



**I.L. Litovchenko, I.A. Shkurupskaya**

**INVESTIGATION OF THE INFLUENCE OF CONSUMER BEHAVIOR  
ON THE FORMATION  
OF INTEGRATED MARKETING COMMUNICATIONS**

**И.Л. Литовченко, И.А. Шкурупская**

**ИССЛЕДОВАНИЕ ВЛИЯНИЯ ПОВЕДЕНИЯ ПОТРЕБИТЕЛЕЙ  
НА ФОРМИРОВАНИЕ  
ИНТЕГРИРОВАННЫХ МАРКЕТИНГОВЫХ КОММУНИКАЦИЙ**

---

This study is devoted to the theoretical and practical basis for creation of the integrated marketing communication (IMC) for enterprises at the B2B markets. Historical stages of integration of marketing communications, as well as the reasons for the transition to the IMC are considered. Analysis of multiple formulations revealed a trend in the development of the concept in the context of achieving the communicational, economic and social goals of the IMC. A main feature of the integrated marketing communications is a binary of their nature: combining channels and means of promotion – as exists in the real and in the virtual economy (due to Internet space). In our view, trends in the development of integrated marketing communications are identified. We have identified 15 motives acquisition of solar energy conversion equipment (as particular example of product in B2B market) to study their influence to the formation of integrated marketing communications. The objective structure of the purchasing reasons for recreational, agricultural and building segments of B2B-consumers in Ukraine was established on the basis of expert assessments. However, there are certain barriers to the willingness of consumers to current and future overpayments savings by using solar energy. The separation of the target audience on the scope of B2B and B2C allows arguments to rank the importance of various marketing activities within the IMC.

INTEGRATED MARKETING COMMUNICATION; CONSUMER BEHAVIOR AT B2B MARKETS; PURCHASING MOTIVES AT THE MARKET OF INDUSTRIAL PRODUCTS; UKRAINIAN SOLAR ENERGY CONVERSION EQUIPMENT MARKET.

Исследование посвящено теоретическим и практическим основам для создания интегрированных маркетинговых коммуникаций (ИМК) для предприятий на B2B рынках. исследованы теоретические подходы основ концепции интегрированных маркетинговых коммуникаций, предложено уточнение предмета ИМК, сделан акцент на бинарности их происхождения (реальной и виртуальной), а также на триединой цели применения ИМК предприятием. Рассмотрены исторические стадии интеграции маркетинговых коммуникаций, а также причины перехода к ИМК. Изучены особенности поведения потребителей в контексте достижения коммуникативных, экономических и социальных целей ИМК. Главной особенностью интегрированных маркетинговых коммуникаций является дуальность их природы: объединение каналов и средств продвижения, которые существует в реальной и в виртуальной экономике (благодаря интернет-пространству). Определены тенденции в развитии интегрированных маркетинговых коммуникаций. Для изучения влияния на формирование интегрированных маркетинговых коммуникаций определено 15 мотивов приобретения гелиоэнергетического оборудования (по преобразованию солнечной энергии) – в качестве конкретного примера продукта на рынке B2B. Наиболее значимые из них: цена покупки, доступность солнечной энергии, цена эксплуатации альтернативного товара, финансовые выгоды (налоговые льготы, зеленый тариф). Объективная структура мотивов покупки для B2B-потребителей на рекреационном, сельскохозяйственном и строительном сегментах в Украине создана на основе экспертных оценок. Тем не менее, существуют определенные барьеры на пути готовности потребителей экономить на нынешних и будущих переплатах за счет использования солнечной энергии. Разделение целевой аудитории на сферы B2B и B2C создает предпосылки для ранжирования важности различных маркетинговых мероприятий в рамках ИМК.

ИНТЕГРИРОВАННЫЕ МАРКЕТИНГОВЫЕ КОММУНИКАЦИИ; ПОВЕДЕНИЕ ПОТРЕБИТЕЛЕЙ НА РЫНКАХ B2B; МОТИВЫ ПРИОБРЕТЕНИЯ НА РЫНКЕ ПРОМЫШЛЕННОЙ ПРОДУКЦИИ; УКРАИНСКИЙ РЫНОК ГЕЛИОЭНЕРГЕТИЧЕСКОГО ОБОРУДОВАНИЯ.

---

*Introduction,* Market penetration requires a company to have connections, contacts and relationships both in the micro- and macro-

marketing space, which is to say, establishing marketing communications and developing a communicative policy strategy is necessary.

Unorganized use of various tools of marketing communications, such as advertising, sponsorship, sales promotion, and PR-activities is inefficient for the company. The best influence on the consumer can be achieved through an integrated marketing communications coverage of the company's target audience. The ability to identify customer needs, to identify the motives for acquisition of goods or services, as well as to highlight features in the purchase decision is important for the understanding of consumer behavior. Marketers need to understand, explain and predict the desired behavior of the consumer. Knowledge of consumer behavior is a prerequisite for establishing effective marketing communications for any organization and has certain features in the industrial market. Thus, it is necessary to combine different forms of promotion into a single coherent program of integrated marketing communications.

*Literature review.* General questions of the theory and practice of marketing communications have received considerable attention in the works of foreign authors such as the following: A. Batre, J. Burnet, E. Blake, E. Bond, E. Dihtl, Kotler, F-F Lamb, K. Larson, J. Myers, S. Moriarty, L. Percy, J. R. Rossiter, William Wells, R. Fizdeyl, T. Harris. American (Robert Lauterborn, Stanley Tannenbaum and Don Schultz [1]) and English (Chris Barry, Alan Pulford, Paul Smith [2]) scientists have made the most significant contributions to the development and creation of integrated marketing communications paradigm, being the first to use a systematic approach in the development of policies to promote enterprises. Its essence is the integrated use of marketing communication tools to maximize the impact on the consumer. Features of integrated marketing communications were summarized by Pickton and Broderick and represented in the 4 C model, which includes the following elements [3]: Coherence; Consistency; Continuity; Complementary.

A.V. Arlantsev, E.N. Golubkov, N.I. Melentiev, A.V. Panko, E.V. Popov, A.A. Romanov, V.I. Cherenkov and F.I. Sharkov should be mentioned among the Russian authors studying this area of marketing communications.

Scientific studies of Ukrainian scientists as A.V. Voychak, S.M. Il'yashenko, T.I. Lukyanets,

A.F. Pavlenko, T.A. Primak, G.G. Pocheptsov and E.V. Romat werededicated to theoretical and practical problems of integrated brand communications, in particular components of the IMC, their organization and planning.

Authors such as Smith, Barry, and Pulford [4], Garkavenko [5], Sotnikov [6], and Romat [7] emphasize in their definitions that the IMC is a consistent activity in managing the company's promotion, and list its separate stages: planning, selection, implementation, analysis, etc. In our view, a disadvantage of a functional approach to the definition of the IMC is the shift in focus from the object and the subject of the IMC to the promotion process that reflects the essence of the IMC only partially.

In terms of defining the object of the IMC, Smith, Barry and Pulford [4], Kotler [8], Abrahamian [9], Romanov and Panko [10] Golubkov [11], and Romat [7] identify a combination and interaction of elements/resources/tools of communication within the marketing policy to promote the enterprise. At the same time, Smith [2], Burnett and Moriarty [12], Schultz, Tannenbaum and Lauterborn [1], Dowling [13], Sharkov [14], and Primak [15] emphasize that the combination of IMC encompasses not only forms of communication, but also elements of the marketing mix. In our opinion, defining the subject of the IMC in this manner corresponds to the modern trends of marketing activities, expanding the application prospects of IMC for enterprises.

We would particularly like to highlight the definition of the IMC by Stelmach [16], since it emphasizes that the scope of the IMC involves not only real but the Internet environment, and also points to the interactive nature of the IMC, which is a notable advantage of this concept of promotion.

In our opinion, one of the most fundamental views on the IMC has been expressed by Cherenkov, who in his work [17] considers the IMC as a stage in the development of the marketing theory, calling it a global integrated communication marketing whose era has lasted since the early 1990s up until the present time. The communicative component of the marketing mix (K-Mix) is central to modern marketing. The brand is the key to integrated marketing.

We have studied the theory and practice of the IMC in Ukraine in the industrial market. We have considered the modern theoretical directions and scientific schools in the problems of communication in industrial markets of innovative products, and provided the main provisions of the scientific and methodical approach to the formation of an integrated marketing communications program for the promotion of solar technologies by Ukrainian [23].

**Formation of the concept of integrated marketing communication (IMC)**

The emergence of the concept of integrated marketing communications (IMC) in the 1990s has led to a revolution in the field of promotion, as much as the introduction of the concept of the marketing mix in the 1960s completely changed the practice of marketing [18]. While studying the literature dedicated to this issue, we have found that, in spite of the importance of integrated marketing communications, most of the works concentrated on the general theory of marketing communications or its components, such as public relations or advertising.

Integrated Marketing Communications is also called TTL-communications (from the English through-the-line).

All the definitions use the concepts of «association», «combination», «coordination», «interaction» in the same context of integration with respect to various means of communication. The differences lie in to the goals to which communication tools are used and in their structure.

Thus, to date, there is no single approach to the scientific definition of IMC. Analysis of multiple formulations revealed a trend in the development of the concept in the context of achieving the goals of the IMC as economic and social communication (Fig. 1).

In our opinion, it is necessary to focus on the triple purpose of the IMC, as it reflects their essence (Fig. 2). Achieving communication efficiency provides high-quality , transmission of information about the promoted object to the target audience with minimal losses [19]. The main criteria are to increase the efficiency of the communication of knowledge about the product (or brand or personality) when prompted and unprompted, increasing their fame, the purchase intent, as well as direct assistance in purchasing. Unfortunately, communication effectiveness is difficult to measure objectively, as to date there is no universal definition of the scale of human emotions. Having analyzed the available methodological approaches to communicative efficiency of the IMC complex, we can conclude that communication effectiveness is in the positive dynamics of communication effects caused by contact between the consumer and the IMC complex [7].

Achieving economic efficiency means that a company is receiving benefits in the form of profits as a result of introducing a set of IMC measures. Indicators such as sales growth, profitability, net income, net income, etc., can also serve as economic efficiency parameters. All these indicators can be expressed numerically, so there are many mathematical and economic instruments to measure them. The key factor is that the amount of money spent on implementing a set of IMC should be less than the inflow of net income to be received by the company from customers. The problem is that a high communication efficiency may be accompanied by low economic efficiency, which is often associated with delayed (spill-over) effect and the effect of depreciation, therefore, there is no definite answer about the economic effectiveness of the IMC complex.

Communication efficiency:	Economic efficiency:	Social efficiency:
<ul style="list-style-type: none"> <li>• strengthening the positive image</li> <li>• clarity, consistency and maximizing the impact of communication programs;</li> <li>• brand positioning;</li> <li>• ensuring clarity, consistency and maximum communication impact;</li> <li>• promoting brands, services, or companies to support single positioning;</li> </ul>	<ul style="list-style-type: none"> <li>• achieving maximum economic efficiency;</li> <li>• getting added value provided by the general plan of IMC;</li> <li>• ensuring profit margins and market capitalization of the company;</li> </ul>	<ul style="list-style-type: none"> <li>• forming positive public opinion</li> <li>• ensuring maximum impact on the target audience;</li> <li>• forming stable long-term relationships with market participants and the strategic objectives of the enterprise;</li> <li>• establishing (bilateral) relations with the target audience.</li> </ul>

Fig. 1. Objectives of integrated marketing communications

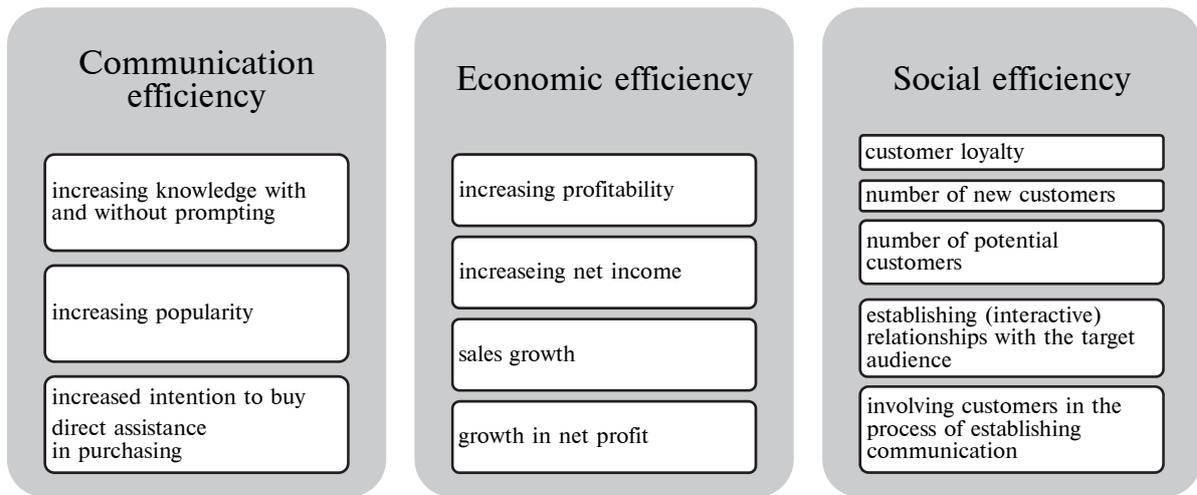


Fig. 2. Indicators of IMC efficiency depending on the objectives

Social benefits obtained by the company as a result of the IMC means achieving a sustainable dialogue with the target audience. Thus, we go beyond the usual boundaries of achieving customer loyalty by studying their national and cultural characteristics, social status and other indicators of consumer behavior, and attain a high level of consumer involvement into the process of interaction with the company. Online tools such as web portals, social networks, forums, chat rooms, live journals, mobile applications serve to implement interactive marketing communications. As a result, the firm receives information about the number of new and potential customers, as well as about the reactions of the target and other audiences to the influences exerted on them via the IMC. Consequently, marketers use a set of integrated marketing communications to prepare «communication on request» in order to better meet expectations and tastes of consumers.

To date, communication, e.g., round the clock customer support via remote access is a huge advantage when making purchasing decisions, particularly in the virtual space. Thus, the proportion of the use of certain traditional channels of communication is reduced due to the increase in the share of Internet communications. Social efficiency of the company’s IMC can be measured by traditional sociometric and mediometric indicators and methods of analysis.

A feature of the integrated marketing communications is their binary nature: combining channels and means of promotion

both in the real and in the virtual economy (on the Internet) [26]. Fig. 3 shows that the company can deploy marketing communications in both the real and the virtual space separately, independently and integrated in both areas (zone of intersection). The most common tools of marketing communication in a real environment are various types of advertising, public relations, sales promotion activities, personal selling, trade shows, direct marketing. The most relevant specific tools in the virtual environment are now search engine optimization (SEO), social media optimization (SMO), social media marketing (SMM), banner and contextual advertising, forums and webinars. Using parallel and integrated marketing communication tools involves developing the media mix. Using media of various types (TV, press, radio, outdoor advertising, Internet, etc.) within the same IMC program makes it possible to minimize marketing costs and increase the efficiency of the campaign to promote solar technology.



Fig. 3. The binary nature of the IMC

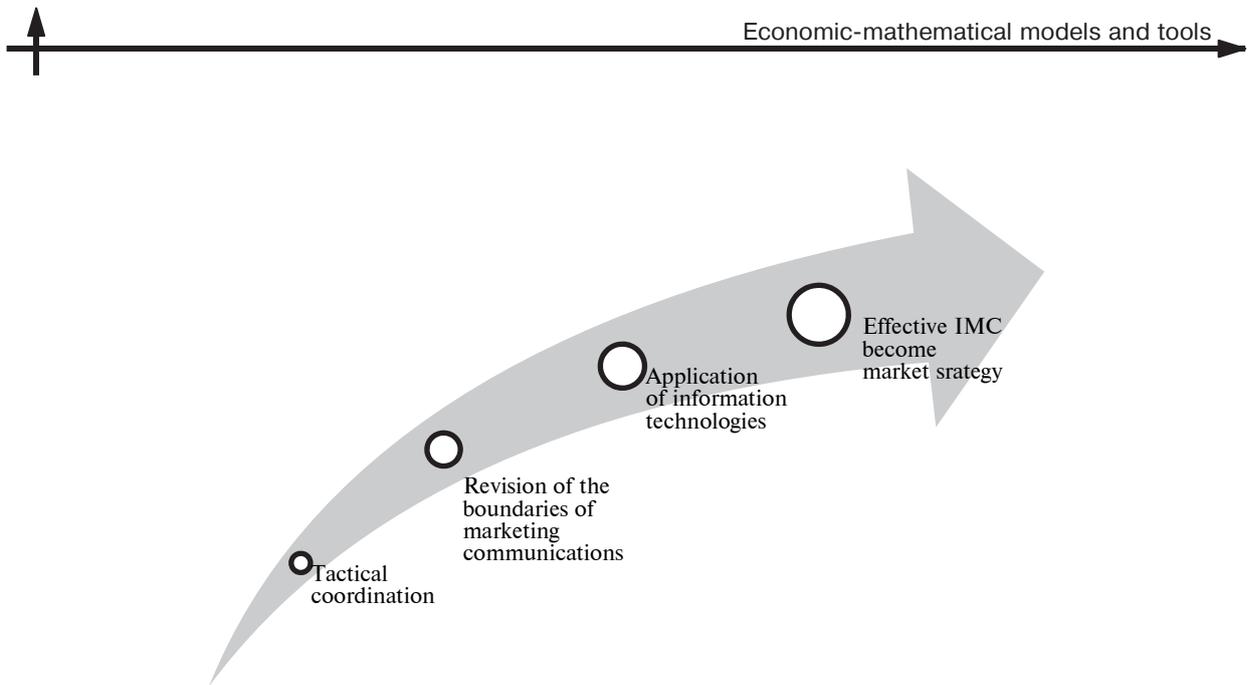


Fig. 4. Historical stages of integration development of marketing communications

The greater the intersection of the marketing communication tools in the real and the virtual environments as part of the IMC, the greater the synergistic effect obtained by the company.

Based on the study, the authors propose the following definition:

**Integrated Marketing Communications is a combination of coordinated marketing activities specific to the object of promotion used to achieve communication, economic and social efficiency of the company's marketing activity, combining the real and the virtual environments.**

Unlike other definitions of IMC, this one takes into account any integration options of the marketing communication tools directly with each other (advertising, public relations agency, direct marketing, sales promotion), as well as with other components of the marketing mix (e.g., modernization of goods, pricing strategies, logistics schemes) and using specific online marketing tools.

Our definition of the IMC specifies the object of promotion, which may be a commodity, a trade mark, a brand, an identity, or a territory. IMC subjects, from our point of view, are the company about which potential customers should be informed, and the marketing specialist forming an IMC complex (who may be a representative of a third party or a part of the company's personnel).

Thus, the concept of the IMC has grown from a simple integration of communications that it implied in the early 1990s to the strategic

integration of marketing communications. As a matter of fact, the IMC make up a part of the company's strategy. Its basis is orientation towards the customers, as well as an understanding that not only planned communication, but also any actions of the employees carry a certain message to the stakeholders [20].

So, initially the possibilities of communicating with the consumer have been greatly limited. To date, these opportunities are much wider, and the number of communication tools is growing.

The first level of communication integration in the company involves the cross-operation of various specialists for planning and consolidation in the communications field.

At the second level, new ideas for improving communications emerge. For example, the personnel can be used not only for distributing marketing communications, but also as a target of the communication. The role of internal marketing is increasing.

At the third level, using information technology solutions such as databases for registering customer transactions allows businesses to interact with specific consumer groups instead of the average individual.

The objectives of companies at the fourth level of integration change. At this stage, the skill and ability to evaluate investments in a particular group of customers becomes more important than evaluating the sales growth as a result of the

advertising campaign. It is also important to use marketing communications to perform organizational and strategic directives.

This approach corresponds to the fourth level of the IMC which is the highest. Communications can be integrated at different levels: strategic, tactical, the level of business processes, educational, and other. At this stage, companies need to continuously monitor and evaluate the effectiveness of marketing communications.

According to many researchers, most companies today are at stages I and II by their integration of marketing communications [20], i.e.:

- the marketing of the company is focused more on the product than on the consumer. The company's main efforts in managing marketing communications are spent on coordination. It should be noted that it is often not observed even the messages sent to users through various media channels are not coordinated;

- the company is actively trying to understand what consumers want to hear or see, as well as when, where and through which media channels they want to receive messages. At this stage, the integration of marketing communications is dictated primarily by the needs of existing and potential customers.

Integration stages I and II do not involve the IMC becoming part of the overall strategy. However, these stages require a minimum tactical coordination of the communications. In addition, their role in the enterprise and in the achievement of the enterprise's strategic goals must be apparent to senior managers. To do this, a system for monitoring the effectiveness of the communication strategy needs to be developed.

The existing practices often show that one of the main obstacles for integration of marketing communications are poorly established communications between departments within the company. Departments often do not work cohesively in pursuit of their own goals, which complicates the process.

Organizational integration of the enterprise exists only to the extent that it is possible to provide a continuous exchange of information among its structural units [12] and their interaction in order to achieve common goals.

It should be noted that market development depends largely on the buyers with the increasing role of information technology among consumers. Because of the unpredictability of consumer

behavior, growing social problems in the society and increasing individualism, in most cases, the results of market research are losing their predicting effectiveness. Interactive means of disseminating information have to be used in order to achieve the most effective response to the demands of consumers, which leads to a new way of functioning of marketing communications.

Current market conditions and the level of development of information technologies determine the further development of the IMC theory. Modern research in this area, in particular, by Ulyanovskiy and Popov, are largely dedicated to the influence of globalization and the development of social consciousness in the IMC [21, 22].

Angus Deaton, awarded the nobel memorial prize in economic sciences in 2015, analyzes in his works the behavior patterns of consumers, questions of poverty and well-being of the population at the micro level. The public is interested in Deaton's research on how individual consumers make choices. The importance of this issue is manifested in the marketing activities of companies, as well as in the economic policy in general.

Thus, studying the behavior of customers makes it necessary to identify the motives, i.e., the reasons, preconditions, inducing certain actions that accompany the purchase. Information about the behavior of the company's consumer is crucial for developing an integrated marketing communications program, as it allows to choose the optimal combination of resources and communication channels, as well as their sources and carriers.

To develop the effective targeted program for the IMC of companies in the market of solar power equipment in Ukraine, ensuring the development of renewable solar energy sales, the specific factors of the behavior of Ukrainian consumers need to be taken into account. A key issue in the marketing activities of these enterprises is to identify the motives of consumers willing to voluntarily pay more for the energy produced directly from the sun. It should be emphasized that behavioral motives are somewhat different for different segments of the consumers of solar power equipment. We made an attempt to rank these motives for the existing customers in the market segments we identified through our marketing study (Tab. 1) [23].

Table 1

**Behavioral motives for purchasing solar energy conversion equipment.**  
(compiled by the authors from the materials of Refs. [25, 26])

№	Motives	Description
1	Cost of operating an alternative product	Price and availability of existing alternatives to solar energy. Alternatives are usually electricity or energy derived from fossil fuels (natural gas, oil, coal). Corresponds to the rates and the cost of the environmental damage caused.
2	Availability of solar energy	Is the resource available in the location under consideration? Corresponds to the number of sunny days and the power of insolation in a particular location. A relative quantity. This factor is considered in the assessment of market capacity.
3	Convenience	How hard and difficult is it to use solar stations?
4	Consumption culture	Directly related to environmental protection. Social impacts of solar power equipment depend on geographical conditions, political situation, and mentality.
5	Social responsibility	The ability to not only understand that solar energy can provide physical benefits (long or short), but also consider the full benefits of economies of scale resulting from collective use.
6	Efficiency of solar conversion systems	If the efficiency (COP) of the solar station increases, the number of parts of the installation and/or the size (area) of the installation shall be reduced. Value depends primarily on the physical and technical characteristics of the solar system and can vary from 30 to 70%.
7	Protecting the environment	Long-term benefits for the environment are in avoiding the use of fossil fuels and using solar energy instead to meet the challenges of global climate change, ozone depletion, deterioration of health and quality of life of the planet.
8	Awareness	Understanding that solar energy is available and can be used in household and industrial purposes. Usually achieved through advertising. Effective use of social advocacy communication channels.
9	Price of purchasing	The cost of solar energy for the consumer, taking into account the fiscal benefits (if provided by the government).
10	Research funding	The scale of financial contributions for studying «solar technology». Depends on the state budget policy and therefore the relevance of the application in a given country. Funding for research may lead to lower prices on converted solar energy and increase the efficiency of solar stations.
11	Risk	Are tax incentives and long-term benefits (savings) guaranteed? How often are such rules revised by the government? Guaranteed market for solar energy, the initial price of which is supported artificially, to be built by the government to promote investment.
12	Financial benefits (savings)	Financial benefits from the use of solar energy through solar power plants that are not included in the price. Includes tax credits, annual tax breaks, reimbursement of the cost of environmental damage, the cost of traditional energy sources which is not used (preserved) through the use of solar energy.
13	Stable economy	Benefits of reducing the dependence on imported energy and the formation of a self-sufficient, independent energy economy.
14	Appearance	Aesthetic component of solar power equipment.
15	Changes in price	The price of a solar station can decrease as well as increase. In the absence of price fluctuations in the case of steadily rising tax benefits, it is possible to achieve maximum savings.

Table 2

**The significance of individual motifs for purchasing solar energy conversion equipment for different segments of consumers in Ukraine**  
(compiled by the authors based on expert judgment [25])

№	Motive	Significance (weight in points – on a scale from 0 to 100%)				
		Recreational complex	Agricultural sector	Building	Social services	Private consumers
1	Cost of operating an alternative product	10	10	10	15	15
2	Availability of solar energy	20	20	20	20	20
3	Convenience	0	0	0	0	5
4	Consumption culture	0	0	0	2	2
5	Social responsibility	5	5	5	3	3
6	Efficiency of solar conversion systems	7	7	7	5	5
7	Protecting the environment	0	0	0	0	5
8	Awareness	3	3	3	5	5
9	Price of purchasing	25	25	25	25	25
10	Research funding	0	0	5	5	0
11	Risk	5	5	5		
12	Financial benefits (savings)	15	15	15	10	10
13	Stable economy	0	10	0	10	0
14	Appearance	5	0	0	0	5
15	Changes in price	5	0	5	0	0
	Total points	100	100	100	100	100

Tab. 1 shows 15 motives of consumer behavior in the market of solar power equipment in Ukraine. These reasons can be divided into three groups according to their functional value for the customer: economic (the cost of operating an alternative product, efficiency of solar conversion systems, price, financial benefits (savings), changes in price); social (availability of solar energy, consumption culture, social responsibility, protecting the environment, awareness, risk, stable economy), aesthetic (convenience, appearance). Studying these consumption motives directly in the market segments will allow to find an individual approach to the construction of the IMC program for each client. Thus, at present the market of Ukrainian solar power equipment enterprises should focus primarily on the following consumer segments when forming the IMC complex:

1. Recreational complex, i.e., enterprises of the recreational industry and catering;
2. Building, i.e., construction companies involved in the construction of luxury housing;

3. Agricultural sector;
4. Social services;
5. Private consumers, i.e., owners of private residences with above-average incomes.

We propose a structure of the motives for each of the customer segments in Ukraine based on the method of expert evaluations (Tab. 2).

It is logical that different customer segments are characterized by some combination of the motives for purchase. However, despite the significant difference between the individual segments, some general trends can be traced. For example, the most significant (10 to 25%) motives for acquisition absolutely for all target groups of consumers in Ukraine are the following:

1. Price.
2. Availability of solar energy.
3. Cost of operating an alternative product.
4. Financial benefits (savings).

You can also trace some similarity in the distribution structure of motives between the recreational, agricultural and building segments (Tab. 3).

Table 3

**Comparative characteristics of different customer segments based on the purchase of solar energy conversion equipment in Ukraine [25]**

№	Differences	B2B Market	B2C market
1	Segments	1. Recreational Complex 2. Agricultural sector 3. Building	1. Social services 2. Private customers
2	Purpose	Commercial	Household
3	Motives of purchasing	1. Price (25 %) 2. Availability of solar energy (20 %) 3. Financial benefits (15 %) 4. Cost of operating an alternative product (10 %) 5. Efficiency of solar energy conversion equipment (7 %) 6. Risk (5 %)/Social responsibility (5 %)	1. Price (25 %) 2. Availability of solar energy (20 %) 3. Cost of operating an alternative product (15 %) 4. Financial benefits (10 %) 5. Awareness (5 %) / Efficiency of solar energy conversion equipment (5 %) 6. Social responsibility (5 %)

This is not surprising, because all of these consumers are enterprises governed by the market trends for B2B organizations. The «business to business» segment corresponds to more organized markets where a certain number of contractors are operating under the terms agreed between them. In this case, market transparency is key to engaging in business activities of clean environmentally friendly energy. If the company is committed to corporate responsibility, the brand with «green» energy can make it reliable in the eyes of consumers. Compared to individual consumers, they are less affected by tariffs, and more by the material components, for example, the size of the savings, efficiency of the solar station (which is proportional to the price of the solar energy converted), risks, possible price changes. The use of innovative «solar» technologies demands something more than simple awareness from a company; the solar energy equipment must be installed reasonably based on investment and financial performance.

There is also some similarity to be observed in the structure of the motives of individual private consumers and the social sphere (Tab. 3). This can probably be attributed to the large influence of social factors: consumer of these segments use solar energy for domestic and not commercial purposes. Unlike other segments, their important motives include consumption culture, convenience, environmental protection, which is also associated with the direct

psychological impact on the person using the solar thermal system. A combination of both rational motives, and intangible assets (for example, brand «reputation», which plays an important role in consumer decisions) is typical for the segment of individual customers (retail market). The factor of brand reputation is the most sensitive to marketing influences for retail customers.

However, when it comes to the acquisition of solar power plants in the Ukrainian market, there are, unfortunately, certain barriers to the willingness of consumers to current overpayments and future savings through using solar energy which must be taken into account in the formation of the IMC. The main factors hindering the development of the solar energy market include [27]:

- Lack of confidence in the system,
- Conservative preference of the consumers
- Lack of free applications for the consumer.

Marketing tools such as the IMC can be effectively used to overcome these barriers, e.g., by introducing the so-called «green» mandates, branding (creating strong brands) and joint communications with «green» brands such as Greenpeace and the World Wildlife Fund. The abundance of brands on a small market leads to confusion rather than transparency, and reduces consumer confidence. Overcoming the conservatism barrier requires certain small ‘sacrifices’ from the average consumer, and is achieved by small increases in price and by high

quality of services, correctly created and implemented by the IMC. This implies that the sellers of solar installations must first and foremost understand the preferences of the potential buyers, and only then form pricing and communications. Free extras (calendars, coupons, discounts, and similar tools) demonstrate the transparency of the market and allow consumers to see exactly what they are investing in.

We have had the opportunity to test our own software developed for integrated marketing communications with enterprise-level customers at the state-run STANKOSERT science and technology center, with the goal of promoting solar technology. We have revealed potential customers from the existing customers of STANKOSERT.

Target audience (customers) are Ukrainian enterprises with high energy consumption, in need of updating their heat-supply equipment. The IMC program should be oriented at the target audience of STANKOSERT's consumers who are interested in buying solar technology to reduce the level of costs for traditional energy. Thus, the financial benefits, the efficiency of the solar equipment, reduced risks, and protection of the environment are the primary motivation for the acquisition of this equipment. Therefore, the type of consumption in these solar installations is commercial use in the B2B market. The choice of marketing communications tools included in

the list of the IMC program was due to the engagement level of STANKOSERT's consumers regarding solar technology specifications.

Taking into account the above features of the potential buyers, we have selected the following elements of the media mix (Fig. 5):

- Direct marketing:
  - personal sales;
  - mailing lists;
  - introduction of CRM-system;
- Public relations:
  - conferences;
  - workshops;
  - publications;
  - TV broadcasts;
  - social projects;
- Exhibitions:
  - industrial
  - specialized;
- Outdoor advertising:
  - branding billboards;
  - street TV;
  - branding posters;
- TV commercial:
  - specialized business channels;
  - Odessa's regional channels;
- Internet communication:
  - Support and optimization;
  - Contextual advertising;
  - Participation in the discussion forums.

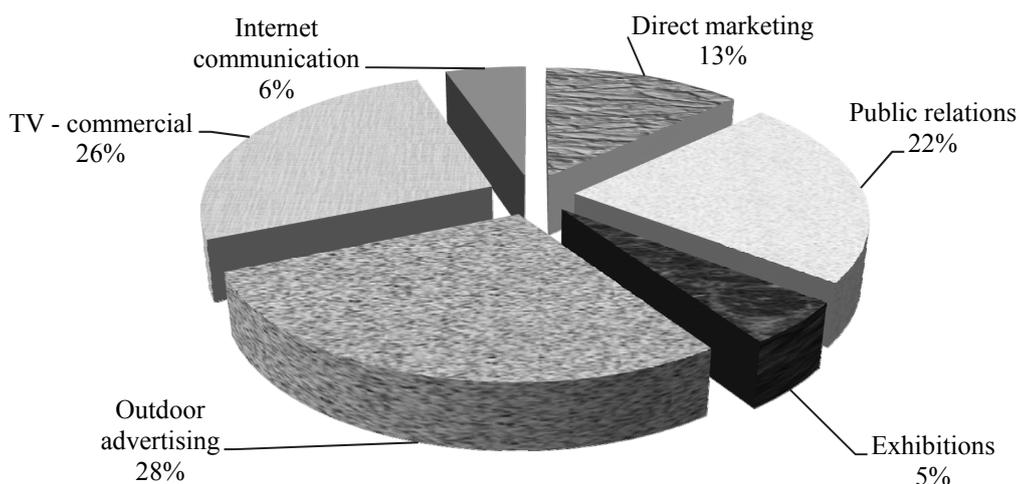


Fig. 5. Shares of various marketing communications in the budget of the IMC program for STANKOSERT [25]



The relevance of implementing the complex of integrated marketing communications is due to several reasons:

- The reduction in the effectiveness of certain tools of the marketing communication policy, including due to high costs (for example, television advertising). Using the IMC complex allows to combine the budgets needed to promote a product via different channels of communication, reducing the cost for each of them. This way the company can achieve its aim effectively, as well as deal with fewer partners, delegating to them unified groups of complex solutions.

- The rapid growth of the information flow and the marketing communications technologies under the influence of the Internet. The emergence of new distribution channels, interactive media, the development of specialized media requires making adjustments and selecting different priorities in the company's strategy of marketing communications.

- The growing individualization of consumption and, consequently, a transition to two-way interactive marketing communications require involving both the consumer and the producer. In such circumstances, hard-to-control sources of influence and information dissemination (independent media, community social networks, business partners, family and friends, experts, state and public organizations, monitoring the quality of products) have started to play an increasingly important role to play.

- Oversaturation of the market with similar services and goods produced in a highly competitive environment by identical technologies. Such a market situation is a challenge for the marketing specialists as they need to be creative in using new approaches and promotion technologies to position a particular product/service/brand in the minds of the target audience.

Generally, in our view, the following trends in the development of integrated marketing communications should be identified:

- 1) extended use of individual marketing strategies and marketing relationships within the IMC;

- 2) extended use of new tools of marketing communications, as well as their coordination on the Internet;

- 3) distribution of responsibility (outsourcing): transfer of the rights to manage the integrated marketing communications complex to an outside organization specializing in marketing;

- 4) orientation of coordinated communicative messages to several different audiences with sequential positioning of the product/service / brand;

- 5) using the advances in psychotechnologies including NLP for creating communication messages;

- 6) evaluating the effectiveness of the integrated marketing communications complex.

Communications can be integrated both at the strategic and tactical levels. At this stage the company needs to continuously monitor and evaluate the effectiveness of marketing communications.

#### *Conclusions, Implications and Further Research*

1. Studies have shown that there is no consensus on the definition of integrated marketing communications. We have identified the IMC, given the «integration» between the communication tools, the «integration» of the communication tools with other components of the marketing mix, «integration» of the communication tools in both areas of the company's activity – (in this case, the IMC arise in a new economic environment engendered by a combination of the real and virtual economies). We have taken into account and developed the three-component goal of the IMC: achieving communication, economic and social efficiency.

2. We have explored the historic stage of the integration of marketing communications and allocated 4 stages: tactical coordination, revision of the boundaries of marketing communications, using information technologies and proper integration of marketing communications into the company's strategy. Since the early 1990s, the concept of the IMC has evolved from simple communication integration to the level where the inclusion of the IMC is one of the basic elements of the business strategy.

3. The basis of the formation of the IMC is the focus on the target audience, with studying the motives of consumer behavior gaining a special importance. We carried out a marketing study of the companies selling solar energy

equipment in Ukraine, which resulted in identifying 5 demand segments: individual consumers (36%), recreation complex (28%), agriculture (16%), construction (12%) and social sector (8%). The motives for purchasing solar stations were revealed for these segments, the most important of them being the price, the availability of solar energy, alternative costs, and savings. The structure of such motives was determined individually for each segment.

4. In order to select specific marketing tools for promoting the solar technology via the IMC program between the selected segments of consumers, we identified differences in the usage goals and purchase motives. The obtained B2B and B2C market segments highlight the

importance of ranking various marketing activities within the IMC.

*Prospects for further research:* Forming an effective IMC complex for enterprises depends on the specifics of the enterprise and the characteristics of the environment in which it operates, and the characteristics of the consumer to whom they are targeting their production. Marketing specialists have remarked upon the increase in business interest in the emergence of new business models based on the IMC, based on some form of consumer behavior at both the real and the virtual markets. Such models provide new opportunities for interaction with the customer and increase the company's competitiveness in the market.

## REFERENCES

1. **Schultz D.E., Tannenbaum S., Lauterborn R.F.** The new paradigm of marketing. Integrable marketing communications. M.: Infra-M, 2004, p. 19–21. (rus)
2. **Smith P.** Marketing Communications. Integration achievements: a monograph. Moscow, 1993, pp. 30–31. (rus)
3. **Pickton D., Broderick A.** Integrated Marketing Communications. Financial Times Pearson Education Limited, 2005. 650 p.
4. **Paul Smith, Chris Barry, Alan Pulford.** Communications Strategic Marketing». Trans. from English. Ed. prof. LF Nikulin. Moscow, Unity-Dana, 2001. 415 p. (rus)
5. **Garkavenko S.S.** Marketing. Pidruchnik. Kiev: Libra, 2004. 712 p.
6. **Sotnikov E.A., Zykov M.E.** Integrated marketing communications as a competitive advantage of the company. *Bulletin OryolGIET*, 2009, no. 1-1 (7), pp. 125–133. (rus)
7. **Romat E.V., Senderov D.V.** Advertising. Practical Theory. 9th ed. St. Petersburg, Peter, 2016. 554 p. (Series «Standard of third generation. Textbooks for schools»). (rus)
8. **Kotler.** Philippe Principles of Marketing. Trans. with angl. E. Solovyov. 4th ed. Moscow, Business Book, 1995. 702 p. (rus)
9. **Abrahamian E.** Promotion as a modern marketing communication. *Marketing Communications*, 2001, no. 3, p. 21. (rus)
10. **Romanov A.A., Panko A.V.** Marketing; Communications. Moscow, Eksmo, 2006. 432 p. (rus)
11. **Golubkova E.N.** Marketing Communications. Moscow, Finpress, 2003. 256 p. (rus)
12. **Burnet J., Moriarty S.** Marketing Communications: an integrated approach. Translated from English. Ed. S.G. Bozhuk. St. Petersburg, Peter, 2001. 864 p. (rus)
13. **Dowling G.** Reputation of the company: the creation, management, evaluation effectiveness: Trans. with angl. M.: IMAGE-Contact; Infra-M, 2003. 368 p. (rus)
14. **Sharkov F.I.** Integrated communications: advertising, public relations, branding: Textbook. (rus)
15. **Primak T.O.** Zmist ta znachennya integrovanih marketingovyh komunikatsiy: sinergichny efekt. *Problems of science*, 2002, no. 7, pp. 36–44.
16. **Stelmach A.A.** Interaktivni marketingovi komunikatsii in menedzhmenti pidpriemstva. Kiev: Reklamediya, 2010. 312 s. (rus)
17. **Cherenkov V.I.** The evolution of marketing theory and the transformation of the dominant paradigm of marketing. *Bulletin of St. Petersburg State University*, ser. 6, is. 2 (no. 16). (rus)
18. **Schultz D.** Integrated Marketing Communications. St. Petersburg, 2005. URL: <http://cfin.ru/> free. Caps. with the title. Screen, p. 24.
19. **Gabidulin E.M., Pilipchuk N.I.** Lectures on Information Theory. Moscow, MIPT, 2007. 214 p.
20. **Blyde Jim.** Marketing communications: what? How? Why? Translated from English. Dnepropetrovsk, Balance Club, 2004. 368 p., p. 335.
21. **Ulyanovskiy A.** Marketing Communications: 28 tools millennium. Moscow, Eksmo, 2008. 432 p., pp. 24–25. (rus)
22. **Popov N.V.** Integrated marketing communications in the information society. *Biznesinform. Economy: Management and Marketing*, 2010, no. 4(3), pp. 58–69, 60–63. (rus)

23. **Litovchenko I.L., Shkurupskaya I.O.** Integrated marketing communications in solar energy conversion equipment market. Monograph. Kiev, Naukova Dumka, 2015. 211 p. (rus)

24. **Advanced Modeling of Renewable Energy Market Dynamics:** M. Evans, R. Little, K. Lloyd, G. Malikov, and G. Passolt, D. Arent, B. Swezey, and G. Mosey – report Operated for the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy by Midwest Research Institute, 2007.

25. **Renewable Energy Policies and Market Developments:** A.L. van Dijk, L.W.M. Beurskens, M.G. Boots, M.B.T. Kaal, T.J. deLange, E.J.W. van Sambeek, M.A. Uytterlinde – report of projec tunder the programme ‘Energy, Environment and Sustainable Development’ – TheREMAC 2014.

26. **Litovchenko I.L.** Marketing v usloviakh dual'nosti sovremennogo promyshlennogo rynku. *Naukovii visnik Khersons'kogo derzhavnogo universitetu. Seriya: Ekonomichni nauki.* 2015. № 10. Ch. 3. S. 60–63.

## СПИСОК ЛИТЕРАТУРЫ

1. **Шульц Д.Е., Танненбаум С.И., Лаутерборн Р.Ф.** Новая парадигма маркетинга. Интегрируемые маркетинговые коммуникации, М.: Инфра-М, 2004. С. 19–21.

2. **Смит П.** Маркетинговые коммуникации. Интеграционные достижения: моногр. М., 1993. С. 30–31/

3. **Pickton D., Broderick A.** Integrated Marketing Communications. Financial Times Pearson Education Limited, 2005. 650 p.

4. **Пол Смит, Крис Бэрри, Алан Пулфорд.** «Коммуникации стратегического маркетинга»: пер. с англ. / под ред. проф. Л.Ф. Никулина. М.: Юнити-Дана, 2001. 415 с.

5. **Гаркавенко С.С.** Маркетинг. Підручник. Київ: Лібра, 2004. 712 с.

6. **Сотникова Е.А., Зыкова М.Е.** Интегрированные маркетинговые коммуникации как конкурентное преимущество компании // Вестник ОрёлГИЭТ. 2009. № 1-1(7). С. 125–133.

7. **Ромат Е.В., Сендеров Д.В.** Реклама. Практическая теория. 9-е изд. СПб.: Питер, 2016. 544 с. (Серия «Стандарт третьего поколения. Учебники для вузов»).

8. **Котлер Ф.** Основы маркетинга / пер. с англ. Е. Соловьева. 4-е изд. М.: Бизнес-Книга, 1995. 702 с

9. **Абрамян Э.** Promotion как современная маркетинговая коммуникация // Маркетинговые коммуникации. 2001. № 3. С. 21.

10. **Романов А.А., Панько А.В.** Маркетинговые коммуникации. М.: Эксмо, 2006. 432 с.

11. **Голубкова Е.Н.** Маркетинговые коммуникации. М.: Финпресс, 2003. 256 с.

12. **Бернет Дж., Мориарти С.** Маркетинговые коммуникации: интегрированный подход: пер. с англ. / под ред. С.Г. Божук. СПб.: Питер, 2001. 864 с.

13. **Даулинг Г.** Репутация фирмы: создание, управление, оценка эффективности: пер. с англ. М.: ИМИДЖ-Контакт; Инфра-М, 2003. С. 368

14. **Шарков Ф.И.** Интегрированные коммуникации: реклама, паблик рилейшнз, брендинг: учеб. пособие.

15. **Примак Т.О.** Маркетингові комунікації в систем і управління ринковою діяльністю підприємства.

16. **Стельмах А.А.** Интерактивные маркетинговые коммуникации в менеджменте предприятия. Киев: Рекламедия, 2010. 312 с.

17. **Черенков В.И.** Эволюция маркетинговой теории и трансформации доминирующей парадигмы маркетинга // Вестник СПб университета. Сер. 6 Вып. 2 (№ 16).

18. **Шульц Д.** Интегрированные маркетинговые коммуникации. СПб., 2005. URL: <http://cfin.ru/> свободный. Загл. с титул. Экрана. С. 24.

19. **Габидулин Э.М., Пилипчук, Н.И.** Лекции по теории информации. М.: МФТИ, 2007. 214 с.

20. **Блайд Джим.** Маркетинговые коммуникации: что? как? почему? Пер. с англ. Днепропетровск: Баланс-Клуб, 2004. 368 с.

21. **Ульяновский А.** Маркетинговые коммуникации: 28 инструментов миллениума. М.: Эксмо, 2008. С. 24–25.

22. **Попова Н.В.** Интегрированные маркетинговые коммуникации в условиях информатизации общества // Бизнесинформ. Экономика: Менеджмент и маркетинг. 2010. № 4(3). С. 58–69, 60–63.

23. **Литовченко И.Л., Шкурупская И.А.** Интегрированные маркетинговые коммуникации предприятий на рынке гелиоэнергетического оборудования: моногр.. Київ: Наукова думка, 2015. 211 с.

24. **Advanced Modeling of Renewable Energy Market Dynamics:** M. Evans, R. Little, K. Lloyd, G. Malikov, and G. Passolt, D. Arent, B. Swezey, and G. Mosey – report Operated for the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy by Midwest Research Institute, 2007.

25. **Renewable Energy Policies and Market De-**

velopments: A.L. vanDijk, L.W.M. Beurskens, M.G. Boots, M.B.T. Kaal, T.J. deLange, E.J.W. van Sambeek, M.A. Uytterlinde – report of project under the programme ‘Energy, Environment and Sustainable Development’ – TheREMAC 2014.

26. **Литовченко И.Л.** Маркетинг в условиях дuality современного промышленного рынка // Науковий вісник Херсонського державного університету. Серія: Економічні науки. 2015. № 10. Ч. 3. С. 60–63.

---

**SHKURUPSKAYA Irina A.** – Marketing department, Odessa National Economic University.  
65082. Preobrazhenskaya str. 8. Odessa. Ukraine. E-mail: irina.shkurupskaya@gmail.com

**ШКУРУПСКАЯ Ирина Александровна** – преподаватель кафедры «Маркетинг» Одесского национального экономического университета, кандидат экономических наук.

65082, ул. Преображенская, д. 8, г. Одесса, Украина. Тел.: +380674830163. E-mail: irina.shkurupskaya@gmail.com

**ЛИТОВЧЕНКО Irina L.** – Odessa national economic university.

65082. Preobrazhenskaya str. 8. Odessa. Ukraine. E-mail: E-mail: irinatigrovna@mail.ru

**ЛИТОВЧЕНКО Ирина Львовна** – заведующий кафедры «Маркетинг» Одесского национального экономического университета, доктор экономических наук.

65082, ул. Преображенская, д. 8, г. Одесса, Украина. Тел.: +380677951556. E-mail: irinatigrovna@mail.ru

---