ECOMMERCE – A VIABLE SOLUTION FOR THE ROMANIAN MARKET OF FOOD PRODUCTS

ECOMMERCE – SOLUȚIE VIABILĂ PENTRU PIAȚA PRODUSELOR AGROALIMENTARE

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Abstract: *Appeared in Romania in late 1999 and having a very important point of growth so far, electronic commerce is close to the beginning phase of maturation. The main advantages and opportunities offered by electronic commerce may be listed: the establishment of closer relationships with suppliers, but also with customers, adjust more quickly to customer needs, getting some good prices for some products / services and / or raw materials, taking more than efficient transactions and stock, reduce costs caused by supply, identifying new markets etc.*

Key words: *market, agriculture, ecommerce platform,*

INTRODUCTION

Agricultural policy in our country is based on scattered information, especially because there is no centralized monitoring system that provides reliable information, while the agricultural and food products market is experiencing a general feeling of instability, made of dysfunctional food chain and the organization relies on broken real-time communication systems.

Basically, an ecommerce platform that is based on a market information system can become a support level of individual decision makers that are on the food chain product, especially agricultural policy needs to adapt to the distribution and changes of demand and supply market.

Such a structure can integrated people and IT tools aiming at collecting, sorting, analysis, evaluation and distribution of accurate and real-time information to support decision makers in their planning activities, implementation and control marketing.

MATERIALS AND METHODS

An ecommerce platform is not just another sales channel, but an integrated system that can continuously monitor the entire business. Technically, such a platform is of great ecommerce through the integration of computer technology (communications and agricultural sciences, based on concepts such as client-server architecture, decision support, distributed database, remote web communications, orientation object, mathematical modeling, interactivity etc.), application type is a database accessible online with a web portal that supports the collection and dissemination of data.

This study aims to present a model for ecommerce platform to monitor stocks and prices of agricultural product markets - basically, is a collaborative process management for marketing agricultural products market, which is to provide an overview of supply demand, distribution channels and stock prices of agricultural products.

The technical characteristics of ecommerce platform is based on:

- running web server software program that understands the HTTP protocol in response to a request by a web client,
- uniform view on different monitors, documents made public on the web, formed in a special way,
- defining the browser or the browser running on the computer,
- performing a set of links to network computers.

Computer system platform underlying online this is based on the following components:

- distributed database that provides collection, storage, processing and transmission distance, the structures and specialized areas designed as a virtual space where they can be accessed in the shortest time, those more favorable conditions,
- database management systems,
- software applications,

- Web applications,
- operating software,
- hardware.

RESULTS AND DISCUTIONS

The creation of the experimental model of ecommerce platform has establish the structure and it's working components as decision support and assisted online collaboration, in the client-server architecture to connect to the Internet, distributed databases and computing applications to the achievement of process of monitoring prices of agricultural products. We start from the existing methodologies for prices in the EU (also in General Directorate for Agriculture and Eurostat), from the management and organization of information system for collecting current agricultural commodity prices, in an optimized form and the creation and implementation of new methods of information and communication technologies (decision support, working in cooperation through the web, online information, Internet and intranet, client-server architecture, electronics and other markets.

Functional characteristics of ecommerce platform:

- ecommerce platform is structured on the basis of new technologies:

- constitute a decision support system, which provides software components capable of processing data for substantiation and evaluation of decision, using methods and techniques modeling, simulation, probabilistic analysis, linear programming, forecasting, statistical calculation and others, offering the ability to access and query a data volume on request.
- constitute a system of computer-assisted cooperative work, web-based, as a strong component for connecting distributed databases on the Internet, which is a vital requirement in the current competitive environment where speed of movement is essential, quick and easy access to information at different levels: the central, county and agricultural markets, warehouses, farms etc.

- applications server database structures are classified by:

- ordinary customers request to the database server, which have the advantage of rapid and flexible addressing

- the request to the Web server that can be addressed by any computer connected Internet with a browser and privileges dictated by security.

- the system has integrated interface to shared environment as a way of cooperation

- are used in this context, the elements such as shared databases that integrated environment, intranet / internet, hypertext, e-mail, videoconferencing, chat shared applications in real time, working synchronously (at the same time with activities such as videoconferencing etc.) and asynchronous work (coordination of actions in a longer period of time such as e-mail).

- the types of applications made:

- software applications for management of distributed databases, local and central levels, function definition, consultation and database query, entry, editing, and deleting data, as well as procedures for data transmission for updating the central server, data are collected, updated and searched (type, variety, price, quantity, location, statistics, economic and financial etc.).

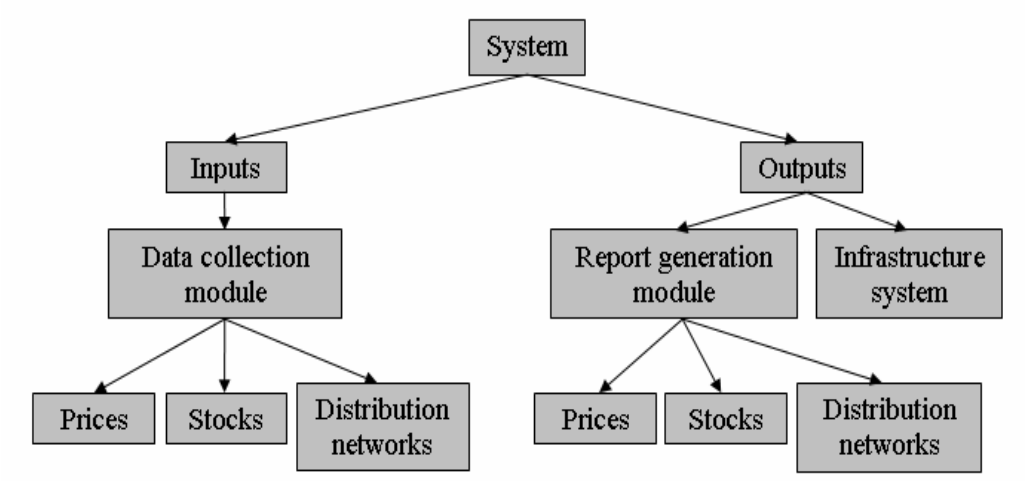
- application specific computer monitor prices of agricultural products, based on mathematical models and algorithms that reflect the phenomena of market prices of agricultural products, procedures for calculating the indicators.

The databases were made by creating the tables with indexing structures and relationships between tables, for creating queries. The monitoring applications for agricultural commodity prices were made with the help of interfaces with databases :

- input forms for information system contains: information from food markets , products and categories of agricultural products and locations
- output system reports include information on prices and quantities of agricultural situations in various food markets, totals items, statements concerning the markets, address, investigators and other situations.

The software application processes the data, the price monitoring processes, structure and specific content for each level stored in databases.

Study assumes a multi-modular platform, which has components (subsystems) and functional connections between them, which providing all activities that contribute to the monitoring of market prices. Modules can be created on the input-output data type, each part of the integrated system of data collection, dissemination:



Ecommerce platform structure

Monitoring of agricultural prices is not just simply observing the prices, but the whole act of buying or selling, where the price is a factor, along with the other side conditions (quantity, quality, channel marketing, contracts etc.) that we called „price-determining characteristics" (CDP).

Collection of prices must follow two principles often conflict each other: representativeness and comparability. Ecommerce platform analyzed in this study was based in order to:

- integrate general information at farmer level
- offer a viable mechanism to store information on pricing, inventory and marketing networks for agricultural products market.

Process	Who	What	When
Data collection	1. It will be done by investigators: - the peasant markets in each county, - the wholesale markets, - other markets.	Data collection will be printed on forms that will be placed online database.	Market prices will be collected weekly.
	2. It will be done by agricultural producers or persons designated by them.	Data collection will be made in the accounting statements, after which they will be placed online database.	Prices, inventory and the sales will be collected monthly.
Data processing	It will make those who manage the database.	It will be done by statistical processing.	It will conduct monthly.
Data processing	The specialists will be done according to the requirements of decision makers.	It will be done by statistical processing according to the following variables: territorial location, temporality etc.	It will be done quarterly, half yearly.

Levels of analysis of the ecommerce platform

Integrated on-line monitoring of prices of agricultural products, made and used in the ecommerce platforms, in a client-server architecture, with distributed database, at county level (agricultural directorates, prefectures etc.) and at central level (ministries and central agencies etc.) acquire, store, process and transmit data to monitor the prices of agricultural products, remotely on the Internet.

This ecommerce platform integrated, structural functional and used at managerial levels, gives a new dimension to quality management by creating an optimal framework for the coordination and monitoring of prices of agricultural products.

CONCLUSIONS

Making an electronic trading platform shows the wide possibilities offered by this product, to process on-line data by collecting, processing and transmission of prices of agricultural products from agro-food markets at the county level and the ministry in order to make decisions. With this platfome ecommerce can better manage the market, provides orientation and opportunity to demand and supply decisions, based on accurate information. This it was constituted as a support for decision in development :

- oriented strategies of support measures and competitiveness
- marketing plans at farmer level
- consumption evaluation of agricultural products.

Ecommerce platform facilitates management decision making at different levels (strategic, tactical and operational) for the purpose of taking effective decisions that lead to optimization and stabilization activities on the pricing of agricultural products. Decision-making as special form of higher information processing, aims to establish action or commands refering to functionality or modification of prices from agricultural markets and monitoring them.

This integrated platform is a systemic, open, enabling the development and expansion of coverage to all markets, connecting at national and EU level (Eurostat and General Directorate for Agriculture), to meet the requirements of the community "aquis", effective management agricultural processes and their integration at European level. The integrated system runs in an unitary conception, with distributed databases, in an client-server architecture, connected to the web network, national and European outlook, to ensure the functions of decision-making, advisory and information for institution and other organizations in agriculture.

Substantiation decisions in the European Commission's agricultural policies required to achieve, the level of accredited bodies (Eurostat and General Directorate for Agriculture) computer system, contained in an information network RICA, which receives and provides reports on the situation of agriculture, including price for each Member State separately.

Specialized agricultural institutions of the country must take urgent action to redress the agriculture, policies to support agriculture, encourage

trade and internal and external, not least through the implementation of integrated on-line monitoring of prices of agricultural products.

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