

**Kyiv National University of Trade and Economics
Tourism and Recreation Department**

FINAL QUALIFYING PAPER

on the topic:

**«LEAN TECHNOLOGIES IN THE MANAGEMENT OF TOURISM
COMPANY “TPG”»**

Student of the 2^d year, group 5 a,
academic degree «Master»
specialty 073 «Management»
specialization «Tourism, Resort and
Recreation Management»

_____ Bodnar Yuliia

Scientific adviser
Candidate of Sciences
(Public Administration),
Associate Professor

_____ Kravtsov S.S.

Manager of the educational program,
Doctor of Sciences (Economics),
Professor

_____ Mykhailichenko G.I.

Kyiv, 2019

Kyiv National University of Trade and Economics

Tourism and Recreation Department
073 «Management»
«Tourism Resort Recreational Management»

Approved by

Head of the Department
T.I. Tkachenko

« ___ » _____ 201_

Task for a final qualifying paper

Bodnar Yuliia

1. Topic of a final qualifying paper: «Lean technologies in the tourism company management»

Approved by the Rector's order from 30.10.2018 № 3993

2. Term of submitting by a student his/her terminated paper: 11/01/2019

3. Initial data of the final qualifying paper

Purpose of the paper is to determine ways of implementation lean management tools and methods in tourism company in order to simplify work processes and improve profitability.

The object is a system of lean management in organizational process of tourism company.

The subject is tools, methods, directions of implementation lean system in tourism.

4. Illustrative material: characteristic of enterprises, that use lean concept; losses during production of goods and services; lean approach of organizational process in tourism company; analyse of distribution of management functions inside a company; dynamics of main economic indicators of tour operator; indicators of profitability of company; SWOT analyse of implementation lean tools in tour operator.

5. Consultants of the research and titles of subsections which were consulted:

Section	Consultant (last name and initials)	Date and signature	
		The task given	The task received
Part 1	Kravtsov S. S.	02/12/2019	02/12/2019
Part 2	Kravtsov S. S.	02/12/2019	02/12/2019
Part 3	Kravtsov S. S.	02/12/2019	02/12/2019

6. Contents of a final qualifying paper (list of all the sections and subsections)

INTRODUCTION

PART 1. CONCEPTUAL BASE OF IMPLEMENTATION OF LEAN TECHNOLOGIES IN MANAGEMENT OF TOURISM ENTERPRISES

1.1. The essence, principles and methods of implementation in tourism enterprise

1.2. World practice of lean technologies in management of tour operator

PART 2. DIAGNOSTICS OF MANAGEMENT SYSTEM OF TOUR OPERATOR "TPG"

2.1. Characteristic of management system of enterprise

2.2. Evaluation of accordance of the tourism company to requirements of lean management

2.3. Evaluation of efficiency of business communications of enterprise on tourism market

PART 3. INTRODUCTION OF LEAN MANAGEMENT CONCEPT IN TOURISM COMPANY "TPG"

3.1. The program of propositions and resource provision of implementation lean management concept by tour operator

3.3. Evaluation of efficiency of applying lean technologies in management of tourism company

CONCLUSIONS

REFERENCES

APPENDIX

7. Time schedule of the paper

No	Stages of the final qualifying paper	Terms of the final qualifying Paper	
		de jure	de facto
1.	Choosing and approval of the final qualifying paper topic	01.09.2018-29.10.2018 p.	01.09.2018-29.10.2018 p.
2.	Preparation and approval of task for the final qualifying paper	30.10.2018-02.12.2018 p.	30.10.2018-02.12.2018 p.
3.	Writing and pre defense of the 1 st part of the final qualifying paper	03.12.2018 - 12.05.2019 p.	03.12.2018 -12.05.2019 p.
4.	Writing and pre defense of the 2 nd part of the final qualifying paper	13.05.2019-31.08.2019 p.	13.05.2019-31.08.2019 p.
5.	Writing and preparation of scientific article	till 01.06.2019 p.	
6.	Writing and pre defense of the 3 rd part of the final qualifying paper	01.09.2019-20.10.2019 p.	01.09.2019-20.10.2019 p.
7.	Preparation of the final qualifying paper (title, content, introduction, references, appendences), presentation of master diploma paper on the department and pre defense in the committee	21.10.2019-03.11.2019 p.	21.10.2019-03.11.2019 p.
8.	Presentation of the final qualifying paper on the department and on the deanery, receiving of referrals for external peer review	till 16.11.2019 p.	till 16.11.2019 p.
9.	Additional processing, printing, preparation of material to final qualifying paper defense	04.11.2019-15.11.2019 p.	
10.	Defensing of the final qualifying paper in the Examination Board	According to the schedule	

8. Date of receiving the task: 02/12/2019

9. Scientific adviser of the research

_____ Kravtsov S. S.

10. Head of educational and professional program

_____ Mykhailichenko G.I.

11. The task received by the student

_____ Bodnar Y.G.

12. Resume of a scientific adviser of a final qualifying paper

Student Bodnar Yuliia completed final qualifying paper in due time according to a calendar plan. Contents, structure and design of the work meet all the requirements. The work consists of introduction, three parts, conclusions, list of references and appendices.

In the first part defined theoretical and methodological basis of lean technologies and system; their definition, peculiarities and methodology; case studies of lean concept in different service enterprises.

In the second part estimated analysis effectiveness of the management methods of tour operator “TPG”, level of business communications and compliance existing management system to the requirements of lean approach.

In the third part defined ways and measures of development and implementation of lean management model in tour operator “TPG”.

The final qualifying paper can be admitted to defense in the Examination Board and deserves high positive score.

Scientific adviser of a final qualifying paper _____ Kravtsov S.S.

13. Resume about a final qualifying paper

A final qualifying paper can be admitted to defense in the Examination Board.

Head of educational and professional program _____ Mykhailichenko G.I.

Head of the Department _____ Tkachenko T.I.

_____, _____, 201_

CONTENT

INTRODUCTION.....	7
PART 1. Conceptual principles of applying lean technologies in the management of tour operator.....	9
1.1. Lean technologies: the essence, principles and methods of implementation in the tourism enterprise.....	9
1.2. Global practice of lean technologies in the management of the tour operator...16	
PART 2. Diagnosis of the tour operator management system “TPG”.....	23
2.1. Characteristics of enterprise management system.....	23
2.2. Assessment of compliance of the tourist operator management system with the requirements of lean management.....	27
2.3. Evaluation of the effectiveness of business communications of the enterprise in the market of tourist services.....	32
PART 3. Implementation of the concept of lean management on the tour operator "TPG".....	36
3.1 Program of activities and resources for the implementation of the concept of lean management by the tour operator.....	36
3.2 Evaluation of the effectiveness of applying lean technologies in the management of a tour operator.....	46
CONCLUSIONS.....	50
REFERENCES.....	52

INTRODUCTION

Actuality of the topic. Nowadays, in the era of constant application of new technologies and innovations, the most important objective of any business is to keep up with the times. The competitiveness and efficiency of performance of each organization depends on effectiveness of management and forehanded changes with the view of improving capabilities and achieving wishful results. Today`s consumer has more and more needs and desires, that must be satisfied in the shortest period of time with the lowest costs and in the most convenient way for consumer. Tourism as one of the most rapidly developing industries in Ukraine and in the world requires ongoing improvement in the process of providing services. Implementation of lean technologies in management of tourism enterprises is one of the most sensible decision in the current economic environment.

Lean production – is effective modern concept of management, essence of which consist in optimization of business processes through maximum orientation on interests and needs of customers and markets, moreover this system considers motivation of each employee [3]. Such as alternative to try once again push add opportunities from existing organisational instruments, a lot of companies begin to look out to methods of lean production such as way to achieving competitive advantages.

Objectives of lean system consist in designing and implementation of methodology, that capable to ensure production different types of goods and services exactly for the time, that is actually needed for production of them. Therefore saving of time, material and labour resources is achieved, cost price of goods and services is reduced, profitability of enterprise is increased and it causes improvement of all economic indicators of business activity.

Domestic scientists contend, that lean - is breakthrough approach to management of quality, that provide long-term competitiveness without significant investments [5]. Reference point in lean system is always consumer, so, in order to begin identify of costs it is necessary to determine what he needs. Organizations, that

deal with development of goods and services should have clear understanding about values from the point of view of customers. It gives opportunity to bring together objectives of all levels with strategic aims, direct all forces to supply consumer's needs and requests and avoid losses.

One of the most effective approaches for management of enterprise is the concept of implementation of lean-technologies, which is to optimize business processes by maximizing customer and market interests and needs, as well as taking into account the motivation of each employee.

The purpose of the topic is to determine ways of implementation lean management tools and methods in tourism organization in order to simplify work processes and improve profitability.

The object of the research is the development of the lean management model in tour operator "TPG".

The subject of the research is theoretical, methodological and practical methods of development of lean management model in tourism enterprises.

The objectives of the research are:

1. Describe the theoretical and methodological basis of lean system.
2. Analyse effectiveness of management methods in enterprise "TPG", determining the resources which can be used for the management system improvement.
3. Assess the current state of activity of tour operator «TPG» and its main indicators.
4. Formulate the main development directions for implementing lean system in tour operator management.
5. Propose measures for lean model development.
6. Develop program of implementation lean management model in "TPG".

Methods of research. For the purpose of meeting previously mentioned objectives we have used the number of qualitative and quantitative methods. The process of the scientific research implemented for the writing of qualifying paper comprised the review of the existed literature on this topic, analysis of current state of

tour operator “TPG” and its main indicators, studying of other tourism enterprises experiences in lean management development and others. In the process of qualifying paper writing, the next research methods were used: analysis, systematization, comparative analysis, generalization and classification. What is more, the first theoretical part of the paper required the use of deduction, abstraction and observation. In the second part, analytical methods were actively used. The third part of the paper was created with the usage of case studies and SWOT-analysis.

Scientific innovation. In this scientific work the new management model with use of lean technologies for tour operator “TPG” was developed.

Practical value. Implementation of proposed measures will lead to the significant improvement of management activity of tour operator, popularization of lean technologies and enhancement of the competitiveness of company “TPG” in Ukrainian tourism market.

Publications. As the result of the research made in the qualifying paper, the scientific article “Lean technologies in the tourism company management” was published (appendix A) in the articles’ collection of master programs students “International Hotel Business and Tourism”.

Paper structure. Final qualifying paper consists of the introduction, 3 parts; each part consists of three sections and conclusions. There are 13 figures, 7 tables in the qualifying paper.

PART 1

CONCEPTUAL PRINCIPLES OF APPLYING LEAN TECHNOLOGIES IN THE MANAGEMENT OF TOUR OPERATOR

1.1. Lean technologies: the essence, principles and methods of implementation in the tourism enterprise

Lean production (economical production) is an effective modern management concept, the essence of which is to optimize business processes by maximizing the focus on the interests and needs of customers and markets, as well as taking into account the motivation of each employee [4, p. 9]. As an alternative to simply trying to squeeze out additional features from existing system tools, many manufacturing companies have begun to look at lean manufacturing methods as a way to gain competitive advantage. Lean methods are a series of techniques by which the time elements of the work required to produce products and services are performed sequentially, one by one, at a fixed pace without waiting time, downtime, or other delays [4, p. 10].

The founder of the term "lean manufacturing" is considered Tahiti Ono, chief of a machine shop, an engineer at the Toyota company in Japan. For the first time, the term appears on the Toyota Production System. TPS - are methods, developed by Toyota in order to produce goods and services using a variety of resources and aimed at ensuring fault-free production by eliminating costs [5, p. 47]. In the years 1932-1959, thanks to Tahiti Ono, the system was supplemented by the concept of economical production and became a real phenomenon and the beginning of the change of economic formation and the transition to a new economic era, known as "time of economical production". The term "lean" was first used in an article by American economist John Krafchik in which he explores and exposes the phenomenon of TPS [6].

The task of lean production is to design and implement a technique that can provide the production of different types of goods and services at exactly the time that is really needed to produce them. Thus savings of time, material and labor

resources are achieved, the cost of production is reduced, the profitability of production increases, and therefore all economic indicators of production and economic activity of the enterprise are improved.

Companies applying the lean-manufacturing concept differ from other enterprises by the following characteristics (Figure 1.1).

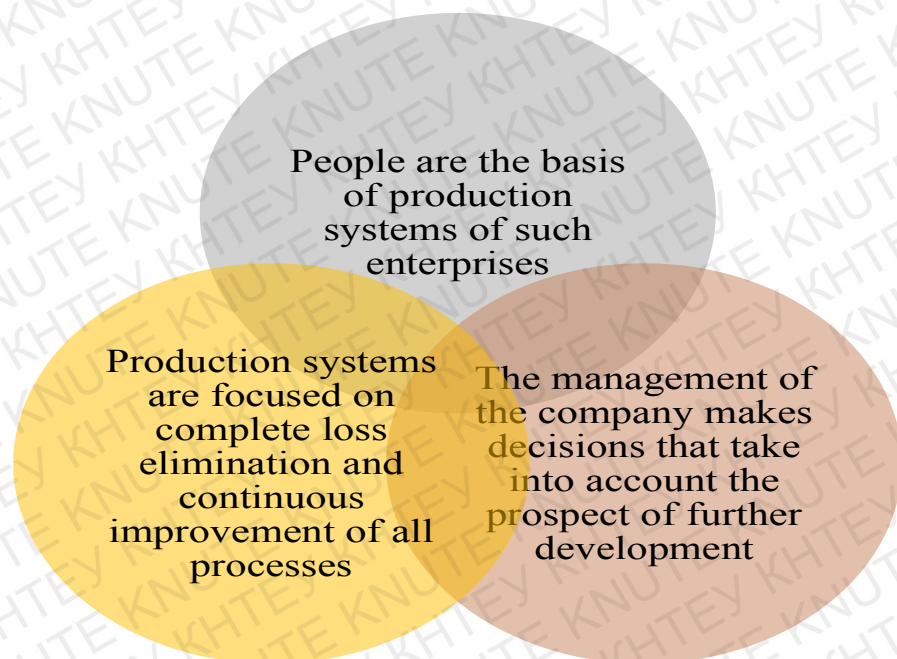


Figure 1.1. Characteristics of enterprises, that use lean approach

1. People are the basis of the production system of such enterprises. They are a driving force in the production of competitive goods and services, while technology and equipment are only a means of achieving these goals. Theory, strategy or technology will not make a business successful. It can only be achieved by intellectual or creative abilities of people.
2. The production systems of such enterprises are focused on complete loss elimination and continuous improvement of all processes. All employees of the company take part in the day-to-day work on preventing all kinds of costs, as well as improving the organization as a whole.
3. The company's management makes decisions that take into account the prospect of further development, but the current financial interests are not decisive. The management of such companies is not in vain

administration - command, unjustifiably tight control, evaluation of employees through complex systems of various indicators. It exists for the intelligent organization of the production process, timely detection, solution and prevention of problems. The ability to see and solve problems in your workplace is appreciated by each employee.

There are twelve principles, that are regarded as basis of applying lean philosophy in management of enterprise (Figure 1.2).

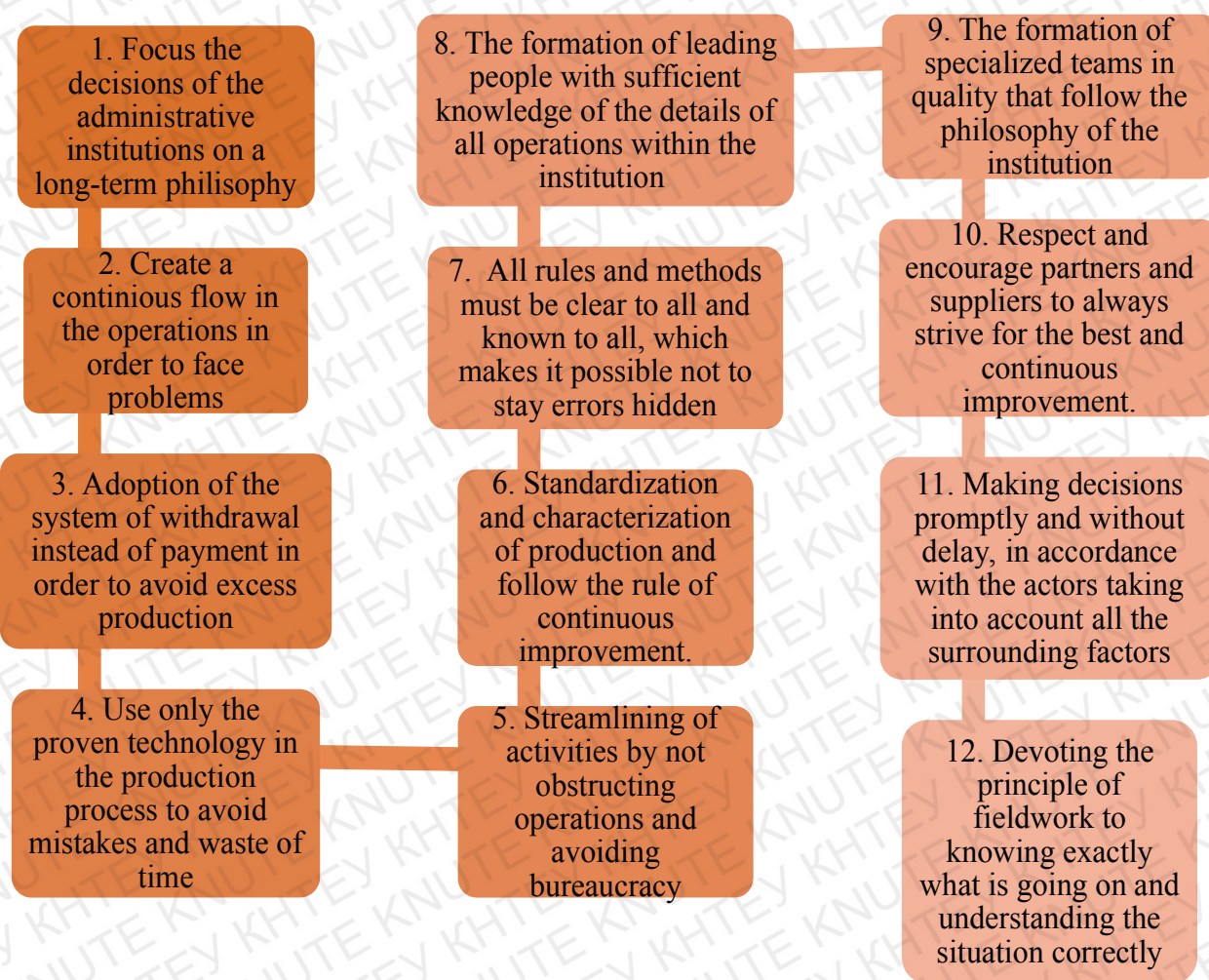


Figure 1.2. 12 principles of lean philosophy

Worth mentioning, that there are a lot of management approaches, that closely interacted with lean principles. The most widespread among them are Six Sigma, Lean-Product-Service system and others.

The six sigma method is a project-driven management approach to improve the organization's products, services, and processes by continually reducing defects in

the organization. It is a business strategy that focuses on improving customer requirements understanding, business systems, productivity, and financial performance. The fundamental principle of Six Sigma is to take an organization to an improved level of sigma capability through the rigorous application of statistical tools and techniques' [12, p. 35]. The Six Sigma method includes measured and reported financial results, uses additional, more advanced data analysis tools, focuses on customer concerns, and uses project management tools and methodology.

A Circular Lean Product-Service System (CLPSS) is defined as a combination of a tangible circular product with intangible value-added service elements, and its related supporting closed-loop networks and infrastructure. It can lead to dematerialization through reducing the creation of waste in manufacturing and services operations, and the consumption of virgin materials, thanks to a restorative and regenerative operational system by design that can satisfy customers' needs, decouple economic growth from environmental impact and create new revenue streams out of extending the residual value of products.

Domestic scientists say lean is a breakthrough approach to quality management that ensures long-term competitiveness without significant investment. [7, p.15]

The experience of implementing Lean Production began in industry and then spread to other types of economic activity. TPS consists of a number of tools, including the elimination of major losses and further optimization of production processes. Tahiti Ono attributed such losses to the enterprise [5, p. 62-63]:

- losses from overproduction - overproduction of products or services that are not ordered, leads to excess inventory and causes losses such as excess labor and retention of additional storage facilities;
- losses of time from waiting - workers who observe the work of other departments, idle in anticipation of the next work operation, tool, materials or simply are unemployed due to delays in the processing of information;
- losses due to the presence of unnecessary stages of processing - unnecessary operations when processing parts; ineffective machining due to the poor quality of the tool, which causes unnecessary movements and leads to defects;

- losses caused by excessive demands on product quality;
- losses due to production of defective products - production of defective parts and repair of defects; waste; replacing products and checking them, which leads to wasted time and effort.

In practice, there are quite a few lean-system tools, the most common of which are:

1. 5S - (Sort, Set in order, Shine, Standardize, Sustain) - the system of organization and rational use of the workplace. (Figure 1.3)

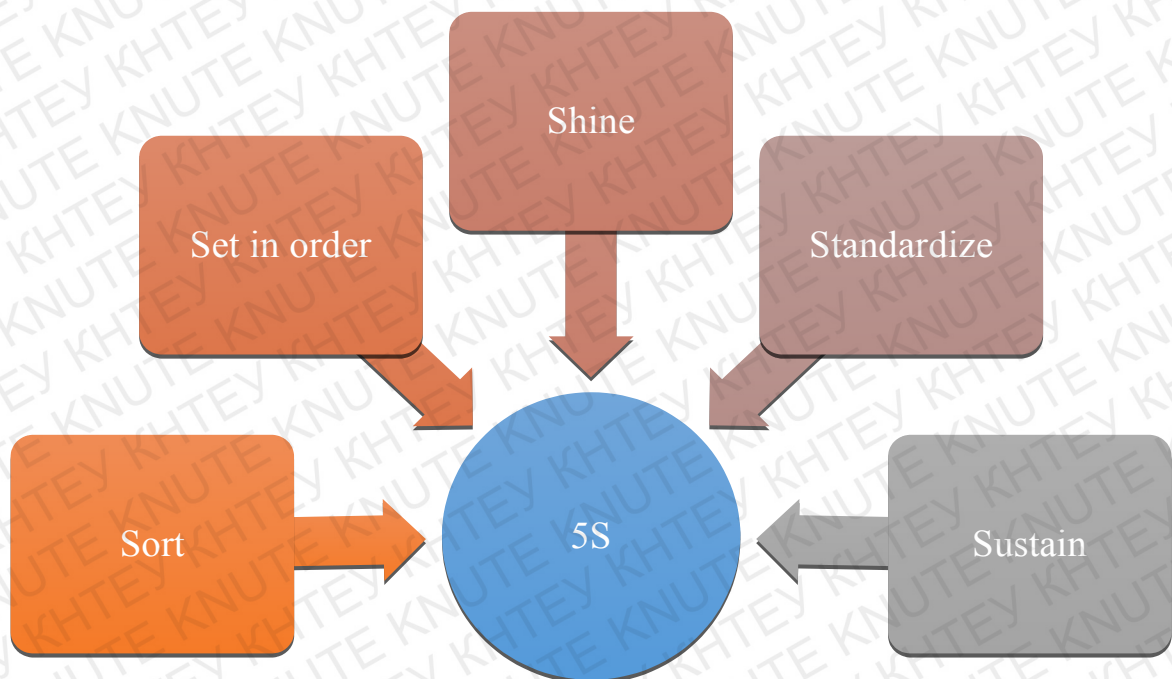


Figure 1.3. Main principles of system 5S

It consists of the following stages [8, p. 28]:

The first stage - sorting - creating a visual workplace - implements the central principle of the system - "only what is needed, only in the amount you need, and only when you need it."

Next is a rational placement. This is a very important step, because it helps to reduce the time spent searching for and using the items you need, as well as the costs associated with moving items from place to place.

The third stage of the 5S system is cleaning. The purpose of this phase is to maintain in perfect order and complete readiness for work that may be required to

perform production operations.

Standardization - the fourth stage - arrangement of the visual workplace, which is to perform the established procedures of the first three stages of the 5S system.

The last step is to improve and support the results we have achieved before. That is, the implementation of established procedures should become a habit.

2. The next tool that is actively used by businesses that follow the rules and concepts of the lean system is the Kanban method. The principles of this method are suitable not only for industrial enterprises, but also for any organizations involved in the production and sale of goods and services. Kanban is a Japanese word meaning “signal” or “visual recording” [9, p. 41]. When a worker needs materials or information from another department of a business, he uses a Kanban card. “Kanban” - very often has the appearance of a plastic-covered card or other device by which a job request is transferred from a particular department to another. In essence, this card is a signal to move or work on a task.

The Kanban system therefore has four main components: minimum costs; optimal timing; the optimal number of goods or services produced; excellent quality. In other words, the consumer we need quality goods in the right quantity, in the right place, at the right time and delivered with minimal cost. The basic rules for implementing the Kanban method are: visualization of work (using cards - planning, process and work done directly), limiting the number of work performed simultaneously, focusing on unfinished tasks and continuous improvement by identifying problems in the organization of work in your enterprise.

3. A widespread tool that is used in Lean systems and which is based on error prevention in organizational processes is the Poka-yoke method. The principle of this method is to find all possible errors in the processes of operation and management and to create techniques and technologies that exclude the very possibility of their occurrence.

Lean thinking and implementing lean approaches allows organizations to be both innovative and competitive, enabling to be resistant to changes in the internal and external environment.

1.2. Global practice of lean technologies in the management of the tour operator

The principles of lean-system can be actively extended to tourist enterprises, for which it is equally important to create effective organization of activity and management of the company.

In order to promote the sustainable development of tourism activities, it is necessary to introduce and use new approaches to the implementation of economic processes in tourism enterprises. The advancement of economic thought in terms of adding value to a product goes beyond the production strategy of the past. Science and practice around the world have proven that the adoption and use of traditional economic strategies and approaches must be continually analysed and the evaluation of these results should open new avenues for improving the methods of using available resources, realizing productive activities and creating value-for-money products.

The famous research directors of the International Motor Vehicle Program Womack and Jones thought up the most widespread approach to lean management of a company, that is consist of such principles [3, p.16] (Figure 1.4).



Figure 1.4 Principles of lean management International Vehicle Program

Recently, many scientists are beginning to consider lean technologies in terms of their application in the field of services. Yorgova stresses that “it is very important for organizations providing services in the market to find competitive advantages. In the fight for survival, those businesses that provide services with better quality for their customers at a competitive price will always be one step ahead of others, and one way to achieve this is to avoid or reduce various losses in the course of the enterprise”. [11]

The use of lean tools can not only improve the overall performance of the organization, but also the emergence of new competitive advantages, which is very important for the service industry - satisfied and loyal customers.

It is equally important for the tourism industry to create an effective organization of a specific production process related to the insensitivity of the product offered. The enterprise should minimize losses in order to increase the value for the consumer and increase the competitiveness. It is well known in the world that losses in tourism are generated throughout the entire tourism industry chain. The causes of such losses are different: seasonality and insufficient capacity; inadequate organization and management of tourism enterprises; poor quality of services; non-compliance with standards; inefficient use of resources; insufficiently qualified personnel; insufficient research on the tourist market, underestimation of the profitability of tourist destinations.

All these and many other losses for the tourism industry, as well as all unnecessary processes and actions that do not add value to the tourism product, can be identified, analysed and removed from the enterprise activity process through a lean approach.

Today Lean thinking approach spreads on companies in tourism and hospitality industries very actively. Thanks to lean management methods hotels and tourism enterprises get new opportunities to offer services with good quality and according to the world standards but for only half of the price.

The initiation and implementation of lean management in a company, that supplies services proceeds generally on an organizational and operational level

(Figure 1.5).

Organizational level (also called in Japan “Kaikaku”) is changes that imply people thinking, their attitude to the work and activities inside of the company from the point of view lean philosophy. These modifications are not continuous process.

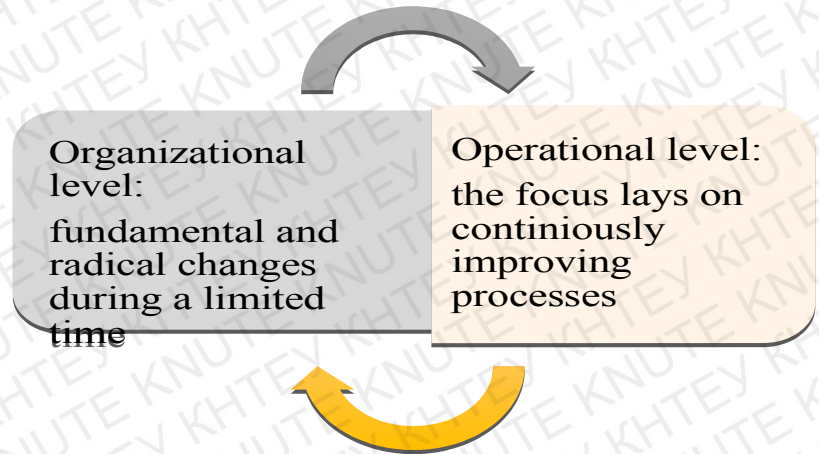


Figure 1.5 Levels of implementation lean management in enterprises of service sector

Operational level (also called “Kaizen”) consists of gradual improvements through implementation of lean methods and tools referred to every single operation in the organization.

Moreover, foreign scientists define, that implementing of lean program in the company is articulated in five main pillars:

- 1) assess the voice of customers by mapping their needs and current level of service (the customers are other internal units of the bank, e.g. retail units),
- 2) improve process efficiency while delivering to customer needs at a lower cost and shorter lead-times,
- 3) actively monitor performance at the team level to identify opportunities for improvement,
- 4) design organizational processes and jobs to meet customer needs at the best possible cost, leveraging on team leader’s span of control, enriched roles and responsibilities and capability building,
- 5) foster behavioral change and towards a customer centric culture.

Lean Management has shown its applicability to the service or tertiary sector

that includes also the hospitality and tourism area. Nonetheless, in world practice there are only a few examples of companies that have implemented Lean Management in their organizational processes up to now. It can be inflicted due to many reasons. One of them is that Lean methods are used only partially in the single departments of an organization or in the single appropriate process and therefore the overall approach is missing. Also implementation and using of lean methods in tourism and hospitality industry often occurs in combination with Six Sigma.

The Yukai Resort in the famous Gero Onsen Hot spring area of Japan use in its business processes lean approach in order to offer great value to their customers, to reduce costs and to remain competitive in the fierce hospitality industry. They achieve it in such way - all resort duties are shared by all personnel, that has allowed the resort to operate with minimal staff and reduce overall costs while maintaining high quality. One more useful lean innovation in this company was buffet style of dinner and breakfast, which reduces staffing requirements.

Marriot Hotel in the United Kingdom developed strategy of continuous improvement based on lean philosophy. There were three fundamental rules:

1. Nobody is pitiful for achievement of the goal.
2. The staff is the first customer.
3. More responsibility for employees from different departments and with different authority.

Moreover, some hotel and tourism enterprises begin to use widely in their work processes such instrument of lean system as CIP-Workshops. CIP-meetings were and are hold in the reception with front and back office, in the marketing department and department of work with clients, as well as in the hotel spa and housekeeping. CIP-board was placed for everyone visible in the company, and it is possible to all employees to write their improvement ideas on prefabricated idea cards. At the end of the year, a lottery with the cards of all endorsed suggestions is hold out. The most interesting ideas and suggestions win a price (incentive tour, ticket to some worthwhile tourism events, etc).

Also Womack and Jones adopted “the five step lean model” for lean

transformation, which has successfully applied in the tourism and hotel industries. It includes follow steps (Figure 1.6).

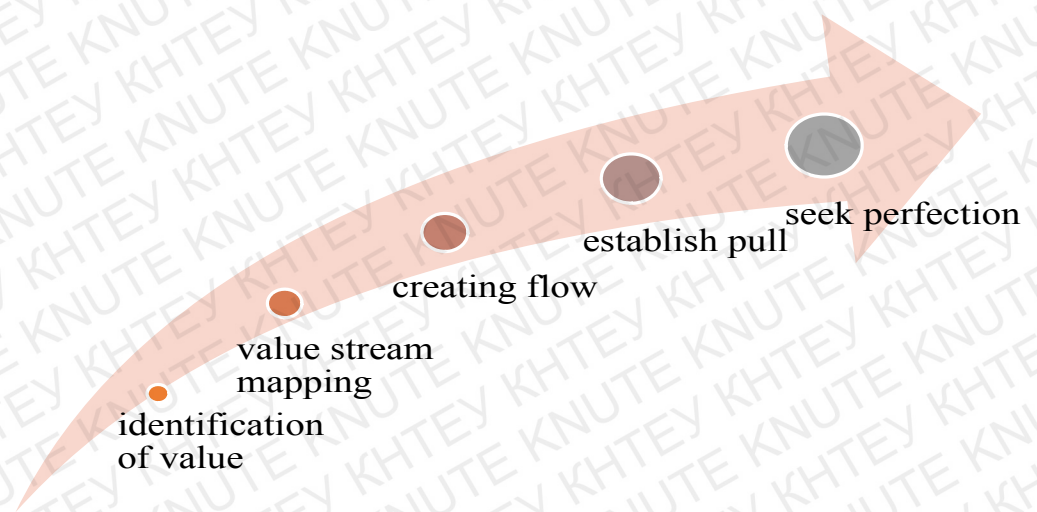


Figure 1.6. Steps for lean transformation in tourism and hotel industries

First step – identification of value – based in identify and describe the operational processes and then to prioritize them concerned to the value added for the end consumer.

Second step – value stream mapping – helps to pinpoint wasteful tasks such as unnecessary movements, excess inventories, lead times.

Creating flow means remove wasted resources from the process to make them smoother. A disturbed flow in the natural sequence of events may result in confused bookings, meaningless waiting, luggage loss, transfer delays, unprepared rooms, etc.

Step four – establish pull – means that the request for a service triggers the pull process and enterprise should do this process particularly fast and flexible.

The last step – perfection or absolute level of lean - gain a competitive advantage via continuous improvement.

Maritan, Brush and Henriksen analyzed not only key success factors, barriers or other determinants of lean implementation outcomes in service industry, but also cases of failed lean implementations and identified such obstacles for achieving successful lean transformation of organizational processes at enterprises, which provide services: lack of top management attitude, commitment and involvement; resistance of culture change; lack of leadership skills and supportive leadership; lack

of employee engagement; lack of training and education; lack of resources (financial, technical, human, etc.); poor communication; weak link between lean and strategic objectives; narrow view of lean as a set of tools, techniques and practices; wrong selection of lean tools.

Conclusions to the part 1

1. The intensification of competition in the tourist services market and the restriction of resources used by businesses in the course of their activities leads to the search for new approaches to enterprise management.

2. One of the most effective approaches to enterprise management is the concept of lean-technology, which is to optimize business processes by maximizing the focus on the interests and needs of customers and markets, as well as taking into account the motivation of each employee.

3. Companies that apply the concept of "lean-production" differ from other enterprises in the following characteristics: the basis of the production system of such enterprises are people; the production systems of such enterprises are focused on the complete elimination of losses and continuous improvement of all processes; further development, while the current financial interests are not decisive.

4. The most effective lean system tools are: 5S (Sort, Set in order, Shine, Standardize, Sustain) technology, Kanban method of using cards or other devices to quickly transfer information between employees, and Japanese based Poka-yoke method to identify possible errors in the process, Value stream mapping and others.

5. The use of lean tools can lead not only to improving the overall performance of the organization, but also to the emergence of new competitive advantages, which is very important for the service industry - satisfied and loyal customers. It is equally important for the tourism industry to create an effective organization of a specific production process related to the insensitivity of the product offered. The enterprise should minimize losses in order to increase the value for the consumer and increase the competitiveness.

PART 2

DIAGNOSIS OF THE TOUR OPERATOR MANAGEMENT SYSTEM “TPG”

2.1. Characteristics of enterprise management system

The tour operator Travel Professional Group is Ukrainian national tour operator, that has been in tourism services market since 1994. This company is an affiliate of the largest tourism community - the World Tourism Organization (UNWTO).

Their partners are tour operators in over 40 countries. TPG cooperates with the leading airlines of the world: Air France, Lufthansa, Austrian Airlines, SAS, Baltic Airlines, KLM, MAU, Windrose, Fly Dubai, etc.

The main office of TPG in Kyiv is located on Velyka Vasylkivska street, 34. There are also other representatives in Ukraine in such cities like Kyiv, Dnipro, Kharkiv, Zaporizhia, Odessa, Lviv and abroad – in Warsaw, Bangkok, Pattaya, Almaty.

Working hours of TPG: from 8 o'clock a.m. to 8 o'clock p.m. with break from 1 to 2 p.m. At the weekends working hours: from 10 a.m. to 5 p.m., but call center is working round the clock. Legal form of enterprise is a limited liability company.

The company has license of the State Agency of Ukraine for Tourism and Resorts, its own balance sheet, current account and other accounts. The company also has a circular stamp containing its full company name in the official language indicating its location. The company may have stamps and letterhead with its own name, its own emblem, as well as registered trademark and other means of individualization.

The main activities of the company are:

- implementation of tourism activities both within Ukraine and abroad;
- registration of foreign passports;
- franchise network with a large amount of tour agents all around the Ukraine;
- organization of individual and group tours;
- organization of transport services;

- providing accommodation for tourists in any country of the world, including the reservation of hotel rooms;
- organization of tours related to training and professional activity.
- cooperation with global airlines to implement charter programs and reservations.

The single representative's staff includes: CEO, accountant department, departments of leading directions, passport managers, advertising department, franchise departments, couriers. The total number of staff of the travel agency staff is about 40 persons. As you can see, "TPG" is one of the biggest tourism businesses in Ukraine.

The main sources of financing for a travel company are the profit from the main activities - sale of tours and franchise activity.

"TPG" deals with the complete set of tours and the formation of a complex of services for tourists, the development of tourist routes, provides the operation of tours and services, prepares advertising and information publications, calculates prices for tours, and then passes the tours to agents for their further implementation. "TPG" is a broad-based travel company that annually increases sales, assortment of tourism product and improves production technology, which enables it to provide high quality tours. Company has convenient booking system, 24-hour support and holds on the most famous and ambitious events in tourism industry of Ukraine.

"TPG" provides visas itself and has created a unique technology for visa services that allows it to control the quality and integrate the visa process into the organization of a business trip. The presence of more than 20 accreditations in foreign embassies will allow tourists to obtain visas, as a rule, without a personal presence.

A detailed breakdown of the management functions inside of the representative of "TPG" is given in Table 2.1.

The structure of this organization can be called functional, as there are functional units that are empowered and responsible for the results of their activities. Linear links differ from functional integration of object management, set of powers,

and responsibilities.

Analysis of the distribution of management functions in the middle of the enterprise

№	Official	Function of the official
1	Board of directors	<p>General management of the firm</p> <p>Organization of interaction of all structural units.</p> <p>Ensure that all commitments made by the firm are fulfilled, including commitments to budgets of different levels and extra budgetary funds.</p> <p>Control over the legality of the activities of all services.</p> <p>Protection of the property interests of the enterprise in court, arbitration, public authorities.</p>
2	Accountant	<p>Accounting and reporting guidance.</p> <p>Formation of accounting policy with the development of measures for its implementation.</p> <p>Detection of domestic reserves, elimination of losses and unproductive costs.</p> <p>Introduction of modern technical means and information technologies</p> <p>Control over timely and correct registration of accounting documents.</p> <p>Ensuring healthy and safe working conditions for subordinate contractors, monitoring their compliance with the requirements of legislative and regulatory legal acts on labor protection.</p>
3	Direction manager	<p>Provision and preparation of tourist routes, control over the performance of all services specified in the tour program, consideration of new types of services and destinations that improve the quality of tourist services, coordination of work with the management of the company, tour programs, support of contacts with partners, sales of tourism products.</p>
4	Franchise manager	<p>Conduct market research, monitoring and market diagnostics; develop a franchising strategy in the region; conduct operational-tactical marketing activities in the region; manage the commodity assortment (range of services) of franchise enterprises; organization and maintain a system of marketing communications of franchise enterprises; development and implement the pricing policy of franchising; calculation the effectiveness of marketing activities;</p>

Each of the direction managers deals solely with their direction of business or the country assigned to it. In this regard, the structure of the tour operator can be partly attributed to the product structure, which is characterized by the fact that the authority to provide services is delegated to one manager, who is responsible for this type of services.

The degree of centralization or decentralization in a given enterprise is difficult to determine because of the large size of the organization's network. From the point of view of the number, importance and consequences of the decisions taken by the managers of the travel agency is decentralized. However, from the point of view of the degree of control of the Board of directors over the work of subordinates, it is centralized because the Board of directors are right about the decisions made by the managers and can influence them if necessary.

The "TPG" provides state authorities with the information needed to tax and maintain a nationwide system for collecting and processing economic information.

On the official website of Ministry of Economic development, trade and agriculture of Ukraine there is reference on the result of processing statistical reports of tour operators for 2018. Annually economists analyse results of activity of Ukrainian tour operators and make a list of 10 the most profitable and significant tour operators in domestic tourism market According to the data of this document we can determine the place of tour operator "Tourism Professional Group" in Ukrainian tourism market, using indicators of general amount of serviced tourists (Table 2.2).

Table 2.2

Rating of Ukrainian tour operators 2018

№	Tour operator	Amount of tourists, persons
1	LLC "Join Up!"	902600
2	LLC "Tourism company "Anex tour"	515582
3	LLC "Accord tour"	297744
4	LLC "Tez tour"	284956
5	LLC "Coral travel"	243729
6	LLC "TTVK"	230462
7	LLC "Travel Professional Group"	229484
8	LLC "Pegas touristic"	115887
9	LLC "GTO"	66400
10	Public company "Obriy Inc"	41576

In favour of a centralized structure is the fact that the Board of directors reserves the right to make decisions on the most important issues, such as pricing, development of services, marketing, etc. However, on the other hand, there are some disadvantages because personnel not always know exactly all peculiarities of creating and providing tour product and it leads to unnecessary delays in work processes and losses of time. on the other hand, there are some disadvantages because personnel not always know exactly all peculiarities of creating and providing tour product and it leads to unnecessary delays in work processes and losses of time.

Analysis of the financial activity of the company showed that the accountant maintains accounting and statistical reporting, in accordance with the procedure established by the current legislation, company officials bear material, administrative and criminal responsibility.

We can see, that tour operator “Travel Professional Group” ranks 7 position in rating of the most prominent Ukrainian tour operators.

2.2. Assessment of compliance of the tourist operator management system with the requirements of lean management

Management methods are a set of ways and methods of influencing the collective of employees and individual contractors in order to achieve the set goals. With their help, the Board of Directors influences the individual employees and the enterprise as a whole. The importance of management methods determines their focus on achieving goals in the shortest time possible under the rational use of all types of resources.

The basic principles of application of management methods in the enterprise are as follows: ensuring profitability, self-sufficiency, economic independence, moral and material interest, competitiveness of products, reduction of cost, etc. In organization of work processes tour operator “TPG” uses such management methods (Table 2.3).

Performance of management methods at “TPG”

Management method	Form of manifestation at the enterprise	Performance
rationing	setting of standards of time of performance of tasks, application of automated systems	as a whole, the enterprise effectively uses the rationing in its activities
instructing	the supervisor instructs subordinates about the conditions and rules of work	this method is not effective enough in this enterprise
planning	the manager is mostly responsible for planning and setting goals, mainly in the form of strategic planning	the effectiveness of this method is high, because in the vast majority, the company achieves its goals
analysis	a monthly analysis of the tourist services market and environmental factors is carried out	The company is almost always well-informed about slightest changes in tourism market since a large amount of managers and franchise network
pricing and accounting	the process of pricing and accounting is carried out by accountants of enterprise	since the company has accountant departments in its representatives, it efficiently and professionally carries out pricing and maintains accounting
stimulation	incentives for employees are in the form of bonuses, extra salaries, incentive tours, free participation in trainings, interesting events	the efficiency of this method is high
training of employees	the manager gives the staff the opportunity to further study in professional courses	this method has a positive effect on the efficiency of the enterprise

Source: own elaboration

Here are the positive and negative characteristics of the process of rationing of work at the enterprise «Tourism Professional Group» (Fig. 2.1, Fig. 2.2).

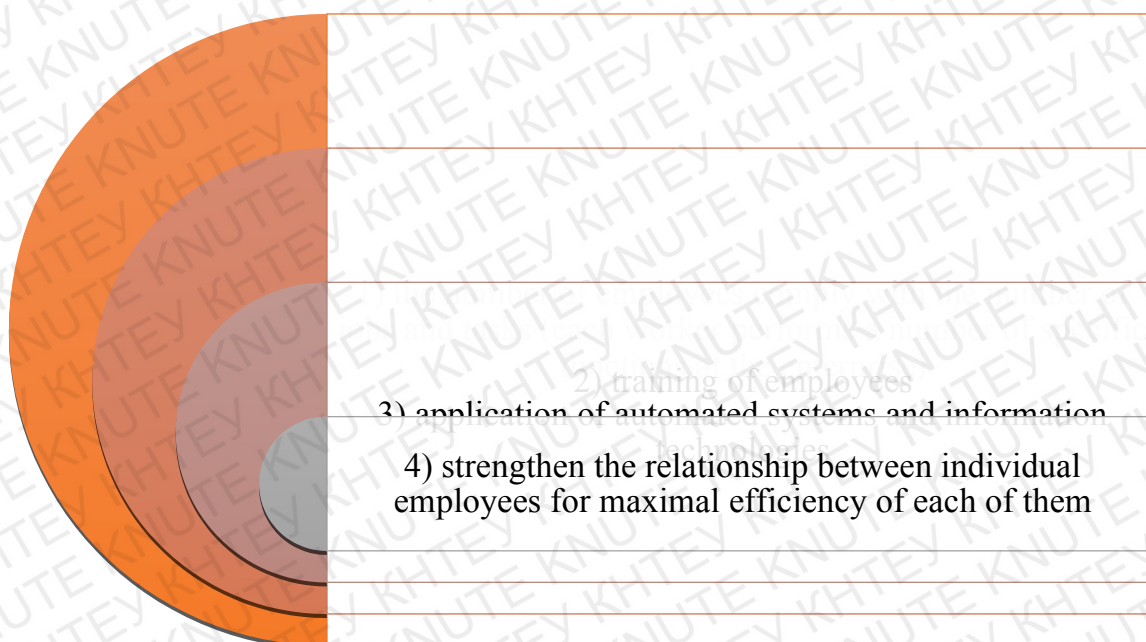


Fig. 2.1 Positive characteristics of the rationing of labor in the tourism enterprise TPG

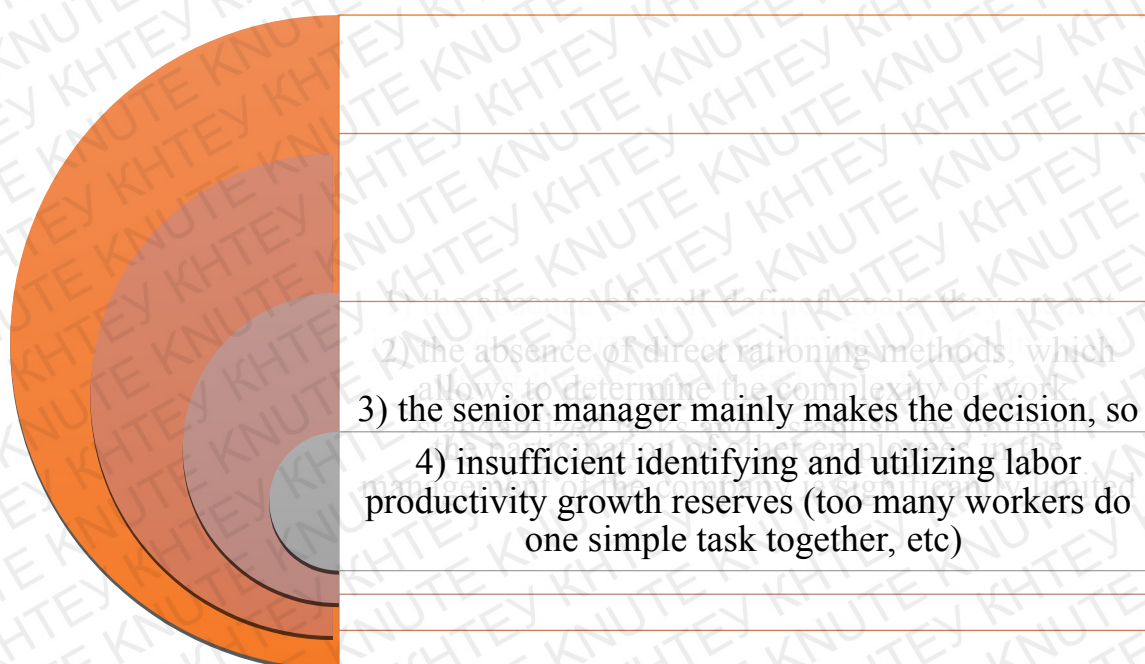


Fig. 2.2 Negative characteristics of the rationing of labour in the tourism enterprise TPG

As we can see from these figures, the company is not effectively implementing the method of rationing of work in enterprise. Usually the use of automated systems such as 1C, Booking, Amadeus and others significantly reduces the time spent in the activity. However, the proper distribution of tasks among all employees would not

only reduce time spent, but also encourage enterprise staff to work more productively and efficiently.

A positive feature of the rationing process is the improvement of skills of employees, free participation in various seminars, courses and trainings. However, at the same time, senior managers of the enterprise do not use the knowledge and skills acquired by the employees, since there is no delegation of authority at the enterprise. The absence of clearly defined and well-founded goals also discourages employees, they do not know what to be guided in the process of activity, as a result of which their activity is ineffective, the set goals are not achieved, time and resources are increased.

The economic management methods at TPG include the following: planning, market analysis, financing and labor incentives.

The company applies different incentive methods, both tangible and intangible. Among them are the additional payments, bonuses to the salaries of the best workers, free participation in various interesting trainings and workshops, the possibility of obtaining additional education, social packages, high level of comfort of work, intensive tours and others. In addition, TPG applies such social and psychological management methods as humanization of work (pleasant and comfortable office design, elimination of monotony, correct placement of furniture), establishment of positive relations between colleagues, conducting corporate trainings.

With regard to communication with customers at tour operator TPG there are some negative occurrences, such as providing insufficient or poor-quality information about tours, flights, hotels and discrepancy between proposed and gained services for clients. It happens due to a lack of interaction with partners and deficiency of manager's knowledge about tour product, that they provide for consumers. In result it causes failures in processes of creating and providing tour product and dissatisfaction of tourists.

According to identified strengths and weaknesses in management of tour operator TPG it is possible to determine compliance existing management system to the main principles of lean approach (Table 2.4)

Table 2.4

Compliance existing management system to the lean principles

Lean principle	Performance at enterprise
1. Focus the decisions of the administrative institutions on a long-term philosophy	Complied partly
2. Create a continuous flow in the operations in order to face problems	Doesn't complied
3. Adoption of the system of withdrawal instead of payment in order to avoid excess production	Doesn't complied
4. Use only the proven technology in the production process to avoid mistakes and waste of time	Complied partly
5. Streamlining of activities by not obstructing operations and avoiding bureaucracy	Complied
6. Standardization and characterization of production and follow the rule of continuous improvement.	Complied partly
7. All rules and methods must be clear to all and known to all, which makes it possible not to stay errors hidden	Complied
8. The formation of leading people with sufficient knowledge of the details of all operations within the institution	Doesn't complied
9. The formation of specialized teams in quality that follow the philosophy of the institution	Doesn't complied
10. Respect and encourage partners and suppliers to always strive for the best and continuous improvement.	Complied partly
11. Making decisions promptly and without delay, in accordance with the actors taking into account all the surrounding factors	Doesn't complied
12. Devoting the principle of fieldwork to knowing exactly what is going on and understanding the situation correctly	Complied partly

In accordance with table data we can do conclusions that not all lean principles are performed in activity of tour operator "TPG" and a lot of principles are performed only partially. There is some deficiency in communication inside company between employers of different departments and lack of qualitative information about tour product, providing to the consumers. It is the main difficulty, which obstructs performance of lean principles fully in the company.

2.3. Evaluation of the effectiveness of business communications of the enterprise in the market of tourist services

The ability to be competitive in the tourist services market, to provide services at a certain volume and quality, depends crucially on the level of economic efficiency of the tourism enterprise. The category "efficiency" at the enterprise level characterizes the relationship between the magnitude of the result obtained from its activities and the amount of invested or spent in the production of resources.

The production base is a collection of the most active elements of the enterprise in providing services or production of a tourist product with the use of certain technologies. On the basis of the above, an analysis of the tourism activity of the Tourism Professional Group was carried out (Table 2.5).

Table 2.5

Analysis of the tourism activity of the tour company "Vip Tour"

Indicators	Years			Relative deviation	
	2016	2017	2018	2018/ 2017	2017/ 2016
Amount of serviced tourists	213997	24072 8	229484	-4,7	12,5
Foreign tourists	723	967	1080	11,7	33,7
Tourists, who travel abroad	215566	23832 1	228381	-4,2	10,5
Domestic tourists	1970	1834	2045	11,5	-6,9
Amount of provided tourism services, thousands UAH	15780	16035	15164	-5,4	1,6
To foreign tourists	344	572	843	47,4	66,3
To tourists, who travel abroad	7684	9754	8540	-12,4	26,9

How we can see from this table amount of serviced tourists decreased in comparison with previous year. Certainly profit from sales of touristic products decreased too.

In spring 2019 UATA Association conducted a survey among directors and

managers of travel agencies of Ukraine about tour operators having their own charter programs in the most popular areas.

8 tour operators, including TPG, were evaluated according to 7 criteria in terms of tourist convenience. Prior to processing the results, deliberately false answers were excluded from the data array.

Table 2.6

Rating of tour operators in terms of tourist convenience

Tour operator	Compliance with the declared flight program	Flight transfers and delays	Frequency of non-settlement in booked hotels	Evaluation of guides work	Confirmation of order (rapidity, rate of refusal)	Best price guarantee due to early booking	Loyalty in resolving contentious issues
TEZ tour	4,67	4,35	4,77	4,38	4,34	3,68	4,20
Pegas Touristic	4,29	3,99	4,54	3,95	4,09	3,40	3,80
TUI	4,22	3,91	4,33	3,91	3,97	3,68	3,73
Coral Travel	4,32	3,95	4,50	3,90	3,99	3,39	3,60
Compas	4,00	3,73	4,09	3,69	3,58	3,28	3,55
ANEX tour	3,85	3,31	4,31	3,09	3,94	3,34	2,77
TPG	3,43	3,01	3,15	3,26	3,00	3,26	3,01
Join Up!	2,49	1,86	3,57	2,95	3,48	3,72	3,45
Average	3,91	3,51	4,16	3,64	3,80	3,47	3,51

The TPG tour operator is in the last positions in the final rankings again, primarily due to low ratings for promotional pricing and order confirmation. However, the company managed to cross the mark by 3 points, which is a slight improvement from the previous rating.

The most prevalent problems in “TPG” concerning working with customers are frequency of non-settlement in booked hotels, rapidity of order’s confirmation and rate of refusal and loyalty in resolving contentious issues.

Also as a result of analysis of consumer’s responses it can be determined next minuses (Figure 2.3)



Figure 2.3 Negative characteristics about organization of tours by TPG

Business communication of tour operator TPG based on co-working with different enterprises of service industry – travel agencies, hotels, airways, entertainment enterprises, insurance companies, banks, educational institutions and others. The company has partners more than in 100 countries around the world.

TPG is preferred partner for world-famous hotel chains: Four Seasons Hotels and Resorts, Mandarin Oriental Hotel Group, The Ritz-Carlton, Orient-Express, Greotel, Marriot Hotels & Resorts, Shangri-La Hotels & Resorts, Hyatt Hotels and Resorts, Hilton Hotels & Resorts, InterContinental, Leading Hotels of the World, Starwood Hotels and Resorts Worldwide, Kerzner International Resorts.

Travel Professional Group offers transportation services to its customers around the world. They can book individual and group transfers from airports, railway stations and offer rental cars of any class.

Conclusions to the part 2

1. The tour operator Travel Professional Group is Ukrainian national tour

operator, that deals with the complete set of tours and the formation of a complex of services for tourists, the development of tourist routes, provides the operation of tours and services, prepares advertising and information publications, calculates prices for tours, and then passes the tours to agents for their further implementation.

2. The structure of this organization can be called functional, as there are functional units that are empowered and responsible for the results of their activities. Linear links differ from functional integration of object management, set of powers, and responsibilities. Each of the direction managers deals solely with their direction of business or the country assigned to it. In this regard, the structure of the tour operator can be partly attributed to the product structure, which is characterized by the fact that the authority to provide services is delegated to one manager, who is responsible for this type of services.

3. The tour operator "TPG" uses all groups of methods of management in the process of organizing their own activities. However, some of them, including the normalization of work at the enterprise, are inefficient, which leads to unnecessary time consuming, unnecessary stages of organization of activities, incorrect setting of goals and demoting employees.

4. Business communication of tour operator TPG based on co-working with different enterprises of service industry – travel agencies, hotels, airways, entertainment enterprises, insurance companies, banks, educational institutions and others. The company has partners more than in 100 countries around the world.

PART 3

IMPLEMENTATION OF THE CONCEPT OF LEAN MANAGEMENT ON THE TOUR OPERATOR "TPG"

3.1 Program of activities and resources for the implementation of the concept of lean management by the tour operator

During the development of a lean-technology enterprise management model, three points preceded it:

- 1) marketing research of the market, determination of the main trends and allocation of the target market;
- 2) assessment of own capabilities of the tour operator TPG;
- 3) identified deficiencies in the current management system.

When designing the management model, we decided that the proposed model should include implementation of methods, which will help to optimize business processes inside and outside the company, to make the enterprise more profitable and efficient, to improve communications with customers and to provide such services, which will be able to satisfy clients completely.

We suggested development program of actions, which included permanent holding of different trainings, seminars and coaching of lean system management for personnel.

In Ukraine there are several courses, which help to implement lean thinking in companies of different sector, in particular, tourism enterprises.

PwC Academy in Ukraine offers a wide range of programs and services in open and corporate training formats. The professional approach and the optimum balance of theory and practice, as well as the accessible and convenient presentation of the material allow the participants of trainings and seminars to receive timely information, to develop valuable practical experience and skills of implementation of progressive market tools in various fields of business.

They apply a flexible approach, taking into account the wishes of the client to adapt the topics to the industry specificity, to the choice of location, timing,

conditions of trainings.

One of the most widespread corporate training is Lean Six Sigma, which teach employees to work with principles of lean thinking, via different interesting business team games.

Program of this course is very beneficial for TPG because it will help:

- 1) have acquired knowledge of processes and resources based on the world's best management practices and continuous improvement systems, as well as knowledge of the basic principles of operational efficiency, people management skills;
- 2) get an idea of how to effectively allocate resources, identify losses, and what action should be taken to address them; considered the principles of the Savings Production methodology and Six Sigma;
- 3) discover 7 types of losses, as well as operations that add and do not add value; studied process mapping, building the current value stream map;
- 4) get to know the JI project "Search and elimination of losses";
- 5) gain an understanding of the DMAIC project and a detailed description of all stages.

Other training company is Lean Institute Ukraine – representative of Lean Global Network, non-profit organization founded in 2007 by James Vumek and Dan Jones, authors of bestsellers “The Machine that changed the world "and" Leann thinking ". Today it includes 24 organizations, which spread the lean thinking in different countries of the world.

Lean Institute Ukraine (LIU) collaborates with organizations and companies embarking on the journey of lean transformation. Such collaboration is to train partner company staff on cost-effective approaches and methods, launch continuous improvement projects, collaborate on experiments and apply new thinking and action approaches, as well as coaching for executives and kaizen teams. LIU focuses on people's development, their understanding of thrift principles, thus building expertise in lean production and service providing in company.

Every month they develop calendar of events and trainings, which are designed for anyone who wants basic knowledge of Lean, for the level of performers,

improvement teams, change teams, and other entry-level employees in lean approach.

Also, Lean Institute Ukraine has a lot of programs of transformation company philosophy – Lean Practitioner Program, Lean Factory Training, Lean Management Training, Lean Basic Training.

Taking into account all resources, peculiarities, disadvantages and difficulties in organization of work in TPG, we assumed, that the Lean Practitioner Program will be the most suitable for this company. The program is developed by LGN experts and has been successfully used by many countries in the world: US, Holland, Turkey, Singapore, etc. After passing the program, participants are certified for on the basis of the examination and implementation of the project.

Each module of the Lean Practitioner Program provides passage training, examining examples and cases from international and national experience, performing tasks using lean methods to develop practical ones skills. Program included such modules (Table 3.1).

Table 3.1

Modules of Lean Practitioner Program

Name	Characteristics
<i>1</i>	<i>2</i>
Module 1. Basics of lean thinking and lean management, Hoshin Kanri strategy development system.	Finding the perfect system. The origins of Lean thinking. Toyota principles; What is Lean? Problems of Lean Transformation. Lean Company culture; Development of short, medium and long term plans implementation of the strategy. Catchball system.
Module 2. Problems techniques, training and controls with A3, continuous system of improvement.	Classical approach to problem solving. Common mistakes; Problem solving with A3; A3 for proposals; A3 to solve problems; A3 for the retrospective; A3 as a communication tool;
Module 3 – The value creation in manufacturing and service processes, construction of continuous flow, removal system.	Using Kanban. Creating value stream maps for the service industry. Techniques for improving the efficiency of office processes. Job description, elements of work, processing time.

Continuation of the table 3.1

1	2
Module 4 – Standardized work, production instructions	Documentation of production methods Standard operating procedures Standardized work Production briefing Analysis of procedures Description of operating procedures Operating instructions
Module 5. Stabilization, efficiency enhancement techniques, visual management, 5C system	Definition of 5C system Steps 5C: 5C implementation plan Baseline for successful implementation of 5C Examples of 5C implementation Visual communication Team work area Visualization of improvement Introduction of visual communication in production What is Temotoka? Approaches to analysis
Module 6. Lean techniques and instruments	General Production Service (TPM) system, Fast conversion (SMED) Just in Time system Yamazumi: Balancing performance and power Poka-Yoke, error prevention Jidoka, Autonomization Evaluate the effect of using the tools
Module 7. Leadership in the implementation of lean, resistance to change, role of leader, formation of necessary behaviour (KATA)	Japanese management style Stages of development of Lean thinking Lean company, what is it? Lean leadership and Lean management Introducing work in high performance teams Motivation and enhancement of change dynamics Change management Personal development: removing barriers

Moreover, Lean Institute Ukraine organizes liner tours, tailored to the client's needs, according to his needs and wishes. These tours give you a very clear overview of the best cases of implementing Lean in successful foreign companies. It is an indispensable experience to inspire, get new ideas, attract and motivate employees. Lean-tours usually have the following program:

1. Meeting with representatives of the Lean Institute of the country concerned.
2. Visiting companies where employees of the respective Lean Institute implemented the lean.

3. Meeting with the top executives of these companies.
4. Practical tasks and lectures.
5. Networking and informal meetings with four participants.

Advantages of co-working with LIU (Figure 3.1)

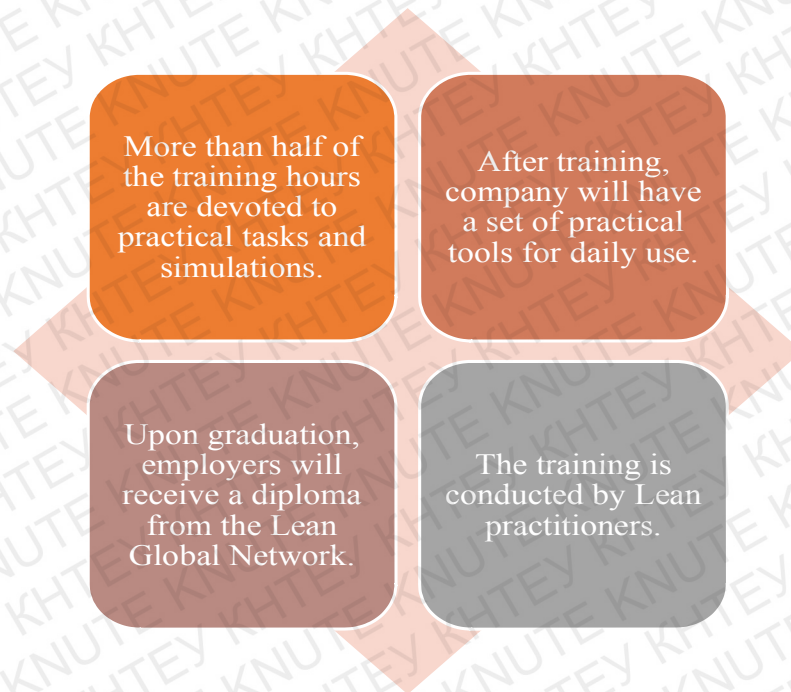


Figure 3.1 Advantages of training personnel with LIU

Other essential step in our model is implementation in the company some Agile methods, that are based on 2 key points

- Able to move quickly and easily.
- Able to think and understand quickly

Agile is not a methodology, but the collective name of various management techniques and approaches (Figure 3.2).

International Consortium for Agile (ICAgile) is an international agile development consortium. The main tasks of Consortium are follows:

- Develops an Agile training plan, creates training programs;
- Conducts accreditation of training organizations;
- Organizes accreditation of courses to support Agile education.

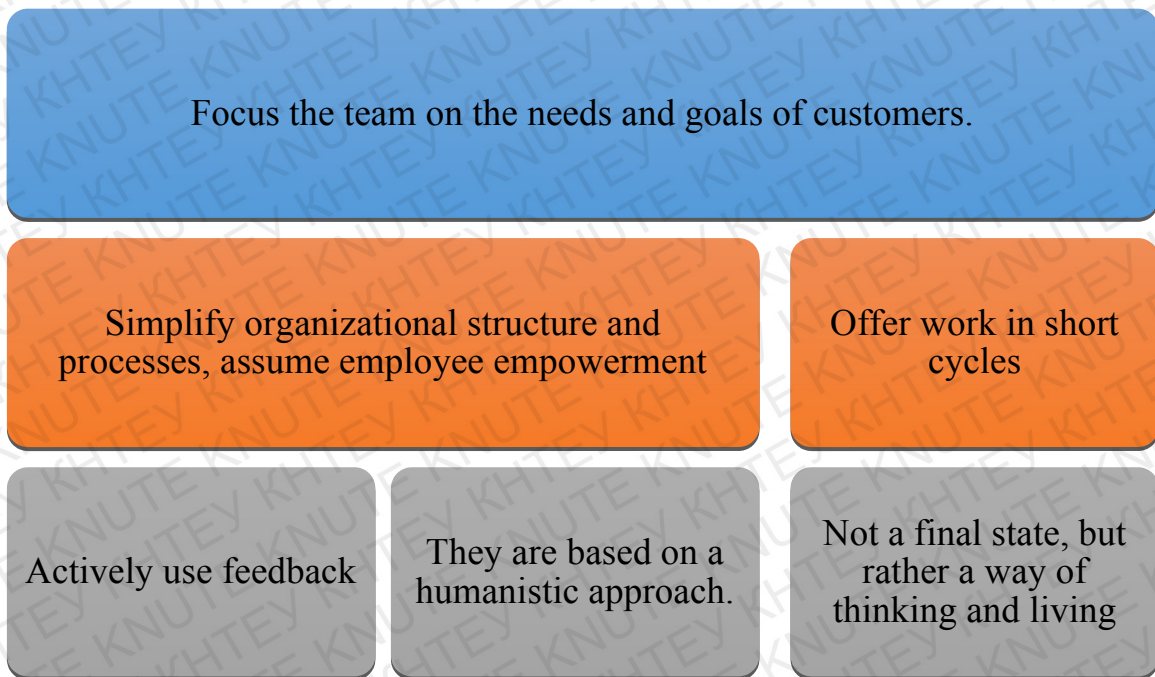


Figure 3.2 Characteristics of Agile methodology

They have a large amount of different interesting seminars and programs. In accordance with specificity of work, peculiarities of management system and personnel's skills and knowledge we suggest to hold for staff of the TPG training "Agile essential with Scrum and Kanban". Program of this training for TPG is follow:

1. Agile thinking
2. Creating a single context for participants in the development process;
3. Iterative and incremental tour product development;
4. The basics of creating and managing Agile processes in product development of tour operator;
5. Scrum and Kanban as the most popular team-level implementations of the Agile approach;
6. Roles, principles, tools, and artifacts in Scrum and Kanban;
7. Scrum and Kanban in practice (games and simulations);
8. Adaptation and implementation of the Agile process for TPG;
9. Agile ratings, Agile planning, process of continuous improvement;
10. Processes of continuous integration (continuous integration) and

continuous delivery (continuous delivery) in tourism enterprise TPG.

All their public trainings can be ordered in a corporate format, which allows any enterprise to immerse itself in the context of the organization and work out cases that are not suitable for discussion at public trainings, as well as apply all the practices in a team, which simplifies their further implementation and use in work.

Courses of training company ICAgile can be very useful for employers of TPG, because it helps:

- 1) get to know the Agile approach not as a set of practices, but as a way of thinking;
- 2) get an idea of the approach through real examples of Agile implementation in hotel and tourism industries;
- 3) systematize knowledge on the basic principles of flexible software development;
- 4) learn to apply the most popular methods of agile software development: Kanban and Scrum; learn to create an environment for successful interaction between people in a team; introduce various practices in their projects (for example, creating of tourist product with help of Kanban cards, that decrease losses of time for execution of one task by one employer);
- 5) understand possible development paths in different areas of Agile; gain knowledge and skills that allow company to consciously manage the process and adapt it to a specific project.



Figure 3.3. Advantages of co-working with AgileLAB

The next step in the development of our management model will involve giving more authority to the employees of the enterprise and reducing control over them to eliminate unnecessary losses of time from expectations and losses due to the presence of unnecessary steps in the process of organizing activities. In addition, providing autonomy, freedom to choose a system of action, being able to make own decisions, defining responsibility, generating motivation for employees, increasing emotional satisfaction with work, enhancing self-confidence and revealing the creative potential and abilities of each employee.

This stage involves the use of modern time management technologies and tools of goal setting such as SMART technology, responsibility matrix, process maps.

SMART technology is a technology of goal setting and formulation. SMART stands for specific; measurable; achievable; realistic; time-bounded.

Specific - The goal must be specific. If an enterprise wants to increase sales of a tourist product, it needs to specifically determine the amount of sales increase in monetary units or percentages. Then the employees will clearly understand what the result of the company is focused on and what needs to be done to achieve this goal.

Measurable - The goal must be measurable. To do this, it is necessary to specify a clear framework of the task: "The profit of the enterprise for the reporting month should be at least 200 thousand UAH." In this case, the end result can be clearly measured by how many percent the enterprise has achieved the goal.

Achievable - the goal must be achievable, taking into account the realities that the manager creates in the enterprise. If a manager wants to increase profits, he needs to analyze what he uses to do it. To achieve, you must use effective methods and tools. In this case, TPG may implement using a lot of Internet resources such as Tourwriter and Axus Travel App – platforms, that allows to manage client files faster, to increase gross sales and to invest more on sales and marketing by spending less on processing. Moreover, these resources provide connect in real-time with colleagues, partners and clients to make sharing ideas and updating details a snap. Also there is very useful and must-read travel resource– PhocusWire – its notional big library, that gather a lot of different articles for tour operators with various

insights about the industry that will inspire, educate, and inform any tour marketer.

Realistic - the goal must be realistic and important. Managers and employees should think carefully about whether a goal is really important to their business, or not contrary to other goals.

Timebounded - The target must be time limited. Otherwise, it may be delayed for a long period of time, or cancelled altogether.

This technology will help the enterprise to more efficiently carry out the process of planning and goal setting, as well as to involve the personnel more in the management of the enterprise.

The other stage in developing a lean management model is to use the responsibility matrix and process map in the enterprise.

The responsibility matrix is a table in which the manager and employees identify the tasks they need to perform, as well as the people who will perform them and be responsible for the outcome. It is important that only one person is responsible for the execution of one specific task. The implementation of this table in the management process will greatly facilitate the work of the manager and give more authority and responsibility to other employees.

Process maps are another table that is divided into 4 components: purpose, objectives, result, time and frequency of execution. An important prerequisite is the formation of this table for all staff, when each employee can participate in the formation of goals and offer their own judgment on the setting of tasks to achieve these goals. This process map must be constantly visible to employees so they can see what tasks have already been accomplished and what results have been achieved. This causes not only less time spent on the organization of work, but also competition within the team, which positively affects the effectiveness of each employee.

The last stage of development of this model was based on the use of various modern technologies and Internet resources, one of which is the site of the company “Vitiana”.

“Vitiana” - is an online tool for creating individual tours and booking individual travel services. The geography of the offerings of this site includes 174

countries of the world, the category of hotels - from 3 to 5 stars. In addition, “Vitiana” provides tour operators and travel agents with excursions, all kinds of transfers and visa support. Using this online resource is very beneficial for TPG because it will help:

- 1) to save time on finding the best accommodation, route and other components of the individual tour for the client;
- 2) to save on the cost of the tour, because through direct contracts with hotels, consolidation of offers from international suppliers, the price of “Vitiana” is mainly more favorable tariffs of the Booking system or other online booking systems;
- 3) eliminate waiting time, as the company guarantees immediate order confirmation and round-the-clock support;
- 4) to improve the skills of employees, because the company constantly invites its partners to participate in various workshops, webinars, workshops and information meetings.

3.2 Evaluation of the effectiveness of applying lean technologies in the management of a tour operator

In the economic rationale of the management model, the cost of this model included the range of services of the training companies Lean Institute Ukraine and AgileLAB: corporate trainings, development of new business approach in existing management system, lean tours, implementing system of continuous improvement via permanent holding of seminars and webinars for the staff.

We have estimated that the cost of using these services will be 80500 UAH for development of lean approach in organization of work of TPG (including training of staff to work with different lean instruments, development and implementation of situational cases for business processes of an enterprise, team-building and self-motivation of employers and continuous support) and participation of personnel in training program of company AgileLAB (including training of Scrum and Kanban methods, analyze of weaknesses of a company and development of recommendations

and new business strategy and continuous support in future).

Also we want to suggest for the executive or top managers to take part in lean-tours, because it will help to get acquainted with the best cases of Lean implementation in successful foreign companies. Usually company provides tours in Germany, Austria, Poland and Canada. It will cost 70000 UAH in average.

Moreover, this management model included costs of co-working with company "Vitiana": individual excursions, transfers, visa support, hotel reservations. Additional workshops for employees, full development of an individual tour, online classes on Skype can be paid additionally.

The company "Vitiana" also offers 2 modes of cooperation: online - assumes that the tourist company selects and books the hotel, apartment, excursion, transfer, etc. and independently forms a new individual tour of these components, and offline - assumes that the tourist enterprise sends to the site Vitiana request and company staff processes this information and fully develop and design tours.

Having analysed the economic situation in the enterprise, we came to the conclusion that the tour operator "TPG" will choose the first variant of cooperation with the company "Vitiana", since it does not require such big expenses as in the second variant.

We have estimated that the cost of using these services will be 120000 UAH per year. At the same time, costs for overproduction of tourist services and other expenses will be reduced by 5% and will amount to 188210 UAH. Besides, knowledge of lean techniques and certificates from prominent international organizations such as AgileLAB and Lean Global Network will give opportunity to hold a large amount of seminars and webinars for travel agencies, which work with TPG and in this way get extra profit.

In average via different trainings and workshops inside own franchise network the company Tourism Professional Group can receive 700 000 UAH.

In order to evaluate all advantages and disadvantages of developed management model we used SWOT analysis (Figure 3.4)

In addition, according to our calculations, we have determined that the revenue

from the sale of services by Tourism Professional Group next year will increase by 4%, which will amount to 157700 thousands UAH, and the net profit – 6400 thousands UAH.



Figure 3.4 SWOT analysis of developed lean model

In addition, we calculate the productivity and efficiency of the management system:

$$P = Sr/N, \quad (3.1)$$

where Sr – sales revenue, thousands UAH

N – number of employers, thousands UAH

$$Em = Sr/Ea, \quad (3.2)$$

where E_m – efficiency of management

E_a – administrative expenses,

Table 3.2

Economic indicators of tour operator “TPG” with developed lean model

Economic indicators	Number
Profitability of the company	4%
Productivity of the management system	1,8
Efficiency of management	3,2

As we can see, profitability has increased, which indicates that the company is using its resources more efficiently. Based on the results of the analysis and calculation of the indicators of economic efficiency, we can conclude that the economy is high enough and is 3,2. This indicates that the tourism enterprise "TPG" has started functioning more successfully and more effectively, and has a positive development dynamic.

Conclusions to the part 3

1. The first stage of development of this model was based on holding different trainings with use of lean technologies. We suggest co-working with Lean Institute Ukraine (LIU), that collaborates with organizations and companies embarking on the journey of lean transformation. Such collaboration is to train partner company staff on cost-effective approaches and methods, launch continuous improvement projects, collaborate on experiments and apply new thinking and action approaches, as well as coaching for executives and kaizen teams. LIU focuses on people's development, their understanding of thrift principles, thus building expertise in lean production and service providing in company.

2. The next stage is using of online-resource “Vitiana”. It is quite advantageous for Vip Tour because it will help: 1) save time finding the best accommodation, route, etc. 2) save on the cost of the tour; 3) eliminate wasted time; 4) improve the

skills of employees, as the company constantly offers its partners to participate in various workshops, webinars, workshops and information meetings.

3. The next step in the development of our management model will involve giving more authority to the employees of the enterprise and reducing control over them to eliminate unnecessary losses of time from expectations and losses due to the presence of unnecessary steps in the process of organizing activities. This stage involves the use of state-of-the-art time management technologies and tools and goal setting such as SMART technology, responsibility matrix, process maps.

4. As a result of developing a model of tourism enterprise management using lean technologies, we made an analysis and comparison of previous economic indicators of the enterprise with our implementation and forecasts for the next year and concluded that this model is very effective and has a positive impact on the management and organization of work.

CONCLUSIONS

1. The intensification of competition in the tourist services market and the restriction of resources used by businesses in the course of their activities leads to the search for new approaches to enterprise management.

2. One of the most effective approaches to enterprise management is the concept of lean-technology, which is to optimize business processes by maximizing the focus on the interests and needs of customers and markets, as well as taking into account the motivation of each employee.

3. Companies that apply the concept of "lean-production" differ from other enterprises in the following characteristics: the basis of the production system of such enterprises are people; the production systems of such enterprises are focused on the complete elimination of losses and continuous improvement of all processes; further development, while the current financial interests are not decisive.

4. The tour operator Travel Professional Group is Ukrainian national tour operator, that deals with the complete set of tours and the formation of a complex of services for tourists, the development of tourist routes, provides the operation of tours and services, prepares advertising and information publications, calculates prices for tours, and then passes the tours to agents for their further implementation.

5. The tour operator "TPG" uses all groups of methods of management in the process of organizing their own activities. However, some of them, including the normalization of work at the enterprise, are inefficient, which leads to unnecessary time consuming, unnecessary stages of organization of activities, incorrect setting of goals and demoting employees.

6. Business communication of tour operator TPG based on co-working with different enterprises of service industry – travel agencies, hotels, airways, entertainment enterprises, insurance companies, banks, educational institutions and others. The company has partners more than in 100 countries around the world.

7. When designing the management model, we decided that the proposed model should include implementation of methods, which will help to optimize

business processes inside and outside the company, to make the enterprise more profitable and efficient, to improve communications with customers and to provide such services, which will be able to satisfy clients completely. We suggested development program of actions, which included permanent holding of different trainings, seminars and coaching of lean system management for personnel.

8. One of the most widespread corporate training is Lean Six Sigma, which teach employees to work with principles of lean thinking, via different interesting business team games. Other training company is International Consortium for Agile (ICAgile), an international agile development consortium. They have a large amount of different interesting seminars and programs. In accordance with specificity of work, peculiarities of management system and personnel's skills and knowledge we suggest to hold for staff of the TPG training "Agile essential with Scrum and Kanban".

9. Other step of implementation lean approach in "TPG" is based on the use of various modern technologies and Internet resources, one of which is the site of the company "Vitiana". "It is an online tool for creating individual tours and booking individual travel services. "Vitiana" provides tour operators and travel agents with excursions, all kinds of transfers and visa support.

10. The next step in the development of our management model will involve giving more authority to the employees of the enterprise and reducing control over them to eliminate unnecessary losses of time from expectations and losses due to the presence of unnecessary steps in the process of organizing activities. This stage involves the use of modern time management technologies and tools of goal setting such as SMART technology, responsibility matrix, process maps.

11. Based on the results of the analysis and calculation of the indicators of economic efficiency, we can conclude that the economy is high enough and is 3,2. This indicates that the tourism enterprise "TPG" has started functioning more successfully and more effectively, and has a positive development dynamic.

REFERENCES

1. Закон України "Про туризм" від 05.09.95 р. // Відомості Верховної Ради. - 1995. - №31. (зі змінами, внесеними законом №2608-VI (2608-1) від 11.02.2015 р.).
2. Менеджмент турбюро та організаторів подорожей: Навчальний посібник/ М.М. Туріяньська, С.С. Кравцов, Н.І. Дрокіна. – Донецьк: Донецьк. Інст. Турист. Бізнесу, 2012. – 294 с.
3. Womack PJ, Jones DT. Lean Thinking. Banish Waste and Create Wealth in Your Corporation. New York: Free Press; 2003
4. Krafcik, J. F. (1988). Triumph of the Lean Production System, Sloan management review association, 30 (1), 173 p.
5. Martínez Sánchez A, Pérez Pérez M. Lean indicators and manufacturing strategies. International Journal of Operations & Production Management 2001; 21 (11):1433-1452
6. Офіційний портал MarkGraban`sLeanBlog [Електронний ресурс]. – Режим доступу: <https://www.leanblog.org/>
7. Лисицин В. Д. Роль “ощадливого виробництва” в діяльності підприємства [Текст] /В. Д. Лисицин, О. І. Лисенко, Ю. С. Вовк // Вісник НТУУ “КПІ”. – 2009. – № 1. – С. 39–61.
8. Дорошкевич Д.В. Інструменти реалізації потенціалу робітників при впровадженні Lean виробництва / Д.В. Дорошкевич // Управління проектами, системний аналіз і логістика. Технічна серія.— 2012. — Вип. 9. — С. 310–312.
9. Katayama, H. and Bennett, D., “Lean Production in A Changing Competitive World: A Japanese Perspective”, International Journal of Operations and Production Management (IJOPM), Vol. 16, No. 2, MCB University Press, Bradford, pp. 8-24, February, ISSN: 0144-3577 (1996).
10. Ермакова Е.А. Внедрение принципов бережливого производства в R&D процессы // Креативная экономика. — 2012. — № 10 (71). — С. 19–24.
11. Yorgova, Y. (2011). The Lean Production concept in the logistics of

services – applicability, peculiarities and advantages, InDimitrov, P., M. Rakovska.

12. Antony, J., Escamilla, J.L., Caine, P., 2003. Lean Sigma. *Manufacturing Engineer* 82 (4), 40–42.

13. Янковець Т. М. Обґрунтування взаємозв'язку стратегічного управління підприємством й інноваційного його розвитку // *Проблеми науки*. - 2011. - №6. - С.26-32.

14. Крот Ю.В. Непродуктивні витрати: визначення та зміст / Ю.В. Крот // *Науковий вісник ЧДІЕУ*. — 2011. — №4 (12). — С. 211–216.

15. Dombrowski U, Ebentreich D, Krenkel P. Impact analyses of lean production systems. In: Elsevier B.V. (Ed.): *Procedia CIRP*, 49th CIRP Conference on Manufacturing Systems. Stuttgart, May 25 - 27; 2016:607- 612.

16. Abdulmalek, F.A., Rajgopal, J., 2007. Analyzing the benefits of lean manufacturing and value stream mapping via simulation: a process sector case study. *Int. J. Prod. Econ.* 107 (1), 223–236.

17. Крикавський Є. В. Застосування філософії Kaizen у логістичному ланцюзі – як важливий чинник підвищення доданої вартості замінних частин / Є. В. Крикавський, Н.В. Фігун // *Збірник наукових праць. Луцький національний технічний університет*. – Вип. 7 (26). Ч. 2. – Луцьк, 2010.

18. Омеляненко, Т. В. Ощадливе виробництво: концепція, інструменти, досвід: наук.-практ. Видання / Т. В. Омеляненко, О. В. Щербина, Д. О. Барабась, А. В. Вакуленко. – К.: КНЕУ, 2009. – 157 с.

19. Anand, G., Kodali, R., 2008. A conceptual framework for lean supply chain and its implementation. *Int. J. Value Chain Manag.* 2 (3), 313–357

20. Ablanado-Rosa, J.H., Alidaee, B., Moreno, J.C., Urbina, J., 2010. Quality improvement supported by the 5S an empirical study of Mexican organizations. *Int. J. Prod. Res.* 48 (23), 7063–7087.

21. Lean and Green Supply Chain: a practical guide for materials and supply chain managers to reduce cost and improve environmental performances.

<https://www.epa.gov/p2/lean-and-green-supply-chain-practical-guidematerials-managers-and-supply-chain-managers-reduce>.

22. Larson, T., Greenwood, R., 2004. Perfect complements: synergies between lean productions and eco-sustainability initiatives. *Environ. Qual. Manag.* 13 (4), 27–36
23. Mollenkopf, D., Stolze, H., Tate, W.L., Ueltschy, M., 2010. Green, lean, and global supply chains. *Int. J. Phys. Distrib. Logist. Manag.* 40 (½), 14–41.
24. Kurdve, M., Zackrisson, M., Wiktorsson, M., Harlin, U., 2014. Lean and green integration into production system models – experiences from Swedish industry. *J. Clean. Prod.* 85, 180–190 (December).
25. Manzini, E, Vezzoli, C, Clark, G. Product-Service Systems: Using an Existing Concept as a New Approach to Sustainability. *J. Des. Res.*, DOI: 10.1504/JDR.2001. 009811; 2001.
26. Shah, R, Ward, P.T. Defining and Developing Measures of Lean Production. *J. Oper. Manag.*, 25(4):785-805; 2007
27. Sassanelli, C, Pezzotta, G, Rossi, M, Terzi, S, Cavalieri, S. Towards a Lean Product-Service Systems (PSS) Design: State of the Art, Opportunities and Challenges. *Procedia CIRP*, vol. 30, pp. 191-196; 2015.
28. Vignesh, V, Suresh, M, Aramvalathan, S. Lean in Service Industries: A Literature Review. *IOP Conf. Ser. Mater. Sci. Eng.*, 149(1):1-10; 2016.
29. Romero, D, Rossi, M. Towards Circular Lean ProductServiceSystems. *Procedia CIRP*, vol. 64, pp. 13-18;2017.
30. Oliva, R, Kallenberg, R. Managing the Transition from Products to Services. *Risk Manag. a Serv. Bus.*, vol. 2, pp. 49-65; 1991.
31. Resta, B, Powell, D, Gaiardelli, P, Dotti, S. Towards a Framework for Lean Operations in Product-oriented Product-Service Systems. *CIRP J. Manuf. Sci. Technol.*, vol. 9, pp. 12-22; 2015.
32. Westphal, I, Freitag, M, Thoben, K.-D. Visualization of Interactions between Product and Service Lifecycle Management. vol. 460, pp. 575-582; 2015.
33. Corvellec, H, Stål, H.I. Evidencing the Waste Effect of Product-Service Systems (PSSs). *J. Clean. Prod.*, vol. 145, pp. 14-24; 2017.
34. J. Riezebos, W. Klingenberg, and C. Hicks, “Lean Production and

information

technology: Connection or contradiction?” *Comput. Ind.*, vol. 60, no. 4, pp. 237–247, 2009.

35. H. Cortes, J. Daaboul, J. Le Duigou, and B. Eynard, “Strategic Lean Management: Integration of operational Performance Indicators for strategic Lean management,” *IFAC-Papers OnLine*, vol. 49, no. 12, pp. 65–70, 2016.

36. N. A. A. Rahman, S. M. Sharif, and M. M. Esa, “Lean Manufacturing Case Study with Kanban System Implementation,” *Procedia Econ. Financ.*, vol. 7, no. Icebr, pp. 174–180, 2013.