

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
NATIONAL AVIATION UNIVERSITY  
Faculty of Transport, Management and Logistics  
Logistics Department

APPROVED  
Head of the Department

Grygorak M.Yu.  
(signature, surname and name)  
«05» June 2020

# BACHELOR THESIS

(EXPLANATORY NOTES)  
OF GRADUATE OF ACADEMIC DEGREE  
«BACHELOR»

THEME: «Logistic approach to enterprise resource management»

Speciality 073 «Management»

Educational and Professional Program «Logistics»

Done by

Lysenko Mariia

(surname and name)

(signature, date)

Supervisor

Molchanova K.M.

(surname and name)

(signature, date)

Standards Inspector

Kaban N.D.

(surname and name)

(signature, date)

Kyiv 2020

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
НАЦІОНАЛЬНИЙ АВІАЦІЙНИЙ УНІВЕРСИТЕТ  
Факультет транспорту, менеджменту і логістики  
Кафедра логістики

ЗАТВЕРДЖУЮ  
Завідувач кафедри логістики  
Григорак М.Ю.  
(підпис, П.І.Б)  
«05» червня 2020 р.

# ДИПЛОМНА РОБОТА

(ПОЯСНЮВАЛЬНА ЗАПИСКА)

ВИПУСКНИКА ОСВІТНЬОГО СТУПЕНЯ

«БАКАЛАВР»

ТЕМА: «Логістичний підхід до управління ресурсами підприємства»

зі спеціальності 073 «Менеджмент»  
(шифр і назва)  
освітньо-професійна програма «Логістика»  
(шифр і назва)

Виконавець: Лисенко Марія Ігорівна  
(прізвище, ім'я та по батькові) (підпис, дата)

Науковий керівник: Молчанова К. М.  
(прізвище та ініціали) (підпис, дата)

Нормоконтролер: Кабан Н.Д.  
(прізвище та ініціали) (підпис, дата)

Київ 2020

NATIONAL AVIATION UNIVERSITY  
Faculty of Transport, Management and Logistics  
Logistics Department

Academic degree Bachelor

Speciality 073 «Management»

Educational and Professional Program «Logistics»

APPROVED  
Head of the Department

Grygorak M. Yu.  
(signature, surname and name)  
«25» May 2020

## TASK

### FOR COMPLETION THE BACHELOR THESIS OF STUDENT

Mariia I. Lysenko  
(surname and name)

1. Theme of the bachelor thesis: «Logistics approach to enterprise resource management» was approved by the Rector Directive №553/CT. of May 04, 2020.
2. Term performance of thesis: from May 25, 2020 to June 21, 2020.
3. Date of submission work to graduation department: June 05, 2020.
4. Initial data required for writing the thesis: general and statistical information about logistics approach to resource management, information of the company «English Prime», production and financial indicators of the company «English Prime», literary sources on logistics approach and resource management, Internet source.
5. Content of the explanatory notes: introduction, the essence of logistics approach to resource management; the types of resource of enterprise; the ways of optimization of resource usage; analysis the activity of the company «English Prime»; identification of disadvantages in the company's activity; application of logistics approach to resource management in “English Prime” school; development of proposals of human resource management; implementation of the “green” office principles in the «English Prime» activity .
6. List of obligatory graphic matters: tables, charts, graphs, diagrams illustrating the current state of problems and methods of their solution.

7. Calendar schedule:

№	Assignment	Deadline for completion	Mark on completion
1	2	3	4
1.	Study and analysis of scientific articles, literary sources, normative legal documents, preparation of the first version of the introduction and the theoretical chapter	25.05.20-27.05.20	Done
2.	Collection of statistical data, timing, detection of weaknesses, preparation of the first version of the analytical chapter	28.05.20-29.05.20	Done
3.	Development of project proposals and their organizational and economic substantiation, preparation of the first version of the project chapter and conclusions	30.05.20-01.06.20	Done
4.	Editing the first versions and preparing the final version of the master thesis, checking by standards inspector	02.06.20-03.06.20	Done
5.	Approval for a work with supervisor, getting of the report of the supervisor, getting internal and external reviews, transcript of academic record	04.06.20	Done
6.	Submission work to Logistics Department	05.06.20	Done

Student \_\_\_\_\_  
(signature)

Supervisor of the bachelor thesis \_\_\_\_\_  
(signature)

8. Consultants of difference chapters of work:

Chapter	Consultant (position, surname and name)	Date, signature	
		The task was given	The task was accepted
Chapter 1	Senior Lecturer, Molchanova K.M.	25.05.20	25.05.20
Chapter 2	Senior Lecturer, Molchanova K.M.	28.05.20	28.05.20
Chapter 3	Senior Lecturer, Molchanova K.M.	30.05.20	30.05.20

9. Given date of the task May 25, 2020.

Supervisor of the master thesis: \_\_\_\_\_ Molchanova K.M.  
(signature of supervisor) (surname and name)

Task accepted for completion: \_\_\_\_\_ Lysenko M.I.  
(signature of graduate) (surname and name)

## **ABSTRACT**

The explanatory notes to the bachelor thesis «Logistic approach to enterprise resource management » comprises of 72 pages, 11 figures, 13 tables, 50 references.

**KEY WORDS: LOGISTICS APPROACH, RESOURCE MANAGEMENT, HUMAN RESOURCES, MATERIAL RESOURSEC, OPTIMIZATION OF RESOURCE USAGE**

The purpose of the research is to study the theoretical foundations of logistics approach to resource management of enterprise and to develop project recommendations for optimization resource usage in the company that provides educational service of foreign languages learning.

The object of the investigation is the process of using resources in a school of foreign languages “English Prime”.

The subject of the research is the appointment of teachers to groups of students and the use of material resources in the activities of the enterprise “English Prime”.

Methods of research are scientific inquiry, empirical, analysis and synthesis, modeling, expert assessments, extrapolation of time series.

Materials of the thesis are recommended for use during scientific research, in the educational process and in the practical work of specialists of logistics departments.

## CONTENTS

NOTATION .....	7
INTRODUCTION .....	8
CHAPTER 1. THEORETICAL BASIS OF LOGISTICS APPROACH TO ENTERPRISE MANAGEMENT.....	11
1.1 Conceptual apparatus of the logistic approach.....	11
1.2 The structure of resources and flows of the enterprise.....	14
1.3 Management of enterprise resources.....	18
1.4 Chapter1 summary.....	23
CHAPTER 2. ACTIVITY ANALYSIS OF THE “ENGLISH PRIME” LANGUAGE SCHOOL.....	25
2.1 General description of the company “English Prime”.....	25
2.2 Analysis of production and financial performance of the company.....	30
2.3 Analysis of the current situation and analysis of problem areas.....	37
2.5 Chapter 2 summary .....	41
CHAPTER 3. DEVELOPMENT OF PROPOSALS FOR OPTIMIZING THE RESOURCES OF THE ENGLISH LANGUAGE SCHOOL "ENGLISH PRIME".....	43
3.1 Logistic approach to resource management of the school “English Prime”	43
3.2 Organization of teacher appointments for the groups at “English Prime”...	48
3.3 Proposal for saving material resources by introducing a “green” office.....	53
3.4 Chapter 3 summary .....	61
CONCLUSIONS AND RECOMMENDATIONS .....	64
REFERENCES .....	67

## **NOTATION**

- CRM – Customer Relationship Management  
IELTS – International English Language Testing System  
MRP – Manufacturing Resource Planning

## INTRODUCTION

The resources of the enterprise - this is what makes up a significant part of its activities. It is the resources and their use that determine the potential of the company. Enterprise resources are all tangible and intangible assets, as well as intellectual potential and opportunities that can be directed towards the creation of products and services. Proper resource management is not only the basis for the normal functioning of the organization, but also can become a competitive advantage.

One of the distinguishing features of resources is their limited nature and cost, therefore, the topic of determining their effective system is relevant, and it allows identifying reserves for increasing the profitability of financial and economic activities of enterprises and liquidity of assets.

A lot of works by leading economists, such as Lyubushin N.P., Lobacheva E.N., Zakharov I.V., Legostaeva E.A., Shubina S.V., Shraibfeder D., Slipachuk O., Zolotova N.N., Savitskaya G.V., Lukash Yu.A., Zyryanova O.T. and others are devoted to the study of issues of an effective resource system.

In market conditions, the effectiveness of the enterprise is evaluated by many indicators. In turn, these indicators depend on various factors, such as the volume of products sold, the quality of the product, demand, costs, etc.

In modern enterprises, specialists require a high level of knowledge in various fields. Among them are production, finance, marketing, etc. Specialists should not only know and understand all these processes well, but also be able to quickly and timely respond to a changing situation, and as a result make informed decisions.

In order for the system to function as a whole, it is necessary to organize end-to-end management.

Effective implementation of management processes is ensured by logistic methodologies that allow optimizing the entire supply chain.

Nowadays, logistics as a practical activity has steadily occupied its niche in the management of modern enterprises. The logistic approach to the control object, tools



and methods of logistics are applied in various management fields. The presence of a logistics unit in the company is no longer something unusual, but is considered as a mandatory component of the organizational structure of a successful enterprise. The area of competence of specialists in the field of logistics covers the management of a variety of objects - document management, human flows, information, financial and, of course, inventory.

The purpose of bachelor thesis is to develop proposals for optimizing the use of resources by foreign language school.

In accordance with purpose of thesis the following tasks were defined and formed:

1. To identify conceptual apparatus of the logistic approach.
2. To determine which resources and flows are in the enterprise.
3. To identify how to manage enterprise resources.
4. To give general description of the company “English Prime”.
5. To analyze production and financial performance of the company.
6. To conduct the analysis of the current situation and of problem areas.
7. To identify how the logistic approach can be applied to resource management of the school “English Prime”.
8. To suggest organization of teacher appointments for the groups at English Prime.
9. To give proposal for saving material resources by introducing a green office.

The object of research were process of use human and material resources of the school “English Prime”.

During the performance of the thesis were used general scientific methods: system analysis, induction and deduction, analyze and synthesis, expertise. During calculation of economic effectiveness of the project were used project performance indicators.

The information sources during thesis research were:

–regulations and legal documents;

–scientific and methodological development whose connect with social and environmental responsibility;

–statistics and financial report of “English Prime” school, internal documents that describe company’s activity;

–Internet sources.

During carrying out calculations and edition of thesis were used Microsoft Office software applications: Word, Excel and PowerPoint.

# **CHAPTER 1**

## **THEORETICAL BASIS OF LOGISTICS APPROACH TO ENTERPRISE MANAGEMENT**

### **1.1 Conceptual apparatus of the logistic approach**

In recent years, significant changes have taken place in the economic practice of a number of countries; new management methods and technologies that are based on the concept of logistics have begun to be used.

The most important aspect of logistics is the ability to influence the strategy and tactics of the enterprise and the creation of new competitive advantages for the company in the market, that is, its ultimate goals.

The use of logistics accelerates the process of obtaining information, increases the level of service. Logistics coordinates the activities of the entire enterprise as a whole.

Logistics also coordinates the relations of all members of the supply and distribution system. Logistics system management includes process management, such as transportation, warehousing, assembly and ordering, product distribution, packaging and maintenance. In modern conditions, the range of activities covered by logistics is constantly expanding and includes not only intra-firm but also inter-firm coordination and integration of logistics.

Logistics should be considered as a key element of the competitive market strategy of the enterprise, as a key primary activity to ensure competitive advantage.

Nowadays many enterprises use the so-called logistics approaches. The logistic approach is a systematic approach to the study of socio-economic and human-machine systems. The introduction of logistics methods and principles allows to respond flexibly to the needs of consumers, reduce the time between the arrival of

raw materials and the time of delivery of goods, minimize inventories and speed up the process of obtaining information.

Trends in global economic development lead to increased requirements for the efficiency of enterprises, which are associated with the intensification of their product range policy, shortening the life cycle of goods, complicating demand forecasting, increasing warehousing and transportation costs. Therefore, rational planning of production and sales, which are focused on meeting demand with minimal costs, strengthening coordination between interrelated activities is becoming increasingly important. Solving these problems requires developed logistics, the presence of competent logistics management. The logistical approach to business management is becoming a major component of its competitiveness. Western logistics experts believe that companies that have achieved world standards in logistics are able to gain a competitive advantage through continuous improvement of customer service.

The main tools of the logistic approach are analysis and synthesis of the system under study. Analysis of the system allows you to identify its most significant components, give them a characteristic, as well as a quantitative assessment of the interaction with each other, determines their influence on the parameters of the system under study. Synthesis is used in the development and operation of a formalized dynamic model of system parameters.

The main principles of the logistic approach include (see Fig. 1.1):

- 1) The principle of synergy (a systematic approach, a comprehensive solution of the tasks);
- 2) The principle of dynamism (logistics systems are not static objects, but constantly developing elements);
- 3) The principle of completeness (reflects that the logistics system is built from several objects that are interconnected by a communication system);
- 4) The principle of initiative (innovation);
- 5) The principle of expediency (using the potential that plays the resulting role in achieving the objectives).

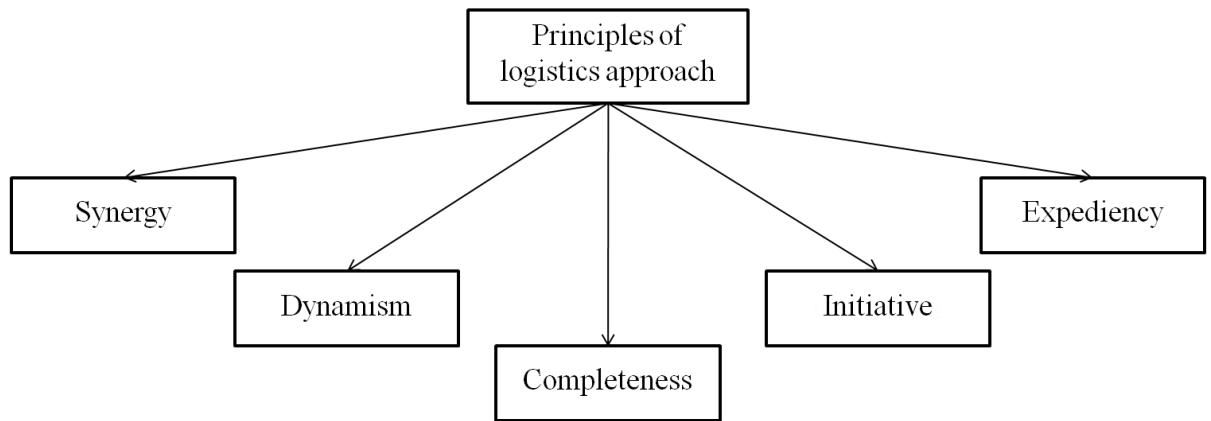


Figure 1.1 - The main principles of the logistic approach

The experience of logistics is evidenced by foreign experience. According to the European Logistics Association, the implementation of the logistics approach makes it possible to reduce production costs by 10-30% and reduce inventories by 30-70%. That is why logistics approach is used in various fields of activity: entrepreneurship, the public sector, urban economy, transport and trade infrastructure, industry, agriculture, tourism, construction, etc.

The logistic approach to managing material flows at the enterprise allows to optimize the implementation of a complex of logistics operations to the best extent possible. A feature of this approach is to change the priorities of managing the financial and economic activities of the organization. An important role in modern conditions is played by the production process, which takes the form of flows, rather than a product or service. Implementation of the management of stream processes and their transformation is a qualitatively new form of control that surpasses traditional forms, both to maximize the final results and the level of creative potential.

The economic effect of using the logistic approach to managing material flows is made up of reducing the level of costs for the implementation of certain stages of economic activity by improving the management system. Also, the logistic approach creates the conditions for improving a wide variety of indicators of the functioning of the material-conducting system, since the interconnection of individual links is enhanced, its overall organization is improved, and controllability is improved.

When using the logistic approach to managing material flows, each organization in the process of its activity should determine for itself the main strategic goals and objectives, which are as follows:

- organization of the production and technical basis of promising, critical and basic technologies that ensure the manufacture of products with ultra-modern properties;
- the formation of a flexible fast-moving production system, operating automatically for a specified time interval, having the property of automated readjustment in the manufacture of products of arbitrary nomenclature within the established limits of their characteristics and consumer properties;
- preservation and development of effective basic technologies that provide a competitive price for the product, creating the image of an enterprise attractive to consumers;
- formation of an effective personnel policy, which allows to guarantee a high level of material and moral motivation of personnel;
- providing technological capabilities to intensify the creation of products of higher technological structures by scientific organizations in a single information environment;
- creating the opportunity to diversify the product portfolio by creating new types of industries.

## **1.2 The structure of resources and flows of the enterprise**

Resources are an organization's assets and are thus the basic building blocks of the organization.

They include tangible assets, such as its plant, equipment, finances, and location, human assets, in terms of the number of employees, their skills, and motivation, and

intangible assets, such as its technology (patents and copyrights), culture, and reputation [1].

The resources which are important to the organization and create a value proposition in service to its customers and deliver the product to the customers are called key resources. These types of business resources are crucial and are important to have for the business in order for it to succeed. It is usually based on tangible and intangible resources.

They are also considered as important assets of the company in particular which are required to create the final product and are usually differentiated from the competitors by few key resources. Key resources involve the operational and business which define the kind of material the business will need and all type of materials that the business needs to employ. These aspects play a very crucial role in getting the value to the business and help in achieving minimum value a business needs to have in order to deliver to its customers.

The types of business resources will impact the sustainability of the organization along with its profitability (see Fig. 1.2) [2].

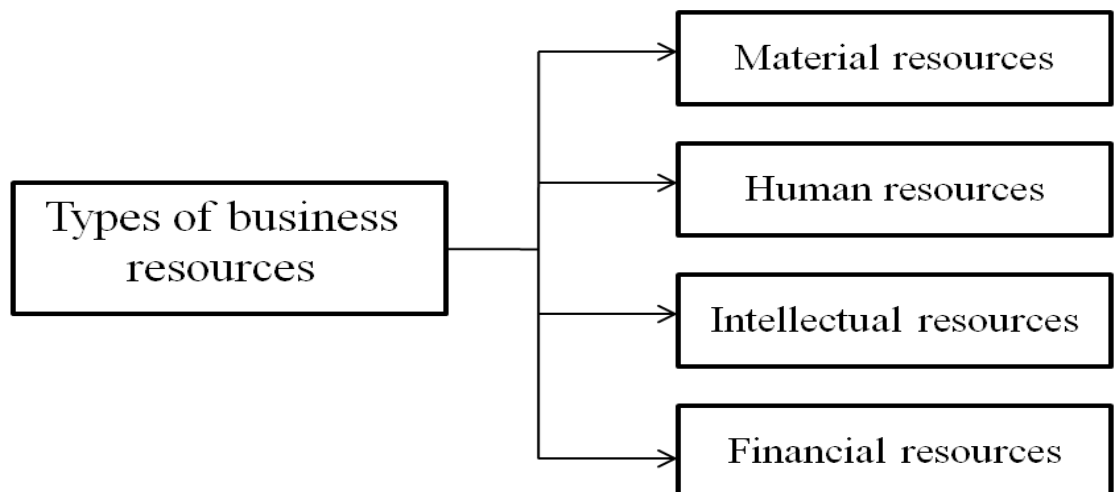


Figure 1.2 – Types of business resources

Material resources - these are material assets and resource potential that are necessary for the continuous production of products, the provision of services and the performance of work under contracts. It is a set of objects of labor intended for use in

the production process of a social product. Material resources include raw materials, materials, fuel, energy, semi-finished products, parts, etc. Quite often, all resources in material form are attributed to material resources.

Human resources are people, or rather, the abilities, skills and abilities that people sell to organizations for wages. People are perhaps the most important resource of an organization. Indeed, examples are known where, only thanks to the enthusiasm of the workers, very ambitious goals were achieved.

At the same time, human resources are the most difficult to use. Although the term “human resources” is used widely in management and other disciplines, such a term is rather difficult to use. In a broader sense, people cannot be used in the same way that money, material resources, technology and information are used.

Human resources are a factor on which the success of an organization depends to a large extent. And therefore, for any organization, specialists are needed who are able to carry out their duties efficiently and effectively solve the tasks they deserve.

Intellectual resources are a combination of accumulated knowledge, developed technologies and scientific discoveries. Intellectual resources of an enterprise include the results of creative and intellectual work of people, as well as organizational knowledge inherent in this enterprise, which are objectified in the following forms: human capital, intellectual property, information, knowledge, innovations, business technologies, organizational (corporate) culture. They are the basis for the creation of very important assets of the enterprise - intangible assets.

Financial resources - are a combination of funds that are formed from own, borrowed and attracted sources.

Financial resources are the economic basis for organizing trading activities on the principles of self-financing. Therefore, the most important task of enterprises is to find reserves to increase their own financial resources and improve their use in order to increase the efficiency of the enterprise as a whole.

The business model of an organization is a major indicator of the type of key resource being utilized by the company. That’s why key resources are directly relevant to the number and type of key activities the company engages in. Ultimately,



the quality of key resources will impact the sustainability and profitability of the company [3].

The success of any company or company depends on how effectively the management of the food and material and technical base is carried out. Business always requires a competent and balanced approach and a miscalculation of the situation ahead. Here logistics comes to the rescue, which allows the company to increase profits and make products and services competitive, making the best use of material-conducting systems. Flows in logistics are a directed movement of a product (materials, raw materials, finance, information, etc.) in the space for a certain time.

The following types of flows are distinguished: material, labor, service, information, energy and financial flows etc. The most significant are material, information and financial flows.

Material flows are formed as a result of transportation, storage and other material operations with raw materials, semi-finished products and finished products - from the primary source of raw materials up to the final consumer. Material flows can occur between different enterprises or within the same enterprise.

Material flow - this is products (in the form of goods, parts, inventory), considered in the process of application to it of various logistic (transportation, storage, etc.) and (or) technological (machining, assembly, etc.) operations and related to a specific time interval. The material flow is not at a time interval, but at a given moment of time passes into the material stock.

Information flow is a message flow in speech, document, magnetic and electronic forms generated by the original material flow and intended for the implementation of control functions. Information flows can be transmitted on paper, magnetic, optical media, by courier, mail, telephone, fax, as well as e-mail and telecommunication networks. Information related to material flows can be divided in time into three types: leading (preliminary); arriving simultaneously with the material flow (for example, its quantitative and qualitative parameters); following the material flow (for example, various confirmations, claims).

A large role in the activities of any commercial (and non-profit too) organization is played by financial flows. Without financial resources, it is impossible to purchase components and raw materials, pay for wage labor, ensure the transportation of goods, and much more. Management of financial flows of a company is one of the basic tasks of company management.

The financial and economic activity of enterprise is accompanied by the movement of cash, which is identified as their income and expenditure. This continuous process is defined by the notion of financial flow. Optimization of financial flows is the most important factor in ensuring financial stability of the enterprise. The financial management system of an entity is individual for each enterprise and needs to take into account the features of its financial and economic activity and the conditions of the external and internal environment [4].

Logistic flows can be expressed not only by the movement of goods, finance or information. There is also the so-called activity approach. These are service flows, which are characterized by the number of services provided over a given time. Services are a special activity serving to satisfy both social and personal needs, for example, advisory services, transportation services, information services, etc. At the moment, there is a rapid development of service flows, due to the development of the service industry, which involves a large number of companies.

### **1.3 Management of enterprise resources**

Resource management is the process of planning, scheduling, and allocating resources in the best possible way. The ultimate aim is to maximize resources' efficiency. This in turn will help the success of the project, task, or monthly goals [5].

Due to improper management of the enterprise's resources, individual companies may experience wage arrears, rent arrears, and a shortage of goods or raw materials — as in the case of production organizations. But managing an organization

should be even more rational. It is necessary not only to count and plan money. It also requires planning staff time. If a large staff is recruited, and the work is mainly done only by a part of the employees, it means that the rest of the payroll is just unnecessary expenses. In the professional management of the enterprise's resources, the premises or the machines and equipment necessary for operation can also act as resources.

Some of processes of resource management are presented in the Table 1.1.

Table 1.1 Advantages of resource management

№	Advantage	Description
1	Avoids unforeseen hiccups	By understanding the resources upfront and planning how to use them, it is possible to troubleshoot gaps or problems before they happen.
2	Prevents burnout	Effective resource management allows to avoid “over allocation” or “dependency” of resources by gaining insight into the team’s workload.
3	Provides a safety net	Let’s say the project was not successful due to lack of resources (it happens). Resource planning and management establishes that you did everything you could with what you had.
4	Builds transparency	Other teams can gain visibility into the team’s bandwidth, and plan accordingly if the team is at maximum capacity or available to take on new projects.
5	Measures efficiency	With a high-level understanding of what’s needed to manage and execute an upcoming project, it is possible to plan effectively.

There are some resource management techniques:

### 1. Resource Allocation.

Resource allocation helps to get the most from available resources. Based on team members' skills and capacity, resource allocation is the process of tackling projects using the resources available at the disposal in the most efficient manner possible.

### 2. Resource Leveling.

Another type of resource management is called resource leveling. This technique aims to discover underused or inefficiently used resources within the organization and work them to your advantage. An example of resource leveling is having a content writer who has experience in graphic design help out the design team by taking on small content tasks that require design work. If a team member can flex their design skills, the design team won't need to hire a freelancer if they suddenly get flooded with design requests.

### 3. Resource Forecasting.

Having a resource management plan is critical to optimizing people, materials, and budget efficiency. Resource forecasting allows to predict future resource requirements before a project begins. During the planning stages of a project, resource forecasting determines the project's scope, possible constraints, unforeseen costs, and potential risks [6].

The process of managing the resource potential of the enterprise consists of separate management cycles, each of which can be divided into a number of independent operations. These operations are: collection and transmission of information, its processing and analysis, development based on the analysis of management decisions, transfer of decisions and their implementation, comparison of the obtained decisions with the indicators and their planned values.

For high-quality management of enterprise resources, the mechanism of formation and use of resources should be based on the systematic and complex principles. The systematic principle supposes the existence of a resource management mechanism as a specific dynamic system. The system should be understood as a set

of elements that are interconnected and interdependent with each other, forming a certain unity. A systematic approach to the management of economic resources allows a deeper study of the object of management, to identify causal links between the components of the resource potential of the enterprise.

The principle of complexity should be considered as a mutually conditioned and proportionally mutually agreed development of the resource management system as a whole, which ensures the interconnection of all subsystems and elements. The complexity of the review agrees on all aspects of the functioning of the economic mechanism for managing the resource potential of the enterprise.

Among the main areas of improvement of forms and methods of enterprise resource management an important place belongs to the formation of information support of the enterprise and increase the scientific level of planning with the use of information technology. Of particular importance is the use of economic and mathematical methods, which improves the process of planning and forecasting the use of resources, their optimal distribution. Other ways to improve the management of enterprise resources include the creation of a system of personnel motivation, the application of an innovative approach to the management of enterprise resources, which will implement scientific and technical achievements in the practical activities of the enterprise.

A prerequisite for the effective functioning of a modern enterprise is the availability of relevant information for making timely management decisions and optimally aligned business processes for all aspects of its activities.

There are methods by which effective enterprise management systems can be built. The names of these methods are MRP, MRPII and ERP.

Methods or approaches MRP, MRPII and ERP are a formalized set of concepts and processes that allows you to create a description of how the enterprise should work. They are of a purely constructive nature, that is, they can be perceived as a set of instructions (algorithm): do it this way, transfer data or materials in such and such a way there, make a record of the operations performed there and there. They are intuitive to any manager or manager. Their main value is as follows:

- they appeared as a result of the analysis of the activities of really working enterprises;
- their development took place evolutionarily, the next concept absorbed the previous one;
- they have proven their effectiveness;
- they cover all the activities of the enterprise.

Material requirements planning (MRP) is a computer-based inventory management system designed to improve productivity for businesses. Companies use material requirements-planning systems to estimate quantities of raw materials and schedule their deliveries [7].

MRP II (manufacturing resource planning) is a methodology for detailed production planning of an enterprise. Its main component is the MRP system. Unlike MRP, the MRP II system allows planning the needs of the enterprise not only for materials, but for all production resources (materials, raw materials, components, equipment, and personnel), keeping count of orders, planning production capacity and production costs, simulating production, keeping its count, planning run-out production, quickly adjusting plans and production targets, etc [8].

Enterprise resource planning (ERP) is a process used by companies to manage and integrate the important parts of their businesses. Many ERP software applications are important to companies because they help them implement resource planning by integrating all of the processes needed to run their companies with a single system. An ERP software system can also integrate planning, purchasing inventory, sales, marketing, finance, human resources, and more.

ERP applications allow the different departments to communicate and share information more easily with the rest of the company. It collects information about the activity and state of different divisions, making this information available to other parts, where it can be used productively.

ERP applications can help a corporation become more self-aware by linking information about the production, finance, distribution, and human resources together. Because it connects different technologies used by each part of a business,

an ERP application can eliminate costly duplicate and incompatible technology. The process often integrates accounts payable, stock control systems, order-monitoring systems, and customer databases into one system [9].

A Customer Relationship Management (CRM) system enhances a business's ability to cultivate and nurture customer relationships. The system provides a unified approach to organizing customer information while also streamlining processes.

Traditionally, due to the customer focus, CRM has been used primarily as a sales and marketing tool. However, in recent years, certain CRMs have evolved to play a more central role, expanding beyond sales and marketing into almost every department [10].

The advantage of using CRM is the overall improvement of the company. It is achieved through the sharing of the necessary information by all departments, which increases the efficiency of interaction with the client.

Automation of standard functions of sales, marketing and service departments can significantly increase the productivity of their activities. Specific to CRM systems is that these functions are not just automated, but become part of a single system tailored to the client. Each interaction takes place in the context of the entire history of the client's relationship with the company, which can be used to provide additional services.

CRM allows, through automation, to move the decision-making process to a lower level and increase the reaction rate to a client's request. Moreover, thanks to this strategy, any employee, based on the client's request and the history of relations with him, can offer the latter exactly the product that he needs.

#### **1.4 Chapter 1 summary**

Nowadays, logistics is perceived as a part of the modern philosophy of business, the entrepreneurial worldview, the concept of optimizing the activities of enterprises

in the competition. The term “logistics” is used in various fields of activity and situations requiring accurate coordination of actions, and a strict sequence of operations.

If an enterprise is considered as an object of logistic impact, then managing it involves working with material, and with information, and personnel, and, financial flows. Then the entire resource potential of the company (material, financial, information, personnel, image, etc.) can be shown in development.

Logistics studies the features of processes associated with flows, so operating terms are directly based on a group of flow terms: flow, material flow, information flow, financial flow, personnel flow, service flow, main flow, associated flow. In this regard, the use of logistics provides a new angle of view on the activities of the company and the strategy of its development, studying not resources, but their movement in space and time, which is understood as a continuous change in the state of resources - their quantity, quality, location, etc.

For modern reality, the main thing is the need to introduce such logistics structures that would be most adapted to the work of this enterprise and to the processes taking place in the economy. This applies especially to the construction of international logistics systems, which should be adapted to the maximum extent possible to meet modern requirements, in particular, to meet the standards for ensuring the quality of work adopted in developed countries.



## **CHAPTER 2**

### **ACTIVITY ANALYSIS OF THE “ENGLISH PRIME” LANGUAGE SCHOOL**

#### **2.1 General description of the company “English Prime”**

English Prime is an English language school. It was founded in 2005 in Kyiv.

It all started from scratch - there were three people and one room. Now the company has more than 150 employees and more than 3000 students studying in the morning, evening and afternoon six days a week, there are 8 large branches in Kyiv, and it is planned to open more branches in Kyiv and other cities of Ukraine. Thousands of students began to communicate freely in English and were able to realize their dreams.

The methodology of the school is based on many years of research in the field of teaching foreign languages and is based on successful practice in learning our native language. Its simplicity and effectiveness are absolutely unique.

English Prime offers its clients training at the course that was created by the international organization Applied Scholastics International, which also includes the English Prime school.

Applied Scholastics International is a nonprofit educational organization based in Missouri. It was founded by a consortium of American educators in 1972. Administered by the Association for Better Living and Education, it is dedicated to the broad implementation of learning tools researched and developed by American author and educator L. Ron Hubbard [11].

Applied Scholastics' declared mission is: "to promote and develop programs of effective education for educators, business trainers, tutors, parents, children and people in all walks of life who need improved study skills to enhance their scholastic, business and personal activities."

Hubbard's theories on education describe three "barriers to learning". The first is the absence of mass, pertaining to the lack of a physical object relating to a concept. The second is a steep study "gradient", meaning a necessary previous step was skipped to master a skill. The third is the "misunderstood word", which necessitates looking up unclear words in the dictionary.

Students are taught that "misunderstood words" are a major cause of confusion and misunderstanding. They are taught to use dictionaries extensively. Emphasis is also put on making sure children are taught at a "gradient", so that a subject's crucial elementary concepts come before more difficult concepts. "Mass" is described as a measure of mental tangibility that students ascribe to a subject, so that students have a picture in their mind of the thing they are learning about.

Applied Scholastics licenses Study Tech to a number of schools throughout the world. In return, these schools pay 4% of their gross income to Applied Scholastics [12].

One of the projects of the organization "Applied Education" is the English language course "English as a Second Language" (ESL). English Prime successfully combined ESL course and study technology by Ron Hubbard (see Fig. 2.1).

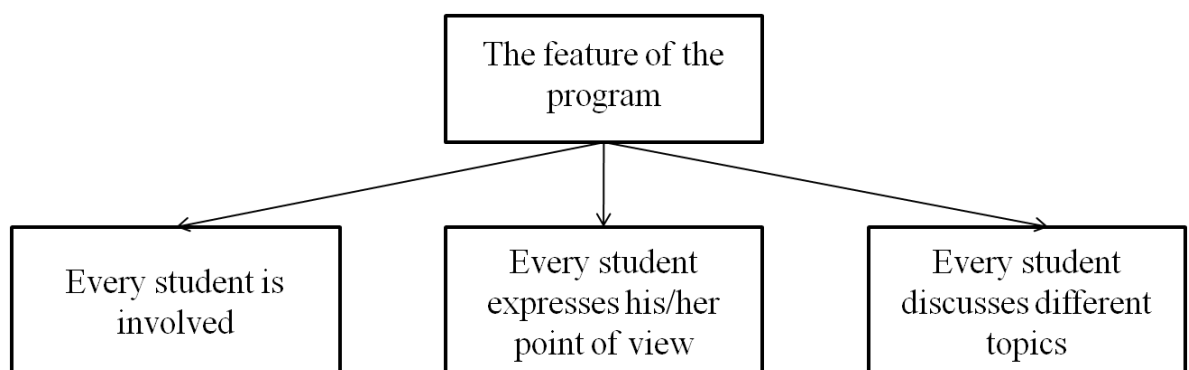


Figure 2.1 - ESL Features from English Prime

The direction of training at English Prime is aimed at an adult audience of people who required knowledge of a foreign language for work or for personal purposes. Students from different age categories and fields of activity are united in one group. Such a distribution imitates being in a real society. The student becomes

more relaxed, learns to speak English with different people and in different situations. Even the most humble people will not be able to remain silent.

At first glance, the essence of the method is quite simple - to make the student talk more and successfully cope with the language barrier. But behind this lies the hard work of teachers who analyze the student's success, direct him in the right direction and focus on the necessary points.

Classes are not quite in the traditional format. In addition to classic teaching materials, students will be offered audio and video content, linguistic games, and selections of relevant English-language films. This approach, according to experts, provides a synergistic effect and enhances knowledge of English.

A flexible curriculum is possible, but to improve the results, teachers advise to practice speaking regularly. A full course from Beginner to Proficiency will take about a year. The intensity of the lesson schedule allows not to stretch studies, because it takes about 7 weeks to complete one level of English.

Following the latest recommendations of the International Applied Education Organization, the focus of the English Prime school teachers is to maximize the development of language skills. The technique used by English Prime will help the student overcome the psychological barrier and make him speak English already in the first lessons.

One of the advantages of the technique is an increase in the speed of perception of sound and symbolic information. Frequently used vocabulary and basic linguistic constructions will be brought to automatism. The program will also please those students who find it difficult to memorize words. The practice of active communication will allow you to replenish the vocabulary in the process of discussions, interactive classes. This will happen easily and meaningfully, without any cramming. The teacher's task is to identify the "problem place" of the student, re-speak the topic, to analyze examples, back up the material with an interesting story, essay or video clip.

Goals and aims of English Prime program are presented on the Fig. 2.2.

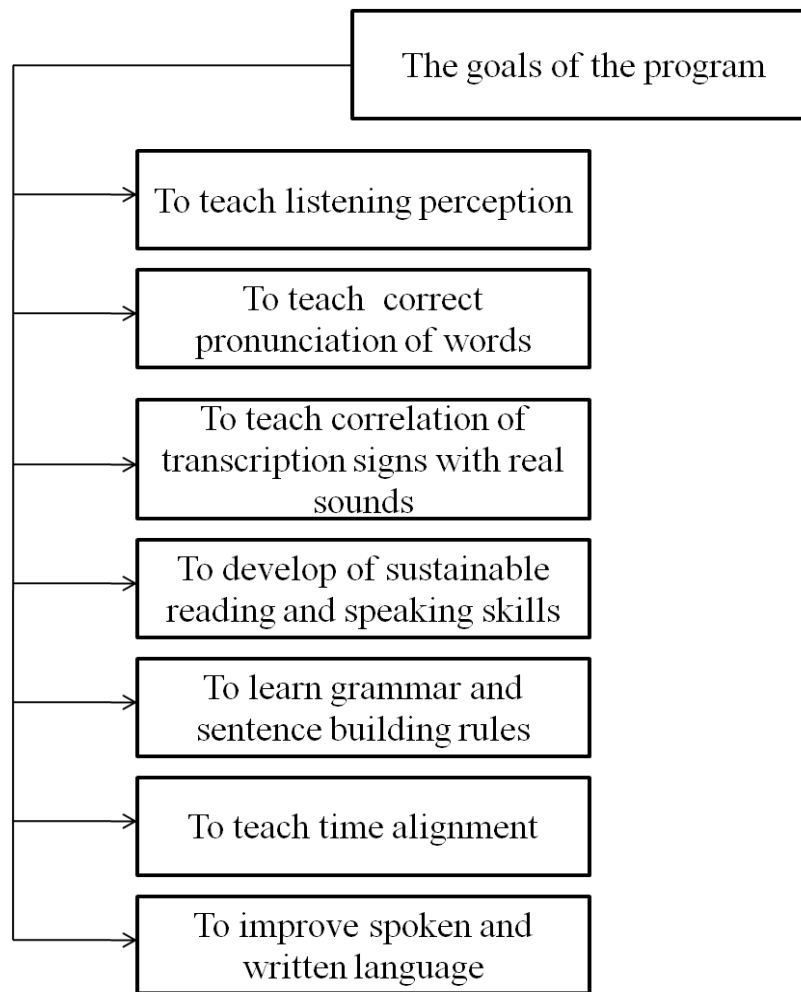


Figure 2.2 – The goals of the program from English Prime

The website of the educational institution presents a huge selection of foreign courses for beginners, pros and special directions. The introduction of ESL teaching methods has improved the quality of services provided and improved students' results. Students are offered individual advice on choosing the right English language study program.

Courses offered by English Prime:

- General English course from Beginner to Advanced;
- Intensive English course: one level in 8-10 days;
- Special IELTS training courses;
- English for travel;
- Job Interview - a weekend course to prepare for an interview in English;
- Business English;

- Mastery (an author's course for graduates of the school);
- General English for children and adolescents.

80% of the time in training is devoted to conversational practice. The methodology of the school is unique, since English is studied according to the same principle as the native language in childhood. That means that during training the main attention is paid to imitation, repetition of words, phrases, and eventually sentences in order to remember them. Such a repetition, according to English Prime, ensures that after memorizing standard phrases and words, it is possible to organize them into a competent "live" speech.

Grammar is given 20% of the course time, and it is immediately practiced during conversations. However, in the description of each course there is a list of grammatical topics.

Native speakers also teach at English Prime, but they only participate in specific parts of the lesson. The basic knowledge is given by Ukrainian teachers, whose task is to explain easily the necessary material.

English Prime has many awards for its work:

- 1st place in the world among English schools teaching according to the ESL method, 2014 – 2018;
- TOP-3 best courses in Kyiv in 2008;
- TOP-9 best companies in the industry in 2010;
- The best English language school of 2012 (Parta.ua);
- In 2017, English Prime® School received the "Favorite of Successful People" award in the nomination "Best Foreign Language School";
- In 2018, English Prime® School received the "Absolute Favorite of Success" award in the nomination "Best Foreign Language School";
- Rating 9.7 out of 10 on Enguide, the first service in Ukraine of searching for English language courses.

The main competitors of the school:

- Green Forest;
- British Council;

- Speak Up;
- American English Center.

## 2.2 Analysis of production and financial performance of the company

English Prime has 8 offices which are situated not far from metro stations (see Fig. 2.3). Such location is very convenient for clients and personnel, because there is no need to spend much time to get to the office.

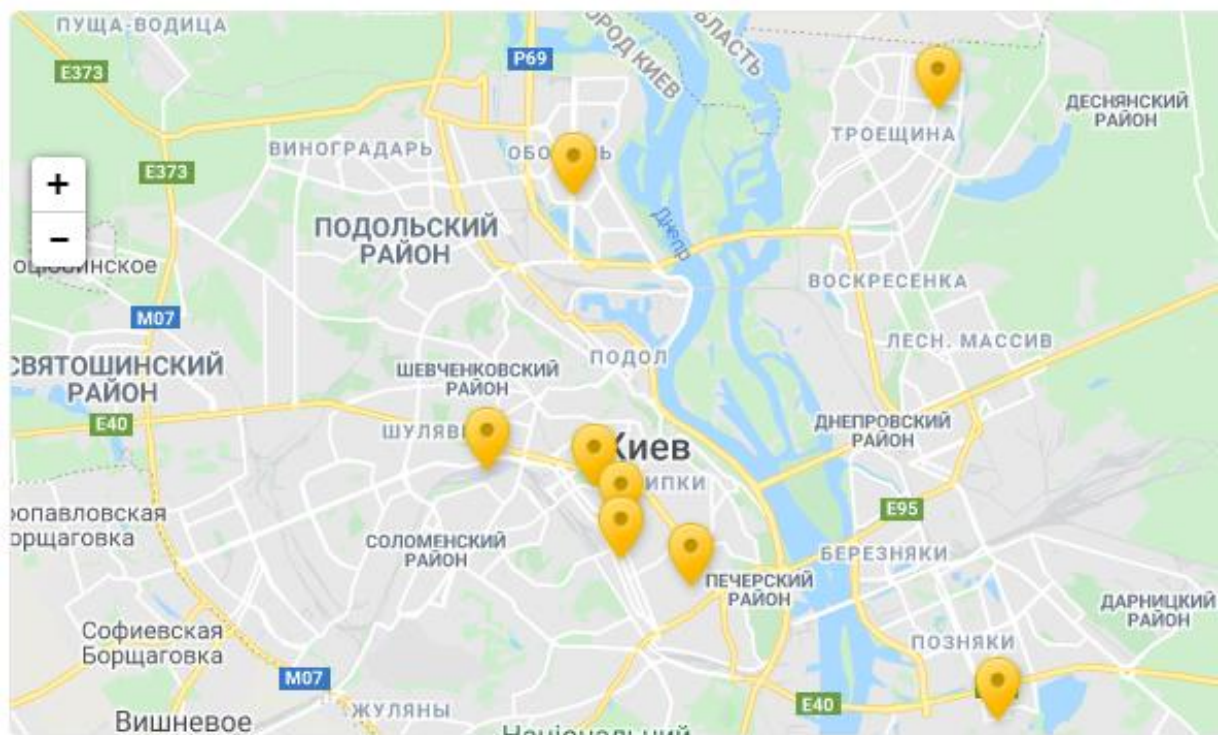


Figure 2.3 – Location of English Prime branches

Each branch has its own production level. Production level is the ratio of the size of the branch to the number of students studying on it. By this indicator, you can determine how much the branch is full. So there are the following indicators:

- Universitet – 115%,
- Poznyaki – 90-100%,

- Troyeshchina – 90-100%,
- Lva Tolstogo - 85-90%,
- Obolon – 80%,
- Olimpiyska – 70%,
- Pechersk – 55-60%,
- Polytechnical Institute – 50%.

It is important to note that in summer these indicators can decrease by 15-20%, because many people go on vacation so this period is not a season for language courses.

The main income the company receives from major courses:

#### 1. Main program.

The program consists of consecutive 9 levels and is perfect for both those who have never studied English, and for students with a high level. The student will begin training at the right stage. This is the best choice for fast and confident growth of the student's English level. Classes are also held 3 times a week in the morning or in the evening. The duration of the class is 3 hours.

#### 2. Intensive.

In just 10 days, students go through a program equivalent in intensity to 1.5 months of classes. Thanks to such a rich learning and a lot of conversational practice, the passage of the intensive is similar to immersion in an English-speaking environment.

#### 3. English courses for students.

There are groups for students, they are called “for teens”. Students of these groups study in the same way, but with a difference in the duration of each lesson - 2 hours (instead of 3). Classes are also held 3 times a week, but at a time convenient for students - from 16:00 to 18:15.

#### 4. Advanced courses.

##### 4.1. General Business English.

Business English courses in Kiev English Prime are designed for entrepreneurs, people who have their own business, work in foreign companies, or plan to work in such.

#### 4.2. Mastery.

This is an author's course for graduates of the school, as well as people with an advanced level of knowledge of the language who want to maintain and develop their knowledge.

The Mastery course is without a doubt the pinnacle of the school's curriculum. Students who completed this special course of the English language speak of it as an exciting journey that greatly influenced not only their level of English proficiency, but also expanded their outlook on life.

#### 4.3. Advanced Listening Skills.

This course will be invaluable in developing listening comprehension skills.

In its effectiveness, the ability to quickly develop listening skills cannot be compared with other training programs. A huge number of special workouts will make your ear “work” 100%.

#### 5. IELTS Preparation Course.

A special practical training course consists of 72 hours of training: 24 lessons of 3 hours (180 minutes) + 1 lesson “Free test”. The duration of the course is 2 months.

#### 6. Special courses.

##### 6.1. Course Job Interview.

The express course takes place on the weekend. Designed for people who want to get a real job interview in English.

##### 6.2. Course English for Travelers.

The 2 days express course for people who travel a lot and they don't have time to take the whole course. During this course all necessary words and phrases for traveling are taught.

The Table 2.1 shows the duration of the courses and their price.



Table 2.1 – Duration and prices of the courses

Course	Duration	Price
Main program (Beginner – Advanced)	1 level – 21 lessons (7-8 weeks)	6500 UAH
Intensive (Beginner – Advanced)	1 level – 10 days in summer , 8 days in spring and winter	6500 UAH
Courses for teens	1 level – 21 lessons (7-8 weeks)	5200 UAH
General Business English	15 lessons	6000 UAH
Mastery	21 lessons	6500 UAH
Advanced Listening Skills	21 lessons	6500 UAH
IELTS Preparation Course	18 lessons + 1 free lesson (trial IELTS test at the school)	9000 UAH
Job Interview	9 hours (weekend course)	2200 UAH
English for Travelers	9 hours (weekend course)	2200 UAH

Due to the big variety of courses and high quality of services, English Prime has a lot of students. The number of students during 3 years is shown in the table 2.2

Table 2.2 – The number of students for 2017-2019 years

Month	2017	2018	2019
January	1216	1328	1899
February	1389	1793	2593
March	1373	1995	2646
April	1245	1930	2694
May	1186	1505	2628
June	1044	1617	2514
July	996	1440	2346
August	928	1330	2284
September	1077	1271	2317
October	1387	1963	2493
November	1614	2349	2567
December	1642	2387	2698

The change of the amount of students during 3 years is depicted in the Figure 2.4. You can also see in the figure that in summer there is a recession of students, since at this time many people go on vacation or take a vacation. The busiest time is from November to May.

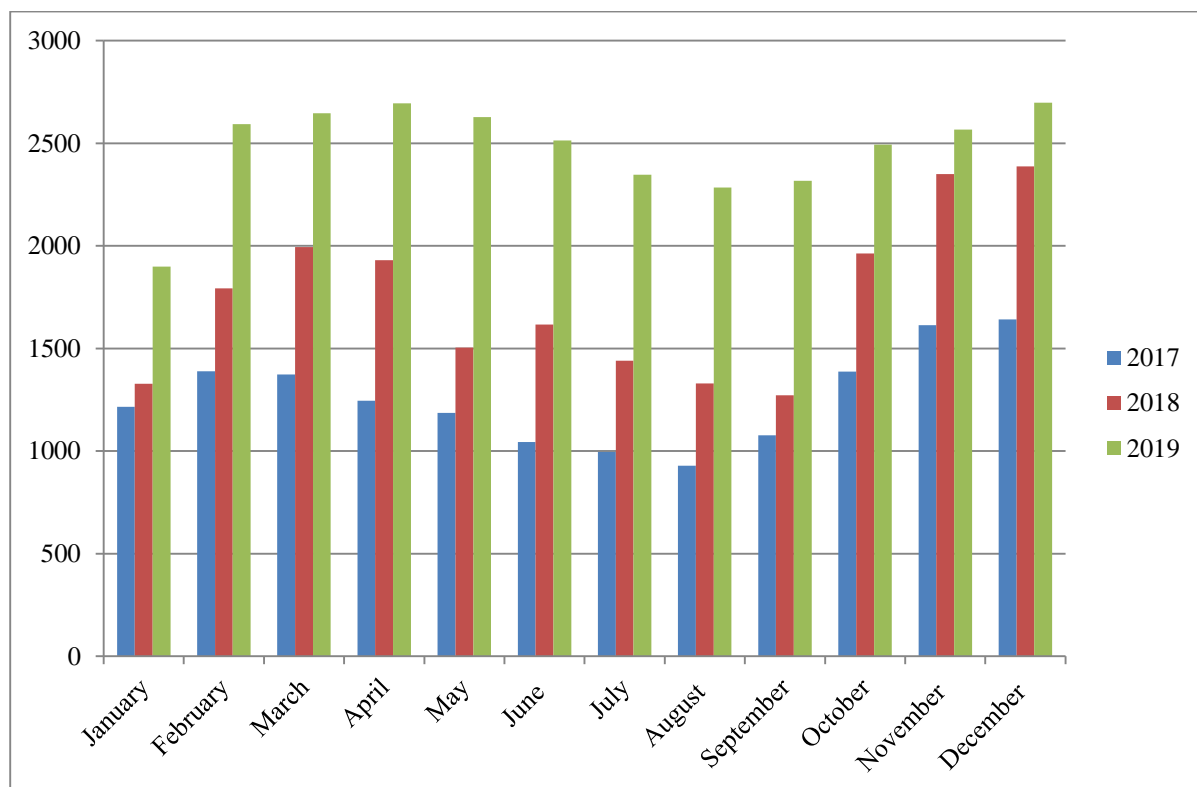


Figure 2.4 – The number of students for 2017-2019 years

The students have 3 lessons per week and one lesson lasts 3 hours. In general, every teacher has 2 groups. Accordingly, each teacher provides 18 hours per week for the lessons. The number of tutor hours (number of hours provided by teachers) for the period of 3 years is shown in the table 2.3

Table 2.3 - Number of tutor hours

Month	2017	2018	2019
1	2	3	4
January	12565,00	13808,20	18031,60
February	13961,25	18026,50	25932,25
March	14587,30	19661,50	25714,00
April	13689,00	18442,25	26485,30

The end of Table 2.3

1	2	3	4
May	12325,50	15118,40	27863,00
June	11325,00	16070,25	27658,50
July	9523,75	14648,60	25634,65
August	9833,40	13810,25	23496,00
September	10666,75	15080,25	23968,40
October	13831,40	19662,80	25465,25
November	16424,75	23592,75	26589,30
December	16465,25	24132,00	27896,00

In the Figure 2.5 you can see that in the period from December to June the number of tutor hours was high. And in January the number is low, because of the holidays and vocations. There are 2 weeks of vocations for some of the personnel, and some of teachers conduct intensive course in this period.

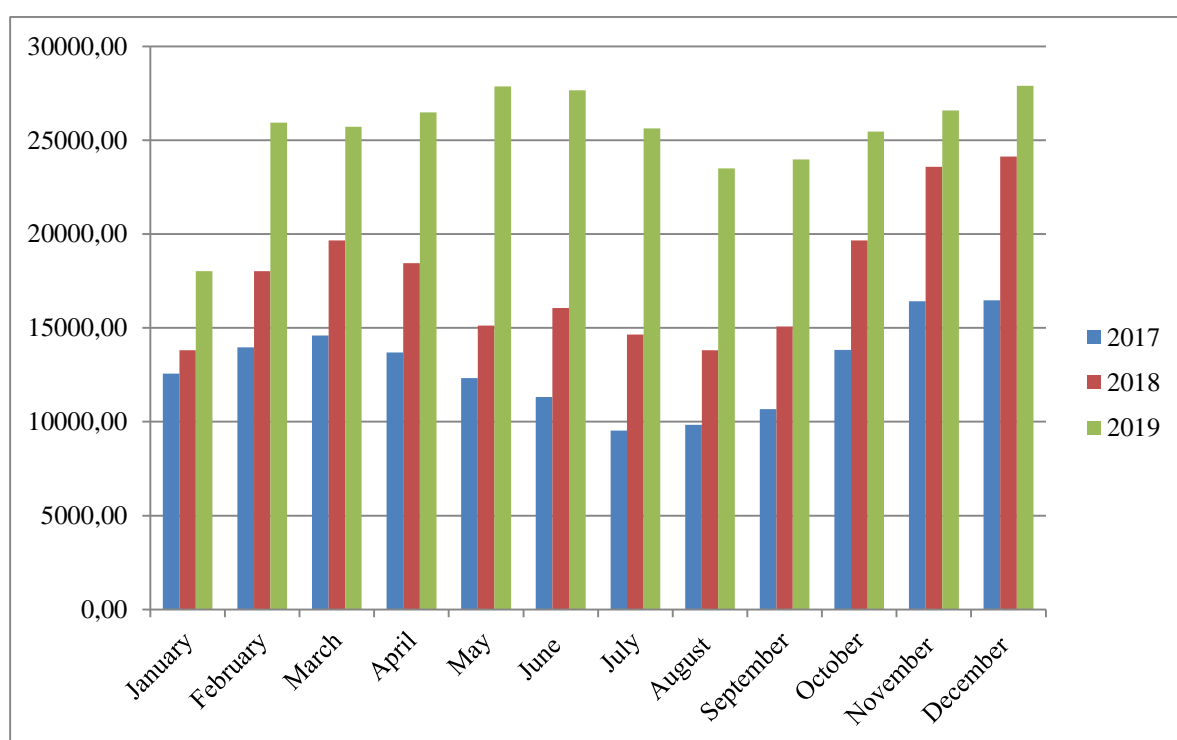


Figure 2.5 - Number of tutor hours

Every lesson at the school has its price. English Prime considers this criterion as the cost of service provided (see Table 2.4). The cost of services provided is a ratio of the price for lessons paid by each student to the number of lessons they attend.

Table 2.4 - The cost of services provided

Month	2017	2018	2019
January	648234	803110	1171946
February	654125	1024670	1599218
March	663254	1146624	1644098
April	656849	1116384	1668745
May	658963	963872	1746985
June	642460	1025539	1635971
July	565921	968175	1573596
August	599007	928525	1463254
September	616972	954213	1496587
October	784313	1232657	1634587
November	918865	1447911	1686934
December	933959	1489677	1699623

In the Figure 2.6 we can see that in the high period (November-May) indicators are high. And in January and in summer they are lower because of the vacations.

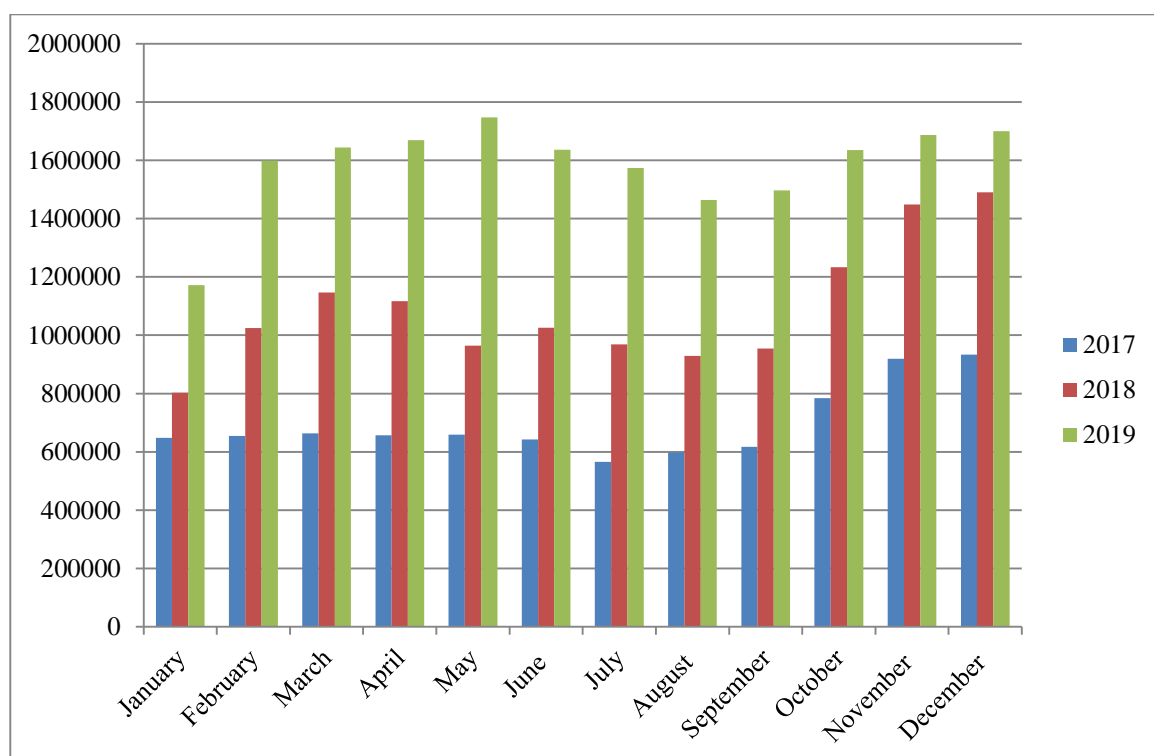


Figure 2.6 – The cost of services provided

The main financial expenses are the next:

- Rent and utilities - 17-20% of gross income,

- Staff salary – 44% of gross income,
- License – 10% of gross income,
- Taxes - 10% of gross income,
- Advertising – 8-10% of gross income,
- Expendable materials – 2% of gross income,
- Reserve – 9% of gross income.

### **2.3 Analysis of the current situation and analysis of problem areas**

The coronavirus epidemic is striking a blow to various areas of life. Education now also suffers from forced quarantine measures.

In addition to the fact that educational institutions are urgently adapting to distance learning, those who studied individually faced significant problems: preparing with tutors for exams, language schools, music and art with private teachers.

Until recently, teachers, tutors, could afford to experiment with distance learning, but now this is the only way out. On the other hand, the online format opens up many opportunities not only for quarantine, but also for the future in general, it is a certain transformation from a "comfortable class" to a more global vision of education in the future. Education after self-isolation will be different, that's for sure.

For language schools that worked offline before quarantine, the need to switch to distance learning was a serious problem. The fact is that group classes, especially children's education, are not so easy to organize in a high-quality manner in a remote format. Namely, groups have always brought schools most of the revenue in the B2C segment.

In distance group training, it is quite difficult to organize work in pairs or mini-groups, perform familiar game tasks and include motor activities in the lesson, which are typical for modern methods of teaching foreign languages.

Preparing for such lessons requires a lot of time from the teacher and the ability to non-standard approach to solving problems. At the same time, customers often expect a reduction in the cost of lessons, because there is an opinion that distance learning should be cheaper. Let's consider advantages and disadvantages of distance learning (Table 2.5).

Table 2.5 – Advantages and disadvantages of distance learning

Advantages	Disadvantages
First of all, it's flexibility. You can be anywhere and practice at any time of the day.	The effectiveness of distance learning depends on self-discipline. Its disadvantage will negatively affect the preparation for classes, assignments and assimilation of information.
The training schedule is entirely up to you and can be easily changed according to your daily routine and workload.	Possible technical problems: poor Internet connection, poor computer / phone specifications, etc.
Relatively low price due to cost optimization (remuneration, rental of premises, provision of all necessary materials, etc.).	If you have a need for the personal presence of a teacher, this method will not be so effective for you. Besides, the realization that the lesson can take place at any time convenient for you leads to the fact that it can be postponed or canceled. Thus, the regularity of classes is also in question

An interesting discovery was that, despite the growing popularity of online, a significant part of the audience of language schools was not ready to abandon full-time classes in favor of distance learning. Today the share of online learning is less than 10% of the total market for teaching foreign languages and the quarantine

experience suggests that this is due not only to technical difficulties, but also to the fact that the audience considers offline learning more effective.

In English Prime, the main product was not transferred online, since training has a training nature. For example, you can't deal with a driving instructor online - the same story is with education. Teachers constantly send students assignments and give feedback. The speaking club was only transferred to online. The company does not want to change its special methodology in order not to lose quality.

But definitely this pandemic could also profoundly change education for the better. Throughout history, the sector has been conservative and resistant to change. For centuries it had the slate, then came a century of blackboard and chalk. Now students are just a finger-click away from the vast knowledge of Google — so much greater than that of any individual teacher.

Coronavirus has given schools Zoom, Microsoft Teams and Google Classroom. The technology turns a laptop screen into a classroom, where students and teachers see each other and can question each other in truly collaborative online learning [13].

At the time of quarantine, English Prime decided not to miss the opportunity and produced several new online products in order to attract new customers and retain old ones. Thus, the following products appeared:

1. Individual Grammar Fix.

This is a course that will help fill any gaps in knowledge of English grammar and, most importantly, transfer this knowledge to the level of practical use.

2. Grammar Fix Intensive.

Group classes for different levels at which students can systematize knowledge and eliminate misunderstandings in the grammar of the English language.

3. Grammatically intensive weekend.

The program of the course contains various grammatical topics and the student can choose exactly the topic with which difficulties arise. One topic is designed for one weekend.

4. English for professional purposes.

The course is designed for students who want to study vocabulary on a specific professional topic. On the course, the student receives a consultation with the teacher, undergoes comprehensive testing to determine the level of English proficiency, and as a result passes a specially designed training program that will be developed based on specific wishes.

#### 5. Speaking club online.

Speaking Club was created not only for people with a high level of English, but also for almost beginners! So that everyone can practice talking in English.

#### 6. Job Interview.

The online course is designed to help you prepare well for an English interview.

#### 7. Advanced listening skills.

The Advanced Listening Skills course has been specially designed to increase the ability to understand the fast colloquial speech of native speakers, namely to achieve a high degree of comfort when communicating with Americans.

#### 8. Online English for children.

During the course, children study in a group and have the opportunity to comprehensively work on the basic skills in the English language (speaking, reading, writing, listening).

#### 9. Practical online course "4 English skills for life."

In this course, each of the 4 English language skills (reading, writing, speaking and listening comprehension) will be allocated a separate, specially designed unit of classes that will allow you to pump yourself and make a powerful leap in English in all 4 directions.

In addition, the school first launched its Youtube channel, which also allows to attract new customers. Also, new online products have allowed customers from different cities and even countries to use the services of the school.

Thus, by creating new online products and taking care of its customers, the company was able to provide its employees with work and accordingly pay them wages during quarantine. And according to the results of a survey among students conducted by English Prime, less than 10% of students doubt that they will continue



their studies immediately after quarantine. Also, the number of students wishing to return money for training was minimal.

So we can say that during the quarantine the school was able to successfully save work. However, one of the main problems is fixed costs, as the company has a very high tax burden, insurance premiums and rents. But the biggest threat to language schools is the country's economic condition. So not a virus and not an online format will affect offline schools, but the solvency of the population. English is far from the first step of the pyramid of needs. Everyone will think primarily about security and basic things.

## **2.4 Chapter 2 summary**

Nowadays, online courses are gaining in popularity, but still traditional courses are in high demand. There is a clear explanation for this:

- Quality control of training – student is in contact with the teacher throughout the lesson, the teacher sees all strengths and weaknesses and monitors progress;

- Communication and working out conversational skills. Practice is a very important factor in learning languages. In a group students have to communicate a lot, they learn to formulate thoughts and understand someone else's speech by ear.

- Full immersion in the educational process. Classes outside the home are usually taken more seriously than doing exercises online. People feel more responsibility, so they will try better.

Speaking about the advantages of studying at English Prime, it is necessary to mention:

- a fixed schedule that will help compensate the lack of self-discipline;
- systematic and regular training, which will quickly lead to the desired result;

-proven methodology and international teaching technology that break the stereotype that "English is not mine." Thanks to the right training exercises, everyone will be able to work out the necessary skills for language proficiency;

-group cohesion creates a friendly atmosphere of mutual assistance and support.

-the transition from level to level takes up to 1.5 months instead of the usual 3-6 months.

But the pandemic situation that happened all over the world forced to look at the learning process from the other side. The forced decision was to switch to distance learning and create several online courses. But this does not mean at all that online schools have replaced traditional ones. On the contrary, I can say that this has given a new development to the school and after quitting quarantine online products can become a great addition to regular courses. The school can do blended learning and take the best of both formats — the reliability of classic lessons and the convenience of online lessons.

**CHAPTER 3**  
**DEVELOPMENT OF PROPOSALS FOR OPTIMIZING THE**  
**RESOURCES OF THE ENGLISH LANGUAGE SCHOOL "ENGLISH**  
**PRIME"**

**3.1 Logistic approach to resource management of the school “English Prime”**

From a business point of view, logistics can be seen as managing material, information and financial flows (movement of resources) in the processes of an organization that contribute to the movement and coordination of supply and demand for goods and services at a specific place and at a given time. Logistics is aimed at optimizing flows in the organization’s process system and between the organization and its external environment.

At English Prime there are the next types of resources: human resources, financial resources and information resources. But the most important resources are human resources.

The concept and methodology of logistics when used in personnel management can be interpreted as follows. Management of human resources of the enterprise is a method of increase of social and economic efficiency of use of labor resources at the expense of the organizational and administrative mechanism of coordination of personnel functions (management systems of labor resources). The purpose of human resource management is to optimize the socio-economic efficiency of their use. The essence of human resource management of the enterprise is that, implementing the appropriate systems, to obtain an additional effect through the rational interaction of personnel functions. This synergistic effect ensures the achievement of the goal. The content of human resource management of the enterprise is a set of seven personnel

functions: recruitment, training, placement, retraining, professional development, pay and incentives.

The concept of “personnel flow” sufficiently reveals the need for continuous monitoring and management of changes in human resources. With this approach, it is necessary to remember all the features inherent in human resources. Human resources are not the property of the enterprise. In many management concepts, personnel are considered as one of the organization’s resources and management objects. However, staff is a specific resource, it has a set of special characteristics that distinguish it from other company resources.

Personnel - this is the most important resource of any organization, since only with the help of specific people the company realizes its activities. This means that any problem in company management (one way or another) is associated with problems in personnel management. Responsibility for it lies not only with the personnel management service, but also with everyone involved in the work with personnel (that is, with all managers).

The life cycle of an employee in a company, as a rule, is longer than the life cycle of a product or specific cash receipts. People have been working in the company for years, while the goods that arrived at the warehouse can leave it on the same day. Therefore, the management of each specific employee requires a strategic (i.e. long-term) approach.

People are endowed with intelligence. Their reaction to external influences is emotionally meaningful, not mechanical. Therefore, the interaction process between the organization and the employee is two-way and requires regular feedback.

People are carriers of knowledge and are capable of self-improvement and development. Moreover, many approaches consider this as the most important and long-term source of increasing the effectiveness of any organization. This process also can and should be controlled.

And finally, people come to the organization voluntarily, consciously, and with certain goals. Therefore, employee satisfaction with the company is the same prerequisite for his work as company employee satisfaction.

Workers in personnel logistics are considered as partners who have concluded an employment contract with the company. As with any other logistics partners, the company should build relationships with them using the logistic principles of integration, compromises, etc. Personnel logistics should ensure consistency between the workplaces available at the company that present certain requirements for employees (qualifications, personal qualities) and employees possessing various qualities, professional training, qualifications. Achievement of this conformity occurs under conditions of constant changes in the requirements for employees, as well as the requirements for employees on the conditions and content of their work. In this regard, the formation of the movement of personnel flows at the enterprise requires a constant selection of the most effective options, taking into account all factors and circumstances. To correctly make this choice, it is necessary to clearly understand the target orientation of the company in the field of personnel.

The employee enters into interaction with the company not as a mechanism that performs specific actions and operations, but as a rational and conscious individual with aspirations, desires, emotions, and morality. This interaction always has a wider area than the performance of certain work in a particular workplace. In any enterprise, in addition to labor operations and functions that ensure the movement of material, financial, informational, service flows, employees enter into personal relationships, thereby creating the cultural environment and social climate of the company.

In addition, the long-term nature of use and, most importantly, the possibility of development in the process of use is inherent in human resources. The development of personnel through training in the course of their work is an important distinguishing feature of these resources in relation to all others.

Personnel logistics of the enterprise has three main logistics functions:

- optimization of incoming personnel flows in accordance with the needs of the company;
- optimization of internal personnel flows - the use of personnel, personnel development;

- optimization of outgoing personnel flows - release of personnel.

With this approach, logistics should provide an optimal balance between incoming and outgoing personnel flows, so that the personnel potential of the enterprise develops in accordance with the development of this enterprise. Optimization and rationalization of personnel flows are the main goal and content of personnel logistics. At the same time, speaking of optimization, it is necessary to indicate the purpose of the movement of personnel flows. Only in this case it is possible to judge the effectiveness of its achievement.

The logistics personnel system of an enterprise can be considered effective if:

- all employees clearly understand and actively participate in the implementation of the goals and objectives of the company;
- the performance of staff duties clearly meets the requirements;
- the staff of all structural divisions of the company effectively interacts with each other;
- interaction with external partners is carried out effectively;
- employees constantly increase their knowledge and apply them in practice;
- necessary attention is paid to the humanization of the labor process (improving working conditions and professional growth of employees, fair material and moral incentives, developed social policies, etc.).

As English Prime is an educational institution, personnel plays a vital role in the life of the company. A close-knit and interested in educational results teaching staff is the key to the successful functioning of the educational organization, since it is the human resource that ensures the effectiveness of the implementation of the educational strategy and the formation of a positive reputation of the educational institution. In this regard, one of the priority tasks of the leadership of the educational organization is to direct efforts to create a purposeful team of teachers and administration, which could be described as a "team of like-minded people."

The team of like-minded people is determined by the fact that:

- all members of an educational organization have a single idea of its mission, goals, objectives and vision;

- all members of an educational organization carry out their professional activities in a single system of organizational values;

- all members of the educational organization have a common understanding of strategic and operational organizational goals, which structures the labor relations in the team.

In order for the teaching staff to carry out organizational tasks productively, management support is needed for the entire process of forming a team of like-minded people, which consists of the following key stages.

1. Stage of setting goals in front of team members (group). At this stage, it is important to achieve a unified perception of the system of organizational goals, to minimize the conflict of goals.

2. The stage of psychological adjustment of team members to each other, the struggle of statuses. At this stage, in the course of interactive interaction with each other in the team, the process of distribution of roles begins.

3. Stage of rationing. At this stage, the collective (group) begin to take shape uniform norms and rules of labor behavior. It is important to consider that without control and support of this process by the leadership of the educational organization, the group can develop values and norms that are contrary to the expectations of the leadership.

Thus, investments in human resources and the development of human resources based on a logistic approach are becoming one of the most important factors in the competitiveness of enterprises, since well-trained personnel with a high level of motivation for quality work are no less important than the latest technologies and equipment. Costs that contribute to improving the skills and productivity of workers are considered in modern business as investments that will be repeatedly offset by increased incomes. This approach to management contains new opportunities for optimizing activities and increasing the effectiveness of its results.

### **3.2 Organization of teacher appointments for the groups at “English Prime”**

Human resources are a very important part of an enterprise. And with proper management of these resources, the company can make very good profits. Since the sphere of the English Prime is a service sector, the right selection of personnel is the basis for the success of the company. All people have their own characteristics and abilities and all convey information in different ways. Accordingly, it is very important in the work of the school to appoint teachers into the groups correctly. Indeed, if students are satisfied with the quality of services and they like the teacher as a person, most likely they will continue to study and will make a profit for the company.

In order to optimize the process of planning the appointment of teachers to groups, it is proposed to use the so-called assignment problem. The problem regarding assignment is an important subject that has been employed to solve many problems worldwide. This problem has been commonly encountered in many educational activities all over the world. Within the education domain, this review classified the assignment problem into two: timetabling problem and allocation problem.

The general aim of assignment problem is to optimize the allocation of resources to demand points where both resources and demand point share equal number [14]. The essence of assignment problem is that there are  $n$  types of work and  $m$  candidates for their performance (performers). It is considered that each of the candidates  $i \in \{1, \dots, n\}$  can perform any work  $j \in \{1, \dots, m\}$  while  $c_{ij}$  is the efficiency of the work performed of the  $j$ -th type by the  $i$ -th candidate. Candidates must be distributed in such a way that each candidate receives a single assignment, each job receives a single contractor and the total efficiency associated with the assignments is maximized.

The problem, hence, can be mathematically presented as follows:



$$F(x) = \sum_{i=1}^n \sum_{j=1}^m c_{ij} \cdot x_{ij} \quad (3.1)$$

$$\sum_{i=1}^n x_{ij} = 1, \sum_{j=1}^m x_{ij} = 1, 0 \leq x_{ij} \leq 1 \quad (3.2)$$

where  $x_{ij}$  is a variable that becomes 1 if the  $i$ -th work is performed by the  $j$ -th executor and 0 otherwise;

$c_{ij}$  - the efficiency of the work performed of the  $j$ -th type by the  $i$ -th candidate;

$n$  – the number of candidates;

$m$  – the number of groups.

Let's describe the initial data.  $C_{ij}$  is an assessment of the interaction of teachers with groups. In other words, this is the degree of interaction between the teacher and the group expressed in balls. Such assessments may be different, but in the range from 1 to 10, where 1 - least effective interaction, 10 - most effective interaction. The number of groups for which it is necessary to appoint teachers is 10. This number is equal to the number of groups. The estimates of the interaction of teachers with the group is given in the Table. 3.1.

Table 3.1 - Estimates of the interaction of teachers with the group

Teachers	Groups									
	1	2	3	4	5	6	7	8	9	10
1	5	9	2	4	8	3	5	6	4	7
2	2	8	6	4	10	2	4	9	7	2
3	10	9	3	7	4	6	2	4	6	9
4	8	1	4	9	3	4	5	6	7	3
5	9	2	10	1	4	8	4	6	7	5
6	6	6	4	9	7	4	5	3	2	8
7	6	7	2	8	4	9	3	10	4	7
8	8	5	7	3	7	10	5	4	2	9
9	6	2	4	7	3	7	9	5	6	1
10	8	6	4	5	3	7	9	5	7	9

Since  $c_{ij}$  expresses an assessment of the teacher's work with the group, the objective function should be maximum, as we strive to maximize the effectiveness of work and student satisfaction.

In this case, the objective function takes the form:

$$\begin{aligned}
 F(x) = & 5x_{11} + 9x_{12} + 2x_{13} + 4x_{14} + 8x_{15} + 3x_{16} + 5x_{17} + \\
 & + 6x_{18} + 4x_{19} + 7x_{110} + 2x_{21} + 8x_{22} + 6x_{23} + 4x_{24} + 10x_{25} \\
 & + 2x_{26} + 4x_{27} + 9x_{28} + 7x_{29} + 2x_{210} + 10x_{31} + 9x_{32} + \\
 & + 3x_{33} + 7x_{34} + 4x_{35} + 6x_{36} + 2x_{37} + 4x_{38} + 6x_{39} + \\
 & + 9x_{310} + 8x_{41} + 1x_{42} + 4x_{43} + 9x_{44} + 3x_{45} + 4x_{46} + \\
 & + 5x_{47} + 6x_{48} + 7x_{49} + 3x_{410} + 9x_{51} + 2x_{52} + 10x_{53} + \\
 & + 1x_{54} + 4x_{55} + 8x_{56} + 4x_{57} + 6x_{58} + 7x_{59} + 5x_{510} + \\
 & + 6x_{61} + 6x_{62} + 4x_{63} + 9x_{64} + 7x_{65} + 4x_{66} + 5x_{67} + \\
 & + 3x_{68} + 2x_{69} + 8x_{610} + 6x_{71} + 7x_{72} + 2x_{73} + 8x_{74} + \\
 & + 4x_{75} + 9x_{76} + 3x_{77} + 10x_{78} + 4x_{79} + 7x_{710} + 8x_{81} + \\
 & + 5x_{82} + 7x_{83} + 3x_{84} + 7x_{85} + 10x_{86} + 5x_{87} + 4x_{88} + \\
 & + 2x_{89} + 9x_{810} + 6x_{91} + 2x_{92} + 4x_{93} + 7x_{94} + 3x_{95} + \\
 & + 7x_{96} + 9x_{97} + 5x_{98} + 6x_{99} + 1x_{910} + 8x_{101} + 6x_{102} + \\
 & + 4x_{103} + 5x_{104} + 3x_{105} + 7x_{106} + 9x_{107} + 5x_{108} + \\
 & 7x_{109} + 9x_{1010} \rightarrow \max
 \end{aligned}$$

There are several methods for solving the assignment problem, such as the Hungarian method. We will use the MS Excel program. it is the most effective and fastest tool for solving such problems.

The first step is to enter the initial data into the program. The next step is to enter all the formulas that describe the objective function and constraints. Formulas for calculating the problem are given in Table 3.2.

Table 3.2 - Formulas of the screen form of the problem

№	Object of mathematical model	Expression in MS Excel
1	2	3
1	Variables (cell M27)	B16:K25
2	Target function	=СУММПРОИЗВ(B3:K12;B16:K25)
3	Line restrictions:	
4	L16...	=СУММ(B16:K16)...
5	L25	=СУММ(B25:K25)
6	Column restrictions:	
7	B26...	=СУММ(B16:B25)
8	K26	=СУММ(K16:K25)

The problem is solved directly using the "Solver" built-in function, the appearance of the dialog box of the function with the entered parameters is shown in Fig.3.1.

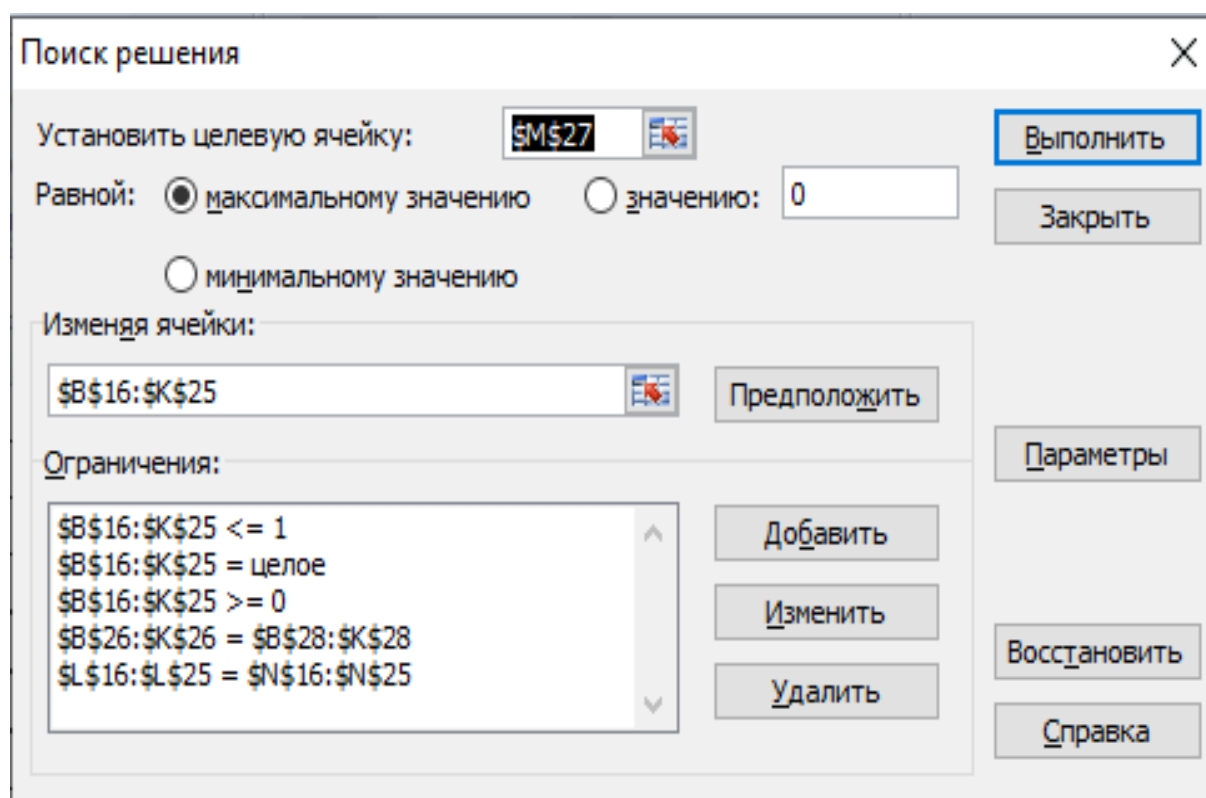


Figure 3.1 - Solution Search dialog box

When all the initial data and the specified parameters are entered, we search for the optimal value. The result of the optimal destination of teachers to the groups is shown in Fig. 3.2.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2	Teachers	Groups												
3	1	5	9	2	4	8	3	5	6	4	7			
4	2	2	8	6	4	10	2	4	9	7	2			
5	3	10	9	3	7	4	6	2	4	6	9			
6	4	8	1	4	9	3	4	5	6	7	3			
7	5	9	2	10	1	4	8	4	6	7	5			
8	6	6	6	4	9	7	4	5	3	2	8			
9	7	6	7	2	8	4	9	3	10	4	7			
10	8	8	5	7	3	7	10	5	4	2	9			
11	9	6	2	4	7	3	7	9	5	6	1			
12	10	8	6	4	5	3	7	9	5	7	9			
13														
14	Teachers	Groups												
15		1	2	3	4	5	6	7	8	9	10	Restrictions		
16	1	0	1	0	0	0	0	0	0	0	0	1	=	1
17	2	0	0	0	0	1	0	0	0	0	0	1	=	1
18	3	0	0	0	0	0	0	1	0	0	0	1	=	1
19	4	0	0	0	0	0	0	0	0	1	0	1	=	1
20	5	0	0	1	0	0	0	0	0	0	0	1	=	1
21	6	0	0	0	1	0	0	0	0	0	0	1	=	1
22	7	0	0	0	0	0	0	0	1	0	0	1	=	1
23	8	0	0	0	0	0	1	0	0	0	0	1	=	1
24	9	0	0	0	0	0	0	0	0	0	1	1	=	1
25	10	1	0	0	0	0	0	0	0	0	0	1	=	1
26	Restrictions	1	1	1	1	1	1	1	1	1	1			
27		=	=	=	=	=	=	=	=	=	=			75,16971
28		1	1	1	1	1	1	1	1	1	1			

Figure 3.2 - Screen form for solving the assignment problem

According to the optimal assignment of teachers to the groups we get the following appointments:

- teacher №1 – works with the group 2;
- teacher №2 – works with the group 5;
- teacher №3 – works with the group 7;
- teacher №4 – works with the group 9;
- teacher №5 – works with the group 3;
- teacher №6 – works with the group 4;
- teacher №7 – works with the group 8;
- teacher №8 – works with the group 6;

teacher №9 – works with the group 10;

teacher №10 – works with the group 1.

### **3.3 Proposal for saving material resources by introducing a “green” office**

In the world of modern business, the "engine" of any successful company is the staff. So most attention should be paid to staff - today they account for about 90% of organizational costs. Improving the efficiency of work often brings significant benefits to the company, which is why most modern organizations are trying to find not only spacious but also environmentally friendly premises.

An important fact is that productivity increases by 10% or more with the move to the "green office". But the overall benefit is much greater as profits increase, costs fall, and the company's competitiveness increases.

The solution to any global problems begins with small but very important steps that are available to each of us. A green office is no longer a fashion, but a requirement of the present. Every year, an increasing number of companies strive to organize their work based on the principles of sustainable development and compliance with international environmental standards.

The philosophy of the green office can be used by any company, regardless of its size, scope or financial situation. In other words, the green office allows you to show environmental responsibility not only to those companies whose activities are associated with hazardous production or negative environmental impacts, but also representatives of medium, small business and even microenterprises.

The basic principle of the Green Office initiative is to promote continuous improvements in the environmental work and results of the involved organisations. Green Office aims at reducing the environmental impacts of office work. Every change helps: from using double-sided copies, adjusting computers' power saving

settings and turning off lights, to recycling waste and choosing sustainable forms of transportation.

By joining the Green Office network, offices can save on materials and expenses. The Green Office initiative inspires employees to adopt environmentally sound habits and leads to high staff motivation [15].

Organizations that implement the recommendations of the eco-office not only demonstrate their environmental responsibility, but also effectively organize their work, reduce the amount of waste from office activities, and also improve the image of their company.

It is important that the "green office" does not require the installation of modern programs, the acquisition of the latest technology or highly complex implementation methods. These are simple rules for the daily use of resources and respect for nature, which make workers more conscious, and companies better, more efficient and more profitable.

Before make decision about implementing of the "green" office principles, company should clearly understand the purpose of this initiative. The Figure 3.3 shows the main objectives of implementing “green” office project at the “English Prime” school.

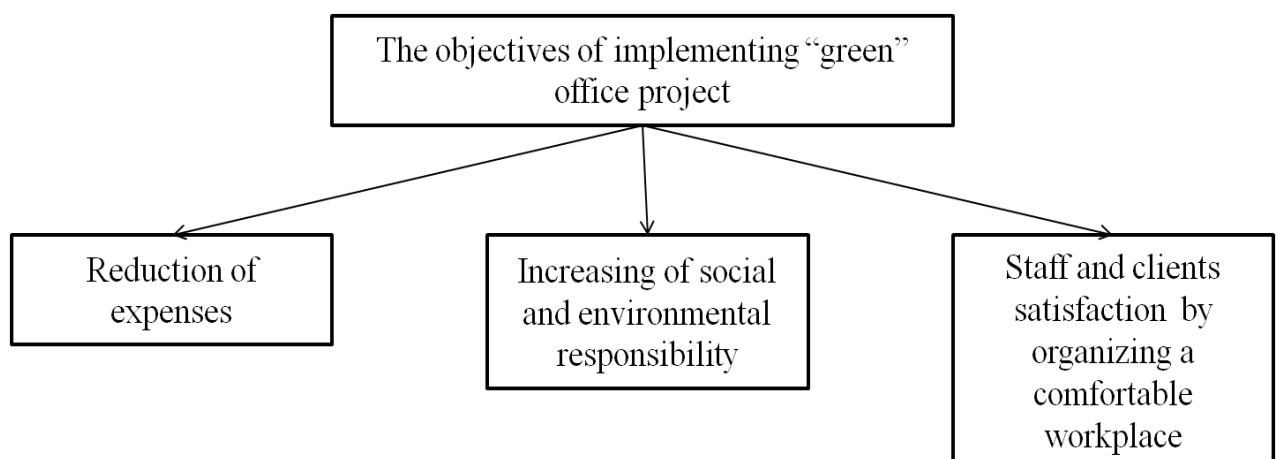


Figure 3.3 – The main “English Prime” objectives of “green” office project

The concept of a green office provides a very wide range of measures that can be applied. There are several main stages for implementing green office concept and achieving objectives of the company:

#### 1) Purchase of products

Purchasing environmentally friendly goods is the first step towards creating a "green space". So you should buy eco-labeled products, including stationery. When choosing office equipment, it is necessary to pay attention to equipment with energy-saving properties, such as printers with refilled cartridges.

#### 2) Use of resources

This stage should be divided into several blocks.

##### Power supply:

- it is necessary to use the system of automatic control of lighting (for example, motion sensors) and to use as much as possible natural light;
- do not forget to unplug appliances and chargers if they are not used at work now;
- set up an automatic transition to "power save mode" for personal computers.

##### Water supply:

- it is obligatory to install meters and high-quality filters for water supply;
- it is necessary to make sure that the taps are so tight; in case of leaks it is necessary to eliminate problems urgently.

##### Heat supply:

- for heat preservation it is necessary to use temperature regulators on batteries for heating, and also to warm windows and doors and to close them with curtains or blinds for the night.

##### "Green printing":

- try to place as much text as possible on one sheet of paper (reduce the font and size of the document margins; try to replace black with lighter);
- paper that has already been used on one side can serve as a draft for printing working documents .

##### "Green advertising"

- to create advertising via the Internet instead of using print ads for posters and banners;

- send e-mails instead of sending paper ones.

### 3) Disposal

At this stage, it is necessary to follow the rules of 3 R.

Reduce - all actions should be aimed at reducing the cost of any resources.

Reuse - Use materials that can be used several more times.

Recycle - Dispose of waste and sort waste properly.

Green office implementation proposals for English Prime are as follows:

- put plants in the office;
- change lightning with LED lamps;
- replace paper towels with hand dryers;
- set up radiator thermo regulators;
- set up filtration system;
- set up separate garbage collection;
- reuse paper as draft and then recycle

Expected results of the project are:

- reducing the cost of maintaining the office;
- setting the optimum temperature depending on the season in the office due to the goals set;
- increase the motivation of employees to support actions and events of the company.

For the economic rationality of "green" office projects, it is necessary to determine the project budget and the benefits that the project will bring. The first step is to determine the cost of work. Project budgeting is the process of evaluating the cost estimates of all project operations. The project budget is listed in Table 3.3, which allocates financial resources for each job. Calculations are made for one branch.



Table 3.3 - The budget of the “green” office project

№	Activity	Financial resources, UAH
1	Carrying out an action for greening the office	4000
2	Purchase of: – LED lamps; – radiator thermo regulators, – garbage containers; – hand dryers; – filtration system	3000 25000 350 20000 30000
3	Installing the regulators on the batteries	10000
4	Installing the hand dryers	1500
5	Installing the LED lights	1500
6	Total	95 350

The cost of the whole project is UAH 95 350, that includes the next expenditures for the project, such as: labour costs, procurement of equipment, payment for services provided by outside organizations for delivery and installation of equipment.

The next step is to determine the benefits of this project. To do this, I considered some of the components: electricity saving, water and heating.

At first I will determine the savings that can be received from energy-saving measures.

I calculated that electricity expenses in a previous year were 30205 UAH.

In order to implement the “green” office program, I have proposed some rules that would help to reduce electricity consumption of the office:

- maximum use of natural light;
- installation of energy-saving devices;
- turning off appliances if they are not used in operation;
- disconnect chargers from the socket;
- turning off the light, even if there is no one in the office for a short time;
- at the end of the working day check that everything was turned off.

These measures can reduce electricity use by 35%. Let's consider a pessimistic, realistic and optimistic scenario and calculate the benefits of the proposed measures to reduce electricity consumption (see Table 3.4).

Table 3.4 – Economy from economical energy consumption per year

№	Indicator	Pessimistic estimation	Realistic estimation	Optimistic estimation
1	Cost saving after energy saving measures, %	24	28	35
2	Expected electricity expenses, UAH	26399	25009	22578
3	Amount of savings, UAH	3806	5196	7627

Expected electricity expenses are calculated:

- for pessimistic scenario:  $30205 \text{ UAH/year} \times 1,15 \times (100-24)\% = 26399$  UAH/year;

- for realistic scenario:  $30205 \text{ UAH/year} \times 1,15 \times (100-28)\% = 25009$  UAH/year;

- for optimistic scenario:  $30205 \text{ UAH/year} \times 1,15 \times (100-35)\% = 22578$  UAH/year.

For the calculations I used coefficient 1,15 which takes into account the annual increase in electricity costs.

For economic water consumption I propose the next measures:

- installation of metering devices (counter);
- tight twisting of the water tap;
- tightening the tap when water is not used;
- the installation of a high-quality filter and water supply system, instead of acquiring bottled water;
- urgent elimination of leaks of taps and toilet tanks.

The water expenses in a previous year were 18 549 UAH. These measures will help to reduce water consumption for 20%. In the Table 3.5 calculation of economic effectiveness from water consumption reduction is shown.

Table 3.5 – Economy from economical water consumption per year

№	Indicator	Pessimistic estimation	Realistic estimation	Optimistic estimation
1	Cost saving after water saving measures, %	15	18	20
2	Expected water expenses, UAH	16555	15970	15581
3	Amount of savings, UAH	1994	2579	2968

Expected electricity expenses are calculated:

- for pessimistic scenario:  $18549 \text{ UAH/year} \times 1,05 \times (100-15)\% = 16555 \text{ UAH/year}$ ;
- for realistic scenario:  $18549 \text{ UAH/year} \times 1,05 \times (100-18)\% = 15970 \text{ UAH/year}$ ;
- for optimistic scenario:  $18549 \text{ UAH/year} \times 1,05 \times (100-20)\% = 15581 \text{ UAH/year}$ .

For the calculations I used coefficient 1,05 which takes into account the annual increase in water costs.

In order to reduce heating expenses it is better to apply the next measures:

- equip the radiators with automatic temperature controllers that reduce the heat consumption by half. During non-working hours, set the regulator to a lower temperature mode.

This can reduce heating expenses for to 40%. The heating expenses in a previous year were 65 354 UAH. Calculation of economic effectiveness from heating consumption reduction is shown in the Table 3.6.

Table 3.6 – Economy from economical heating consumption per year

№	Indicator	Pessimistic estimation	Realistic estimation	Optimistic estimation
1	Cost saving after heating saving measures, %	34	37	40
2	Expected heating expenses, UAH	47447	45290	43133
3	Amount of savings, UAH	17907	20064	22221

Expected heating expenses are calculated:

- for pessimistic scenario:  $65354 \text{ UAH/year} \times 1,1 \times (100-34)\% = 47447 \text{ UAH/year}$ ;

- for realistic scenario:  $65354 \text{ UAH/year} \times 1,1 \times (100-37)\% = 45290 \text{ UAH/year}$ ;

- for optimistic scenario:  $65354 \text{ UAH/year} \times 1,1 \times (100-40)\% = 43133 \text{ UAH/year}$ .

For the calculations I used coefficient 1,1 which takes into account the annual increase in heating costs.

Thus, adhering to all recommendations, it is possible to reduce sufficiently utility costs. Besides, there are also some another savings:

1. Installation of a high-quality filter instead of purchasing bottled water will bring some good savings.

“English Prime” orders 7 bottles (18,9 liters) of water per week by price 100 UAH/bottle. It means that yearly expenses are equal:

$$7 \text{ bottles} \times 100 \text{ UAH/bottle} \times 52 \text{ weeks} = 36400 \text{ UAH/year.}$$

And the company will use only filtration system it is possible to save  $36400 - 3400 = 33000 \text{ UAH}$ , where 3400 UAH – it is the cost of cartridges needed for a year.

2) Installation of hand dryers instead of paper towels in the washrooms. There is one washroom in the office and the company used paper towels before. Average paper towels consumption was 2 packs per day (pack contains 200 towels) by average price 30 UAH/pack. The annual expenses equal:

$$2 \text{ packs} \times 30 \text{ UAH/pack} \times 260 \text{ work days} = 15600 \text{ UAH/year.}$$

There a lot of students during the lessons, so it will be more practical to install two hand dryers. Annual electricity consumption by these devices will be  $0,387 \text{ KW} \times 2 = 0.774 \text{ KW}$ . Cost of 1 KW in Ukraine is 90 UAH. Thus, amount of yearly saving will be:

$$15600 \text{ UAH} - 0.774 \text{ KW} \times 90 \text{ UAH/KW} = 15530 \text{ UAH/year.}$$

Thus, reducing the number of purchases and using innovations, it is possible to reduce some more costs.

All saving that is possible to obtain due to different saving measures are shown in the Table 3.7.

Table 3.7 – Savings that the company obtains from the implementation of “green” office project in the year, UAH

№	Indicator	Pessimistic estimation	Realistic estimation	Optimistic estimation
2	Savings from reduction of electricity consumption	3806	5196	7627
3	Savings from reduction of water consumption	1994	2579	2968
4	Savings from reduction of heating expenses	17907	20064	22221
5	Savings from installing a filtration system	33000	33000	33000
6	Savings from installing hand dryers	15530	15530	15530
7	Total amount of savings	72237	76369	81346

So we can see that savings are quite high.

The environmental benefits of the green office are obvious: the consumption of electricity, water, heat, consumables, and, accordingly, the resources needed for their production, is significantly reduced. In addition, the introduction of a green office is economically feasible and saves company money.

As another means of income, I think it would be advisable to run daytime groups. Thus, the company will satisfy the demand of customers and receive more profit to the main income. In addition, this way the rooms will be used more, and due to daylight, less energy will be used.

### 3.4 Chapter 3 summary

There are different views on company employees. You can look at company personnel as a carrier of the culture and knowledge of an organization, you can look

at a group of individuals connected by certain relationships and possessing certain competencies. But, in addition to all of the above, staff can and should be considered as one of the key resources of the company. In the current difficult demographic and economic situation, more and more attention is paid to managing this resource.

Human resources management as a resource is the most complex process requiring special and constant attention of a manager, and the effectiveness of human resources processes significantly affects the efficiency of the company as a whole.

In the third chapter logistics approach was applied to the human resources management. As English Prime works in service field it is very important to provide quality services. So it is necessary to provide clients with appropriate teachers. Thus with the help of assignment problem the optimal assignment of teachers to the groups was defined.

A high degree of employee satisfaction is important for a successful company, because it is an important ingredient in cocktails for creativity, involvement, efficiency. Motivation directly depends on staff satisfaction, as satisfied employees are more motivated than dissatisfied employees, and management should not forget how important the level of people's happiness in their workplace is.

If there are some troubles with getting work done, maybe that's because of unsustainable, energy-guzzling office. Greener office design, it turns out, can make employees happier and more productive [16].

Besides, thanks to the Green Office program, companies not only publicly demonstrate their environmental responsibility by reducing the amount of resources used and environmental pollution, but also receive practical benefits, such as reducing the cost of maintaining an office and improving the image of relations with stakeholders .

In this chapter some measures for implementing “green” office were proposed and they are aimed at reducing the administrative costs of the company and increasing environmental responsibility of employees. The possible savings after project implementation could be: electricity consumption – from 24% to 35% of existing costs; water consumption – from 15% to 20% of existing costs; heating

consumption – from 34% to 40% of existing costs. There are also some savings from installing hand dryers and filtering system.

## CONCLUSIONS AND RECOMMENDATIONS

The term "enterprise resource management" should be understood as a system of methods and techniques of meaningful impact on the property belonging to the enterprise and other resources to achieve a positive economic effect.

Resource management of the enterprise is the basis of its financial and economic activities. The more effective such management is, the higher are economic and social indicators that the enterprise can achieve.

The primary task of business executives is to daily improve the skill of assessing available resources and their effective redistribution in accordance with the enterprise development strategy.

We are talking about all types of resources at the disposal of the enterprise: financial, material, informational, human (labor) and others.

A properly built resource management scheme ensures a consistently high quality of products or services provided, and contributes to additional optimization of financial costs without sacrificing quality.

The lack of clear schemes for the implementation of the goals may lead to difficulties in the process of development of production.

High-quality management of financial and other resources of the enterprise guarantees the demand for the company's services / products and ensures its stable market position.

Only effective management of capital, financial instruments and other resources of an economic entity will allow it to remain competitive.

In accordance with thesis tasks in the theoretical part of bachelor thesis work was considered the importance of proper management of company's resources and the possibility of applying logistics approach to these resources.

The logistical approach to enterprise management is aimed at ensuring the rationalization of flow processes within the controlled system from the standpoint of a single material chain, the integration of individual parts of which is carried out at



technical, technological, economic, methodological levels, and minimizing time and resources is achieved by optimizing and financial flows. Thus, logistics management is a targeted impact on logistics flows in order to synchronize their interaction and achieve a synergistic effect.

The application of the principles of logistics management allows the company to ensure high competitiveness of its products and services by optimizing costs associated with the production and sale of goods, accelerate working capital turnover, the fullest satisfaction of consumers in quality goods and services.

Logistics studies the features of processes associated with flows, so operating terms are directly based on a group of flow terms: flow, material flow, information flow, financial flow, personnel flow, service flow, main flow, associated flow. In this regard, the use of logistics provides a new angle of view on the activities of the company and the strategy of its development, studying not resources, but their movement in space and time, which is understood as a continuous change in the state of resources - their quantity, quality, location, etc.

For modern reality, the main thing is the need to introduce such logistics structures that would be most adapted to the work of this enterprise and to the processes taking place in the economy. This applies especially to the construction of international logistics systems, which should be adapted to the maximum extent possible to meet modern requirements, in particular, to meet the standards for ensuring the quality of work adopted in developed countries.

The goal of analytical part of thesis was analysis of the activity of “English Prime” school. The company works in the field of education. It was founded in 2005 in Kyiv. Now the company has more than 150 employees and more than 3000 students studying in the morning, evening and afternoon six days a week, there are 8 large branches in Kyiv, and it is planned to open more branches in Kyiv and other cities of Ukraine.

The methodology of the school is based on many years of research in the field of teaching foreign languages and is based on successful practice in learning our native language. English Prime offers its clients training at the course that was created by

the international organization Applied Scholastics International, which also includes the “English Prime” school.

In this part comparison of online and offline studying was conducted. And was made a conclusion that offline studying has more advantages and is much better for studying of foreign languages.

In the project part of thesis, logistics approach was applied to the human resources management. As English Prime works in service field it is very important to provide quality services. So it is necessary to provide clients with appropriate teachers. Thus with the help of assignment problem the optimal assignment of teachers to the groups was defined.

As an option of optimization of material resources implementation of “green office” was proposed. thanks to the Green Office program, companies not only publicly demonstrate their environmental responsibility by reducing the amount of resources used and environmental pollution, but also receive practical benefits, such as reducing the cost of maintaining an office and improving the image of relations with stakeholders .

Some measures for implementing “green” office were proposed and they are aimed at reducing the administrative costs of the company and increasing environmental responsibility of employees. The possible savings after project implementation could be: electricity consumption – from 24% to 35% of existing costs; water consumption – from 15% to 20% of existing costs; heating consumption – from 34% to 40% of existing costs. There are also some savings from installing hand dryers and filtering system.

## REFERENCES

1. Company resources: веб-сайт. URL: <https://businessmantalk.com/company-resources/> [Access date 01.06.2020].
2. Four Types of Business Resources: веб-сайт. URL: <https://www.marketing91.com/four-types-of-business-resources/> [Access date 01.06.2020].
3. Key Resources: веб-сайт. URL: <https://www.cleverism.com/key-resources-building-block-in-business-model-canvas/> [Access date 01.06.2020].
4. Financial flows of the Enterprise and Ways of their Optimization: веб-сайт. URL: [https://www.researchgate.net/publication/337984790\\_Financial\\_flows\\_of\\_the\\_Enterprise\\_and\\_Ways\\_of\\_their\\_Optimization](https://www.researchgate.net/publication/337984790_Financial_flows_of_the_Enterprise_and_Ways_of_their_Optimization) [Access date 01.06.2020].
5. 5 Reasons Why Resource Management is Important: веб-сайт. URL: <https://www.gantt.com/blog/why-is-resource-management-important> [Access date 01.06.2020].
6. What is Resource Management and Why is It Important: веб-сайт. URL: <https://www.wrike.com/blog/what-is-resource-management/> [Access date 01.06.2020].
7. Material Requirements Planning (MRP): веб-сайт. URL: <https://www.investopedia.com/terms/m/mrp.asp> [Access date 01.06.2020].
8. MRP II - manufacturing resource planning ): веб-сайт. URL: <https://it-enterprise.com/knowledge-base/technology-innovation/manufacturing-resource-planning-mprii> [Access date 01.06.2020].
9. Enterprise resource planning (ERP): веб-сайт. URL: <https://www.investopedia.com/terms/e/erp.asp> [Access date 01.06.2020].
10. What is a Customer Relationship Management (CRM) system: веб-сайт. URL: <https://us.hitachi-solutions.com/blog/what-is-a-crm-system/> [Access date 01.06.2020].

11. What is Applied Scholastics: веб-сайт. URL: <http://www.appliedscholastics.org/about-us.html> [Access date 01.06.2020].
12. Applied Scholastics: веб-сайт. URL: [https://en.wikipedia.org/wiki/Applied\\_Scholastics](https://en.wikipedia.org/wiki/Applied_Scholastics) [Access date 01.06.2020].
13. Covid-19 is changing education for better: веб-сайт. URL: <https://www.ft.com/content/51496fde-98e7-11ea-871b-edeb99a20c6e> [Access date 01.06.2020].
14. An Assignment Problem and Its Application in Education Domain: A Review and Potential Path: веб-сайт. URL: <https://www.hindawi.com/journals/aor/2018/8958393/> [Access date 01.06.2020].
15. Green Office. Environmental Management System for Sustainable Organisations: веб-сайт. URL: [https://wwf.fi/app/uploads/t/n/g/76rpqljfnlgv5g2rkvegpzd/green\\_office\\_achievements\\_and\\_activities\\_2010\\_web.pdf](https://wwf.fi/app/uploads/t/n/g/76rpqljfnlgv5g2rkvegpzd/green_office_achievements_and_activities_2010_web.pdf) [Access date 01.06.2020].
16. 5 Ways Green Office Design Also Makes Workers Happier and More Productive: веб-сайт. URL: <https://www.fastcompany.com/3037151/5-ways-green-office-design-also-makes-workers-happier-and-more-productive> [Access date 01.06.2020].
17. Сущность логистического подхода: веб-сайт. URL: [https://studme.org/1594102414253/logistika/suschnost\\_logisticheskogo\\_podhoda](https://studme.org/1594102414253/logistika/suschnost_logisticheskogo_podhoda) [Access date 01.06.2020].
18. Логистический подход в экономике управления предприятием: веб-сайт. URL: [http://www.science-bsea.bgita.ru/2005/ekonom\\_2005/galushko.htm](http://www.science-bsea.bgita.ru/2005/ekonom_2005/galushko.htm) [Access date 01.06.2020].
19. Логистический подход в бизнесе: 6 точек соприкосновения логистики с управлением компанией: веб-сайт. URL: <http://nta.com.ua/blog/369-logistic-in-business/> [Access date 01.06.2020].
20. Логистика в управленческой деятельности предприятия: веб-сайт. URL: <https://nauka-rastudent.ru/13/2318/> [Access date 01.06.2020].

21. Сутність логістичного підходу: веб-сайт. URL: [http://studme.com.ua/1594102414253/logistika/suschnost\\_logisticheskogo\\_podhoda.htm](http://studme.com.ua/1594102414253/logistika/suschnost_logisticheskogo_podhoda.htm) [Access date 01.06.2020].

22. Логистический подход к управлению системой предприятия: веб-сайт. URL: [http://media.miu.by/files/store/items/rnpsmu-pipsn/iii/smu\\_2012\\_seminar\\_14.pdf](http://media.miu.by/files/store/items/rnpsmu-pipsn/iii/smu_2012_seminar_14.pdf) [Access date 01.06.2020].

23. Особенности и варианты использования логистического подхода к управлению знаниями в организации: веб-сайт. URL: <https://moluch.ru/conf/econ/archive/132/7166/> [Access date 01.06.2020].

24. Эффективная система ресурсов предприятия: веб-сайт. URL: <https://moluch.ru/archive/146/41058/> [Access date 01.06.2020].

25. Ресурсы предприятия. Финансовые и трудовые ресурсы предприятия: веб-сайт. URL: <http://www.catback.ru/articles/theory/firm/resources.htm> [Access date 01.06.2020].

26. Логистический подход к управлению затратами в корпоративных структурах: веб-сайт. URL: [https://www.cfin.ru/management/finance/cost/logistical\\_approach.shtml](https://www.cfin.ru/management/finance/cost/logistical_approach.shtml) [Access date 01.06.2020].

27. Виды финансовых потоков и ресурсов в логистических системах: веб-сайт. URL: <https://www.xcomp.biz/5-1-vidy-finansovykh-resursov-i-potokov-v-logisticheskix-sistemax.html> [Access date 01.06.2020].

28. Common resource management techniques: веб-сайт. URL: <https://www.prosymmetry.com/resources/know-your-resource-management-techniques/> [Access date 01.06.2020].

29. Resource management concepts and techniques: веб-сайт. URL: <https://bizfluent.com/list-6190694-resource-management-concepts-techniques.html> [Access date 01.06.2020].

30. Resource management: веб-сайт. URL: <https://www.shopify.com/encyclopedia/resource-management> [Access date 01.06.2020].

31. Quick guide to resource management: веб-сайт. URL: <https://www.projectmanager.com/blog/quick-guide-resource-management> [Access date 01.06.2020].

32. Логистика в системе менеджмента: веб-сайт. URL: <http://www.klubok.net/article2728.html> [Access date 01.06.2020].

33. Логістичне управління підприємством: теоретичний аспект: веб-сайт. URL: <http://ukr.vipreshebnik.ru/logist/4401-logistichne-upravlinnya-pidpriemstvom-teoretichnij-aspekt.html> [Access date 01.06.2020].

34. Логістичний підхід до управління персоналом: веб-сайт. URL: <https://studfile.net/preview/5386695/page:7/> [Access date 01.06.2020].

35. Преимущества логистического подхода в управлении производством: веб-сайт. URL: <http://www.smartmanage.ru/deels-54-1.html> [Access date 01.06.2020].

36. Логистика в управленческой деятельности предприятия: веб-сайт. URL: <https://nauka-rastudent.ru/13/2318/> [Access date 01.06.2020].

37. Управление ресурсами предприятия: проблемы и системы: веб-сайт. URL: <https://sprintinvest.ru/upravlenie-resursami-predpriyatiya-problemy-i-sistemy> [Access date 01.06.2020].

38. Логистический подход к управлению персоналом организации: веб-сайт. URL: <file:///D:/Logistic/%D0%94%D0%98%D0%9F%D0%9B%D0%9E%D0%9C/logistic-heskiy-podhod-k-upravleniyu-personalom-organizatsii.pdf> [Access date 01.06.2020].

39. Выход в онлайн: как языковые школы пытаются выжить в эпоху карантина: веб-сайт. URL: <https://www.forbes.ru/forbes-woman/396095-vyhod-v-onlayn-kak-yazykovye-shkoly-pytayutsya-vyzhit-v-epohu-karantina> [Access date 01.06.2020].

40. Чотири розповіді: Як корона вірус змінює локальну освіту і змінює її майбутнє: веб-сайт. URL: <https://varosh.com.ua/noviny/chotyry-rozpovidi-yak-koronavirus-zminyuye-lokalnu-osvitu-i-vplyvaye-na-yiyi-majbutnye/> [Access date 01.06.2020].

41. «30 процентов рынка может обанкротиться»: как школы английского отреагировали на карантин: веб-сайт. URL: <https://ain.ua/2020/04/04/shkoli-anglijskogo-i-karantin-kolonka/> [Access date 01.06.2020].

42. Концепція «зеленого» офісу: що це таке, та навіщо її впроваджувати: веб-сайт. URL: <https://bakertilly.ua/news/id45157> [Access date 01.06.2020].

43. Как сделать офис «зеленым»: веб-сайт. URL: <https://www.facepla.net/content-info/art-menu/900-3r-green-office.html> [Access date 01.06.2020].

44. «Зеленый офис» как концепция управления организацией»: веб-сайт. URL: <https://essuir.sumdu.edu.ua/bitstream-download/123456789/31370/1/mhoyan.pdf;jsessionid=099349E249752647C24EC787A596F017> [Access date 01.06.2020].

45. «Зеленый» офис – здоровый офис: реально ли это для украинских компаний: веб-сайт. URL: <https://ecotechnica.com.ua/stati/630-zelenyj-ofis-zdorovyj-ofis-realno-li-eto-dlya-ukrainskikh-kompanij-video.html> [Access date 01.06.2020].

46. Green Tips for the Office: веб-сайт. URL: <https://www.thebalancesmb.com/going-green-ideas-for-the-office-2948097> [Access date 01.06.2020].

47. Значение мотивации персонала в эффективности организации: веб-сайт. URL: <https://hrhelpline.ru/znachenie-motivatsii-personala-v-effektivnosti-organizatsii/> [Access date 01.06.2020].

48. Персонал как ключевой ресурс: как выстроить управление максимально эффективно: веб-сайт. URL: [http://upr.ru/article/kontseptsii-i-metody-upravleniya/PERSONAL\\_KAK\\_KLYUCHEVOJ\\_RESURS\\_KAK\\_VYSTROIT\\_UPRAVLENIE\\_MAKSIMAL\\_NO\\_EFFEKTIVNO.html](http://upr.ru/article/kontseptsii-i-metody-upravleniya/PERSONAL_KAK_KLYUCHEVOJ_RESURS_KAK_VYSTROIT_UPRAVLENIE_MAKSIMAL_NO_EFFEKTIVNO.html) [Access date 01.06.2020].

49. Управление персоналом образовательной организации как педагогическое понятие: веб-сайт. URL:

<https://cyberleninka.ru/article/n/upravlenie-personalom-obrazovatelnoy-organizatsii-kak-pedagogicheskoe-ponyatie/viewer> [Access date 01.06.2020].

50. Основы управления персоналом в образовательной организации : веб-сайт. URL:

[https://studme.org/87006/menedzhment/osnovy\\_upravleniya\\_personalom\\_obrazovatelnoy\\_organizatsii](https://studme.org/87006/menedzhment/osnovy_upravleniya_personalom_obrazovatelnoy_organizatsii) [Access date 01.06.2020].