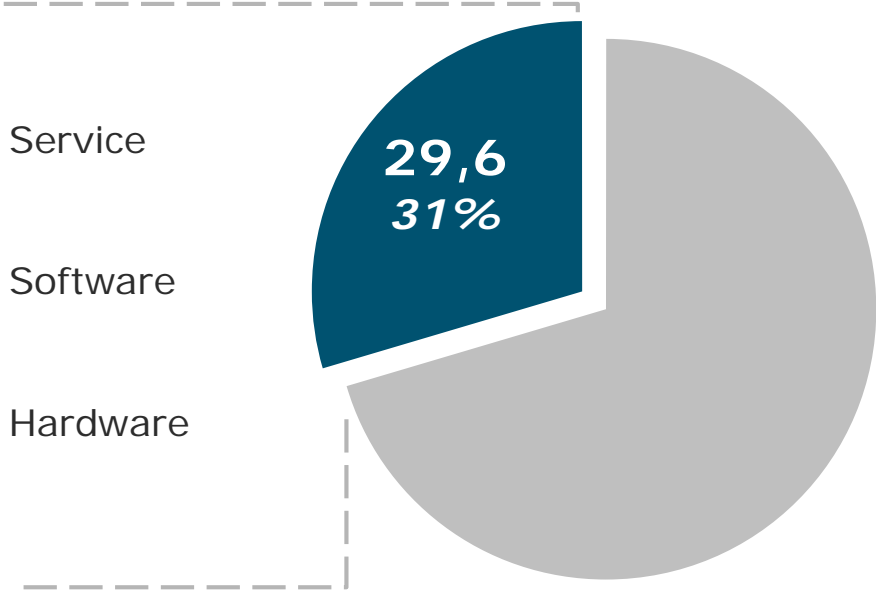
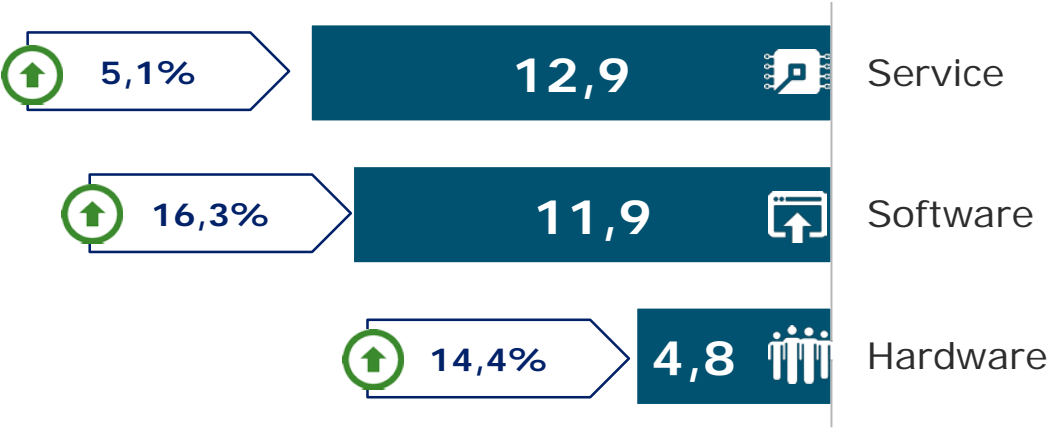
# ICT market breakdown (bn USD)



% = Karşılaştırılabilir Değişim Oranı

# Breakdown of Information Technologies Sector

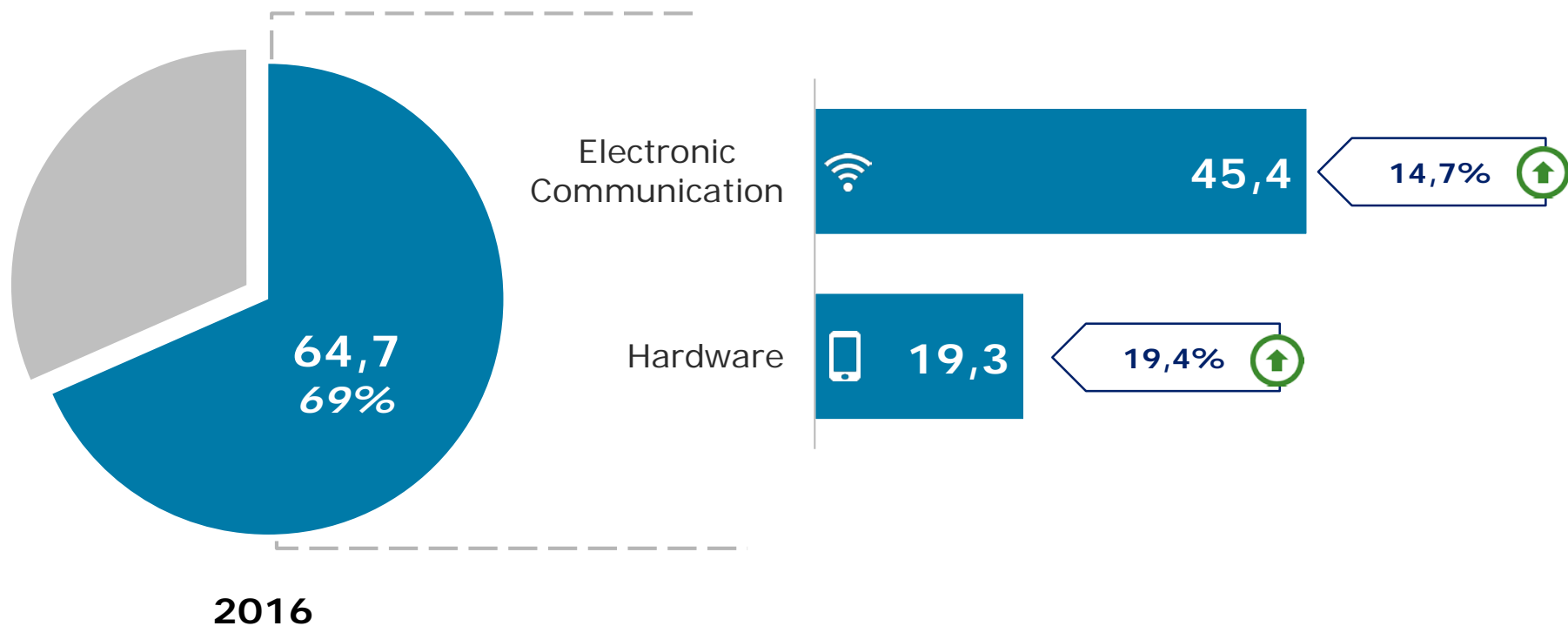
(bn USD)



2016

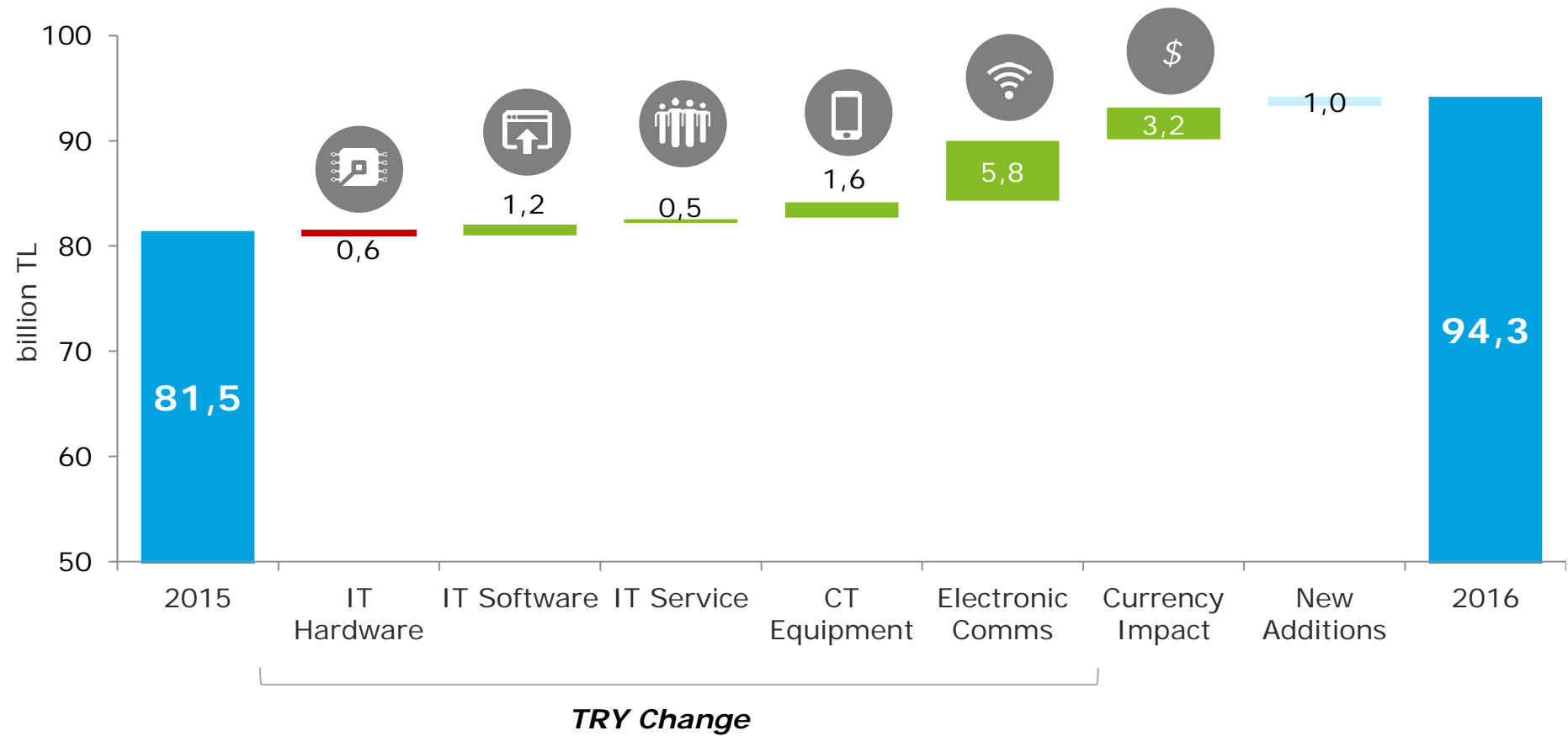
= Comparable % Change

# Breakdown of Communication Technologies Sector (bn TRY)

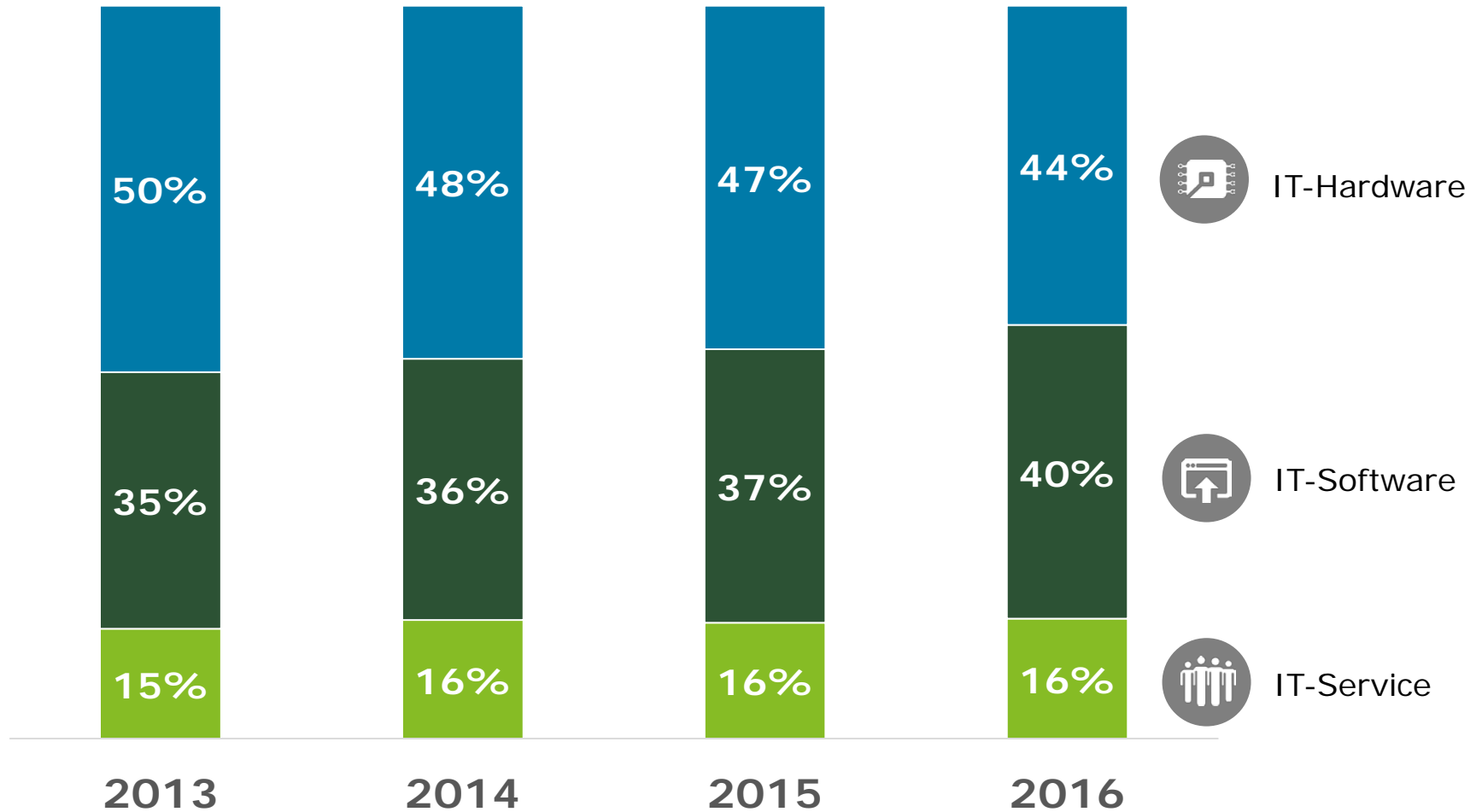


= Comparable % Change

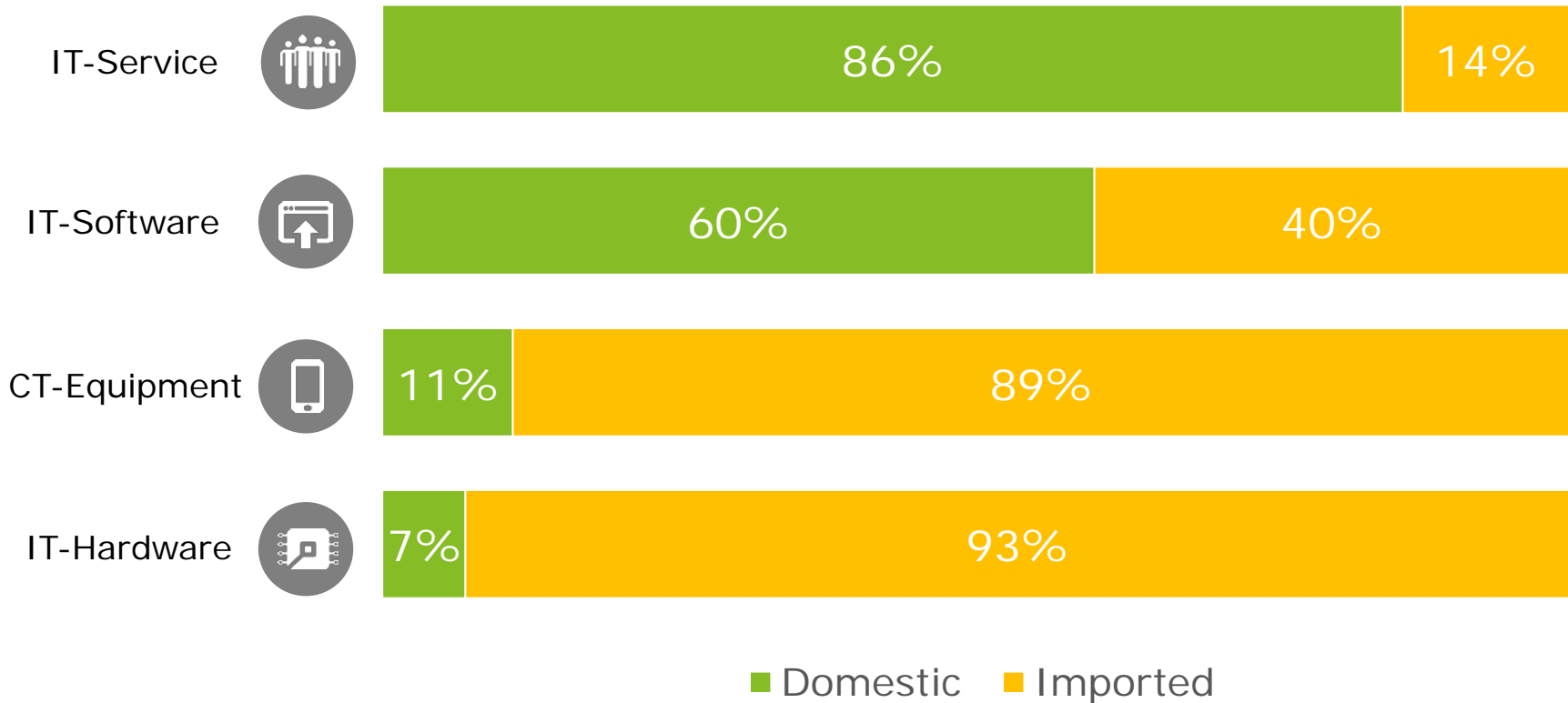
# Sources of ICT market growth



# Shares of subsectors over time



# Origins of product and services 2016



# Technoparks in Turkey - 2016



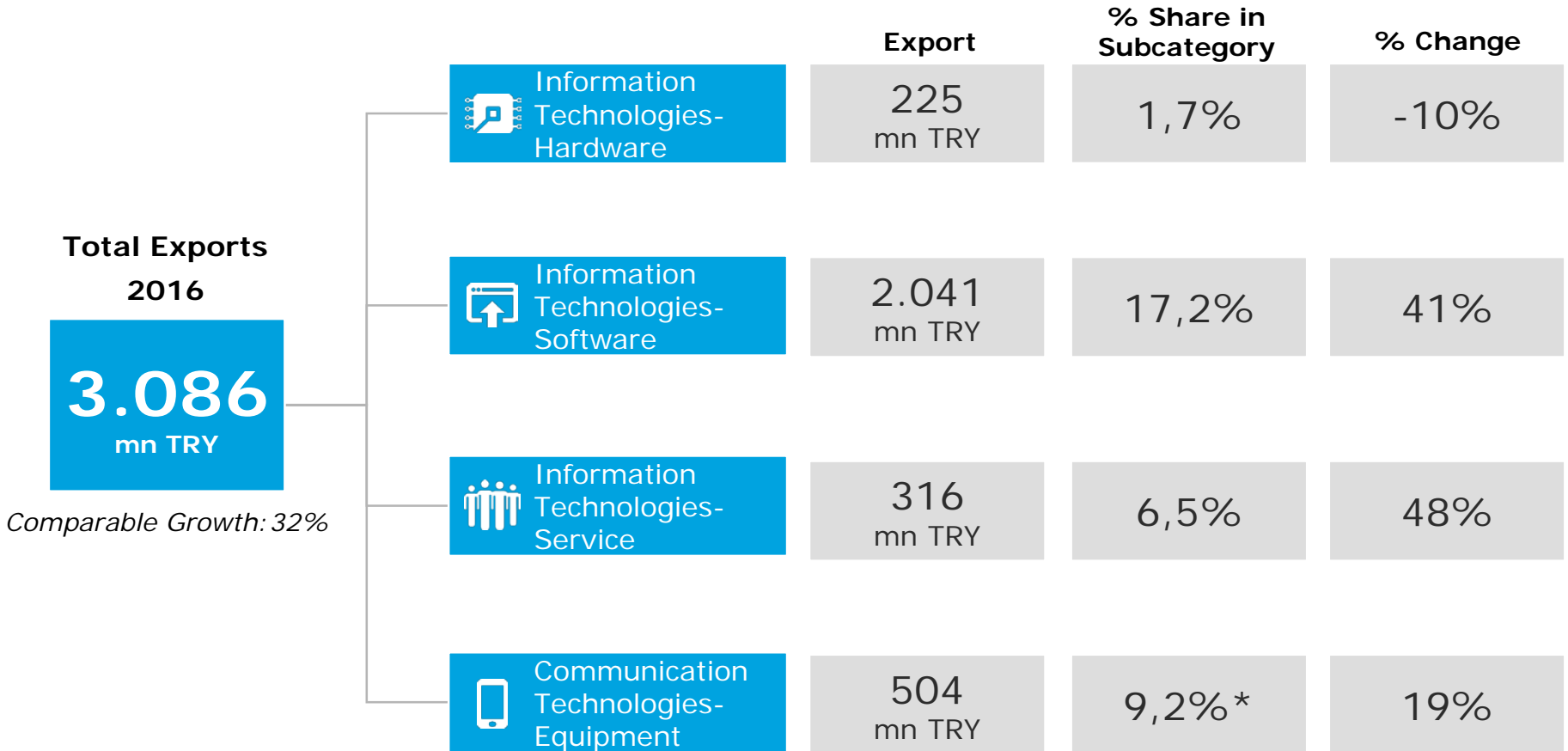
| IT Companies            | 2015**         | 2016   | Change |
|-------------------------|----------------|--------|--------|
| # of Companies          | 2.260 (213)    | 2.900  | 28,3%  |
| # of Employees          | 28.363 (1.027) | 33.767 | 19,1%  |
| Total Revenues (TRY mn) | 6.730 (306)    | 8.037  | 19,4%  |
| Total Exports (TRY mn)  | 922 (11)       | 1.597  | 73,2%  |

\*Including data from technoparks that are newly added in 2016

\*\*Numbers in parentheses reflect 2015 data of technoparks that were newly added in 2016.

# ICT Exports

mn TRY

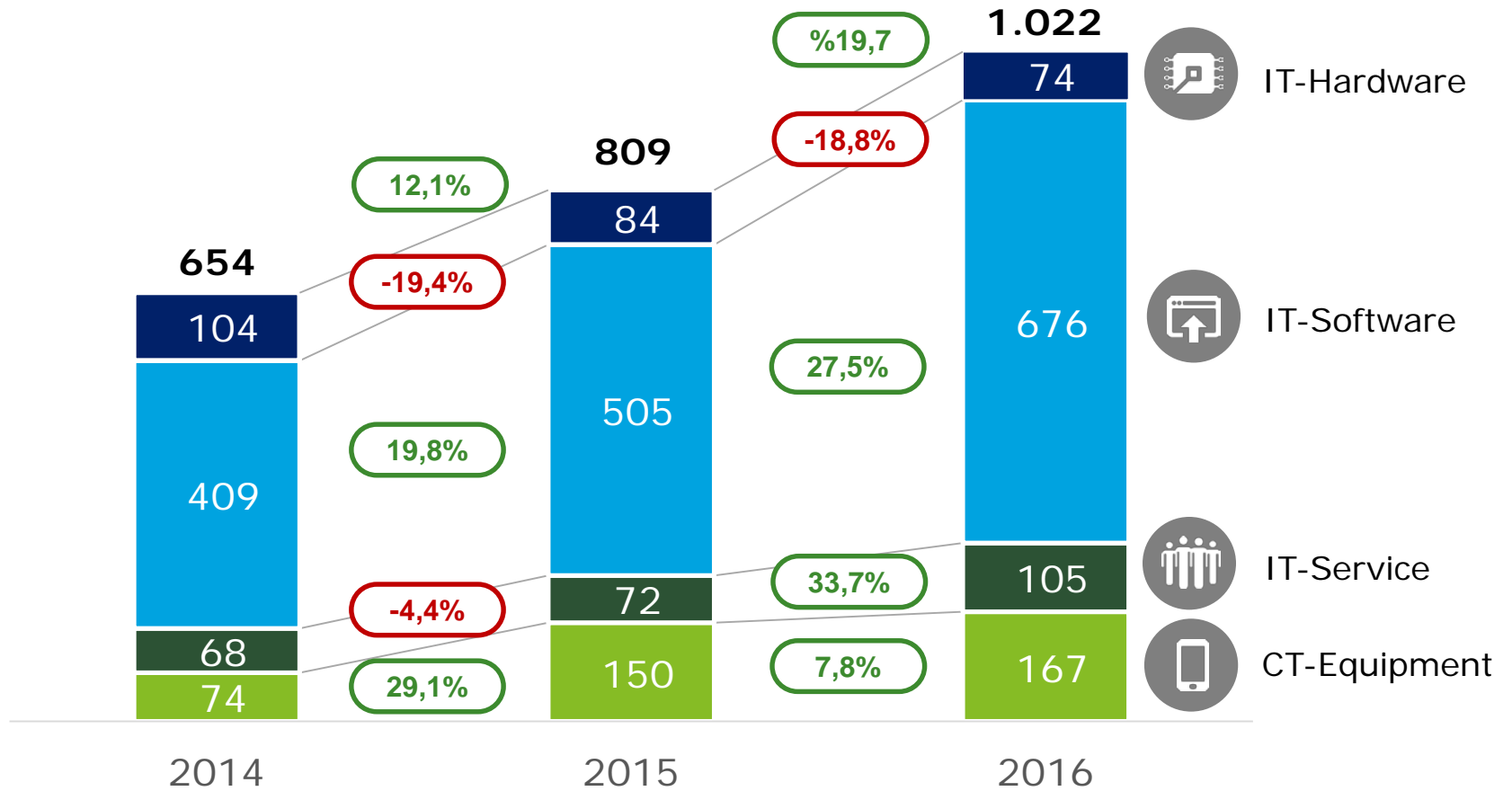


\*Mobile phones are excluded.



# ICT Exports

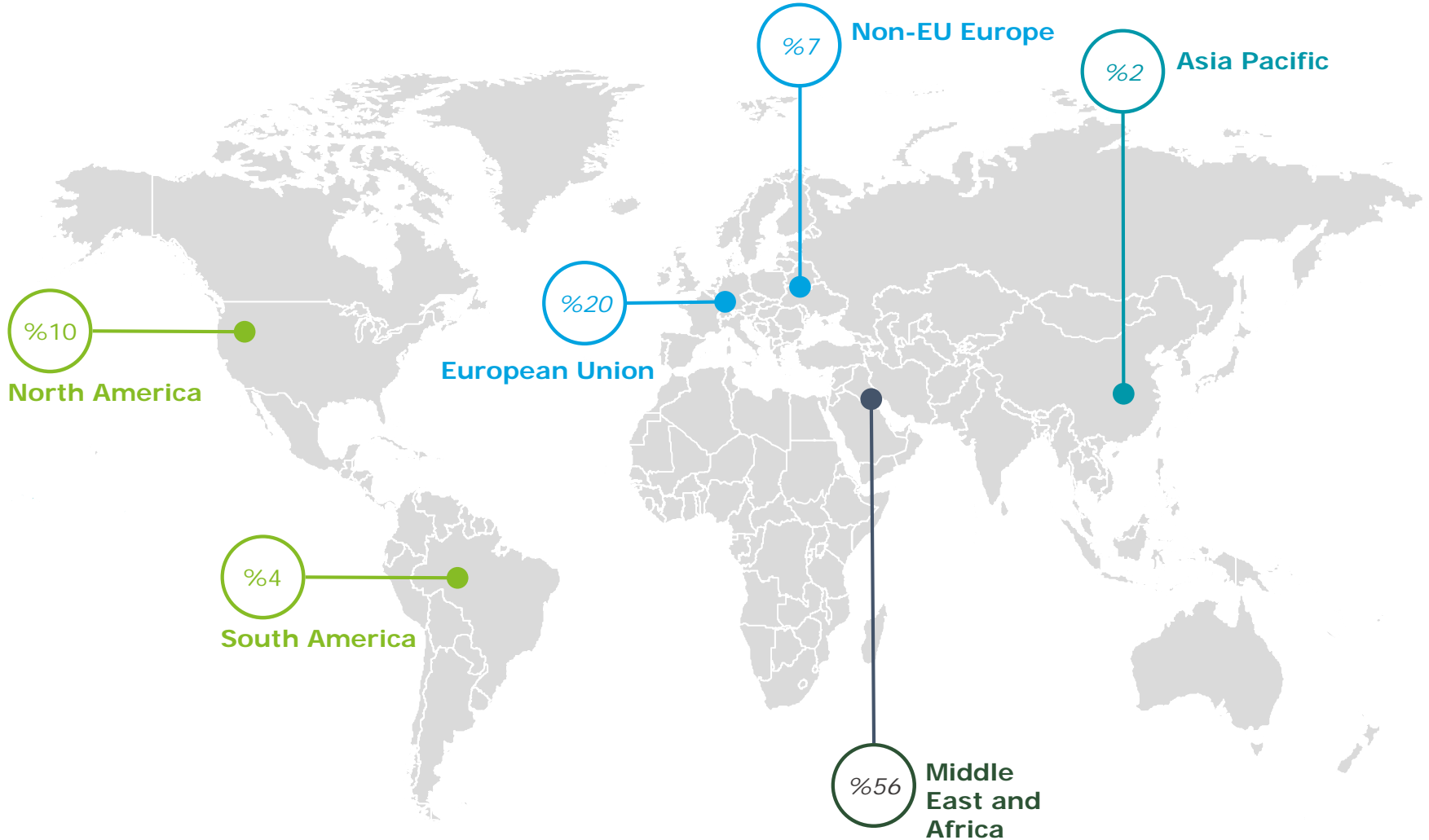
mn USD



**%** = Comparable Change Rate

# Exporting regions

## Breakdown of total exports by region 2016



Based on responses of 71 firms, breakdown of total exports to regions

# Employment (k persons)

111 K Person  
(2015)\*

Total Employment  
2016

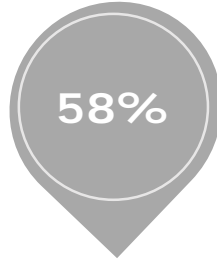
**120**  
k Person

Growth\*: 0,0%

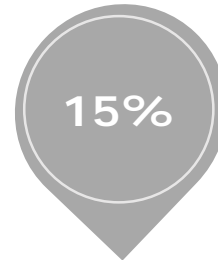
|                            | Employment | % Share | % Change * |
|----------------------------|------------|---------|------------|
| Information Technologies   | 80,4       | 67%     | 4,8%       |
| Communication Technologies | 39,1       | 34%     | -9,1%      |



Female employees<sup>1</sup>



University graduates<sup>1</sup>



R&D employees<sup>1</sup>



Subcontractors<sup>1</sup>

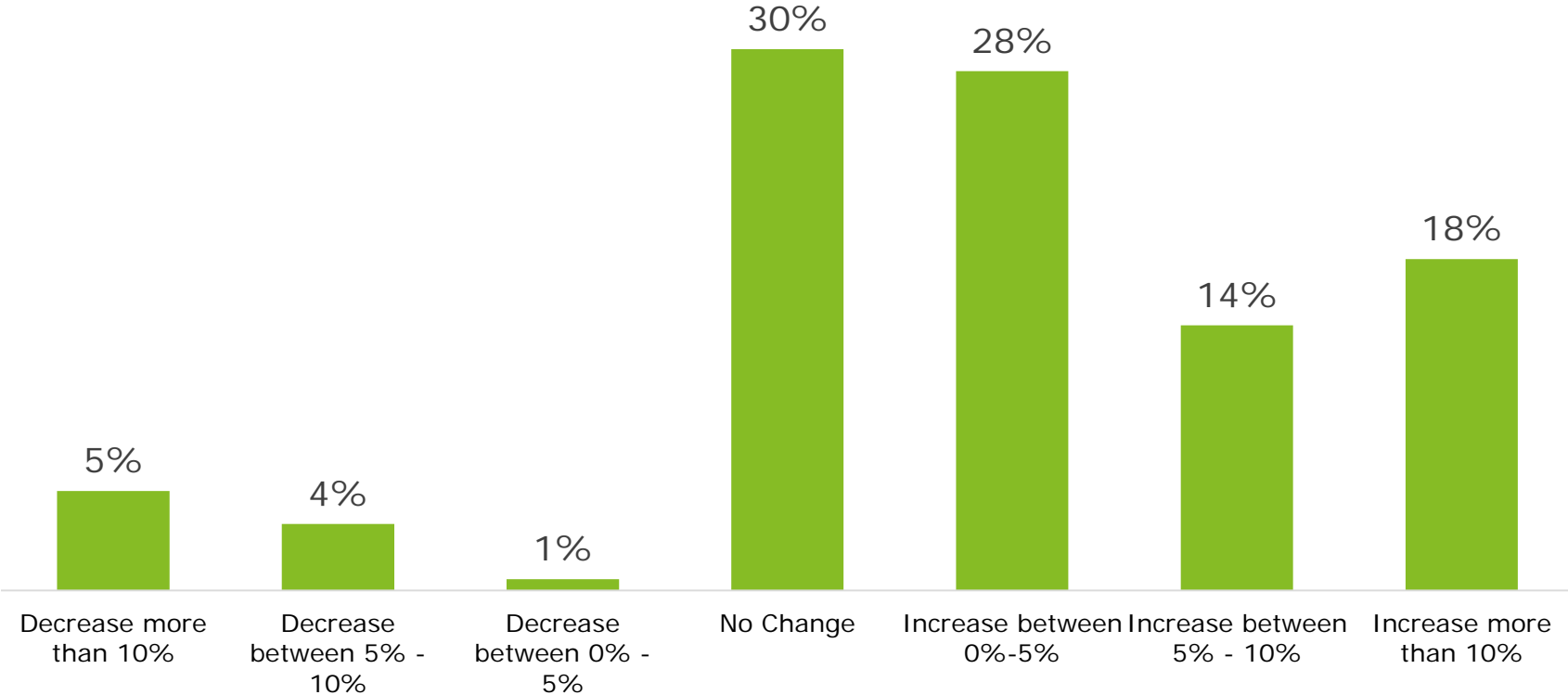
<sup>1</sup> Based on survey responses and BTK data

\* 2015 data was updated. Growth rates represent comparable rates (calculated by excluding surveyed firms for the first time this year)

# Employment

## 2016-2017 change forecast

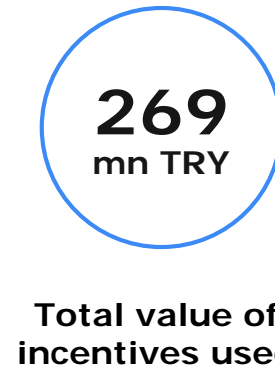
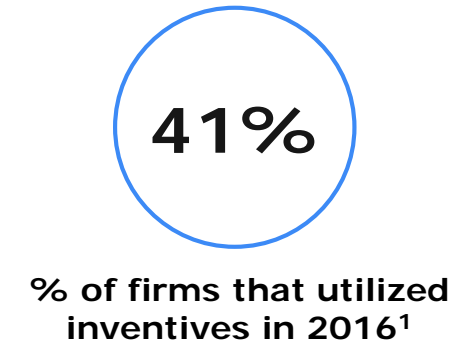
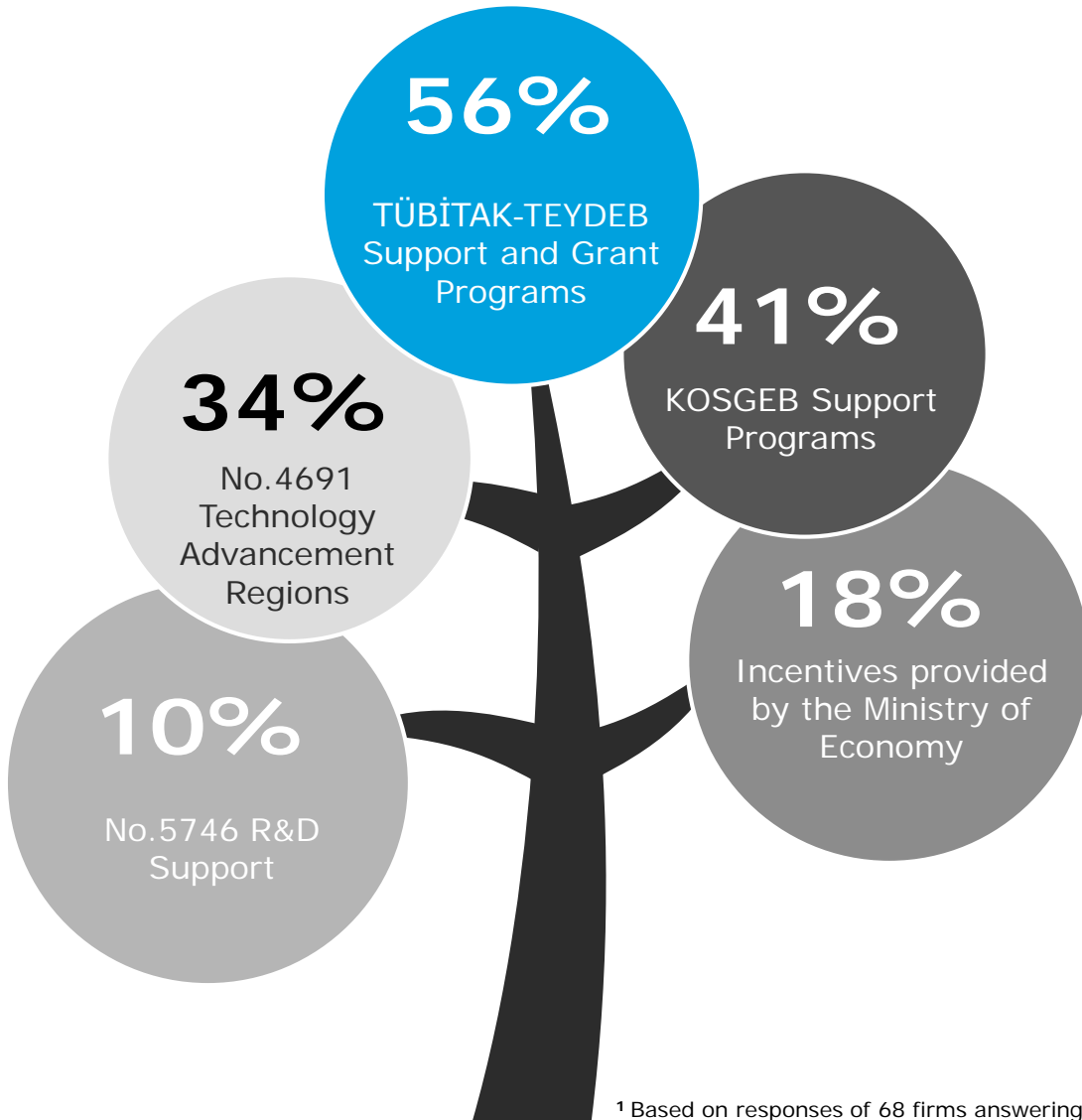
In your view, how is the number of employees for your company likely to change in 2017?



N = 168



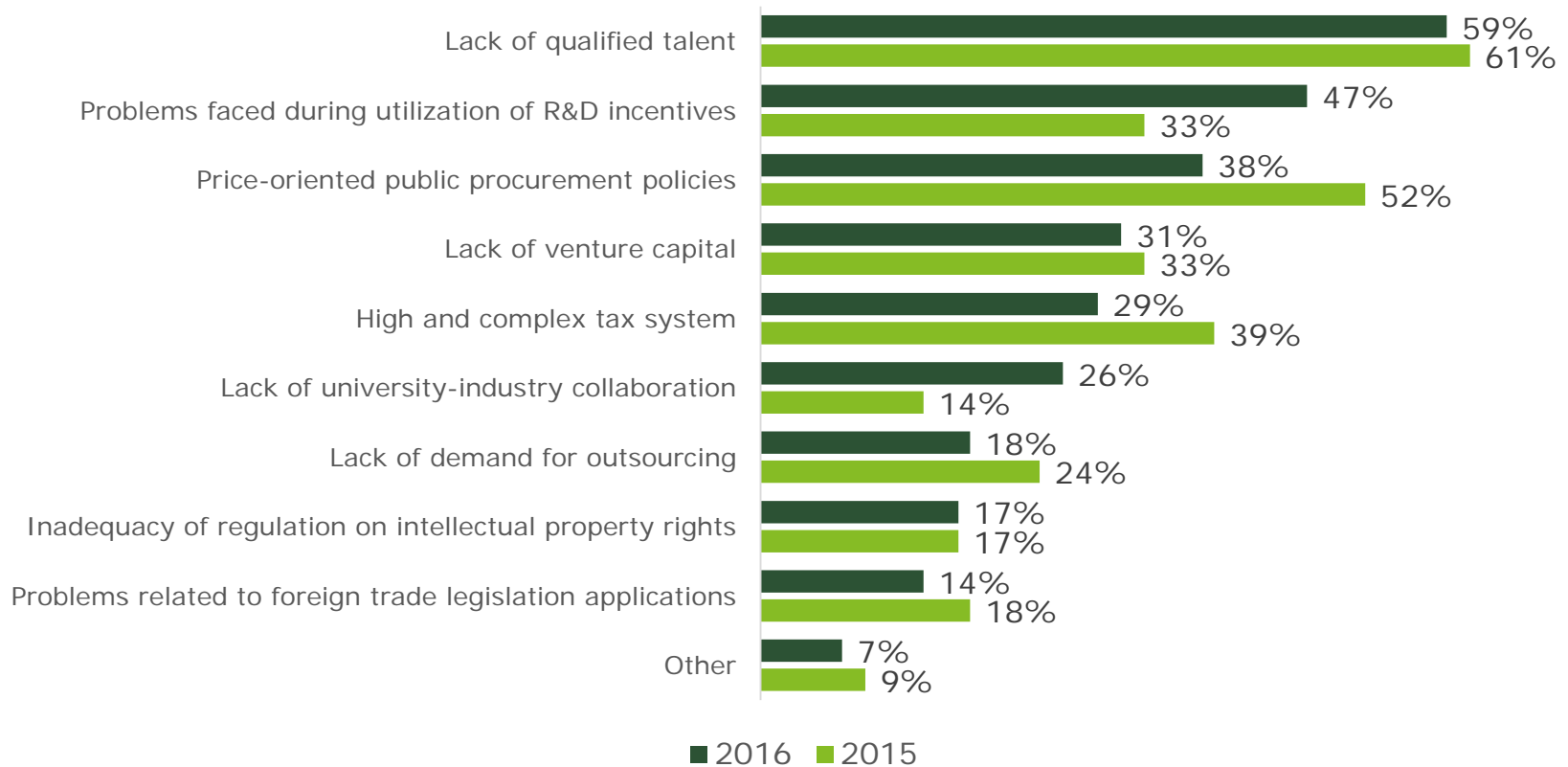
# Utilized Incentives



<sup>1</sup> Based on responses of 68 firms answering the question

# Key issues in the ICT sector

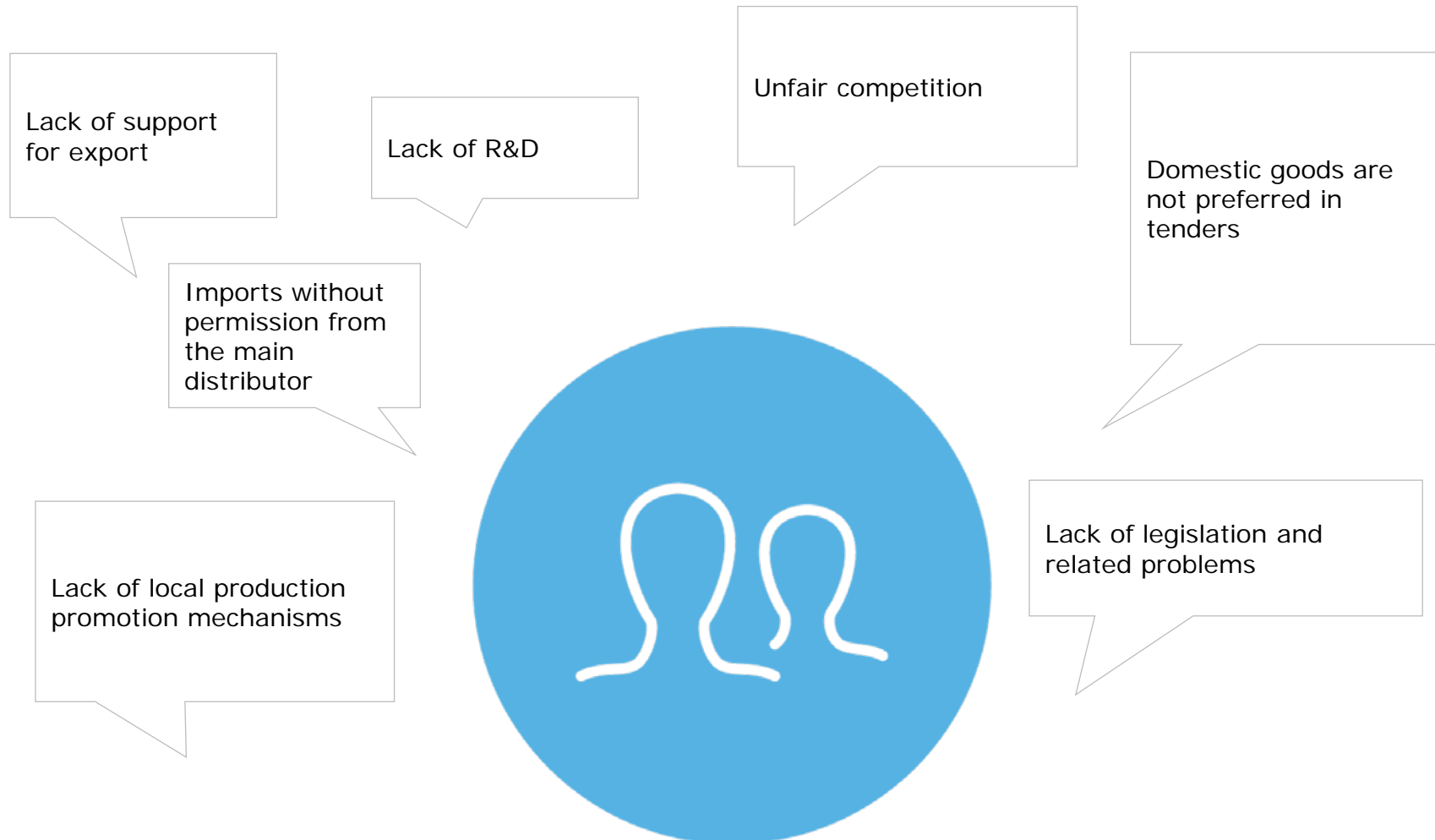
## What are the 3 major problems faced in the sector?



Criteria: 168 firms that responded to the question

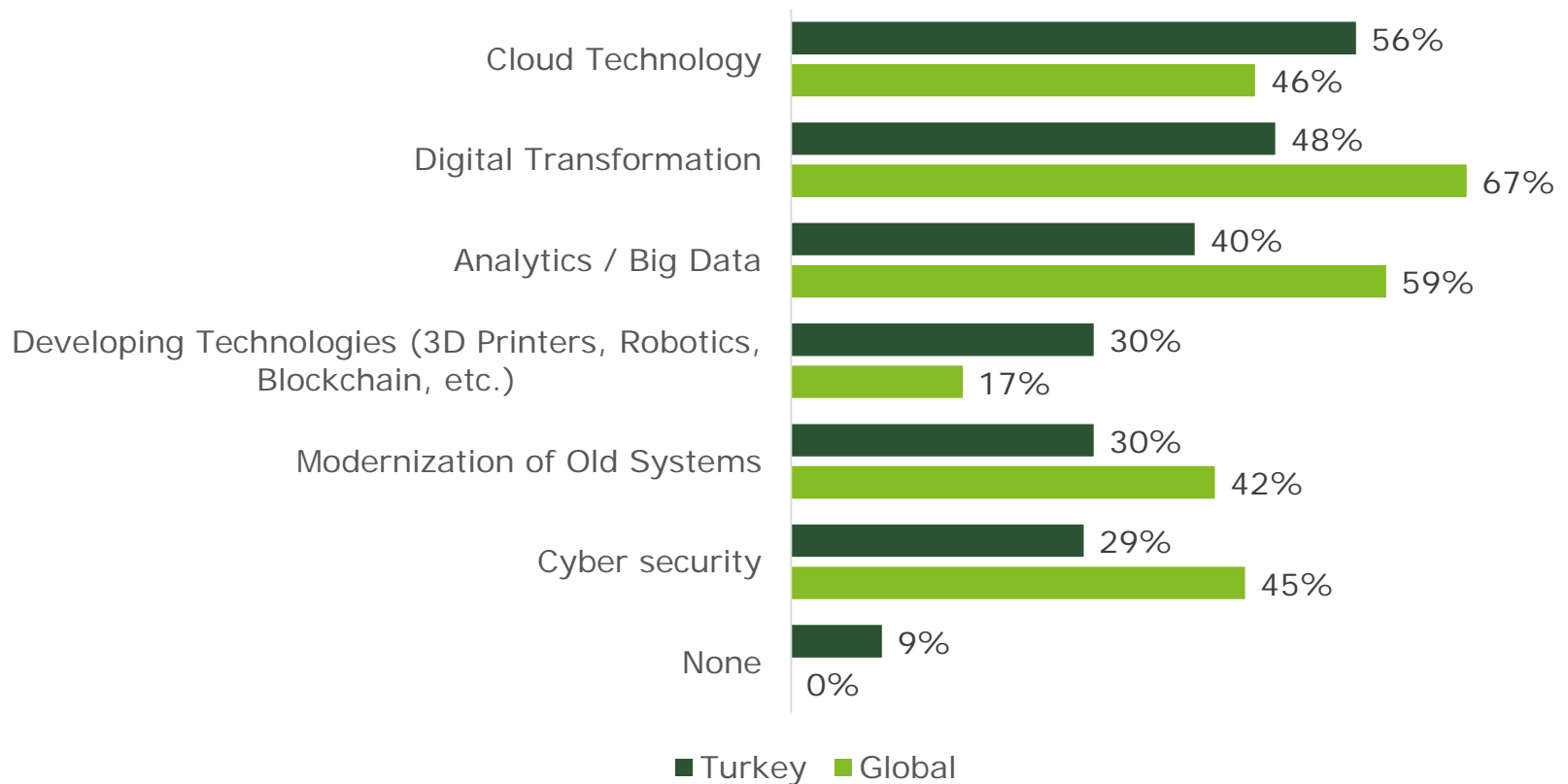
# Key issues in the ICT sector

## Breakdown of 'Other' answers



# Impact Areas

For the next two years, which of the following technological areas will have the most impact on your business (Choose at most three answers)



N = 168; Deloitte 2016-2017 Global CIO Survey, Deloitte University Press



# 2016 ICT Market in Turkey

Bn TRY

## 2016 ICT Market Sector

Total Exports  
**3,1**

Total Market Size  
**94,3**

Total Employment  
**120k**

### Information Technologies

**29,6**

### Communication Technologies

**64,7**

 Hardware

**12,9**

 Software

**11,9**

 Service

**4,8**

 Equipment

**19,3**

 Electronic Comms

**45,4**

# 2016 ICT Market in Turkey

Bn USD

## 2016 ICT Market Sector

Total Exports  
**1,0**

Total Market Size  
**31,2**

Total Employment  
**120k**

### Information Technologies

**9,8**

### Communication Technologies

**21,4**

 Hardware

**4,3**

 Software

**3,9**

 Service

**1,6**

 Equipment

**6,4**

 Electronic Comms

**15,0**



Thank You

We would like to thank  
TOBB Telecommunications Council,  
ICTA, TGBD, Context, SASAD,  
TÜBİSAD members and sector companies for their valuable contributions.

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