

# The Adoption of E-commerce in Small and Medium Enterprises (SMEs)

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**Abstract:** It is without a doubt that Internet has immensely helped the growth of e-commerce businesses. The small and medium enterprises (SMEs) are businesses with lower number of employees than a given threshold. The term is generally used by organizations such as European Union, United Nations, World Trade Organization, World Bank and so on. In this paper, we present the small and medium enterprises (SMEs) that have adopted the Internet and e-commerce.

**Keywords:** small and medium-sized enterprises, EU support programs.

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## Introduction

The Internet is definitely one of the most essential driving factor for small and medium enterprises (SMEs) since it gives global access to services which in turn helps increase the overall productivity [15]. The use of Internet has been adopted by many countries specifically to increase exports. For instance, businessusa.gov gathers trade data in United States. Openexport.com from United Kingdom and Connectamericas.com from Latin America do the same function. The similar organization, Matchsme.com in Denmark, brings local businesses with local service suppliers [1, 4].

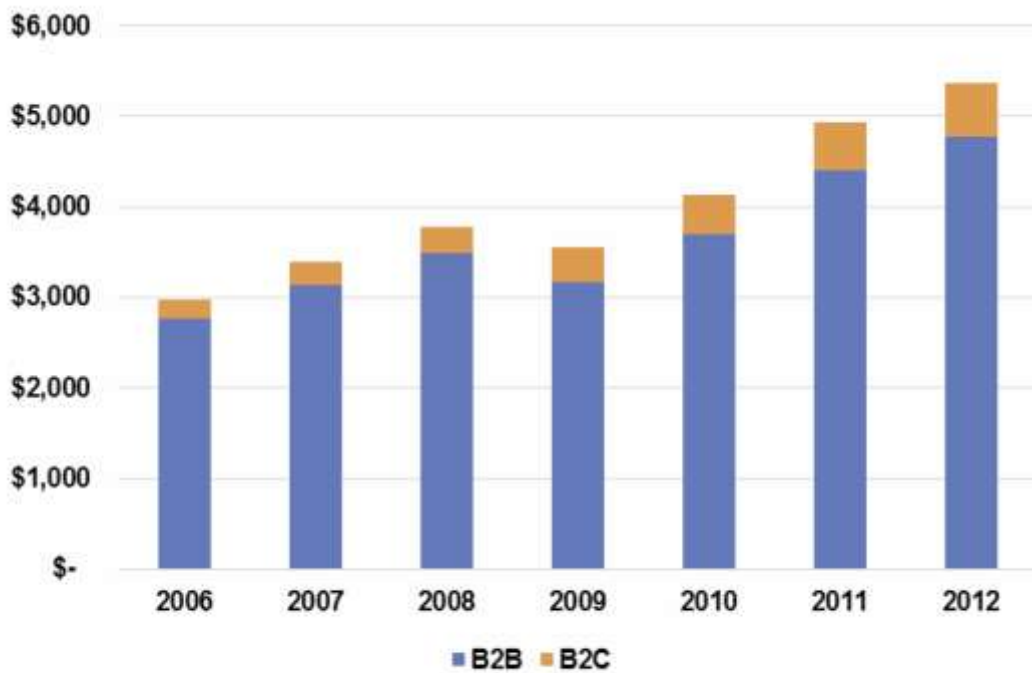
E-commerce is essential for SMEs since it can significantly help in improving quality of the products and services while decreasing the associated costs [12, 13, 14]. E-commerce has certainly provided numerous benefits to many businesses not only locally but also globally. Business-to-Business (B2B) and Business-to-Consumer (B2C) bring e-commerce to businesses as long as the business has access to Internet. Information Technology (IT) has helped tremendously the growth of e-commerce [7]. E-commerce can be considered that it takes advantage of the IT software tools for the business development [2, 3].

There are several organizations such as United Nations Development Program (UNDP) and World Bank [24] have been supporter of microenterprises. The development of SMEs is considered by many as a positive force towards diminishing poverty and increasing the economic growth [8, 23].

The examples of use of e-commerce by SMEs can be found in Botswana [9] and Kenya [18]. The SMEs leverages the characteristics of e-commerce such as the flexibility and responsiveness to the new technologies. Saffu et al. [10] reports the following factors in the order of priority for e-commerce adoption: perceived usefulness, ease of use, readiness and compatibility, and external pressure. On the other hand, Jones et al. [5] states that e-commerce adoption has faced some challenges due to the dynamic nature of information systems and the different needs of various businesses. SMEs are not homogeneous and vary with the size, industry, and adoption levels.

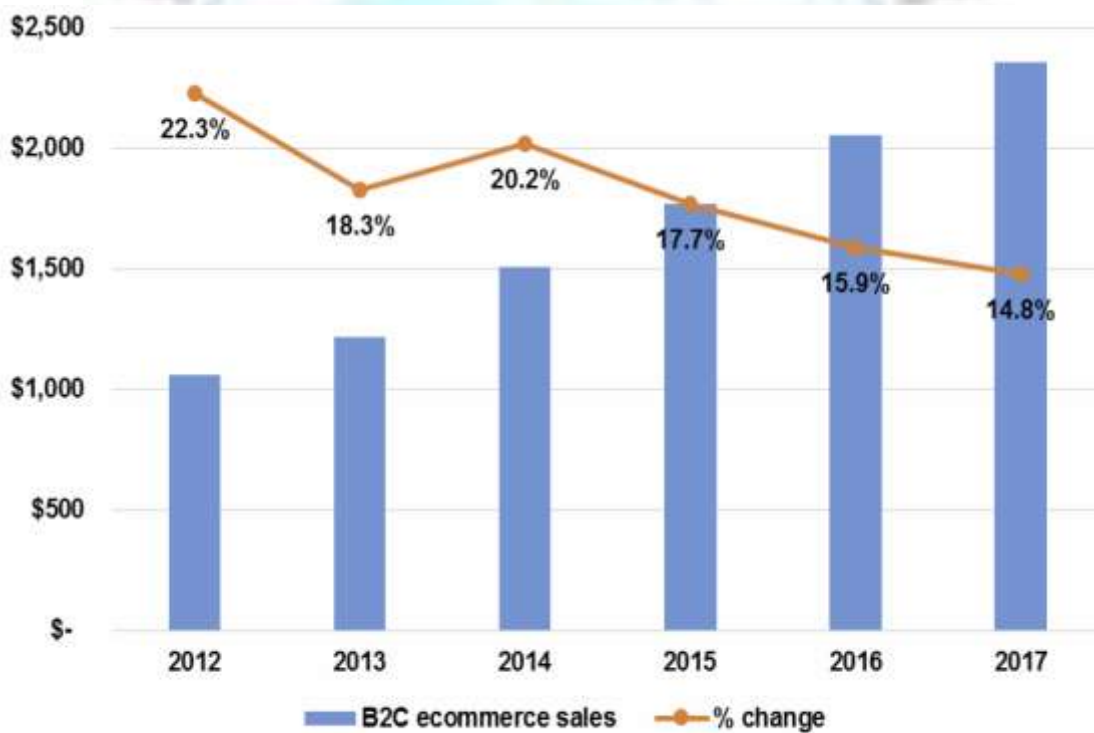
## E-Commerce

E-commerce is getting adopted all around the globe. For instance, the total online transactions have gone up from \$3 trillion in 2006 to \$5.4 trillion in 2012 in the United States (see Figure 1). Many of these transactions fall within B2B category and B2C takes up about 12%. In 2017, B2C transactions are predicted to reach \$2.4 trillion from \$1.5 trillion in 2014 (see Figure 2). In Asia-Pacific market, the e-commerce is expected to increase 50% on the average per year from 2012 to 2017 (see Table 1). Based on the Boston Consulting Group [20], China will reach 700 million Internet users (also known as netizens) in 2015. This is a remarkable number since it is multiple times higher Internet users than United States and Japan together. Europe and North America will follow with almost a trillion dollars worth B2C transactions in 2017 [16].



Source: U.S. Census Bureau E-Stats report 2012.

Figure 1. U.S. B2B and B2C e-Commerce Transactions, 2006-2012 (in billions of US\$) [16]



Source: eMarketer.

Figure 2. Global B2C E-Commerce Marketplace in 2012-17 (in billions of US\$) [16]

**Table 1. Global B2C E-Commerce Marketplace in 2012-17**  
 (in billions of US\$ and average annual growth), by Region [16]

	2012	2013	2014	2015	2016	2017	CAGR
Asia-Pacific	\$ 301.2	\$ 383.9	\$ 525.2	\$ 681.2	\$ 855.7	\$ 1,052.9	50%
North America	\$ 379.8	\$ 431.0	\$ 482.6	\$ 538.3	\$ 597.9	\$ 660.4	15%
Western Europe	\$ 277.5	\$ 312.0	\$ 347.4	\$ 382.7	\$ 414.2	\$ 445.0	12%
Central & Eastern Europe	\$ 41.5	\$ 49.5	\$ 58.0	\$ 64.4	\$ 68.9	\$ 73.1	15%
Latin America	\$ 37.6	\$ 48.1	\$ 57.7	\$ 64.9	\$ 70.6	\$ 74.6	20%
Middle East & Africa	\$ 20.6	\$ 27.0	\$ 33.8	\$ 39.6	\$ 45.5	\$ 51.4	30%
Worldwide	\$ 1,058	\$ 1,215	\$ 1,505	\$ 1,771	\$ 2,053	\$ 2,357	25%

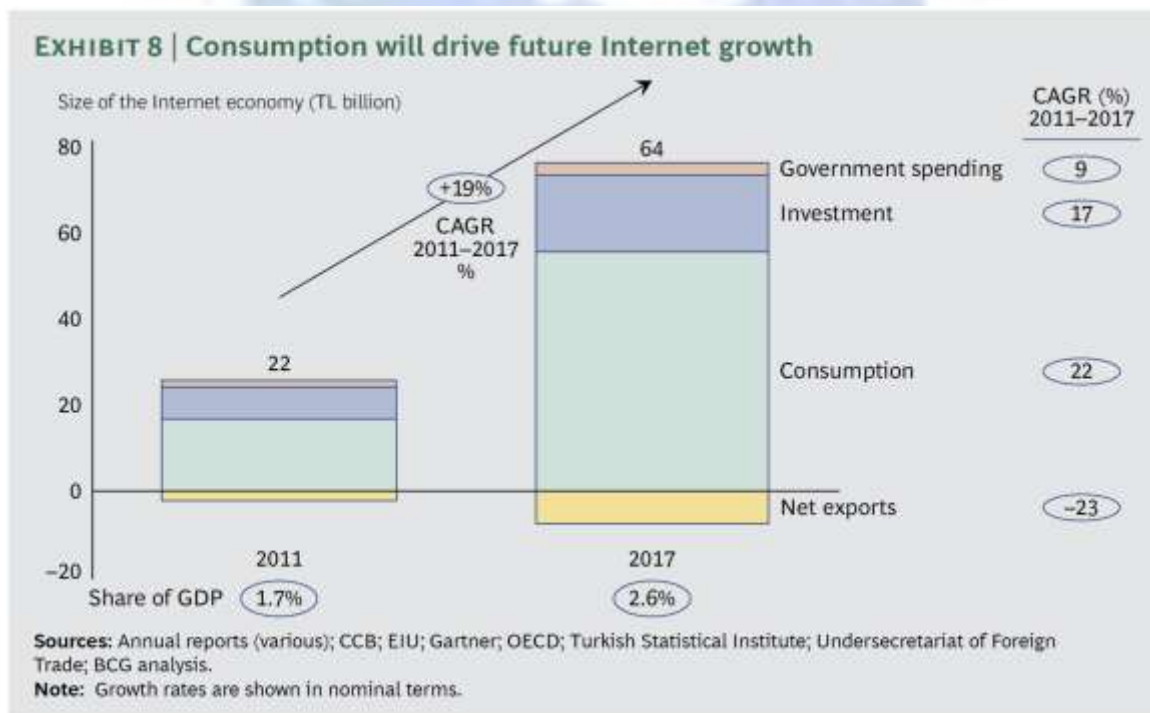
Source: eMarketer.

### Small and Medium Enterprises in Turkey

E-commerce has been defined multiple times by many researchers. For instance, Turban et al. [17] consider e-commerce as the process of buying, selling or exchanging products and/or services through Internet. Kalakota and Whinston [6] define e-commerce as using various components such as network communications, automated business processes and services as well as online buying and selling. According to Schneider and Perry [13], e-commerce comprises of business activities carried out through electronic data transmission via the Internet and WWW. Saffu et al. [11] defines e-commerce as the exchange of goods and services among various types of businesses and consumers using Internet.

While some businesses are less enthusiastic about getting accessible online, many businesses in Turkey have Internet presence. The Internet has tremendously affected Turkish SMEs to increase the customers in Turkey as well as globally. For instance, 92% of the businesses with at least ten or more employees accessed Internet in 2011 while this number was only 80% in 2005. The Boston Consulting Group (BCG) [19] survey of 500 SMEs in Turkey reports that online businesses have increased their sales compared to the last few years and they predict higher sales in the coming years. The SMEs contribute to about 80% of the employment in Turkish economy.

The Boston Consulting Group [22] predicts that there will be about 19% yearly growth in Turkey's economy between 2011 and 2017. The consumption is expected to drive the growth due to increase in the usage of e-commerce, broadband, and Internet (see Figure 3).



**Figure 3. The future Internet growth predictions [22]**

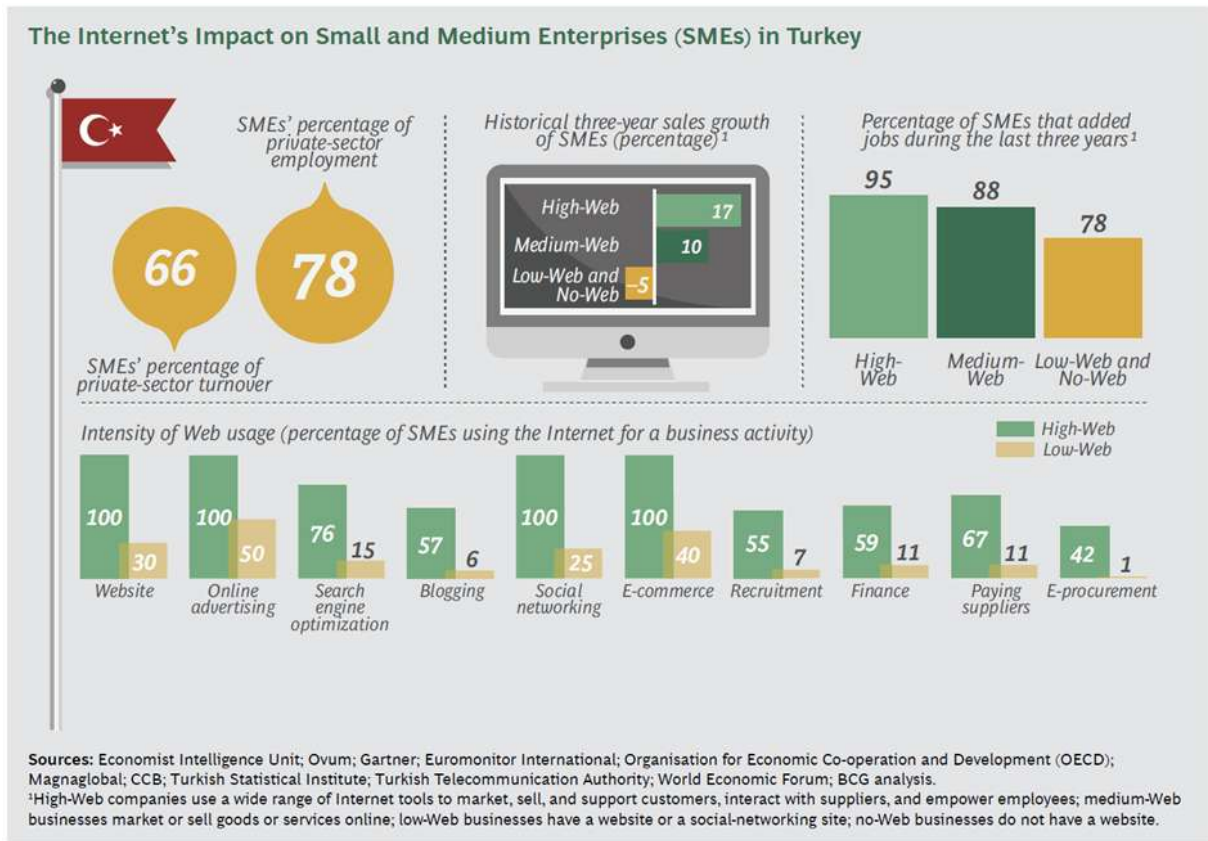


Figure 4. SMEs in Turkey [21]

Here are few SMEs and E-commerce companies in Turkey:

- **ÇiçekSepeti:** online retail-flower-delivery business, which has 100,000 monthly orders.
- **Hepsiburada:** an early e-commerce online site offering items in numerous categories such as books, electronics, clothes, and so on with 7.5 million users.
- **Trendyol:** a private online shopping club offering its customers up scale clothing and beauty products with over two million users.
- **Milliyet.com.tr:** the most popular online news site with loyal customer base.
- **YemekSepeti:** a food delivery service with around 6,000 registered restaurants and 30,000 placed orders per day. This business has opened up in Russia and United Arab Emirates.
- **Doğan Online:** the largest Internet player with almost 10 million users.
- **e-bebek:** online mother-and-baby-care business with revenues of TL 30 million in 2010.
- **Pozitron:** this business assists larger enterprises to get into mobile platforms.
- **Markafoni:** a private online shopping club with over two million users and a record of a sale at every two seconds. This business is also opened up in Australia, Greece, and Ukraine.

#### CONCLUSIONS

E-commerce has penetrated to various businesses and changed the way the business transactions take place. Due to its numerous benefits such as allowing users to shop from anywhere and anytime through Internet made businesses more profitable than ever before. It is interesting to note that the developing countries such as Turkey has tremendous e-commerce presence. Small and medium enterprises (SMEs) along with e-commerce allow the economic growth and

creation of new businesses in the developed and the developing countries. In this paper, we discussed the adoption of the e-commerce in SMEs and present SMEs in Turkey as a case study.

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