

Modern aspects and trends of Customers Intelligent development

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Түйін

Жүріп жатқан сандық түрлендіру бизнес үшін де, тұтынушылар үшін де деректерді жинау және өңдеу саласында үлкен перспективаларды ұсынады. Қазіргі уақытта деректерді жинау және өңдеу жүйелерінің дамуы тұтастай бизнес, сонымен қатар маркетинг үшін жаңа және серпінді мүмкіндіктер ашады, өйткені құрылымдалған мәліметтермен қатар құрылымданбаған деректер де өңделіп, маркетингтік аналитиканың құрамдас бөлігі болып табылады.

Зерттеудің мақсаты - тұтынушылық аналитиканың жалпы аспектілерін, мақсаттары мен бағыттарын жалпы маркетингтік аналитика бөлігі ретінде анықтау болып табылады. Енді кез-келген ұйым өзінің маркетингтік қызметінде сандық құралдар мен әдістерді қолдана алады. Компаниялар тұтынушылар туралы, соның ішінде тікелей тұтынушылардың пікірлерін жинау және өңдеу үшін үлкен мүмкіндіктерге ие болды. Өз кезегінде тұтынушылар компаниялармен және олардың брендтермен тікелей байланыс орнатуға көбірек ресурстар алуда. Тұтынушыларды диалогқа тарту және олардың іскерлік қызметтің барлық салаларына әсер етуі компаниялар қызметінің ажырамас бөлігіне айналды.

Авторлар маркетингтік талдау призмасы және нарық аналитикасы, өнім, бәсекелестер, тұтынушылар сияқты оның төрт компоненті арқылы Клиент аналитикасының мәнін, оның маркетингтік қызметтегі ролін анықтау үшін 28 ғылыми және іскери журналға әдеби шолу жасады. Қазіргі әлемде Клиенттік аналитика маркетингтік қызметтің негізгі компоненттерінің бірі бола отырып маркетингтік қызметтің көрсеткіштерін едәуір жақсартуға көп мүмкіндіктер тупғызады.

Түйін сөздері: Маркетингтік аналитика, мәліметтер базасы негізіндегі маркетинг, клиенттік талдам, клиенттік талдама ресурстары, тұтынушыларды идентификациялау, тұтынушыларды тарту, тұтынушыларды ұстап қалу, тұтынушылардың құндылығын дамыту

Аннотация

Цифровая трансформация, происходящая в данный момент, представляет огромные перспективы как для бизнеса, так и для потребителей в сфере сбора и обработки данных. Текущее развитие систем сбора и обработки данных открывает не просто новые, а прорывные возможности для работы бизнеса в целом и маркетинга в частности, потому что обрабатываются не только структурированные данные, но и неструктурированные данные становятся частью маркетинговой аналитики.

Целью данного исследования является выявление существующих аспектов, задач и трендов потребительской аналитики как части маркетинговой аналитики в целом.

В современных условиях любая организация использует цифровые инструменты и методы в своей маркетинговой деятельности. Компании получили большие возможности для сбора и обработки данных о потребителях, включая их прямые отзывы. Потребители, в свою очередь, получают все больше и больше ресурсов для прямых контактов с брендами и компаниями. Диалог бизнеса с потребителями оказывает влияние на все сферы бизнес активности и уже стал неотъемлемой частью деятельности компании.

Авторы провели литературный обзор 28 научных и бизнес-журналов для определения сути и понятия клиентской аналитики, ее роли в маркетинговой активности через призму маркетинговой аналитики и ее четырех составляющих: аналитики рынка, продукта, конкурентов и потребителей. В современном мире клиентская аналитика, как и базы данных потребителей, является одним из ключевых компонентов маркетинговой активности, создающих большие возможности для значительного улучшения показателей маркетинговой деятельности компании в целом.

Ключевые слова: маркетинговая аналитика, клиентская аналитика, ресурсы клиентской аналитики, идентификация потребителей, привлечение потребителей, удержание потребителей, развитие ценности потребителей

Abstract

The current digital transformation provides great prospects for both businesses and consumers in the field of data collection and processing. The current development of data collection and processing systems opens not just new, but breakthrough opportunities for business in general and marketing in particular. Now not only structured data is being processed, but also unstructured data is becoming a part of marketing analytics.

The aim of this research is to consider and present current aspects, tasks and trends of Customer Intelligence (CI) as the part of Marketing Intelligence. Today any organization can use digital tools and methods in their marketing activity. Companies have got huge ability through a lot of internal and external resources to gather and alter (processing) customer data, including personal feedback from customers. In their turn customers get more and more possibility to contact brands and companies directly. The involvement of consumers in a dialogue with a business and their influence on all areas of business activity have already become an integral part of our life.

Authors did a literature review of 28 scientific and business resources to determine the nature and the role of CI in marketing activity through a prism of marketing intelligence and its four components – market, product, competitive and

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customers. Nowadays Customer Intelligence is one of the key marketing activity components with a huge capacity which makes a real impact on marketing performance.

Key words: Marketing Intelligence, Data Driven Marketing, Customer Intelligence, Resources for Customer Intelligence, Customer identification, Customer attraction, Customer retention, Customer value development.

Introduction

Relevance of this research is determined by a digital transformation of modern reality from business, organizational, and customers sides. Nowadays businesses have an extreme opportunity to collect, analyze and use customer information to learn more about preferences, needs, and behavior of their customers. These are new ways to take to a data driven marketing to marketing intelligence and to improve marketing performance for organizations.

For Kazakhstan's business the point of business effectiveness is one of the main points as for the world's business. Here are important not only the access to the advanced technology but also knowledge and skills technology application.

Now there are a lot of different tools which could improve marketing effectiveness. In business reality it is important to recognize and use this method systematically, understanding the role and possible results of it. For this purpose, in the article we introduce world's examples by means of CI and getting results via using CI. Which can be good cases for improving marketing and business impact.

In the world business there is the trend of increasing the value of Customer Intelligence metrics as metrics which could indicate the sustainability and future potential of a business in the Investment Industry as example, which is important for developing SME. Customer Intelligence metrics are the foundation for the decision-making process in marketing and for the whole business. CI is the tool which could help business be more effective through more tailored marketing activity, increasing customer and loyalty customer lifetime value and business effectiveness totally.

The purpose of the research is to identify the nature, trends and objectives of Customer Intelligence development; to display its role in an effective business development.

Methodology

In the nature of Customer Intelligence research own literature review was built by authors using different resources like EBSCOhost, Google Scholars, Howard Business Review and Marketingcharts. Based on the analysis of scientific articles and books presented in these resources, the document shows the dynamics of the development of the concept, practical usage by the world's cases with receiving results also Kazakhstan examples and international application trends of Customer Intelligence.

Upon reaching the purpose of these research scientific methods as analysis, synthesis, systematization and generalization of information in the literature review were applied. The dynamic of CI

development is presented with relevant research data through 28 resources.

Results and Discussions

The results of the research are based on a literature review of scientific articles about the creation and functioning of Customer Intelligence. Studying and analyzing the works of different authors on Customer Intelligence appears that CI is one of the main Marketing Intelligence factors contributing to the modern effective business development in the digital transformation era, which grew and developed on the basis of data base marketing.

In contemporary reality when a lot of business and marketing questions can be answered on the consumers behalf, there are many prosperous opportunities to gain and analyze information about customers to improve customer experience for existing products, and to create new products and services. Today with increasing possibilities of data, marketing intelligence is very important. It consists of four main marketing components: customers, market, competitors and product (figure1) represents the structure of marketing intelligence, which is based on literature review and classification of marketing intelligence from different studies [1, 2, 3].

Any organizations could exploit data and big data to gain competitive advantage and to improve marketing performance. This era of intelligence starts with inconceivable space for organizations to adapt the digital transformation via new smart systems and services that are related to marketing intelligence from big data [4]. The International Data Corporation (IDC) declared that worldwide spending on the digital transformation (DX) of business practices, products, and organizations is forecasted to attain \$2.3 trillion in 2023. DX spending is expected to steadily expand throughout the 2019-2023 forecast period, achieving a five-year compound annual growth rate of 17.1%. [5] These numbers say how big transformation is and how quickly digital changes are happening. Opportunity and possibility of customer intelligence grow parallel with increasing growth and expansion of digital marketing tools and especially customer data and its analysis.

As Peter Drucker said, the true purpose of a business is to create and keep customers. In this paper our focus is on CI as part of Marketing Intelligence. We analyze CI's sources of information, main tasks and purpose, and consider the development of its trends and find out that literature does not indicate an official definition of Customer Intelligence. There are several examples of existing explanations: Cambridge dictionary [6] provides definition of CI - information about customers that a company collects and uses to help make future plans:

customer intelligence can provide insights that can change an organization’s marketing strategy. The fundamentals of customer intelligence include customer acquisition, customer retention, cross-sell, and win-back strategies, written by Philippe Baecke and Dirk Van den Poel. [7] Navarro-García A. [8] says that Customer intelligence includes information

of customer needs, preferences, cultures, lifestyle, purchasing power, shopping behaviors and habits of potential customers. Information collected about customers can be used for various analytic processes to create customer intelligence to better profile and classify customers, predict customer behavior, conduct target marketing, cross and up sell into existing customer base, noticed Joseph O. Chan. [9]



Figure 1 – Customer Intelligence Structure

Note. Compiled by the authors based on the analyzed sources [1, 2, 3]

The consideration of this paper is that CI is a set of information which fluctuates based on digital development with a given understanding of current and potential customer preferences, needs, purchasing behavior, power, and insight, making the CI the basis for better development of competitive advantages, innovations, and marketing performance.

Information and sources of collecting information for CI. There are external and internal sources for customer intelligence, according to Table 1. External sources of customer intelligence let businesses look for telephone numbers, addresses, and publicly accessible social media, competitors’ websites, household hierarchies, Fair-Isaacs credit scores, customer reviews, clickstream information/data [10, 11, 12]. Often it being realized though the leading generation programs which work using both offline and online resources. Internet gives

companies an opportunity to collect information about customers’ needs and detecting business opportunities from web pages, e-commerce sites, and social media [1, 13]. There are clickstream data logs on visit frequency, viewed items, and visit time on a website to understand customers’ browsing habits and purchasing behaviors [12, 14]. Current internal sources for capitalizing Customer Intelligence are billing records, company’s weblogs, CRM system, customer surveys, [11]; depending on the type of a business an information about customers’ purchasing location, shopping basket, preferred payment methods and other information can be added there that will help to understand the three parts - recency, frequency and monetary. This information can be a framework for understanding customer’s value and building a retention program. Today advanced marketers rely on a big data as a huge opportunity for gathering information about customers [15].

Table 1 – External and internal information data resources for Customer Intelligence

Internal Information	External Information
Basket and billing records	Contacts data (telephone number, e-mail, address)
Place of purchasing (off-line or online shops, market place)	Household hierarchies
Payment methods	Statistic analysis
Shopping basket	Customer reviews
Date and period of purchasing	CMM
Company’s weblogs	Webpages
Customer surveys	E-commers sites
CRM system	Clickstream
Lead generation campaign (the link between internal and external resources)	Competitors’ websites
	Credit score
Note - Compiled by the authors based on the source’s analysis [15], [10], [12], [11], [14], [13], [1], [16]	

Ongoing digital transformation stimulates both internal and external sources of information. Data gathering and analysis processes also grow due to improving tools for working with the main part of dig data - unstructured data. As noticed Paul Zikopoulos, IBM Vice President Cognitive Systems, the growing importance of unstructured data is evidenced by the recognition of Big Data industry leaders and academics that unstructured data has become a critical aspect of developing and using all the types of data intelligences that organizations, governments, and businesses have at their disposal. Competent and effective operation by unstructured data helps companies better manage their entire data asset and create additional value in competitions activity. In these days, in digital world, structured and unstructured data achieve and compound each other. For example, structured data include customer ID, financial and monetary information, demographic characteristics; unstructured data might be voice

records of a customer’s interaction with a services center, survey verbatim, social media content, or search query text and etc [17].

Companies should reinforce customer intelligence from external and internal data sources and all data types – structured and unstructured, to find out customers insights and knowledge of market growth possibilities. Such kind of access to gather, process and analyze the information, let companies successfully run through all main tasks of Customer Intelligence. Main tasks and purpose of CI. Customer intelligence has four main tasks in marketing activity which is represented in Figure2: 1. Customer identification – how to identify the most profitable customers; 2. Customer attraction – how to attract customers through marketing activities; 3. Customer retention – how to retain profitable customers and build long-term relationship with them; 4. Customer value development – how to develop and increase customer values [11, 18].

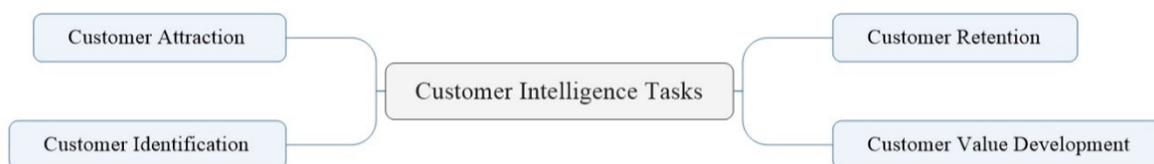


Figure 2 – Customer Intelligence Tasks

Note. Compiled by the author based on different studies [3, 11, 18]

Below you can look at all four tasks in more details, identify the role and some methods used for them.

1. Customer Identification begins with determining customer segments with similar interests and profitability. Data of demographic, psychographic, purchasing behavioral, geographic criteria are used for customer segmentation [3]. Customer segmentation such as clustering and classification use for splitting up customers into homogenous/cognate segments and build customer profiles [12, 19]. Customer’s profiles should include demography information (age, gender), buying behaviors (needs, purchasing power, preferences, lifestyle), purchasing attributes (recency, frequency, size), product category, product mix, and estimated customer lifetime values [3, 20]. By selecting and ranging the most beneficial and profitable segments they can be applied to target customer analysis. The role of this process is essential as the results of customer identification will form a framework for all other four main tasks.

2. Customer Attraction process is based on results of customer identification. It lets create a cohesive process more tailored and targeted. Here is RFM analysis in the view of recency, frequency, and

monetary of purchases may apply to comprehend customer behavior and improve marketing strategy for attraction customers [21]. Understanding the customers’ behavior and their needs founded on Customer Identification lets choose the most appropriate communicational channels and create a relevant content that are important points for effective customer attraction process. In the modern information field relevant content and channels/networks play really important role in competitive strategy.

3. Customer Retention process serves to customize marketing strategies which incorporate customer preferences and behaviors [19, 22]. The purpose for developing customer profiling, campaign management analysis, credit scoring, recommender systems or loyalty programs is boosting customer satisfaction and maintaining a long-term relationship [11, 22]. The metric which company uses to measure customer retention is a retention rate. Throw this rate a company can see how many customers stay with it, how good company performs in customer satisfaction direction by improving and managing customer services activity in customer journey. At this point of development, it is really important for employee to understand and engage in customer centric strategy. Company and her staff could reap the benefits of

decreasing retention rate and increasing customer satisfaction by building long-term relationships. The long-term relationships let company be more sustainable and profitable. According to Rob Markey, research loyalty leaders—companies at the top of their industries in Net Promoter Scores or satisfaction rankings for three or more years—grow revenues roughly 2.5 times as fast as their industry peers and deliver two to five times the shareholder returns over the next 10 years [23]. These are great numbers for companies to understand the value of building long relationships with customers.

4. Customer Value Development. Customers development includes three main aspects - market basket and bill analysis, customer lifetime value, and up/cross-selling, which service to maximize customer's value [18, 22].

We could understand and measure long term relationship or customer loyalty with Customers Life Time Value (CLTV). Let's look at the basic formula of calculating the CLTV which will provide understanding of significance of this metric for the business:

$$CLTV = ARPU \times \text{Gross Margin} \times \text{Lifetime.}$$

where:

ARPU - the Average Revenue Per User

Gross Margin - the ratio of the total Revenue to the Cost of Goods Sold (COGS)-cost of providing services

Gross Margin (%) = (Revenue - COGS) / Revenue. [24]

Lifetime - the period during customers buying company products.

This indicator helps to recognize how sustainable company is, because through this metric company management could see how many customers stay with a company and how much money they will spend for company's products and services in a foreseeable future. Loyal customers bring new customers by virtue of recommendations which is one of the most reliable way of bringing new customers, as known.

Basket and bill analysis let figure out customers purchase preferences and behavior which serve as the base for up/cross selling activity. These are wide used analysis and activity especially in online stores and market places. This assists company to develop and use Search Engine, for example Amazon uses A9 organic product ranking algorithm that is composed of direct and indirect factors used to match users' search queries to products they are most likely to purchase. More than 35% of Amazon sales are generated from recommendations: "People who bought this book also bought ..."; Netflix leverages analytics to recommend movies you are more likely to watch. Also, in excess of 70% of Netflix movie choices arise from its online recommendations. [25]

In summary, company could grow customer value by acquiring more customers, increasing sales to existing customers, retaining them if it stays profitable and by creating or changing customer experience in simple and barrier less direction through digital transformation. Nowadays customer value is becoming more and more demanded. This point is interesting not only to top managers of businesses, but also investors pay more attention to customer's value of companies. In the HBR interview Brennan, chairman emeritus of Vanguard, one of the world's largest investment companies with 100 separate domestic investment portfolios, with current U.S. fund assets of more than \$3 trillion, noticed "the customer base is a critical part" of business, "A debate is currently going on about whether investors who are buying not an entire company but, say, 1,000 shares should have access to some of the same information about the core value of the customer base that private-market investors see in their due diligence process"[26].

CI is the framework for Customer decision making process. As for all intelligence fields, the primary purpose of intelligence is to inform decision making, with the intent of increasing the likelihood of the most optimal outcomes for the organization. [27]. Understanding of customers behavior and needs founded on customer identification lets choose most appropriate communicational channels and create relevant content which are important points for effective customer attraction process. In modern information field relevant content and channels play an important role in competitive strategy. Marketing decisions for any of the four main tasks based on information about customers, on CI, it lets make marketing activity more suitable for customer's segments and even more personalized. It depends on how actively company collects, analyzes and uses information and data of customers. In other words companies choose their own ways with integration of customer centric approach or not.

Trends of developing CI. We should think about growing trend of customer-focused companies and first their leaders, such as Jeff Bezos from Amazon, Jim Sinegal from Costco, and Jack Brennan from Vanguard, when we are talking about the CI. They have understood the significance of concentrating on customer value as an asset rather than pursuing (looking for) short-term profits, and they've become enduring (grow into steadfast) customer loyalty leaders in the process, as wrote Rob Markey [23].

Nowadays we also can find examples of companies which measure customer value metrics in Kazakhstan. Pioneers in this area were banks and mobile sectors/providers, they started to measure Net Promotion Score in their performance. Given examples of customer orientation strategies of worldwide companies could be also used in Kazakhstan market, by companies who interesting in profitable long-term relations with customers. E.ON, one of the largest

energy companies in Europe, has been tracking loyalty metrics since 2013 and uncovered its corresponding industry competitors, publishing their performance. E.ON declared “As a customer-focused company, we see our ability to acquire new customers and retain existing ones as crucial to our success.”

According to Digital Trends report, produced by Econsultancy and Adobe, published in 2019 [28] and based on global survey of 12 815 B2B and B2C marketing, creative and IT professionals surveyed both agency and brand sides of most marketers, 55%, suppose (expect) ‘better use of data for more effective audience segmentations and targeting’ to be amid three top preferences during 2019. The second more popular option, 42%, is “improving customer intelligence and insights fir holistic customer view’. The report’s authors also paid a big attention to consumers’ views: a recent study found out that 74% of consumers expect their companies to treat them as individuals. Presently there is a full potential to realize customers’ expectations: an unprecedented increasing of interactive devices such as smartphones, tablets, wearables, sensor networks, and global positioning system (GPS) sensors that create new data from everything we see, hear, touch, and feel.

Conclusions

It was educed that in modern reality leading companies use CI to improve business efficiency, as example companies at the top of their industries in Net Promoter Scores or satisfaction rankings grow revenues roughly 2.5 times as fast as their industry peers [23]. Moreover, both business and consumers ready for more individually tailored and focused communications. With the reference to this study marketing professionals will be able to understand what Customer Intelligence is, what kind of marketing tasks CI will help improve, and which resources should be used for building customer intelligence.

In giving cases in our research we saw the role and increasing value of Customer Intelligence metrics as metrics which give transparency picture of marketing and business effectiveness and vitality. Customer data via marketing intelligence and decision-making help managers improve marketing and as a result business impact throw custom-made communication programs according customer segmentations based on such as CLTV indicators and other of Customer Intelligence set.

Presently we are working on impacting marketing intelligence on marketing performance for SMEs in Kazakhstan, with the intention of creating a system for practical usage in the future for SMEs in Kazakhstan.

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