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.Net Platform-based Sales Management System Software

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Abstract
The paper describes sales management software and the technologies of its development. There have been examined the modules and functions of the developed software. .

Keywords
Sales, System, Software, Sock management, Cash Flow Management, Revenue Service, Cash flow.

1. Introduction

The rapid development of information technology (IT) has led to its expanded use. All spheres of human activities: social, political, economic, cultural or others, cannot be imagined without the use of modern information technology. One of the key elements in the successful operation of any company or organization is whether they integrate information technology in their activities.

Improving the management of business processes by using modern information technology is one of the important directions both for the area of business administration and automation of business processes. The modern automated management systems are the complex human-machine systems, which are created on the basis of state-of-the-art computer and network technology, integrated software packages and the object-oriented, process-oriented and service-oriented methods [1,3,4].

At present, the use of modern information technology in such important sphere of human activities as sales, is of high relevance. The use of modern information technology in the sale process has a direct line to the effectiveness of the sale process.

Based on the above, the paper presents a simple and flexible software package for sales management.

2. basic part

The software comes from the client-server architecture, which provides the operation in the multi-user regime, which means that several operators (sellers) can work simultaneously together with the software, and more than that, by means of the software, it is possible to manage the network sales.

The developed software system contains:

1. A centralized database, which represents the system's information support;
2. A set of organizational and programming-technical tools, which are necessary for the operation of the system, and ensure the effectiveness of the system;
3. Desktop applications, which in turn contain the different functional modules.

The sales management software modules are shown in Fig. 1:

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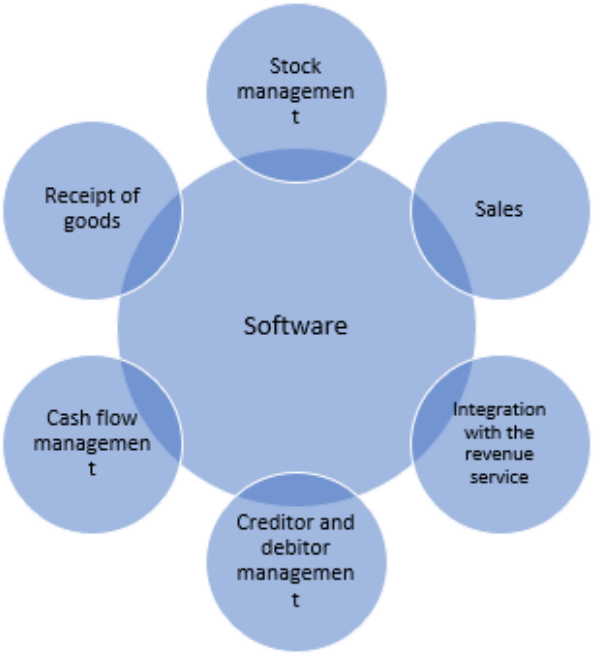

Fig. 1 sales management software modules

Let us consider the software modules shown in Fig. 1.

❖ **Receipt of goods**. This module presents all operations relating to receipt of goods: registration of received goods (Fig.2 - insertion of bar code by means of a barcode scanner, specifying the name of the item, unit of measure, of receiving goods, the value of the sale, quantity, etc.);
vendor registration and the management of information on them; management of the payments of financial obligations caused by receipt of goods; editing or deleting the registered items. Loading from the revenue service web-portal in the program of the received invoices.

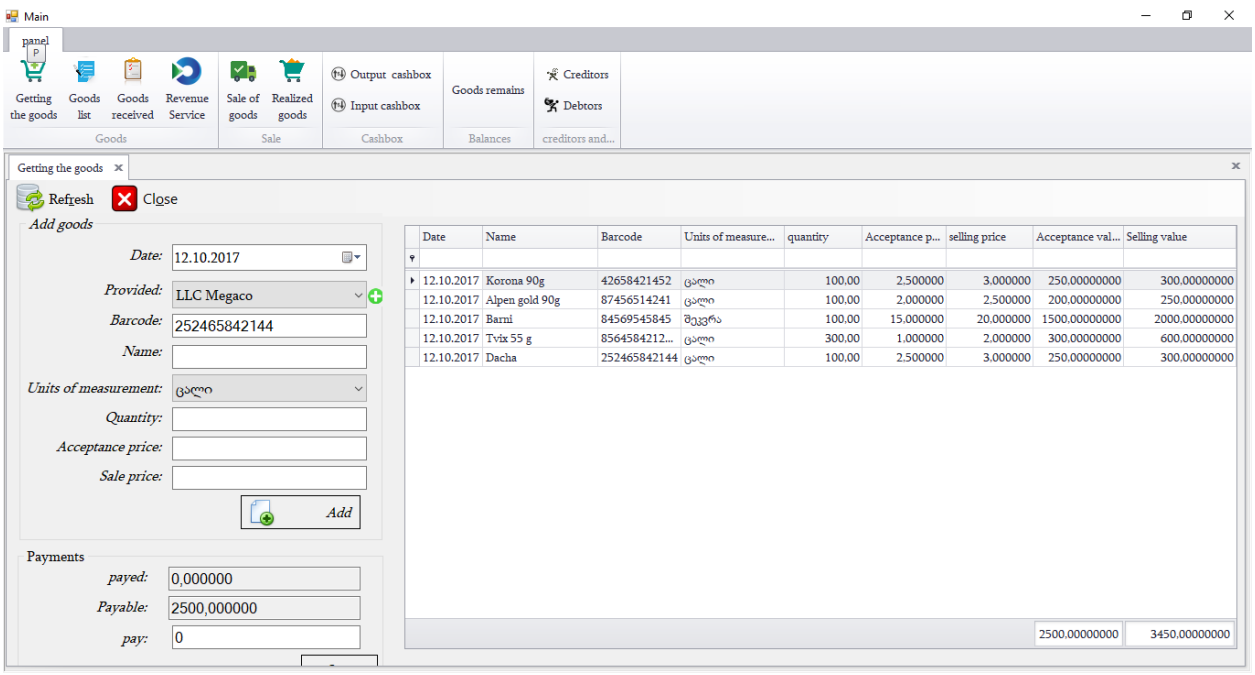

Fig. 2 Receipt of goods

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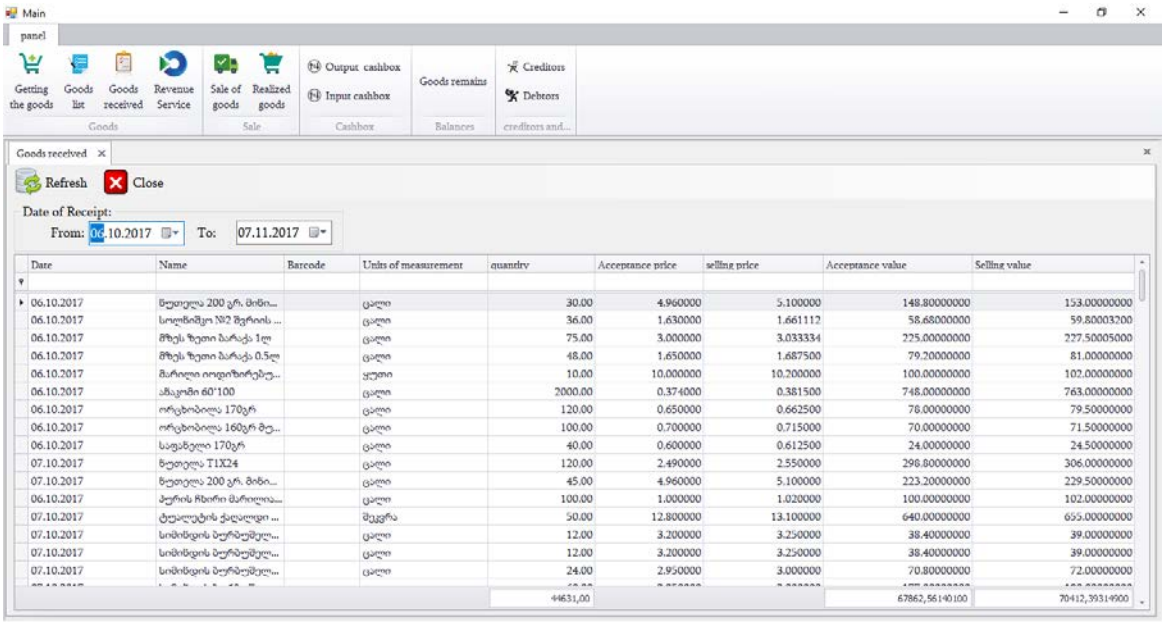

Fig. 3 Goods received

❖ **Stock management.** Stocks represent the universe of those goods, which are stored in the organization. The given model allows us for determining stock of goods we have at the current time. The rational stock management ensures the effective organization of goods in stock. We are able to control the remaining items by the day, keep tabs of zero-rated goods and so on.

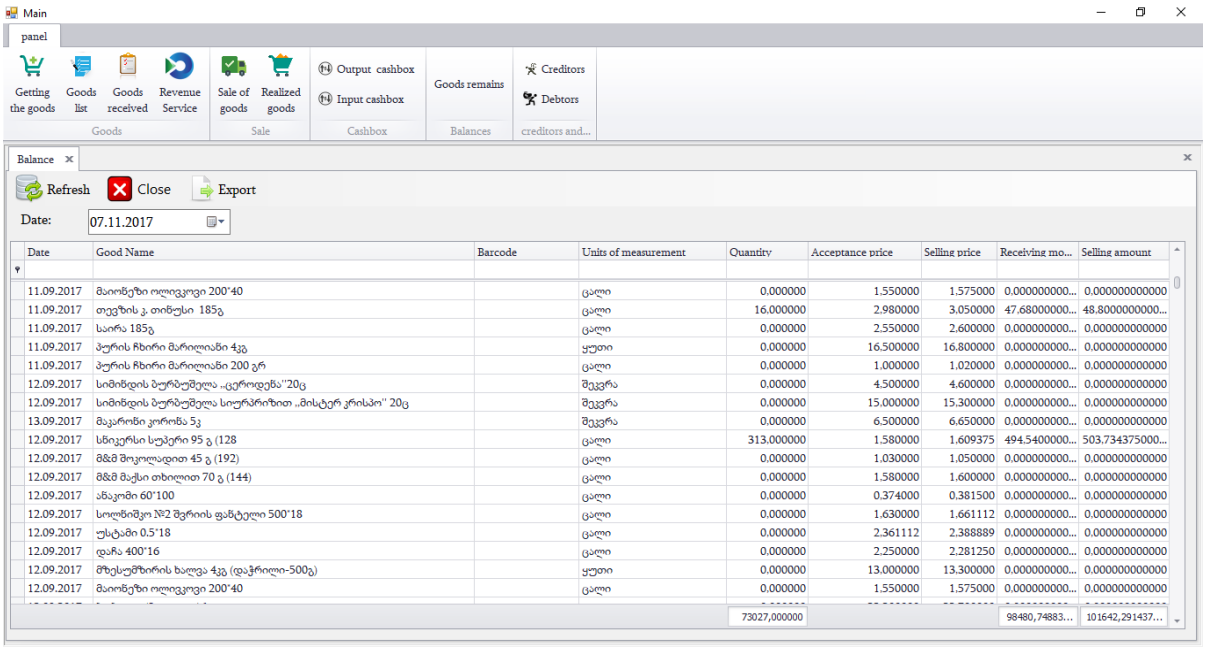

Fig. 4 goods balance

❖ **Sales.** The module presents a very simple interface od sales, which provides fast sales, enhances the effectiveness of the operation and mitigates the risks of errors during the routine transactions. This module is equipped with the following capacities: fast customer service; the use of a bar code scanner; cash payments and calculation of change; search for goods by bar code and the name of item; accounting and control of obligations arising as a result of sales on the part of customer; price discounting by customer. The program allows for controlling sold products, determining sold goods by a given period, and so on.

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To make the sale process as simple and fast as possible, the sales module envisages the automated printing of the receipt for tax purposes from the cash register upon the completion of a particular sale process, which enables the cashier-seller to avoid that routine work, which envisages the necessity of check printing from the cash register upon the completion of a particular sale process, which also eliminates any chance of error, which may be caused by the cahier-seller when printing the check on the cash register. To ensure automated picking up of a check from the cash register, the cash register has been integrated with the software.

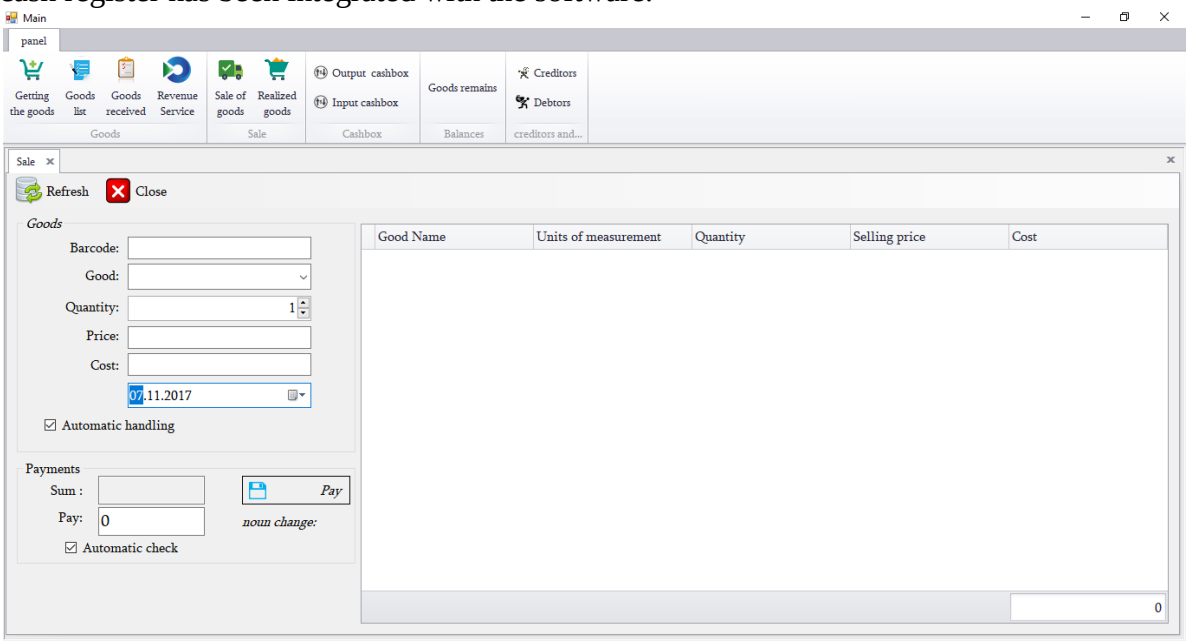

Fig. 5 Sale

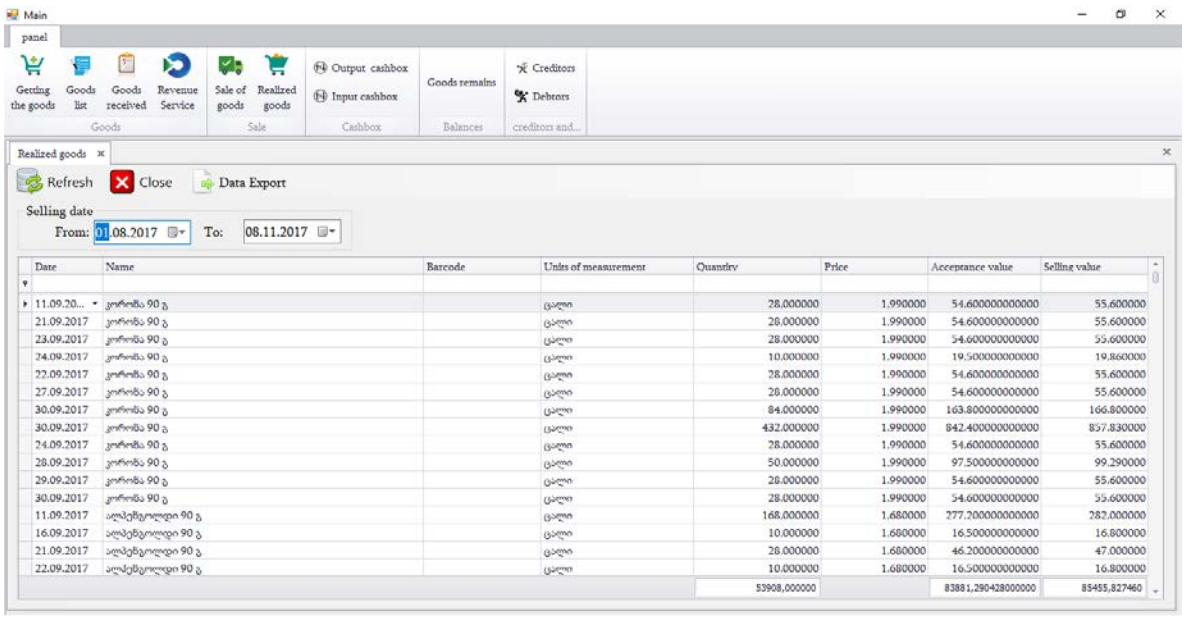

Fig. 6 Realized goods

❖ **Integration with the revenue service** [6]. This module is equipped with the following capacities:

- uploading of the users of the electronic invoices created by the authorized customers of the revenue service's electronic declaration, who are eligible to fill, store, correct, activate, cancel and complete the electronic invoice, as well as their storage in a database;
- uploading of the electronic invoice and its import in a database;

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- viewing of the uploaded invoice and making adjustments (determining the sale price of the goods, giving a bar code to the goods by means of a bar code scanner, if the goods unloaded by the invoice have no bar code or have incorrect bar code);
- uploading of the electronic invoices the revenue service web-portal;
- vendor control;
- cancellation of the electronic invoice imported in a database;
- determining the sale price of goods (bringing the sale price determined earlier for the same goods);
- controlling re-uploading of the invoice imported in a database.

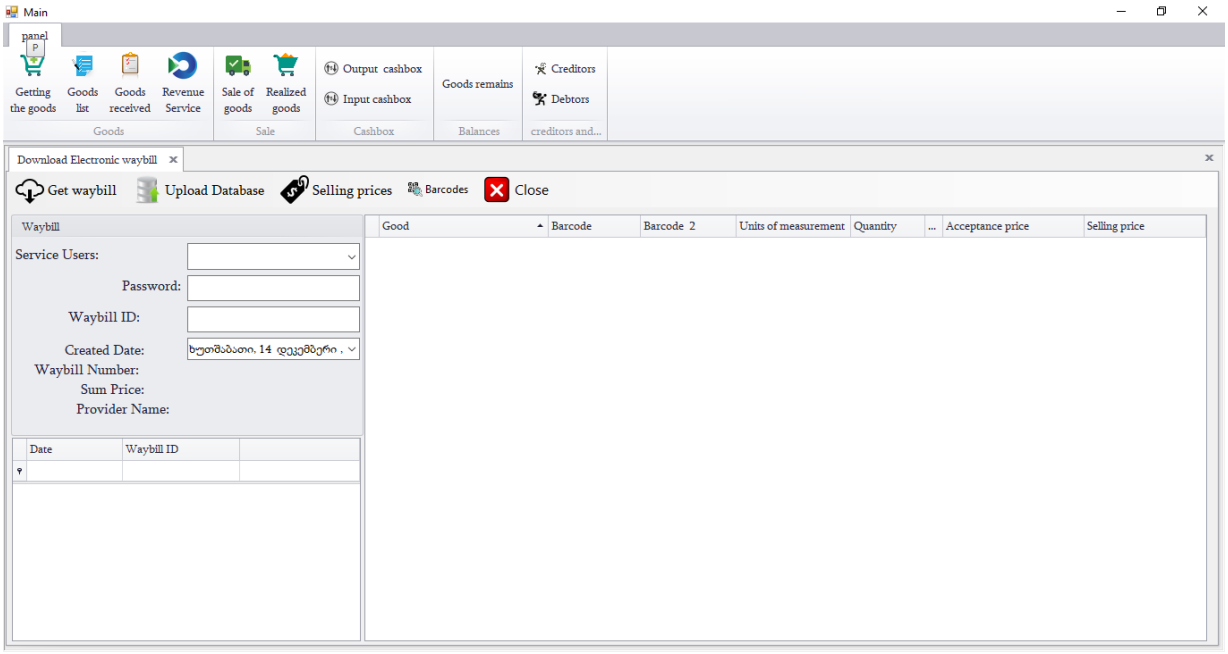

Fig.7 rs

❖ **The creditor and debitor module**. The module provides the control of receivables and payables, as well as their detailed accounting, which allows us for obtaining detailed information on receivables and payables.

❖ **Cash flow management**. This module ensures accounting of cash assets entered into the till and pulled from the cash register.

The proposed software has been developed by using the Microsoft company's technologies (.Net Framework, C# software programming language). A software database has been developed and placed on a Sql Server 2014, which is a modern and widely accepted management system of the client-server databases, which is being widely used for working with the large databases[2,3].

3. Summary

There has been developed the sales management software, which enhances the effectiveness and reliability of the sales process.

The proposed sales management software meets those quality requirements, which are imposed on the software: effectiveness; functionality; simplicity of use; promptness; integratedness; compatibility; sustainability, expansibility, etc.

The software presented by this paper has been introduced in the companies and is being used actively and successfully by them.

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