Ministry of Education of the Republic of Belarus

Educational institution

Belarusian State University

Informatics and radio electronics

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WILLIAMS ELVIS

ABSTRACT

For Master's Degree

By specialty 1-40 80 04 Computer science and programming technology

Topic:

CRM-system of enterprise management/CRM-система управления предприятием

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(Master's signature)

Supervisor

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(Signature of supervisor)

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INTRODUCTION

In the current business sector and what is happening in the world, most business face great challenges in monitoring and organizing their business activities mostly when they have more than one business branch, so the business or company needs.

Subject Area: Organization or arrangement of the company work flow with multiple branches and its customers.

Purpose: The system purpose is to automate the system for keeping, record, track and organizing crm system to obtain orderliness and accuracy in every activity, as well as to avoid errors that occurs during manual usage in the system.

As a result of the design, the following tasks were solved (functions of the developed system):

Testing the system for data storage for customers, which is developed in the crm, for subsequent safe keeping and directing, alerting the company specifically on which customer they should attend too without any form of difficulties but extremely orderliness.

Alerting various and specific CRM users on their various fields which customer should be attended too, with an automated system reminder and timer to keep to time on any ongoing project been worked on.

CRM systems compile customer data across different channels, or points of contact between the customer and the company, which could include the company's website, telephone, live chat, direct mail, marketing materials and social media. CRM systems can also give customer-facing staff detailed information on customers' personal information, purchase history, buying preferences and concerns.

Customer relationship management (CRM) is an approach to manage a company's interaction with current and potential customers. It uses data analysis about customers' history with a company to improve business relationships with customers, specifically focusing on customer retention and ultimately driving sales growth.

SUMMARY OF THE WORK

The master's thesis consists of 48 pages, an appendix and one sheet of graphic material in A4 format.

In the introduction, a brief assessment of the current state of the problem of synchronization of information systems is given, the main prerequisites for choosing a research topic are identified, the rationale for the relevance of the master's thesis is given, and its goals and objectives are formulated.

The first section provides a general description of the synchronization of systems, the formulation of the synchronization problem and a description of the problems associated with it. It presents the main factors of integration, describes the parameters of integration complexity and possible options for minimizing their negative impact, and considers methods that ensure the competent implementation of an integration solution. It also describes the main ways of synchronizing information systems, lists the criteria for choosing the optimal integration method, and describes the evolution of integration approaches.

The second section provides a detailed description of the main ways of synchronizing information systems. Such integration methods as file transfer, shared database, remote procedure call, messaging are described. The advantages and disadvantages of each of the methods, their features and comparison of the described methods with each other are also given.

The third section contains practical examples of using the basic system synchronization methods, describes the advantages and disadvantages of these methods, and demonstrates how these methods can be combined in practice. The technical details of the implementation and the most popular ways of transmitting information are given. The features of cloud computing, the deployment model of cloud infrastructure are also given, the hybrid model is described as the most difficult to implement integration.

The graphic material illustrates the scheme of a generalized integration solution, which, with proper design, can be used to transfer information and synchronize systems in any of the existing ways.

CONCLUSION

To date, there is not a single information system that can fully satisfy the needs of a business on a long-term basis. As companies grow, they are forced to refine existing systems, acquire new enterprise applications and interact with partner systems. Thus, the problem of competent and effective interaction of systems does not lose its relevance, and the integration strategy depends primarily on the organizational and functional structure of the company and the characteristics of corporate business processes.

The customer relationship management system helps people spend their time and effort for them, the crm system helps organize and keep track of everything happening in an organization and allow users know their clients or customers properly, thus making it easier for people to build an organization knowing with the system built they can handle and watch every ongoing activity in the business.

In this paper, methods for synchronizing heterogeneous systems are considered and described, a characteristic of these methods is provided, an analysis and comparison of their advantages and disadvantages is made, and criteria for choosing the optimal integration method are given.

The CRM system provides function on minimizing human errors and organization in the a company, boost the work flow and activities that goes on in the business and marks out every untended activities in the business, the system solves the problem of current system by reducing time wastage.

Stores the necessary info about the client: The CRM system stores detailed information about every client including ongoing projects, the deadline of all work and of which stage the ongoing project has gotten too. All information is stored at the database and in the result to join the system the company acquires all personal info and includes it to the CRM system for other necessary information.

The algorithm of the system shows how the user or admin logins into the system

Provides the account tab, contact tab, leads, opportunity tab, currency, campaign and user tab where the admin gets the option to use in a way the business needs to organize and arrange what goes on in the their organization.

Two articles published as the results of the study

1. Williams, E. Customer relationship management in Nigerian banks data analytics / E. Williams // Информационные технологии и управление : материалы 57-ой научной конференции аспирантов, магистрантов и студентов по направлению 2, Минск, 19-23 апреля 2021 года / Белорусский государственный университет информатики и радиоэлектроники ; редкол.: Л. Ю. Шилин [и др.]. – Минск, 2021. – С. 130.

2. Williams, E. Nigerian banks data analytics / Williams E., Gurinovich A. B. // Информационные технологии и системы 2021 (ИТС 2021) = Information Technologies and Systems 2021 (ITS 2021) : материалы международной научной конференции, Минск, 24 ноября 2021 г. / Белорусский государственный университет информатики и радиоэлектроники ; редкол.: Л. Ю. Шилин [и др.]. – Минск, 2021. – С. 178–179.

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