Implementing the Digital Business Model into Organization Activities as a Factor of Economic System Sustainable Development

Evgeniya Nigay, Yuliya Lebedinskaya and Elena Barausova

Economics and Management Department, Vladivostok State University of Economics and Service, 41 Gogolya str., Vladivostok, Russia

Keywords: Digital Business Transformation, Business Model, Growth Strategy, Competitiveness Management, Algorithm for Implementing a Digital Business Model.

Abstract: The stable functioning and sustainable development of economic systems is largely ensured by the formation of strong and competitive business structures that promptly adapt their strategic management approaches in accordance with the external environment. Timely, comprehensive and rational use of digital tools in business process management contributes to the growth of competitiveness at all levels of the functioning of economic systems. The article proposes an algorithm for introducing a digital business model into the activities of an enterprise based on the approach developed by the authors to transforming the business model of an organization in the context of the digitalization of the economy, as well as an assessment of the consequences of this process.

1 INTRODUCTION

Today, it is customary to distinguish three main areas of digital transformation of business models: customer experience, operational processes and platform business models. Usually companies don't introduce the changes at all three areas at once. Some choose a growth strategy by better understanding the client and increasing points of contact with him. Others increase their performance through digitalization and reengineering of internal processes and increased employee productivity. Still others are changing the boundaries of business models, creating digital platforms and mastering new activities, products and markets.

The successful operation of a business is largely due to the need for growth, including by better understanding of the client and increasing points of contact with him. The main directions of digitalization in this case are:

- strengthening the focus on the requirements of customers and their loyalty;
- search for hidden sources of value;
- creation of prerequisites for future sources of revenue;
- developing of competitive advantages (Prokhorov and Konik, 2019).

2 RESEARCH METHODOLOGY

The aim of the study is to assess the consequences of introducing a digital business model into the activities of business structures. The objectives of the research are: a brief description of the digital business model, a description of the developed algorithm of implementation in the organization's activities, an assessment of the consequences of this process.

The theoretical and methodological basis of the study was the key aspects of digitalization and modeling of business processes, the foundations of the development and functioning of business structures, methods for assessing the effectiveness of the implementation of digital tools in management processes.
3 RESULTS OF THE RESEARCH

The digital transformation of the customer interaction system in the business model of the organization is based on the so-called omnichannel approach, which involves the integrated use of all possible digital channels of communication with the customer, forming a single history of contacts and customer experience in the company. From this position, the number of mastered, implemented digital technologies and communication channels in the customer interaction system can serve as an indicator of the company's digital activity (Barausova et al., 2021).

The introduction of digital tools into business processes and the systematic digitalization of the business model of the organization are both sources of formation and maintenance of competitive positions, as well as factors for the sustainable development of entrepreneurial structures, markets, and economic systems.

According to the proposed approach, four key sectors can be identified in the structure of the company's business model:

1) activity of the company, which includes the main aspects, factors and subjects of the market, ensuring the functioning and development of the enterprise. These include key partners, key resources, activities;

2) value proposition - key formulation of the positioning of the company's offer, which is characterized by the value of the company in the consumer's consciousness;

3) Customer Interaction system includes channels and means of interaction with customers, connected and coordinated with the company's goals, understanding and meeting client's needs. This aspect contains consumer segments, customer relationships, distribution channels;

4) the monetization of activities is a commercial component of the company's offer, characterizes the degree of demand for goods and is composed of a structure of costs and revenue streams.

Transformations in the "Customer Interaction" sector in the business model offered are implemented on the basis of an omnichannel approach.

The omnichannel approach involves the integrated interaction of the company with the client, through the use of a single harmonized channel system, which gives the impression of continuous communication.

Comparing the traditional channels and the multi-channel approach in the pre-digital era with the modern innovative omnichannel approach, it is necessary to emphasize following, the multi-channel approach reaches the consumer through the maximum possible number of channels, the main task of which is to ensure maximum coverage, frequency and customer engagement based on the principle of "the more, the better." The omnichannel approach, in addition to the significant expansion of the range of digital interaction tools used, connects each channel together with a single accounting system, interacting with customers comprehensively, simultaneously on all channels and individually on each channel separately (Nigay et al., 2021).

In the system of customer interaction and customer experience management, the omnichannel approach includes three main aspects:

1. Omnichannel marketing. In general, it assumes a digital integrated approach to customer experience management based on the involvement of an agreed set of communication tools: content marketing, messenger marketing, SMM marketing, email marketing, and others.

2. Unified platform BPM (Business Process Management) + CRM (Customer Relationship Management). A single platform (as a digital service) in the presence of a CRM system allows you to "switch" a client from one channel to another, (using the CRM system database) without breaking the logic of the client's interaction with the company, with the subsequent development of a development strategy, modeling and performance evaluation for each business-process.

3. Transactional context. When introducing and using digital customer engagement tools in an omnichannel approach, you cannot focus on digital engagement alone. It is necessary to remember about the client's route, which he takes from getting to know companies in the digital space to the possible conclusion of a transaction offline.

All three components are necessary for customer experience management, which is aimed at comprehensive, systematic support of the client at all stages of the interaction process, from making a decision to purchasing goods and services, both through digital and offline channels. As a result, interaction with the client is built in two directions:

1) consultative interaction;

2) transactional interaction.

Consultative interaction directly depends on omnichannel marketing, transactional interaction with the client occurs due to the development of the transactional context - building a clear vision of the "client's route" (which way he can go from digital online channels to traditional ones). In the nt the "real" stage of interaction with the client, process of
digitalization, it is necessary to take into account while maintaining effective interaction with the client across all channels.

The structural digitalization of the customer interaction system based on the omnichannel approach is shown in Figure 1.

![Figure 1: Digitalization of the customer interaction system in the business model of the organization.](image)

1 Block "Relations with the client" in the framework of the general business model is responsible for how the relationship with the client is formed and describes the types of relationships. The introduction of omnichannel marketing in this block, as a rule, is carried out using the following tools:

1) SMM marketing;
2) messenger marketing.

All the tools for interaction with the client in this block operate on the basis of a single platform of business processes connected to a CRM system, with a clear vision of the client's route until the moment of the transaction.

2 The Consumer Segments block defines which groups of people and organizations the company expects to attract and serve. The introduction of omnichannel marketing in this block involves the use of the following tools:

1) content marketing;
2) e-mail marketing;
3) targeted advertising.

All the tools for interaction with the client in this block operate on the basis of a single platform of business processes connected to a CRM system, with a clear vision of the client's route until the moment of the transaction.

3 The Sales Channels block includes communication, distribution and sales channels that provide direct interaction between the company and the consumer. The introduction of omnichannel marketing in this block includes such tools as:

1) mobile app for shopping;
2) website.

Information on customer experience (data on purchases, views) is recorded on the basis of a unified BPM (Business Process Management) platform. At the same time, the client's route is monitored from viewing the offer to completing the transaction. At the same time, when planning sales channels in the system of interaction with a client, it is necessary to coordinate their work in both digital and traditional directions (Blizkiy et al., 2021).

The most sensitive and mobile in terms of adapting business processes are small and medium-sized businesses, which today are actively introducing digital tools into management and operational solutions, thereby achieving increased productivity, efficiency, and competitiveness (Lebedinskaya and Nigay, 2019). As a substantiation of the proposed approach, the results of the implementation of a digital business model in the activities of LLC Partner-DV, operating in the market of fasteners and structures in Vladivostok, were used.

Since the main field of activity of LLC Partner-DV is wholesale and retail sales, it is the system of interaction with the client that is of the greatest importance for it. The building blocks of this system in the company's business model are:

1) relationship with customers;
2) consumer segments;
3) sales channels.

Figure 2 shows the structure of the customer interaction system in the basic business model of the enterprise before the improvement of digital tools for influencing customer experience.

Initially, the company had only a CRM system of digital elements of customer interaction, which was used exclusively for working with the B2B segment, including construction companies and retail chains.

![Figure 2: Basic structure of the system of interaction with clients of the business model of LLC "Partner-DV", Vladivostok.](image)

The website (as a digital sale channel) was targeted at the B2C consumer segment. The site also
served as an informational role for the target audience of B2B.

Digital communication channels were used in the form of e-mail and the WhatsApp messenger - mainly as a personal initiative of sales managers. Thus, the ratio of the personnel involved in the work using digital tools of communication with the client was 0.15, which is typical for the follower strategy in the use of digital technologies in the activities of the enterprise general (Nigay & Popova, 2019).

It should be noted that the haphazard use of digital tools leads to a decrease in both overall indicators of digital activity and efficiency in general (Razumova and Levine, 2019).

Thus, in the context of the digitalization of the market and the economy for small businesses, the transition to a new digital business model that links all the digital channels of interaction with the client on a single management platform, as well as consistent with the system of traditional (offline) communication channels, is becoming an urgent area of activity. The algorithm for the transition to a new business model in relation to the activities of Partner-DV LLC is shown in Figure 3. Improvement of the customer interaction segment in the business model of the enterprise is based on the use of an omnichannel approach and includes consistent coordination and a complex combination of digital tools along with with the formation of offline customer experience (transactional context). This facilitates the generation of a flow of integrated and complete organization-to-consumer communications.

Figure 3: Algorithm for the transition to digitalization of the customer interaction system in the business model of the enterprise based on the omnichannel approach.

In the block "Relations with the client" on the basis of the omnichannel approach, the following tools have been introduced: SMM marketing, a unified BPM platform (integration with the existing CRM system), messenger marketing (Blizky et al., 2021).

In the block "Consumer segments": content marketing, email marketing, targeted advertising.

In the "Sales Channels" block, within the framework of the omnichannel approach, the emphasis is placed on strengthening the sales function of the existing website and creating a mobile application for making purchases operating on various operating systems.

4 RESULTS

The introduction of omnichannel marketing is the largest layer of work in improving the company's business model, covering all blocks of the Customer Interaction segment. A description of the activities carried out is presented in Table 1.

Figure 4 shows the transformation of the system of interaction with the client of the business model of LLC "Partner-DV" in the context of digitalization based on the omnichannel approach.
Table 1: The sequence of implementation of the digital system of interaction with the client of the organization's business model.

<table>
<thead>
<tr>
<th>Clients Relations</th>
<th>Sales Channels</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Application for mobile phone purchases</td>
<td>E-mail marketing</td>
</tr>
<tr>
<td></td>
<td>(Android and iOS)</td>
<td>Content marketing</td>
</tr>
<tr>
<td></td>
<td>Webpage development</td>
<td>Targeting</td>
</tr>
<tr>
<td>1 Choosing platform (Facebook, Twitter, Instagram etc)</td>
<td>1 Placing of the order and development of</td>
<td>1 Plan and strategy</td>
</tr>
<tr>
<td>+ profile customization</td>
<td>the application</td>
<td>1 Strategy</td>
</tr>
<tr>
<td>1 Choosing mix of applications</td>
<td>1 SEO and web search optimization</td>
<td>2 Layout and content</td>
</tr>
<tr>
<td>(depending on TA)</td>
<td></td>
<td>2 Content</td>
</tr>
<tr>
<td>1 Setting goals and objectives</td>
<td></td>
<td>3 Contact base</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 Publications content plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 Direct-mail optimization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 Promotion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 Evaluation(KPI)</td>
</tr>
</tbody>
</table>

Sales channels for this campaign should be developed through the creation of an application for purchases and the development of an Internet site.

Taking into account all predictive estimates of the expected effects from the implementation of a digital business model, we can give an overall assessment of the effectiveness of the proposed business model for the company “Partner-DV” LLC (Table 2).

Table 2: Predictive assessment of the expected effects of the implementation of a digital system of interaction with the client of the business model of the organization of LLC "Partner-DV”.

<table>
<thead>
<tr>
<th>Competitiveness assessment</th>
<th>Economic assessment</th>
<th>Innovation assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing the position of</td>
<td>Growth of economic</td>
<td>Increased use of</td>
</tr>
<tr>
<td>the company in the market</td>
<td>performance indicators - 28%</td>
<td>digital tools for</td>
</tr>
<tr>
<td>Changing the “follower”</td>
<td></td>
<td>customer interaction</td>
</tr>
<tr>
<td>strategy to the “candidate</td>
<td></td>
<td>(digitalization rate 0.57)</td>
</tr>
<tr>
<td>for leadership” strategy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation of the proposed improved business model of LLC "Partner-DV” assumes the following change in indicators.

Increase in revenue up to 114,499 thousand rubles. already in the next period will change the company's market share from 7.71% to 12.79%, as well as improve the rate of growth of the market share from 89.83% to 106.48% - this will contribute to a change in the position on the competitive market map from a weak position competitive position and deterioration in growth rate, on the position of a weak competitive position with an improvement in the growth rate (Krasova and Xiu, 2016).

5 CONCLUSION

The proposed theoretical and methodological approach to transforming the business model of an organization in the context of digitalization, assessing the consequences of digital transformation involves improving the system of interaction with a client based on an omnichannel approach and a complex combination of digital and traditional channels of interaction (Nigay et al., 2021). The transformation of the model of the system of interaction with the client acquires particular importance in the activities of organizations that form direct client experience, when
comprehensive, integrated information and consulting support of the client is required at all stages of making purchasing decisions. This is facilitated by the integration of digital and traditional customer interaction tools. It is proposed to assess the consequences of the transformation based on the determination of the company's competitive position by the methods of competitive analysis; assessing the economic effect, as well as assessing innovative indicators (Salova, 2020)

REFERENCES


Nigay E.A. & Popova I.V. (2019). Substantiation of a systematic approach to managing the competitiveness of objects at the micro, meso and macro levels, Azimuth of scientific research: economics and management, 8, 2(27).


