

ABSTRACTS

UDC 655.027

AUTOTYPE TONE REPRODUCTION CORRECTION FOR SQUARE RASTER ELEMENTS

M. M. Lutskiy, P. Z. Kurka

Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
petiaman@gmail.com

Research Methodology. *The methodological basis of the study is the correction of two-parameter autotype tone reproduction in the ink printing system. To solve this problem, we have used the theory of screening for the modulation of ink flows by the raster printing plate, the theory of errors — to determine the deviation of the characteristics of autotype tone reproduction from the linearity, simulation — for constructing a simulation model of two-parameter autotype tone reproduction for the correction and determination of the parameters of the correctional line and the construction of the characteristics of autotype tone reproduction.*

Results. *In the conducted research, the method of r -correction for two-parameter autotype tone reproduction with a raster element of square shape has been worked out. The structural scheme of the simulation model of correction, which simultaneously computes the characteristics of the output and adjusted autotype tone reproduction and their deviation from the linearity, has been developed.*

Novelty. *The scientific novelty of the obtained results is that a new method of normalized r -correction and determination of parameters of the correction line has been suggested and justified, which will serve for the correction of autotype tone reproduction at the stage of preparation of images prior to screening.*

Practical Significance. *A simulation model of autotype tone reproduction in the Matlab package Simulink allows you to determine the parameters of the correction line, which provides the requirements for the linearity of the autotype tone reproduction when reducing the thickness of the ink on the tone interval.*

UDC 686.12.056

CRITICAL ANALYSIS OF MODERN EQUIPMENT FOR TRIMMING OF BOOK-JOURNAL BLOCKS AT THE TIME OF THEIR TRANSPORTATION

P. V. Topolnytskyi, S. V. Kuzma

Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
svatoslavkuzma@gmail.com

Research Methodology. *During the study, a critical analysis of the known equipment has been carried out for trimming the book-journal blocks in different ways during their movement. The results of this analysis have been used to further explore the effectiveness of the new equipment, which analyses the methods and means of implementing the process of trimming the book-journal blocks during their movement.*

Results. *Different methods of trimming book-journal blocks during their transportation and cutting tools (disk, flat and polygonal) have been used for the implementation in the new equipment for trimming the book-magazine blocks. When developing a new as well as modernizing the existing equipment, special attention should be paid to the development of compact means of transportation and the change of position (90 ° rotation) of the blocks during their movement from the first cutting section to the second one.*

Novelty. *Having evaluated the studied equipment, a new equipment has been suggested, which would have relatively small dimensions, simplicity in design, and increased equipment productivity.*

Practical Significance. *Increasing the productivity, reducing an overall size and simplicity in maintenance contributes to the use of this equipment in practice.*

UDC 669.293.5.293.784

**THE ROLE OF THREE DIMENSIONS IN THE FORMATION
OF STRUCTURE AND PHYSICAL-MECHANICAL PROPERTIES
OF VANADIUM AND ALLOY OF THE SYSTEM
OF VANADIUM-CYRICONIUM-CARBON**

V. V. Shyrovok, O. V. Shyrovok
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
vshyrovok@gmail.com

Research Methodology. *The objects of the study are vanadium of technical purity and alloy V-2,6Zr-0,37mass.% C in which the atomic ratio $Zr / C = 1,68 / 1,57 = 1,07$ is provided.*

The method of applying the previous (non-destructive) load has been applied, which allows to reveal the regularities and interconnections of processes of deformation, changes of physical and chemical properties and structural transformations, the analysis of which allows to predict the boundary state of a material before destruction. Small samples have been used.

Multi-positional installations have been applied, where 60 models were simultaneously under the static loading.

Results. *On the basis of the analysis of experimental results, it has been established that in a vacuum, a prolonged load of up to 1000 h and its level at 1073 K does not significantly affect the mechanical properties of vanadium of technical purity.*

In the process of exposure, metal absorption of impurities from the residual atmosphere is possible, which is accompanied by the growth of a constant lattice and TEDF. Their values increase with the time and load levels.

The maximum sensitivity to the state of the metal has been detected by the application of the thermoelectric method.

Novelty. *For the first time a complex of material researches of vanadium and an alloy on its basis has been conducted.*

Practical Significance. *The obtained results allow us to expand the use of vanadium alloys and predict their behavior at certain time intervals.*

UCD 655.5+004.942

**MULTIFACTORIAL CHOICE OF ALTERNATIVE OPTIONS
OF COMPOSITE EDITION DESIGN
BASED ON CRITERIA LINEAR COAGULATION**

I. V. Pikh, A. V. Kudriashova
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
kudriashovaaliona@gmail.com

Research Methodology. *The set of factors of composite edition design is based on the principle of Pareto. The matrix of pairwise comparisons of factors of the Pareto set has been constructed using the scale of relative importance of objects in Sa'ati. The optimal alternative variant of the implementation of the composite edition design has been determined by the method of linear coagulation of the criteria.*

Results. *As a result of the study, an optimal alternative variant of the implementation of the composite edition design has been determined.*

Novelty. *For the first time, alternatives to the composite edition design have been evaluated based on factors such as the format of the publication, the type of publication, the page layout, the volume of the publication, and the optimal alternative to the composite edition design has been determined on the basis of linear coagulation of the criteria.*

Practical Significance. *The research contributes to making the right managerial decisions on the proper execution of the composite edition design under conditions of uncertainty.*

UDC 621.798:676.272

**REMOVAL OF WASTE FROM DIE-CUT CARDBOARD BLANKS
(EXPERIMENTAL EVALUATION OF TECHNOLOGICAL LOAD)**

S. V. Ternytskyi, N. M. Kandiak, V. Yu. Olishkevych
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
serhij86@gmail.com

Research Methodology. *In order to study the dependence of technological efforts of the destruction of connecting bridges during waste from the die-cut sheet of cardboard on various factors, we have used the method of system analysis, and the empirical studies (an experiment using strain gauging) have been done. For the study of the phenomena that arise during the destruction of connecting bridges, we have used an electron microscopy. For the detection of the dependence of the destroying force of connecting bridges on the cardboard thickness, we have used mathematical methods.*

Results. *The method of research has been improved, which allows getting the technological destroying efforts of connecting bridges and change of this efforts as function of the vertical movement of the destructive tool; we have revealed the dependence of the destructive efforts on the thickness of the cardboard and suggested the empirical formulas for their determination; we have set the values of the destructive efforts of the connecting bridges and the vertical movement of the tool for several types of cardboard with different thicknesses; we have substantiated the appropriate movement of instruments and their mutual location.*

Novelty. *It has been found out that the vertical movement of the tool, which causes the destruction of the connecting bridges, is much bigger than the thickness of the cardboard work piece, which indicates about the significant deformation of the cardboard. Using of mathematical methods, which are based on empirical studies, we have determined the dependence of the change of the destructive efforts of connecting bridges during waste from the die-cut sheet of cardboard on the thickness of the cardboard. It has been established that the width of the apertures of the matrix plywood plate affects the value of the destructive efforts.*

Practical Significance. *The obtained results of researches will be useful: during solving practical tasks, in particular, during determining the total loads in the automatic machines, the torques and power consumption both in the platen section, and in the cutting press in general; for the improvement of the design of means for waste removal operation from die-cut cardboard blanks.*

UDC 536.5+004.42

DIAGNOSTICS OF COATING WITH DEFECTS BY THE DEVIATION OF THE HEAT FIELD

S. V. Prokhorenko^{1,2}, D. Ploch², Y. M. Kavyn³

¹ Lviv Polytechnic National University,
12, Bandera St., Lviv, 79013 Ukraine

² University of Rzeszow, Center for Microelectronics and Nanotechnology,
16c, Aleja Rejtana, Rzeszow, 35-959, Poland

³ Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
yaroslav-kavin@ukr.net

Research Methodology. *The method of thermal imaging has been used to detect hidden defects in surface layers. The research has been carried out on the basis of the analysis of zonal deviation of the heterogeneity of the temperature field induced by the directed heat flux on the surface, in particular in the area of hidden defects. The practical confirmation of the effectiveness of the thermal imaging method for the detection of hidden surface defects was the creation of a laboratory model based on the use of a technical basis, in particular, the heat carrier flow (heat-air soldering station), and a thermographic camera (thermal imager).*

Results. *The thermal picture in the area of the hidden surface defect will be different from the thermal picture of the surface with the established parameters of the heat flow.*

Accordingly, the control of the coolant flow angle relative to the surface, to which it is supplied, is an important element in the thermal imaging method, in particular in the propagation of the temperature field heterogeneity.

Novelty. The determination of the gradient energy change (in this case, the gradient of heat) on the basis of the distribution of the heterogeneity of the temperature field and its zonal deviation as a result of bringing the thermal energy flow to the studied material surface.

Practical Significance. The application on the installed elemental basis of the surface layer diagnostics system for detecting hidden surface defects, in particular the use in printing for the protection of securities, marking of packaging products, application of Braille font, etc.

UDC 336+338.242

DEVELOPMENT OF THE ORGANIZATIONAL AND ECONOMIC MECHANISM OF PUBLISHING AND PRINTING ENTERPRISES AND ITS INFLUENCE ON THE COMPETITIVENESS OF REGIONS

Ye. M. Palyha, O. Ya. Oneshchak

Ukrainian Academy of Printing,

19, Pid Holoskom St., Lviv, 79020, Ukraine

kafekonomikauad@gmail.com

Research Methodology. The theoretical and methodological basis of the research are the works of domestic and foreign scientists, the methods of theoretical generalization, analysis and graphic representation.

Results. The results are based on scientific research in the development of the organizational and economic mechanism of the enterprises of publishing and printing industry, and its impact on the competitiveness of the regions. The characteristic features of publishing and printing activity of enterprises have been substantiated, the main participants of the publishing and printing market have been determined, and the factors of “pyramid” of competitiveness of regions have been estimated.

Novelty. The methodological approaches to the development of organizational and economic mechanism of publishing and printing enterprises and its influence on the competitiveness of the region have been generalized, the methodical approaches to the formation of the main participants of the publishing and printing market and factors forming new approaches through the “pyramid” of the region’s competitiveness have been adapted.

Practical Significance. The scheme of organizational and economic mechanism of the enterprise management of publishing and printing industry has been designed, the main participants of the publishing and printing market, and the “pyramid” of the region’s competitiveness have been determined. The development of the organizational and economic mechanism of the enterprises of publishing and printing industry and its influence on the competitiveness of the region have been proved, as well as the need for practical use of corporate governance of enterprises, which will raise the living standard of the population.

UDC 339.138+330.341.1+332.122

PECULIARITIES OF INNOVATIVE MARKETING AT THE REGIONAL LEVEL

V. V. Homolska

Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
govika@gmail.com

Research Methodology. *The author has substantiated the theoretical support and the argumentation of the conclusions on the basis of the system approach, which included general scientific methods of analysis and synthesis of information, theoretical generalization, comparative analysis, and methods of graphic modeling, those allowed to get a visual representation of information.*

Results. *In the article the theoretical basis for the development of innovative marketing at the regional level has been studied. The main principles of innovative marketing have been revealed. Modern management technologies, such as regional marketing and Internet marketing, have been suggested to use in the process of managing the development of territories. Subjects of regional Internet marketing are all areas of social and economic life of territories and their development, and the elements of regional Internet marketing have been determined by common goals and directions of implementing the regional information policy.*

Novelty. *The article clarifies the concept of innovative marketing, which is defined as marketing of new information technologies in business, state and municipal structures. The basic direction of development of innovative technologies of regional marketing is Internet marketing, which provides the access to the world information resources, the wide coverage of the target audience, reliable and quick feedback, and simplifies the evaluation of the effectiveness of marketing policy.*

Practical Significance. *The main results of the research are universal and can be used at different levels of the state economy management system and at enterprises of various fields of activity when developing and promoting innovative products on the market. In addition, the results of the research can be used in the educational process in the disciplines «Marketing», «Marketing Management», «Regional Marketing».*

UDC 311+332/338

REGIONAL BENCHMARKING AS A TOOL OF MUNICIPAL AND PUBLIC ADMINISTRATION

T. V. Panchyshyn

Ivan Franko National University of Lviv,
18, Svobody Ave., Lviv, 79008, Ukraine
t.panchyshyn@lnu.edu.ua

Research Methodology. *The general scientific methods have been used in the work: the method of generalization (for the allocation of common features and principles of*

benchmarking of regional development under different scientific approaches), the system method (with the aim of building a system of interrelated indicators that is appropriate to use during the benchmarking of the region's development), the synthesis method (in order to combine various socio-economic indicators into an integrated indicator of socio-economic development of territories).

Results. *The features of benchmarking in assessing the level of competitiveness of the region have been considered, the principles of organization of benchmarking of regional development on the basis of informational opportunities of official statistics have been analyzed. The practical conclusions and recommendations that may be useful for local government bodies that develop regional development strategies have been presented.*

Novelty. *The advantages of using benchmarking tools in order to promote the sustainable development of Ukrainian regions and cities and increase the capacity of local authorities to effectively plan social and economic development of territories have been substantiated. The existing approaches to building a system of benchmarking indicators of the region's development have been systematized.*

Practical Significance. *Practical conclusions and recommendations for introducing a benchmarking system for regional development can be useful for local governments that develop regional development strategies as implemented during the development of Dnipropetrovsk region development strategy.*

UDC 658:65.012.8

FORMATION OF THE INFORMATION BASIS FOR ENSURING THE ECONOMIC SECURITY OF INDUSTRIAL ENTERPRISES BY DEVELOPING A MODEL OF PRIORITY EFFECTS OF KEY EXTERNAL ENVIRONMENTS

A. M. Shtangret¹, Y. V. Ratushniak¹, L. E. Suhomlyn²

¹*Ukrainian Academy of Printing,*

19, Pid Holoskom St., Lviv, 79020, Ukraine

²*Institute of Educational Content Modernization,*

36, Lypkivs'kogo St., Kyiv, 03035, Ukraine

shtangret.am@ukr.net

Research Methodology. *To create an information basis for ensuring the economic security of industrial enterprises, such methods have been used: induction and deduction, comparison and systematization — in determining the aggregate of key external threats to the economic security of industrial enterprises; synthesis and analysis — to form theoretical provisions for the use of accounting and analytical support in the process of making managerial decisions; questioning and expert analysis — to determine the totality of external threats to the economic security of industrial enterprises; paired comparisons — to build a model for prioritizing the impact of key external threats on the economic security of industrial enterprises; graphic — for visual representation of*

theoretical and methodical material; abstract-logical — for theoretical generalizations and conclusions of the study.

Results. *The ability to ensure the economic security largely depends on the ability of security persons to counter the effects of external threats. It has been proved that the effective counteraction is possible through the implementation of protective and adaptive tactical and strategic decisions. The role of information support in the process of making managerial decisions by security subjects has been substantiated. An analytical study has been carried out through an expert survey to determine the set of priority external threats that affect the economic security of industrial enterprises.*

Novelty. *Based on the results of the analytical study, which provided for the generalization of the points of view of experts, which included the heads of industrial enterprises, representatives of local authorities and scientists, a list of key external threats to the economic security of industrial enterprises has been formed. A model, developed for prioritizing the impact of key external threats on the economic security of industrial enterprises, can be used as an information basis in the development and implementation of operational, tactical and strategic decisions by security subjects.*

Practical Significance. *Theoretical conclusions, scientific and practical recommendations and other results of scientific research are tested in the conditions of ten industrial enterprises in Ukraine.*

UDC 336 + 338.242

DIRECTIONS FOR IMPROVEMENT OF ORGANIZATIONAL AND ECONOMIC MECHANISM FORMING ECONOMIC SECURITY OF ENTERPRISES MANAGEMENT

D. V. Obertan

*Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
obertan@ukr.net*

Research Methodology. *The theoretical and analytical approaches to improving the organizational and economic mechanism for the formation of economic security of the subjects of management of publishing and printing activities have been used.*

Results. *The recommendations on increasing the entrepreneurial success of entrepreneurial structures have been highlighted and formulated.*

Novelty. *The structure of the economic-organizational mechanism for the formation of economic security of enterprises has been improved.*

Practical Significance. *The developed mechanism, in particular its organizational and economic blocks, principles, criteria and functions should be used in the activities of enterprises.*

UDC 330.131.7:655.41

RISKS IN PUBLISHING BUSINESS ACTIVITY: FINANCIAL, ECONOMIC, SOCIAL AND PSYCHOLOGICAL ASPECTS

L. P. Stetsiv, P. P. Lazanovskyi, O. M. Hirnyak

*Ukrainian Academy of Printing,**19, Pid Holoskom St, Lviv, 79020, Ukraine**l_stetsiv@ukr.net*

Research Methodology. *Methodological and methodic basis of the research has been made by the modern theory of entrepreneurship and scientific publications concerning the entrepreneurship and risks arising in it. The aim of the research has been achieved through the use of methods of comparison, analysis and synthesis grounded on statistics development of publishing business in Ukraine in terms of five-year periods, since 1991 as well the conclusions about the existing risks have been made.*

Novelty. *The expedience (justification) of the publishing business risks have been considered in the paper with the statehood position and from the standpoint of the entrepreneur-publisher. The results of the publishing business activity in Ukraine have been analyzed and the major factor risks arising at various stages of its proceedings have been revealed. The author's vision has been offered concerning the psychology of publishers behavior in the current conditions of State economy crisis within the context of their business risks. The attention has been paid to the fact that the risks in the publishing business always can be considered as justified because of the social importance of the publishing product. The role of social publishing business has been recognized as well the value of Government support in reducing the negative impact of risks on its activity.*

Practical Significance. *The research results can serve as a basis for active publishers in defining their own risks when doing publishing business, determining its priority from the viewpoint of financial, economic, social and psychological expediency, ethics and social orientation of the publishing business.*

UDC 658:65.012.8

SYSTEM ACCOUNTING AND ANALYTICAL SUPPORT FOR MANAGING THE ECONOMIC SECURITY OF THE COMPANY

A. M. Shtangret O. C. Sylkin, M. M. Karaim

*Ukrainian Academy of Printing,**19, Pid Holoskom St., Lviv, 79020, Ukraine**shtangret.am@ukr.net*

Research Methodology. *For the developing methodological bases for the formation of a system of accounting and analytical support for the management of economic security of an enterprise, such methods have been used: induction and deduction, comparison and systematization — in determining the essence of the concepts “information” and “accounting and analytical support”; synthesis and analysis — to form theoretical provisions for the use of accounting and analytical support in the process of making*

managerial decisions; modeling theory — for building a mechanism for the formation of accounting and analytical support for the management of the economic security of an enterprise; graphic — for visual representation of theoretical and methodical materials; abstract-logical — for theoretical generalizations and conclusions of the study.

Results. *It has been proved that the ability and effectiveness of security subjects performing tasks in the sphere of economic security essentially depends on the development and implementation of adequate management decisions by them. The basis for the development of management decisions should be the information basis, which is formed in the system of accounting and analytical support. The accounting and analytical support has been described as a system, its goals have been defined, the criteria for the formation of the structure and organization have been substantiated to meet the information needs of external and internal security subjects, and key requirements have been established to ensure the safe development conditions of each enterprise.*

Novelty. *A mechanism has been developed for the formation of accounting and analytical support for the management of the economic security of the enterprise, which assumes the use of the existing system of accounting and analytical support for enterprise management with the introduction of the necessary changes to meet the information needs of security subjects. The attention is focused on solving the problem of achieving the necessary qualitative parameters of accounting and analytical information and ensuring the timeliness of its receipt to users.*

Practical Significance. *Theoretical conclusions, scientific and practical recommendations and other results of scientific research are tested in the conditions of ten industrial enterprises in Ukraine.*

UDC 658:65.012.8

MAIN ASPECTS OF PERSONNEL SECURITY OF AN ENTERPRISE

O. V. Khalina, N. O. Kozachenko

Ukrainian Academy of Printing,

19, Pid Holoskom St., Lviv, 79020, Ukraine

ds-23ryt@yandex.ua

Research Methodology. *To determine the main aspects of personnel security of an enterprise, such methods have been applied: induction and deduction; comparison and classification — in the study of threats to the personnel security; operations analysis — to determine the relationship of the system elements of personnel security; graphic — for a visual representation of theoretical and methodological material; abstract and logical — for theoretical generalizations and conclusions of the study.*

Results. *The main aspects of the system of personnel security have been determined and their impact on the economic security of the enterprise has been analyzed.*

Novelty. *It has been suggested to improve the interaction of actors in the safety regulation of the system of personnel security of an enterprise.*

Practical Significance. *Theoretical developments for the improvement of methods of personnel security of an enterprise through a combination of such basic aspects as the recruitment system, loyalty and control in a continuous process with a clear regulation,*

have an applied nature and can be practically applied at any enterprise with the aim of improving the system of personnel security.

UDC 65.012.8(477)

ESSENCE DESCRIPTION OF FUNCTIONAL CONSTITUENTS OF ECONOMIC SECURITY OF ENTERPRISE

Kh. O. Mandzinovska, I. I. Peretiatko

Ukrainian Academy of Printing,

19, Pid Holoskom St., Lviv, 79020, Ukraine

k.mandzinovska@gmail.com

Research Methodology. When studying the basic concepts «the structure of economic security of an enterprise», such methods have been used as: inductions and deductions, methods of comparison and systematization have been used for the analysis of the existent opinions of research workers, in relation to the selection of basic constituents of economic security on a micro-level; the system analysis — for the research of key tasks of every functional constituent of economic security of an enterprise; the graphic method — for the visual presentation of theoretical and methodical material; the abstract logical method — for theoretical generalizations and research conclusions.

Results. The existing in scientific and professional literature constituents of economic security of an enterprise have been studied and generalized in the work, it is well-proven that the list of functional constituents of economic security on a micro-level is varied both in quantitative and qualitative values. Our own vision has been suggested, in relation to the structure of economic security of an enterprise including machine-building. The primary objective of every functional constituent of economic security of an enterprise has been considered.

Novelty. The author's vision has been offered in relation to the functional constituents of economic security of an enterprise including machine-building and the primary objective and the description of every constituent have been outlined.

Practical Significance. It consists in grounding the recommendations for the formation and providing the economic security of an enterprise.

UDC 658:65.012.8

METHODOLOGICAL TOOLS FOR THE FORMATION AND FUNCTIONING OF THE MECHANISM FOR ENSURING ECONOMIC SECURITY OF INDUSTRIAL ENTERPRISES

S. M. Shynkar

Ukrainian Academy of Printing,

19, Pid Holoskom St., Lviv, 79020, Ukraine

svetlana.kuprik@ukr.net

Research Methodology. For the formation of the methodological basis for ensuring the economic security of industrial enterprises, the following methods have been used: induction and deduction, comparison and systematization, in determining the essence

and shaping one's own interpretation of the concepts "economic security of an industrial enterprise" and "mechanism for ensuring the economic security of an enterprise"; synthesis and analysis — for the formation of theoretical provisions for the application of the mechanism for ensuring the economic security of an industrial enterprise; modelling theory — to develop an element-by-element diagram of the mechanism for ensuring the economic security of an industrial enterprise and the scheme of the process of formation and functioning of a mechanism for ensuring the economic security of an industrial enterprise; graphic — for visual representation of theoretical and methodical material; abstract-logical — for theoretical generalizations and conclusions of the study.

Results. *High dynamics and difficultly predicted changes in the environment of functioning of the operating conditions of domestic enterprises require a systematic review and improvement of the methodological basis for managing the economic security of each enterprise. It has been proved that one of the key elements of the economic security system of an industrial enterprise is the mechanism of provision, the tools of formation and functioning of which are not given due attention. The mechanism for ensuring the economic security of enterprises is defined as a system of the influence of security subjects on security objects using principles, functions, methods and means using the available security. Particular attention is paid to determining the content of the principles of ensuring the economic security of an industrial enterprise, in particular such as: systematic, timeliness, continuity, interaction, economic expediency.*

Novelty. *An element-wise functional scheme of the mechanism for ensuring the economic security of an industrial enterprise has been developed. The main stages of the process of formation and functioning of the mechanism for ensuring the economic security of an industrial enterprise have been substantiated.*

Practical Significance. *Theoretical conclusions, scientific and practical recommendations and other results of scientific research are tested in the conditions of ten industrial enterprises in Ukraine.*

UDC 005.3 (075) .8

MODERN APPROACHES TO ORGANIZING THE MANAGER'S WORK

O. M. Hirnyak, P. P. Lazanovskiy

Ukrainian Academy of Printing,

19, Pid Holoskom St., Lviv, 79020, Ukraine

lazanovskiy@ukr.net

Research Methodology. *The methodology of the research is based on the conclusions of scientists and practitioners on the chosen problem. In the process of research we have used means and methods of scientific research: the methods of analysis and synthesis, calculation and the analytical method.*

Results. *On the basis of the research and publications analysis on the time management, the criteria for using the time have been selected. The study of using the time*

has been done with the help of the self-photograph of the working day by the criteria of “personal scenario”, “independence or alien will”, “urgency”, “significance”. The Chief of the Economic Service and Marketing has been selected as the objects of the research. The study of the working time at a printing enterprise indicates the possibility of obtaining additional benefits for the enterprise without additional investment.

Novelty. The researches reflected in the article give the grounds to assert that the rational using of time by managers at printing enterprises is relevant. The criteria for using the time have been selected, the method of its use has been suggested.

Practical Significance. The research can be used at operating enterprises by the employees of the managing department for the preparation of personal calendar plans, the optimal use of their working time and the determination of the priorities of the work. Without additional investment, the company can increase profits and competitiveness.

UDC 331.1:159.92

BUILDING A TALENT-BASED TEAM AS AN EFFECTIVE METHOD OF MANAGEMENT BY THE COMPANY

V. V. Shlyakhetko

Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine

vit_shl@ukr.net

Research Methodology. The research is based on a systematic approach to the study of specific economic events. In the process of research, we have used a set of general and specific scientific methods of knowledge, logical synthesis, analysis and comparison.

Results. It has been studied that talent in our time is one of the main factors that determines the effectiveness of the activity, and the ability of the company to attract, develop and retain talents will be the main competitive advantage for many years. Building a talent team should become a permanent and fundamentally new way of managing the company, which will bring numerous benefits from productivity growth to expanding capabilities, from accelerating scientific and technological development to increasing job satisfaction.

Novelty. The research shows that many companies do not measure their share of the talent market compared with their competitors' shares; do not track staff turnover to draw conclusions and take appropriate measures. While the world's most successful Fortune magazine and S&P 500 TOP 100 companies claim that the effective use of talent enables them to increase profitability in 2.1 times.

Practical Significance. This study has made it possible to partially deal with such unusual perceptions as talent, talent management, their conceptual boundaries, and facilitating the work of the next researchers for this important issue. The results of the study can be implemented in the educational process of Ukrainian Academy of Printing as a higher educational institution.

UDC 339.138 : 655.4/.5

ORGANIZATION AND IMPLEMENTATION OF PRACTICE OF MARKETING AUDIT ON PUBLISHING AND PRINTING ENTERPRISES

I. R. Bezpal'ko, V. B. Bazyliuk
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
irynabs83@i.ua, bvb.uad@ukr.net

Research Methodology. *The methods of comparison, analysis, synthesis and abstract-logic have been used for theoretical generalizations and conclusions. The method of generalization and systematization has been used to cover the process of marketing audit.*

Results. *The necessity of application of marketing audit practice and peculiarities of its system organization in the conditions of publishing and printing enterprises has been determined.*

Novelty. *The peculiarities of organization and introduction of marketing audit practice at publishing and printing companies have been considered; the place and role of marketing audit in the system of enterprise management from the standpoint of marketing planning and marketing control have been defined. The structuring of the marketing audit process with the definition of the applied methods at each stage, taking into account the specifics of publishing and printing activity has been implemented.*

Practical Significance. *Marketing audit as a comprehensive and systematic analysis of the external and internal environment of the enterprise, in the right approach to its organization, could be an effective method of managing and controlling the marketing of domestic publishing and printing companies to improve their economic situation and increase their competitiveness.*

UDC 658:65.012.8

ORGANIZATION OF THE INTERNAL CONTROL SYSTEM OF AN ENTERPRISE

I. V. Novyk
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
Novyk_I_V@ukr.net

Research Methodology. *With the purpose of revealing the conceptual foundations of creating an internal control system at the enterprise, the following methods have been used: comparison and systematization — when defining the concept of “internal control”; synthesis and analysis — to form internal control objectives, to study organizational forms of internal control, to determine the system of internal control in the organizational structure of the enterprise; graphic — for visual representation of theoretical and methodical material; abstract-logical — for theoretical generalizations and the formation of research findings.*

Results. *Taking into account that today internal control is the most important element of the smooth management mechanism, the organizational forms of internal control have*

been studied, the place of the internal control system in the organizational structure of the enterprise has been determined, and the importance of using co-sourcing to form an effective internal control system has been proved.

Novelty. Based on the results of the conducted research, the purposes of internal control at the enterprise have been formed. Advantages of using co-sourcing in the enterprise have been highlighted. The stages of formation of the process of organization of the internal control system at a small enterprise have been suggested.

Practical Significance. Theoretical conclusions, scientific and practical recommendations and other results of scientific research on the organization of the internal control system will help business entities find new combinations for doing business, using assets more effectively, improving their own economic stability and competitiveness.

UDC 338.512

ANTI-CRISIS MANAGEMENT OF ENTERPRISE EXPENDITURE IN INTERNATIONAL ECONOMIC ACTIVITY

U. I. Kohut, N. I. Horbal, R. B. Vilhutska
Lviv Polytechnic National University,
12, St. Bandery Str., Lviv 79013, Ukraine
uliana.i.kohut@lpnu.ua

Research Methodology. When writing the article, the following research principles, methods and approaches have been used: comparative analysis, systematization and generalization – in determining the essence and content of anti-crisis cost management; complex approach – for developing the process of crisis management costs of the enterprise; system approach – for forming a system of indicators for assessing the cost effectiveness of the enterprise in terms of international economic activity.

Results. The results of the research include: the defined content of the anti-crisis management of expenditures, the developed process of crisis management of expenditures, aimed at preventing of loss-making activities and crisis prevention at the enterprise; the system of indicators for assessing the costs of the enterprise in terms of international economic activity in order to create an appropriate informational support on the role, expediency of implementation, optimization or reduction of certain types of expenses in the activities of the enterprise.

Novelty. The novelty of the article is the content of anti-crisis management of expenses, the process of crisis management of costs, the system of indicators for evaluating the cost effectiveness of the enterprise in the conditions of international economic activity.

Practical Significance. The practical significance of the results of the study consists in: the possibility of creating an appropriate informational support on the role, significance and feasibility of implementing certain types of costs in the activities of enterprises in the context of their international economic activity; promoting better monitoring and control of costs based on the usage of the suggested system of indicators for assessing the cost effectiveness. The realization of the developed process of crisis management

of expenses allows solving those issues comprehensively, optimizing and, if necessary, correctly and reasonably reducing the amount and level of expenses in order to prevent loss-making and crisis in the enterprise activity. The results of the research can be used by the heads of enterprises of different spheres of activity and forms of ownership in cost management, in the educational process of NU «Lviv Polytechnic» in the course «Management of Expenses of Subjects of Foreign Economic Activity», in course and graduation projects of students of economic specialties.

UDC 657.42

ANALYSIS OF SCIENTIFIC APPROACHES ABOUT THE ESSENCE OF THE CREDITIZATION AND ITS CLASSIFICATION

O. B. Chornenka

*Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
volovych@i.ua*

Research Methodology. *Scientific research has been carried out using general scientific methods of studying the object and specific methods of economic research, in particular methods of analysis and synthesis for the study of the essence of accounts payable, the generalization method for its classification.*

Results. *The analysis of scientific approaches to the notion of commitment and payables has been carried out. Summarizing the position of scholars, the interpretation of the category “payables” has been suggested. Different approaches to the classification of payables have been considered. Based on the heterogeneity of payables in the composition, the diversity of its manifestations and consequences for the enterprise, its types have been differentiated and systematized.*

Novelty. *The definition of accounts payable has been suggested based on the legal, accounting, analytical and financial understanding of this phenomenon.*

Practical Significance. *Theoretical and practical results of the research can be used in the process of organization of accounting, financial management of industrial enterprises and educational process.*

UDC 65.011.46 + 330.552.4

RESERVES OF INCREASING A TECHNICAL AND ECONOMIC DEVELOPMENT PRODUCTION LEVEL

O. M. Bozhenko

*Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
kafekonomikauad@gmail.com*

Research Methodology. *The methods of systematization, synthesis, comparison, analysis and synthesis have been used to highlight the reserves for increasing the technical and economic production level.*

Results. *The reserves of increasing the technical and economic production level have been systematized and summarized, the necessity of managing the processes of using reserves has been substantiated.*

Novelty. *The necessity of creating an organizational and economic mechanism for managing the increase of the technical and economic production level has been substantiated.*

Practical Significance. *The measures of use of the revealed reserves for increasing the technical-economic production level have been substantiated.*

UDC 655.3.021.3

DETERMINATION OF DIRECTIONS OF INK CONSUMPTION RATE DIFFERENTIATION IN OFFSET PRODUCTION

V. V. Martyniv, P. V. Yankevych
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
kafekonomikauad@gmail.com

Research Methodology. *In the article the method of analytical analysis of current ink consumption rate in offset production has been used, the research of its use at printing enterprises of Ukraine has been done.*

Results. *The result of the study is the need to revise and differentiate the rates of ink consumption in offset production for printing of book, magazine, fine art and newspaper products.*

Novelty. *The method of determination of ink consumption rate in offset printing has been suggested for printing book-magazine, fine art and newspaper products.*

Practical Significance. *At many printing companies, there are local rates for ink consumption, which require a more detailed study of their use. In this connection, the directions of differentiation of ink consumption rate in offset production have been suggested.*

UDC 330.341.1

MAIN COMPONENTS OF THE DEVELOPMENT MECHANISM OF THE ENTERPRISE INNOVATIVE POTENTIAL

L. Yo. Kobryn
Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
kobrynlesya@gmail.com

Research Methodology. *The article uses the methods of theoretical generalization using the principles of system study and objectivity to substantiate the relevance of the research. The presentation of the main material is accompanied by the use of methods of functional dependence and methods of formalizing the economic phenomena using the principles of interconnection and interaction.*

Results. *An important scientific result is the creation of an effective mechanism for the formation and development of the innovative potential of the enterprise. The implementation of this mechanism is possible on the basis of creation and interaction of the main components of the element: forecasting of innovation development, organizational and informational support, systems of motivation of innovation activity and system of financing of innovative processes. This involves the development of an innovative strategy for the creation and implementation of innovations, which allows to achieve the strategic competitive advantages of the enterprise.*

Novelty. *The scientific value of the paper is to develop theoretical and methodological approaches to the formation and implementation of the mechanism of development of innovative potential as a means of achieving the strategic competitive advantages of an industrial enterprise.*

Practical Significance. *The author has suggested specific tools of forecasting, organization, information support, motivation of innovative activity of the personnel and source of expenses for financing innovations, which can be used at existing enterprises for the purpose of improvement of innovative management.*

UDC 070:342.732(477) «1992/2017»

THE LAW OF UKRAINE “ON PRINTED MASS MEDIA (PRESS) IN UKRAINE”: EVOLUTION OF THE DOCUMENT FROM 1992 TILL 2017

Z. V. Haladzhun

Lviv Polytechnic National University,
1/3, Knyazya Romana St., Lviv 79001, Ukraine
galadzhyn_zoryana@ukr.net

Research Methodology. *A range of approaches, principles and methods has been applied to obtain the results of research. Analysis and evaluation of the origin and development of the primary document have been made on the grounds of historical approach within the principles of integrity, self-organization, and interrelation with surroundings. Norms that obtained new or specified content have been identified by applying the method of comparison. Stages of development of Law 1 have been defined by means of generalization methods and structuring as part of system approach.*

Results. *Based on the results of the research conducted, main formation stages (milestones) of Law 1 have been identified, that is:*

1. 1992-1997 – period of smooth operation.
2. 1998-2002 – period of stagnation.
3. 2003-2004 – period of dynamic changes.
4. 2005-2010 – the second period of stagnation.
5. 2011-2017 – period of sweeping changes.

Besides, Laws that entailed the majority of amendments to the Law 1 have been specified:

1. The Law of Ukraine № 1170-18 dated 27.03.2014 “On Amendments to Certain Legislative Acts of Ukraine in connection with adopting the Law of Ukraine “On Infor-

mation” and the Law of Ukraine “On Access to Public Information” – nine amendments and supplements have been made.

2. The Law of Ukraine № 5461-VI (5461-17) dated 16.10.2012 “On Amendments to Certain Legislative Acts of Ukraine regarding the activity of Ministry of Justice of Ukraine, Ministry of Culture of Ukraine, and other bodies of central executive power; activity of which is directed and coordinated by the respective ministers, as well as by the State Space Agency of Ukraine” – five amendments and supplements have been made.

3. The Law of Ukraine № 409-VII (409-18) dated 04.07.2013 “On Amendments to Certain Legislative Acts of Ukraine on ensuring transparency of ownership in respect of the mass media” and the Law of Ukraine № 917- VIII (917-19) dated 24.12.2015 “On Reforming State and Municipal Print Media” – four amendments to the primary document have been made.

Novelty. Within a framework of social communication and other branches of knowledge, complex analysis of legal language of the Law of Ukraine “On printed mass media (press) in Ukraine” over a period of its functioning has been made. Main stages of its formation have been determined. Documents that most influenced its content have been singled out.

Practical Significance. Significance of the results obtained enables further quality analysis of legal foundation of mass media activity within sociocommunicavistics.

UDC 316.77 : 070 : 654.195 : 314.743

RECONFIGURATION OF MEDIA RESOURCES IN THE PROCESS OF ESTABLISHING MOBILE RADIO JOURNALISM

T. S. Hirina

Classical Private University,

70B, Zhukovskiy St., Zaporizhzhia, 69002, Ukraine

hirinatetyana@gmail.com

Research Methodology. Obtaining the reliable results of the study was made possible by the use of theoretical and theoretical-empirical methods, including the historical, method of monitoring, analysis (genetic and causal, retrospective). Particularly valuable results are the ones obtained on the basis of the use of the prognostic method of the method of analysis.

Results. The article analyses the use of mobile technologies during radio journalists’ performance of their duties. The experience of Ukrainian and foreign scientists in studying the potential of mobile journalism has been considered, and the notion of “Mojo” (“mobile journalism”) has been studied in the context of historical stages of development.

Novelty. The transformation of broadcasting in the context of mobile multiscreen journalism is categorically represented through the expansion of the line of devices, the evolution of the genre paradigm, the enrichment of the communicative potential of the radio station, the increased possibilities of positioning information by radio journalists, the implementation of amateur journalistic radio initiatives, the inclusion of the function of reproducing the radio stream in applications, the creation of a variety of programs focused on providing users access to audio information of various types, etc.

Practical Significance. *The potential has been revealed for the development of broadcast through devices that offer users the ability to play selected files later in time, as well as the potential of audio blogs, audio-books, radio shows.*

UDC 012:821.161.2.09

FRANKO STUDIES IN THE SCIENTIFIC HERITAGE OF MYROSLAV BUTRYN

O. C. Levytska

*Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine
oksana_levytska@ukr.net*

Research Methodology. *A review of publications written by a famous scientist and bibliographer Myroslav Butryn that were dedicated to Ivan Franko has been done based on bibliographic and historiographic methods.*

Results. *The main trends of M. Butryn's research dedicated to Ivan Franko have been reviewed, the major stages of bibliographic work have been established, and his contribution to the development of I. Franko's bibliography has been determined. This article is accompanied by a bibliographic list of the publications of Franko studies by M. Butryn.*

Novelty. *Myroslav Butryn's bibliographic work dedicated to the Franko studies has been holistically represented for the first time and distinguished among his other bibliographic work. The gradual establishment of the Franko studies methodology on the basis of Butryn's bibliographic and scientific research has been observed. The main aspects of Butryn's scientific interests in the figure of Ivan Franko, in particular his literary, publishing, and library activity have been discovered, as well as the systematization of the research about Franko published during 1966-1998 has been created.*

Practical Significance. *The article proves that M. Butryn's Franko studies research has significantly contributed to the Ukrainian studies of Ivan Franko and has developed a methodology for bibliographing. This review aims to draw the attention of the Franko studies to Butryn's personality as a bibliographer and his contribution to the Ukrainian Franko studies. In the future, the annotated index of M. Butryn's bibliographic Franko studies should be available in both printed and electronic versions.*

UDC: 070:621.397+004.738.5

PRECONDITIONS AND HISTORY OF ONLINE TELEVISION APPEARANCE IN UKRAINE

A. A. Dutchak

*Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv, 79020, Ukraine,
juta@opora.org.ua*

Research Methodology. *The synthesis, generalization and hypothetical research methods have been used while writing the article. The analysis and synthesis methods*

have been applied in order to describe the history of national TV development and to provide the description of the first Internet TV projects in Ukraine. The author has also used the hypothetical method of inquiry to identify the process of TV channels springing up in the Ukrainian Internet.

Results. The research results helped to create a short historical overview of how domestic television was developed in the context of its further theoretical evolution into the Internet TV. Based on publications and expert articles, the author provides a list of key factors that fostered television transition from its traditional form into the Internet. The key date when Internet TV started to operate is set taking into account the historical overview of television development, the description of the first projects and their efficiency.

Novelty. This work is the first scientific paper providing a historical overview of domestic television in the context of its further development by the means of Internet tools, as well as setting up the key date when Internet TV started to operate in Ukraine and determining the reasons why first Internet TV projects appeared.

Practical Significance. Theoretical material collected and elaborated within the research work can be used in the educational process in order to train editors and journalists who will work with video in the Internet. Moreover, the results obtained by the author can create a solid basis for further studies dedicated to the development of domestic media in the field of Internet television.

UDC 93“19”(477.83)

THE BACKGROUND AND THE ENVIRONMENT OF THE APPEARANCE OF WORKERS' MUTUAL ASSISTANCE BASES AMONG LVIV PRINTERS

I. R. Berest

Ukrainian Academy of Printing,
19, Pid Holoskom St., Lviv 79020, Ukraine
berestigor1@gmail.com

Research Methodology. To solve the problems posed in the article, a number of methods have been used, including the systematic analysis that has provided a study of the interaction between the workers' mutual assistance bases and civil society as subsystems of the general social system and the structural functionalism used to determine the main characteristics of the workers' mutual assistance bases and to find out their place, a role in society.

Results. The essence of professional organizations, as well as their social role, peculiarities of functioning and the development in a multi-ethnic society have been studied on a theoretical level in the national historical science systematically and conceptually for the first time.

Novelty of the research is the first attempt for the national historiography to comprehensively cover the birth and the development of the workers' mutual assistance bases of the middle of the XIXth century on the basis of the generalization of the revealed sources.

Practical Significance. The conclusions obtained during the theoretical research give a coherent picture of the experience of establishing, functioning and the development

of the workers' mutual assistance bases in the territories of Galicia in conjunction with the processes of creation, organization and activity of one of the components of society — organized groups of employees.

UDC 007:[070+339.138:659.442](043.3)=161.2

SUPPLEMENTS TO THE NEWSPAPERS: TYPES AND PROSPECTS

I. N. Mudra, M. O. Kitsa

*National University «Lviv Polytechnic»,
3, Prince. Roman St., Lviv, 79000, Ukraine,
ariane@ukr.net, mkitsa@gmail.com*

Research Methodology. *The realization of the purpose of the study has led to the use of both theoretical and empirical research methods: inductive (generalization and structuring of intermediate conclusions), analytical (analysis of works devoted to the problems of supplements to newspapers). None of the Ukrainian newspaper researchers studied the supplements to the newspapers as a separate element of the printed edition. There is a small amount of the literature on the theory of the supplements to newspapers or media satellites.*

Results. *We could not find the works and publications of researchers about supplements to newspaper as an instrument to increase the audience. Sandra Kreft in the article “Additional and indirect activity of newspaper companies” and S.M. Gurevich in the work “The newspaper yesterday, today, tomorrow”. Therefore, in order to provide good examples of the use of the supplements to the newspapers, we have studied the most popular supplements of the “High Castle” and “Express” newspapers for 15 years and have shown that publishing such publications is profitable for newspapers.*

Novelty. *For the first time the supplements to the newspapers are considered as a method of increasing the popularity and the audience of the newspaper.*

Practical Significance. *The topic of the supplements to the newspapers will be interesting for researchers in the field of media marketing and media management. But it is more urgent for the editors of the newspapers, especially during the economic crisis, when each media has a problem how to survive and keep its audience. The article “Supplements to Newspapers: Types and Prospects” is the first attempt to show that the supplements contribute to the increase in sales of copies of publications and increase the reader's audience.*