

TRANSFORMATION OF THE DISTRIBUTION FIELD UNDER THE DIGITALIZATION PROCESS

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Abstract: The article analyzes the concept of distribution. The main objects of the distribution system - the manufacturer, the wholesale reseller, the retail reseller and the user - are identified and characterized. The article highlights the benefits of digital distribution over traditional distribution. The article analyzes the features of digital distribution in the areas of books, music, software and computer games. The article examines the genesis, evolution, and perspective of digital distribution.

Key words: digital distribution, Full Packaged Product, Original Equipment Manufacturer, GenuineKit, Hypertext Transfer Protocol, freeware, shareware, digital transformation.

JEL: O31, F29.

Introduction

The relevance of the topic of research is due to the fact that for several decades the Internet has effected the lives of people working in multiple spheres of social activity. Among these spheres, of course, are those related to the economy. Owing to the Internet's impact on the economy, new areas of application have emerged in the economic sector. One of these areas is called e-commerce - a wide array of interactive methods for conducting consumer and customer service activities.

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There is no doubt that the popularity of digital distribution in general is increasing every year. The profits of these services have positive dynamics, even in spite of the economic crisis.

Today, the services do not play the role of online stores only anymore. They have begun to develop social networks, exchanges and other means of interaction of users with each other. This has led to the creation of communities of different levels of mobility. That is why, this topic is relevant and can be studied by modern scholars, especially marketers and financiers.

The purpose of the research is to study the marketing transformation in the area of distribution under the influence of the digitalization process.

1. Concepts and definitions of digital transformation

The terms “digital economy” and “digital transformation” are well-established, despite the fact that they themselves do not have a clear definition.

One of the first meanings of the term “digital transformation” is the transition from analog to digital data - what is commonly called digitalization today.

In a broad sense, the digitalization process continues, and for different professionals it has different accents. Engineers and developers are inclined to believe that the focus of digital transformation is the technologies on which it is based, business consultants believe that the main focus should not be on technology, but on rethinking the strategy of companies. Human resources specialists see the task in recruiting people with new thinking and understanding of digital business. From here, various answers to questions arise - what is the essence of the phenomenon, when did it appear and how to measure it. In our opinion, three points of view can be distinguished.

The first is that since the advent of digital technology, people have tried to use it to automate business. That is, digital transformation is a process that lasts decades, and each new technology adds new stages to it (Hardidy).

The second point of view is that digital transformation should be associated with a certain period of ICT development and the turning point is

the emergence of the so-called third platform (clouds, mobility, social technologies, “Big data”) on the basis of which digital companies began to appear, offering a new business model using the above-mentioned technologies and the maximum avoidance of non-digital assets (Gruman).

Advocates of the third point of view emphasize the business areas of the phenomenon and say that digital transformation is relevant for any company engaged in both digital business and real production. The latter focus not only on certain technologies, but also on the economic conditions in which the company finds itself, and they ask how to find new business models and the necessary ICT tools for successful development under different conditions (Elliott).

2. Analysis of the functioning of the traditional distribution system

Distribution is the organization of sales of goods and the allocation of goods through the network of sales.

Distribution is a set of interrelated functions that are implemented in the process of assigning the material flow between different buyers. Thus, distributive logistics, or physical distribution, is the activity associated with receiving products, their preservation until the reception of the order and the subsequent delivery to the client.

Distribution channel - a set of firms or individuals who take on themselves or help transfer someone else the ownership of a particular product or service on their way from the manufacturer to the consumer.

Distribution has different levels of distribution channels. The allocation channel can have maximum 4 objects, at least 2 objects, but there can be many intermediaries (types).

The main objects of the distribution channel:

- Vendor (Manufacturer);
- Distributor (Wholesale Reseller);
- Reseller (Retail Reseller);
- User (User).

The Vendor functions are as follows:

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- production;
- sales;
- selection of the distribution channel;
- licensing;
- identification of affiliate programs.

Distributor functions (Wholesale Reseller):

- bringing the product to a retailer;
- active participation in the distribution channel;
- facilitating licensing;
- Participation in affiliate programs.

Reseller functions:

- bringing the product to the end consumer;
- participation in the distribution channel;
- facilitating licensing.

User functions:

- purchase of goods;
- use;
- providing recommendations that can help produce even better

products.

3. Features of digital distribution

With the digital transformation of the distribution industry, platforms have begun to play an important role.

Platforms as key players in multilateral markets are not a new phenomenon for the economy. However, the rapid development of digital technologies and the widespread access to the Internet have raised the question of the need to determine the subject area in which they are located, as well as the effects of their formation and functioning.

The study of the organization of platforms as participants in multilateral markets is a kind of continuation of research on the theory of networks (Bakos, Katsamakos, 2008; Economides, 1996; Katz, Shapiro, 1985). Directly in the theory of industry markets, several works laid the foundation for the study of platforms in the 2000s (Armstrong, 2006; Rochet,

Tirole, 2006), who consider them as market players connecting two or more parties.

In modern literature, several points of view have formed a key feature of platforms. Early works (Caillaud, Jullien, 2003; Evans, Schaltegger, 2007; King, 2013; Rysman, 2009) argue that it consists in the emergence of direct and cross network externalities that underlie economies of scale in building network interactions.

There are two main types of network effects: direct and cross.

Direct network effects can occur in markets where the more users participate in communication on the platform, the more value the platform has for users. At the same time, direct network effects are also found in one-way markets (Evans, Schaltegger, 2007).

Another type of network effect is cross. It occurs when a platform brings together two or more user groups that receive benefits, from the presence and number of users on the other side of interactions (Caillaud, Jullien, 2003).

In a later paper by Rochet and Tirol (Rochet, Tirole, 2006), network effects are supplemented by the so-called “non-neutral pricing structure”, which is that the platform, changing the price structure, can affect the number of transactions passing through it.

In later works, in addition to network effects and a non-neutral price structure, one of the distinguishing features of platforms is called the need to ensure direct interaction (contact) between the parties of the multilateral market (Hagiu, Wright, 2015). At the same time, the platform can transfer money between the parties (Shastitko, Markova, 2017), which makes it look like a financial intermediary. If the condition of direct contact is supplemented by the need of the parties to engage in interaction with the platform in the form of a certain fixed connection price, as well as associated or alternative costs in the form of installing software or training on working with the platform, then the resellers hired by companies for the organization no longer fall under the definition of platforms procurement or distribution of goods (Hagiu, Wright, 2015).

Digital distribution or digital spread is one of the modern ways of distributing legal electronic content (music, video, software, video games). This term is commonly used in cases where the distribution of media content

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occurs via Internet channels, that being, without the use of physical methods of disseminating information. In other words, without material information carriers.

International organizations involved in trade statistics in one way or another (Organization for Economic Co-operation and Development, WTO, UN Conference on Trade and Development (hereinafter - UNCTAD)) have taken several initiatives, including a project on international e-commerce and enhanced cooperation in the development of recommendations for measuring and the classification of digital commerce. In accordance with these recommendations, digital trading includes three types of cross-border operations (IMF, 2018):

- digitally ordered - cover cross-border e-commerce of goods and services. This segment is fairly wide: 900 million people in the world participate in international social networks, and 360 million people are subjects to electronic commerce;

- platform-enabled - implemented with the help of intermediary platform companies (Alibaba, Uber, Amazon, etc.) (OECD, 2017);

- digitally delivered - products that are delivered through digital download channels or web streaming (for example, media or software).

Thus, it can be argued that in a broad sense, digital distribution includes the second and third definition. Distribution of digital goods is a narrower term and, in this classification, is called digitally delivered.

The following types of finished products are distinguished:

- FPP (Full Packaged Product) - a fully packaged product. Usually, in the package version the buyer gets all the necessary components for installing and using the product, namely: a license agreement, a certificate of authenticity, a distribution with a software product, a registration card and a printed documentation.

- OEM (Original Equipment Manufacturer) – hardware with software. Often - operating systems Windows, complete with a laptop, are sold in the form of OEM versions. Also, some applications and server operating systems are supplied in the OEM channel.

- GK (GenuineKit) - software legalization kit. Microsoft recommends that you license a previously unlicensed copy of the operating system for existing and corporate users who need to purchase one or more licenses for existing PCs.

Advantages of digital distribution:

1. Direct sales

Products distributed through the digital distribution method do not require additional costs for production space, warehousing, delivery and placement at the point of sale. The number of people involved in the supply chain from manufacturer to buyer is significantly reduced, resulting in a decrease in the cost of such goods and an increase in producers' revenue.

2. Accessibility

Buying and selling digital distribution is available anywhere on the planet with Internet access. The delivery of the purchase is almost instantaneous, depending on the speed of connection.

3. Permanent availability

With only one copy of a product, it can be sold to millions of buyers, an infinite number of times for any length of time. In real trade, if the product is out of stock or ceases to be manufactured, the buyer is not able to purchase it while removing these barriers.

There are several basic types of digital distribution of software:

1. Commercial. The purpose of creating such software is for the right holders to obtain the profit from its use by other users, which is usually achieved through the sale of its copies.

2. Free. The license agreement of this software does not require any payments to the right holder. Such software may be distributed without source code and may contain restrictions on commercial use. According to the name, it does not provide any fee for the developer, but no additional services, such as improved versions, are provided.

3. Owned (non-free). The owner of such software product is its developer or other copyright owner who has a monopoly right to modify, copy, distribute and use this software. Such software is allowed to use wherever it is impossible to make a profit. Its use is allowed to individuals,

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educational and medical institutions, non-profit organizations, etc. But if this software is used for profit, then you need to purchase it.

4. Free (freeware). When using free software, users have the right to use the program in any way not prohibited by law: to freely use it, to study, distribute, make any changes to the program, and to distribute instances of the modified program.

5. Conditional (shareware). The type of software is free or payable, with the use of certain conditions. In our time, the term shareware understands the techniques used by the authors of shareware programs to encourage users to pay for their free program. In this case, the user is offered a version of the commercial product, limited in scope, duration or legal prohibition of use for purposes other than familiarization.

There are several options for purchasing or obtaining the right to use the software:

1. PayPlay system (Payments to using). Before the user gets the right to use the software, they must first pay for it. That is, for example, buy a license key program, which will make the software eligible to use.

2. Try before you buy (Try before you buy). Before purchasing the software, the user is offered a version with limited opportunity, expiration date, or the one with built-in reminder lock on the need to pay for the use of the program. In case of purchase of this software, the user is given a special serial number, after which the possibility to use the program is unlimited in time. Usually, such software is one of the various shareware programs.

3. Advertising software that contains advertising. The main purpose of advertising activity is to generate profit and cover the cost of software development, which means that the developer's profit is generated due to showing the user advertising information. Such programs are also a kind of shareware software, called adware programs.

4. Subscription. In this case, the user can usually pay for a month using a program or programs from a certain set provided by the digital distributor. In addition to this option, there are also subscriptions for one particular program and for different terms (including unlimited).

The payment of the right to use the software is made by using the user's bankcard or through various payment systems on the Internet. After paying for the program or several programs, the user receives a unique serial number, after which they can activate the program. In the case of de-activation of the software on the device where it was installed can be re-activated using a serial number on another device.

It should be noted that some of the content may be limited in its distribution. This condition is relevant for proprietary software when the rights holders require payment for each copy of the software product. Usually, such a restriction applies to applications that target a narrower "professional" market segment, or to software that requires a large number of users.

There are several ways to distribute software over the Internet. In digital distribution, protocols such as HTTP, P2P or FTP are used predominantly.

HTTP (Hypertext Transfer Protocol) is an application-level data transfer protocol (currently used for the transmission of arbitrary data), based on the client-server technology, which means it is presumed that there are:

- consumers (clients) who initiate the connection and send a request;
- The vendors (servers) waiting for the connection to receive the request, make the necessary actions and return the message with the result.

The main object of HTTP manipulation are the resources indicated by the URL (link) in the client request. Typically, such resources are files stored on the server. Among the main services using this technology are Steam, GOG.com, Origin.

Peer-to-peer (P2P) is an overlay computer network (created on top of another network), based on the principles of maintaining equal rights of participants. Participants in this network have feasts, which means, equal users of the network provide services to other members of this network and use their services themselves. An example of such a distribution method is Uplay from Ubisoft.

Digital distribution has captured various spheres of manifestation of human interests, such as, for example:

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1) Music. The emergence of the possibility of sharing music content on the Internet has led to a large drop in sales of music products at the beginning of this century, when sales of CDs have dropped almost double. One of the main reasons that caused such damage to sales of licensed CDs was that unlicensed music content download was very affordable. This copyright infringement strongly influenced sales and economic performance in the music industry. Therefore, it was decided to change the business model, which would allow to keep up with fast-changing technologies. The step that has been made for moving the music industry into the internet space has been successful for several reasons. The development of such method as lossless data compression allowed users to compress high-quality music files. Typically, these files are compressed to a size of 3 megabytes. For comparison, it can be said that for the same song it might take about 30-40 megabytes of disk space on a CD. The transition of the music industry to the online space has also led to an increase in the sales of products and profits of some composers. In addition, such a step allowed them to significantly reduce the cost of coordinating and disseminating their musical content. Thus, lower costs helped new composers gain popularity and recognition. In the past, some little-known composers have tried to find a way to enter the market independently to compete with other organizations that implement their content. However, the Internet gave composers more control over their music in terms of ownership, their rights, the creative process itself and much more. Another advantage of the online store was that now users have an easier way to access content. Online stores began to allow consumers to choose exactly the songs that the listeners want, instead of having to buy the entire album from which the user wanted to listen to only one or two compositions.

2) Video. Many traditional TV shows, movies and other video content are now available online. The content owner can share them themselves or use third-party services. YouTube, Netflix, Hulu, Synaptop, Amazon Video, FlickRocket and other network video services allow content owners to place it and allow users to access their content through computers, smartphones,

tablets, or with devices such as game consoles, computer consoles or Smart TVs.

3) Books. The phenomenon of digitizing books has enabled users to access them through portable e-books. One of the benefits of e-books is that they allow users to access also additional content through hypertext links. In addition, thanks to such electronic books, readers can now save several books at once, depending on the size of the hard disk of their placement. Thus, after the introduction of e-books by many companies that have invested in the modernization of their equipment, the volume of sales of their products has increased significantly.

4) Video games. The idea to sell a computer game through the Internet service was born at the time of the release of Half-Life. In 1997, its developer Valve agreed with the publishing house to reserve the right to spread the game in the "figure". Its publisher, the large international company Sierra did not attach much importance to it, thus giving Valve the opportunity to create a unique and more profitable system of Steam. They were one of the first to see the utility of such a business. Digital distribution has significantly changed the structure of the video game industry. Approximately, in the 2000s even more accessible to users and commercially successful games came out, for example, such as remakes of classic games. New for that time, the possibility of digital distribution also motivated the creation of a new game content of not-well-known gaming developers, which included independent game developers, since previously, it almost did not get them any commercial benefit.

Various gaming companies began to create their own platforms for digital distribution to facilitate the process of selling games. These platforms, such as Steam, Origin and the Xbox Live Marketplace, provide services that allow you to purchase and download digital content for specific gaming consoles or computers. Some platforms can also serve as a digital rights management system, limiting the use of purchased games and linking them to one account.

Unlike games that are recorded on discs, digital games can be purchased immediately in an easy way, even without leaving home. This

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way, gamers can get immediate access to the game in a shorter time. Also, compared to physical games, digital games, such as those offered on the Steam digital distribution service, cannot be lost or destroyed, and can be downloaded again any time. However, such services do not offer the ability to sell a game that was already in use when the user no longer needed it. However, at the same time, these services can provide means that give you a possibility to use a common family mode in the game.

In addition, the increasing prevalence of the digital distribution phenomenon has allowed independent game developers to sell and distribute their games without having to enter into agreements with other publishers. There was no longer a need to rely on the usual slow selling methods to get the profit. Independent game developers could see that the digital distribution of their gaming content had already been more successful, although before that, publishers even refused to accept their games.

The main problem is the presence of a large number of incompatible data formats in which the content is provided, due to which the capabilities of the used device may be limited. In addition, as a result of this problem, the process of data conversion may become necessary.

These streaming services may have some disadvantages:

- to require a permanent connection to the Internet while using the content;
- limit some of the content that cannot be stored locally;
- limit the content that is transferred to physical media;
- use more censorship at the discretion of content owners, infrastructure and consumer devices.

We can highlight some of the most promising methods of increasing demand among users:

- interactive work with the playing audience (implementation of their requests and wishes);
- involve journalists, bloggers, cyber sportsmen, opinion leaders among the players in the project;
- holding promotions.

Conclusion

Thus, digital distribution platforms are key participants in multilateral markets that provide direct contact between the parties involved in working with the platform. These may be consumers, producers and as owners of assets, on the one hand, and as consumers on the other. Also, the platform can connect advertisers and sell them the "attention" of consumers.

Network distribution is a qualitatively new stage in the development of trade, but it is important to understand that all its novelty lies not only in changing the mindset of the consumer, but also in the formation of a number of other preferences for business, state, education and other.

The development of network distribution is not only a profitable business, but also an innovative business that can influence the situation on the labour market, stimulate the development of urban infrastructure, accelerate the development of domestic programming, create a certain demand in the field of education and even increase the tax base.

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