

**Ministry of Education and Science of Ukraine  
West Ukrainian National University**

**COMPETITIVENESS AND  
INNOVATION: CURRENT  
TRENDS IN BUSINESS  
MANAGEMENT**

**Monograph**

**Ternopil  
WUNU  
2021**

**UDK 658.5.011**  
**C 45**

*Recommended to print*  
*by the Academic Council of the West Ukrainian National*  
*University*  
*(Protocol 2 of September 29, 2021)*

**Reviewers:**

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**Kutsyk**;  
Doctor of Economic Sciences, Docent, Dean of Faculty  
of Economy, Business and Control **Natalia Kuprina**.

C 45 Competitiveness and innovation: current trends in business  
management: collective monograph / scientific editorship  
by Doctor of Economic Sciences, Professor Mykhailo  
Luchko and Doctor Stanislaw Szmitka. Ternopil: WUNU,  
2021. 228 p.  
**ISBN 978-966-654-649-7**

The collective monograph describes the theoretical and  
practical aspects of business management. The general issues of  
the competitiveness, innovative orientation, efficiency,  
sustainable development, pandemic threats, etc. are considered.  
The publication is intended for scientists, researchers, business  
people, experts, teachers, graduate students and students of  
higher education.

**ISBN 978-966-654-649-7**

**UDK 658.5.011**

# CONTENTS

<b>INTRODUCTION</b>	
<b>Agnieszka Górka</b> .....	5
<b>Stanisław Szmitka</b> .....	7
<b>Mykhailo Luchko</b> .....	11
<b>Olena Petryk, Oleksiy Patsarniuk. INNOVATIONS AND INNOVATIVE ACTIVITY: STATE OF DEVELOPMENT IN UKRAINE AND THE WORLD</b> .....	13
<b>Mykhailo Luchko. COSTS OF INNOVATION AND GROSS DOMESTIC PRODUCT OF THE COUNTRY: ANALYSIS OF INTERACTION DATA MINING/MAR SPLINES ANALYSIS</b> .....	27
<b>Nataliia Dziubanovska. MATHEMATICAL MODELING OF THE INFLUENCE OF THE USE OF HIGH TECHNOLOGIES IN THE PRODUCTION ACTIVITY OF UKRAINIAN ENTERPRISES ON THEIR PROFITABILITY</b> .....	37
<b>Sobina Wojciech. PRACTICAL ASPECTS OF IMPLEMENTING THE LEAN MANAGEMENT APPROACH IN AN ENTERPRISE</b> .....	45
<b>Anna Michalczyk. DIGITAL AVAILABILITY AS AN ELEMENT OF IMPROVING COMPETITIVENESS AND INNOVATION OF ENTERPRISE</b> .....	59
<b>Łukasz Jędrzejczyk, Stanisław Szmitka. FRANCHISE AS AN INNOVATIVE METHOD OF CONDUCTING CONTEMPORARY BUSINESS</b> .....	71
<b>Stanisław Szmitka. MODEL OF THE MANAGEMENT OF AN INNOVATIVE ENTERPRISE IN A PANDEMIC PERIOD. OPPORTUNITIES AND THREATS</b> .....	93
<b>Robert Dmuchowski, Stanisław Szmitka. BUSINESS CLUSTERS AS SUBJECTS OF THE REGION'S INNOVATION AND COMPETITIVENESS STRATEGY</b> .....	121

<b>Andrzej Fetliński. ENTERPRISE IN COVID-19 PANDEMIC .....</b>	<b>131</b>
<b>Liudmyla Holinach. ANALYSIS OF THE PRODUCTION POTENTIAL OF DISPOSABLE BREAD DISHES .....</b>	<b>155</b>
<b>Iryna Shchyrba. EFFICIENCY AUDIT IN THE ENTERPRISE MANAGEMENT SYSTEM .....</b>	<b>167</b>
<b>Oksana Cheresnyuk. INNOVATION AS A COMPONENT OF SUCCESSFUL BUSINESS .....</b>	<b>211</b>
<b>Oksana Arzamasova, Anatolii Hryhoruk, Liubov Lytvyn. INVESTMENT IN HUMAN CAPITAL AND EFFICIENCY OF WORK: CORRELATION OF RELATIONS THROUGH THE PRISM OF INDICATORS .....</b>	<b>219</b>

*Arzamasova O. V.  
PhD in Economics  
West Ukrainian National University*

*Hryhoruk A. A.  
PhD in Economics, Associate Professor*

*Lytvyn L. M.  
PhD in Economics, Associate Professor  
Ternopil Volodymyr Hnatiuk  
National Pedagogical University  
Ternopil, Ukraine*

## **INVESTMENT IN HUMAN CAPITAL AND EFFICIENCY OF WORK: CORRELATION OF RELATIONS THROUGH THE PRISM OF INDICATORS**

According to the Wikipedia definition, human capital is a social and economic category derived from the categories «labour power», «workforce», «labour potential», «human factor» and in general it can be considered as an economic category that characterizes the totality of formed and developed as a result of investments, productive abilities, personal traits and motivations of individuals who possess them, use them in economic activities, contribute to productivity growth and thus affect the growth of income (earnings) of their owner and national income. The notion of human capital is a natural development and generalization of the concepts of the human factor and human resources.

There are physical capital, financial capital, natural capital, intellectual capital and human capital, as well as some other types of capital. National wealth includes physical, human, financial and natural capitals.

It is common to divide human capital into individual human capital, human capital of a company, national human capital and investment areas.

In national wealth, human capital in developed countries is from 70 to 80%. Education, health care, professional training, search for economically relevant information, labour mobility, bringing up and child care are among the main areas of investments in human capital. Therefore, investment in human capital should be carried out at 4 levels:

- personal – for the formation of human capital of individuals;
- micro-levels – for the formation of human capital of enterprises;
- meso-levels – for the formation of human capital of regions and industries;
- macro-levels – for the formation of the total human capital of the country

It is generally believed that in connection with the COVID-19 pandemic, remote forms of work and the creation of new virtual jobs have become widespread. It should be noted that in recent years the traditional factors (social, political, instability of legislation, limited financial resources, etc.) have been negatively affected by the effects of the pandemic, which led to the closure of business.

According to many economists, investing in human capital should undoubtedly play an important role in good governance at such a difficult time. There is reason to believe that in the context of digitalization and globalization of the post-industrial economy, global economic processes and the need to ensure the competitiveness of entrepreneurial activity is increasingly

demanding to increase the innovation of human capital, thus increasing investment in it. In practical terms, this means that for the development of entrepreneurship there must be favourable conditions, which are provided by investments not only in the production capital of the enterprise, but in human capital as well.

The materials of the survey allow us to summarize the benefits of investing in human capital. It is our belief that they:

- allow you to assess the effectiveness of training policy in the company;
- help assess the level of investment in employee development compared to competitors;
- contribute to the planning of the training budget;
- provide an opportunity to assess the competitiveness of the company in terms of the amount of training costs;
- can be used to build the image of a company that cares about employee development.

The thematic literature is rich in a set of various statements about the need to invest in human capital. They follow directly from the purpose of the investment. There are investments such as capital, deliberately spent by the investor in order to increase their income. In practice, companies distinguish among tangible, financial and intangible investments. Investments in tangible assets relate to tangible assets, such as land, buildings, machinery, vehicles, and so on. Financial investments (capital) consist of investing capital in assets (stocks, bonds), on accounts, in the form of participation in companies. Intangible assets relate to the size and structure of the company's intangible and legal assets.

These are the costs of education, organizational improvements, patents, licenses [1].

The purpose of the study is to establish and verify the truth of the statement that investing in human capital is able to make a profit, despite the risks. This goal requires a study of the list of indicators by which it is possible to assess them and determine the relevant effects in management.

One of the most important features of the studied object is first of all the establishment of types of investment in human capital and assessment of their purpose. A general review of the literature allowed us to identify the following types of investments in human capital and establish their purpose (Table 1).

*Table 1*

**Types and purpose of investments in human capital**

<b>№</b>	<b>Types of investment in human capital</b>	<b>Purpose of investments</b>
1	Investments in the formulation and definition of personnel strategies	Defining appropriate goals to achieve quantitative and qualitative transformations of human capital
2	Investments in training	Prevention of disqualification (aging) of obsolescence knowledge, and in some personnel strategies – its development
3	Investments in knowledge management	Creating a basis for developing the creativity of employees
4	Investments in the implementation of the concept of training organization	Enrichment of knowledge of employees



5	Investments in marketing of personnel	Recruitment of employees, prevention of their dismissal, development of their employees' careers in order to make better use of their capital
6	Investments in loyalty programs	Prevention of employees' outflow
7	Investments that transform organizational culture	Creating a management culture that supports business strategies

The available views on this issue practically allow to identify the characteristics of investments in human capital and to form indicators for their evaluation. Indicators of investments in human capital primarily inform about how much the company invests in employee development. They allow you to evaluate the effectiveness of the implemented training policy and control the costs it creates. Indicators of investments in human capital inform about the degree of implementation of the planned training budget, the share of the training budget in operating costs or the average cost of training of the employee.

The collected and analyzed factual material allows us to identify the following list of indicators of investments in human capital: planned training budget per employee, used training budget per employee, indicator of the quantity of training (hourly), share of training budget in operating costs, use of training budget for trained employee, training budget use rate.

The planned training budget per employee is the size of the planned training budget per employee. It includes the training budget, except for compulsory training,

which is provided by the provisions of the Labour Code, such as training on labour protection.

The actual training budget per employee is the amount of training costs spent per staff member. Such costs include only training costs, except for compulsory training, which follows from the Labour Code and is provided by the established estimates. This is the amount actually spent on training during the calendar year.

The indicator of the quantity of training (hourly) expresses the number of hours of training per employee of the enterprise. Such training hours include training hours, with the exception of compulsory training in accordance with the Labour Code, such as training on labour protection.

The share of the training budget in operating costs describes what part of the operating costs is actually used according to the training budget. Training is included with the exception of compulsory, for example, according to the Labour Code of Ukraine – on labor protection. This is the amount actually spent on training during the calendar year.

The use of the training budget for a trained employee is the amount of the training budget used per one trained employee. The indicator informs about the average cost of employee training. This includes training, with the exception of compulsory training, which follows from the Labour Code. This is the amount actually spent on training during the calendar year.

The use rate of the education budget informs us about the percentage of use of the planned education budget. This is the amount actually spent on training during the audited year.

Performance indicators show the relationship between costs incurred and effects achieved and indicate

areas for improvement. Indicators of profitability and productivity allow us to assess the economic situation of the enterprise and the pace of its development. Performance indicators of the human resources department or the number of people per manager make it possible to assess the effectiveness of the organizational structure of the company (see table 2).

*Table 2*

**List of performance indicators and their importance for human capital management**

№	Indicator	Advantages of indicators
	Employee productivity index Employee profitability index Productivity index of total wage costs Profitability rate to total wages Index of monthly labour costs The ratio of the share of labour costs in operating costs The average monthly gross salary in the company Average monthly payment expenses Number of employees per manager Human Resource Performance Indicator Overtime indicator	allow to estimate productivity and profitability of labor costs; management control tool; contribute to management decisions; provide early detection of problems related to the financial position of the company; allow you to build a system of bonuses based on the results of the company; help to optimize company expenses; warn of tension.

The performance indicator of full-time employees is the amount of net income per employee transferred to full-time work.

The profitability index for full-time employees indicates the amount of net income per employee enrolled in full-time work. Its peculiarity is that this indicator

largely depends on the sector of the economy and may be seasonal.

The productivity index of total wage costs expresses the amount of net income per hryvnia invested in wages.

The rate of return on total wage costs expresses the amount of net income per 1 hryvnia invested in wages.

The monthly labour cost index informs about the total monthly labour costs, including the employer's costs, in relation to the average annual number of employees employed under a contract, transferred to full-time work.

The ratio of the share of labour costs in operating costs is the share of total labour costs in operating costs. The value of the index largely depends on the nature of activity, industry and may be seasonal.

The average monthly gross wage in an enterprise is the average gross wage per employee transferred to full-time work.

Average monthly payment expenses is the sum of expenses for payment of salaries per employee, excluding service payments from the social insurance fund.

The number of employees per manager informs about the average number of employees managed by managers. Management positions include employees of middle and senior management, i.e. managers, directors, board.

The Human Resources Performance Index informs about the number of employees per employee of the Human Resources Department. The human resources department includes groups of employees engaged in personnel, coaching, training, recruitment and selection of personnel, personnel management, payroll, relations with employees.

The index of overtime work per employee is the average number of overtime hours per employee.

Thus, the study of the above indicators confirms that investment in human capital can benefit the overall management system. The study made it possible to draw a conclusion about the correlation between indicators of investment in human capital and performance indicators in general. Therefore, investments in human capital have an overall positive effect on financial and economic activities in general.

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