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FUTURE MARKETING IN B2B SEGMENT: INTEGRATING ARTIFICIAL INTELLIGENCE INTO SALES MANAGEMENT

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ABSTRACT

The technological phenomenon of artificial intelligence transforms B2B marketing and approaches to the formation of product value, sales and service. The case study allowed the author to examine and summarize the experience of large companies in integrating artificial intelligence into the sales management system, marketing and service. The article identified three problems of B2B companies' sales system: incomplete, unreliable data, lack of interaction between marketing and sales systems, dynamic growth of personal data volume. The study proves economic efficiency of the integration of artificial intelligence, which solves these problems. The future of marketing was identified based on the latest trends in the B2B segment. In the future, industrial marketing will be determined by the accuracy, reliability of customer information, a high level of accuracy of demand forecasts, a shortened cycle of trade agreements, increasing level of effectiveness of cooperation between marketing and sales departments. The integration of artificial intelligence into sales management will finally complete the era of digital marketing in the B2B segment and will be the beginning of the era of "human" marketing. The latter will mean that in the context of a regulated digital private B2B data market, marketing will be focused on human needs with an accurate predictable understanding of customer needs.

Introduction (Problem Statement). Sales management in the B2B segment is complicated by increasing pressure on the sales management system to ensure a sustainable income and at the same time a shortage of hard skills specialists. The latest trend determines the need for consistent training of salesmen (trainings, seminars, training videos), and is exacerbated by the difficulty of maintaining the required level of competence of professionals in terms of staff turnover. These problems are addressed through business digitization and the integration of artificial intelligence, which supports a sales management system to ensure a stable income.

In the glass industry, sales management problems are exacerbated by the continuous production cycle, seasonal demand for products that require long-term planning, low level of culture of consumption of glass products and knowledge of end consumers about the properties of glass. With a high turnover of sales professionals, these problems require technological solutions to automate sales processes. The integration of artificial intelligence into sales management can solve a number of problems in this area, including shifting the focus from the functional responsibilities of salesmen to optimizing interaction with the customer when concluding a transaction.

Review of recent research and publications. The use of data in industrial marketing is not a new phenomenon, but issue of digitalization of business models has recently studied more often [13]. The following works deal with B2B marketing: Brennan, R., Canning, L., & McDowell, R. (2020), Cortez, R. M., & Johnston, W.J. (2017), Gilmore, A., Gallagher, D., & Henry, S. (2007), Hall, S. (2017), Harker, M. J., & Egan, J. (2006), Lindgreen, A., Di Benedetto, C.A., Geersbro, J., & Ritter, T. (2018), Noori, B. and Hossein Salimi, M. (2005), Pandey, N., Nayal, P., & Rathore, A. S. (2020), Paschen, J., Kietzmann, J. and Kietzmann, T.C. (2019), Ritter, T., & Pedersen, C. L. (2020), Sharma, A. (2002), White T. (2019), Wise, R., & Morrison, D. (2000), Wright, L. T., Robin, R., Stone, M. & Aravopoulou, E. (2019).

Ritter, T., & Pedersen, C.L. [13] created the concept of "digitization capability" of B2B companies, and determined the development of the interaction of this ability of the company to ensure data-enabled growth. Technology and data have changed the value proposition of companies' products and the way they are sold. The use of applications based on technology and data, artificial intelligence began in 1935, and in 1956 the first conference on artificial intelligence was held in Dartmouth, USA. Thus, the research has dealt with the issue of "big data" and artificial intelligence in B2B marketing since the early 1950's of last century [13]. However, today, there is much more data than ever before thanks to access to powerful big data processing equipment that provides a high analytical ability to study consumer information.

Table 1. Stages of research of digitalization of B2B companies' business

	Stage 1	Stage 2	Stage 3	Stage 4
Period	Before 1990	1990-2000	2000-2010	After 2010
Phenomenon	Digital data	Digital platforms and communications	Increasing the efficiency of digitalization	Digital as a "new norm"
The main focus	Experimental	"Release" from intermediaries	Operation	Integration
The main activities of companies	Digital technologies are used as a new way of business development	Digital technologies provide communication with consumers through platforms or digital channels	Digital technologies optimize business flows to increase the efficiency of existing business processes	Digital technologies are widespread and accepted as a fact in business

Source: Ritter, T., & Pedersen, C. L. (2020) [13].

Research considers digitalization as a digitalization capability of B2B companies or as a digital way of value formation, value creation of a product (value propositions). In our article, we integrate these concepts and consider digitalization as an opportunity to provide a competitive advantage of the B2B companies to shape product value, product consumption culture, and facilitate the interaction of sales management system with the customer.
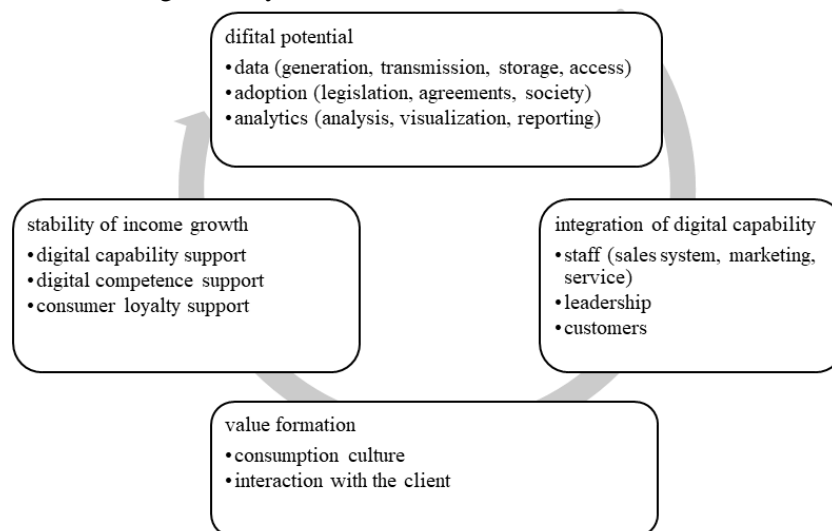

Fig. 1. Conceptual model of digital business model formation.
Source: supplemented by the author based on [13].

The article intends to forecast trends in B2B marketing in terms of integrating artificial intelligence into sales management.

The main objectives of the article are the following:

1. Studying the experience of international companies in sales management, integration of artificial intelligence and CRM, ERP systems.

2. Analysis of economic and financial effects of integration of CRM, ERP systems.

3. Study of the features of the transformation of B2B marketing under the influence of the integration of artificial intelligence, personal data about customers and artificial intelligence in sales management.

Research methods. In this article, we rely on the concepts of content and digital marketing, digital capability and value creation, integrated marketing, customer focus, and customer relationships(Harker, M. J., & Egan, J., 2006 [5]),and a local approach to B2B marketing (Globalization local model, Glocal model), covered in the research by Hall, S. (2017) [4], Cortez, R. M., &Johnston, W.J. (2017) [2]. The local approach of future B2B marketing means focusing on a narrow circle of end users and detailed segmentation of customers, business partners, providing the consumer with detailed information about the product, which allows forming a culture of consumption. In industrial marketing, segmentation takes into account the customer behaviour, industry and size of the client company.

The study is based on a qualitative methodology, which includes the study of trends in B2B marketing, the integration of artificial intelligence in sales management of multinational companies. The technological phenomenon of artificial intelligence (Paschen, J., Kietzmann, J. and Kietzmann, T.C., 2019 [12]) is a central concept in our study that influences the future of industrial marketing.

The article uses the case study methodology of two companies that have integrated revenue analysis systems into sales management based on artificial intelligence. Next, we consider the case of integration of CRM and ERP systems in the Russian glass industry company (ABC company, the name is confidential). The effects of artificial intelligence integration are considered based on the analysis of the integration of CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning System) in companies.

Results. Recent studies indicate the active transformation of marketing in the B2B segment and the subsequent change in approaches to sales in the future [2]. The era of integration of technological applications ("digital or application age") [4], in particular CRM, ERP, began in the 2000's.

Hall, S. (2017) [4] identifies the following marketing trends in the B2B segment:

1. Growth of customer-centricity. In the glass industry, such a trend will be due to the formation of a culture of consumption, informing consumers about the properties of glass, changing trends in consumption through changing tastes of consumers in related industries (approaches to architecture and design). The culture of consumption is directly related to the competence of sellers in selling the product.

2. The growing role of content and digital marketing. This trend is directly related to the formation of culture. The right content influences sales, digital sales channels are also a way to place content about the product and influence consumer decisions.

3. Multi-channel marketing. Digital marketing allows expanding the number of sales channels, but in the glass industry, the main sales channels are viral marketing, "buzz marketing", thought leaders, the Internet, blogging, TV repair programs.

4. Increasing pressure on optimization of marketing performance, including sales plans. In the glass industry, the glass manufacturer consistently provides sales of 20% to customers and 80% of products. The pressure increases due to seasonality: in winter, the implementation of plans is complicated by the decline in demand.

In this article, we identify two more trends — the first is the formation of a digital private market of personal data, which in particular allow predicting consumer behaviour, can be integrated into sales management. Large companies are the owners of information as a factor of production, which has recently become increasingly important due to "destructive" innovations. Another trend is the integration of artificial intelligence to manage personal customer data. In this case, the first trend is a consequence of control over the confidentiality of personal data, protection and unauthorized access in the context of business digitalization. The second is a response to the complex challenge of managing a growing volume of customer data in the context of integrating technology solutions into sales management. These trends are interrelated — the growing data volume necessitates the use of a

local approach to doing business and data protection, as well as automating data management to ensure accuracy, reliability, completeness, and predictability.

With the growing role of customer orientation, in particular the orientation of companies in the B2B segment to the needs of end users of their own customers, the integration of personal data into marketing is a way to understand the customer, the ability to form a culture of consumption in "customer language". The integration of personal customer data also solves the problem of ineffective communication between seller and buyer, as well as incorrect communication of product information by the seller. In addition, the integration of personal data and customer experience solves the problem of incompetence of sellers in terms of staff rotation.

Technological solutions in response to the outlined problems in sales management cause other challenges for organizations. The integration of CRM and ERP improved the accuracy of demand forecasts based on customer activity information. In turn, new problems and challenges arise that require new solutions.

International companies in the B2B segment in sales management face the following problems: incomplete customer data, lack of cooperation between marketing, sales, service, outdated data. Companies are under increasing pressure to achieve revenue growth and sales organization. Ensuring speed and efficiency of sales slows down due to loss of time for customer data management, tracking of customer and seller activities, manual determination of agreements. This means reducing the time to form and deliver the value of the product to the end customer in the constant operation of sales departments with large data sets. In this case, only 20% of the activity is usually recorded in CRM.

Another problem is that the filling of customer data in CRM systems is incomplete, a certain volume of customer information is missing due to the human factor. Artificial intelligence solves this problem of lack of knowledge about the client. The integration of artificial intelligence into the CRM system is a tool for collecting information, which is the basis for automatic analysis of all contact data and activities from the group that works with customers and forms a single source of customer information. Large companies use such artificial intelligence-based analysis systems to address the lack of complete, outdated customer information. At the same time, this allows the sales department to focus on delivering the value of the product to customers.

The sales management system based on artificial intelligence solves three main problems:

1) Incomplete data. Prior to the integration of artificial intelligence into sales management, the analytical dataiskept in the sales, marketing and service departments, which were responsible for entering all contacts, customer interaction data in the CRM system. The integration provided automatic collection of contact and action data from groups working with customers, filling CRM with the right capabilities and accounts. This eliminates manual data entry and ensures CRM accuracy.

2) The collected data is sent to marketing, sales or customer departments. Lack of cooperation between marketing and sales means that the company does not receive data about the customer. The sales management system provides data collection by function and combines in a single platform. Reliable data is a source of information for all employees of the company to make decisions.

3) Outdated data. The database in the average company usually doubles in 12-18 months, and is quickly transformed. Stuff rotation and lack of frequent updating of information in the CRM-system lead to inaccurate information. The revenue analysis system automatically finds and updates contacts, customer data. Thus, artificial intelligence is responsible for automatically updating data, which ensures the credibility of information in the CRM system.

Thus, the sales management system based on artificial intelligence (Revenue Intelligence System) is a technological solution that automates the collection of data on contacts and customer activities, dynamically updates the CRM system and provides sales, marketing, service departments with real intelligent data for sales management. As a result, it provides a comprehensive implementation of a customer-oriented approach in the development of digital marketing.

Examples of the use of such systems are a new stage in the marketing of the B2B segment. Table 2 provides basic information based on the case studies of two companies in the B2B sector.

Gainsight Inc. integrated an artificial intelligence-based sales management system to address the accuracy and efficiency of the Sales Department in forecasting and closing trade transactions. An additional goal is to increase the level of cooperation between Marketing and Sales Departments. The main challenge for the company is the lack of clear data on the activities of individual sellers, problems in concluding agreements with customers, unreliable forecasting [7].

Gainsight's Sales Department needed access to key data on the dynamics of transactions, problems that arise during the conclusion of the transaction, ways to improve sales performance and sales forecasting. The lack of clarity of this data in the company is due to the lack of resources for real-time data collection in order to understand the level of productivity of the Sales Department. Another need of the company is the need of the Marketing Department in the exact understanding of sales. The integration of the sales management system based on artificial intelligence provided [7]:

1) Display of the procedure for conducting trade activities, which ensures the speed and efficiency of closing transactions.

2) Understanding ways to increase win rates.

3) Elimination of the key problems of closing trade agreements.

4) Determination of factors of the transaction cycle reduction.

5) Identification of trends in the activity of potential customers, which are generated by the marketing department. Greater efficiency of sales service is ensured, key information is provided to ensure effective salesmen training and to check the effectiveness of closing transactions.

Table 2. Case study of integrating artificial intelligence into sales management: New Relic, Gainsight

Company characteristics	New Relic	Gainsight
Industry	Software in the B2B segment	Software in the B2B segment
Number of customers	17,000, including 50% of Fortune 100 customers	More than 360 companies in the B2B segment (Adobe, Box, DocuSign, HP, Marketo, Nutanix and Workday)
Annual income	$ 600 million	$ 50 million
Number of employees	More than 2,000 people	More than 700 people
Subsystems of integration of artificial intelligence	Sales: automation of activity data collection, integration of data-based sales training. Marketing: automation of contact creation, CRM optimization. Customer success: identifying customer information, monitoring customer coverage.	Sales Analysis: provides analysis of data on 360 customers to whom Gainsight ensures revenue growth.
Key results, effects	Solution launch the within 14 days. 100,000 contacts are automatically downloaded from sales team mailboxes during the first six months of operation of the solution. The accuracy of the CRM system and data has improved by 80%. 300% increase in the activity of high-value data (for example, display of customer behaviour data in CRM).	People.ai SmartMatch technology detects 15,000 contacts from trade group mailboxes in 9 months. Gainsight has achieved 90% accuracy in sales forecasting. Productivity of sales representatives increased by 15%

Source: based on [7; 9].

Another case study is New Relic, which integrated an artificial intelligence-based system into sales management to access sales metrics, data reliability, develop a sales cycle for revenue growth, and conduct training to improve sales productivity [7].

New Relic offers customers technological solutions (cloud software) and innovations based on software for introducing innovation, business transformation. In a rapidly growing environment, New Relic's Sales and Marketing Departments needed a way to reconcile contact collection and activity data to retain and expand customers. The lack of customer data, including sales, required accuracy to

increase the productivity of Sales and Marketing Departments. The sales management system based on artificial intelligence was launched within 14 days and provided: sales and marketing development, optimization of customer service [9].

Platforms based on artificial intelligence automatically collect sales activity in real time and provide useful information to increase the productivity of sales, marketing, service (Table 3). All sales activity is recorded on the platform, activity is synchronized with CRM. This reduces data collection time and increases sales time by 20% [9]. Pre-built dashboards give managers a real-time view of trading, trends, forecasts and red flags.

Table 3. Differences in sales management before and after the integration of the artificial intelligence platform

Element of the sales management system	Before the integration of artificial intelligence	After the integration of artificial intelligence
Marketing	Manual data collection and registration, data analysis. Errors in data collection. Insufficient segmentation of demand and consumer behaviour.	Automated collection, registration and analysis of data. Segmentation of demand formation and marketing campaigns based on accurate customer data. Tracking the impact of marketing on sales. More personalized strategies for concluding agreements, tracking the status of the agreement, determining procedures for accelerating agreements.
Sales Department	Lack of clear data on the activities of individual sellers, problems in concluding agreements with customers, unreliable forecasting. The need for training and coaching of salesmen. Lack of understanding of clear actions in concluding agreements.	More personalized strategies for concluding agreements, tracking the status of the agreement, determining procedures for accelerating agreements. Improving sales methodology. Increasing productivity. Personalized customer analysis. Reducing the time of concluding an agreement and determining the priority of agreements.
CRM system	Inaccurate, incomplete, outdated customer data, customer activity data.	Increasing data accuracy and reliability by 80%. The volume and quality of data in the system has increased. Automatic system update. Increase in the percentage of system capacity from 50% to 90%. Automatic analysis of all contact and activity data from the group that works with customers and forms a single source of customer information. Track of salesmen performance.
ERP system	Inaccurate forecasts of product demand, unreliable forecasting.	Increasing forecasting accuracy.

Source: author's research.

In general, the integration of artificial intelligence in sales management provides accuracy, completeness, reliability of data, accurate demand forecasts. Distance learning systems integrated into the CRM system increase the productivity of sales and marketing departments by establishing cooperation and eliminating the functions associated with the collection and updating of customer data.

In Russia, it is highly likely to have no similar experience in the integration of artificial intelligence due to lack of information and adaptation. At the same time, we can observe the trend of integration of CRM with ERP system, a system of statistical planning, which provides high accuracy of product demand forecasts. Forecasting in the glass industry company[1] is based on product article, sales channels, dates and other product characteristics. There is no experience in integrating e-learning systems. In the B2B segment, companies form a personnel development department (coach), or hire a salesmen competence development manager. The E-Commerce component in the CRM-system also plays a significant role. The company processes requests manually, but there is a transition to electronic document management, automation of request processing through E-commerce component of the integrated CRM-system (Sales Force). Direct and indirect customers are segmented, and Customer Journey roles and typical scenarios are described. At each point of contact between the seller and the customer, the expectations, needs of the customer and the seller's actions are determined to minimize manual sales management.

The Harvard Business Review Analytic Services − Pulse Survey, involving more than 320 respondents, surveyed future trends in the transformation of marketing through the integration of artificial intelligence into business [6]. Companies that have already integrated artificial intelligence also took part in the survey. The main findings of the study indicate the following future trends (Figure 2) [6]:

1) 51% of large companies expect automation of manual processes using artificial intelligence over the next three years;

2) 82% of large companies believe that artificial intelligence will significantly improve the consistency of work between the sales system and marketing through the introduction of reporting;

3) 43% of large companies believe that data-based coaching is the biggest advantage of artificial intelligence.
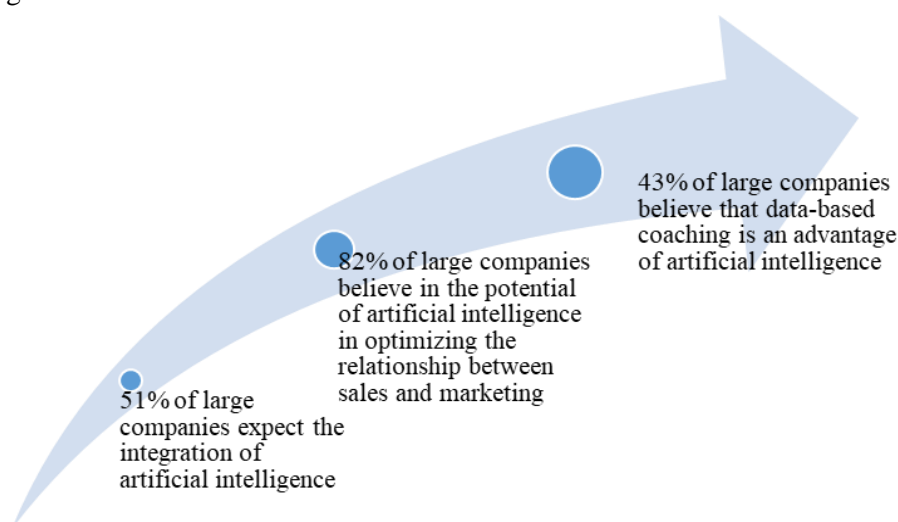

Fig. 2. Future trends in the integration of artificial intelligence in sales management. Source: [6].

The growth rate of salesmen productivity due to artificial intelligence at the same time provides an increase in customer satisfaction. The problem of competence is also solved — artificial intelligence is a "coach" who instructs the seller to enter into a transaction, eliminating routine work, lack of knowledge about the next stage of the transaction, providing effective support and customer service. About 85% of large companies believe that artificial intelligence will improve the quality of customer service. About half of companies plan to use artificial intelligence to detect growing customer dissatisfaction. About 47% believe that artificial intelligence technologies will provide a higher level of customer personalization. According to Wise, R., & Morrison, D. (2000), traditional marketing skills will become relatively less important, while the ability to understand the customer and customer behaviour will determine the success of B2B companies. The company's digital capacity will be replaced by the ability to understand the buyer, which will determine digital transformation.

Thus, the study of marketing in the B2B segment in the context of analysing the experience of integrating artificial intelligence into sales management indicates the influence of technological,

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[1]ABC company, the confidentiality of inside information is the reason for the conditional name

informational factors on the formation of demand. These factors will depend on socio-economic development and political, legal readiness for the integration of artificial intelligence. These technologies are "destructive", because they completely transform the approaches to marketing and doing business. This requires the government and society to consciously accept these trends, as well as develop new legal regulations governing the emerging digital data market.

Conclusions. B2B marketing is influenced by "destructive" innovations, forming critical trends in the integration of artificial intelligence in business management. The considered trends of B2B marketing are supplemented by formation of the digital data market which will become the accelerator of digital changes. The case studies of large companies indicate three main problems that are solved by integrating artificial intelligence: incomplete, outdated, inaccurate data; lack of cooperation of subsystems of sales, marketing, service; accumulation of big data, which complicates their processing in terms of the need for rapid decision-making. Due to the integration of artificial intelligence, the functions of salesmen and marketers are shifting from filling data to optimizing the sales process, forming product value and consumption culture, improving customer interaction, increasing customer satisfaction. In the future, industrial marketing will be determined by the accuracy, reliability of customer information, a high level of accuracy of demand forecasts, a shortened cycle of trade agreements, increasing the level of effectiveness of cooperation between marketing and sales departments. The integration of artificial intelligence into sales management will finally complete the era of digital marketing in the B2B segment and will be the beginning of the era of "human" marketing. The latter will mean that in a regulated digital B2B data market, marketing will be focused on human needs with an accurate predictable understanding of customer needs.

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