

MANAGING INTANGIBLE ASSETS IN THE GAMING INDUSTRY ENTERPRISE

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Abstract: The objective of the paper is to describe and systematise the concept of the enterprise's resources, as well as to indicate comprehensive methods of managing intangible assets followed by the case study of a Polish gaming industry company with regard to protection of its non-material assets. The approach applied in the paper is of a descriptive-empirical nature. The research methods used in this paper are: induction, deduction, literature studies and a case study. The method of critical and comparative analysis was used in relation to the views presented in literature. The paper ends with a brief presentation of the research findings.

Keywords: intangible assets, intellectual capital, strategic management, gaming industry.

1. Introduction

Intangible assets are becoming the dominant means for creating value in a modern enterprise (Shaikh, and Junaid, 2004). The understanding of factors responsible for the financial success of an enterprise is changing gradually. The book value of a property and its tangible assets is no longer considered a main factor. The importance of the factors usually not included in a financial statement is being acknowledged more and more often (Mikuła, and Pietruszka-Ortyl, 2010). Therefore, rather than only concentrating on financial capital or physical resources, various modern strategies focus greatly on investments in non-physical assets derived from human, social and organisational capital instead (Ireland, Hoskisson, and Hitt, 2006). Proper identification and effective management of these factors contribute to long-term gains and create stable enterprise value on the market (Domagała-Korona, and Herman, 2006). Following the above-mentioned introductory remarks, the aim of the paper was formulated, which is to systemise and analyse the concepts of intangible assets and methods of their management on the basis of a literature review and a case study of the selected gaming industry company.

2. Basic concepts

Assets are one of the most relevant categories in economics. Everything that is at a company's disposal and can be used in business, as well as that which allows effective and economic achievement of the goals and objectives, is considered an asset (Stankiewicz, 2002; Godziszewski, 2011). Basically, assets are nothing but all the economic resources under control of a given business entity at a given time and that can be used for future benefit (Stefanowicz, 2004). These are divided into two categories: tangible assets and intangible assets (Huff, Floyd, Sherman, and Terjesen, 2011).

The notion of "assets" is commonly used in accounting and economics. Despite the fact that the terms "assets" and "resources" are often used interchangeably, they are not exactly synonymous, and therefore the meaning of "market resources" and "market assets" varies slightly. The assets precisely defined in the applicable legal requirements have specific qualities that affect whether a given resource may and will be a part of these assets. Due to their formal status, assets are to be obligatorily disclosed in financial reporting. Currently, the resources that do not comply with the specific accounting criteria are not required to be revealed systematically or in accordance with commonly used procedures and standards. This results in widening the information gap and information asymmetry, taking into consideration the current state of the enterprise and its strategic resources, deciding upon its possible future business undertakings and developments (Rumniak, 2014). During the process of building a company's value, the role and place of assets changes over time (Czerniachowicz, 2016).

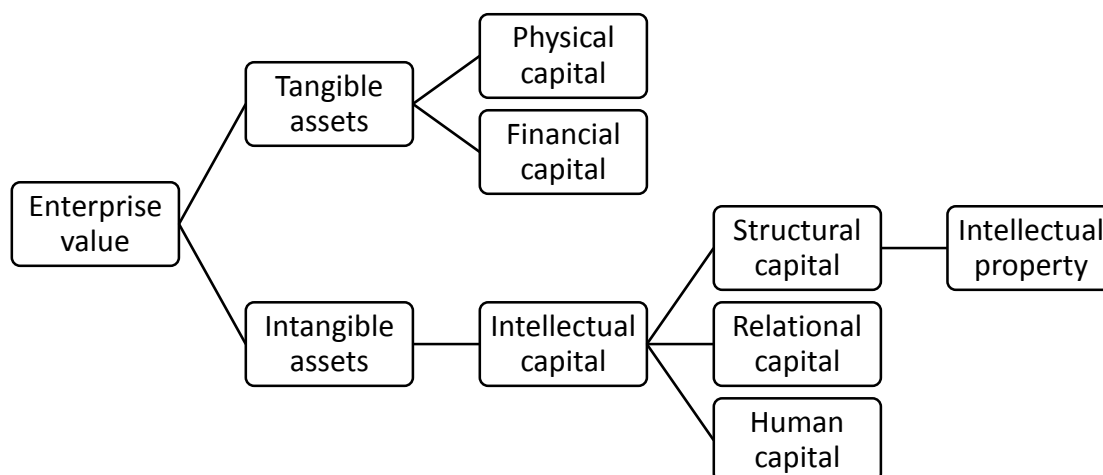


Figure 1. Enterprise Value Diagram, Source: Mikula, 2002.

Tangible assets are physical values that are used to generate revenue for a company. Tangible assets in accounting are either current or fixed. Current assets include items such as cash, inventory and marketable securities. These items are typically used during a year and, thus, can be sold to raise cash for emergencies more readily. Fixed assets, on the other hand, are noncurrent assets which a company uses in its business operations for more than a year and

include assets such as trucks, machinery, office furniture, buildings, etc. (Marczewska, 2016). The money generated by a company with the use of tangible assets is recorded in the income statement as revenue (Michalczuk, 2013).

Tangible resources are those company assets that have an actual physical form and can be touched and grasped in a material sense. They can therefore be easily identified and quantified within the business concerned. They are mostly the property components included in the balance sheet and those which are relatively easy to have their worth evaluated (Mikuła, and Pietruszka-Ortyl, 2010).

Various terms are used for intangibles in literature (Reilly, Schweihs, 1998; Cohen, 2005). Intangible assets, intangible resources and intellectual capital are all common and often used interchangeably. They cannot be defined precisely (Lev, 2001). The term “intangible assets” can primarily be found in accounting literature, while “intangible resources” is widely used by economists, and “intellectual capital” is a notion mostly popular in management and law literature (Bąk, 2008). The International Accounting Standards Board (IASB) defines an intangible asset as an ‘identifiable non-monetary asset without physical substance’. Therefore, the first component in the valuation of an intangible asset for representation on a balance sheet or for other purposes is to conceptually understand what can be deemed to be an intangible asset so as to identify it (International Accounting Standards Board, 2019). The IASB definition specifically precludes monetary assets in their definition of an intangible asset. This is necessary to avoid the classifying items such as accounts receivable, derivatives and cash in the bank as an intangible asset. IASB contains examples of intangible assets which include: computer software, copyright and patents. Intangibles are defined by the New York University Intangibles Research Center (ICR) as nonphysical sources of the future economic benefits to a company, which is everything but the money and tangible assets (Łukasiewicz, 2005). To be recognised by the accounting system, intangible assets have to comply with the criteria clearly established in the definitions cited above. Therefore, the scope of intangibles found in an entity’s balance sheet is much smaller than the one that is the subject of study in management science (Budzińska, 2011). Intangible assets are all the elements of an enterprise that exist in addition to tangible assets (Smith and Parr, 1994). While competently and ably combined with tangible assets, intangibles can be the subject of strategic management and determine the advantage over the competitors and therefore increase the enterprise’s market value (Murawska, 2008). To summarise, intangibles are nonphysical sources of value and claims for future benefits.

In this paper, the term “intangible assets” will specifically be used to describe all of the non-material resources of an enterprise.

3. Managing intangible assets

In 2010, a study on the efficiency of the Spanish model of managing and reporting intangibles was carried out. The study revealed that 51.9% of the communication managers surveyed did not include the management of intangibles among their responsibilities. The remaining 48.1% did mention the management of some intangibles among their main functions laid down by the firm, stressing the management of corporate image, brand and reputation. Only 2.5% of respondents claimed that their responsibility was to manage all the intangibles. This research shows that, due to the changes in value creation and enhancement, the role of a communication manager is rapidly evolving, which results in new responsibilities and therefore may require some change of focus and a new set of skills. Experts therefore point to gaps in the training of communication managers. These loopholes need to be closed if they are to fulfil their growing remit successfully. The research also points to important shortfalls in the management of intangibles, and lines of action therefore ought to be established to solve them, as this is one of these areas which has the greatest potential for future development within the new role of the communication manager. Four lines of work are therefore proposed based on the data furnished by quantitative analyses and reinforced by the opinion of the experts consulted (Lopez Barajas de la Puerta, 2011).

In addition to the tangible financial resources owned by an enterprise, the role of a strategic business leader is to be considered in terms of what new strategies for creating differentiated products and services that will bring value to the business entity, some of which will later become recognised as intellectual assets and may be developed based on both the organisation's tangible and intangible assets (Barcik, 2019). This suggests that enterprises resources are co-dependent, and innovation is the key to the creation of intangible assets. In the position of making a business decision, it is important to stop perceiving knowledge-based assets as having predominantly legal functions and initiate their use in business management processes. They should also be included in economic, financial and risk management planning, as well as in core business strategies in general (Swaminathan, 2016). However, costly and time-consuming challenges over control use and ownership of a company's intangibles, including misappropriation, infringement and counterfeiting, and other vulnerabilities that can lead to asset compromise and undermining should be avoided at all cost. Therefore, it is important to identify and counter the expanding global risks and threats in order that they don't impede business momentum, delay or undermine transactions and decrease an entity's competitive advantages through eroding the value and performance of its assets. The main objective for any enterprise is to focus on yet unrecognised intangibles and bring managerial, business, strategic and economic clarity to how to find, monitor, protect and enhance them. Once recognised, the under-the-radar intangibles must have their value, risks, threats and materiality monitored. It is also important to distinguish the objective and subjective intangible asset value.

Understanding of what the difference is and of the importance it makes is crucial. Valuation of intangibles must be thorough and apply the business worth model, market approach, income approach and cost approach. There are many recognised circumstances in which intangible asset value may fluctuate. These depend on the developmental and operational stage, market value and consumer cycles within a given industry. It may happen that a recognised intangible asset value can be instantly undermined by premature disclosure, misappropriation, leakage, or theft, global business intelligence, data mining, counterfeiting and economic espionage. Another factor is entanglements and challenges over origin, control, use and ownership. It is important for the organisation to understand and recognise practices responsible for sustaining the profitability and defensibility of intangible assets. It is important for an enterprise to never underestimate its know-how and assume that no one is interested in it. Actually, any business entity ought to assume that their know-how will be consistently targeted throughout its full value cycle, from the beginning at the earliest stages of its development till the peak. Therefore, it is relevant to develop effective practices to protect, preserve and monitor the value of know how (Moberly, 2014).

It is therefore necessary to integrate the planning and implementation of IP assets with market strategies built on the results of strategic and operative market analysis. IP protection and the development of secure channels of exchange of IP assets with partners is another key focus. The following stages should be taken into account in the management of intangible assets: (Mikuła and Pietruszka-Ortyl, 2010).

- setting goals for intangible assets and strategies for their development, resulting from the mission, vision and general strategic objectives of an enterprise,
- identification of the most important intangible assets in an enterprise and the assessment of their current state,
- developing of a plain and comprehensive system responsible for the effective and precise measurement and evaluation of intangibles,
- comparison of the intangible resources of an organisation with the general situation in the industry,
- finding ways to improve the quality of an organisation's most important intangible assets,
- preparation of reports on a company's intellectual capital.

If taken into consideration that all of the competitive markets force companies to constantly innovate and come up with new products, ideas and services, then it can be assumed that the source of sustained competitive advantage of the companies operating in a knowledge economy lays in the proper management of their IC. According to several authors, IC is a strategic and decisive resource in the creation of enterprise value, for it allows a company to face the dynamic, ever-changing environment and provides it with a source of sustained competitive advantages that allows it to differentiate itself from its competitors (Nuryaman, 2015).

All the above-mentioned characteristics show how crucial a role intangible resources play in the management of a company. The specific nature of intangibles, however, makes managing them quite troublesome of a task. Enterprises worldwide are forced to take on the challenge and find ways of effective valuation and management of intangible assets if they wish to gain a competitive edge over the rest. Intangible resources are based mainly on information and knowledge, so they are hard to identify and quantify. Furthermore, unlike tangible assets that lose value almost each day, intangibles usually gain value as they are used and therefore need to be constantly re-evaluated (Lopez Barajas de la Puerta, 2011).

The key resources and competences influence the level of benefits perceived by customers and, therefore, contribute to increased customer satisfaction (Manikas, Patel, and Oghazi, 2019). To have a competitive advantage means then to provide buyers with products and services that have higher added value than those offered by the competition (Suszyński, 2007). In turn, the gained advantage, generating above-average profits, contributes to the increase of shareholder value (Urbanek, 2000).

4. Case study of the CD Projekt company

CD Projekt S.A. is a Polish joint-stock company dealing in the production and distribution of video games via its subsidiaries. It is listed on the Main Market of the Warsaw Stock Exchange. The company belongs to the WIG20 index. In the 1990s, as one of the largest PC manufacturers in Poland, it expanded its operations to the production of cash registers, providing integrated IT solutions for offices and large enterprises and created one of the leading Polish online portals – Onet.pl. The head of the CD Projekt Capital Group is CD Projekt S.A., a holding company under which operates the CD Projekt Red development studio.

In 2018, the company generated PLN 363 million of consolidated sales revenue, which made a consolidated net profit of PLN 109 million. In that year, both the Group's balance sheet and equity, for the first time in history, exceeded the symbolic PLN 1 billion (CD Projekt, 2019).

The first case concerns a game produced by the company. Since September 2003, CD Projekt has been working on the role-playing game *The Witcher*. After its premiere in 2007, it became the best selling game in Poland. The company then focused on creating *The Witcher* continuation, *The Witcher 2*, which premiered in 2011. Another production of the company was the third and final part – *The Witcher 3*. The game was released in 2015. The success of the game was not only due to the hard work of the developers, but also due to the very engaging story adopted from the novel by Andrzej Sapkowski. It was possible to use the creator's output due to the paid acquisition of copyrights. Andrzej Sapkowski sold the rights to CD Projekt to create games based on *The Witcher* novels. He also gave up his interest in the profits as he did

not believe in the success of the venture. In 2018, CD Projekt received a letter from Andrzej Sapkowski's lawyer, in which the writer demanded additional remuneration for copyrights to use *The Witcher's* world in CD Projekt games. CD Projekt believed that Sapkowski's demand was unfounded, both in principle and in amount. In an official announcement, its representatives explained that in CD Projekt's point of view: "The company has validly and legally compelled the rights to all of the works by Andrzej Sapkowski, including the rights to use the book's content in the framework of the games created by the company, by paying the remuneration agreed in the contract". An amicable solution was found. Andrzej Sapkowski was to receive additional money from CD Projekt, although this amount was much smaller than the demanded amount. CD Projekt emphasised that the company would pay the compensation to express its appreciation for the writer's works and to maintain a healthy relationship with him (Orlikowski, 2019).

Regardless of the validity of the author's claims, the company decided to settle the dispute amicably in order to protect the brand's reputation. CD Projekt's representatives made sure that brand safety was preserved even in the final life cycle of the product.

In another case, CD Projekt has registered a trademark named "Cyberpunk" with the European Union Intellectual Property Office (EUIPO). For the last 34 years, this word was used to describe the genre in art. Currently, people wishing to sell gadgets, books or organise events with the word "Cyberpunk" in the name must be very careful. The actions of the creators are associated with the planned premiere of their next title called "Cyberpunk 2077". The word "cyberpunk" is used to describe the trend in science fiction and cinematography, focusing on the negative consequences of people functioning in an environment of advanced computer and information technology. The first time this term appeared was in the title of a short story by Bruce Bethke, published in 1983 as part of the anthology of "Amazing Stories". Since then, it has been strongly associated with a specific type of art. The popular series of games "Cyberpunk 2013", "Cyberpunk 2020" and "Cyberpunk V3.0" (to which, incidentally, CD Projekt bought the rights in 2012) reinforced the image. Today, such movies as "Blade Runner" (1982, directed by Ridley Scott) and "Robocop" (1987, directed by Paul Verhoeven) are referred to as cyberpunk movies. Since 2011, the right to the "Cyberpunk" mark has been owned by Sony Music Entertainment UK Limited; however, this is mainly in the field of music. CD Projekt has already had the same trademark in the US since 2013 (CD Projekt, 2019).

The company in the early stages is securing activities in the legal field. It is worth paying attention to the international nature of the insurance, which is related to the inconsistency of the nation law.

In the third case, the following tweet appeared on the company's official Twitter account in June 2018: "An unidentified individual or individuals have just informed us they are in possession of a few internal files belonging to CD Projekt. Among them are documents connected to early designs for the upcoming game, *Cyberpunk 2077*. A demand for ransom has been made with a threat that the files will be released to the general public. We will not be

giving in to the demands of the individual or individuals that have contacted us, which might eventually lead to the files being published online. The appropriate legal authorities will be informed about the situation. The documents are old and largely unrepresentative of the current vision for the game. Still, if you're looking forward to playing *Cyberpunk 2077*, it would be best for you to avoid any information not coming directly from CD Projekt. When the time is right, you will hear about *Cyberpunk 2077* from us – officially” (CD Project, 2019). It is worth noting that two years earlier, a similar incident took place, but without elements of blackmail. On the network, there were a lot of documents regarding the third part of *The Witcher* which were stolen from the Google account of the game production manager. At the beginning of 2018, there appeared information on the Internet concerning a data leakage from the CDPR forum which took place in March 2016. It was reported that the personal information of almost 2 million forum members found itself in the hands of hackers (Godziński, 2019).

World class specialists and cutting-edge solutions are employed by CD Projekt to protect its assets, yet hackers were able to get past the company's security and steal the confidential information. To preserve the details of projects, that sometimes last for many years, a business secret is a great challenge that cannot always be realized. The company is constantly exposed to attacks. As for leaks, it should be noted that keeping this type of documentation “in the cloud” is not a serious crime against good practices, for the cooperation opportunities offered by platforms such as Google Drive provide many benefits to people managing large projects. Moreover, there was no really confidential data among the disclosed information. Of course, platforms available only on a local network could be implemented for this specific purpose; however, this type of solution is recommended for undertakings of lesser strategic importance than the production of a highly anticipated game. For smaller projects, it is enough to ensure proper protection of user accounts.

5. Conclusion

Summarising the above presented cases, it should be pointed out that the company presents itself as aware of the risk and therefore uses risk management methods in terms of protection of non-material assets. The following observations based on the examined company were made:

- Risk management in the business endeavours of the CD Projekt Capital Group is based on constant market monitoring and risk assessments being carried out on an on-going basis to help minimise the impact of threats on the financial situation and property.
- The Group is exposed to risks specific to entities conducting economic activity in Poland, as well as other threats related to the export of products and activity of subsidiary companies, including foreign entities, as well as risks typical for the electronic entertainment industry.

- Running innovative projects characterised by high complexity requiring a number of iterations in many processes to achieve the expected effect is naturally associated with a higher risk than in the case of less compound and sophisticated projects. Along with each completed project, the Group gains more publishing and production experience and improves management and monitoring practices, eliminating many potential risks this way.
- The Group's operations depend on the proper functioning of IT systems, computers and servers. As a result of failures or errors in the technical infrastructure, there may be interruptions in its operation, preventing ongoing operations or the functioning of online websites. What is more, in similar situations, storage and processing data is exposed to the risk of theft or leakage. A possible system failure or access to data by unauthorised persons may result in the loss or disclosure of data, a reduction in sales revenues or even the need to incur unforeseen costs or penalties. In addition, the Group may be exposed to a loss of reputation and, as a consequence, of trust. To ensure the continuity of the proper functioning of the technical infrastructure and minimise the associated risks, the Group took special measures and has implemented a number of security systems ensuring constant access to electrical power for the main server room. With regard to key data, security copies are automatically made on devices in another fire zone. A number of key processes are implemented using redundant solutions, which basically means that in case of damage to the basic element, its function is taken over by a spare element that allows the system to still work correctly despite the failure. To ensure proper functioning, the Group cares for ensuring proper maintenance and modernisation of its IT systems. The market is constantly being monitored for the updates and new technological solutions that are subsequently introduced to improve the operation of servers and systems. Despite all the actions aiming at protection of the capital and safety measures taken by the Group, it is not possible to completely eliminate the risk of hardware failure, leakage or data loss.
- Effective acquisition, licensing and protection of intellectual property rights owned by the CD Projekt Group, or those used by it, including trademarks, is an important element of its business activity. In the process of video game production, the Group acquires proprietary copyrights to works based on contracts with the authors, employees, colleagues and external suppliers. Despite the introduction of relevant provisions to copyright transfer agreements, it cannot be ruled out that the rights have been transferred unsuccessfully, were acquired from an unauthorised person or were unintentionally infringed upon. An additional threat in the field of copyright is the various regulations in individual jurisdictions aimed at protecting the interests of creators.
- The CD Projekt Group tries to constantly analyse and adjust the concluded contracts to the current legal situation in order to minimise the threats described above. Due to the expansion of the products and services of the CD Projekt Capital Group throughout the

world, there is a tendency to offer products and services of the Group under names translated into the language of the target market. This often includes not only using a foreign language, but also distinct alphabets. There is a risk that some of the chosen names will be similar or identical to existing trademarks, which may result in possible claims for trademark infringement. There is also a risk of refusal to register trademarks for the benefit of the Group due to similarity with or being identical to signs already registered in a given country. Therefore, CD Projekt constantly monitors trademark applications by third parties and examines registration of signs before choosing a specific name appropriate for the product. In some countries, patent protection of software, information concepts or elements of video games is allowed. The Group is trying to monitor the situation in this respect; however, due to the non-uniformity of legal provisions in individual jurisdictions permitting extensive use of patent protection, the risk of patent claims against the CD Projekt Group as a result of the possible unconscious infringement of third party rights may not be completely excluded. Raising claims in respect to intellectual property rights, patents and trademarks may have a negative impact on the Group's reputation and its further development. An important risk is also violation of the company's rights by third parties. The companies of the CD Projekt Capital Group do not have a direct impact on the level of illegal product distribution. The Group constantly improves upon the legal solutions applied in concluded agreements. It also registers trademarks in the European Union and in other countries of the world. Actions are also taken to limit violations of industrial property rights and copyrights. As one of the measures, the company monitors infringements on auction portals in Europe, the United States and Asia.

- The good reputation of the Company and its subsidiaries may not only positively influence the consumers' tendency to purchase the Group's products and services, but also creates the opportunity to acquire new and maintain existing: employees, associates, subcontractors and contractors. It also creates the right attitude of the broad environment and stakeholders of the Company towards the Group.
- As a result of events, both dependent and independent of the Group, there is a reputation risk that may adversely affect the company or its subsidiaries and, consequently, the financial condition of the Group. The management believes that long-term reputation building requires actions based on fair play and fair treatment of employees, players and business partners. Continuous, open and honest communication with consumers, as well as a focus on the quality of products and services offered, are also relevant factors that the Group takes under consideration in regard to building upon its good name.

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