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"Kyiv Polytechnic Institute named after Igor Sikorsky"THE IMPACT OF HUMAN RESOURCE LOGISTICS
ON THE SUSTAINABLE DEVELOPMENT OF COMPANIES

ВПЛИВ КАДРОВОЇ ЛОГІСТИКИ НА СТІЙКИЙ РОЗВИТОК ПІДПРИЄМСТВ

The article is devoted to the study of the impact of personnel logistics on the sustainable development of the company. In particular, some aspects and conditions of implementation of human resource logistics in the enterprise are identified. The methodological basis of the research is the concept of strategic management of human capital and the leading statements of the resource concept which takes into account the development of highly effective structural subsystems based on the use of key competencies reflecting the ability of a human capital enterprise to generate new ideas and technologies, self-organization and rapid adaptation to change. Within the framework of the study such general scientific and specific methods of scientific knowledge as analysis, synthesis, generalization, systematization, and systemic and synergetic approaches were used, on the basis of which the factors on which the process of implementation of personnel logistics system at the enterprise depends were determined. The approach to the management of personnel flows at the enterprise, based on the four main aspects of the enterprise development in terms of transformational changes, has been proposed. It is proved, that the majority of domestic enterprises already need to increase requirements for the quality of human capital of the enterprise and the solution to this problem lies within the limits of personnel logistics.

Keywords: human capital, human resource logistics, sustainable development, human resource flow.

Стаття присвячена дослідженню впливу кадрової логістики на стійкий розвиток підприємства. Зокрема визначені деякі аспекти та умови імплементації кадрової логістики на підприємстві. Методологічною базою дослідження є концепції стратегічного управління людським капіталом та провідні положення ресурсної концепції, що враховує розвиток високоефективних структурних підсистем на основі використання ключових компетенцій, які відображають здатність людського капіталу підприємства до генерації нових ідей і технологій, самоорганізації та швидкої адаптації до змін. Також у межах дослідження використано такі загальнонаукові та специфічні методи наукового пізнання, як аналіз, синтез, узагальнення, систематизація, системний та синергетичний підходи, на основі яких було визначені фактори від яких залежить процес упровадження системи кадрової логістики на підприємстві. Запропоновано підхід до управління кадровими потоками на підприємстві, який ґрунтується на чотирьох основних аспектах розвитку підприємства в умовах трансформаційних перетворень. Особлива увага у роботі приділена дослідженню перспектив упровадження кадрової логістики з відповідною градацією на сфері впливу. Аргументовано, що одним з основних інструментів стійкого розвитку підприємства на ринку є імплементація кадрової логістики з урахуванням корпоративної культури інноваційного типу, яка передбачає розробку та реорганізацію основ управління, орієнтовану в основному на довгострокові цілі, поряд з цим розглянуто відповідні моделі організації праці на підприємстві. Визначено, що імплементація кадрової логістики на підприємстві з метою стійкого розвитку має бути спрямована на реалізацію нової концепції управління персоналом. Доведено, що більшість вітчизняних підприємств вже відчувають потребу підвищення вимог щодо якості людського капіталу підприємства і вирішення означеної проблеми лежить в межах кадрової логістики. Для цього пропонується вводити на підприємствах нові структурні одиниці, метою яких є оптимізація кадрових потоків.

Ключові слова: людський капітал, кадрова логістика, стійкий розвиток, кадровий потік.

Problem statement. Highlighting human enterprise capital as the dominant factor in ensuring the sustainability of economic development of the enterprise is associated with the gradual replacement of the nature of work, which is based on the intellectualization of activities. This is due to the fact that in the transformation of the economy

to a post-industrial type of development (knowledge economy), any production begins with an idea. These ideas are linked to the level of development achieved and the nature of production relations and are generated on the basis of knowledge and available information. Accordingly, it is not past, but living creative labor, which is the basis for

creating added value, is of paramount importance in modern production. This labor is determined by the level of scientific discoveries, new technologies, and management systems that determine the degree of intensity of adaptation to technical, technological, and organizational discoveries and advances in production. Consequently, knowledge and information are the main system-forming mechanisms for the formation of socio-economic relations in the enterprise. This is reflected in the qualitative change of labor factors, where human capital becomes the main component [1–4].

We recognize that the modern vector of economic relations development should take into account the most progressive, technologically updated, scientifically grounded, practically expedient processes and phenomena, which allow optimizing the process of their implementation and obtaining the results closest to an optimistic forecast. Therefore, specialists and scientists pay special attention to the study of the logistic approach, which constantly confirms its theoretical and practical importance as the basis for the search for development reserves and their further rational use. This applies not only to the fields of production and circulation but also to individual types of resources, to which, as mentioned above, human capital comes first. As a consequence, there is a constant increase in requirements for human capital management through the prism of the logistical concept, operating with such definitions as professionalism, competence, personal and cultural values, adaptability, self-organization, leadership, and others.

In this correspondence, it can be recognized objectively that the synthesis of logistics and human capital management forms a relatively new scientific direction – human capital logistics, which combines the processes of intellectualization, rationalization, and optimization of human resources management in an enterprise, which, unlike other types of resources, are characterized by self-organization and adaptability, which determine the high complexity of their management.

Consequently, it is human capital that is the basis of human capital, endowed with relevant characteristics that directly determine the efficiency of managerial decision-making at the enterprise, the strengthening of competitive positions, and the sustainability of its economic development. It should be noted that the definition of this postulate was preceded by a number of theoretical views based on the determination of value orientations, which are inherent to the economic conditions of a certain time.

Analysis of recent research and publications. The theoretical basis of the study consists of the scientific works of such leading domestic and Western scientists as G. Becker, M. Veresklyya, A. Galchinsky, A. Grishnova, A. Gavrish, F. Herzberg, P. Drucker, M. Kravchenko, O. Krivoruchko, I. Kreidich, R. Likert, D. McGregor, I. Leontieva, P. Lawrence, D. McClelland, D. Macgregor, A. Maslow, J. March, G. Mintzberg, N. Mikhailitka, E. Mayo, F. Taylor, I. Tokmakova, J. Thomson, A. Fayol, A. Chandler, where the principles of scientific management [5–7], administrative principles of bureaucratic organization [8], human resource management principles [9] and the conceptual framework of personnel logistics [10–11] were substantiated.

While paying tribute to the scientific significance of the scientists' works, it should be noted that the approaches were fragmented. Thus, in the works of M. Weber, A. Fayol, and F. Taylor [6; 7] a person was considered as a rational individual, and an enterprise as a closed system, where

organizational and technical improvements are implemented by improving the efficiency of internal functions of an enterprise, E. Mayo, D. McGregor [8], considering the management of closed production and business systems, relied on internal relations between employees and non-economic motivation of their activities. The works of A. Chandler, J. Thomson, and P. Lawrence use a mechanistic view of the employee in the conditions of functioning of the company as an open subsystem in the state system [9].

Although the authors' models contain different criteria that should be met by HR logistics, aimed at forming complementary assets of the enterprise, the common feature of all the models is that they are based on the dominant postulates of institutional-logistic direction [4], which should be characterized as follows: the enterprise is a social and production subsystem of market relations; activities of individual organizational subsystems and decision-making have social consequences as

Their consideration made it possible to determine that in the conditions of transformational transformations, information, communication, and scientific developments, the implementation of which is based on the use of knowledge, the main carrier of which is human capital, become a necessary factor for the sustainable economic development of the enterprise. Given the theme of the research, it is reasonable to define it as a personnel flow, and personnel logistics as a tool to ensure sustainable development of the company.

However, some of the issues determining the impact of human resource logistics on the sustainable development of the enterprise and their implementation require further research.

Shaping the aims of the article. The purpose of this article is to investigate the impact of human resource logistics on the sustainable development of enterprises under conditions of transformational change. In order to achieve the above objective, the research sets and solves the following tasks:

1) to investigate and identify the main factors and conditions for the implementation of human resource logistics in the enterprise;

2) to propose an approach to the management of human resource flows in the enterprise, based on the main aspects of the development of the enterprise in conditions of transformational transformation.

Presentation of the basic material. Therefore, it is advisable to consider ensuring the sustainability of the economic development of enterprises as a new quality of human capital management, which provides the opportunity to increase the overall level of capital accumulation and obtain a high position in the market. Thus, we can conclude that ensuring the sustainability of economic development of enterprises is achieved through the accumulation of knowledge, and the development itself is a change in the state of the production and economic system, in which the overall level of capital accumulation over a certain period of time is provided by investing in human capital. This is based on the fact that under the conditions of transformational changes, uncertainty in the external environment, liberalization of the financial market, changes in consumer demand, variability of prices for resources, and the emergence of new markets require the search for options for the production and economic activities of enterprises and as a consequence the change in human capital flows. It is objective to recognize

that in the conditions of transformational change, competitive advantages are gained by those enterprises that are able to foresee and manage risks by focusing on quality, innovation, and productivity, and organizing staffing changes. It is the application of more efficient logistical solutions in human resource policies that enable the implementation of preventive strategies that contribute to minimizing the cost of economic resources, which is the basis for sustainable economic development. Such enterprises are characterized by a quick reaction to changes in market conditions; investment and innovation activity; financial stability and liquidity in the long term. Consequently, a necessary condition for development is the resistance to constant renewal and self-improvement, changing conditions and goals of the enterprise's human resource potential exploitation. This means that the management structure of the enterprise must be flexible, capable of modernization, and adaptive to fluctuations in macroeconomic factors. This is possible with the reorientation of the organizational structure (HR logistics) toward strategic management of the enterprise's human capital, which ensures the sustainability of the economic development of enterprises.

It should be noted that most domestic economists now define strategic development management as a long-term action plan aimed at the effective allocation of resources, including human resources, to achieve the main corporate goals [12, p. 9]. Some authors consider the development strategy as a certain action plan based on the system approach to the prospects of the enterprise activity [13, p. 27–29]. We support the viewpoint of the authors who believe that development strategies should be based on the market position of the enterprise [14]. Note that, in our opinion, the strategy should contribute not only to sustainable economic development but also to the improvement of its position in the market space, which is based on changes in the production, technical-technological and socio-economic conditions of management with the appropriate implementation of human resource logistics. In this case, the main principles of sustainable development are holistic orientation, adaptability, integrity, and dynamism, and the main driving force is the human capital of the enterprise.

Therefore, the analysis of existing today's concepts of enterprise development allowed us to single out those that directly take into account human capital management. To these, first of all, we refer the resource concept, which provides for the development of highly effective structural subsystems based on the use of key competencies of employees; maximization and development of internal human capabilities; motivation of human capital activities of the enterprise, maintenance of material, physical and moral well-being; training and development activities of managerial staff, which is related to the needs of the enterprise; creating conditions for the introduction of basic, managerial development policy

It should be pointed out that according to the resource concept, the success of the enterprise in the market is largely determined by the key competencies reflecting the ability of human capital of the enterprise to generate new ideas and technologies, self-organization and rapid adaptation to changes. Well-trained workers tend to have higher levels of productivity, and are more capable of learning and producing innovative products through the improvement of existing technological processes, as well as through the introduction of higher technology. All of this, in combina-

tion, leads to increased revenues for the enterprise, a higher level of competitiveness of its products, and business leadership in all types of markets.

In this accordance, we propose to base the development of the human capital management strategy of the enterprise on the principles of a new management paradigm [13], which provides: consideration of the enterprise as an open adaptive dynamic system; focuses on the quality of products and services; situational approach to management, ensuring the adaptation of the enterprise to market conditions; main sources of added value – human capital of the enterprise; management system focused on increasing the role of corporate culture, motivation.

A prerequisite for the formation of effective HR logistics in domestic enterprises striving for sustainable development is the authors' conclusion that the level of enterprise profitability depends not only on the influence of the industry structure but also on the impact of human resource flows on production. As an argument in favor of the implementation of human resource logistics in the enterprise, it is possible to use the dominants of the resource concept, which provides for:

- 1) development of highly efficient structural subsystems based on the use of employee competencies;
- 2) maximization and development of internal abilities of a person;
- 3) motivation of the company's human capital activity, support of material, physical and moral well-being;
- 4) activities for the training and development of managerial staff related to the needs of the enterprise;
- 5) creation of conditions for the implementation of policies for the development of basic, managerial and professional competencies;
- 6) creation of the climate necessary for creative teamwork [1; 2].

It should be pointed out that, in general, strategic decisions on the implementation of human resource logistics in the enterprise depend on the following factors: general policy objectives of the enterprise; the ratio of strengths and weaknesses concerning competitors; market product strategy determined by changes in consumer demand; conditions of formation of necessary production factors. Hence, it is clear that enterprise HR logistics should be based on offensive, defensive, or absorptive external knowledge that provides opportunities for innovative development.

The proposed approach to the management of human resource flows in the enterprise is based on four main aspects: satisfying the interests of resource owners; implementing a strategic approach to becoming a leader; creating added value through the development of human capital of the enterprise; the need for a strong corporate culture which manifests itself in the mission and values of the organization which is supported by communication, training and management processes.

Thus, the methodology of forming a system of strategic management of human resources consists of performing two successive stages: analysis of the business environment (SWOT-analysis) and developing a scenario of the business development strategy of the enterprise. In addition, it should be added that the competition characteristic of global business leaders is also conditioned by differences in strategies and management styles. In this correspondence, it should be pointed out that for domestic enterprises to compete effectively in the market, atten-

tion should be paid not only to the products they produce but also to strategic management as a whole, taking into account the practicalities of implementing human resource logistics. Hence, we recognize that an enterprise that aims to achieve sustainable economic development has the following qualities: consolidation; advantages in a competitive environment; legitimacy. Taken together, this is achieved through production, investment, financial, innovation and marketing activities, which allows domestic enterprises to consistently apply the following types of strategies: strategy of creating new opportunities; strategy of innovation; strategy of sustainable activities; strategy of change management for all enterprises through the optimization of human resource flows, i.e. implementation of human resource logistics (Figure 1).

It should be noted that most domestic enterprises already need to increase the requirements for the quality of human

capital of the enterprise. This is based on the main demands that the development of the knowledge economy and the spread of globalization processes put before commodity producers, in particular: improvement of product quality and service, application of more complex systems in production, technical and technological innovations, etc. This, in turn, on the one hand, expands the boundaries and composition of the requirements for workers, and on the other hand, requires new approaches to improve the key competencies of any worker. In this regard, it should be noted that knowledge is a basic type of monopoly that provides additional advantages in the market environment through the use of individuals' intellectual capital. Such a monopoly provides additional benefits both to its owner and to the enterprise where it is applied. From the point of view of the proprietor, it is an opportunity to obtain additional intellectual rent – income maximization. And from the point of view of the enterprise, it is to obtain

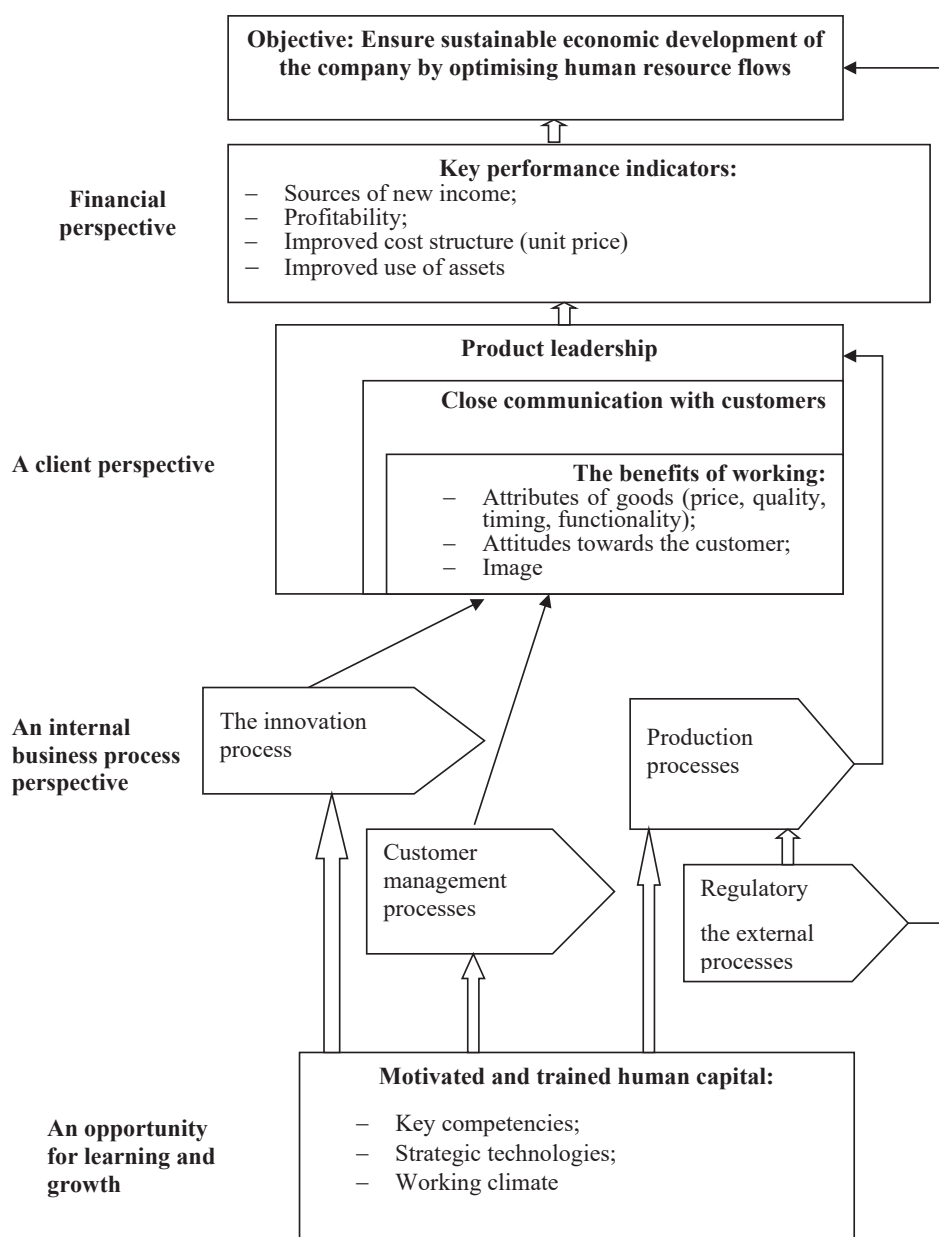


Figure 1. Prospects for implementing HR logistics in an enterprise

Source: elaborated by the authors

additional income – revenue maximization. As far as revenue maximization is concerned, it should be noted that today, it is becoming increasingly important for enterprises whose activities are based on a certain triangle – the knowledge triangle. This, in turn, has three main components – knowledge itself, research, and innovation. The knowledge pillar concerns the intellectual capital of the enterprise's staff which is generated in the information subsystem. As for research, it refers to the use of the creative potential of the enterprise, applying ideas as a result of its creative activities in the innovation subsystem. Innovation should be considered as the result of the implementation of the creative potential of the enterprise, carried out based on coordination of the corporate culture subsystem and the management subsystem. The result of the use of knowledge is the share of new products in the total volume of production [1; 3].

It should be added to the above mentioned that to achieve strategic goals of the enterprise when implementing human resource logistics at the enterprise, apart from material incentives, the following are of particular importance: working conditions and occupational safety, personnel safety; forms and methods of regulating labor relations; establishing norms and principles of moral relations in the team, developing a corporate code (code of business ethics); employment policy based on labor market analysis, the system of hiring and using personnel, the establishment of a work and rest regime; vocational guidance and adaptation of personnel, based on the principles of raising the educational and qualification levels; development of a personnel development concept, which includes new forms and methods of training, business career planning and professional promotion; improvement of the mechanism for managing labor motivation of personnel; development of new systems and forms of remuneration, material and

non-material incentives for employees; development of new and use of existing measures of social development of the organization; improvement of information support for all personnel work within the framework of the chosen strategy; measures to improve the entire personnel management system or its individual subsystems and elements; formation of an innovative strategy as a prerequisite for research and their subsequent diffusion (distribution).

At the same time, one of the main tools for the sustainable development of the enterprise on the market is the implementation of human resource logistics, taking into account the corporate culture of the innovative type, which involves the development and reorganization of the management framework, oriented mainly towards long-term goals.

In addition to this, special attention should be paid to the following work organization models in the enterprise: work change, which involves a regular and systematic exchange of spheres of activity between employees; expansion of the range of work by transferring a certain number of tasks from one place to another; work generalization, where related activities are brought together into a single complex; formation of autonomous teams performing a set of tasks, linked together and combined in a single time interval. In this correspondence, it is necessary to admit that the application of the abovementioned labor organization models allows for achieving the following results (Table 1).

To summarise the above, it can be argued that the implementation of HR logistics in the enterprise for sustainable development must be based on the new concept of HR management (Figure 2).

The implementation of such a concept involves: a system of personnel search, selection, recruitment, and adaptation; a comprehensive system of personnel performance evaluation; a management mechanism.

Table 1

The main objectives of labor organization taking into account the human factor

Objective	Methods of work organisation			
	Change of work	Expanding the range of work	Generalisation of labour	Formation of autonomous groups
To strengthen the corporate culture subsystem	x	x	x	x
Opportunity for professional development	x	x	x	
Increased chance of individual advancement	x	x	x	x
Greater job satisfaction	x	x	x	x
Greater motivation at work	x	x	x	x
Greater interest in the workplace	x			x
Better integration of work teams			x	x
Opportunity for self-fulfilment			x	x
Ability to assert oneself			x	x
A qualitative improvement in work content		x	x	x
Improved work process				x
Sensitivity to individual differences				x
Support of social contacts				x
Better information			x	x
Greater accountability			x	x
Greater field	x	x	x	x
Increasing the quality of products			x	x
Decentralisation of lower levels of the production organisation			x	x
Reduced staff turnover				x
Better information			x	x

Note: Developed by the authors

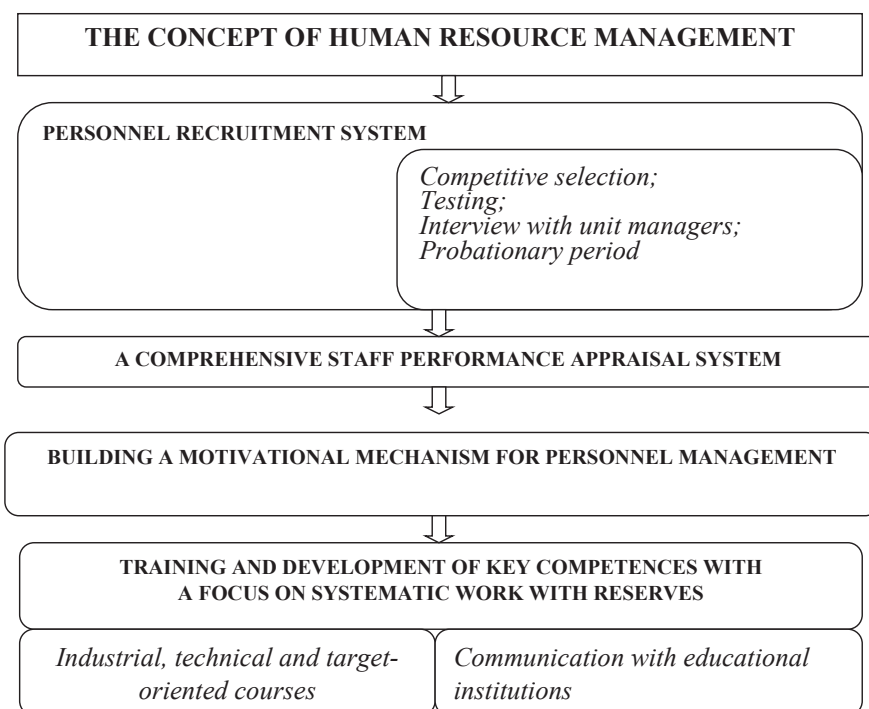


Figure 2. The concept of human resource management

Source: developed by the authors

Conclusions. In this accordance let us conclude that the sustainable development of the enterprise in the market is achieved through effective management, consisting of the timeliness of management decisions and the successful application of the key positions of personnel logistics.

Thus, based on the research conducted, the following conclusions can be made. Today, the main factors influencing the sustainability of economic development of the enterprise are: optimizing the management of human resource flows, due to which the product differentiation strategy is implemented. In addition to the above, it should be added that a systematic approach, which is based on the development of

the enterprise, concerning the structural organization of the enterprise, allows for determining the conceptual framework for the implementation of human resource logistics.

For this purpose, we propose to introduce new structural units at the enterprises, the purpose of which will be the implementation of personnel logistics, in particular the department of orientation, adaptation, career development, and personnel motivation management; department of perspective personnel management; department of work with young people. A further area of research within the selected topic will be the development of methodological approaches to assess the effectiveness of personnel logistics in the enterprise.

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