THE IMPACT OF INTERNAL AND EXTERNAL FACTORS ON THE IMPAIRMENT OF GOODWILL

O IMPACTO DE FATORES INTERNOS E EXTERNOS NA IMPARIDADE DO GOODWILL

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Resumo. Este estudo analisa a influência de fatores externos e internos na deterioração do goodwill das empresas russas de TI. A relevância do estudo reside no facto de, nos últimos anos, grandes empresas russas terem vindo a diversificar as suas fontes de rendimento, mudando para ecossistemas empresariais. Esta abordagem implica inúmeras fusões e aquisições com empresas de diferentes setores, que muitas vezes constituem boa vontade adicional da empresa-mãe. A imparidade do goodwill, por sua vez, afecta directamente a futura valorização dessas empresas e a sua atractividade de investimento. Este artigo discute os fatos de redução do ágio nos maiores players do mercado russo de TI que implementam seus próprios ecossistemas intersetoriais: Yandex e VK.Group. Os métodos de pesquisa são a análise da literatura relevante e das demonstrações financeiras das empresas, juntamente com métodos analíticos de estimação de indicadores. Como parte do resultado da investigação, espera-se identificar gatilhos comuns que têm impacto na imparidade do goodwill na indústria de TI na Rússia.

Palavras-chave: Goodwill, Impairment, It, Ecossistema.

Abstract. This study analyzes the influence of external and internal factors on the goodwill impairment of Russian ITcompanies. The relevance of the study lies in the fact that in recent years large Russian companies have been diversifying their sources of income by switching to business ecosystems. This approach implies numerous mergers and takeovers with companies in different industries, which often form additional goodwill of the parent company. The impairment of goodwill, in turn, directly affects the further valuation of such firms and their investment attractiveness. This article discusses the facts of goodwill impairment in the largest players of the Russian IT market that implement their own cross-industry ecosystems: Yandex and VK.Group. The research methods are the analysis of relevant literature and financial statements of the companies, together with analytical methods of indicator estimation. As part of the research result, it is expected to identify common triggers that have an impact on goodwill impairment in the IT-industry in Russia.

Keywords: Goodwill, Impairment, It, Ecosystem.

INTRODUCTION

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The modern structure of business work is actively influenced by the trend of informatization. This phenomenon has already gone beyond the typical IT-industry of a few years ago, information objects and services are penetrating into all areas of human life: smart things (IoT), mobile services for food delivery, cab calling, and artificial intelligence is gradually becoming not only an analytical assistant, but also an applied tool in everyday things (Belousova et al., 2021). The human worldview is also changing. If previously consumers were looking for the most profitable agents in each industry and competition within the sector played a significant role, now many economic actors give preference to time saving and convenience of use (Pogosyan, 2021 a, b). Thus, the emergence of demand for the speed and convenience of obtaining goods and services in various industries has provided an opportunity for business development for the largest players in the IT industry (Plotnikov et al., 2022; Tarman and Kilinc, 2022).

This trend was the determinant for the transition to an ecosystem approach to business, the introduction of aggregators, in which the parent company is a function of interaction with the client and the delegation of all kinds of tasks to its divisions and subsidiaries in different areas. Some IT companies have been predicting this transition and experimenting with entering new industries since the 2010s. For example, Yandex decided back in 2012 to launch a ride aggregator, Yandex. Taxi. In 2021, this segment brings the company 20% of total revenue. However, the main push for the transition happened in 2019-2021. First, the state of technology in the IT industry at the time made it possible to optimize the business processes of many household services to the ecosystem. Second, customer access to the means of interaction with new technologies (computers, smartphones, smart watches, TVs, etc.) was sufficient (Yemelyanov et al., 2018, 2020). Thirdly, the dramatic development of such ecosystem products, affecting various areas of ordinary human life, was influenced by social constraints related to the COVID-19 pandemic. Lockdown and selfisolation made it much more difficult to get offline services: difficulties with shopping in the store, going to the movies, meeting and interacting with colleagues all created a huge demand for remote services. At the same time, this trend was noticed by far more than one company in the field of IT. Major industry players made decisions to launch new services affecting a particular area, which led to high competition and the struggle for new markets. Thus, one can notice the emergence and active promotion of interchangeable services: Yandex. Taxi and Citymobil (taxi sector), Yandex. Eda and Delivery Club (food delivery sector), Ozon, Wildberry, Yandex.Market (marketplace sector), etc. That is why, we can say that the main period of transformation took place between 2019 and 2021.

The problems that occupy the marketing managers today is that their efforts to create and maintain the brand lacked the necessary planning, due to the lack of knowledge of the characteristics of the brand and the lack of knowledge of the correct methods of brand management, they cannot Effectively, link the product with the brand name. Most of the marketing managers or brand managers know marketing concepts such as understanding customer needs, positioning, promotional and advertising activities and have a lot of experience in implementing them, but in general, what causes them problems in marketing products and services is is that they cannot apply marketing concepts in the way of enhancing brand value. All this stems from the fact that they do not have a proper understanding of the brand as one of the most important intangible assets of the company, and their perception of the asset only includes things that can be seen and touched.

Just as the science of organization management can help managers of production institutions by using management tools such as goal setting, planning, coordination, mobilization of resources and facilities, and control to achieve the goals of the organization. The science of brand management also enables managers to plan correctly in order to achieve the goals of the brand, in such a way that the amount of achieving the goals is maximized without wasting resources.

Most designers work with or within an organization, designing the organization's products or visual communications. Designers participate in the work of the organization along with management, salespeople, engineers and production workers. Although the organization is composed of a number of components, in general it is often given a human face. One of these features is identity. It is said that a positive identity is a competitive advantage for an organization. In a human being, it is understood that identity is a quality that distinguishes him from other people.

It is a set of assets and liabilities that are associated with the name and symbol of the brand and are added or subtracted to the value created by a product or service for the company or the company's customers. These assets and liabilities on which the special value of the brand is formed are different from one context to another.

Defining brand characteristics from the point of view of international economy

The brand name and brand equity includes a set of assets and liabilities that are added to or subtracted from the value provided by the company's goods or services over time. This special value of the brand name is the distinctive and positive effect that the recognition of the brand name has on the consumer's reaction to the product or service. The main assets are:

Brand equity has different aspects. First, brand equity is a set of assets. Therefore, brand equity management requires creating and increasing these assets. Second, each of the brand's assets create value in different ways. Third, the special value of the brand creates value for both the company and the customers. Fourthly, the assets and obligations related to the brand name and logo may undergo changes or even some of them may be lost in case of any change in the brand name or logo.

The meaning of awareness in branding is the amount and strength of presence that the brand has in the consumer's mind. Various methods that measure brand awareness affect the brand's memory by the customer. From brand recognition to calling the mind of the brand to the highest brand in the mind and to the dominant brand. Awareness creates a feeling of familiarity with the brand in customers. If a brand is recalled in the customer's mind at the time of purchase, it can create a prominence in the customer's mind. Name awareness can be a sign of some kind of customer commitment. If there is name awareness, then there must be a reason for it.

It should be noted that the income diversification model in listed companies is mainly implemented based on the acquisition of one or several companies operating in the specified industry and their integration into a single system (Chuvashlova et al., 2021; Strugar, 2022; Filipovic, 2022; Tasri, 2022; Jamalpour & Derabi, 2023). Thus, a significant expansion of the activities of large Russian IT companies occurred due to acquisitions, thus, the goodwill indicator also increased significantly. In the context of many similar transactions and relatively short transformation periods, the question of the fairness of the modern valuation of such companies and the possibility of potential impairment of goodwill is relevant (Balganova, 2021; Nikitin and Safonov, 2021). Thus, the author aims to study the internal and external factors influencing the impairment of goodwill and to determine the potential for possible impairment of goodwill of IT companies in the medium term. In order to achieve the goal, the authors set themselves the following tasks (Öztürk, 2020; Otts et al., 2021; Grigoryev et al., 2022). First, to study the dynamics of goodwill and its impairment in the largest companies in the Russian IT industry in the period from 2018 to 2022. Thirdly, to draw conclusions about external and internal factors affecting the impairment of goodwill in the IT industry in Russia.

LITERATURE REVIEW

Goodwill today is an integral part of the company's assets and is reflected in the company's non-current assets. According to IFRS-3 «Business Combinations» goodwill represents the future economic benefits arising from assets that cannot be separately identified and recognized. In this case, only positive goodwill is recognized in the balance sheet in the amount of the excess of the purchase price over the acquired share in the fair value of identifiable assets, liabilities, and contingent liabilities as of the date of purchase. It should be noted that IFRS 3 replaces IAS 22 Business Combinations and clarifies that goodwill is not amortized; instead, an annual impairment test is performed in accordance with IAS 36 Impairment of Assets (IFRS 3 "Business combinations").

The understanding and definition of goodwill has evolved significantly since its inception. According to G.Hags, goodwill develops in parallel with the business. Its appearance is associated with the beginning of business reorganization processes through mergers and acquisitions, the formation of primary monopolies. The fact that the enterprise was paying more value than the value of its assets led to discussions among the accounting community. At the end of the 19th century, there were 2 approaches to reflecting Goodwill in financial statements. Economists such as V. Knox, A. Knight and F. Moore advocated the immediate write-off of goodwill to expenses. In 1925, the German economist, I. Scher, in support of this position, argued that accounting for goodwill in the balance sheet is a dilution of capital. On the other hand, scientists such as F. Didier, J. Verliy, G. Kopf advocated reflecting goodwill in the balance sheet as deferred expenses. They also argued that goodwill was amortized. During the 20th century, there were many political and economic events that influenced the rethinking of attitudes towards goodwill. These events had both global and local significance. Thus, the issue of reflecting goodwill gradually moved from the scientific plane to the legislative plane. Thus, when the standard IFRS 3 "Business Combinations" appeared, which involves accounting for goodwill as a non-current asset subject to an impairment test, many European countries did not recognize this standard and apply it in practice, since, according to the EU directive, adopted before the introduction of the standard and worth above IFRS standards, goodwill was amortized (Yemelyanov et al., 2020). Thus, the issue of recording and depreciating goodwill is the basis for extensive discussions among professional legislators, there are differences in methods, depending on the recognition of a particular country of the standard. In this article, we will rely on the definitions and standards of IFRS 3. It should be noted that when including goodwill in financial statements, accountants today rely on the provisions of IAS 38 "Intangible Assets", which does not allow recognition of goodwill created internally (own brands, headlines, publisher names, customer lists and similar items in content). The only acceptable form of goodwill is goodwill acquired externally through business combinations, purchases, or acquisitions (Yemelyanov et al., 2020; Shariati et al., 2013).

At the completion of the business combination process, it is important to calculate the value of goodwill. Let's consider how this process takes place from the side of IFRS standards. With the January 2008 revision of IFRS 3 "Business Combinations" and IAS 27 "Consolidated and Separate Financial Statements", two different methods of calculating goodwill have emerged, which in turn affect the calculation of its impairment. The first and traditional method is proportional. According to it, goodwill arising at the time of the acquisition of a subsidiary is considered (and calculated) as the excess of the fair value of the consideration transferred by the controlling shareholder over its share in the fair value of the net assets of the subsidiary. Thus, goodwill calculated by the proportional method can be represented by the following equation (1):

$$G_p = I - NA_s \times OS, (1)$$

 $\begin{array}{ll} \mbox{Where:} & G_p-\mbox{Goodwill calculated by proportional method;} \\ I-\mbox{Amount of investment paid on acquisition;} \\ NA_s-\mbox{Net Assets of the subsidiary company;} \\ OS-\mbox{Ownership share gained by acquisition.} \end{array}$

The second method, which emerged from the revision of the above standards, is called the full goodwill method. Let's get back to its essence. This method of calculating goodwill consists of comparing the fair value of a subsidiary to all of its net assets, not just the controlling shareholder's portion of it. In this case, the fair value of the subsidiary is equal to the sum of the fair value of the consideration given by the controlling shareholder and the fair value of the non-controlling interest. We can distinguish the following formula (2):

$$G_f = (I - NCS) - NA_s, (2)$$

 $\begin{array}{lll} \mbox{Where:} & G_p-\mbox{G}_p-\mbox{Goodwill calculated by full method;} \\ & I-\mbox{Amount of investment paid on acquisition;} \\ & NA_s-\mbox{Net Assets of the subsidiary company;} \\ & NCS-\mbox{Non-controlling share.} \end{array}$

The process of recognizing goodwill involves accounting for it as an asset of the entity. According to current standards, this asset is not subject to depreciation, but it is necessary to test for impairment at least once a year. Goodwill is inseparable from the net assets of a subsidiary. Therefore, goodwill can only be tested for impairment at the cash generating unit (CGU) level, i.e., sets of assets that collectively create economic benefits. In general, the CGU will correspond to the subsidiary itself, i.e., the sum of its net assets and goodwill. Thus, an impairment test for goodwill would consist of comparing the carrying amount of the subsidiary's net assets, plus the goodwill, to its recoverable amount. According to Vladimir Voiteliev, Senior IFRS Consultant at ADE Solutions, goodwill can be tested for impairment under IAS 36 para. 10 at any time during the financial year, and different CGUs can be tested at different times. However, testing should be performed at the same time interval each year to maintain the chronological integrity of the analysis.

Next, let's consider what factors can affect the impairment of a company's goodwill. Maria Nykyforovych (2017) in her article "Trigger Warnings: When Is Goodwill Impairment Disclosure Informative?" examines the quality of the information disclosed in the financial statements on testing goodwill for impairment. She classifies the causes of impairment into three main groups:

- 1. related to the company itself (characterized as internal, includes the approach of corporate management to the management of acquired assets, inflated expectations from the financial results of the acquired company, etc.);
- 2. related to the industry as a whole (more related to external ones, for example, a decrease in demand for certain types of goods and services related to the company's activities. However, they can also be internal in nature, for example, a sharp increase in competition in the market, unforeseen in forecasting financial results acquired company);
- 3. relating to the economy as a whole (external, including the crisis, political and economic instability).

As the study showed, the market reacts very strongly negatively both from the position of price and from the position of trading volumes for the company's securities, mainly to the decisions of companies to impair goodwill, but mainly in the case when the company indicates its internal reasons for this in the

reporting. The author of the article concludes that the indication of internal reasons gives shareholders reasons to reduce the credibility of the company's management, while the write-off of goodwill with reference to external factors causes a less serious reaction. If the impairment of goodwill is due to external factors, then in theory, external triggers could already be assessed by the investor in advance and are not new information that spoils the opinion of the company. This thesis consists of the fact that the process of testing an asset for impairment can occur once a year, during which several external triggers can occur at different time intervals. Nykyforovych (2017) notes this as a very significant shortcoming, which means a huge potential for improving the current model with little or no effort. Considering that the global financial reporting standards developers (including IASB and FASB) are now very seriously considering simplifying the testing model, which can be manifested in the form of abandoning mandatory annual testing in favor of testing goodwill after the occurrence of trigger events, the importance of these same triggers in the future will only increase.

An important aspect of internal factors affecting the impairment of goodwill is the approach of the company's management to recognize the fact of a decrease in the recoverable amount of assets. Given that the impact on financial projections and the resulting fair value estimates is still significant, it is only reported in the financial statements with the consent of management. Moreover, goodwill impairment decisions often occur with a change in the company's management (GAAP.RU) without inside information, it is difficult to assess what will be the real cause of the impairment. In addition, the reluctance to recognize the fact of impairment may also be explained by the fact that the test does not imply replenishment of the goodwill estimate in future periods, and the result of the assessment affects the value of the company. This fact is extremely important to keep in mind when considering companies in the IT industry that have a significant share of goodwill in the structure of the company's assets.

MATERIALS AND METHODS

One of the most famous and perhaps the most important marketing concepts today, which was first formed in the 1980s, is the concept of brand equity. This concept was initially proposed as the most important research area in consumer markets. From the point of view of marketing or in other words customeroriented point of view, the most important and valuable definitions and conceptual frameworks have been presented by Keller and Acker, which have been used more than other definitions in brand literature. Francioni et al., (2022) defines brand equity as: "a set of five groups of brand assets and liabilities that are connected to the brand name or symbol, and to the value of a product or service for a company or for its consumers. The company adds or subtracts from it. Therefore, brand equity in Aker's model consists of 5 dimensions, which are: brand awareness, perceived brand quality, mental association of the brand, brand loyalty and other proprietary assets of the brand such as privileges and registration rights [5], trademarks and Relations with the channel. In 2000, Yu et al. developed the model proposed by Acker. They showed that the special value of the brand can be created and protected and even developed by strengthening its dimensions.

There are several prerequisites for brand equity dimensions, for example, any marketing activity has the potential to impact brand equity, as these activities show the effect of marketing investments made on the brand. In subsequent studies conducted by Rojas-Lamorena et al., (2022), a new model for brand equity was created in which brand awareness and mental association were integrated and considered as one dimension, thus the model three dimensions consisting of brand awareness/mental association, perceived quality and brand loyalty emerged. Based on Keller conceptual framework of customer-oriented brand equity, dimensions of brand equity are sources of value creation for the company and customers. Therefore, it can be said that the overall value of brand equity is one of the consequences of having a strong brand, and it is a financial and tangible value that is created or reduced due to the promotion or degradation of brand equity. Brand equity dimensions create value for both the company and the customer in a variety of ways (Keller, 1993).

Because strong brands create a sustainable competitive advantage in the B2B environment. Therefore, paying attention to industrial branding and special evaluation of the industrial brand can greatly contribute to the success of companies. Buyer-based brand equity is a good starting point for evaluating industrial brand equity, so the customer-based method that is common in consumer markets can be used for industrial buyers.

Two markets applied changes to the Keller pyramid model and presented a revised model that is applicable to this area by considering industrial market indicators. The changes applied are:

- 1. Evaluating the equity value of the producer (corporate) brand instead of the equity value of the brand associated with the products
- 2. Company representatives (sales force) play an important role in industrial markets.
- 3. The mental association of the brand is more about the functional characteristics of the product.
- 4. Credit plays a much more important role in industrial markets.
- 5. The buying process in industrial markets is more logical than emotional, so emotions do not play an important role in these markets.
- 6. Brand congruence needs to be modified to suit industrial markets.

According to revised model, we will continue to examine the most important indicators proposed in this model, which will be the distinguishing feature of consumer and industrial brand equity.

Company image

One of the methods of creating a connection between the secondary knowledge of the brand and the brand itself is the image of the company, the promotion of which creates special value of the brand through the improvement of the secondary knowledge (Keller, 1993). The mental image of the company is: the immediate mental understanding that a person, group or network has of the organization, or the internal interconnected state of the mind, which is the basis for the successful or unsuccessful efforts presented by the company. The role of the company's mental image in creating brand equity has been emphasized in industrial markets more than in consumer markets. To show the image of the company in the B2B field, the following dimensions can be considered:

- 1. Features, benefits and attitudes related to the product, such as; Quality and innovation
- 2. Association related to people and relationships like; Customer Orientation
- 3. Values and programs such as; Concern about the environment and social responsibility
- 4. The credit of the company such as; Expertise, reliability and popularity.

As part of the study of factors affecting the impairment of goodwill, it is necessary to evaluate the methodology of impairment tests. The test requires comparing the carrying amount of an asset with its recoverable amount. The recoverable amount is the higher of the fair value less costs of disposal and value in use of the asset. If the carrying amount exceeds the recoverable amount, company needs to recognize an impairment loss. In the case of goodwill, it is not possible to test it as an asset for impairment in a simple way because it does not generate cash on its own and it is not possible to determine its fair value. In this case, the cash-generating unit (CGU) needs to be tested - the smallest identifiable group of assets that generates cash inflows that are largely independent of cash inflows from other assets or groups of assets.

Typically, the CGU is the company as a whole, but if there are separate divisions generating independent cash flows, then the CGU would be a division. Thus, in the event of a takeover of a company with multiple divisions, this goodwill should be allocated to each of the cash-generating units that are expected to benefit from the synergies of the business combination. However, each CGU to which goodwill is allocated must be the lowest level at which goodwill is tracked, and a CGU cannot be larger than an operating segment as defined in IFRS 8. Unfortunately, there is nothing in IAS 36 about the method of distribution or how you should allocate goodwill.

In practice, many methods are used, for example, it is possible to allocate goodwill based on the preand post-acquisition fair value of the CGU, where the difference is the allocated goodwill. Alternatively, it is possible to simply calculate the difference between the fair value of the net assets acquired and the fair value of the business (or division) acquired.

After a company's CGUs have been determined and goodwill allocated to them, an impairment test must be performed. This requires comparing the sum of the carrying amount of the CGU and the goodwill allocated to the recoverable amount.

If the carrying amount exceeds the recoverable amount, an impairment loss must be recognized. However, it should be considered that, since the impairment loss relates to many assets within one CGU, in case the amount of the loss exceeds the goodwill, it is necessary to allocate the loss by first reducing the goodwill to 0, and then allocating its balance to the assets on a pro rata basis.

In the case of a partial ownership of the company, only own interest is indicated in the goodwill section of the parent company. For an impairment, it is necessary to bring the goodwill ratio of a particular CGU to 100% and at the end of the impairment, recognize only a share of the loss proportional to the division/company ownership. This method is relevant for proportional valuation of goodwill. If the full

method is used to measure the value of goodwill, then the loss is recognized in full, but is recognized as a reduction in retained earnings as a share of the relevant share of the company and as a reduction in non-controlling interest in accordance with the external interest (Yemelyanov et al., 2020).

RESULTS AND DISCUSSION

Today, the abundance of many choices is not only common in the consumer market. Rather, there is a lot of choice in industrial markets as well. On the other hand, the spread of similar products and services, globalization and intense competition force markets to differentiate their products from other companies and create value for their buyers. Mere innovation in goods and services will not necessarily create a longterm competitive advantage; Because these operational advantages are usually quickly copied and therefore short-lived and scarce. Technical excellence is no longer the only essential factor for success; In markets where products and services are becoming more and more compatible, a strong brand may be the only feature that differentiates a product or service from competitors.

Consumer companies have known and used branding and brand management for several decades to adapt to these changes, but it must be said that brand and brand management have expanded beyond the old theories of consumer goods marketers. Brand is increasingly important for companies, in almost every industry from steel. One of the growing industries in the world is the software industry, which has grown significantly in recent years. , as one of the managers of Hewlett-Packard Company believes that in the nottoo-distant future software will consume the world and all companies will be forced to use software in their affairs (Wall Street Journal).

In Iran, the software industry has grown by 41% in recent years, which has enjoyed good growth compared to other industries. And it has been compiled, it has greatly increased the software market (Arabi and Shaareian, 2014; Tightiz & Yoo, 2022). In such a situation, companies will succeed in differentiating themselves from their competitors and creating a favorable and unique position in the minds of their corporate customers, one of the ways to create a sustainable competitive advantage in these markets, which has not been addressed before. It is the creation of special brand value, that is, the value that is added to products and services by having a brand and can be created, maintained and strengthened. There are several prerequisites for brand equity dimensions, for example, any marketing activity has the potential to impact brand equity, as these activities show the effect of marketing investments made on the brand.

Activities such as advertising expenses, marketing research expenses and sales force, brand age, advertising share and product portfolio, as well as other marketing activities such as: use of public relations, guarantees, slogans or echoes, symbols and packaging, company image, country of origin And promotional processes and brand naming strategy have been presented as sources of brand equity. Therefore, to determine the effect of marketing activities, including marketing mix factors and company image, on brand equity in the software sector of the information technology industry, research should be conducted on the direct and indirect effects of these factors on brand equity. In this way, to help the companies active in this field to strengthen their brand by developing appropriate strategies regarding the most key factors influencing the brand value and allocating more financial resources to these factors, and thereby strengthening their performance. Improve your finances.

Due to the economic developments in the country and the targeting of subsidies, the price competition will decrease and with the entry of global brands into the domestic market, the market will become highly competitive, so companies will seek to gain a competitive advantage through investing in brand creation and the role of branding. It becomes more prominent in commercial markets.

According to the features of software products, the importance of brand equity in these products is very high, and usually the selection of a product or service in this industry is based on its brand. Therefore, considering the increasing role of branding in the country's industrial sector and the importance of brand equity in the software industry, it is necessary to use a comprehensive model to examine the factors affecting brand equity in industrial markets (especially the software industry, where the products are more complex have and need special support services) is clearly visible. Because in such an industry, due to the high risk of purchase, buyers prefer famous and powerful brands to other brands in the market.

The practical part of the study considers two companies in the IT industry that implement a key part of their activities in Russia: Yandex N.V. and VK.Group. It should be noted that one of the largest companies in the banking sector, Sber, also takes part in the active development of the ecosystem approach, announcing its rebranding and entry into the IT market at the end of 2019. However, when considering the financial statements of a banking company, difficulties arise in the analysis of goodwill. First, Russian law allows a group of companies that have a key role in the Russian economy not to fully disclose financial statements. Secondly, in the available financial statements of Sber there is no information about the amount of goodwill and data about its impairment. Other companies are not notable for large investments in the development of their own ecosystems, implementing activities in various industries. The exception is the telecom companies (MTS, VimpelCom, and MegaFon). However, their projects are formed within the industry, mainly on the basis of their own funds, which excludes large mergers and acquisitions in the format of income diversification. Let us consider the way of companies in recent years in a little more detail.

Yandex N.V. is the largest company, until 2010 the main source of income was contextual and targeting advertising on the Internet. Then, the company began experimenting with revenue diversification. Since 2012 the company started to develop cab services. Since 2015 - food delivery services. In 2018 its own mobile aggregator Yandex.Go was created, combining the functions of food delivery, cab, music and other services. Since 2020, the company has also moved into the sphere of smart things. Now the company has many services in different industries. (Yandex N.V. History)

VK.Group is a company formed through the rebranding of another major IT player on the Russian market, the Mail.ru Group. The company also, like Yandex, developed its own IT services on the Internet. After 2015, the company tended to develop social networks and online games. However, services related to income diversification also took place. In particular, the food delivery service Deliveri Club, cab CityMobile and smart speakers in the format of the Internet of Things. As an assessment of the equivalence of companies, it can be noted that in 2021 there was even an exchange of assets.



Let's consider the growth dynamics of goodwill of the two companies (Figure 1).

Figure 1. Goodwill dynamics 2017-Q3 2022. Source: calculated by author on a base of official data Source: prepared by authors

Yandex's goodwill increased more than 15 times between 2017 and Q3 2022. During this period, the company's services were actively developing. The largest increase is observed in 2018 compared to 2017 (more than 5 times) and in 2020 compared to 2019 (2 times). The results of 2018 can be explained by the strategic decision to move to a policy of diversifying revenues and the launch of multiple services, in particular Yandex. Market. In 2020, however, there was a sharp acceleration in diversification due to the increased demand for remote IT-services because of the covid 19 pandemic.

In the case of Vk.Group's goodwill dynamics, there is some consistency with Yandex. In 2018, there is also an increase in goodwill, but the company has not made specific decisions to increase the number of services in 2020. However, the deferred effect is reflected in the reports for 2021 and the increase in the results for Q3 2022.

If we consider the goodwill impairment processes of the two companies, we can note that there is some consistency in this process as well. During the period under review, each of the companies reported only 1 loss related to this fact. In 2019, Yandex reported a goodwill impairment loss of 762 million rubles. In its annual report, the company noted that the decrease occurred against the background of inflated expectations of the management of investments in the food delivery sector (CGU), that is, acknowledged the priority of the internal cause of the impairment. In turn, VK Group announced an impairment loss of 758 million rubles in 2020. In their statements, they noted that this fact is related to the closure of several projects in the online gaming sector (CGU). Thus, internal and external factors were recognized. Given the diversification of revenues and the increase in the number of new

As a result of the analysis, the risk of shielding was noted. Shielding is a process where the impairment does not come from an increase in goodwill in CGU. Goodwill cannot exist in the absence of assets. To assess goodwill, assets are combined into groups - CGU. In the case of the monitored companies, these units are the areas of activity of the company, divisions. For example, the division of online games at VK.Group and food delivery at Yandex N.V. Thus, active investment in the development of services entailed an increase in a number of mergers and acquisitions, and, consequently, goodwill. Thus, goodwill from specific mergers is diluted in the reporting if there is an increase within the CGU and it exceeds losses from previous mergers. Thus, it will be possible to assess the result of the success and profitability of the acquisitions made only after the end of the period of active development of services.

Impairment in this process is influenced by both external and internal factors. As for the external ones, it is possible to assess the overestimation during the takeover of a business in the conditions of accelerated takeover processes over the period under review. Among the external factors is an increase in competition, which confirms the emergence of transactions on the exchange of services between VK.Group and Yandex in 2022 in order to divide the markets. Also, an external factor may include a decrease in demand for most products that are relevant during the growth of the COVID-19 pandemic.

CONCLUSION

As a result of the study, the author identified several conclusions regarding the impairment of goodwill in IT companies in Russia. First, there is a trend of IT companies revenue diversification and aggregation, which leads to an increase in the number of acquisitions and an increase in the goodwill of companies. Second, companies were looking to capture new markets between 2018 and 2021, which limited settlement time for management and increased the risk of internal impairment risks. Thirdly, the growth in demand, which caused such a need, is gradually decreasing, which confirms the slowdown in the pace of ecosystem building and the increase in goodwill. Fourthly, companies evaluate goodwill in relation to the assets of specific divisions, which consist of a number of acquired companies, thus it is not possible to accurately determine the impairment of goodwill of a particular acquired company in isolation from the company's business segment, and since services are currently being developed, there is the risk of screening in reporting. Thus, it is rather difficult to assess how accurately the goodwill of companies currently corresponds to reality and is able to reflect the prospects for further profit. For an accurate assessment, it is necessary to wait for the end of the growth of assets and see the real process of depreciation.

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