



The Internet as a business environment in Romanian agriculture

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Abstract

In Romania there are over four million and a half actors activating in the agricultural field, spread all over the surface of the country, in regions where the possibilities of communication with the clients are limited. This category is represented by producers of raw materials, agricultural service providers and even partners from food industry and individual customers. The lack of prompt communication between them is one of the factors which obstruct the efficiency of Romanian agriculture whose products ought to cope with the free European market. In an economy where the offer and the demand meet even more often in the virtual space, it is high time the Romanian agriculture to eliminate the time and space barriers, and to use Internet as a business environment. The benefits brought to the Romanian agriculture by giving up the traditional approach of the processes regarding the procurement and the commercialization of the agricultural output represents a part of the effected research. By means of this paper we aim at evaluating the domains that gave up the traditional methods of information and affairs development and the stage of Internet use in Romanian agribusiness. Moreover, we will identify the factors that led to this layout. Throughout the study, we took into account both factors influencing the e-commerce evolution in general and specific agribusiness-oriented factors as well. Emanating from the present study, there are numerous solutions for the improvement and popularization of Romanian e-agribusiness which would raise the awareness about the advantages of e-commerce on the Romanian business scene.

Key words: Agribusiness, Internet, e-commerce, farmers, influence factors.

Introduction

Internet is a medium with one of the biggest widespread rates. The usage growth rate in the period 2000-2008 was around 210% in Europe and 318% for the rest of the world. The statistics for 2008 indicates that over 1.4 billion people accessed Internet, 293 million of them being European people¹. The technologic progress was an important factor that helps the electronic transactions, including the commercial ones, to evolve as quickly. In a few years the facilities offered by Internet revolutionized trade, health, education and public administration. That is why may be considered that Internet could bring major changes in the evolution of agribusiness, by opening new markets and reducing cost transaction².

Methods

The use of informational technologies in agriculture as well as in other economic fields is influenced by numerous conditions and factors. Only parts of these are registered in the statistic data. The breakthrough of informational technologies in agriculture is influenced by a great variety of local, national and European decisions. In order to reach the objective of the present paper, numerous sources and materials have been appealed to, being therefore relevant for the influence of information and communication technologies (ICT) breakthrough in economy and especially in rural economy. All things considered, this paper aims to conduct and develop an objective analysis of the current

state of Romanian e-commerce, particularly for the agribusiness sector, in comparison with the European Union's (EU) situation, by means of pertinent data and statistics and of an unbiased presentation of the legislation concerned.

Results

Analysis of e-commerce indicators: The technological inequalities that exists even between the same region countries (in the EU, for instance) stands up also in what it concern the e-commerce evolution. Romania has an Internet penetration rate of 31.4%¹, knowing that the midlevel in the EU is situated around the 55.7% value. A more specific finding from the data analysis was that at local level there are disparities between urban and rural areas regarding Internet penetration rate. The most commercial developed forms of Internet are driven by demand and thus primarily serve areas of high population density. Regarding Romania, a bad influence over the country indicators has the low access to the broadband services on the rural environment inhabitants, which represent over 40% of the country population.

The RNC (Romanian National Computer Network) ranks recorded that at the end of 2007 about 250,000 domains .ro were reserved, for which it had been paid about 61 USD charge, the same amount as in 2006^{3,4}. From among these sites, more than one thousand are registered on the e-commerce area. With respect to group product specialization of online shops, a study elaborated by the

Ministry of Communications and Information Technology (MCIT) in 2007, shows that only 118 of them activate in the agro-alimentary field⁵. In conclusion, the Romanian e-commerce market is slightly developed in this direction.

Romania does not possess statistics able to quantify the number of sites specialized in technology, finance and research for agribusiness, technical assistance for development in agriculture and institutional development, commercial applications of agricultural technology, consulting and solutions for agribusiness and market research and information technologies in agribusiness.

More than the low PC penetration, Romanian Internet development is held back by the limited use of credit cards and an inadequate banking and online payment infrastructure. Only 41 of the virtual shops commercializing agro-alimentary products use credit card payment⁵.

The factors that have a bad influence on development of Romanian e-commerce: The factors that led to a weak development of the Romanian e-agribusiness can be classified into two distinct categories, namely general factors and factors specific to Romanian agriculture.

General factors: Security is the most important factor that had a negative influence on the developing of e-commerce. The impact of security concerns the online behavior both for companies and individuals, too. Companies who usually use Internet as a business environment consider that factors like the costs for security measures, lack of time training and lack of staff time are the primary problems. Lack of technical skills is not the only reason preventing companies from going online for developing their business. In order to avoid the drawback caused by the lack of confidence many Romanian companies which conduct electronic business make complementary usage of other communication methods such as telephone or e-mail.

Factors which are specific to Romanian agriculture: The main structural disadvantages of Romanian agriculture become obvious when adopting a modern activity meant to develop e-commerce based agricultural business. Thus, the vast surface of the Romanian agricultural land, divided in many small holdings, speaks for itself with respect to the creation of the infrastructure specific to ITC, respectively to the broadband Internet suppliers. A large surface of land is in the possession of too many farmers who either get close to retirement. It is the situation especially of those small holdings, constituted mainly as subsistence holdings. The majority of these farmers has no training or possesses a level of limited competence and knowledge. Taking into account their scarce connection to the market, this category of farmers does not show any interest in the new demands of the agricultural market. Consequently, they have practically neither the motivation nor the ability to adopt modern methods to run a business. Unfortunately, the situation is not very different either regarding the great holdings. Here, too, the presence of young farmers remains reduced, that is 14% of the total number of big commercial farms. Only 25% of them have specialized university studies⁶.

The reduced interest in adopting new modern methods to develop the agribusiness is due to the absence of some key-market sectors: training, consulting, credit and marketing services. The strategic interventions that will focus on the lack of these markets can be fundamental for the modernization and restructuring of the way in which the business of the Romanian agricultural

holdings are run and for the achievement of the agricultural competitiveness. The training and consulting services are still scarcely developed and prepared to meet the farmers' demands and to help them restructure and improve their agricultural performance (including the technical point of view and the duty to respect the standards of food safety and environmental protection, foreseen by the EU). Generally, their clients are bigger holdings in need for support in preparing the project of investments or in solving some management problems the farms deal with⁶.

Discussion

In order to attain a successful level of e-commerce development, Romania must adopt measures so as to improve the general frame of e-commerce as well as measures directly addressed to agricultural business as it follows: building trust in e-commerce; removing the legal obstacles that are making the activity of the net business harder; the regulation of the relationships between the card owner and the others with an adequate legal framework for banking activities; the implication of regional and national authorities in order to reduce the negative impact that the agricultural factors have on the adoption of a ITC-based variant in the agribusiness development⁷.

Building trust: Building trust is a condition for having alternative forms for commerce as e-commerce, no matter the domain of the business. Trust and confidence influence the results gained in the process of promoting e-commerce in developing countries. Buyers and sellers will only take the risk of making contractual obligations over Internet if they know their rights and obligations and that these will be enforced⁸. The promotion of trust and confidence depends on a number of factors, such as legal norms which covers contract enforcement, consumer protection, privacy protection, intellectual property rights, and process and technical standards.

Analyzing the way in which it has evolved in the last year in Romania, the legal framework which settles the building of trust in the e-business, can be said that it has progressed in major way concerning the insurance of the institutional environment. The electronic commerce law demonstrates that click-wrap contract is legally valid also in Romania when the terms imposed by the law are respected. Also, for the growing trust, the Romanian legal framework gives the buyer the right to send back the thing that he bought in ten days period⁹. Any e-commerce site is directly involved in the manipulation of personal data that is using for the users registration before the buying process or to permit the payment or to transmitting the goods or the services. In the personal data domain, in Romania exists a law for the person protection regarding to personal data manipulation and the free circulation of these data. A Romanian legal framework limit is the fact that the law refers only to the physical person and the data referring to legal persons (name, address, unique identification code) can be proceed in a free way.

The removal of the legal obstacles that makes the e-business activity harder: It is necessary to allow users and further players in the market to gain confidence in the use of e-commerce solutions. This may be done not only by the use of adequate technologies to ensure technical security, but also by strategic

initiatives aiming at a change in user perspectives on the reliability of ICT in commercial transactions. The legal framework is necessary because of the differences occurred between the practices utilized by each parties involved in a commercial transaction and also, because the different perception of the involved parties regarding the transaction. In fact, commercial activities usually depend on laws that regulate the execution of contracts, their validity conditions, their enforcement, their limits of liability, and their resolution in case of conflict. Beyond the realizations in that domain, one of the biggest difficulty of the legislative domain in Romania is the absence of a specific law that can refer only to the e-commerce and that can gather all the legislative dispositions applicable on the e-commerce. The dispositions that are applied also the e-commerce legislation, the distance contracts, the personal data security, the author's rights law and in other interfacing domains, are found in different laws. This thing makes harder the legislative interpretation, especially when the persons that are involved does not always have a juridical qualification¹⁰. The negative impact of the inaccessibility of the legal frame establishing the e-commerce is greater on the agricultural activities because the persons' professional training developing this type of activities is below average and only the great holdings have employed juridical personnel. Also, the local authorities from the rural milieu do not have a juridical-skilled staff able to give information to the farmers that take into account the possibility to change their traditional way of running business.

The creation of a banking environment: The existence of e-payments is "a precondition for the successful development of e-commerce"¹⁰. Digital cash and low technology penetration creates problems in developing countries due to lack of trust in online transactions together with their questionable security. In order to gain the trust of the consumer, Romania has developed alternative payment methods in e-commerce systems, such as cash on delivery (paid to the courier), bank and wire transfer or cheques. For impulsion of cards usage, the banks have emitted co-branded cards with renowned commercial companies, products that have international usage, including on Internet. The challenge for information technology providers has been to work with banks to design the new channels in such a way that customers, no matter their technical degree, will readily learn to trust and use them.

About the role of digital signatures in e-commerce growth: The United Nations Commission on International Trade Law formulated a model law that develops a legal framework for digital signatures, called the UNCITRAL Model Law on Electronic Signatures⁹. Completing the legal framework for electronic signature is made at the EU level by adopting Directive 93/1999 on a Community framework for electronic signature. The Romanian law is implementing very well the European directive foresights. In this moment, in Romania, the digital signature is slightly used, although exists a legal environment, institutional and technical possibilities.

The major restrain is made by the service price (100 Euro for initial package and 40 euro per year for a renewing certificate). The price proved to be prohibitive for the farmers who practice subsistence agriculture since half of the Romanian agricultural surface is worked in this way.

The implication of regional and national authorities: The development of e-Government solutions in the rural environment, as a consequence for the efforts made by the Romanian local authorities in order to implement eEurope 2005 and eEurope 2010 initiatives, had unexpected consequences on the development of e-commerce in the rural environment¹¹. Thus, the development of the Information Office for Citizens program led to Internet breakthrough in geographic areas which are difficult to reach. Moreover, the program has an initiation component of the persons from the rural environment in the use of Internet.

Another direction which the public local authorities can take is a direction of stimulating the assimilation of European financing that is given inclusively for e-commerce activities in agriculture, by the measure 312 - Support for the creation and development of micro-enterprises included in the Program for National Rural Development (PNRD) - investments in Internet connection and broadcast services⁶. In these conditions, the Romanian private system of consultancy doesn't make much effort for supporting the farmers in the elaboration of financing proposals on this type of programs, because the majority of companies of this kind are localized in the urban area. Generally, their clients are bigger agricultural holdings. That is why a major role in counseling the small farmers is assigned to the local authorities, by the National Agency for Agricultural Consulting (NAAC), which is a public institution, subordinated to the Ministry of Agriculture and Rural Development. Although the consulting centers are geographically close to the small farmers, the NAAC system shows a deficit with respect to the competence in domains like: economy and farm administration, marketing, introducing the new technologies, including ITC, elaborating and monitoring projects.

Conclusions

This study proposes a set of issues for the policy-makers to consider when they face the creation of the environment necessary for promoting successful e-commerce transactions in agribusiness, especially in Romania: 1) develop a dialogue to discuss these issues within a diverse, large and informed community of stakeholders that includes national and local authorities, local business and individuals involved in agribusiness; 2) promoting the benefits of e-commerce in agricultural communities; 3) making popular the experience of other countries or some other organizations and persons involved in agriculture, by using mass-media; 4) create a coherent and accessible legal framework for e-commerce in general and e-agribusiness in particular; 5) fully assess the providers of the technology, procedures and the transfer to local firms; 6) develop the human capital capacity by developing some programs which are meant to assure a minimal complementary training for the interested agricultural specialists and producers in order to familiarize them with the specific instruments to work on Internet; 7) investigate who will buy digital signatures and develop modalities to give financial support; 8) create laws that fully protect the rights of the consumers utilizing these new technologies.

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