

## Selection and Assessment of E-commerce Models in SMEs

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*Small and medium-sized enterprises, defined as firms employing up to 250 people, are the backbone of the European business community, generating half of gross product and therefore are the main targets for the adoption of electronic commerce models, at this time intensively being integrated in almost all types of business. Electronic commerce is treated as one of the most efficient tolls for business processes optimization, based on more effective control of information management. So electronic commerce can be compared to other traditional forms of competitive advantages, but the main difference in this case is the importance of information technologies base for electronic commerce adaptation. But these new business opportunities have a very specific dimension for small and medium enterprises because of their size, financial abilities and relatively small turnover. The paper aims to analyze the possibilities to integrate the electronic commerce models in small and medium enterprises, defining the main factors that influence the electronic commerce integration and their significance to successful small and medium business approach to electronic commerce usage.*

Keywords: *electronic commerce, small and medium enterprises, business process.*

### Introduction

Information economy, based on growing possibilities of information technologies use, is treated as one of the most important events in world economy during the last 15-20 years and is correlated with the appearance of new business development models, implementing cost decrease and activity efficiency growth. The spread of e-commerce in various economy sectors is related to the modern business characteristics: huge and constantly growing competition, decreasing variety of competitive advantages, durable treatment of profit, as the result of cost reduction. Traditional competitive advantages like modern technologies, low cost level or suitable geographical location become less significant because of globalization process. For this reason companies are looking for new efficiency increase possibilities.

Problem and relevancy. Small and medium-sized enterprises (SMEs) are considered as the base of European economy, generating about a half of gross national product. The faster and faster spread of information technologies in business processes do not overtake even SMEs' sector. The evaluation of SMEs characteristics shows the existence of specific factors that determine the success of e-commerce in small and medium-sized business. Scien-

tific researches in this area can be divided in two groups. In the first case there are given the results of researches, done in different countries or geographical regions, that characterize e-commerce spread over the SMEs' sectors (Cloete, 2003; Di Nicola, 2003; Kadlec, Mareš, 2002; Kendall, Tung, 2001). In second case there are given specific technological decisions, relieving e-commerce use in SMEs (Chanu, Hui, 2001; Kevin, Patrick, 2001; Mehrtens, Cragg, Mills, 2001; Menendez, 2002). In both cases it can be noticed the deficiency of broad-brushed study, designating essential factors, influencing the success of e-commerce use in SMEs' sector.

**Research object** – electronic commerce in small and medium business.

**Research objective** is to define and assess the main factors that influence the adoption of e-commerce models in small and medium enterprises.

**Research methods** – systematic, logical and comparative analysis of scientific literature.

In this article there are analyzed recently internationally known authors (J. Fraser, J. Coppel, M. Brookes, Z. Wahhaj, I. Lewis and oth.) and Lithuanian authors (V. Kavaliauskienė, T. Šarapovas, A. Gatautis, P. Baršauskas and oth.), researching the e-commerce and its influence on SMEs.

### E-commerce impact on economy

At the beginning of e-commerce development most of authors (OECD, 2002; Lewis, 2001; Coppel, 2000) used to identify e-commerce as the source of new format transactions, conditioning new possibilities for transaction process. But after the spread of information technologies use in various (in size and industry sector aspects) companies, e-commerce becomes more and more important in company's processes and starts being treated as the framework of business philosophy (Fraser, 2000; Craig, 2000; Heffes, 2001). Since the mid 90's e-commerce conception evolved from the separate electronic transactions in goods purchase or resources supply, based on business-to-customer or business-to-business models, to dynamic business ecosystems, based on the merge of separate markets and value chains, created on the network communication framework. In the aspect of business processes e-commerce can be defined as the use of electronic networks with the objective to simplify and fasten all phases of business processes: from the production of goods to the sale and delivery (Kavaliauskienė, Šarapovas, 2002).

Statistical information shows that the idea of e-business is positively adopted by more and more organizations. In 1991 the use of internet for electronic business

was almost undiscovered – there were less than 3 millions of internet users over the world. In 1999 the number of internet users reached 250 millions and about a quarter of them used internet for shopping. The value of all internet transactions in 1999 was about 110 millions USA dollars (Coppel, 2000), and in 2002 the value of 172 millions euros was reached only in Western Europe (contemporary European Union countries, Norway and Switzerland) (Eurostat, 2004).

E-commerce evolution is related to rapid perfection of information technologies, their growing possibilities of adoption in various areas and the cost of use decrease. Though e-commerce boom in 2000 – 2002 ended in bankruptcies of large companies who based their business solely on e-commerce, the impact of this for e-commerce spread was minimal and today e-commerce decisions more and more often are treated not like competitive advantage, but like the necessity, trying not to lag behind competitors.

Since information technologies keep improving rapidly, companies can easier and with smaller cost coordinate their activities and business processes, using, for example, e-markets on internet. This type of market symbolizes links between mass of different organizations and is one of the main hallmarks of new economy.

The development of e-commerce can directly influence economy in micro- and macro- levels (Brookes and Wahhaj, 2000). E-commerce, as the component of e-business, determined the development of new business sectors (virtual companies, electronic banking, etc). The importance of e-commerce for entire economy is illustrated by D. Lucking-Reiley and D. Spulber (2000), who give the description of new intermediation forms, whose appearance is treated as the direct e-commerce development consequence:

1. Buyers and sellers grouping (it guarantees the economy of search cost and diminished asymmetry of transaction).
2. The help on transactions performance control (it allows for companies to reduce the cost of commercial transactions' technological support).
3. Relief of operations (it helps to reduce the cost of buying/selling procedures).
4. Buyers and sellers coordination (for example, companies of one industry sector, combined in one market).

In separate organization level e-commerce firstly is correlated to possibilities of competitive advantages formation. R. Gatautis (2002) presents five areas of e-commerce use, enabling to reach stable competitive advantages:

1. To enlarge the cost of customers' choice.
2. To reduce the cost of companies' choice.
3. To protect companies' market position or protect the market from substitutes, using innovations.
4. To collaborate with chosen competitors, creating the barriers for new competitors to enter the market.
5. To use personalized information, trying to improve customers' service.

A.J. Davies (2003) prognoses, that:

- During the nearest 10 years e-commerce will develop very fast and it is very likely to await the fast-

est growth of business-to-business sector.

- Large companies will gradually transform the biggest part of their traditional business processes to electronic processes. New companies will displace the old ones, who will acclimatize too slowly.

The rapidity of e-commerce integration to economy shows that in the nearest future e-commerce will become the necessity for any and all business forms, including small and medium-sized business sector, where e-commerce spread is slower than in large companies because of the lack of resources, qualification, and other factors, being analyzed in this article.

### **E-commerce models and their expediency in SMEs**

In European countries small and medium-sized business is described as companies, owning 250 employees or less (Davies, 2003). Statistics, presented by Eurostat (2004), shows, that in Europe only 0.2 percent of all companies are described as large, while other companies belong to SMEs' sector, and 93 percent of them are so-called micro-companies with 10 or less employees. The importance of small and medium-sized business to European economy is presented by the fact, that SMEs generate 55 percent of the turnover in the European Union. The importance of SMEs' sector is especially noticed in the case of employment – small and medium-sized business creates new work places notably faster than large business, particularly during the economic recession, when companies' flexibility and ability to adopt continuously changing environment plays very important role (Menendez, 2002).

The level of information technologies integration in business processes is constantly growing. This growth is correlated with the higher universality of information technologies adoption, simplicity of use, etc. But it must be noticed, that e-commerce has a bigger potential to be adopted in large companies, owning enough resources for such kind of experiments, while small and medium-sized companies often sidestep information technologies integration in business possibility, because of the fear of possible loss and scarce qualification in this area (Kadlec, Mareš, 2002). Researches in Finland and United Kingdom shows that in SMEs' sector most often information technologies adoption is limited to the use of traditional electronic tools (e-mail, internet, web site) and such tools play only an auxiliary role in business processes (Di Nicola, 2003). C.C. Krüger, P.M.C. Swatman and K. van der Beek (2003), analyzers of e-business model formation peculiarities, accentuate one of substantial assumptions in e-commerce adoption – the proper technological equipment, as the base of e-commerce decisions realization.

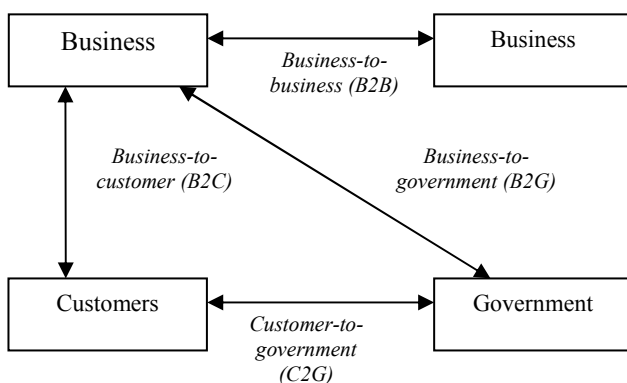
While analyzing the possibilities of small and medium-sized business to adopt e-commerce in their performance, it is important to appraise the potential benefits of different e-commerce models.

Experts of e-commerce J. Coppel (2000), D. Menasce and V. Almeida (2000), S. Korper and J. Ellis (2000), C. van Slyke and F. Belanger (2003), and others underscore three subjects in e-commerce environment: business (companies), customers (households) and government, and accentuate e-commerce models, based on the relationships

between those subjects (Figure 1).

*Business-to-business* model is described as the realization of electronic commerce links between two or more organizations (Kerrigan, Roegner, 2001). It is the most prevalent e-commerce model all around the world, being developed since the origins of e-commerce and all the time being one of the main e-commerce development stimulators.

The origins of *business-to-business* model can be related to "CommerceNet" consortium establishment in April, 1994, with the purpose to motivate business-to-business development. At the very beginning this model was not very popular, companies, in parallel, were trying to use business-to-customer model with the object to choose the proper e-business development direction, but in 2001, as D. Trninic (2003) affirms, e-commerce transactions, based on business-to-business model, amounted to 87 percent of all e-commerce transactions and this proportion has a tendency to stay untamed in near future. E. Cloete (2003) notices, that business-to-business model is mostly spread in large companies' sector, because those companies give big attention to the adoption of new technologies and business transformation, and the use of business-to-business model guarantees higher profitability. The spread of business-to-business e-commerce model in various industry sectors is related to modern business characteristics: big and constantly growing competition, decreasing variety of competitive advantages, durable treatment of profit, as the result of cost reduction.



**Figure 1.** E-commerce models

*Business-to-customer* e-commerce model includes transactions between the retailer and consumers of final goods. G.E. Christensen and L.B. Methlie (2003) accentuate that this e-commerce environment most often is used by e-retail companies and is characterized by such factors as wide assortment, personal contacts, unlimited time, effective advertising and various possibilities for SMEs'. The main forms of business-to-customer model are electronic store, catalogs, databases (for addresses or phone numbers), etc. (Baron, Shaw, 2000). The process of buying-selling takes between company and consumer of final goods. Consumer makes order for goods/services in virtual store (web site). Clearance can be executed in virtual store, usually using credit cards, or physically, after the goods/services are delivered/performed. The main objec-

tive of business-to-customer model adoption is described as searching for new costumers (markets).

Main objects of *business-to-government* model are taxpaying, transmission of statistical information and publication of information from public offices. Analogous functions can be attributed to *customer-to-government* model, but in this case business, as the subject of e-commerce, is isolated, because government interacts directly with households. Those two models are connected more with information transmission than business, but they can also be interpreted as e-commerce models, because of having positive direct or indirect impact on business subjects' performance efficiency (Wimmer, 2002).

Companies pay the biggest attention to two main e-commerce models – business-to-business and business-to-customer. Those models in literature are described as the framework of e-commerce. J. Coppel (2000) considers that business-to-business and business-to-customer e-commerce models will overlap and boundary between them will almost disappear. R. Craig (2000) also agrees with the possible synergy of those models, but he emphasizes different trends of models' evolution: business-to-business model will be more oriented to supply, business-to-customer model – to customers.

So, the traditional interpretation of e-commerce models is going to change. The use from adoption of e-commerce models in SMEs is related to lot of factors. A.J. Davies (2003) presents the results of the research in the United States, showing the need of efficiency growth as the main reason for business-to-business model adoption in SMEs' sector. In this case e-commerce impact on business efficiency is correlated to cost reduction, while business-to-customer model is reckoned as the tool for turnover enlargement (Table).

Table

**Drivers to implement e-commerce (Davies, 2003)**

Drivers to implement e-commerce	Business-to-business, %	Business-to-customer, %
Improve efficiency	28	17
Increase turnover	22	23
Stay ahead of competitors	21	17
Driven by customers	14	9
Develop new products/services	12	8
Enable collaboration	6	2
Follow the trend	5	7
Driven by suppliers	5	3

The analysis of A.J. Davies (2003) research results concludes the fact that e-commerce integration to business processes is considered as realistic possibility to strengthen company's position in the market, so in near future it is very believable for e-commerce to become the necessity (market entrance barrier) in some industry sectors, where e-commerce models can generate considerable cost economy. In that case it can be concluded, that any company in small and medium-sized business sector must evaluate possible benefits from e-commerce adoption in business processes.

## Factors, influencing e-commerce models adoption in SMEs

Summarizing e-commerce adoption and benefits in SMEs' sector, it is purposeful to analyze e-commerce integration to small and medium-sized company's business processes in two directions: business-to-business integration and business-to-customer integration, additionally evaluating the impact of business-to-government model for SMEs' business efficiency (Figure 2). Evaluating essential success factors of e-commerce adoption in business-to-business and business-to-customer directions, it is necessary to take into account generic factors, influencing both models, and specific factors, influencing only business-to-business or business-to-customer model adoption.

**Competition.** Competitors' decisions to adopt e-commerce model may be the main motive for the company to adopt analogous model, because e-commerce can become important competitive advantage.

**Qualification.** In SMEs, the lack of information technologies specialists generates comparative high cost of e-commerce technical supervision. Also it is important to pay attention to the fact, that the owner or manager of SME can avoid information technologies adoption in business processes because of psychological motives (Baršauskas, Šarapovas, 2004).

**Market structure.** Efficiency of e-commerce models depends on market structure characteristics: number of participators in market (customers), their geographical spread, etc. For example, it's clear that higher benefit can

be generated in markets where customers are far away from company, because in this case possibility to communicate in distance becomes one of the most important factors.

**Financial resources.** E-commerce integration in business processes is related to some expenses. Those expenses mostly depend on the complexity of e-commerce system. Besides, e-commerce adoption and supervision is directly connected to the need of information technologies specialists.

**Information technologies.** The success of e-commerce integration also depends on possible information technologies. For example, in United States average bandwidth of internet channel is greatly bigger than in Lithuania (for the same price), what means possible problems trying to realize e-commerce decisions, related to the need to transform huge amounts of information, while in USA such model can be adopted without specific problems.

Without already discussed generic e-commerce adoption in SMEs success factors, it is necessary to analyze specific factors, influencing business-to-customer model adoption in SMEs: spread of internet, government's support, customers' pressure and partnership relations.

**Spread of internet.** Spread of internet is a critical factor in the case of business-to-customer model popularity. If internet connection is only accessible for small part of consumers, company's possibilities to raise the turnover or to gain strong competitive advantage are minimal, limited to the number of internet users.

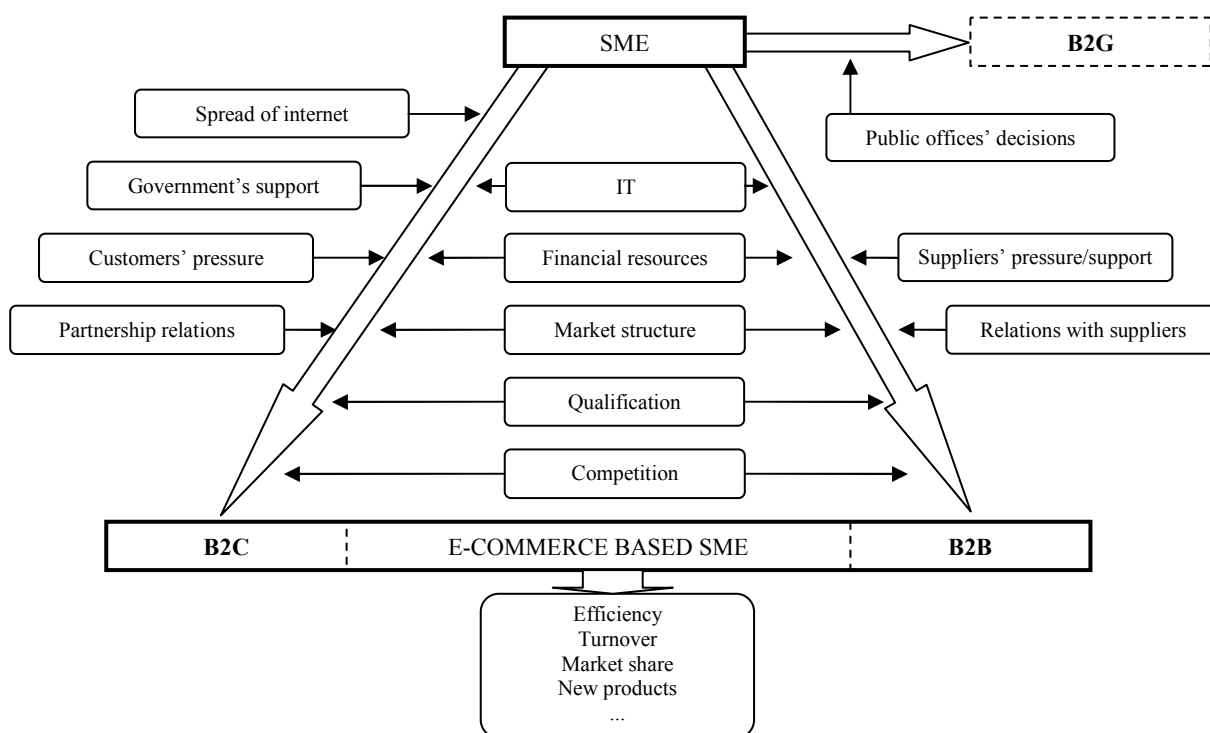


Figure 2. E-commerce integration in SMEs: success factors

**Government's support.** Government's decisions may have both positive or negative impact on e-commerce spread, especially in SMEs' sectors. It mostly depends on legislation in e-business area (Kendall, Tung, 2001). Be-

sides, there is indirect impact of government to e-commerce spread in SMEs' sector. It can be illustrated by Lithuania's example – income tax privileges for computer equipment buyers raised the number of households

having computers, what also means increased number of internet users – one of the main factors of e-commerce spread.

*Customers' pressure.* In some cases customers have strong pressure on the company which may be forced to accept or decline the decision to adopt e-commerce. For example, software production purchasers prefer buying on internet, what means the necessity for small or medium-sized company to offer such possibility (Mehrtens, Cragg, Mills, 2001).

*Partnership relations.* B.M. Sadowski and others (2001) accentuate the possibility for SMEs to maximize benefits from e-commerce adoption in business, creating e-markets, based on partnership relations, where goods/services of more than one company could be offered and the total cost of marketplace maintenance would be distributed between all partners.

Suppliers' pressure/support and the nature of relationships with suppliers has additional impact on *business-to-business* model adoption success in business.

*Suppliers' pressure/support.* In parallel to already discussed customers' pressure, suppliers may have the same power. In this case pressure from suppliers can be very hard, because a big manufacturer, owning electronic system for orders acceptance and processing, may refuse to collaborate with small or medium-sized company, not having possibilities or needs to contact with supplier using his electronic system (Chanu, Hui, 2001). But in this case there also exists the probability of suppliers' stimulation – supplier may accept all e-commerce adoption and maintenance costs, what is very important for SMEs.

*Relationships with suppliers.* Relationships with suppliers determine the success of *business-to-business* e-commerce model adoption in small and medium business. If the supplier is permanent and supplies the main resources (goods), e-commerce adoption will condition notable cost economy for both partners (Kevin, Patrick, 2001). But if company has no permanent suppliers or has a big number of them, there exists probability for e-commerce to generate additional expenses, bigger than possible cost economy.

While analyzing business-to-government model adoption in SMEs, it is necessary to pay attention to the fact that in this case essential decisions must be taken from public offices. If government devotes enough resources to realize such e-commerce form, then small and medium-sized companies will be forced to adapt this system. But it's very believable, that this change in activity will condition minimal expenses (acquisition of simple technological equipment, short employees training to use the system, etc).

## Conclusions

1. Electronic commerce today is judged as one of the most effective success factors in a lot of business sectors. Electronic commerce enables to reach not just the higher efficiency of activity, but also to create the competitive advantage, influencing company's success in the market.
2. For the small and medium enterprises sector, which generates about a half of European Union gross na-

tional product, adaptation of electronic commerce models in a near future in some business sectors may become the necessity. For this reason it is important for small and medium enterprises to evaluate their possibilities and potential use of electronic commerce adaptation.

3. The effort of small and medium enterprises in the context of e-commerce integration in business is mostly limited by the adoption of traditional information technologies (e-mail, internet, web page), but for the reason of effective e-commerce use in business it is necessary to integrate the higher-level e-commerce decisions: e-markets, catalogues, etc.
4. Small and medium enterprises can use the potential of e-commerce in three directions, adopting business-to-business, business-to-customers and business-to-government e-commerce models.
5. The main success factors of e-commerce integration to small and medium enterprises are: competition, financial resources, market structure, qualification, information technologies. Adopting e-commerce business-to-customers model in a small and medium business, there appears the high importance of the spread of internet, government's support, customers' pressure and partnership relations. Adopting business-to-business model, the main impact is asserted by such factors as supplier's pressure/support and relations with suppliers. The success of business-to-government model integration mostly depends on the public offices' decision to use this model for the communication with business units.

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### Elektroninės komercijos modelių parinkimas ir įvertinimas SVV sektoriuje

Santrauka

Informacijos ekonomika, pagrįsta informacinių technologijų taikymo galimybių didėjimu, traktuojama kaip vienas svarbiausių įvykių pasaulinėje ekonomikoje per pastaruosius 15 – 20 metų ir siejama su naujų verslo vystymo metodų atsiradimu, sąlygojančiu sąnaudų mažėjimą ir veiklos efektyvumo didėjimą. Elektroninės komercijos

plitimas įvairiuose ūkio sektoriuose susijęs su šiuolaikinio verslo ypatybėmis: didele ir nuolat augančia konkurencija, mažėjančia konkurencinių pranašumų įvairove, tvirtesniu požiūriu į pelną kaip kaštų mažinimo pasekmę. Tradiciniai konkurenciniai pranašumai, tokie kaip modernios technologijos, mažesni kaštai, patogii geografinė padėtis, tampa vis mažiau reikšmingi dėl globalizacijos proceso, todėl įmonės ieško naujų veiklos efektyvumo didinimo galimybių.

Elektroninės komercijos formavimosi pradžioje ji buvo tapatinama su naujo pobūdžio transakcijų šaltiniu, sąlygojančiu naujas galimybes sandoriams vykdyti. Tačiau, pradėjus informacines technologijas plačiai taikyti įvairių (tiek dydžio, tiek pramonės sektoriaus aspektu) įmonių veikloje, elektroninė komercija tampa vis svarbesne įmonės veiklos dalimi ir imama traktuoti kaip įmonės verslo filosofijos pagrindas.

Elektroninės komercijos samprata XX a. paskutiniojo dešimtmečio pirmojoje pusėje – XXI a. pradžioje evoliucionavo nuo atskirų elektroninių transakcijų prekių pardavimo ar išteklių tiekimo srityse verslas-vartotojui ar verslas-verslui modelių pagrindu iki dinaminį verslo ekosistemų, pagrįstų atskirų rinkų susiliejimu ir tinklinio bendradarbiavimo pagrindu gyvuojančių vertės grandinių. Verslo procesų atžvilgiu elektroninė komercija gali būti apibūdinama kaip elektroninių tinklų naudojimas siekiant supaprastinti ir pagreitinti visus verslo procesų etapus: nuo produkto pateikimo iki pardavimo ir pristatymo. Statistinė informacija rodo, jog elektroninio verslo idėja vis palankiau priima daugelis komercinių organizacijų. Elektroninės komercijos raida siejama su sparčiu informacinių technologijų tobulėjimu, jų pritaikymo įvairiose srityse galimybėmis, naudojimo kaštų mažėjimu. Kadangi informacines technologijas ir toliau sparčiai tobulinamos, įmonės gali vis lengviau ir mažesniais kaštais koordinuoti savo veiklą ir verslo procesus. Elektroninės komercijos plėtra tiesiogiai gali padaryti poveikį ekonomikai tiek mikro-, tiek makrolygmenyje. Elektroninė komercija, kaip elektroninio verslo sudedamoji dalis, lėmė naujų verslo sektorių vystymąsi (virtualios įmonės, elektroninė bankininkystė ir kt.).

Įmonės lygmenyje elektroninė komercija pirmiausia siejama su konkurencinių pranašumų formavimo galimybėmis. Išskiriamos šios elektroninės komercijos naudojimo sritys, įgalinančios pasiekti konkurencinių pranašumų: padidinti klientų pasirinkimo kaštus; sumažinti įmonės pasirinkimo kaštus; inovacijomis išlaikyti savo vietą rinkoje arba apsaugoti nuo prekių pakaitalų; bendradarbiauti su pasirinktais konkurentais iškeliant barjerus naujiems konkurentams įeiti į rinką; panaudoti personifikuotą informaciją siekiant geriau aptarnauti savo klientus.

Elektroninės komercijos integracijos į ekonomiką sparta rodo, jog artimiausiu metu elektroninė komercija taps neišvengiama būtinybe bet kokiai verslo formai, įskaitant ir smulkiojo bei vidutinio verslo sektorių, kuriame elektroninės komercijos plitimas yra lėtesnis nei stambiojo verslo sektoriuje dėl lėšų, kvalifikacijos trūkumo bei kitų veiksnių.

Elektroninės komercijos integracija į verslo procesus yra reali galimybė sustiprinti savo pozicijas rinkoje, todėl tikėtina, jog anksčiau ar vėliau elektroninė komercija taps būtinybe (įėjimo į rinką barjeru) kai kuriuose pramonės sektoriuose, pasižyminčiuose didele kaštų ekonomija naudojant elektroninės komercijos modelius. Vadinasi, bet kuri SVV sektoriui priklausanti įmonė turi įvertinti galimybes ir galimą naudą savo veikloje taikant elektroninę komerciją.

Šiuo metu pastebima, jog elektroninę komerciją žymiai sparčiau savo veikloje integruoja stambiosios įmonės, turinčios daugiau išteklių tokio pobūdžio eksperimentams nei smulkiojo ir vidutinio dydžio įmonės, vengiančios informacinių technologijų dėl pernelyg didelių galimų nuostolių nesėkmės atveju ir nepakankamos darbuotojų kvalifikacijos. Tyrimai rodo, jog SVV sektoriuje dažniausiai apsiribojama tradicinių elektroninių priemonių (el. paštas, internetas, interneto svetainė) naudojimu ir šios priemonės atlieka tik pagalbinį vaidmenį verslo procesuose.

Tačiau smulkiojo ir vidutinio verslo sektorius taip pat yra svarbi elektroninės komercijos modelių plitimo terpė, kadangi, remiantis Eurostat organizacijos duomenimis (2004), Europoje tik apie 0,2 proc. visų įmonių priskiriamos stambiajam verslui, o likusi dalis – smulkiajam ir vidutiniam verslui. Didžiąją smulkiojo ir vidutinio verslo dalį (apie 93 proc.) sudaro vadinamosios mikroįmonės, kurių darbuotojų skaičius neviršija 10. Smulkiojo ir vidutinio verslo svarbą Europos ekonomikai liudija ir tai, jog smulkiosios ir vidutinės įmonės generuoja 55 proc. apyvartos Europos Sąjungoje. Smulkiojo ir vidutinio verslo reikšmė ypač pastebima užimtumo aspektu, kadangi SVV sparčiau kuria naujas darbo vietas nei stambusis verslas, ypač ekonominio nuosmukio laikotarpiu, kai išryškėja smulkiųjų ir vidutinių

įmonių lankstumas ir gebėjimas prisitaikyti prie kintančios aplinkos.

Analizuojant smulkiojo ir vidutinio verslo galimybes savo veikloje integruoti elektroninę komerciją, tikslinga įvertinti atskirų elektroninės komercijos modelių potencialią naudą įmonei. Elektroninės komercijos ekspertai akcentuoja tris elektroninės komercijos terpės subjektus: verslą (įmones), vartotojus bei vyriausybę ir šių subjektų tarpusavio ryšių pagrindu išskiria bazinius elektroninės komercijos modelius: verslas-verslui (elektroninės komercijos ryšių tarp dviejų ar daugiau organizacijų realizavimas), verslas-vartotojui (sandoriai tarp mažmeninės prekybos įmonės ir galutinių prekių vartotojų) ir verslas-vyriausybei (mokesčių mokėjimas ir statistinės informacijos perdavimas bei vyriausybės įvairios informacijos suteikimas). Verslas-verslui elektroninės komercijos modelis yra traktuojamas kaip labiausiai paplitęs elektroninės komercijos modelis visame pasaulyje, vystęsis nuo pat elektroninės komercijos atsiradimo pradžios ir visada buvęs vienu iš pagrindinių elektroninės komercijos plėtros variklių.

Įmonės didžiausią dėmesį skiria dviem pagrindiniams elektroninės komercijos modeliams – verslas-verslui ir verslas-vartotojui, kurie literatūroje dažnai minimi kaip elektroninės komercijos funkcionavimo bazė. Šių modelių diegimo nauda SVV veikloje gali būti grindžiama tyrimo Jungtinėje Karalystėje rezultatais, kurie rodo, jog svarbiausia elektroninės komercijos verslas-verslui modelio naudojimo priežastis smulkiojo ir vidutinio verslo sektoriuje yra efektyvumo didinimas, siejamas su kaštų mažėjimu, o verslas-vartotojui modelis dažniausiai naudojamas siekiant padidinti apyvartą.

Apibendrinant elektroninės komercijos SVV sektoriuje naudojamą ir jo plėtros galimybes, elektroninės komercijos integraciją į smulkųjų ir vidutinį verslą, tikslinga nagrinėti išskiriant verslas-verslui ir verslas-vartotojui integracijos kryptis bei papildomai įvertinant verslas-vyriausybei modelio teikiamą naudą efektyvumo požiūriu.

Diegiant elektroninės komercijos modelius smulkiajame ir vidutiniame versle, svarbu įvertinti šiuos esminius veiksnius, lemiančius verslas-verslui ir verslas-vartotojui modelių veiksmingumą: konkurenciją (konkurentų sprendimas diegti elektroninės komercijos sprendimus gali būti pagrindinis įmonės motyvas diegti analogišką modelį savo veikloje), kvalifikaciją (smulkiose įmonėse elektroninės komercijos techninė priežiūra sąlygoja nemažus kaštus, be to, įmonių vadovai gali vengti diegti informacines technologijas dėl psichologinių motyvų), rinkos struktūrą (elektroninės komercijos modelių veiksmingumas priklauso nuo rinkos dalyvių skaičiaus, jų geografinės sklaidos ir pan.), finansinių išteklių (elektroninės komercijos diegimas susijęs su tam tikromis išlaidomis; jos, diegiant sudėtingas elektroninės komercijos sistemas, gali būti gana didelės), informacinių technologijų (elektroninės komercijos integracijos sėkmė priklauso nuo regione prieinamų informacinių technologijų.). Be aptartų bendrųjų elektroninės komercijos integraciją į SVV lemiančių veiksnių, verslas-vartotojui modelio diegimo sėkmę lemia tokie veiksniai kaip interneto paplitimas, vyriausybės parama, vartotojų spaudimas (parama), partnerystės ryšiai. Verslas-verslui modelio diegimo sėkmei papildomos įtakos turi tiekėjų spaudimas (parama) bei santykių su tiekėjais pobūdis. Nagrinėjant verslas-vyriausybei modelio taikymą SVV sektoriuje, pažymėtina, jog šiuo atveju esminiai sprendimai turi būti daromi valstybės.

Apibendrinant galima pažymėti, jog smulkiojo ir vidutinio verslo sektoriui, kuris sukuria apie pusę Europos Sąjungos bendrojo vidaus produkto, elektroninės komercijos modelių diegimas artimoje ateityje kai kuriuose verslo sektoriuose gali tapti neišvengiama būtinybe, todėl smulkiosioms ir vidutinėms įmonėms svarbu įvertinti savo galimybes ir potencialią naudą, įdiegus elektroninę komerciją.

Raktažodžiai: *elektroninė komercija, smulkus ir vidutinis verslas, verslo procesas.*

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