6.2. Criterion basis of marketing channels suitability for innovative products distribution[4]

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Today the role of marketing channels in the world economy and specifically for manufactures and costumers increases. Scientist S. I. Kiriukov says that only efficiently build and managed marketing channels system can deliver goods to the end users in the best way and convince that these products are the best comparing to analogous in the market. According this statement we summarize that the choice of marketing channels for product distribution must be diligent and careful. Such statement explains that right chosen marketing channels, other words, optimal marketing channels increase innovation product chances to be successful on the consumer market. It also contributes to delivering even insufficiently effective innovative products to the target market. Opposite situation also possible in case when wrong marketing channels are chosen for innovation product distribution, in such case perspective innovation can be failure.

The choice of the marketing channels in the formation of the distribution system depends on the scope of its activities, the markets, the specifics of the produced products, the management strategy, and the level of innovation activity. The process of marketing channels choice for innovation product distribution at the enterprises which are engaged in innovative development becomes especially important.

Recently, one of the most discussed issues between scientists in economy field stay issues concerning the products distribution and their effective delivering to consumers. Channel researches offer numbers approaches and strategies to «build» an effective and efficient marketing channels for product delivering to the end users. In just the past decade, the number of publications focused on marketing channels has grown by more than 150%. So, the issues that reveal the essence, significance and structure of distribution policy are disclosed in the publications of such academics as Bilovodska O.A. [1], Pavlenko A.F. [12], Petrunia Yu.Ye. [13], Prymak T.O. [14] etc. Accordingly, there are numbers of academics who provide analysis of the role and structure of marketing distribution policy. The issues of distribution marketing channels management have

been reflected in the scientific works of such individuals as Hladun P.P. [3], Horčels L., Marijen E., Uest Č. [4, 5], Krykavskyi Ye.V. [9], Naumov V. M. [11], Skliar O. M. [17], El′-Ansari A.I., Koflan E.T., Štern L.V. [18]. Theories related to the marketing channels choice are presented in the publications of such scholars as Gercyk V.A. [2], Duplenko N.G., Kharichkova Ye.V. [6], Korolchuk O.P., Syvanenko G.P., Toropkov V.M. [8], Lugunova D.O., Kotova M.V. [10], Samorodov V.B., Tiutiunnykova I.A. [15].

Based on analyze of extant marketing channel literature we provide a visual representation of the algorithm of marketing channels choice for innovation product. Summarizing the foregoing, we have developed a block diagram of the algorithm of marketing channels choice for the innovative products distribution, which has this form (Figure 6.26).
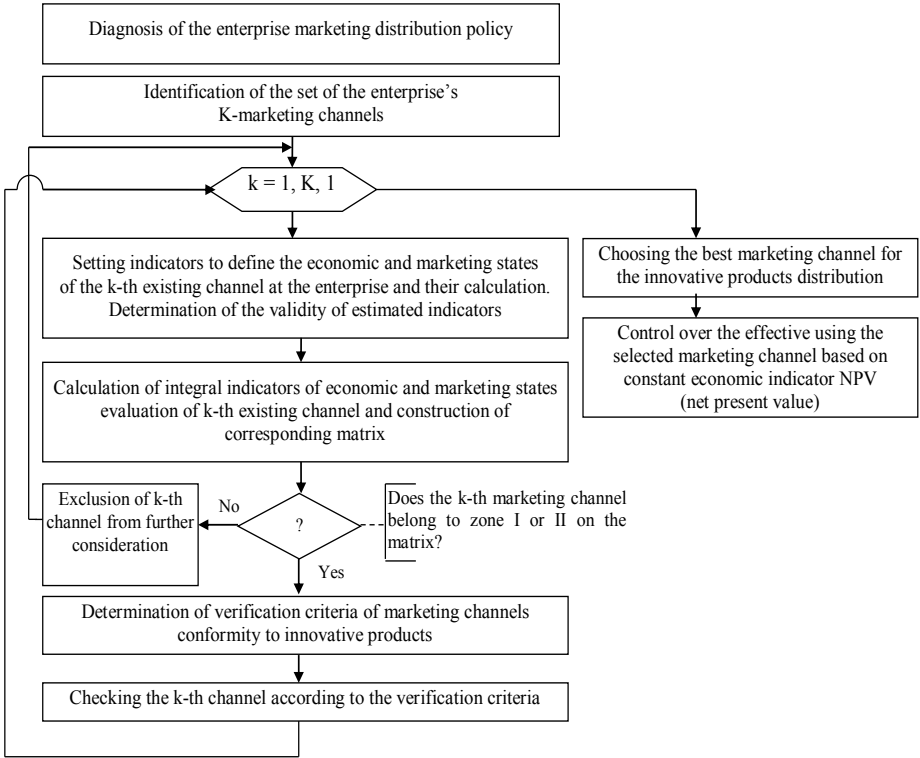

Figure 6.26. Block diagram of the algorithm of marketing channels choice for the innovative products distribution

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So, we identify that the choice of marketing channels for the innovative products distribution at an industrial enterprise consists of 4 steps [16]:

1) diagnostics of the actual conditions of the marketing distribution policy at the enterprise;

2) evaluation of existing marketing channels of the enterprise;

3) checking existing marketing channels conformity to innovative products according to criterion base, and their final choice;

4) monitoring and control over the effective use chosen marketing channels through the time.

Each of these steps is basement for further steps, all steps are connected. Thus, the evaluation of existing marketing channels of an enterprise allows not only to determine their state (according to the results of the enterprise marketing channels evaluation they may occupy one of the positions: leader, challenger, follower, collector, eliminator [16]), but also to find out feasibility of their hold and use at the enterprise in subsequent periods. Also, such evaluation has another goal – identifying among the existing marketing channels, those that are the most appropriate for the distribution of innovative products. Other words, this evaluation helps to choose appropriate marketing channels for distribution of the proposed innovation. Important to check all marketing channels and complains with the specifics of innovative products.

So, it is important to develop an approach to marketing channels checking on their conformity to the innovative products specifics of the enterprise and to determine suitability of the channels to innovative products distribution.

A generalized block diagram of the algorithm for channels checking, based on the pre-made evaluation of channels conformity to the specificity of innovative products, is given in Figure 6.27. According to the block diagram, it is important to compare product characteristics with the conditions provided by the channels according to the group of criteria: 1) conformity of the products novelty level to the complex characteristics of the marketing channel; 2) the target market for innovative products and the market on which the channel operates; 3) conformity of innovative product to assortment distributed through the channel; 4) actions to promote innovative products; 5) readiness of channel participants for the innovative products distribution; 6) the risk of innovative products distribution through the marketing channel.

The transition between blocks of the algorithm is carried out using the «yes» and «no» queries. Specialists of the analyzed company who are engaged in the innovative products development, specialists in sales and

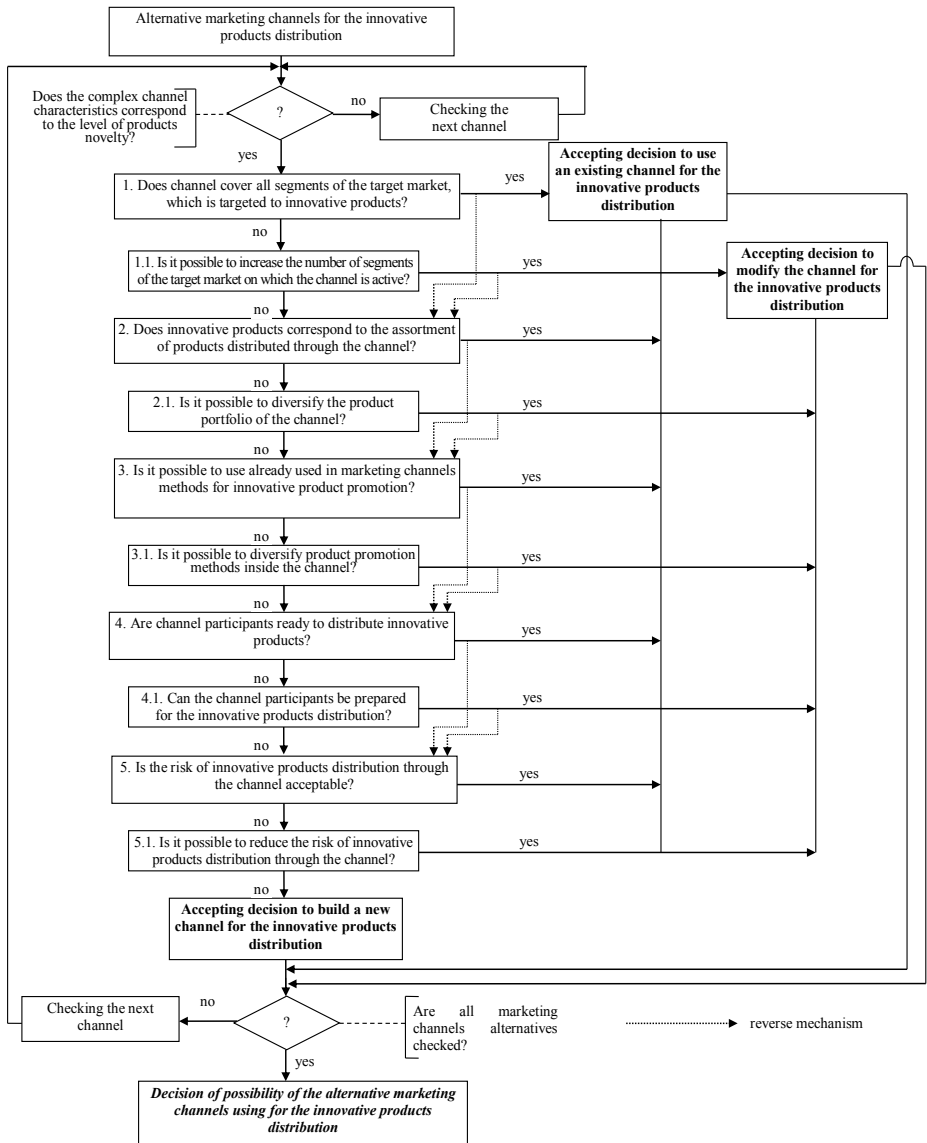marketing, and direct participants in the channels must be involved in the checking process.

Figure 6.27. Block diagram of the algorithm for checking marketing channels conformity to the specificity of innovative products

Before accepting any decision connected with production and distribution of innovative products, verification of marketing channels according to the specified criteria must always be done. The fulfillment of all verification criteria (Fig. 6.27) indicates the high suitability of existing marketing channels for the innovations distribution and determines the possibility of their use without changes and, accordingly, requires least costs and efforts. Middle suitability is possible in case of channels discrepancy to individual verification criteria but with opportunity to improve them. Lack of such capabilities indicates a low suitability and determines needs of channels modification and/or their replacing with new specially designed channels.

Choice of appropriate marketing channels for the distribution of innovative products is determined, first of all, by the type of innovative products (radical, ordinary, improving – modifying and replacing). Options for selecting best type of marketing channel depending on the level of product innovation is shown in Figure 6.28. Diameter size of the circle depends on the acceptability of using marketing channel: larger circle means more appropriate type of marketing channel.
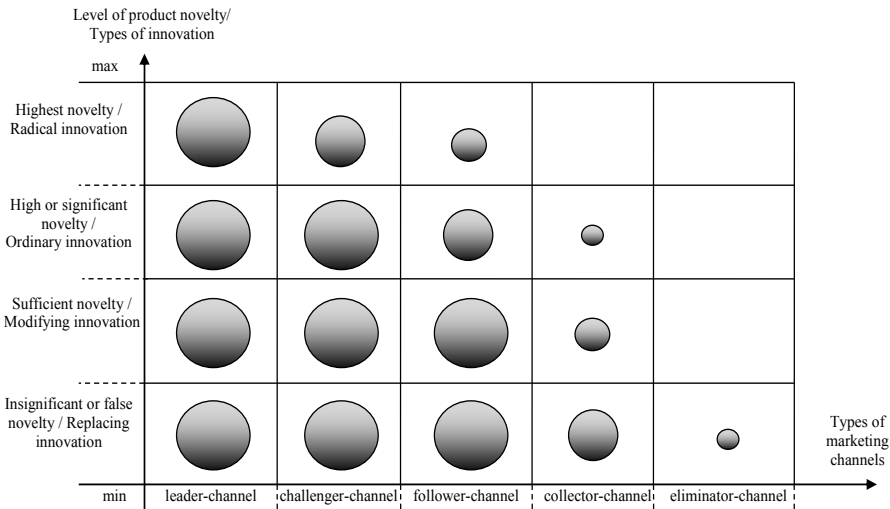

Figure 6.28. Intensity of marketing channels use depending on the level of products novelty

Types of marketing channels that can operate at an enterprise, and innovations (in terms of novelty) that are expediently distributed through the appropriate types of marketing channels are presented in Table. 6.5.

Table 6.5. Characteristics of marketing channels

Channel type	Characteristics of marketing channel	The level of innovation novelty
Leader	*Leading (dominant) position.* A significant part of the enterprise's production is distributed through the channel. «Leader» is profitable. Marketing activities at are at a high level. It is possible to distribute products with a different level of novelty through the channel. At the same time, such channel requires additional financial investments for maintaining achieved positions	*Radical,* ordinary, improving (modifying, replacing) innovations
Challenger	*Strong position.* Channel has a stable economic and marketing state. Such channel has a rapid pace of development. The channel can become a leader after additional investments in its development. Inclusion of innovation to portfolio of marketing channel products is considered as way to improve its functioning and achieve or advance the level of leader channel. «Challenger» can be used in the distribution of ordinary and improving innovations, and radical innovations can be distributed after its testing through leader-channels	*Ordinary and improving (modified, replaced) innovations,* also radical innovations after their testing through leaders-channels
Follower	*Favorable position.* Marketing and economic state of the channel indicates that the channel has a stable position. Channel's participants are not always ready to take risks arising from the inclusion of innovative products in the portfolio. To keep existing consumers and receive stable profits is the most important task for channel participants. It is expedient to use «Followers» for distribution of improving innovations, also for distribution of radical and ordinary innovations after their testing through leader-channels and based on their strategies. Using of leader-channels' strategies reduce the risk of failure and help to avoid losses	*Improving innovations,* also radical and ordinary innovations after their testing through leaders-channels
Collector	*Satisfactory position.* Channel has a low economic and mediocre marketing state, or mediocre economic and low marketing state. «Collector» can operate on a small segment of the market with well-defined consumer needs. Collector-channels get profit in the short term. After «harvesting» collector-channels must be eliminated gradually. However, such channels have the potential for development in the presence of favorable conditions. It is advisable to use collector-channels for traditional products distribution. In some cases, it is possible to use such channel for innovative products distribution, chiefly stare, to improving innovation	*Replaced innovations*
Eliminator	*Unsatisfactory position.* Channel's economic and marketing state is low. The channel does not develop and does not have any capacity to improve its status. «Eliminator» needs to be eliminated or radical reorganized. Eliminator-channels can be used for traditional products distribution during «harvesting»	*Traditional products*

For innovative products distribution, first of all, channels that are ready to distribute such products without changes are chosen. In case of

existing only alternatives that require channels modification or they replacement for new ones, it is important to specify solutions for existing channels modifications and options for new channels developing.

Modification of existing marketing channels according to innovative products requirements or creation of new channels require additional financial investments. Such investments are related to the formation/increase of channels suitability for innovative products distribution. There is correlation between costs and benefits of channel modification. The higher costs are incurred on the formation of marketing channels suitability for innovative products distribution, the lower costs will be connected with innovative products move through channels and at the same time higher level of customer service will be guaranteed. However, it is important to find such an interrelation between the costs on the formation of marketing channels suitability for innovative products distribution and results incurred with channels use in which these costs are justified.

Interrelation between the costs and level of marketing channels suitability for innovative products distribution is presented in Figure 6.29. According to it there is a certain level of marketing channels suitability, in which aggregate costs are minimal, and therefore, it is optimal.
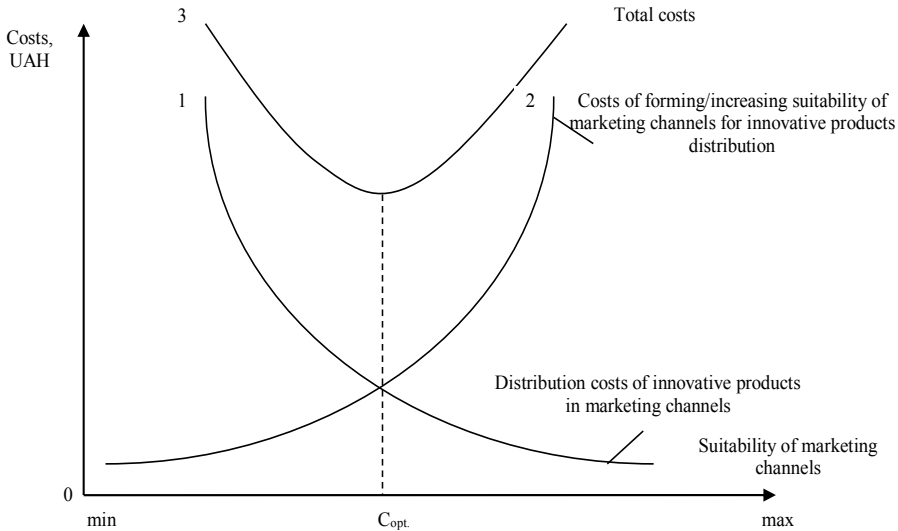

Figure 6.29. Interrelation between the costs and level of marketing channels suitability for innovative products distribution

Necessary, periodically, to do some additional costs in the process of forming/increasing marketing channels suitability for innovative products distribution. The volume of these costs has an inverse character to the level of channel's suitability: high level of suitability fitness fewer costs (Figure 6.29). Curve 1 in Figure 6.29 has the form of hyperbole and approaches the axis of absis. The reason of such tendency explains that there is no ideal marketing channel and channels for innovative products distribution throughout their life cycle require costs to improve or at least maintain the current state.

In the case of transition to the «Decision to modify the marketing channel» block (Figure 6.27) for each criterion, according to which the marketing channel does not suit to innovative products, measures are determined. Implementation of measures allows to lead the channel in accordance with innovative products specificity, other words, to improve the suitability of the channel. An indicative list of additional costs for increasing channels suitability for innovative products distribution by channels modifying, and results from their use is given in Table 6.6.

Table 6.6. Indicative list of costs and outcomes benefits connected with marketing channels suitability improving through their modification

Criterion requiring modification	Decision	Costs	Result
Market of innovative products	expanding marketing channel scope within the target market by targeting new segments; finding and attracting consumers of new products	costs for analysis of the market segment, where it is planned to distribute products; expenses for new partners searching and conducting negotiations with them; costs for preparing consumers to new products; expenses for maintenance of several segments in the target market	expanding scope of the marketing channel; raising of consumers awareness about innovative products and enterprises; increasing of consumers; increasing of orders number; consumer loyalty increasing
Correspondence of innovative product to the channel's assortment	defining place of innovative product in the existing products' assortment; innovative product embedding in the existing assortment	costs for analysis of enterprise products' assortment; costs on diversification of products assortment (extension, deepening or harmonization of assortment); maintenance and assortment management costs	assortment diversification and, accordingly, strengthening marketing channel position on the market; increasing of consumers

Table 6.6. Continuation

Criterion requiring modification	Decision	Costs	Result
Methods of innovative product promotion	new measures selection for innovative products promotion; adaptation of existing measures to new product specifics	marketing costs; cost of new communication promotions	raising consumers awareness about a new product and its manufacturer; increasing of consumers; increasing of orders and re-purchases number
Readiness of channel's participants for innovative products distribution	participants preparation to innovative products distribution	costs for channel participants valuation, and researching of their activities' effectiveness; expenses for participants training; costs for channel participants training according to innovative products distribution; costs for service improving within the channel	reduction of expenses for partners and consumers searching in the market of new goods; improving the quality of customer service
Risk of innovative product distribution	risk's reduction, prevention, liquidation, diversification, risk insurance	expenses for risk situations overcome and/or conditions creation for risks prevention	reducing of product distribution risk; reduction of losses due to risk situations; increasing of consumer confidence

Transition to the «Decision to build a new channel» block (Figure 6.27) means that the use of existing marketing channels or their modification will not provide sufficient suitability for innovative products distribution, therefore the development of new ones is the most desirable.

First, there is the question of choosing the type of a new channel – direct or indirect, such choice depends on industry, conditions of innovative products usie etc. An indicative list of costs and results connected with development of new channels for innovative products distribution is presented in Table. 6.7.

Table 6.7. Indicative list of costs and outcomes results connected with new marketing channels development

Channel type	Terms of use	Costs	Result
Direct channel	Highly specialized innovation requires high-quality service. Sufficient capacity of the manufacturer (experience in innovation distribution field, availability of necessary infrastructure, sufficient resources, etc.)	– costs for researching of conditions where new channel operates; – costs for developing and evaluating alternative channel options	– direct target consumers achievement; – increasing consumers number; – strengthening of the enterprise marketing channels portfolio;
Indirect channel	It is possible to involve participants who have experience in innovative products distribution and familiar with the target market. Moderate costs of attracting and retaining marketing channels members	– costs for researching of conditions where new channel operates; – costs for developing and evaluating alternative channel options; – costs for evaluating potential participants and their involvement in the channel	– diversification of the enterprise' channels activities; – increasing effectiveness of product distribution

Each version of the marketing channel modification or development of a new one is connected with a certain level of results (R) and costs (C). Considering that the financial capabilities of the enterprise are limited, simultaneous modification and/or development of new marketing channels at the enterprise is not always appropriate. Therefore, it is necessary to choose a variant of existing marketing channels modification or a new channels development from the whole set of alternatives. Costs for improving/forming existing channels' suitability or new channels' developing must be the lowest, and results – the best:

$$E_{MC} = \frac{R}{C} \rightarrow max, \qquad (6.1)$$

where E_{MC} – coefficient of effectiveness of existing marketing channels' modification or development of new marketing channels; R – results from existing marketing channels' modification or new marketing channels' developing, money units; C – costs for existing marketing channels' modification or new marketing channels' developing, money units.

Additional profit is an overall result of modified channels or newly developed channels use. Additional profit is defined as the difference between profit received in the marketing channel after innovative products distribution and profit received before.

Costs for modification include:

$$C_M = \sum_{i=1}^{n} C_i = C_{TM} + C_{As} + C_{Pr} + C_P + C_R, \qquad (6.2)$$

where C_{TM} – potential costs for marketing channel withdrawal to another segment of the target market according to products specifics, money units; C_{As} – potential costs for innovative products inclusion in the existing products' assortment, money units; C_{Pr} – potential costs for additional marketing methods of innovative product promotion within the marketing channel, money units; C_P – potential costs for channel participants additional preparation to new products distribution, money units; C_R – potential expenses for reduction of risks of innovative product distribution, money units.

Costs of a new marketing channel development include:

$$C_N = \sum_{j=1}^{m} C_j = C_{MR} + C_A + C_E + C_{PC}, \qquad (6.3)$$

where C_{MR} – potential cost for marketing research for determination conditions of the marketing channel functioning, money units; C_A – potential costs for identifying alternatives of a new channel development, money units; C_E – potential costs for marketing channel's alternatives evaluation and choice of the best one, money units; C_{PC} – potential expenses for new channel's participants searching, money units.

Apparently, maximum effectiveness will be in case if formula denominator that represents costs amount for existing marketing channel modification or new marketing channel development (C), seeks to minimum, and the results of modified or new channel use, located in the numerator of the formula seeks to maximum. Effective will be those variants of marketing channels where effectiveness exceeds 1 ($E_{MC} > 1$).

Consequently, based on the passage of the steps of the algorithm, given in Figure 6.26, the enterprise for innovative products distribution can

choose existing marketing channel without changes, existing marketing channel after its modification or a new specially designed channel.

Taking into consideration dynamics of the external environment changes, that can be caused by the competitors' activities, changes in consumer inquiries, there is the need of periodically audit of marketing channels involved in the innovative products distribution. For this purpose, a generally accepted criterion for determining the effectiveness of investments in innovative project – net present value (NPV) – can be applied.

While checking the marketing channels (modified channels, and new specially designed channels) it is necessary to consider the factor of marketing channels suitability for innovative products distribution. This factor can be considered by including in the cash flows' table costs for maintaining and forming of marketing channels suitability for innovative products distribution. Formulas for calculating of net present value with factor including are presented in Table 6.8.

Table 6.8. Effectiveness checking of selected marketing channels use

Channel	Formula	Legend
1. Existing marketing channel	$$NPV_k = \sum_{t=0}^{T} \frac{CF_{kt}^{+}}{(1+r_t)^t} - CF_k^{-}$$	CF_k^{+} – the net cash flow generated by the distribution of innovative products through the k-th marketing channel in t-year, money units; CF_k^{-} – the project costs on the development and implementation of innovative products, distributed through the k-th marketing channel, money units; t – year of marketing channel use for innovative products distribution, $t = 1, ... T$; T – period of marketing channel use for innovative products distribution, years; r – annual discount rate
2. Modified marketing channel	$$NPV_k = \sum_{t=0}^{T} \frac{CF_{kkt}^{+} - C_{TMkt} - C_{Askt} - C_{Pr\,kt} - C_{Pkt} - C_{Rkt}}{(1+r_t)^t} - CF_k^{-}$$	
3. New marketing channel	$$NPV_k = \sum_{t=0}^{T} \frac{CF_{kkt}^{+} - C_{MRkt} - C_{Akt} - C_{Ekt} - C_{OPCkt}}{(1+r_t)^t} - CF_k^{-}$$	

So, there is always a set of alternative marketing channel options that can be used for innovative products distribution [19, 20, 21]. It is important to choose such marketing channel that is the most relevant to the innovative products specifics, needs the lowest costs and at the same time brings the best results. Therefore, we propose a list of criteria based on possibility to determine the best marketing channel for innovative products distribution among existing ones. It is proposed to evaluate chosen marketing channels during their use for innovative products distribution. Also evaluation based on the calculation of net present value allows to make a decision for appropriate changes or channel replacing with new one.

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