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# **Reducing operating costs in high cost area “People and Processes” (the example of the Bulgarian enterprises)**

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## Brief information about the South-West University "Neofit Rilski" as Project Partner No.6 under the CROSS-INNO-CUT Project

South-West University "Neofit Rilski" Blagoevgrad is one of the leading universities in Bulgaria. The structure of the SWU "Neofit Rilski" consists 8 faculties, 1 college and many scientific centers as follows:

1/ Faculty of Law and History, 2/Faculty of Mathematics and Natural Sciences, 3/Faculty of Economics, 4/Faculty of Public Health and Sports, 5/Faculty of Pedagogy, 6/Faculty of Philology, 7/Faculty of Philosophy, 8/Faculty of Arts and 9/Technical College

Some of scientific centers:

- European Documentation Center
- Center for Career Development
- International University Center for Balkan Studies
- University Center for Ancient European Culture etc.



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## Cause of high cost area “People and Processes”

As Project Partner No.6, the South-West University has to organize an innovative pilot application in cost reduction in 1 SME. At this moment it is executing a small public procurement in connection with WP - 6. Till the end of the May we expect the innovative pilot application to be completed.

The high cost area is “People and Processes”

Some of the main causes are:

- **High cost of processing goods and services;**
- **High sales cost;**
- **Low employee efficiency.**



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## Some possible solution (TOOLS):

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- ISO 9000 family standards;
- Business Process Reengineering
- Implementation of a modern ERP system.



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The ISO9001:2008 formalizes the processes within the organization which are so important to meet the business objectives that they need a systematic approach.

The ISO 9001:2008 basically renarrates ISO 9001:2000. The 2008 version only introduced clarifications to the existing requirements of ISO 9001:2000 and some changes intended to improve consistency with [ISO 14001:2004](#). There were no new requirements. For example, in ISO 9001:2008, **a quality management system being upgraded just needs to be checked to see if it is following the clarifications introduced in the amended version.**

(Wikipedia [http://en.wikipedia.org/wiki/ISO\\_9000#2008\\_version](http://en.wikipedia.org/wiki/ISO_9000#2008_version) )



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## Enterprise resource planning /ERP/- SYSTEM:

**The** ERP systems are well known and designed after the international standards for business processes and the company begins working according to them. Planning and organizing orders and deliveries lead to at least 15%-20% reduction of stocks, which releases financial resources for the company. These systems make it possible to create different analysis and facilitate quick and adequate response to the changes in market environment, which reduces expenses by about 10% and increases revenues by the same.



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## Case in Bulgaria - VENERA EZI Ltd.: Brief history of this SME

The company has more than 14 years experience on the market of clothing production for ladies – skirts, dresses, pants, jackets, blouses, vests and coats.

The company is specialized in mass production executing orders from companies situated in some of the member states of the EU such as Germany, Belgium, Austria, France, Italy, Spain and it also exports part of its production for the USA.

About 70 people work in the firm (the average number of employees in a year), such as: dressmakers, designers, production control, cutters, technologists, seamstresses, administrative personnel etc.



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## High cost in VENERA EZI Ltd.

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According to the analysis and the design of workflows and processes within an organization low efficiency is the result of poor programming processes that do not meet the requirements of a modern clothing production.

Many of the key business processes can be optimized and in this way the **labor productivity** will increase and **cost price** of the production – will be reduced.





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According to the situation in which VENERA-EZI Ltd. is, there are 2 possible options:

First, basic version: It includes reducing of high cost of processing goods and services and increasing of employee efficiency through Reengineering of key for company business process.

Second, full version for reducing of costs and increasing efficiency of people and processes. This option also includes reengineering of key for company business processes as well as the subsequent implementation of ERP system and ISO 9001:2008. The implementation of these measures requires significantly more financial resources from the company.



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## **Reengineering of key business process in VENERA-EZI Ltd.**

1. Several jobs are combined into one.
2. Decision-making becomes part of the job of employees (employee empowerment).
3. Steps in the processes are performed in natural order, and several jobs get done simultaneously.
4. Processes have multiple versions. This enables the economies of scale that result from mass production, yet allows customization of products and services.
5. Controls and checks and other non-value-added work are minimized.
6. Reconciliation is minimized by cutting back the number of external contact points and by creating business alliances.
7. A single point of contact is provided to customers /etc./



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## ERP in VENERA EZI Ltd.

- ERP is a multimodal software, which aims to integrate all the information flow throughout an enterprise - financial and accounting information, information relating to human resources, logistics information and customer information.
- Due to the lack of an information system in "Venera-Ezi" Ltd., the following modules must be implemented: "Production", "Logistics", "Finances", "Clients" and "Human Resources".



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# PRODUCTION Module

**This module consists of four main sub-modules:**

1. Technology – manner of manufacturing a product - materials and operating steps etc.
2. Material planning MRP (Material Requirements Planning) - planning the material requirements
3. Capacity planning CRP (Capacity Requirements Planning) - this is in essence the capacity planning of production facilities
4. Manage production process SFC (Shop Floor Control) - this is in essence the management of the production process itself.



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## FINANCES Module

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This module of the ERP system covers the entire financial accounting process of the small and medium enterprise Venera – EZI Ltd. It includes the following sub-modules:

- Accounting
- Cash flow
- Fixed Assets
- VAT reporting
- Financial Statements



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## Client, consumer Module

This module provides an overview of the sales and marketing departments. It allows the sharing of tasks and monitoring their implementation. It controls the flow of marketing campaigns and analyzes the results achieved. It also:

- Improves customer service
- Increases employee efficiency
- Reduces the average time to process a new request
- Leads to increase of the number of loyal customers
- Monitors feedback from customers for products used
- Facilitates traders to meet customer expectations
- Monitors effectiveness of marketing campaigns
- Organizes and controls activities in the marketing department
- Keeps track of potential clients and deals



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## Logistic Module

The module allows enterprises to save time and money by optimizing the process of obtaining and enforcing storage orders. The use of the module allows providing accurate information on inventory in real time to the other subsystems. It also:

- **Increases employee efficiency** in the warehouse by easing their reporting of daily activities
- **Improves** customer service by increasing the number of timely deliveries
- **Reduces material costs** by increasing the control and optimization of current stock
- **Increases visibility** on current and expected quantities through reports and statements



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## **Reengineering of key for company business process**

When applying the BPR management technique to a business organization the implementation team effort is focused on the following objectives:

- Customer focus
- Flexibility.
- Quality.
- Innovation.
- Productivity.





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### **A. Short term**

- Reducing the costs for insufficient quality of clothes – by some 8900 BGN/year ;
- Increase in production capacity of VENERA-EZI Ltd. by 10%;
- Reducing to zero the number of complaints due to delivery delays of production.

### **B. Medium term**

- more clients **by** 3-7 %;

### **C. Long term**

- Access to and entering in new markets with new, higher quality of production;
- more clients by 10-15 %;
- more incomes of the company - by 55%.



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## Financial Indicators:

### **First scenario:**

#### **Net present value (NPV):**

Key assumptions: discount rate 5%, period of the project 5 years.

Based on the assumptions above the project is calculated to have the following

Net present value: **NPV = 20 459 EUR**

Adjusted with the risks:

**NPV = 11 913 EUR**

#### **Internal rate of return (IRR):**

Key assumptions: period of the project 5 years.

Based on the assumptions above the project is calculated to have the following

Internal Rate of return: **IRR = 70.75%**

#### **Return on investment (ROI)**

Taking into consideration the estimations above, ROI is calculated below, for the first three year period as the following:

***$(44\ 500 - 20\ 000) / 20\ 000 = 2.125$  times return on investment (the used data in this presentation are available in action plan prepared in WP 5)***



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## Financial Indicators

### **Second scenario:**

#### **Net present value (NPV):**

Key assumptions: discount rate 5%, period of the project 5 years.

Based on the assumptions above the project is calculated to have the following Net present value: **NPV = 14 543 EUR**

#### **Internal rate of return (IRR):**

Key assumptions: period of the project 5 years.

Based on the assumptions above the project is calculated to have the following Internal Rate of return: **IRR = 21.25%**

#### **Return on investment (ROI)**

Taking into consideration the estimations above, ROI is calculated below, for the first three year period as the following:

***$(75\ 000 - 65\ 000)/65\ 000 = 0.154$  times return on investment (the used data in this presentation are available in action plan prepared in WP 5)***



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(the example of the Bulgarian enterprises)

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**Thank you for the attention!!!**

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