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FOREIGN STUDENT DEPARTMENT
COMPUTER SCIENCE DEPARTMENT

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**DEVELOPMENT AND IMPLEMENTATION OF A BUSINESS PROCESS
MODEL FOR PLANNING, MONITORING AND ORGANIZATION ANALYSIS
DEPARTMENT**

8.05010101 "Information Control System and Technologies "

Abstract

Of thesis for obtaining educational degree "master"

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The work at the Department of Manufacturing Engineering Ternopil National Technical University Ivan Pul'uj Ministry of Education and Science of Ukraine

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Defence will be held in February 26, 2017 at 10.00 am at the meeting of the examination board №32 of Ternopil National Technical University Ivan Pul'uj at 46001, Ternopil, st. Ruska 56, educational building № 2, Aud. 702

GENERAL DESCRIPTION OF WORK

Actualization of work: The project provides the essentials of the Business Process (BP) Modeling and management. Its application from the organization and theoretical point of view. Business process modelling has gained widespread acceptance, particularly in large IT-enabled business projects. It is applied as a process design and management technique across all project lifecycle phases. While there has been much research on process modelling, there has been little attention on “how to” conduct process modelling effectively, or on the evaluation of process modelling initiatives and outcomes. This project addresses this gap by deriving a process modelling success model that contains both the success factor and success dimension of process modelling.

This project will start with a comprehensive literature review which includes the first annotated bibliography in process modelling research. A case study will be used to build the conceptual process modelling.

Objectives: aims to improve business performance by optimizing the efficiency of connecting activities in the provision of a product or service by improving the efficiency of the business process.

Object, Methods and sources of research: The main objective of work is to study the existing business processes and create an area of optimization using a real organization as a case study. Methods of work: theoretical, graphical, economical and mathematical modelling.

Scientific novelty of the results:

- Develop a completed “as is” of the business and create the “as it should be” and comparing the results of study;
- Choosing the right tools and techniques for the development of models in order to visualize the conceptual parts of the process.

The practical significance of the results.

The model that is developed can be implemented in any organization. The method of optimization of the business process can also be used in project activities that are within the scope of the model in discussion.

Approbation. The results have been reported at V International scientific conference of young scientists and students << Current Issues in Modern Technologies >> Ternopil, November 17-18, 2016.

The structure of the work. The work consists of an explanatory notes and graphical part. Cash-explanatory note consists of an introduction, 5 parts, conclusions, list of references and appendixs. Scope of work: settlement and explanatory note - 109 pages A4, graphic part - 7 sheets A1

MAIN CONTENTS

In the first section, a review of the current state of the business process management/modelling, the main challenges and limitations that will be addressed.

In the second section a Literature Review and Theory the history of business process management, the foundation of business process modelling was reviewed to see the crude process and activities that are being used by early organization to manage their processes. And also how BPM has evolved during the years.

In the third part is the analysis of the processes and activities of the organization and all the business process techniques that have been applied. Also, past literatures and other sources are analyzed; the formulation of the problem thesis and the solution prescribed.

In the fourth part technological part are mentioned other techniques that can be used in modelling and analysis of the problem including business frameworks that are in use in software development. At the end of this chapter, all this tools and technologies are further explained to see their advantages and disadvantages in order to choose a tool that better fits the organization need.

In the fifth part Research performed - it should also be mentioned that some interviews were conducted and some questions were generated that are specifically targeted at the managers of some department to understand the process that they follow to achieve their work, the technologies that are used to coordinate and achieve these works and their storage facilities. This helps to know areas and resources that are under-utilized and to know how a change in the information flow or process of one department will affect other parts of the organization.

In part "Substantiation of economic efficiency" provide an economic calculations aimed at the estimation of program's efficiency.

In terms " Labour Protection and Safety in Emergency " considered the Requirements to Design PC-Workplace and Factors influencing the functional state of the computer users .

In part "Ecology" analyzes of the Technology Impacts on Ecology and the study of the environment Ecology.

In the graphic part of the drawing shows the details of the designation of the coordinate axes and surfaces, drawing blanks, naladok technological schemes, assembly drawings of technological equipment and layout of equipment at the site mehobrobky.

CONCLUSIONS

1. The project analyzes business processes, tools, techniques and the methodologies for increasing business process speed or reduce cycle time; to increase quality; or to reduce costs, such as labor, materials, scrap, or capital costs;
2. To help management in the utilization of the results in making a good decision and creating the need to document requirements for an information technology project;
3. Explore other ways of optimization of business process that are not currently explored or discovered by organization;

List of published author of THE TOPIC OF WORK

Bandzoukassa Isis Evangeline, B.B. Mlynko. Development and Implementation of a Business Process Model for Planning, Monitoring and Evaluation Department of an organization/ Proc. Of V International scientific and technical conference of young researchers and students <<Current Issues in Modern Technologies>>, Ternopil, November 17-18, 2016, vol.2. – Ternopil, TNTU press. – –8 p.

SUMMARY

In this project, a case study of the business process of an organization is analyzed and optimized and business process modeling tools are used to provide transparency into business processes, as well as the centralization of corporate business process models and execution metrics. A study of business process management and techniques are also verified and the implementation of the result.

Keywords: business process management, business process modelling, process map, BPR, BP model, information technology, organization changes, human resource management, business process model and notation (BPMN).