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Review article

Considering-commerce advantages, development and acceptance

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ABSTRACT

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Due to the continuously changing and competitive environment focusing on static services and products is not recommended by the companies. These companies should fight their competitors through improving their products and services quality and decreasing the prices. They should also change their way of production, and business. Electronic marketplace on the Internet can boost the productivity and competitiveness of both producer and consumer companies. Positive points of e-commerce are: Reduce the raw materials price, decreasing cycle times. Offering more effective service to the customers. Current research analyzes different aspects of e-business and delivers useful information to various people.

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1. Introduction

Electronic commerce means applying Information Communication Technology (ICT) in business operations to enable the buying and selling of products and services and to facilitate the transaction of business activities among businesses, persons, governments. ICT can help internal function of companies, such as logistics, procurement, and human resource and contracts management, information and data management, communication functions, and to facilitate the flow of products between businesses and consumers, e.g. marketing, ordering, payment, delivery, and searching for suppliers. Adoption of

electronic commerce offers a great opportunity to SMEs to gain greater global access and reduced transaction costs, provides substantial advantages via improved efficiencies and raised revenues; facilitates access to potential customers and suppliers, productivity improvements, customization of products and services and information exchange and management. Exploitation of New Business1-Electronic commerce underlines the creation and exploitation of new business opportunities and to apply well-known phrases: "create business value" or "do more with less". 2-Establishing the Customers Electronic Commerce is empowering customers to have sufficient information on what products are made, how products are made and how services are delivered (a shift from a slow order need fulfillment process with a limited understanding of what is happening inside the firm, to a more prompt and faster process with customers taking privilege of greater control.3.-Improved Business Transaction Electronic Commerce endeavors to make better the execution of business transaction over various networks.4-Effective performance which it results in more effective performance i.e. a higher quality, more customer satisfaction and better corporate decision making.5-Higher economic efficiency: it is possible to achieve greater economic efficiency (lower cost) and more rapid exchange (high speed, accelerated, or real-time interaction) by utilizing electronic commerce.6-Execution of information: using inter-connected networks, it enables the execution of information-laden transactions between two more parties. These networks could be a combination of plain old telephone system (POTS), Cable TV, leased lines and wireless. Information based transactions are creating new ways of conducting business affairs and even new types of business.7-Incorporating transaction electronic commerce also involves transaction management, as a good strategy to organize, route, process and follow transactions. Also, it covers consumers making electronic payments and funds transfers.8-Increase of revenue: firms use technology to either reduce operating costs or raise revenue. Electronic Commerce has the potential to increase revenue by forming new markets for old products, creating new information-based products, and establishing new service delivery channels to provide customers with better service and interaction. The transaction management aspect of electronic commerce can also empower companies to decrease operating costs by providing better coordination in the sales, production and distribution processes and to strengthen operations and reduce overhead.9-Reduction of Friction Electronic Commerce research and its associated implementations is to reduce the "friction" in on line transactions frictions is often described in economics as transaction cost. It can arise from inefficient market structures and inefficient combinations of the technological activities required to make a transaction. Ultimately, the reduction of friction in online commerce will enable smoother transaction between buyers, intermediaries and sellers.10-Facilitating of Network Form Electronic Commerce influences business and also the network form of organization where small flexible firms are dependent upon other partner companies for component supplies and product distribution to fulfill changing customer needs in a more effective manner. Hence, attempting to end relationship management solution is a desirable and required goal to manage the chain of networks linking customers, workers, suppliers, distributors and competitors. The management of "online transactions" in the supply chain plays a pivotal role.11-Facilitating organizational model is facilitating an organizational model basically different from the past. It could be considered as a control organization to the information based organization. The established forms of techno-organizational structure include shifts in managerial responsibilities, communication and information flows and work group structures (Raghunath and DharPanga, 2013).

2. E-commerce aspects

E-commerce has some aspects. The major e-commerce aspects are business-to-consumer (B2C) e-commerce, business to business (B2B) e-commerce, consumer to consumer (C2C) e-commerce and Government to business/consumer (G2B/C) e-commerce. UNCTAD (2003) argues that in 2001, annual B2B online sales in the United States amounted to \$995 billion, or 93.3 percent of all United State e-commerce. Private-sector estimates of the value of B2B trade in the European Union put it at between nearly \$185 billion and \$200 billion for the year 2002. In the Asia-Pacific region, it grew from about \$120 billion in 2002 to around \$200 billion in 2003 and \$300 billion by 2004. According to UNCTAD (2003), African B2B e-commerce in 2002 was expected to amount to \$0.5 billion in 2002 and \$0.9 billion in 2003, with South Africa accounting for 80 to 85 percent of these amounts (UNCTAD, 2003; Laudon and Traver,

2003). The North American online retail market was anticipated to grow 45 percent in 2001 to £65 billion for B2C, according to a joint study conducted by the industry group Shop.org and the Boston Consulting Group (cited in Patton, 2001). In the second quarter of 2004, eBay, the leader in online consumer auctions hosted 332 million listings, with 8.0 billion dollars of goods trading on the site. Some of the technologies developed by pioneers in this medium (e.g. eBay and Onsale.com) have already found interesting applications in the B2B space as well. The government market is strikingly similar to B2B. As Furth (2001) says: if the 20 percent cost saving claimed by B2B proponents can be replicated in B2G, the implication for tax payers as well as market entrants will be enormous in this \$1.5 trillion market. E-commerce has the potential to radically alter existing economic and social structures and arrangements. Not surprisingly, it has become a major pre-occupation of policy makers and business over the last few years (Davis, 2003). The two main crucial driving forces behind the new economy are the Internet and e-commerce (Wong and Seok Ling, 2001). E-commerce generates part of a broader process of social change, characterized by markets' globalization, the change and transformation towards an economy based on knowledge and information, and the increasing dominance of technology. A smooth transition to e-commerce requires investments in social infrastructure and skills to help people use the technology in a way that is in agreement with the local circumstances, cultures and abilities of users in developing countries (Hamed, 2009).

3. Effective factors on e-commerce adoption

Radaideh and Salim (2004) introduced factors of e-commerce adoption decision in a case of developing countries as shown in Figure 3.2 below. They argue that there are critical factors affecting the adoption of e-commerce by firms which are classified into two main categories; internal and external factors. Internal factors are within the firm and external factors are environmental in nature. Internal factors are IT readiness which refers to the level of IT usage within the firm. This category includes information and networking security, system interrelation, data conversion, hardware and software compatibility, adequacy of the firm's IT infrastructure and migration from legacy system. The second internal factor category refers to the firm's financial readiness. Graham and Cobham (2006) argued that financial readiness is reflected by the top management's willingness to fund an e-commerce adoption project. The major cost of e-commerce adoption is the cost of educating and training management and employees to use e-commerce.

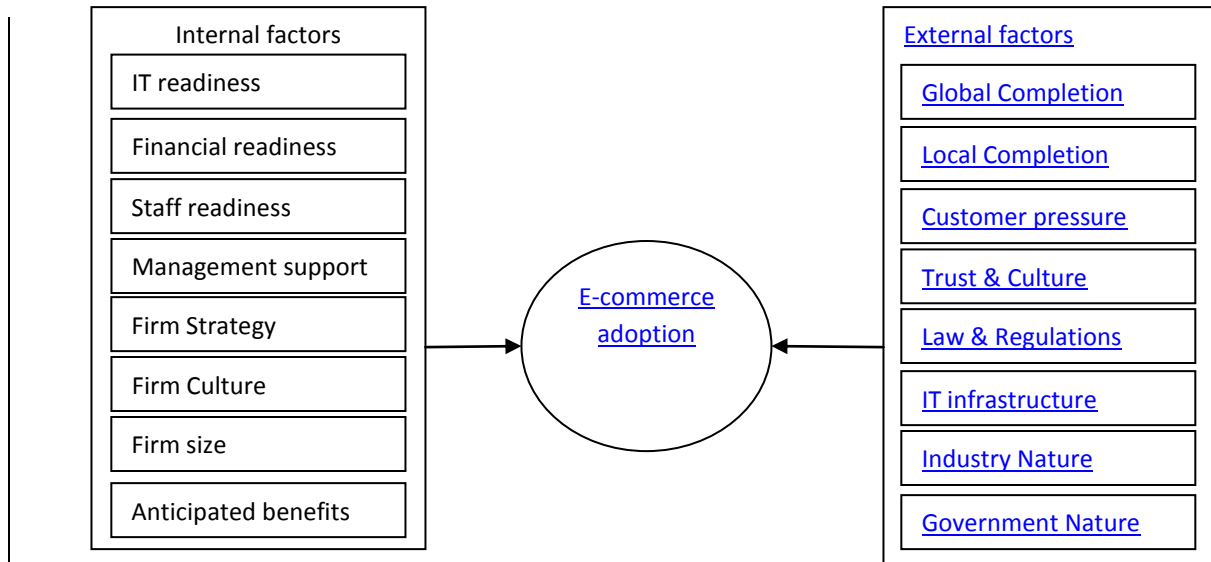
4. Factors influencing e-commerce adoption

The losses of productivity due to abuse by IT staff are another concern of the top management. The readiness factor category is the IT and e-commerce literacy level inside a company. Figure 1: Factors associated with E-commerce adoption decision by a company.

Management support is another significant internal factor category. Graham & Cobham (2006) assert that this factor represents the extent to which the top management realizes the significance of e-commerce adoption. The realization is shown in top management executives' leadership in e-commerce adoption process. Firm's internal culture is reflected in collaboration level and style between the different managerial levels and team spirit and devotion and commitment to the business processes. One of the main reasons for not adopting e-commerce is firm size. Large firms take privilege of more resources and infrastructure to enable implementation of e-commerce adoption projects. The anticipated financial and managerial benefits are critical factors influencing the adoption decision.

There are several external factor categories to be taken into account. The first category includes pressure inflicted by competitors on a firm. Tabor (2003) claims that competitive intensity is a factor that increases the need for e-commerce adoption by firms. The competition not only results in environmental uncertainty, but also increases the need and rate of adoption. Allen (2000) underlines the significance of trust in continuing productive adoption of e-commerce. Culture has been regarded as a critical factor influencing e-commerce adoption. In addition, customer pressure on firms to adopt e-commerce is also a critical category. They underlined that the industry to which a firm belongs influences the adoption decision. One of the most important factor groups affecting e-commerce adoption is the nature of

government. Ranganathan, (2003) reinstates that government needs to create knowledge and set proper standards. Policies and regulations also play important roles at the local and global stages (Hamed, 2009).



Source. Radaideh and Salim, 2004.

5. The Russian internet market

5.1. The online retail market

5.1.1. Market size

Based on Data Insight, in 2012, Russian online retail accounted for a total market volume of about 400 billion rubles (approximately \$13 billion), up to 27% from the previous year, including 290 billion rubles (\$9.5 billion) paid on physical goods. The market, this year, is predicted to near 510 billion rubles (\$16 billion), not including cross-border sales to Russia which is totally an estimated \$3 billion. According to Data Insight, 30 million Russians bought physical goods online within a year. Although the general picture of market sections is rather transparent, different methodologies from different sources indicate some differences. The categories of physical goods with the highest demand are garment and footwear, household appliances, consumer electronics and computer hardware and also books, cosmetics and beauty products (E-Commerce In Russia, 2013).

Turnover by segment (2012 and H1 2013, in billion rubles): Source: Data Insight.

Segments	2012	H1 2013
Household appliances and electronics	116	65.7
Clothing shoes. accessories	36	20.2
Car parts	29	15.6
Household goods and furniture. DIY	18	9.6
Children's goods	12	5.9
Cosmetics and perfumes	10	5.5
Books, DVDs. CDs	5	2.8
Groceries	7	3.5
Sporting goods	3	2.0
Gifts. Luxury goods	3	1.6
Non-specialized internet stores	21	13.1
Other	21	11.7

On daily deal and group buying sites – which lost traction in 2012 – the five types of services or goods most in demand are related to beauty services, entertainment and sports, dining and travel.

Among virtual goods and services, the most popular appear to be airline and train tickets as well as event tickets, and software.

International comparisons: In 2012, the sales volume of online retail in Russia was similar to that in Brazil, while significantly behind the USA and Western Europe. The share of online retail in total retail amounted to approximately 2%, compared to between 5% and 10% in the USA and most Western European countries. In the UK, this share reaches 13%.

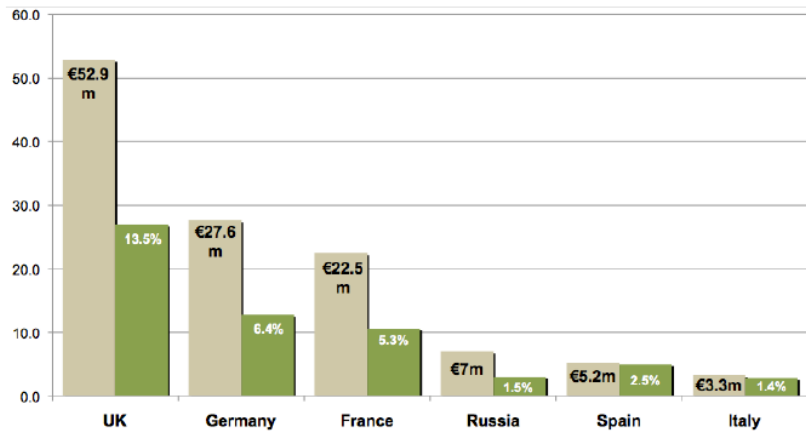
Research by PwC in 2012 found that Russian Internet users make purchases less frequently (43%) than the international average (60%).

Nevertheless, the low penetration of e-commerce in Russia - in 2012 only about 15% of the adult population shopped online – is primarily due to the relatively low level of Internet penetration. Given that in 2012 30% of Internet users shopped online, the share of online retail sales in Russia is more or less comparable with the situation in Italy, Greece and the new EU members from Central Europe and the Baltic states, all of which have similar level of e-commerce.

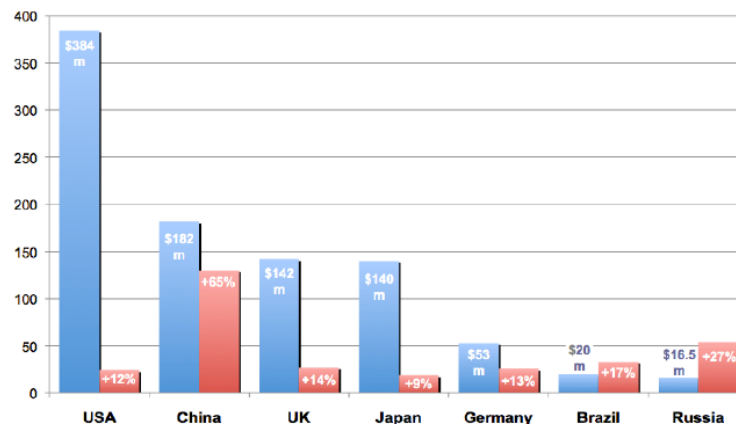
Online retail in 2012:

Russia compared with Europe’s main markets

(Physical goods only, online retail volume and as a percentage of total retail sales, in billion euros).



Sources: E-Commerce Europe Association (EU countries), Data Insight (Russia).
 Online retail in 2013: Markets size and early development rate in Russia and other markets.
 (Physical and virtual goods, not including games, in billion USD).



Sources. Data Insight (Russia), eMarketer (other countries).

Investments in Russian e-commerce: During the past few years, according to research studies by Fast Lane Ventures, PWC and RVC, e-commerce in the broad sense was the major destination for venture investment in Russia. During these three years, based on publicly disclosed transactions, the Russian online retail industry attracted more than \$950 million in venture investment, including \$400 million for

2012 alone. In scope, these figures are comparable with investments in e-commerce in the U.S., but they look modest in comparison with India and China. In the latter, venture investments in e-commerce have ranged in the tens of billions of dollars since 2010.

Norway: The use of Internet and e-business is widespread among Norwegian companies. Measuring from 1998, the number of Small and Medium Sized Enterprises (SME) with more than 10 employees (10+) that had Internet access grew from 40% to 87%. This increase has now levelled out and reached its peak. Within the same period, the number of 10+ companies with homepages grew from 20% to 61%. About 2% of all companies sell digital products and services via their homepages, and 10% of the companies have received orders via their homepage. The turnover via homepages was about 5 billion Euros in 2003. More advanced use of e-business is low in Norway, as in most other countries. The Welsh eCommerce Innovation Centre defines a 7-step ladder of e-commerce. In 2004 less than 5% of the Welsh companies had reached the level where they have an online store, have integrated IT-systems with their business partners or use advanced e-commerce, like electronic marketplaces. Lacking similar studies, but being able to compare Norway to Denmark we can use the results from the "Participation in an Internet-Based Trading Community 2002" as a basis. This study shows that about 95% of the companies had heard about the concept of an Internet marketplace, but only 2.8% participate as a buyer, 7.9% as seller, and only 5.6% as both buyer and seller. These numbers are also consistent with other studies and reports, some of which have been published on the eMarketServices portal. E-business and the use of more advanced tools like electronic marketplaces is still giving the companies a competitive advantage if they are able to implement it successfully within their organisations and are able to attract the buyers (E-Business Report: Norway, 2006).

Spain: In our 2011 Report on Electronic Commerce in Spain, we mentioned that in June of 2010, the European Council adopted the Europe 2020 strategy, which includes the Commission's proposal for a strategy to help the European Union overcome the crisis and become a smart, sustainable and inclusive economy of productivity and social cohesion by 2020. Europe 2020 includes the Commission's policy paper COM (2010) 245, "A Digital Agenda for Europe" which aims to "deliver sustainable economic and social benefits from a digital single market based on fast and ultra-fast Internet and interoperable applications." The Digital Agenda aims to promote e-commerce among the population, boost cross-border e-commerce, and advance e-commerce in companies. This year, in its commitment to e-commerce as a means to bolster growth in the European Union, and on the 20th anniversary of the single market, the European Commission's Single Market Act II covers the twelve points it considers most important in driving economic growth in the European Union.

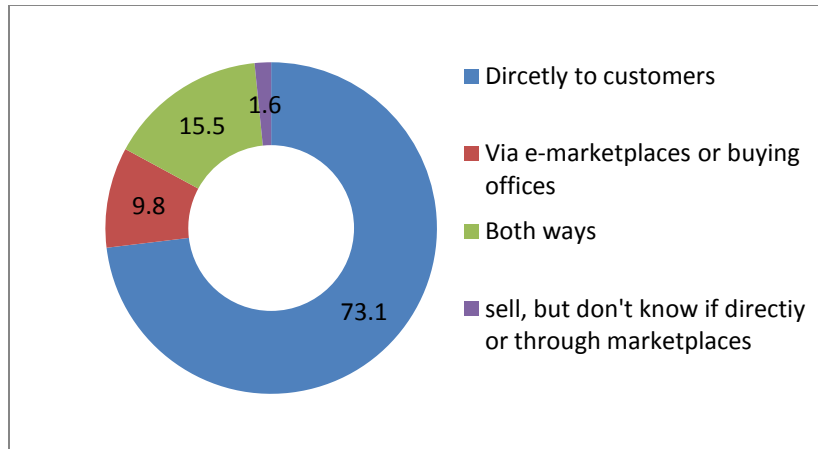
Because of its important indirect effect and since it is considered an opportunity not to be missed, improving the digital economy is among the twelve key points. To accomplish this, they believe it is important to promote e-commerce in the EU "by making electronic payment services easier to use, more competitive and efficient" and by improving consumer trust in order to build a real digital market by 2015. Another key point is promoting electronic invoicing, to make it the standard invoicing mode for public procurement, because it seems generate savings according to EC spokespersons.

The Single Market Act II follows the measures put in place by the Commission in the Single Market Act I (IP/11/469) and opens a new chapter in the process to bigger and better single market integration. According to the National Observatory for Telecommunication and Information Society (ONTSI) the

Companies that purchased through e-commerce represent 19.1% of the total purchases made by businesses - 22.5% more than the previous year - which implies that they are adhering to this as a normal supply channel (E-Commerce in Spain, 2012).

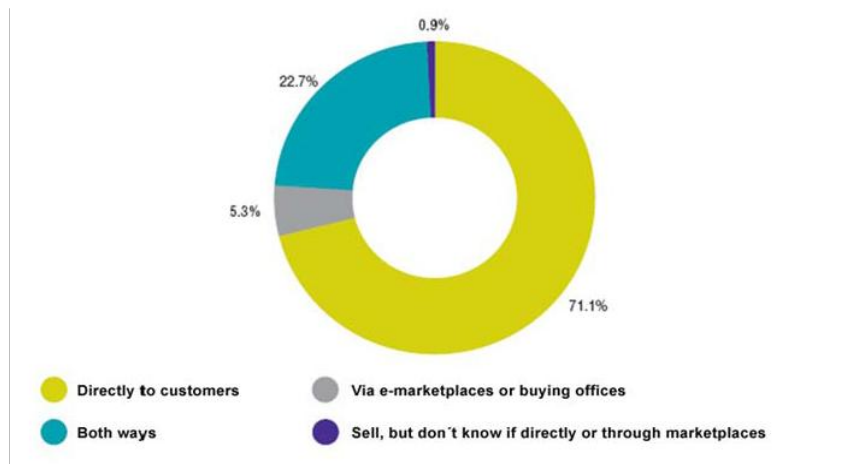
E-Marketplaces in Spain: Spanish companies have different ways of selling online. According to the AMETIC/Everis report, most, 73.1% prefer to deal directly with their customers (up two percentage points from the previous report). However, 9.8% of the businesses that sell online do via e-marketplaces, and 15.5% employ both options.

E-commerce sales models. By percentage of companies that sell online



Source: AMETIC/Everis Survey of companies

Regarding online purchasing patterns, 71.1% of the companies that buy online, purchase directly from suppliers. On the other hand, 5.3% acquire their products from e-marketplaces, and 22.7% use both options. In this section we see that the number of companies that buy directly from suppliers as well as those that only buy through marketplaces has dropped one percentage point from last year, in favor of the category that uses both options, which last year recorded 20.7%.



Source: AMETIC/Everis Survey of companies

According to the eMarket Servicesdirectory, as of November 2012 there are 85 e-marketplaces and 8 business directories¹ based in Spain, 21 more e-marketplaces than in the last edition of this report (+32.8%), an indication of the interest that exists in creating new platforms.

5.1.2. The Australian online shopping market

Market overview: Australians are embracing the internet, with nearly nine in 10 adults (people aged 18 years and over) in fixed-line telephone households personally using the internet either at home or away from home at April 2011. Eighty-seven per cent of fixed-line telephone households in Australia also had an internet connection, with the majority of these households having a broadband connection (98 per cent).³ The number of households with an internet connection increased from 82 per cent at November 2009. In addition to increased levels of online connectivity, Australians are using the internet more frequently-59 per cent of adults go online several times a day (up from 53 percent in November 2010). Increasing online participation is paralleled by greater knowledge of the internet and the associated benefits of going

online. At the same time, more organisations have integrated the internet into their operational plans either by providing retail customer oriented services online or by developing electronic supply chains with key suppliers and major customers. These developments have a number of specific and well documented benefits for businesses including:

- avoiding high rental costs (or reducing rental costs) for business premises
- comparatively low obstacles to entry in terms of business establishment costs
- low obstacles to geographic expansion across Australia and overseas
- reducing the amount of advertising needed to sell products
- removing the need for intermediaries and associated costs by interacting directly with customers.⁵

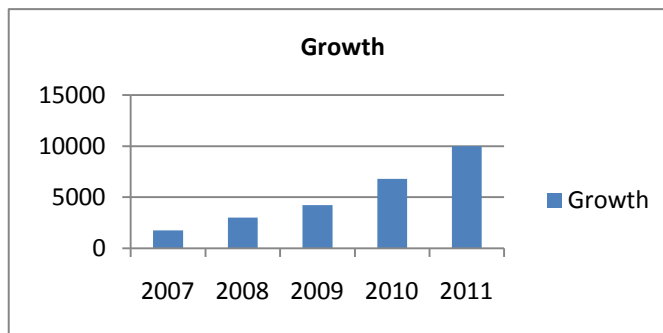
Latest data available from the Australian Bureau of Statistics (ABS) reflects the increasing importance of the internet to business revenues. The ABS reports that Australian business received an estimated \$143 billion in internet orders during the 2009–10 financial year, an increase of 15 per cent on 2008–09.⁶ This included business-to-business (B2B) and business-to-consumer (B2C) online sales. In addition, the recent Sensis report *The Online Experience of Small and Medium Enterprises* shows that an estimated 59 per cent of small and medium enterprises (SMEs)-businesses with 1–200 employees—in Australia received orders for goods and services online at April 2011, compared to 58 per cent at April 2010 (Figure 1).

Industry sectors most prominent in taking orders online include wholesale trade (76 per cent of SMEs in that sector taking orders online) and manufacturing (72 per cent) (Figure 2). These sectors are more likely to be involved in B2B e-commerce, providing services to other industries. According to the Sensis report, at April 2011, approximately 59 per cent of SMEs in the retail trade industry, where the majority of B2C activity occurs, took online orders for goods and services (Communications report 2010–11).

E-commerce in India: A report by the Internet and Mobile Association of India has revealed that India’s E-commerce market is growing at an average rate of 70 percent annually and has grown over 500 percent since 2007.

The current estimate of US\$ 6.79 billion for year 2010 is way ahead of the market size in the year 2007 at \$1.75 billion. The following chart depicts the growth of E-commerce in India in the last couple of years:³

Growth of E-commerce over the years (figures in USD millions)

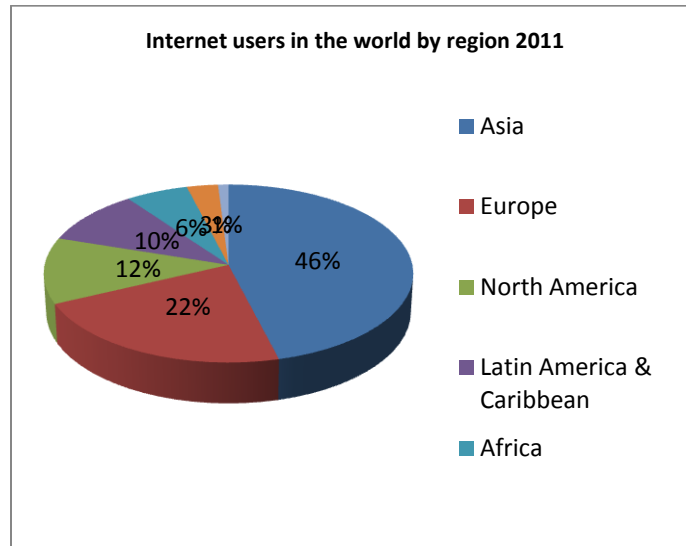


Apparently, more online users in India are willing to make purchases through the Internet. Overall e-commerce industry is poised to experience a high growth in the next couple of years. The 70 percent year on year growth is expected to continue and India’s e-commerce market is forecast to reach a whopping \$US 10 billion by the end of 2011. The e-commerce market in India was largely dominated by the online travel industry with 80% market share while electronic retail (E-Tailing) held second spot with 6.48% market share (Kumar, 2011).

6. Overview of ITC and e-commerce worldwide

As of December 31, 2011 there were 2.27 billion Internet users worldwide, 270 million more than in 2010. Data from Internet World Stats shows that Asia, with more than 1.01 billion online users takes the

lead, followed by Europe with over 500 million, and North and South America both with 235 million (E-Commerce in Spain, 2012).



Source. Internet World Stats and our own elaboration of data.

The highest user penetration is in North America (78%), followed by Oceania/Australia (67.5%) and in third place Europe with 61.3%. Latin America (39.5%), the Middle East (35.6%), Asia (26.2%) and Africa (13.5%) still have a long way to go to extend Internet access to their communities. Nevertheless, the 2,988.4% increase in Internet usage in Africa, 2244% in the Middle East and 1,205.1% in Latin America from 2000 to 2011 is remarkable, as well as the speed at which they are gaining ground. Broadband Internet access technology is also on the rise, especially mobile broadband technology. There were 584 million users of fixed broadband in 2011, 12.3% more than the previous year. All of the major regions mentioned except Africa, which remains stable, have experienced growth. The 1.16 billion subscribers of mobile broadband account for 36.3% of the increase. Concerning mobile access, 92% of the world's population already has cell phones. And according to the 2012 TNS Mobile Life report, there are more than 6 billion users. Of those, 30% have a smartphone, 21% utilize their cell phone to search in the web and 39% express interest in doing so. According to Digital Life, the TNSstudy on digital consumers, regardless of which stage the consumer buying decision process is at, more product information searches are done online rather than offline. The digital world encourages consumer to buy their required items. So shoppers are able to search and make purchases anywhere and at any time; and that can be seen in the bottom line results of e-commerce worldwide. A recent report by IMRG (Interactive Media in Retail Group) B2C Global e-Commerce Overview 2012 shows that consumer oriented e-commerce increased by 20% in 2011 to \$961 billion (€690 billion) and is expected to continue to grow in 2013 to over € 3 trillion. Such figure was not expected to be reached until 2014. Based on this data, in terms of geographic region, Europe will benefit the most from this kind of e-commerce with \$ 343 billion (more than € 246.5 billion), followed by North America with over \$ 330.2 billion (more than € 237.3 billion), Asia Pacific with \$220 billion (over € 158.1 billion) and Latin America with \$ 38.9 billion (nearly € 28 billion). The e-commerce leaders are the countries such as the United States, followed by the United Kingdom and Japan. Although growth in these mature markets is decreasing, there happening an annual double digit increase of between 10 and 15%. The 130% increase in e-commerce in China in 2011 constituted great deal of the growth in Asia Pacific. France, Italy, Spain, Russia, Turkey and Poland are the countries with the best prospects for growth in Europe. Brazil and Mexico are regarded as the leaders of the growth in Latin America, and Israel and the United Arab Emirates are the main contributors to development of e-commerce in the Middle East. Concerning the most commonly used payment methods, the Nielsen

Global Survey of Investment Attitudes reports that half of online consumers worldwide (52%) apply credit cards to pay for the price of food, shopping and other leisure activities; 42% utilize debit cards.

7. Conclusion and recommendation

To maximise the potential of e-commerce, business must be aware of the benefits, challenges and success factors of trading electronically. This research examined these factors in B2C industry. The main findings of the research presented in this paper are:

- The major benefits of e-commerce adoption not anticipated by the sector are business efficiency, improved image, competitive advantage, increased automation of processes and increased business turnover.

- The key challenges identified for the sector are the costs of the technology, the lack of knowledge of e-commerce, managing the change, budgeting and issues associated with linking back end systems.

- Secure transactions were not considered a major challenge for the sector; in contrast they were considered one of the success factors, along with effective project management, adequate resources, support from top management and rapid delivery of systems.

- Participating companies correctly estimated the vast majority of challenges of e-commerce that lay ahead. Acquiring IT skilled people was, however, one significant challenge that was not correctly anticipated.

References

- Communications report., 2010–11. series Report1-E-commerce marketplace in Australia: Online shopping, Publish. Austral. Commun. Media Author., pp1-40.
- E-Business Report: Norway., 2006., pp1-6.
- E-Commerce In Russia., 2013. PART 1 – EXECUTIVE SUMMARY – December, pp1-62.
- E-Commerce in Spain., 2012. January, pp1-36. Available at: <http://www.emarketservices.com>
- Hamed, A., 2009. E-commerce and Economic Development in Libya. thesis submitted to the University of Wales Institute. Card. Philosophy Card. School Manag., pp1-420.
- Kumar, R., 2011. E-commerce in India and the potential competition issues With special reference to credit cards market in India. M.sc economics ,2nd year, TERI University, VasantKunj, Delhi, pp1-49.
- Raghunath, A., DharPanga, M., 2013. Problem and Prospects of E-Commerce. Int. J. Res. Dev. Manag. Rev., (IJRDMR), Volume-2, Issue1, pp59-68.