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**APPLICATION OF THE LEAN CONCEPT AS A PREREQUISITE FOR A
TOURIST BUSINESS DEVELOPMENT**

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A key issue in the globalized market is the demand of a new approach, providing the tourism businesses a sustained market presence. This means increasing competitiveness and making management decisions in this direction. One of the methods to solve this problem is to apply the Lean concept whereby the entrepreneurial efforts are focused on value - in terms of costs and in terms of the ability of the product to satisfy customer needs.

The aim of the article is to bring opportunities for competitive development of tourism by applying the Lean approach. The study is based on concrete statistical data and results of a survey of managers and business owners in the sector of tourism. The following research methods are applied: analysis and synthesis, a poll survey and statistical methods.

Keywords: *Lean concept, tourist business, prerequisite, development, value.*

Introduction. The sustainable development of the tourism activity can be contributed to the successful approaches in the implementation of economic processes in enterprises. Progress in economic thought in terms of adding value to the product goes beyond production strategies of the past. Science and practice worldwide have proven that the adoption of currently sustainable economic strategies and approaches must be constantly analyzed and the assessment should unlock new doors to improvement and perfection of the processes of the use of available resources, the realization of productive activity and the creation of a product with the required customer value.

The production process in every enterprise undergoes unnecessary costs and losses. Although tourism as an economic activity has a specific product that is not material and therefore visible to the user, its cost also consists of different components that can be cost reduced. The most significant change in this regard is the improvement of the management system, which leads to improved use of tourist resources, cost reduction, increase of productivity and meeting the needs of tourists by offering products with greater added value. These are key factors in enhancing competitiveness.

To achieve the objective, literature sources were studied and analyzed, and statistics from the National Statistical Institute (NSI) of Bulgaria and own survey of the tourism sector were used.

As a system of techniques to increase efficiency, lean is a new philosophy regarding the development of the industry. The concept of lean management is applicable not only to increase production efficiency in various fields of industry, but also in services to which tourism also belongs.

It is necessary to clarify that the lean concept is realized into practice through lean management, specified in the lean approach and its tools.

Analysis of researches and publications. The application of the lean approach in the practice of companies dates back from the beginning from the 50s of the 20th century when it was introduced as a basic management philosophy in the Japanese car maker Toyota by its Executive Director Taichi Ohno (Toyota Production System - TPS), in order to increase the value of the product to the customer by reducing production loss.

Research was conducted and the theoretical aspects of this new production management were developed much later. For the first time such research was made in the 80s of the 20th century by MIT, and the center of attention was the system "Just in Time", implemented by carmakers in Toyota [43]. It is believed that the term "lean" in relation to production was first used by J. Krafcik. In 1988, in his work "Triumph of the Lean Production System" [20], he uses the term "lean production system" and spoke of "lean production management policy". Krafcik stresses that "lean management policy is most conducive to improved productivity and quality performance" [20, p. 51]. According to the same author „production management policy has a tremendous effect on plant operating performance“ and „lean plants are more capable of simultaneously achieving high levels of productivity, quality, and mix complexity“ [20, p. 51]. Later in 1991, J. P. Womack, D. T. Jones and D. Roos in their book „The Machine

That Changed The World: The Story of Lean Production” introduced the term *lean manufacturing*. It may be pointed out that this set the beginning of theoretical construction of the lean concept. M. Holweg [18, p. 434] does comprehensive presentation of the genealogy of the term "lean production", revealing the key events and basic research and publications that lead to its clarifying and establishment in science and practice.

The literature review shows that a number of authors dedicated their works to the lean approach in the management of enterprises. It was found that no uniform opinion on the substantive aspects of the lean concept exists. For example, lean is seen as a production practice that aims to minimise waste along entire value streams and create more value for customers [3, p. 18]. On the other hand, Mofizul Islam Awwal [4] argues that in its essence, lean is a managerial practice which enables organizations to increase their efficiency and effectiveness by eliminating non value adding activities from their organizational processes. Another noteworthy perception is that of Sohal [35] as well as Standard and Davis [36], according to whom lean can be explained as a methodology based on the Toyota Production System and whose principal objective is to eliminate waste and inefficiency from production systems in order to reduce costs, improve quality and reliability, and speed up cycle times.

The opinion of some authors is that Lean should be seen in terms of continuous improvement. According to Ritsch [29] lean is based on continuous improvement through elimination of waste. Begam, Swamynathan and Sekkizhar [6] indicate that lean is a philosophy of continuous improvements and respect to people.

The essence of lean is regarded as management philosophy by Shah and Ward [33]. The authors determined that it is a management philosophy associated with identification and elimination of waste within and beyond organizations' product value chain. An important focus, which the above cited authors give is that lean can be seen as a set of principles, practices and techniques. The opinion of Ugochukwu, Engström and Langstrand [38, p. 87] is that lean is a management philosophy that enhances customer value through waste elimination and continuous improvement in a system, by applying lean principles, practices and techniques.

The clarification of the essence of the lean concept is also a subject of attention to Georgescu [14], who thinks that the lean philosophy is expressed in several different statements: achieving more with less people, reducing non-value-adding activities, slimming etc. at the same time, the author claims that lean should on the one hand be regarded in relation to effectiveness and waste decrease, and on the other – as a continuous striving for flawless products, that can be delivered on demand, customer specific, without wasting material, labour hours, and other resources (energy) in a safe (both physical, emotional as well as professional) working environment.

Womack и Miller [42] also contributed to the understanding of the lean concept as a management philosophy. They pay special attention to the lean thinking, defining it not as a manufacturing tactic only, but a management strategy that is applicable to all organizations because it has to do with improving processes. Unlike the above cited authors, Hines, Holweg

and Rich [17] think that lean has two levels: strategic and operational. According to them, while the strategic level is focused on the lean principles and is connected with value creation and better understanding of customer value, and has unlimited applications, the operational level is directed towards the tools and techniques, and solving the issues of waste elimination.

The issues of the lean concept are subject of attention to a number of researchers, who explore it in terms of the implications of lean on operations management [9; 13], competitive advantage [23], employee health and the quality of working life [22; 31], and organizational learning [1; 7].

The scientific literature discusses the question of the application of the lean concept in the sphere of services. In support of this are also the opinions of Swank [37], Piercy and Rich [25], Delgado and Ferrerira [10], who emphasize that the lean approach can be applied to services. It was found that there are little or few studies that identify the challenges of applying lean in the process of providing services attached with a product [11, p. 465]. According to Ross and Canacari [30, p. 85] the core idea of Lean is to maximize value for customers while using fewer resources and minimizing waste. Pojasek [26, p. 1] argues that Lean is an operating philosophy, which is focused on shortening the time that elapses between a customer's order and the shipment of the product or the provision of the service that fills the order. Lean is one such tool which can reduce the waste in an organization and at the same time improve quality, ultimately yielding better profits [29, p. 2]. In the opinion of Womack and Jones [41] lean is delivering the customers "what they want with minimum use of resources such as equipment, time, space and human effort resulting in the least amount of waste generated".

M. Graban on his own [15], as well in co-authorship with other researchers [16] provides a definition of the lean approach, by reviewing its application in hospitals and points out that „in the Lean model, work and activity are broken down into the general categories of “value” and “waste” and „the goal in a Lean environment is to maximize value to the customer while reducing activities that are not “value” (i.e., activities lacking value are “waste”)“.

Yorgova also explores the lean approach in terms of its application in the sphere of services [43]. In this connection, she emphasizes that “for organizations offering services in the market, it is crucial to find a competitive advantage. In the struggle off survival, the ones that provide their clients services of better quality at a competitive price will succeed”, and one of the sources for this is waste elimination. According to her, on this basis “faster and more flexible service processes can be realized, which will allow customers to receive what they want at the right moment, with the right quality and at the right price.” The author thinks that “the application of the lean tools could lead not only to improvement of effectiveness and efficiency of the general activity of a given organization, but also to competitive advantage, which is really important for the service industry – satisfied and loyal customers” [43]. The lean concept can be also defined as one whole, encompassing the knowledge and tools which the organization employs to free itself from the all the activities and procedures that consume time but do not add value for the consumers of its products [43].

The specifics of the lean approach in tourism are reflected in the works of Vlachos, Bogdanovic, Anderson, Price, Baum, Bowen and Youngdahl and others. The main questions in some of these publications include the lean tools and techniques that are more applicable and profitable to hotel management [2; 27; 5; 39]. Other authors such as Bowen and Youngdahl [8] discuss the essence of characteristics of a lean approach to hotel operations. Mahmoud S. Abou Kamar [19] reveals the opportunities for application of the management system Six-Sigma in the hotel industry. Erwin Rauch, Andreas Damian, Philipp Holzner, Dominik T. Matt [28, p. 614] present the application of Lean Management methods in the hospitality sector and discuss the question about their suitability and the possible potential for optimization.

Previously unsettled problem constituent. The issues of implementing lean management as a prerequisite for the tourism business development has not been examined by the authors so far.

Main purpose of the article. The aim of the article is to bring opportunities for competitive development of tourism by applying the Lean approach. The focus of this study is aimed at analyzing and evaluating the use of lean management as a new and successful approach in the field of tourism.

Results and discussions. From the literature review it becomes clear that the essence of the lean concept is subject to clarification in the scientific literature. Lean management is defined as “an approach to running an organization that supports the concept of continuous improvement, a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality” [44].

As it was already pointed out, the lean approach appeared in response to the need from loss optimization in the process of production, as well as reduction of unnecessary activities which do not add value to the product. It contributes to cost reduction, achievement of better results with less efforts, increase in effectiveness and competitiveness.

The lean approach is oriented towards satisfaction of customer needs. That is why products are “pulled” from the customer, i.e. „no one upstream should produce a good or service until the customer downstream asks for it“ [41, p. 67].

Taichi Ohno [24] defines seven types of waste, (muda – in Japanese), which should not be allowed:

- defects in products;
- overproduction of goods not needed;
- inventories of goods awaiting further processing or consumption;
- unnecessary processing;
- unnecessary movement of people;
- unnecessary transport of goods;
- waiting (by employees for process equipment to finish its work or on an upstream activity).

To these sources of waste J. P. Womack and D. T. Jones [41, p. 355] have added one more

– „the design of goods and services which do not meet users needs“.

The same authors [41, p. 15] point out that „*muda*” means "waste", specifically any human activity which absorbs resources but creates no *value*. According to them „*muda*“ is everywhere, but fortunately, there is a powerful antidote to *muda*: *lean thinking*. It provides a way to specify value, line up value-creating actions in the best sequence, conduct these activities without interruption whenever someone requests them, and perform them more and more effectively. In short, lean thinking is *lean* because it provides a way to do more and more with less and less human effort, less equipment, less time, and less space-while coming closer and closer to providing customers with exactly what they want [41, p. 16].

The basic principles for creation and development of lean production (no waste production) were defined in 1991 by J. P. Womack, D. T. Jones and D. Roos in the book „The Machine That Changed the World: The Story of Lean Production“ [40], and later in 1996 J. P. Womack and D. T. Jones [41, p. 6], considering that the focus of this book is on collective processes such as product development, sales and production, rather than broadly applicable principles in order to provide a reliable guide to action managers, summarized in their other work (*Lean Thinking: Banish Waste and Create Wealth for Your Corporation*) the principles of lean thinking in the following way:

– Precise specification of *value* by specific product – in their opinion „The critical starting point for lean thinking is *value*. Value can only be defined by the ultimate customer. And it is only meaningful when expressed in terms of a specific product (a good or a service, and often both at once) which meets the customer's needs at a specific price at a specific time“. [41, p. 16];

– Identification of the *value stream* for each product – the value stream is defined by the authors as „the set of all the specific actions required to bring a specific product (whether a good, a service, or, increasingly, a combination of the two) through the three critical management tasks of any business: the *problem-solving task* running from concept through detailed design and engineering to production launch, the *information management task* running from order-taking through detailed scheduling to delivery, and the *physical transformation task* proceeding from raw materials to a finished product in the hands of the customer.“ [41, p. 19];

– Make value *flow* without interruptions – in connection with this principle the authors point out that an organization should be made, so that „remaining, value-creating steps flow“, i.e. a continuous flow of production should be created, leading to a decrease in the time from product design to its launch on the market, thus accelerating the return on investment [41, p. 21];

– Letting the customer *pull* value from the producer, which means producing exactly what the consumer wants at a given moment [41, pp. 24-25];

– Pursuing *perfection* – according to the authors, its achievement is connected with the gradual elimination of waste, and as the most important spur to perfection they point out transparency, which enables all participants to see the process – subcontractors, suppliers,

distributors, customers, employees and others and thus discover better ways to create value [41, p. 26].

The principle of "engaging employees" by providing power to make decisions about improvements in the production process as defined in 1991 by J.P. Womack, D.T. Jones and D. Roos in their book "The Machine That Changed the World: The Story of Lean Production" [40] is important for complete clarification of the lean concept.

The principles of the lean concept can be extended to tourism, where it is no less important to create an efficient organization of the specific production process related to the intangibility of the product offered. Business organization should minimize waste to add value for the customer and help to increase competitiveness. It is known from the practice that tourism losses are generated in the whole chain of the tourism industry, creating value for the consumer. The reasons are various:

- Seasonality and non-filling of capacity;
- Mismatch between the available capacity of tourist facilities and real needs – the presence of overcapacity that occurs mainly in places of accommodation (hotels, campgrounds, cabins and other places of short stay accommodation);
 - inadequate organization and management of the activities of the tourist enterprise;
 - low quality service;
 - failure to comply with standards;
 - bad attitude towards tourists;
 - insufficient training of staff;
 - inefficient use of staff;
 - inadequate feedback;
- untimely fulfillment of customers' wishes, i. e. offering tourism products in the period when you are in demand and out of season;
 - insufficient research on tourist markets and creation of tourist routes, underestimation of the profitability of tourist destinations;
 - insufficient study of customer needs, offering old and insufficiently demanded tourist products;
 - reduction or lack of prestige of tourist enterprise, etc.

Statistical data and the survey we conducted clearly show the role of some of these reasons for inflicting waste. The most striking waste occurs under the influence of seasonal fluctuations in tourism. For instance, hospitality statistics for 2015 indicate the following (see Fig. 1):

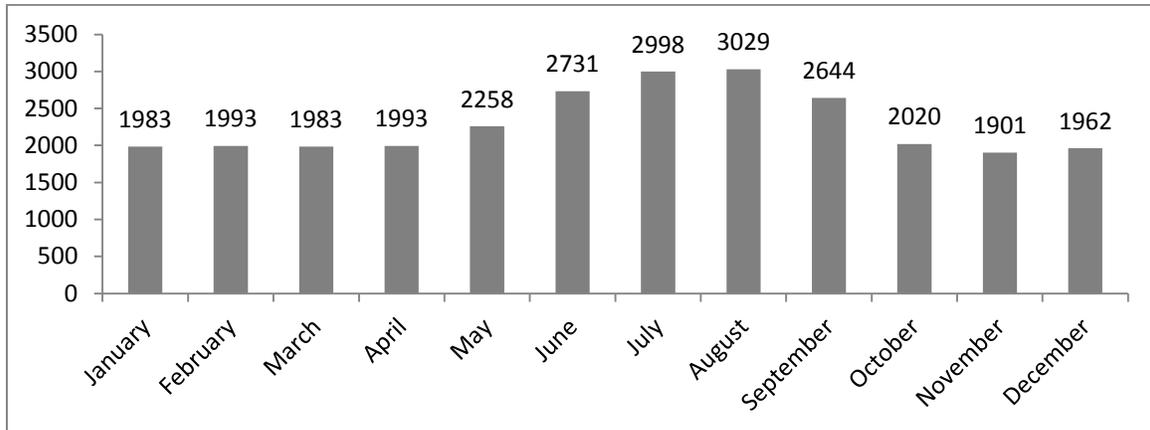


Fig. 1. Operating accommodation establishments in Bulgaria by months for 2015 – in numbers
(Source: NSI, Business statistics, Tourism, Activity of accommodation establishments by statistical zones, statistical regions and provinces by months in 2015, www.nsi.bg)

On the above figure we can clearly see the influence of seasonality on the monthly functioning of accommodation establishments. Seasonality also affects the occupancy rate, as well as the incomes from sales, and respectively – the profit.

The occupancy rate indicator reveals the degree of capacity utilization of accommodation facilities, so it is essential to characterize their condition and to assess the effectiveness of their operation [21, p. 154].

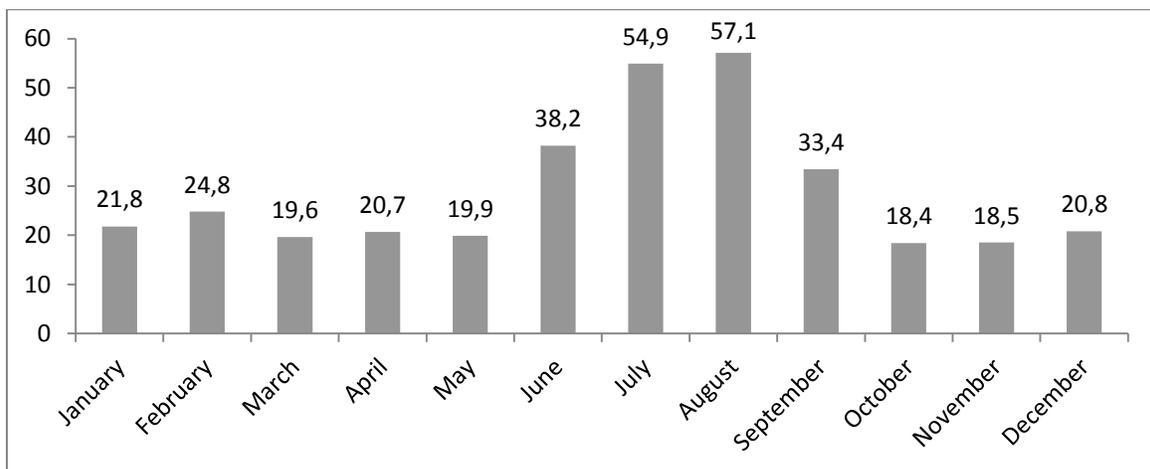


Fig. 2. Occupancy rate of operating accommodation establishments in Bulgaria by months in 2015 - %

(Source: NSI, Business statistics, Tourism, Activity of accommodation establishments by statistical zones, statistical regions and provinces by months in 2015 and own calculations using the method of NSI, according to which the occupancy rate is calculated as a ration between realized overnight stays and bed nights, www.nsi.bg)

In the case it is clear that even in high season (the months of June to August) a significant share of the capacity of accommodation facilities remained idle. In our opinion, other reasons have importance too, both domestic (for example, poor organization, weaknesses in advertising, the absence of studies on customer demand, deficiencies in service and external ones, caused by the continuous construction of new accommodation facilities, leading to excessive construction. The result is the existence of overcapacity in tourist areas expressed in oversupply (manufacturing, disproportionate to the actual needs), not generating revenues and incurring only costs. It should be borne in mind that "at some point extensive development may hinder further development of hospitality" and "is a prerequisite for overcrowding resorts, overloading of tourist resources, which in turn has a negative impact on the environment, saturation of transport infrastructure, that leads to an imbalance in development." [21, p. 161]. In turn, this can lead to loss of not only to a single company, but all or most of the operating enterprises in a territory, i.e. will have the opposite effect. "It is therefore important in future for hospitality to develop intensively, and think about improving the usability of the facilities," which is in line with lean management [21, p. 161].

Poor performance of accommodation establishments by months of the year and the low occupancy of facilities under the influence of seasonality naturally lead to significant financial losses, as evidenced by the state of their monthly income (see Fig. 3).

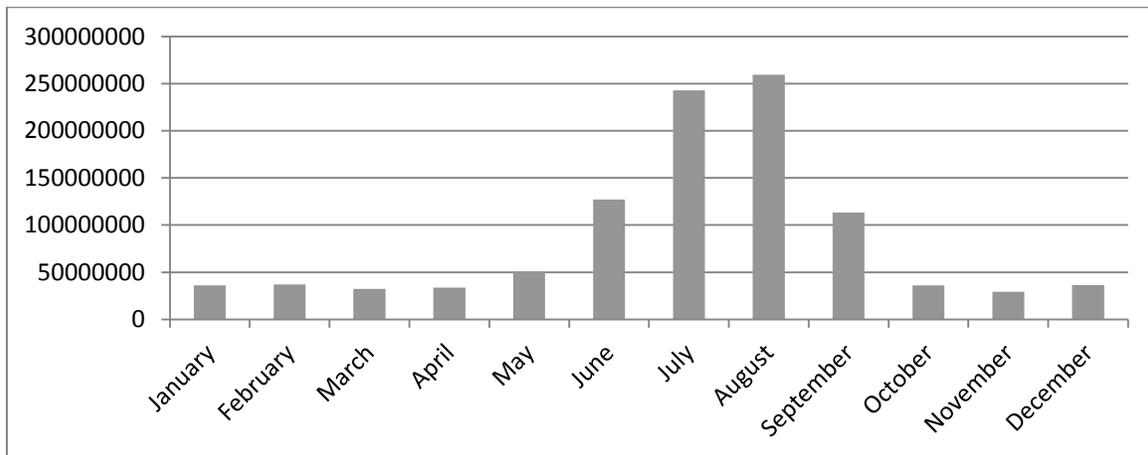


Fig. 3. Revenues from overnight stays of operating accommodation establishments in Bulgaria by months in 2015 – in leva

(Source: NSI, Business statistics, Tourism, Activity of accommodation establishments by statistical zones, statistical regions and provinces by months in 2015, www.nsi.bg)

Losses under the influence of seasonality can be traced through the activity of tour operators / agents, expressed in the number of trips of Bulgarian citizens abroad for tourism (rest and excursion). From the statistical data it is clear that once again the highest values are observed in the summer months, particularly in July (220 444 trips) and August (214 473 trips), followed by September (170 368 trips), while in winter they are more than 2.5, and in

some cases and more than 3 times lower. (www.nsi.bg, NSI). Of course the losses of intermediary companies (tour operators / agents) can be due to other reasons too, some of which are listed above and are visible from the conducted survey. More important in this case may be reasons such as: poor organization and management; failure to comply with the wishes of potential tourists due to lack of or conduct of only occasional surveys; untimely satisfaction of tourists' wishes; insufficient market research; underestimation of the potential of tourist destinations; failure to comply with standards and poor quality of service, poor training of staff (e.g. tour guides), etc.

While we do not have data on restaurants because their activities are not monitored separately by the National Statistics Institute, we believe the same applies to this tourist sector, especially restaurants in resorts, which terminate their activities off-season. Losses for them are obvious.

The data from the survey we conducted in 123 enterprises in the tourism sector also illustrate the existence of losses and the need to apply the tools of lean approach to minimize them. The survey results show that the most important reasons for these losses according to respondents are as follows (see Table 1):

Table 1. Reasons for existence of losses in the surveyed enterprises

Reason	Obtained result – relative share of responses (%)
Lack of established practice for research on competitors	It is not necessary to analyze competitors – 46.2%
	Never performed such an activity – 16%
	We have studied our competitors – 37.8%
Lack of research on consumers	Never studied the tourist preferences to a given type of tourism - 46,7%
	Never offered organized entertainment events – 43.3%
Lack of a programme for events for attracting tourists in the low season	There is no such programme - 48.5%
	There are no joint programmes with the municipality or other organization for utilizing the tourist resources on the respective territory – 76.7%
Inefficient process of strategic planning for business development	No such strategy - 59.8%
Lack of plans for development	Do not elaborate development plans - 64.7%

(Source: Authors' own survey, 2015)

The presented data shows that according to respondents the reasons are of a domestic nature, mainly organizational, managerial and marketing one. This is a significant deficiency, which affects the whole chain of tourist services, even more so given that only 37.8% of enterprises do research on competitors, mainly to manage sales, build a strategic plan and profile the most important competitors. According to respondents development strategies implemented in enterprises are mainly directed to: increase market share (25.8%), product

development / development of new products or improving existing (12.5%) and entering new markets (2.9%). Along with that limited use of the tools of lean approach was identified - according to respondents the main instruments contained in the development plans of the surveyed companies are: improving the quality of products / services (15.2%); investment in new equipment and technology (10.9%) and cooperation with foreign partners (9.2%). This means that these companies do not make efforts to reduce losses and implement lean management for better organization and management and to create products with high quality and added value for tourists and as a result suffer significant losses.

All these and other losses to companies in the tourism sector, as well as unnecessary activities that do not add value to the product can be identified, analyzed and removed by the application of some of the tools of the lean approach. A number of its essential tools are known in theory and practice. Although they are designed to improve production processes in manufacturing plants, a significant portion of them can be used successfully in the field of tourism.

The tools according to their type, purpose and outputs can be grouped as follows: to establish waste, for an analysis, to eliminate waste and activities without added value, and achieve excellence. On this basis, in view of the consistency of the implementation of the tools for implementing the lean approach we believe it can be seen as a process whose realization involves the following steps/stages:

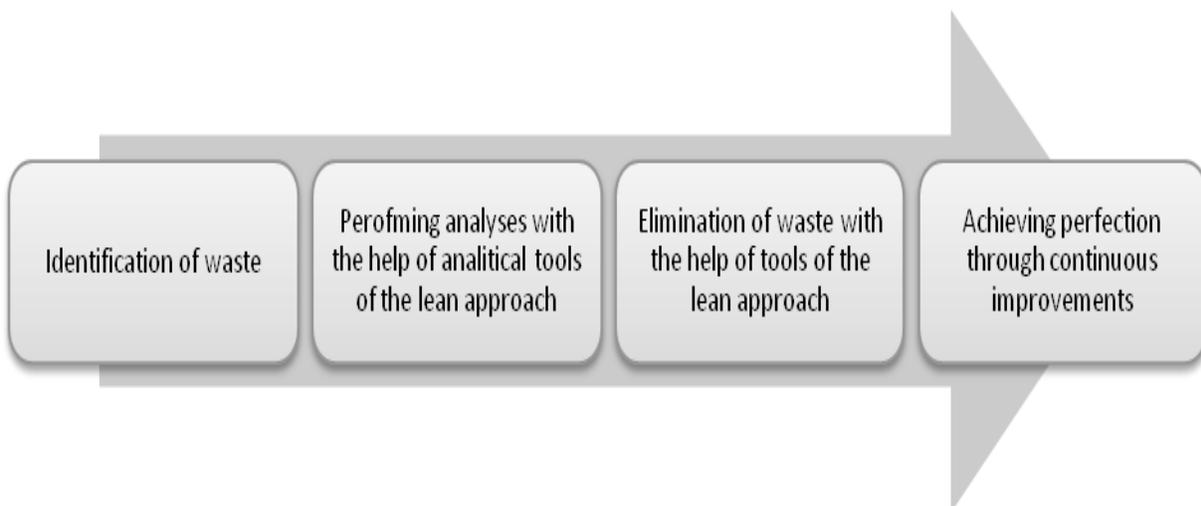


Fig. 4. The lean approach as a process according to the application of the tools for its realization

Since each system develops and functions in a dynamic environment influenced by many factors, the process is not only continuous but recurrent, cyclical, meaning that emerging waste should constantly be identified and removed and improvements should be made to perfect the activity of the enterprise. This in turn is a guarantee for the continuous improvement of the competitiveness of the company and its products.

The first step in this process in any enterprise, including the tourism one, is the identification of activities that cause waste and do not add value for the client as well as the types of waste ("muda"). This will enable their elimination with follow-up measures. Some of the tools of the lean approach can be used to identify waste in tourist enterprise (see Fig. 5).

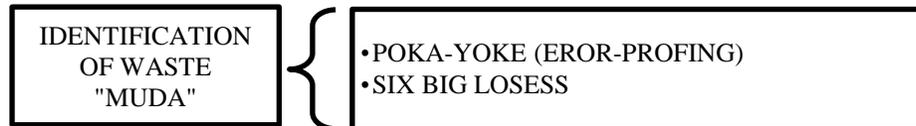


Fig. 5. Lean management tools for identification of waste

Poka-Yoke (from Japanese - Error - Proofing) helps to discover and prevent errors so that waste is not allowed. In our opinion the application of this method in the tourist enterprise is particularly important in relation to its effective management. Prevention of errors is associated with analytical and evaluative activities of managers and is their primary task in the overall process of tourist services.

The Six big losses method enables the identification of waste connected with productivity. This method is suitable for the tourism sector because of the opportunities it provides for analyzing and highlighting the efforts of managers on the most common causes of losses.

In the field of tourism according to the specifics of the particular enterprise for the analysis of losses and inefficient activities (not generating value added), in our opinion, the following analytical tools can be used (see Fig. 6):

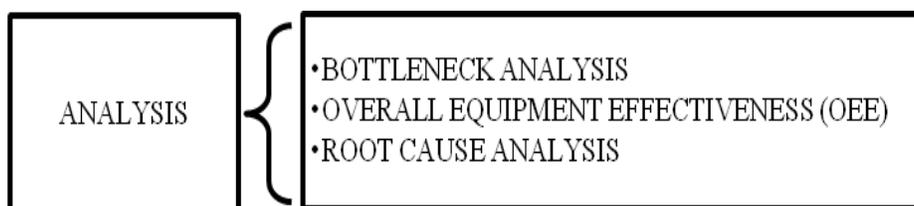


Fig. 6. Analytical tools of lean management

Some of these tools are aimed at identifying losses, problems and errors in the enterprise, while others - to measure the extent of their manifestation in order to take decisions to prevent them.

To the first group we can refer the Bottleneck analysis and Root cause analysis, and to the second - Overall equipment effectiveness (OEE).

Bottleneck analysis gives the opportunity to identify where exactly the weak point of the production of the tourist product is, while through Root cause analysis one can identify the primary causes of occurring drawbacks and problems. The elimination of the weak link,

identification of the underlying problem and taking specific corrective actions for resolving create prerequisites for improving the organization and overcoming occurring defects and other problems caused by the main one. By the method Overall equipment effectiveness (OEE) one can be measure losses within a manufacturing process - in terms of service time, performance and quality, which is especially important for the tourism sector. The application of this method is directly linked to the implementation of control on service time, professional and quality performance of the obligations of employees and the quality of the tourist product. Based on a comparison with the starting position we may determine the extent of elimination of waste from poor service and creation of poor and not demanded products that do not satisfy the requirements of tourists, and take measures to reduce the time spent on serving tourists throughout the sector chain.

The tools for waste elimination include (Fig. 7):

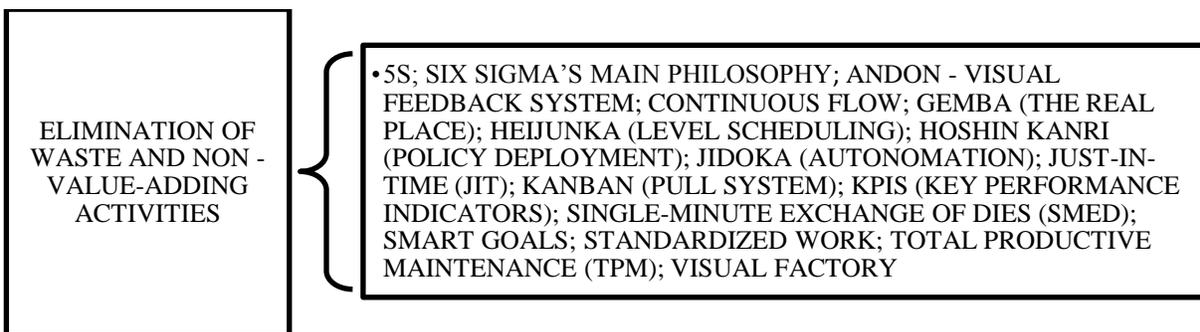


Fig. 7. Lean management tools for waste elimination

In this paper we discuss only some of the many tools to eliminate waste, which we believe are more relevant to tourism enterprises in view of its specificity. Furthermore, it should be borne in mind that any elimination of waste leads to an improvement, so it is difficult to separate 1 methods for elimination of losses from these for improvements and perfection.

Out of these, special importance has the tools that are connected with the organization and management of processes - 5S (Sort; Set in Order; Shine; Standardize; Sustain), Sigma's main Philosophy, Heijunka (from Japanese) - Level Scheduling, Hoshin Kanri (from Japanese) - Policy Deployment), Just-In-Time (JIT), SMART Goals. Using the method 5S in the tourist enterprise contributes to the elimination of losses caused by the waste of time in servicing tourists due to improper organization of work and workspace. It should be borne in mind that the right organization and observance of the sequence of activities and actions make it possible to create a flow in the functioning of the company. This reduces the time for carrying out an activity, increases productivity and efficiency respectively. In order to reduce losses, especially from improper organization of the various operations in the hospitality industry and high expenditure of time for implementation, the Six Sigma's main philosophy method can also be used. С него се снижават defects in outputs by eliminating wasteful steps and the

variation in an operation [12].

The tools Heijunka (Level Scheduling), Hoshin Kanri (Policy Deployment) and SMART Goals are connected with the implementation of the first managerial function – planning and setting of objectives. In our opinion, the Heijunka method, which is applicable in a small-scale production, when applied to tourism would refer to the creation of packages of unique products and at the same time offering the products of different types of tourism, leading to a more complete satisfaction of potential tourists. Hoshin Kanri allows to align strategic to tactical and operational plans of the tourist enterprise and provides continuous elimination of waste due to lack of connection between the plans and the determination of SMART Goals ensure that targets will be set, specific for enterprise and industry, measurable, achievable, relevant and timely, which is an important step towards increasing the efficiency of the planning process - strategic, tactical and operational. Another method that can be applied in the tourism sector is Just-In-Time, the use of which in this case is related to the timely satisfaction of tourist needs.

As a means to achieve greater efficiency in the organization and management of the process of elimination of "muda", some methods related to monitoring and visualization can also be used. Important to control activities and the establishment of progress in the elimination of waste and unnecessary activities are the lean tools Andon (from Japanese), Gemba (form Japanese) - The Real Place, KPIs (Key Performance Indicators). The role of Andon method consists in providing feedback in the enterprise, through which the state of a given issue is identified and which allows you to respond immediately. The indicators for monitoring the objectives are determined by means of KPIs. The nature of the Gemba method is different, which imposes the need to monitor and analyze the performance of the staff in the place where the work processes take place, helping to improve its efficiency, productivity and quality and leads to optimal utilization of human resources.

Apparently, the elimination of waste and unnecessary activities leads towards perfection, a process that can not be realized without the active participation of all employees of the tourist company. To do this, it is important not only to build appropriate strategies, tactics, plans and roadmaps for development but also to increase preparedness of employees, strengthen teamwork and organizational culture in the company. We can point out the following tools to achieve perfection which can be used by tourism enterprises (Fig. 8):

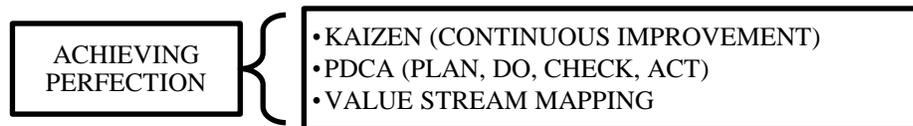


Fig. 8. Lean management tools for achieving perfection

Achieving perfection is impossible without the development of a specific program. And

this is the first step that should be taken on the road to perfection. Along with the strategies adopted to eliminate the shortcomings and unnecessary activities in the tourist enterprise, the opportunities provided by the mode PDCA (Plan, Do, Check, Act) can also be used to achieve continuous improvement. It includes the elaboration of an action plan to determine expected results, continuous monitoring of implementation of the plan, and to making analyses and assessments. This is necessary for the continuous improvement of operations at a higher quality level. Of the same type is the instrument Value stream mapping. It can be seen both as a tool to detect losses and as a means to improve the state based on the development of a "road map" - a program for solving problems. Its complex nature makes it easily usable in the tourist enterprise, but combined with the application of analytical methods. Given the role of the human factor in the overall production process and in the implementation of improvements, one of the tools that are applicable in the tourist enterprise is the Kaizen method (from Japanese). It is an approach aimed at continuous improvement through process optimization resulting from the implementation of teamwork. This tool is directly related to the formation of such a corporate culture that combines the efforts of staff in achieving the main goal - continuous improvement to enhance the activity. Therefore, an important concern of managers and business owners in the sector should be the permanent training of staff.

Conclusions and further researches directions. From the above and the presented statistical data and results of the conducted survey it can be seen that the application of the lean approach is needed for tourism enterprises in order to better meet the needs of tourists, increase overall efficiency and competitiveness. The lean concept as a management philosophy may have a role to eliminate losses and activities that do not provide added value for customers and hence to achieve high results based on:

- Aligning the offering of tourism products with expressed customer needs ("pulling"), providing their expected value, a prerequisite for which are regular marketing studies of market demand and the needs of potential tourists.
- Defining value in accordance with the whole product [41, pp. 46-51], which in tourism means the whole chain of service in the hospitality industry seen from the perspective of tourists.
- Pricing that reflects the actual cost in order to offer products with lower prices and offer promotional packages, leading to attracting greater numbers of tourists.
- Optimal use of tourism resources through meaningful enrichment of the product, adding new features to it, thus expanding the opportunities offered by it (e.g. adding elements of cultural, eco, rural and alternative types of tourism to a product aimed primarily at marine tourism), adding extra services (spa and wellness treatments, etc.), which creates additional value for tourists.
- Achieving high quality of the tourist product based on the removal of defects and weaknesses as early as during the process of design and production, i.e. at their source. This process is accompanied by continuous improvement of the product based on the results of the survey of the opinions of tourists. Product quality is related to its content and form, its timely

offering, as well as the attitude and skills of the staff.

- Minimizing waste by identifying and removing the causes at the outset (of not demanded and therefore unnecessary travel products, activities and operations without added value, waste of time to serve tourists, redundant production costs, etc.).

- Optimizing customer service operationalization of the process of service, especially in hotels and on this basis, focusing on quality, lowering waste and the elimination of unnecessary activities, by placing customer expectations in the input, and the desired product at the output.

- Increasing the flexibility and adaptability of the tourist enterprise to the dynamic changes in the environment tourist market and the wishes and needs of tourists using flexible management system. Such a system allows easy and fast transition to new products in terms of their type and combining, the time of offering, destinations, prices and other characteristics. This means developing skills in managers of the company for quickly resetting the range of products and a variety of combinations, creating a wide range of different target groups and flexibly switching from one product offering to another while maintaining quality and feasibility of planned financial results.

- Building an “expanded value flow” [41], including partners the chain of the complete tourist service, so that they contribute to the reduction of losses based on respect for contracts, risk sharing, realization of continuous exchange of information - an approach important for each individual company and the sector in general. The effect will be considerably greater if they perceive the lean concept as their leading managerial philosophy.

- Ensuring continuity of the lean process, constantly searching for sources of waste and activities / products that do not add value for the customer, taking specific measures to eliminate them and making continuous improvements in the organization's production process and the ongoing information flow in connection with its implementation, the products and the quality of tourist services in order to achieve perfection.

For the effective implementation of the lean concept in tourism enterprises and to increase the competitiveness, it is necessary to take some managerial steps - forming and implementing lean strategy and its integration with appropriate tactics and a specific program, including appropriate tools, especially for operations management in hospitality. To realize this management philosophy it is necessary to engage human resources, which involves the provision of personnel initiative to solve problems in a bottom-up manner.

All this not only leads to a total reduction of unnecessary costs and eliminates / reduces waste, but also to a complete and quality satisfaction of the tourist needs, strengthening the positive image and continuously improving the competitiveness of the tourist company and its products. And although according to Krafcik „lean management policies have inherent risks“, „the potential gains are great“, „production management policy has a tremendous effect on plant operating performance“ and „lean plants are more capable of simultaneously achieving high levels of productivity, quality, and mix complexity“ [20].

The future studies of the authors will be directed towards research and evaluation of the

implementation of the specific lean management tools in the practice of tourism enterprises in Bulgaria.

References

1. Adler, P. S, Cole, R. E. (1993). Designed for Learning: A Tale of Two Plants, *Sloan Management Review*, 34 (3), 85-94.
2. Anderson, G.K. (1991). The Education and Training of General Managers in Scotland, *International Journal of Contemporary Management*, 3 (2), 26-29.
3. Arfmann, D., Federico, Dr., Topolansky Barbe, G. (2014). The Value of Lean in the Service Sector: A Critique of Theory & Practice, *International Journal of Business and Social Science*; 5 (2); February 2014, United Kingdom, p. 18.
4. Awwal, M. I. (2014). Breaking the barrier of service hostility: A lean approach to achieve operational excellence, *International Journal of Business and Economics Research*, 3(6-1): 65-73
5. Baum, T. (1988). Toward a New Definition of Hotel Management, *The Cornell Hotel and Restaurant Administration Quarterly*, 29 (2), 36-40.
6. Begam, M. Sh., Swamynathan, R., Sekkizhar, J. (2013). Current Trends on Lean Management – A review, *International Journal of Lean Thinking*, 4 (2) (December 2013)
7. Berggren, C. (1995). The Fate of the Branch Plants - Performance Versus Power in Sandberg, Å (ed), *Enriching Production*, Avebury, Aldershot Business statistic, Tourism (2016) NSI, www.nsi.bg
8. Bowen, E.D., Youngdahl, W.E. (1998). “Lean” service”: in defence of a production-line approach, *International Journal of Service Industry Management*, 9(3), 207–225.
9. Cooney, R. (2002). Is “lean” a universal production system?: Batch production in the automotive industry, *International Journal of Operations and Production Management*, 22 (10), 1130-1147.
10. Delgado, C., Ferreira, M., Branco, M. C. (2010). The implementation of lean Six Sigma in financial services organizations, *Journal of Manufacturing Technology Management*, 21 (4), 512-523.
11. Elnadi, M., Shehab, E., Peppard, J. (2013). Challenges of lean thinking application in product-service system, *Proceedings of the 11th International Conference on Manufacturing Research (ICMR2013)*, Cranfield University, UK, 19th – 20th September 2013, pp. 461-46.
12. Fitzpatrick, B., R. Rogers (2003) Six sigma™ explained. *Hospitality Upgrade*, 128-130, Retrieved from <http://searchcio.techtarget.com/definition/lean-management>
13. Forza, C. (1996). Work organization in lean production and traditional plants: What are the differences?, *International Journal of Operations & Production Management*, 16 (2), 42-62.
14. Georgescu, D. D. (2011). Lean Thinking and Transferring Lean Management- The Best Defence against an Economic Recession?, *European Journal of Interdisciplinary Studies*, 3 (1), June 2011.
15. Graban, M. (2009). *Lean Hospitals: Improving Quality, Patient Safety and Employee Satisfaction*, CRC Press, Taylor & Francis Group, pp. 1-252,
16. Graban, M., Prachand, A. (2010). Hospitalists: Lean Leaders for Hospitals, *Journal of Hospital Medicine* 5(6), July/August, 317-319, Retrieved from <http://cdn.markgraban.com/wp-content/uploads/2016/01/Journal-of-Hospital-Medicine.pdf>
17. Hines, P., Holweg, M., Rich, N. (2004). Learning to evolve: A review of contemporary Lean thinking. *International Journal of Operations and Production Management*, 24 (10), 994-1011.
18. Holweg, M. (2007). The Genealogy of Lean Production, *Journal of Operations Management* 25, 420–437, Retrieved from <https://www.researchgate.net/publication/222301917>
19. Kamar, M. S. A. (2014). Six-Sigma Application in the Hotel Industry: Is It Effective for Performance Improvement? *Research Journal of Management Sciences*, 3(12), 1-14, December 2014

20. Krafcik, J. F. (1988). Triumph of the Lean Production System, Sloan management review association, 30 (1), 41-52.
21. Kyurova, V. (2011). Seasonality and competitiveness in the hotel business, doctoral dissertation, SWU “Neofit Rilski”, Blagoevgrad, pp. 1-252
22. Landsbergis, P. A., Cahill, J., Schnall, P. (1999). The impact of lean production and related new systems of work organization on worker health, *Journal of occupational health psychology*, 4 (2), pp. 108
23. Lewis, M. A. (2000). Lean production and sustainable competitive advantage, *International Journal of Operations & Production Management*, 20 (8), 959-978.
24. Ohno, T. (1988). *The Toyota Production System: Beyond Large Scale Production*, Portland, Oregon, Productivity Press, pp. 19-20
25. Piercy, N., Rich, N. (2009). Lean transformation in the pure service environment: the case of the call service centre, *International Journal of Operations & Production Management*, 29 (1), 54-76.
26. Pojasek, R. B. (2000) *Lean, Six Sigma and the Systems Approach: Management Initiatives for Process Improvement*, Wiley Periodicals Inc., Retrieved from <http://www.Pojasek-Associates.com>
27. Price, L. (1994). Poor personnel practice in the hotel and catering industry: does it really matter?, *Hotel Resource Management Journal*, Vol. 4, No 4, 44–62.
28. Rauch, E., Damian, A., Holzner, Ph., Matt, D. T. (2016). Lean Hospitality - Application of Lean Management methods in the hotel Sector, 48th CIRP Conference on MANUFACTURING SYSTEMS - CIRP CMS 2015, *Procedia CIRP* 41 (2016) 614 – 619, Retrieved from www.sciencedirect.com
29. Ritsch, B. (2006). Value stream mapping helps service industry to eliminate waste. Georgia: Georgia Tech's Economic Development Institute
30. Ross, W. S, Canacari, E. G. (2012). *A Practical Guide to Applying Lean Tools and Management Principles to Health Care Improvement Projects*, Vol 95, No 1.
31. Senthilkumar, V.B.E. (2011). *Lean in Hospitality Services Across a State University*, Texas Tech University, pp. 1-67
32. Schouteten, R., Benders, J. (2004). Lean Production Assessed by Karasek's Job Demand-Job Control Model, *Economic and Industrial Democracy*, 25 (3), 347-373.
33. Shah, R., Ward, P.T. (2007). Defining and developing measures of lean production, *Journal of Operations Management*, 25 (4), 785–805.
34. Simon, R. W., Canacari, E. G. (2012). *A Practical Guide to Applying Lean Tools and Management Principles to Health Care Improvement Projects*, January 2012, *AORN Journal* 95 (1)
35. Sohal, A. S. (1996). Developing a lean production organization: an Australian case study, *International Journal of Operations & Production Management*, 16 (2), 91-102.
36. Standard, C., Davis, D. (1999). *Running today's factory: a proven strategy for lean manufacturing*, Hanser Gardner Publications
37. Swank, C. K. (2003). The lean service machine, *Harvard business review*, 81 (10), pp. 123-130
38. Ugochukwu, P., Engström, J., Langstrand, J. (2012). Lean in the supply chain: a literature review, *Management and Production Engineering Review*, 3 (4), 87–96.
39. Vlachos, I., Bogdanovic Al. (2012). Lean thinking in the European hotel industry, *Tourism Management*, January 2012, 36:354-363
40. Womack, J. P., Jones, D. T., Roos D. (1991). *The Machine That Changed The World*, Retrieved from https://d11.cuni.cz/pluginfile.php/218097/mod_resource/content/0/womack_the_machine_that_changed_the_world.PDF
41. Womack, J. P., Jones D. T. (2003). *Lean Thinking: Banish Waste and Create Wealth for Your*

Corporation. Simon & Schuster, New York, 1-390.

42. Womack, J. P., Miller D. (2005). Going lean in health care, Institute for Healthcare Improvement

43. Yorgova, Y. (2011). The Lean Production concept in the logistics of services – applicability, peculiarities and advantages, In Dimitrov, P., M. Rakovska (eds). Logistics – present and future, Sofia, IBIS, pp. 341-349.

44. Lean management. searchcio.techtarget.com Retrieved from <http://searchcio.techtarget.com/definition/lean-management>

ПРИМЕНЕНИЕ ЛИН КОНЦЕПЦИИ В КАЧЕСТВЕ ПРЕДПОСЫЛКИ ДЛЯ РАЗВИТИЯ ТУРИСТИЧЕСКОГО БИЗНЕСА

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Ключевым вопросом в условиях глобализации рыночного спроса является поиск нового подхода для обеспечения устойчивого присутствия на рынке туристическим предприятиям. Это означает повышение конкурентоспособности и принятие управленческих решений в этом направлении. Одним из способов решения этой проблемы заключается в применении лин концепции, согласно которой предпринимательские усилия направляются к стоимости с точки зрения затрат и с точки зрения способности продукта удовлетворять потребностей клиентов.

Цель статьи состоит в том, чтобы выявить возможности для конкурентного развития туристического бизнеса путем применения лин подхода. Исследование основано на конкретных статистических данных и результатов опроса руководителей и владельцев предприятия в секторе туризма. Применялись следующие методы исследования: анализ и синтез, опрос по анкете и статистические методы.

***Ключевые слова:** лин концепция, туристический бизнес, предпосылка, развитие, стоимость*