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METHODOLOGY OF BUILDING MARKETING SYSTEMS

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marketing systems, digital economy, product segmentation, optimization, forecasting.

In this article the authors proposed a methodology for building marketing systems, which is based on the principles of: reliability; constant study of the state and dynamics of the market; adaptation to market conditions, taking into account the requirements and capabilities of end-users; active influence on the market for its formation in the directions necessary for the economic object; globalism; substitution; security. An offer methodology of construction of MCC can be used in parallel for: research and analysis of economic problems of decisions in the context of change of the target market and competition environment; developments of strategic and tactical plans of development of economic object and design of processes in an economy with the legacy plan of development of object; analysis of plans of development of economic object, ranging of processes on priorities, development of recommendations on the improvements of processes of change of the system of sale. The authors of this article are the developed classification of systems for input and output information used in marketing systems, as well as the interaction of Internet services with the marketing system, which allows you to obtain marketing information. The authors present a classification of systems of marketing systems by types, basic methods of construction and ways of interaction with the help of information systems and network communications. The authors in this article proposed a conceptual model of marketing systems, which is based on the use of the principles of system analysis, which allows to ensure the formation of a system for managing the marketing activities of an enterprise in the modern digital economy. Offer methods and conceptual model can be used and in other approaches of sale activity of enterprise.

МЕТОДОЛОГІЯ ПОБУДОВИ МАРКЕТИНГОВИХ СИСТЕМ ЗБУТУ

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Ключові слова:

маркетингові системи, цифрова економіка, сегментація товару, оптимізація, прогнозування.

У статті запропоновано методологію побудови маркетингових систем збуту, яка базується на принципах достовірності; постійного вивчення стану й динаміки ринку; пристосування до умов ринку з урахуванням вимог і можливостей кінцевих споживачів; активного впливу на ринок для формування його в необхідних для економічного об'єкта напрямках; глобальності; заміщення; безпеки. Запропонована методологія побудови МСЗ паралельно може використовуватися для дослідження й аналізу економічних проблемних рішень у контексті зміни цільового ринку й конкурентного середовища; розробки стратегічних і тактичних планів розвитку економічного об'єкта й моделювання процесів в економіці з успадкованим планом розвитку самого об'єкта; аналізу планів розвитку економічного об'єкта, ранжирування процесів по пріоритетах, розробки рекомендацій для поліпшення процесів зміни системи збуту. Наведено розроблену класифікацію систем за вхідною і вихідною інформацією, вживаною в маркетингових системах збуту, а також взаємодію із службами Internet, що дозволяє отримувати маркетингову інформацію. Подано класифікацію систем маркетингових систем збуту за видами, основними методами побудови і способами взаємодії за допомогою інформаційних систем і мережових комунікацій. Запропоновано концептуальну модель маркетингових систем збуту, ґрунтовану на використанні принципів системного аналізу, що дозволяє забезпечити формування системи управління збутовою діяльністю підприємства в сучасній цифровій економіці. Запропоновані методи й концептуальна модель можуть бути використані в різних підходах збутової діяльності підприємства.

Statement of the problem

Today management the sale efficiency in the modern marketing systems (MS) was purchase new forms. So, the use of information technologies as a mechanism of sale function the number of users allowed to increase and to retain them as consumers. By main tasks MS as marketing basis there are advancement of brand and increase of sale by means of mobile technologies Internet is used here as a basic of communication mediator.

While basic approaches of marketing positioning and segmenting remain unchanging, and data paths create the new methods of increase of volume and speed of bringing in of consumers requires new decisions. MS today examined as totality of information technologies directed for advancement of commodity and services by means of facilities of the network. Essence MS consists in engaging of consumers in the on-line-environment of Internet.

Forecast, that in the near time marketing will begin to suffer substantial changes. Markets and their structures will work, leaning against NT and principles. A digital economy will change practically all aspects of life. The process of purchase and sale will become the automated process. Companies and firms will communicate with the clients and with each other through Internet of the network. It will be easier to find potential customers for salespeople, and customers without problems will be able to choose the best commodity and the best salesman. Time and distance will not have a fundamental value now. In addition, Internet markets have a row of advantages: possibility to do shop around the clock and every day, a customer does not need to go in a shop, choice of commodity on a criterion "price-quality", reviews et al.

A digital economy opens new directions among that the digital marketing occupies one of leading places. In modern market conditions, when the dynamics of processes in an economy is high enough, required operative processing of data, where sale of commodities, strategy of production, price – all depends on the necessities of customers. All aspects of activity of enterprise are sent to the consumer. The queries of customers straight influence on sale activity as on a marketing function. Therefore, MS has direct connection with consumers and acting information real-time allows quickly to react on the change of demand.

Thus, MS today is the new unique system, where sale function allows shortening expenses due to new economic environment due to inexpensive communications, new and operative treatment of information, technological cost cut-out, access to the world markets.

Analysis of recent studies and publications

The ponderable contribution to theoretical developments, and also in forming of home scientific directions of research of instruments of channels of distribution of products, descriptions of defects and advantages of channels of realization of commodity, managements by business processes, models of the informative systems, models of optimization of prices and volumes of sales on user markets, functions and approaches of management in marketing, problem-having a special purpose management by business processes, management works brought in marketing potential of enterprise:

V. K. Galitsyn [1], F. Kotler [3], V. N. Kravchenko [4], Yu. G. Lysenko [5], L. O. Chorna [6] and others.

The analysis of the advanced studies testifies that theoretical and methodological aspects of construction of the conceptual model of the marketing system of sale (MSS) in a management by an economic object, oriented to application of modern information technologies, require development of new approaches and methods.

Objectives of the article

The objective of this article is a construction of conception of the marketing system of sale in the conditions of digital economy at the target market, based on the use of principles of analysis of the systems, allowing to provide forming of control system sale activity of economic object.

The main material of the research

The economic sense in application of estimation of efficiency of sale activity of enterprise consists of construction of method of estimation of efficiency of management of sale activity of the marketing systems, that is based on principles of construction of the MSS.

Methodology of construction of MSS is based on next basic principles [3]: to authenticity; permanent study of the state and market dynamics; adaptations to the terms of market taking into account requirements and possibilities of end-user; active affecting market for forming of him in necessary for an economic object directions; globalization; substitutions; safety.

Principle of authenticity envisages an operative receipt and treatment of information, applications of effective methods and models in the process of acceptance of administrative decisions.

Principle of permanent study of the state and market dynamics envisages monitoring and analysis of market condition real-time.

Principle of adaptation to his terms taking into account requirements and possibilities of end-user provides for informing and work with a consumer in the interactive mode with application on-line of technologies.

Principle of the active affecting market envisages forming at the market necessary for an economic object direction of strategies of development of enterprise at the level of object and directions of activity taking into account CW of functioning (real time is on-line mode), that assists the achievement of maximal efficiency of sale activity.

Principle of globalization provides for that the system MSS must take into account the necessities of not only home market but also world. The system must be open and integrated according to the requirements of countries with a market economy.

Principle of substitution envisages providing of substitution new commodities and commodities substitutes taking into account their demand.

Principle of safety provides for that information about financial and trade operations must not become property of extraneous persons. It is one of terms for success and absence of possibility of economic or financial causing damage to the economic object.

Methodology of construction of the MSS can be used in parallel for:

- research and analysis of economic problems of decisions in the context of change of target market and competition environment;
- developments of strategic and tactical plans of development of economic object and design of processes in an economy with the legacy plan of development of object;
- analysis of plans of development of economic object, ranging of processes on priorities, development of recommendations on the improvements of processes of change of the system of sale.

The conducted analysis and offer methodology of construction of the MSS allow to draw conclusion, that the process of construction of conceptual model of MSS is sent to:

- rethinking of the existent going near organization and construction of the marketing systems of sale;
- determination of new economic knowledge about an environment an economic object function in that;
- development of methods of choice and estimation of parameters of target market; development and drawing on the complex of methods for the analysis of productively-sale possibilities of enterprise, competitors by means of conception of "4P" (Product, Place, Price, Promotion) and segmentation of commodities and customers; use of methods of optimization, prognostication and system of support of decision-making.

Classification of the systems on entrance and output information in the MSS it is presented applied on a Fig.1 [2].

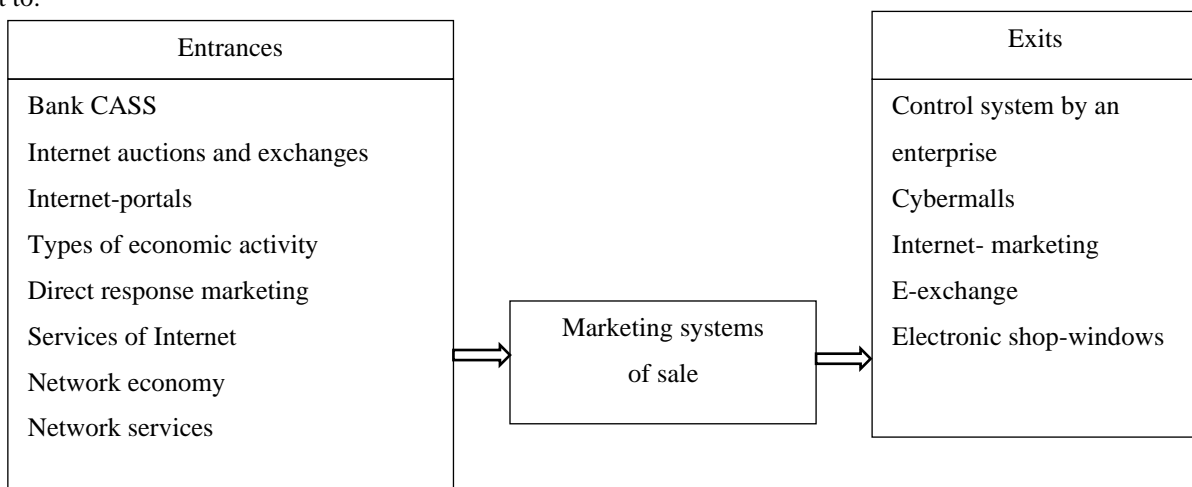


Fig. 1. Classification of the systems on entrance and output information in the MSS

As the MSS is based on the use of modern information technologies that provide for: presence of exit in the global network of Internet, opening of web-site of enterprise and virtual shop, presence of control system by an enterprise,

the use of electronic advertisement, the use of case frames by a production. The cooperation of services of Internet with the MSS allows getting marketing information, and also accomplish trade transactions (Fig.2) [5].

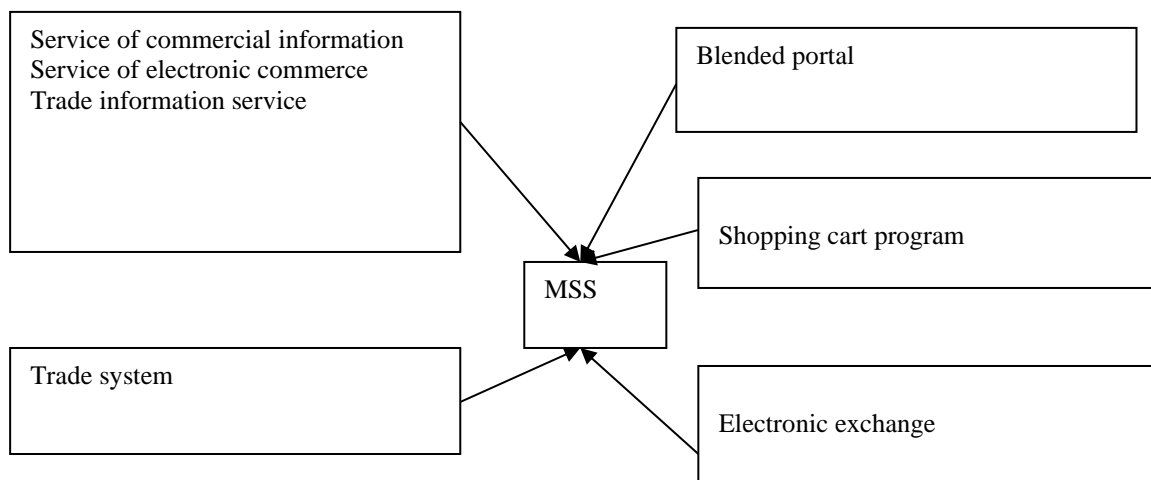


Fig. 2. The use of services of Internet in the MSS

It should be noted that every service has the features and executes the functions [2], namely:

1. Service of commercial information or service of electronic commerce (Trade information service) it is the informative network service given in area of entrepreneurial activity includes: information about requests on a

purchase/sale of separate types of commodities; analysis of data about the state of shipping and risks; analysis of products, reports on the state of enterprises and prospects of their development; information about organizations, formative a business infrastructure; texts of laws, standards and other normative documents; news, statistics, reviews and prognoses.

2. Blended portal is a portal combining in itself the functions of electronic commerce and classic certificate services.
3. Trade system (Trading system) – virtual system for realization of trade operations in the mode of dialogue of client and trade system (cybermall). Usually the trade system provides consultations of specialists, infrastructural service and other additional possibilities.
4. Electronic exchange – exchange leading bidding with the use of Internet of network. The operations of purchase-sale come true by users by means of the subscriber systems plugged in the global network of Internet.
5. Shopping cart program – program, started on a web site and collecting information about the set of the commodities chosen by a client.

On the basis of the conducted analysis classification of the systems of MCC (Fig.3) is presented on kinds, basic methods of construction and methods of cooperation by

means of the informative systems and networks of communication.

The telephone marketing is report and questioning of potential clients on mobile telephones. The telephone marketing is used: for the exposure of potential customers of commodity or services; for the study of opinion of consumers about a commodity or service for the study of presentation of consumers about optimal properties of commodity or service.

The secondary telephone marketing is questioning on the mobile telephone of those clients or on electronic addresses direct delivery of commodity was before conducted that. The secondary telephone marketing is used: for confirmation of receipt of correspondence, for the analysis of project and for adjusting of direct contact with a consumer.

The television marketing is marketing carried out through television by the show of advertisement for direct answer; or the uses of the special television (digital) commercial channels intended only for a commercial and advertisement information transfer, becoming familiar with that a consumer can order a commodity on bargain prices, keeping indoors from home.

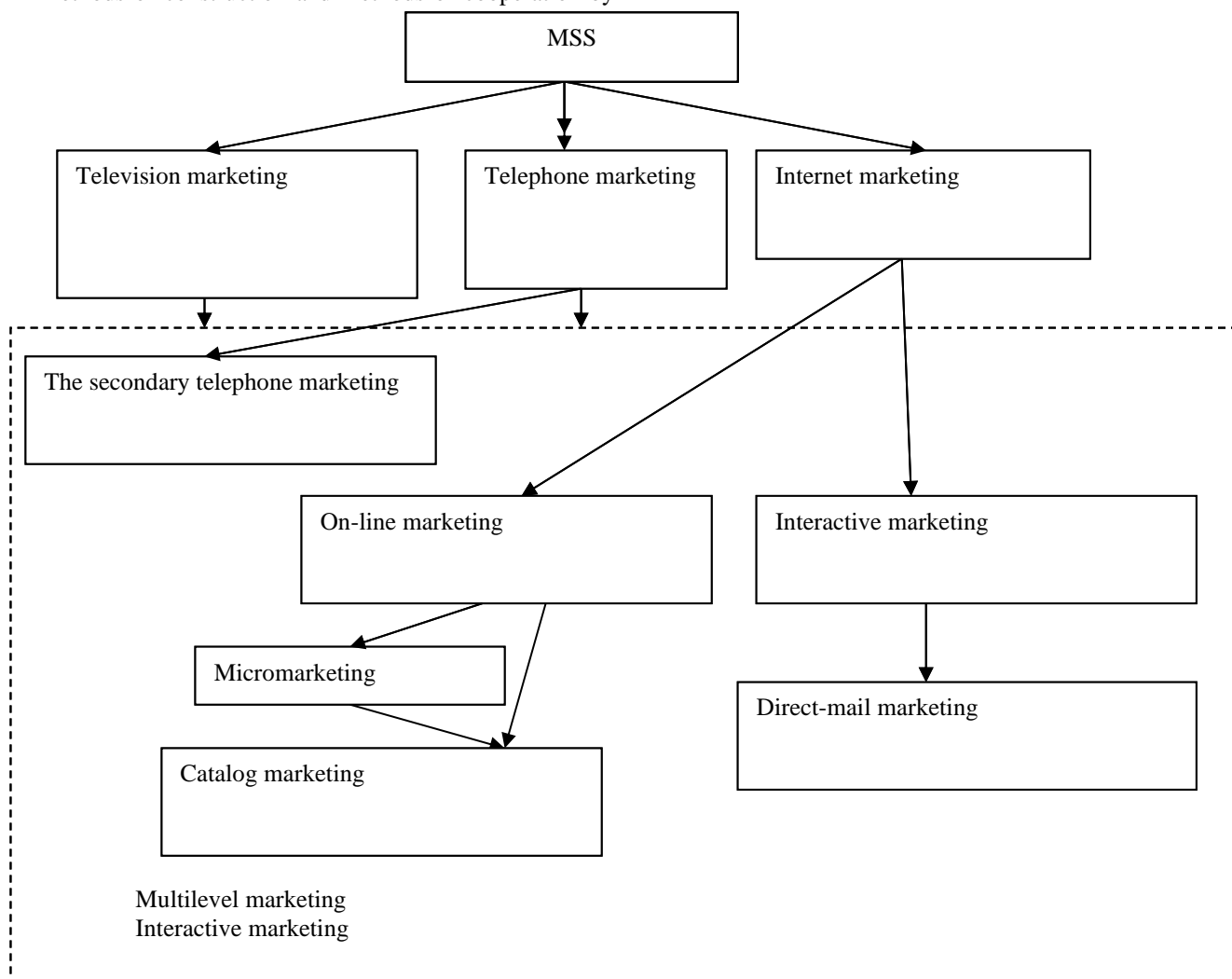


Fig. 3. Classification of the systems in the MSS

The internet marketing is on-line marketing based on the use of resources of network of Internet.

The on-line marketing is marketing based on the use of computer networks: commercial on-line channels and network of Internet. Using the networks of Internet,

customers get marketing information about a commodity and accomplish trade transactions.

The micromarketing is used at the level of separate economic objects.

The interactive marketing is marketing system of cooperation between an enterprise and customer.

The direct-mail marketing is direct response marketing carried out by distribution of electronic letters, SMS of reports, advertisement, boulevards and other systems of sending to the permanent consumers. Users sneak up on the basis of lists of the most credible customers of certain groups of commodities.

The catalogue marketing is direct response marketing carried out on the basis of e-catalogues, chosen users or given to them in cybermalls.

The integrated approach that is used in the modern e-marketing is the multilevel marketing (Multi-Level Marketing – MLM). The multilevel marketing is the multilevel system intended to move forward goods and services from a producer to the consumer, using the direct

contact of B2C or B2B by means of information technologies.

In the multilevel marketing many consumers are engaged in distribution of product. As a result of it, every certain consumer registers oneself in a database during an acquaintance with products. Unconventional is that in the multilevel marketing the first contact is initiated, as a rule, by a spreader.

On the basis of undertaken a theoretical study the conceptual model of the MSS, presented on a Fig. 4, based on the use of principles of analysis of the systems, allowing to provide forming of control system sale activity of enterprise, offers.

An analysis on separate factors and comparison of these data with the grand total of table allow to investigate, weak and strong parties of enterprise and due to the improvement of indexes of competitiveness.

At raising of task of sale activity of enterprise the tasks of marketing research are determined: analysis of productively-sale possibilities of enterprise, comparative analysis of competitors by means of conception of "4P" and segmentation of commodities and customers.

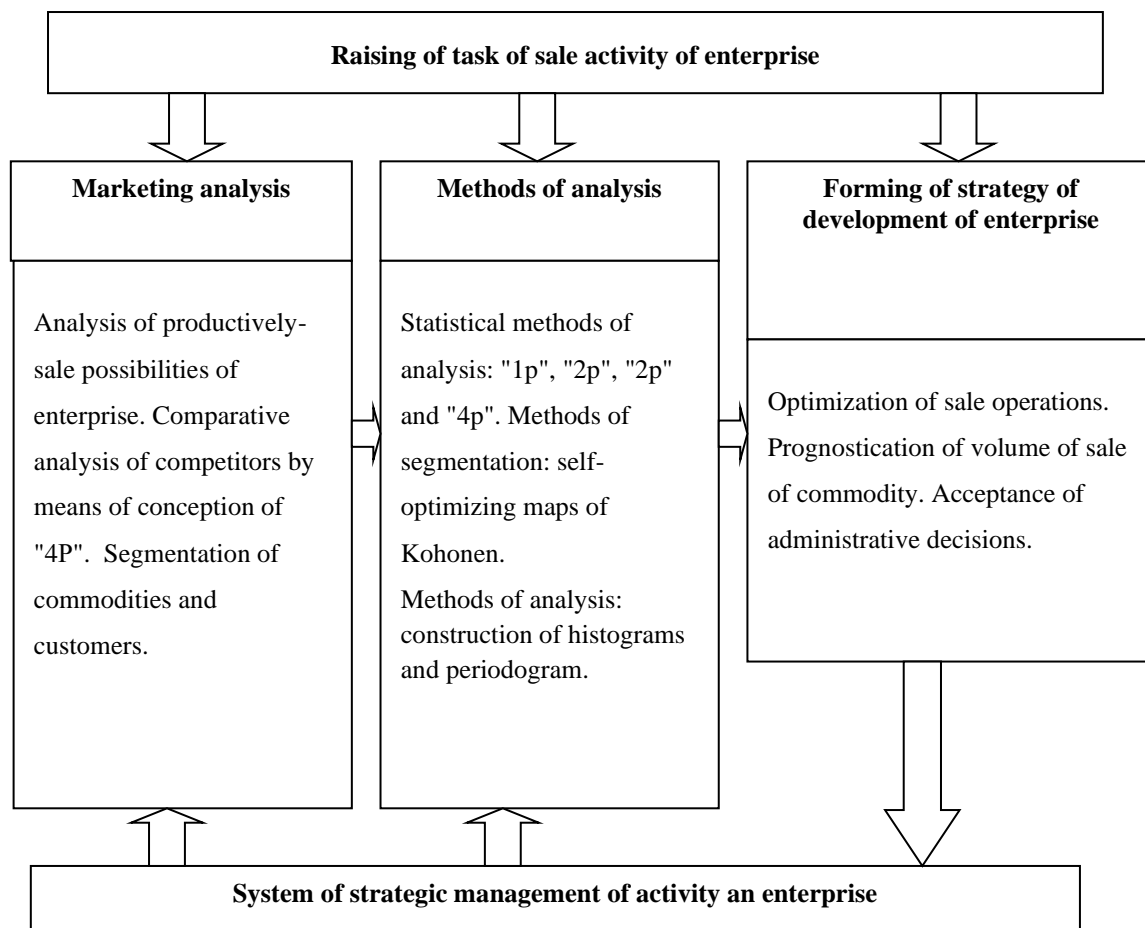


Fig. 4. Conceptual model of the MSS

In research statistical methods are used for the analysis of commodity of "1P" from that it is possible to draw conclusion about that, what attention spares an economic object to the value of reliability and quality of products that supplies with to the target market, including descriptions: tenure of employment, repair and warranty service.

In the analysis of pricing of "2P" investigated, with what standard of prices an economic object enters the market. Analysed also, whether an economic object possesses sufficient flexibility by the system of discounts, that would allow to the consumers to acquire the greater amount of commodity at less price.

In research of channels of sale of "3P" dignities and defects are analysed strategy of sale and market volume.

In the field of advancement of commodity of "4P" investigated analysis of advertisement activity, that uses an economic object: Internet-advertising, mobile advertising (mobile telephones), television advertising, banner advertising and others.

At an analysis segmenting of consumers basic descriptions of consumers are investigated is constancy, orientation, economic descriptions et al. Analysing the economic indicators of consumers, it is possible to draw conclusion about optimization of sale operations and prognosis volumes of sale of commodity.

In addition, researches on segmentation of commodity at the market will allow to predict behavior of consumer in regard to a commodity, adherence to the trade mark; circumstances of purchase (novelty, chance, descriptions), benefit (quality, price, comfort).

By the next stage of analysis of segmentation on customers, which is conducted research distribution of all potential consumers on groups, being characterized general indexes and signs. This analysis allows to define, as far as and on what parameters a commodity must correspond to this segment.

For realization of research of segmentation of commodities and customers on consumer preferences self-optimizing neural networks (by the maps of Kohonen) are applied. The construction of histograms and periodogram

allow to investigate extras and their frequency, what the presence of seasonality of demand will allow to educate.

The next stage at forming of strategy of development of enterprise is a decision of tasks of optimization, prognostication of sale activity and acceptance of administrative decision.

Conclusions

The methodology of construction of the marketing systems of sale offers in the article, that is based on principles: authenticity, permanent study of the state and market dynamics, adaptations to the terms of market taking into account requirements and possibilities of end-user, active affecting market for forming of him in necessary for an economic object directions, globalization, substitution, safety.

The worked-out classification over of the systems is brought on entrance and output information applied in the MSS, and also co-operating with services of Internet, that allows to get marketing information.

Classification of the systems is presented in the MSS on kinds, basic methods of construction and methods of cooperation by means of the informative systems and network communications.

The conceptual model of the MSS, based on the use of principles of analysis of the systems, allowing to provide forming of control system sale activity of enterprise in a modern digital economy, offers.

Offer methods and conceptual model can be used and in other approaches of sale activity of enterprise.

References

1. Galitsyn, V.K. (2000). Systemy monitorynhu [Monitoring systems]. Kyiv: KNEU [in Ukrainian].
2. Ivanov, N.N. (2013). Informatsionno-analiticheskiye sistemy v upravlenii ekonomicheskimi ob'yektami [Information-analytical systems in the management of economic objects]. Business inform, 10 (429), 141-145 [in Ukrainian].
3. Kotler, F. (1995). Osnovy marketinga [Fundamentals of Marketing]. Moscow: Business Books [in Russian].
4. Kravchenko, V.N. (2014). Instrumenty problemno-celevogo upravlenija biznes-processami [Instruments of problem-oriented management of business processes]. Dnepropetrovsk: Serednjak TK [in Ukraine].
5. Lysenko, Yu.G., Guz, N.G., & Ivanov, N.N. (2005). Upravlenie marketingovym potencialom predprijatija [Management of marketing potential of the enterprise]. Donetsk: Yugo-Vostok, Ltd. [in Ukraine].
6. Chorna, L.O. (2009). Mistse systemy realizatsiyi produktsiyi v marketynhoviy diyal'nosti pidpnyemstv [The place of the product marketing system in the marketing activities of enterprises]. Ekonomika ta derzhava – Economy and the State, 1, 38 – 40 [in Ukraine].