

ABSTRACTS

THEORY AND METHODS OF PRODUCTION MANAGEMENT

Mistrov L.E.

METHOD OF ORGANIZATIONAL-FUNCTIONAL SYNTHESIS OF THE ORGANIZATION OF MANUFACTURE OF THE ENTERPRISES

Decomposition goals of the organization production enterprises' (OPE) has been performed on set interdependent tasks and functions. It is shown that in the basis of (OPE) there are levels of external system synthesis and intra-system synthesis. They are determined based on the branch and bound method. On the basis of decomposition disaggregation level using methods forecast and consistent destination resource units is formed an OPE tree of functions. It is formed as a set of actions that should be performed by the enterprise. It is offered a methodical approach to the description of OPE action ways in the form of functional dependence on external factors, internal operations, structure of functions and characteristics. It allowed to formalize a problem definition and to develop a method of OPE organizational and functional synthesis on the basis of hierarchical structures: aspects (procedural, operational, structural and parametrical), disaggregation levels (external system, intra-system) and stages (initial, intermediate and final) of its shape.

Key words: organization of production, design, organizational and functional synthesis, purpose, function, criteria and efficiency indicators, shape, categories of synthesis, aspect, level, stage.

PRODUCTION MANAGEMENT PRACTICE

Fattakhov Kh. I.

CONTRADICTIONS BETWEEN PRODUCTION AND MARKETING SUBSYSTEMS OF THE ENTERPRISE, ARISING FROM UNCERTAINTY OF A CONSUMER DEMAND, AND METHODS OF THEIR ELIMINATION

Problems of operational planning production processes under conditions of uncertainty in consumer demand for domestic industrial enterprises are considered in the article. In the paper has been established the existence of contradictions between market and production subsystems of the enterprise. Two main types of contradictions are allocated: contradictions between the purposes of marketing and production subsystems, and contradictions between the purposes of a marketing subsystem resources and a production subsystem. The causes of appearing two main types of contradictions and consequences of their untimely elimination have been analyzed and systematized. The basic tools and methods of revealed contradictions elimination are described. Has been done the grouping methods and means to remove contradictions belonging to systems planning of production processes "pull" and "push" and the comparative characteristics of methods and means to address the contradictions in system planning "pull" and "push" are given

Key words: production organizations, business management, contradictions, "pull" and "push" system of production planning.

Chernysheva G.N.

EFFICIENT MANAGEMENT FACTORS OF PRODUCTION ENTERPRISE RESOURCE

The article reveals management problems resources' enterprises on the Life Cycle stages. The definition of enterprise life cycle and its stages has been given: nucleation (creation), formation, development, stability (maturity) and decline, in terms of composition and characteristics of the factors affecting the status and effectiveness productive resources management enterprise.

The author proves that, the objectives, the content and structure of production resources analysis stages will depend on the development stage, according to the specific enterprise functioning at different stages of the enterprise life cycle. The article presents the specific stages of the base resource analysis and their contents at different stages of the life cycle.

The methods of production resources analysis including the key indicators for each development stage of the enterprise are proposed in the article. The main attention is focused on integrated approach to the assessment of the resource base that allows us to conclude on the effectiveness of resources management on the enterprise and make a conclusion about available reserves growth

Key words: production resources; lifecycle enterprise; management factors, resource base, and the potential of the enterprise, the effectiveness of management of production resources, effective management, and methods of assessing the potential of the resource base; reserves efficiency.

Aniskin Y.P., Kinjakin S.N.

THE FEATURES OF FORMATION THE MECHANISM OF MANAGEMENT MANUFACTURING ACTIVITY

This article explains the features of creation mechanism management activity on the enterprise that corresponds to modern requirements of economic development. The key condition for a balanced planning development of production is managing the rate of changes in manufacturing activity. However, effective development of production is impossible without appropriate management mechanism. In order to create the control mechanism of manufacturing activity it should be considered, not only the impact of external (market conditions, competition, suppliers, etc.) and internal (production activity, innovation and investment activity) factors, which may cause multi directional impact and act simultaneously, but also modern conditions of development and specifics of production. Effective management of manufacturing activity includes the process of the company development, accompanied by output expansion, increased production, investment and higher number of employees

Key words: manufacturing activity, economic proportionality, stakeholder, balance of productive capacity.

Prypoten V.Y., Novak E.V.

IMPLEMENTATION OF INTEGRATED STRATEGIC PLANNING FOR BUSINESS FIELDS AT ENTERPRISES OF CONSTRUCTION INDUSTRY

The article examines existing theoretical approaches to the implementation of integrated strategic planning, identifies main elements of strategic planning and motivation necessary to ensuring the strategies implementation fields of business. In the paper has been determined the dual nature of industrial activity for general-constructional enterprise with organizational and economic point of view; defined characteristics and problems of formulating strategies for constructional enterprises taking in account their industrial specifics; highlighted the necessity and principles of strategic planning in the fields of business. It is emphasized that the use of integrated strategic planning for the construction industry will allow approaching the perspective process of goal-setting and subsequent implementation strategies of business fields to enterprises that operate in the market conditions forming self-reliant product program. Implementation of integrated strategic planning at construction enterprises strengthens their innovative and investment activity, it will increase infrastructure capacity; allow to ensure the technological production modernization and socio-economic development on the ground of adequate control system of its improvement

Key words: integrated strategic planning, business fields, potential, production program, adaptation to the transformations of economic environment, construction industry.

Poskochinova O.G.

AN ENTERPRISE-WIDE RISK MANAGEMENT SYSTEM FRAMEWORK

The article provides a brief description of the structural-functional and corporate approach to risk management in manufacturing plants, which allows identifying the main problems associated with their implementation in practice. Within this paper the concept of enterprise risk management, is a compromise between the above described structural-functional and integrated approaches, and thereby allowing to overcome the most significant disadvantages of each approach on the one hand, and, to design systems of risk management, more suitable for Russian enterprises on the other hand. The article presents the author's concept of forming a risk management system which has been functionally distributed on the enterprise scale, and directed on creation conditions for more effective realization of identification processes and risks assessment connected with enterprise activity, their better accountability and precautionary management

Key words: risk management system, enterprise risk classification, risk management structure, risk monitoring, enterprise risk management process, risk prevention.

ECONOMIC PROBLEMS OF PRODUCTION ORGANIZATION

Pinchuk T.A.

METHODS AND TECHNIQUES OF APPLICATION ON PERFORMANCE MONITORING ENTERPRISE BASE ON BSC

The article defines the methodological approaches to performance monitoring company. Integrated indicators' calculation of efficiency monitoring and comprehensive assessment of the boundary enterprise efficiency is carried out. It is substantiated the expediency of using the balanced scorecard for the integrated boundaries business efficiency assessment using: factor causality analysis between the factors' effectiveness performance company for blocks; regression analysis between the functional index - return on assets and factor indicators, by their results are determined the factors of increasing the enterprise efficiency; heterogeneous indicators combination by weighted coef-

ficients for the integrated effectiveness assessment for blocks that are equal among themselves; determining growth rates of integrated performance indicators for blocks: finance, customers, manufacturing business processes, training and development for the analysis of marginal efficiency business. It is proposed organizational and economic performance monitoring mechanism based on the balanced system of scorecard

Key words: monitoring of the effectiveness, BSC, integral indicators, complex assessment of effectiveness.

MANAGEMENT OF INNOVATIVE PROCESSES

Tolstyh T.O., Krutskaya N.M.

PORTFOLIO MANAGEMENT OF INNOVATION PROJECTS IN INDUSTRY

The question of innovation development dimension in Russia is generally followed in this article by emphasis on management innovation of enterprises. Within the framework of enterprises activities have been described process creation and portfolio management of innovative projects. In the article have been proposed progressive formation methods on selection basis the most cost-effective projects with analysis of promising scientific - technological areas. In this paper has been described a process portfolio realization in the context of limited resources based on the use of new types of corporate that enable the integration resources while minimizing the cost and time.

It has been considered in the article phasing performance of scientific research experimental work (SREW) creation innovative products with involvement subcontractors which were selected on the basis of analysis sufficient production volume and technological equipment, scientific and technological potential and experience of work done. Also is designated expediency of gradual involvement of subcontractors to determine design, technical, technological and economic solutions to ensure rational use of available resources and technology to create a new product, coupled with the optimization criteria pricing and complexity high-tech products

Key words: innovation, a method of forming an innovative portfolio, implementation of innovative project.

Ivanitskaya A.E., Dmitriev Y.A.

THE DEVELOPMENT OF CONCEPTUAL MECHANISM IN THE INNOVATIVE ACTIVITY OF INDUSTRIAL ENTERPRISES

The article considers the problems of managing the innovative activity of enterprises in the light of new concepts concerning the structure of innovative process, the content of its stages and the evaluation of results. The basis of the system considering all problems the innovation enterprises activity should be considered the functional structure of business which is represented by 7 basic functionalities: informational support, intelligence, marketing, innovation, risks, General accounting and production. On the basis of these provisions changes have been made in the structure of the system managing the innovative activities of industrial enterprises, concerning its managed and target sub-systems. Attention is focused on the content of the functionalities of innovation and marketing; the place and role of innovative and marketing potentials in the system of managing the innovative activities of industrial enterprises. Special features of marketing component are also analyzed

Key words: innovative process, innovative activity, innovative potential, strategic marketing.

REGIONAL ASPECTS OF THE ORGANIZATION OF MANUFACTURE

Shichkov A.N.

FRACTAL APPROACH TO THE CREATION AND DEVELOPMENT OF INNOVATION BUSINESS IN MUNICIPAL REGIONS AND CITY DISTRICTS

The system approach to the creation and further development of the business will allow: ensuring production continuity and sales of goods and services; to get increment of net income which was defining factor of an increase market cost the share capital; to increase workplaces and budgets taxable base of all levels, through the development innovations product, technology and allocation. Business should have the integration ability in the business environment on the municipality territory. Manufacturing-technological system (fractal of the business) is a minimum set of tangible and intangible assets ensuring on the base operational activities production of goods or services that have a market value. The article is given an example of formation the interregional tourist firm which is using the management innovation tools. They include a transfer operational expenses and consumer properties of production and services in financial responsibility zones, being fractals of complex business. On the researches basis the structure and formation of the Belozersky tourist fractal "A northern route" algorithm are offered

Key words: manufacturing-technological systems (fractal), operational costs structure, analogues of business, multipliers of the business, the business infrastructure.

TRAINING AND RETRAINING

Kalyashina A.V.

FEATURES OF TRAINING COMPANIES ENGAGED IN MANUFACTURING AUTO- MOTIVE COMPONENTS IN A COMPETITIVE ENVIRONMENT

This paper considers the question of achieving real effectiveness of personnel training enterprise, for example, supplier of automotive components - one of the leading companies Russia's GAZ group, in terms of preparation modern corporate training system. At present, the requirements of the international standard ISO / TS 16949 -09 are often formally performed. An approach to training staff of an enterprise-automotive components supplier in the implementation process APQP is suggested. Indicators and components performance are defined. It has been proposed to include the entire life cycle of specialist training in to corporate training system; to ensure universality training system; selection category of students for forming the system competence; to allocate two groups of functions: the main functions and teamwork. The training is carried out before each stage of the project. Consultations are being held during the work performance. Final certification is carried out in the form of APQP-team. There appears an opportunity to understand in practice the essence of modern management approach to Russian specialists

Key words: system of corporate education, team work, the international standard of quality, the APQP procedure, competitiveness, project life cycle, production preparation.

LOGISTICS BASES FOR THE ORGANIZATION OF PRODUCTION

Brom A.E., Evstifeeva N.V.

DEVELOPMENT OF LOGISTIC SUPPORT FOR SPACE EQUIPMENT ON THE BASE OF THE «SAIL-BMSTU» MIDGET SPACECRAFT

The article is devoted to the possibility of applying integrated logistic support conception (LSC) for space equipment on the base of the student's «Sail BMSTU» midget spacecraft (mission) (MS) example. The peculiarities of space equipment logistic support in operation phase are considered. The problem of decrease in production expenses for spacecrafts due to application in electro radio products (ERP) design of commercial and industrial appointment is emphasized. The paper suggests that the solution of this problem should be based on standard engineering procedures generally accepted in the practice of design and construction. Implementation of these procedures is presented on the example of LSC (MS) spacecraft "Sail-Bauman." Classifications of criticality of refusals and refusal emergence probability levels were developed for MS. It is described an algorithm for the analysis of types, consequences and criticality of refusals (ATCCR) for (MS). Recommended guidelines providing reliability of electro radio products are elaborated. The article will be useful for professionals in engineering, PLM, logistics, management, for research, teaching and private study purposes

Key words: the integrated logistic support (ILS); space equipment; space satellite; reliability; failure modes, effects and criticality analysis (FMECA); electro radio products.

INFORMATION TECHNOLOGIES IN PRODUCTION MANAGEMENT

Shotylo D.M.

ORGANIZATIONAL AND ECONOMIC PROBLEMS OF MANUFACTURING SYSTEMS ON THE BASIS OF MODERN INFORMATION TECHNOLOGY

In the paper are considered organizational and economic problems of production systems development on the basis of use modern information technologies and the main problems connected with low production development of innovative and knowledge-intensive production. The special attention is paid to problems in the sphere of investment enterprises policy in the course of introduction modern information technologies, logistic infrastructure, business processes re-engineering and transformation the organizational structure of the production system with introduction modern information technologies. Also it is identified the lack of a single universal model for evaluating the effectiveness of introduction modern information technologies and systems. The deficiencies of development infrastructure of domestic consulting and audit in the information technologies sphere are highlighted. In addition, in the paper are considered the problems in the fields of information management, business intelligence and underdeveloped domestic e-commerce system

Key words: production system, information technologies and systems, organizational and economic problems of development.