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CALCULATION OF SYNTHESIZED EFFECT FROM INTEGRATED MARKETING COMMUNICATIONS OF INDUSTRIAL ENTERPRISE

The article offers the scheme of forming the synthesized effect of marketing communications integrated by types, an approach for calculating the synthesized effect of marketing communications integrated by types, and develops an evaluation hierarchical model of integrated marketing communications for various stages.

Keywords: *integrated marketing communications; synthesized effect; model; industrial enterprises.*

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РОЗРАХУНОК СИНТЕЗОВАНОГО ЕФЕКТУ ІНТЕГРОВАНИХ МАРКЕТИНГОВИХ КОМУНІКАЦІЙ ПРОМИСЛОВОГО ПІДПРИЄМСТВА

У статті запропоновано схему формування синтезованого ефекту від інтегрування маркетингових комунікацій за видами, методичний підхід до розрахунку синтезованого ефекту інтегрованих за видами маркетингових комунікацій, розроблено ієрархічну модель інтегрального оцінювання інтегрованих маркетингових комунікацій за етапами формування.

Ключові слова: *інтегровані маркетингові комунікації; синтезований ефект; модель; промислові підприємства.*

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РАСЧЕТ СИНТЕЗИРОВАННОГО ЭФФЕКТА ИНТЕГРИРОВАННЫХ МАРКЕТИНГОВЫХ КОММУНИКАЦИЙ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ

В статье предложены схема формирования синтезированного эффекта от интеграции маркетинговых коммуникаций по видам, методический подход к расчету синтезированного эффекта интегрированных по видам маркетинговых коммуникаций, разработана иерархическая модель интегральной оценки интегрированных маркетинговых коммуникаций по этапам ее формирования.

Ключевые слова: *интегрированные маркетинговые коммуникации; синтезированный эффект; модель; промышленные предприятия.*

Problem setting. Experience of the world famous industrial enterprises suggests that integrated marketing communications (IMC) are the constant component of marketing mix. They not only serve as a way of promotion, but also improve business efficiency and competitiveness of enterprises. So the issue of development and practical implementation of the holistic evaluating system of IMC, is urgent.

Rapid development of environment requires a high level of enterprises adaptation and as a consequence a permanent search for new ways to keep their competitive position and promote products. This and other factors lead to the revision of enterprises communication policy towards transition from the integration of traditional marketing communication (MC) tools to synthesizing a marketing communication instrument that provides the emergence of new tools, ways and forms of enterprises' products promotion.

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Recent research and publications analysis. The problem of integration methods and evaluation the effectiveness of MC found a place in the research of Ukrainian and foreign scientists. Thus, in the field of domestic science the structure of MC and MC model were considered by A.D. Pilko and O.M. Lukan (2013), MC efficiency for industrial enterprises was investigated by M.A. Oklander, I.L. Lytovchenko and M.I. Botushan (2011). These issues are also explored by foreign scientists, including I.M. Karasyk (2011) who analyzed the trends of MC integrating, D. Dayton (2005) who investigated the characteristics of MC integration. D. Taylor and S. Hatch (2008) explored the communication's ideas in the context of integrated marketing communications (IMC). Ways and methods of evaluating effectiveness of the IMC were investigated by G.E. Belch and M.A. Belch (2004), A. Jenkinson (2006), D. Jerman and B. Zavrsnik (2012), H.I. Katrandjiev (2000), R. Saeed (2013), A. Sinickas (2005), T.-H. Hsu, Y.-T.H. Chiu and J.-W. Tang (2010).

The research objective. The variety of communication tools requires systematization and scientifically based methodological approaches which are able to present growth of economic performance in practice. Integrating MC by types that is synthesizing of communication tools allows obtaining the increased synergy. *The research objective* is to determine the method of calculation and to build a hierarchical model of the synthesized effect of MC, integrated by types (ATL-, BTL-and TTL-communications).

Key research findings. Classification IMC by types in ATL ("above the line"), BTL ("below the line") and TTL ("through the line") includes:

- ATL-communications are widespread traditional promotion tools that carry out a unilateral impact on consumers and have long-term effects;
- BTL-communications include personalized nontraditional tools that require dialogue of sellers and consumers and can be designed both on the short and on the medium terms;
- TTL-communications are personalized MC tools that carry out bilateral impact, and form by the features combination of different instruments of ATL- and BTL-communications. Include nonstandard promotion tools.

It should be noted that the integration of communication complex components to save the advertising budget or to get additional impact on campaign can take many ways (Karasik, 2011):

- the impact on consumer segments;
- the distribution of communications in time;
- areas of integration subject to the purpose;
- areas distinguished by their functions.

Scientists emphasize the existence of a number of MC tools, ways and forms. (Dayton, 2005) among the main IMC characteristics distinguishing:

- the plurality of communication tools;
- the plurality of audiences;
- the plurality of stages;
- coordination mechanism.

Obviously, the plurality is one of the principal IMC features at this stage of their development. In addition, some scientists point to the need for a timely transition to the next stage of IMC because traditional integration gradually loses its effectiveness.

D. Taylor and S. Hatch (2008) emphasize the inconsistency in using strategic ideas and ideas of their implementation, which makes it necessary to find new methods of IMC.

One of coordinated promoting forms is MC integrated by types (ATL-, BTL- and TTL-communications). Integrating MC by types and synthesising communication tools allows obtaining growth of synergy that is a synthesized effect.

Synthesized effect of MC integrated by types is the result of the phased evaluation:

- at the operational level – psychological, communication, economic efficiency of each separate promotion tool (efficiency is shown by function);
- at the tactical level – the synergistic effect of MC integrated by types (ATL, BTL- and TTL-communications);
- at the strategic level – synergy growth is provided by TTL-communications that synthesize characteristics of ATL- and BTL-communications, and promote the occurrence of the synthesized effect.

The scheme of forming a synthesized effect that allows to follow the interaction of its components is presented in Figure 1. The area of the functions of ATL-, BTL- and TTL-communications changes (axis Ox) is the time range of management levels, range of values corresponding functions (axis Oy) is the economic impact (income) from marketing communications implementation.

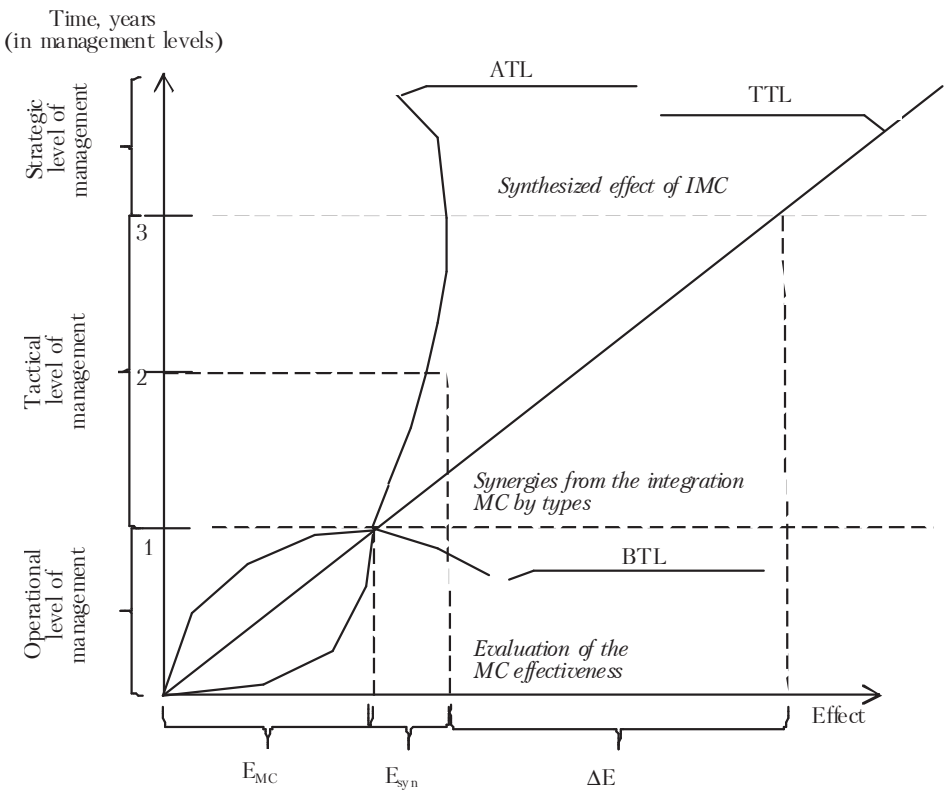

Figure 1. **Scheme of forming the synthesized effect of MC integrated by types,** *author's development*

Considering that ATL-communications are the resultant in the long term and their economic evaluation is appropriate to be carried out on the strategic management level and BTL-communications are the resultant on the short and medium terms and their economic evaluation should be carried out at the operational and tactical levels of management, so the effect of implementation the latest ones at the strategic level will decline sharply in contrast to ATL.

It follows that the functions of ATL- and BTL-communications are mutually inverse, and TTL formed at the crossing point of ATL- and BTL-communications features provide the largest economic benefits.

TTL, combining the features of ATL and BTL may use non-traditional forms and channels of communication (as BTL) and continue to provide economic benefit in the long term (due to the peculiarities of ATL). At that time, as an effect from the BTL-communications introduction decreases in the long term, and the effect from the ATL introduction in the long term remains unchanged, TTL-communications provides the effect growth that is growth of synergy.

At the operational level, there is a previous stage of the integral IMC evaluation through continuous diagnosing of the effectiveness of each separate marketing communication tool:

$$\varepsilon_{MC} = f(\varepsilon_p \varepsilon_c \varepsilon_{ec}), \quad (1)$$

where ε_{MC} – the effectiveness of each MC instrument; ε_p – psychological effectiveness of MC instrument; ε_c – communication effectiveness of MC instrument; ε_{ec} – economic effectiveness of MC instrument.

Figure 1 shows that the resulting IMC assessment can be represented as the sum of economic effects of promotional tools, the synergistic effect from MC integrated by types and synergy growth which are dealt on 3 periods of promotion (operational, tactical and strategic level):

$$E_{synth} = \sum E_{ec_i} + \sum E_s + \sum \Delta E, \quad (2)$$

where E_{synth} – the synthesized effect of IMC integrated by types; E_{ec} – economic effects of each MC instrument; E_s – the synergistic effect of IMC integrated by types; ΔE – synergistic effect growth.

The sum of MC tools economic effects represent the difference between income and costs for all types of MC tools on the condition of traditional MC combination:

$$E_{ec} = \sum I_{tr} - C_{tr}, \quad (3)$$

where I_{tr} – income that an enterprise receives using traditional MC; C_{tr} – costs that enterprise spends using traditional MC.

Synergistic effect is greater than the total and can be defined as the product of all the effects and the correction index that shows the degree of MC integration in a particular program:

$$E_s = (\sum E_{BTL} + \sum E_{TTL} + \sum E_{ATL})_{(n+1)} \times K_{s_{(n+1)}}, \quad (4)$$

where E_{BTL}, E_{TTL}, E_{ATL} – the effects of each separate type of MC.

The coefficient of synergy in this case can be calculated as follows:

$$K_s = \frac{I_s^{pr} - C_s^{pr}}{I^{tr} - C^{tr}}, \quad (5)$$

where I_s^{pr} and C_s^{pr} – the projected income synergy and synergy costs (for this type of product).

In general, the formula of the synergetic effect takes the form:

$$E_s = (I^{tr} - C^{tr}) \times K_s. \quad (6)$$

Increase in the synergistic effect is the result of enterprise's communication activities on the strategic level with less cost to IMC, multiplied by the corrective coefficient:

$$\Delta E = (I^{tr} - C^{tr})_{(n+2)} \times K_{synth(n+2)}, \quad (7)$$

where I^{tr} – the actual income (for this type of product); C^{tr} – the actual cost of IMC (for this type of product); $K_{(n+2)}$ – adjustment coefficient that takes into account the deviation of actual indicators of enterprise's marketing communication activities results from the planned ones:

$$K_{synth} = \frac{I_{synth}^{pr} - C_{synth}^{pr}}{I^{tr} - C^{tr}}, \quad (8)$$

where $I_{synth}^{pr}, C_{synth}^{pr}$ – the projected synthesized income and synthesized costs (for this type of product); I^{tr}, C^{tr} – income and costs that enterprise can get by using the traditional approach to the MC integration (for this type of product).

Thus, the formula for the synthesized effect, from using MC integrated by types, becomes:

$$E_{synt} = (I^{tr} - C^{tr})_n + [(I^{tr} - C^{tr}) \times K_s]_{(n+1)} + [(I^{tr} - C^{tr}) \times K_{synth}]_{(n+2)}. \quad (9)$$

For the complex of integrated marketing communications (CIMC), which has only one cycle and a set of 3 MC instruments in its structure, the calculation system of the synthesized effect will have the form, presented in Table 1.

Table 1. **Calculation of synthesized effect for 1-cyclic CIMC,** *author's development*

MC Toolkit	Period					
	1st period		2nd period		3rd period	
Tool of ATL-communications	ε_p, ε_c, ε_{cc}	E_{cc}	E_{ATL}	E_s	ΔE_{ATL}	E_{synth}
Tool of TTL-communications	ε_p, ε_c, ε_{cc}		E_{TTL}		ΔE_{TTL}	
Tool of BTL-communications	ε_p, ε_c, ε_{cc}		E_{BTL}		ΔE_{BTL}	

Integral MC evaluation of appropriate conduct at the strategic management level at the end of the time range in the 3 periods since the beginning of the communication campaign for separate type of product is presented in Figure 2.

This approach to MC combination based on integration by types provide the opportunity to get MC effect in the long term, primarily due to an increase term of TTL-communications: while BTL lose their ability to influence on consumers at operational and tactical levels and ATL-communications – at the strategic one, TTL-communications negate the economic losses from this and ensure efficiency.

Conclusions. Calculation of the synthesized effect from integrating MC by types performs the function of conformity assessment of the actual MC efficiency to target parameters, providing objective and comprehensive research, and the diagnostic function of changes in the analyzed parameters. Integration of MC tools by types for industrial enterprises allows obtaining the synthesized effect, providing communica-

tion efficiency in the long-term perspective and sustainable development of enterprises in the future.

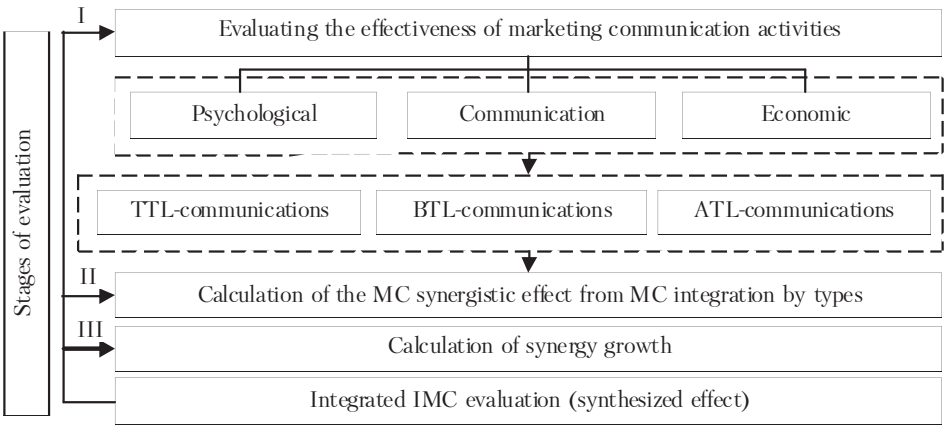

Figure 2. **Hierarchical model of IMC integral evaluation by stages of its formation,** *author's development*

The proposed hierarchical model of integral IMC evaluation by stages of its formation implements one of major objectives of enterprise management, such as the formation of the MC evaluation system, which provide effective enterprise management.

The model reproduces the key functions of economic analysis in diagnostics and evaluation of the enterprises MC system in quantitative and qualitative measurement and in search of previously unused tools in practice and the ways of synthesizing their features to create a new toolkit that meets the requirements of external and internal enterprise's environment.

Thus, MC tools integration of industrial enterprises by types allowes obtaining the synthesized effect, ensuring communication effectiveness in the long term.

The research results can be used for further scientific studies and in practical activities of Ukrainian industrial enterprises.

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