

INTELLECTUAL CAPITAL AS A VALUE DRIVER OF FOOTBALL CLUBS

Ivinić, Fabio

Doctoral thesis / Disertacija

2023

Degree Grantor / Ustanova koja je dodijelila akademski / stručni stupanj: **University of Pula / Sveučilište Jurja Dobrile u Puli**

Permanent link / Trajna poveznica: <https://um.nsk.hr/um:nbn:hr:137:009770>

Rights / Prava: [In copyright](#) / [Zaštićeno autorskim pravom.](#)

Download date / Datum preuzimanja: **2024-07-23**



Repository / Repozitorij:

[Digital Repository Juraj Dobrila University of Pula](#)



Faculty of Economic and Tourism Dr. Mijo Mirković



Fabio Ivinić

INTELLECTUAL CAPITAL AS A VALUE DRIVER OF FOOTBALL CLUBS

DOCTORAL DISSERTATION

Doktor znanosti (dr.sc) / PhD

Supervisor:

Izv.prof. Ksenija Černe

Pula, 2021

ACKNOWLEDGEMENTS

This dissertation is dedicated to all those who have supported me during its writing and development.

First, I would like to thank my parents who have helped me throughout my entire life, and as one of them says, without their help, I would probably still be in elementary school. Biba, thank you.

I would also like to express my gratitude to the BAL group and to Mr Lauzurica. Without a doubt, I can say that BAL group provided me with an enormous opportunity to understand the workings of a large and complex sports system. Many thanks to Mr. Lauzurica whose knowledge and professional expertise helped me to better understand the requirements needed to manage a sports club and which obstacles one faces in conducting everyday activities.

I would also like to highlight the support and professionalism of “Deki” and Prof. Škare who have given me a lot of advice and support throughout this process.

A special thanks belongs to my mentor Prof. Ksenija Černe who was always available, helpful, punctual and strict when needed.

Finally, I would like to thank Lorea for patiently putting up with my lack of availability and for listening to my “minor” complaints and concerns.

Once again, many thanks to all of you - half of this dissertation belongs to you.



Consortium of the International Joint Cross-border PhD Programme in International Economic Relations and Management

DECLARATION OF AUTHORSHIP

Name: Fabio Ivinić

Address: Črnjna Ulica 23, 52100 Pula

E-mail address: fivinic@gmail.com

Title of the dissertation: "INTELLECTUAL CAPITAL AS A VALUE DRIVER OF FOOTBALL CLUBS"

The author certifies that the thesis is solely his/her own intellectual work and he/she is the sole proprietor of all the relevant rights of this work. The electronic version is practically identical to the printed version (small variations in the layout or the tacit correcting of typing errors, etc., are not counted as amendments).

As the sole proprietor of all the rights of this work, including the right to use any figures, photographs, graphs, tables, etc., the author allows the Consortium to include this work in a data base and to put it online on the internet in electronic form, thus permitting the work to be downloaded or printed.

If excerpts and translations from foreign papers exceed the norms of academic citation, the written permission to use and translate the work was obtained from the original author. In particular, the author of this work certifies that the rights of third parties as well as any relevant laws have not been violated.

The author may, if he/she so wishes, publish the thesis elsewhere or put it on the internet.

Pula, 8/12/2021

ABSTRACT

This study addresses the importance and impact of the Intellectual Capital in managing Football Clubs. Managing professional Football Clubs is becoming increasingly complex in every possible way, from the Football field to managing everyday business operations. Football is not just a game; it is a real business as well. Professional Football Clubs are managed and organized like business entities, therefore their main objective is not just based on good sports results but also on developing all the other departments in order to achieve positive financial and organizational results. The awareness of the "internal" capital of a business entity is one of the crucial factors in dealing with tough market challenges and harsh competition as well as reaching business goals with the highest possible efficiency. This study shows how Intellectual Capital and the deep knowledge of its internal values represent one of the key factors and a catalyst in achieving all the goals set in the business and sports arena. Furthermore, the study investigates the financial statements of Football Clubs and certain specific positions that can be related to Intellectual Capital, it looks into and discusses about current Intellectual Capital valuation and reporting models as well as the existing definitions of the Intellectual Capital and the Intellectual Capital structure. Specifically, the study claims and investigates the strengths and weaknesses of the current valuation and reporting models of the Intellectual Capital for business entities and Football Clubs together with some positions of the current financial reporting within Football Clubs. Consequently, according to the study and investigations conducted, the study will try to expose a proposal of the Intellectual Capital definition, to propose the Intellectual Capital structure for Football Clubs and to suggest guidance in building an efficient Intellectual Capital structure within other business areas. Finally, the study will present a proposal for the efficient Intellectual Capital valuation and reporting model for Football Clubs.

Keywords: Intellectual Capital, Football, Management, Accounting, Structure

LIST OF ABBREVIATIONS

IC = Intellectual Capital

FC = Football Club

SC = Structural Capital

HC = Human Capital

RC = Relational Capital

IAS = International Accounting Standards

IT = Information Technology

HSFI = Hrvatski Standardi Financijskog Izvještavanja (Croatian Standards of Financial Reportings)

IFRS = International Financial Reporting Standard

IGG = Internally generated goodwill

SMEs = Small and medium-sized enterprises

SSAP = Statements of Standard Accounting Practice

SAI = Sports Area Index

BAI = Business Area Index

SIVSA = Sum Index Value Sports Area

SIVBA = Sum Index Value Business Area

CCSIVSA = Cummulative Component Sum Index Values of the Sports Area

CCSIVBA = Cummulative Component Sum Index Values of the Business Area

FSIVSA = Final Sum Index Value Sports Area

FSIVBA = Final Sum Index Value Business Area

ICVE = Intellectual Capital Value of the entity

CONTENTS

ACKNOWLEDGEMENTS	II
DECLARATION OF AUTHORSHIP	III
ABSTRACT	IV
LIST OF ABBREVIATIONS	V
CONTENTS	VI
1. INTRODUCTION	1
1.1. Introduction of the topic	1
1.2. Objectives and research questions.....	3
1.3. Relevant literature and data sources.....	6
1.4. Research Methodology.....	7
2. INTELLECTUAL CAPITAL INTRODUCTION	10
2.1. Intellectual Capital meaning.....	10
2.2. Intellectual Capital definitions and explanations	15
2.3. Three-dimensional approach to Intellectual Capital definition.....	18
3. INTELLECTUAL CAPITAL STRUCTURE	21
3.1. Structural Dissection of the Intellectual Capital	21
3.1.1. Human Capital	23
3.1.2. Structural Capital	26
3.1.3. Relational Capital.....	30
4. INTANGIBLE ASSETS AND INTELLECTUAL CAPITAL	33
4.1. Definition and characteristics of the Intangible Assets.....	33
4.2. Intangible asset classification.....	36
4.2.1. Licences	36
4.2.2. Software	37
4.2.3. Trademarks	38
4.2.4. Concessions.....	38
4.2.5. Patents	39
4.2.6. Goodwill	40
4.3. Theoretical differentiation between the terms of Intellectual Capital and Intangible Asset	41

4.4.	Market value and Balance Sheet (book) value differentiation	46
4.5.	Internally Generated Goodwill (IGG)	50
5.	EXISTING MODELS, METHODS AND OBSTACLES OF THE	
	INTELLECTUAL CAPITAL VALUATION	53
5.1.	The Skandia Navigator	57
5.2.	Balance Score Card Method – BSC	61
5.3.	Economic Value Added method – EVA™	64
5.4.	The Valued Added Intellectual Coefficient VAIC™	67
5.5.	Financial Method of Intangible Assets Measurement – FiMIAM	71
5.6.	Exposed Intellectual Capital models benefits	73
5.7.	Intellectual Capital valuation obstacles	77
5.8.	Impossibility of the Intellectual Capital valuation among different business areas..	79
6.	IMPORTANCE OF THE INTELLECTUAL CAPITAL IN MANAGING	
	FOOTBALL CLUBS	81
6.1.	Present appearance of the Intellectual Capital within Football Club Financial Statements	83
6.2.	Problematic of the current sports intangible assets reporting within Football Clubs Financial Statements	85
6.3.	Intellectual Capital structure dissection for Football Clubs	89
6.3.1.	Structural Capital subcomponents within Football Clubs	92
6.3.2.	Human Capital subcomponents within Football Clubs	94
6.3.3.	Relational Capital subcomponents within Football Clubs	97
7.	INTELLECTUAL CAPITAL ASSESSMENT FOR FOOTBALL CLUBS	100
7.1.	The FOrNeX Index	101
7.1.1.	The Nexus Index concept	104
7.2.	Intellectual Capital valuation and reporting model proposal for Football Clubs	106
7.3.	System of indicators for the valuation of the Intellectual Capital model proposal .	114
7.4.	Main Intellectual Capital Valuation tables and calculation steps	134
8.	SURVEY RESULTS AND HYPOTHESIS ANALISIS	138
9.	DISSERTATION OUTCOMES AND CONCLUSION	157
10.	SUMMARY	161
	CONTENT TABLES	162
	LIST OF FIGURES	164

REFERENCES.....	165
APPENDIX A – Model Proposal final valuation table applied on one Spanish LaLiga Club	172
APPENDIX B – Model proposal Final valuation table applied on one Croatian First Division Club	174
APPENDIX C – INTELLECTUAL CAPITAL VALUATION TABLES MODEL PROPOSAL.....	176
APPENDIX D - SURVEY	187
APPENDIX E – IDICATORS.....	197

1. INTRODUCTION

1.1.Introduction of the topic

The company's financial statements are enabling an insight into the financial results and balance sheet positions of a certain entity. Consequently, the informations that they are providing are fundamental for conducting various analyses, detect the development, finding out the dynamics of changes from different positions in the balance sheet and examining various data required for a better and wider insight into the business entity works and its efficiency.

Within current economy and "society of knowledge", the Intellectual Capital is becoming increasingly recognized nowadays because of its high impact on current and future results of a business entity. Thus in line with A. Andrikopoulos and N. Kaimenakis (2009), in the knowledge based economy the creation of value mostly arises from intangible resources, primary from knowledge (Intellectual Capital), significantly more than from the traditional sources of value creation: physical and financial capital. Therefore, according to different authors, as invisible in the traditional financial reporting methods, Intellectual Capital can be considered one of the principal factors that brings and is responsible for the growth, success, development and competitiveness of business entities (Černe, 2011). Additionally, A. Mutisari and A. Riziki (2020) claim that it is an intangible source responsible for the future wealth creations of an entity. Thanks to the Intellectual Capital, companies are able to adapt to changes quickly and to remain competitive on the market. Moreover, according to A.N.A. Alkhateeb, L.Yao and J.K. Cheng (2018) it can be considered as a strategic asset responsible for the efficient company development. According to B.Y Obeidat (2017), the Intellectual Capital has increasingly become a source of competitive advantage due to innovation. Further, the problems of a generally (non) accepted definition, recognition, valuation and reporting about Intellectual Capital are becoming more and more significant and the reasons for that will be further analysed within this study.

A. Andrikopoulos and N. Kaimenakis (2009) stated that further Intellectual Capital studies should be based on the need on finding ways to systematically codify and financially evaluate the intangible sources, quantitatively map them and incorporate them into current financial statements.

In line with Černe (2011), when dealing with Intellectual Capital and its valuation and reporting, the current accounting practice, rules and standards, are not offering the possible wide range of quality information to stakeholders nor all the possible impacts of the Intellectual Capital. Consequently the Intellectual Capital value is ordinarily shown as cost (wages expenses). Further, it does not evaluate or presents the contribution that derives from the Intellectual Capital and its direct impact on the final result of business entities.

Consequently, according to several authors (e.g. Abdulaali 2018, R. Zenzerović at. al 2014), a lack of information concerning Intellectual Capital can mislead stakeholders, and the management of a company and Football Clubs in a decision-making processes, allocating company resources, planning, setting long-term goals and strategies as well as projecting future investments.

Due to a lack of information regarding the Intellectual Capital value, various stakeholders can be misled by unreal or missing information that can negatively affect their investments. The mentioned could be particularly important in knowledge-intensive activities and sport business.

Many academic researchers based their studies on a discussion about the concept and significance of the Intellectual Capital in knowledge-based economies. Due to Khan (2014), the Intellectual Capital is the organizational knowledge resource and the highest vital asset for the survival of knowledge-intensive entities. Moreover, the business entity's success can often depend on discovering, creation and utilization of such knowledge resources, called Intellectual Capital. M. Abbas (2015) stated that in the contemporary management theory and practice, knowledge is considered as one of the most important assets of organizations and as a strategic asset through which it is possible to achieve and maintain comparative advantages. While according to B.F. Seyr and T.Hoffer (2020), the internal awareness about the competences of employees¹ can lead to an efficient and successful knowledge management that enables competitive advantages, especially in contemporary global and fast-changing business environment. Some of the traditional factors such as capital, land and labour are not disappearing during time, they just become secondary (Kozak 2011), thus in the knowledge-based economies the influence of intangibles is much higher than the influence of tangible assets (M. Abbas 2015).

¹ Employees are part of the Intellectual Capital, they are a subcomponent of Human Capital

Nowadays football is not just a game, it is more than that; it is a real business as well. Professional Football Clubs are managed and organized like business entities, therefore one of their objectives is based on developing all business related departments in order to achieve positive financial and organizational results and to be competitive on the market. As mentioned in the abstract above, managing professional Football Clubs is becoming increasingly complex in every possible way, even in managing its everyday business operations. When referring to Intellectual Capital and its components, impacts and effects for a company in the area of sports business should be examined in order to get a wider knowledge about its value, components, and effects within Football Clubs.

The survey conducted within this study is mostly trying to research and find answers related to the business and sports area of Football Clubs. Thus, the question is whether professionals from the area of Football are aware of the Intellectual Capital within a sports club, and consequently what is their opinion regarding its effects. Therefore, in order to get a more precise knowledge regarding the Intellectual Capital within a football club the research was conducted mostly between Football professionals from different countries and managerial levels.

1.2. Objectives and research questions

Due to the fact that a detailed and widely accepted model of Intellectual Capital valuation and definition still does not exist, it is necessary to point out the need and importance of developing a comprehensive, systematic and accepted valuation and definition model regarding the Intellectual Capital. Moreover, despite the high interest in the Intellectual Capital field and its concept, and considering its importance there is still not an universal agreement on the term (O. Calhan et.al. 2020). By figuring out answers related to the problems mentioned above, entities would acquire an important information input that would facilitate and support their development, success and competitiveness on the market in a business area and sports business as well. The question is whether or not current tools, findings and efforts related to the Intellectual Capital, its valuation and presentation have reached the appropriate and desired level? Can those findings be considered adequate for the accurate and efficient measurement of the Intellectual Capital value, or is there nowadays a certain “invisible factor” in a so-called “society of knowledge” that is becoming more and

more responsible for the success of the organization and its final results? The assumption is that the Intellectual Capital is a value driver that differentiates companies, quality business processes and is responsible for the accomplishments of the goals set by the management in a more efficient way.

Researchers mostly agreed that the Intellectual Capital structure can be divided in three main categories; thus, according to Stewart, (1997), Sveiby, (1997), P. Trappe, (2013), Edvinsson; Malone, (1997), Ramírez; Lorduy; Rojas, (2007), A. Suray et.al. (2020), O. Calhan et. al (2020), Kim et al. (2021); those categories are Human Capital, Relational Capital and Structural Capital. One of the purposes of this study is also to find, categorize and classify all the components and subcomponents (“value creators”) of the Intellectual Capital within Football (Chapter 6.3).

Furthermore, there is a question whether the current state of researches about the Intellectual Capital field fulfills all the needs of various stakeholders, managers and investors when dealing with predicting, evaluating, managing and investing in a company.

One of the main objectives of this study is to define the structure of the Intellectual Capital within Football Clubs, that will further support the creation of a comprehensive and reliable model of its valuation and reporting. With the aim that such a model with further researches can be extended and applied among different business areas. The IC structure for Football Clubs should be considered as one of the fundamental parts for the creation of an efficient Intellectual Capital valuation and reporting model. Due to A. Andrikopoulos and N. Kaimenakis (2009) although Intangible resources (Intellectual Capital) are usually beyond the scope of the established codifying settings, like accounting standards and regulations, they emerge as major value drivers and crucial determinants of the organisational identity nowadays.

The question is if everything mentioned by now in regards to the Intellectual Capital (characteristics, structure, effects etc.) can be applied on Football Clubs in the same way and same model as in other business areas. Further, which structure, valuation and reporting model of the Intellectual Capital in this field is the correct one?

Consequently, some of the objectives of this paper are:

- Get the knowledge about the Intellectual Capital and its structure;
- Emphasize the importance and components of the Intellectual Capital within Football Clubs and other business entities;
- Emphasize the usefulness of the Intellectual Capital for the management of a Football Club and other stakeholders;
- To recognise, create and classify the Intellectual Capital structure components and correspondent subcomponents (“value crators”) within Football Clubs;
- Propose the definition of the Intellectual Capital;
- Propose the Intellectual Capital valuation and reporting model for Football Clubs (the one that can further be extended and developed for other business areas);

Moreover, this study and its survey will strain to find answers to the following issues and questions:

Are the Intellectual Capital components important for the competitiveness of a business entity? Are companies within themselves aware of their Intellectual Capital and the possibility of the value-added that it may provide? How to present Intellectual Capital and its impact within financial reporting? Does the difference between the market value and the book value of the business entity somewhat reflect the value of the Intellectual Capital? Is there any study that is analysing the Intellectual Capital within sports? Are Football Clubs aware of their Intellectual Capital?

The outcomes of the study and all the possible findings derived out of it (informations generated) should be of great help for business entities (i.e. Football Clubs) and their stakeholders (shareholders, owners, managers, directors, partners, institutions etc.).

Consequently, the hypotheses that the study will try to determine, whether they can be accepted or not, are the following:

- ▶ H1: The Intellectual Capital is an important factor of the organizational development
- ▶ H2: The Intellectual Capital structure components have an impact on a company result
- ▶ H3: The Intellectual Capital awareness is useful for the entity’s stakeholders.
- ▶ H4: The management is aware of the Intellectual Capital within Football Clubs

- ▶ H5: The Intellectual Capital impacts a Football Club's business results
- ▶ H6: The Intellectual Capital valuation and reporting model is useful for Football Clubs

1.3. Relevant literature and data sources

According to A. Andrikopoulos and N. Kaimenakis (2009), the first time a term of Intellectual Capital as a “hidden” component of a company value was used in the 1980s within a discipline of management. The idea was to highlight and start to consider the ‘hidden’ assets of entities that impacts their performance. The pioneering theoretical works that increased the interest of academics about the subject and resulted in creating the first sharp of the Intellectual Capital are as follows: "Mobilizing Invisible Assets" by Itarni (1980), "The Invisible Balance Sheet" written by Sveiby and the Konrad Group (1989) and "Intellectual Capital: The New Wealth of Organizations" by Stewart (1997). The phenomenon of Intellectual Capital started to be explored and studied more in in the 1990s. By the chronological point of view, a model from 1992 can be considered as the first report regarding the Intellectual Capital and its internal calculation within a company; that model was published as an Appendix of financial statements, called “The Skandia Model” (Miltiadis, 2008). Current methods and models of Intellectual Capital valuation are a mix of quantitative and qualitative models. Furthermore, those models are ordinarily presented as Appendixes of financial statements, thus they require a comprehensive interpretation and wide professional knowledge in order to reach a general conclusion regarding the Intellectual Capital value within a certain company. There are scientific studies regarding the Intellectual Capital, various models were presented, various definitions of the Intellectual Capital were described but unfortunately, there is still neither a commonly accepted method/model nor a definition of it. In the late nineties, the focus on the Intellectual Capital started to be approached and considered relevant also by the accounting point of a company as well (Černe, 2011). Consequently, when it comes to Intellectual Capital, there is a lack of the accepted valuation model and commonly accepted definition of the term itself. Furthermore, very few studies and articles elaborate on how the Intellectual Capital generates value for a company, how the management can use it efficiently, how it can help in a decision making process, or how it improves a company competitiveness on the market. Current studies are mostly focused on theories about how much the Intellectual Capital is important for a

company. Further, having a quality and accepted model of the Intellectual Capital valuation would enable a company to set efficient strategies and assure quality controlling models based on the awareness about its internal knowledge. Further, referring to knowledge and knowledge management, according to B.F. Seyr and B. Hoffer (2020), proper controlling tools of strategic knowledge management are fundamental to secure the organization's capability to react, coordinate, learn, and innovate (be more competitive) in order to survive in a contemporary fast-changing environment.

When it comes to researches and studies in regards to the Intellectual Capital and its impact on Football Clubs, this domain cannot be considered developed, well known and studied. Few studies were made and they are not a full review of a global impact that the Intellectual Capital can have on Football Clubs or the value added that can derive out of it. Furthermore, surveys and consultations with professionals from different states (leagues) were not made, neither was suggested a clear, simple and efficient reporting and valuation model regarding the Intellectual Capital within Football Clubs. This study will consult professionals and investigate the need of a clear reporting and valuation model of the Intellectual Capital within Football Clubs and their opinion regarding its impact and significance.

Among the various literature analysed within the study, the following authors are emphasised: D.Sunać and N.Švast (2016), B.Y, Obeidat (2016), K. Černe (2011), M. Abbas (2015), B. Pratama (2020), B.F. Seyr and T.Hoffer (2020), Bontis (2008), A. Kianto, (2017), Miltiadis (2008), A. Abdulaali (2018), A. Andrikopoulos and N. Kaimenakis (2009), O. Chalhan et.al (2020), A.N.A. Alkhateeb et. al., (2018), Visconti (2020), Tracy (2020.) etc.

1.4. Research Methodology

To present all the elements of Intellectual Capital the study will use appropriate qualitative (analysis with descriptions and conceptualizations) and quantitative methods. Furthermore, analysis of Football Clubs financial statements and data collecting, data collection and analyses of various models of the Intellectual Capital Valuation and survey conducted. Consequently, the mentioned investigation and analyses of the data collected will be directed to create a platform for monitoring and reporting about the Intellectual Capital as value, primary for Football Clubs. Further, the survey (based on the sample representativity and data

collected) will enable the identification of Intellectual Capital components, subcomponents and their impact on Football Clubs' performances.

For the survey purposes, the scaling method that will be mostly used is the Likert Scale. Additionally, for the research purposes various analyses of comparisons, deduction and sintetization will be used. Consequently, other methods that will be used are synthesis, descriptive and inductive methods. The mentioned is within the scope of generating comprehensive conclusions and feedbacks from professionals of the field, identifying the impact of Intellectual Capital and its correlations with company sports and business performance.

Additionally, with the help of the survey conducted regarding the central topics, the study attempts to find answers related to the previously mentioned key questions and objectives of the study through which consequently the hypothesis set can be tested as well. The T-test is used to conduct anayses whether the hypothesis tested can be acppter or rejected.

The data collection was based and conducted on a purposive sampling since with the aim to obtain reliable and significant information for responding the research questions. The aim was to gather as much as possible reliable feedbacks since the sample members are highly experienced professionals with a high level of practical background within sports industry and within managing Football Clubs.

To determine the required sample size of the population, the method used within the study is the sampling method. Consequently, the sample size is 36 with a Confidence Level value of 95%, population size of 96² and a Confidence Interval of 13³.

The survey is divided into 4 sections. The first part has an open question related to the opinion of professionals whether nowadays Football Clubs are real business entities. Further, the second part is testing the 6 hypotheses set with 12 correspondent questions per hypothesis with the Likert scaling. The third part is related to the difference between the market and book value of a Football Club, whereas the study attempts to get feedbacks if there is a difference between them and how big is that difference. The last part is formed by questions related to the Intellectual Capital and Football Club importance. The study is trying to protect the anonymity of the respondents of the survey, consequently personal information are omitted within the study. In order to maintain the representativeness of the sample, within the

² The population size is 96 since the five best divisions in Euruoep are containging 98 clubs.

³ Sample size calculator available at <https://www.surveysystem.com/sscalc.htm>

survey many prominent Football professionals were consulted whose experitease of operations covered a wide geographical area (Croatia, Spain, France, Germany, Austria, Japan, England, Italy, Turkey, Slovenia, etc.). The survey results are presented within the eight chapter, while the survay is available and presented as Appendix (D).

2. INTELLECTUAL CAPITAL INTRODUCTION

2.1. Intellectual Capital meaning

When it comes to valuation, recognition and reporting about the Intellectual Capital and other assets or categories, it is necessary to specify and understand what exactly is measured, analysed and discussed. Therefore, it is important to define what precisely is evaluated and what should be part of the reporting model. Thus, intending to apply the same on Intellectual Capital, it is very important to find some answers to these questions.

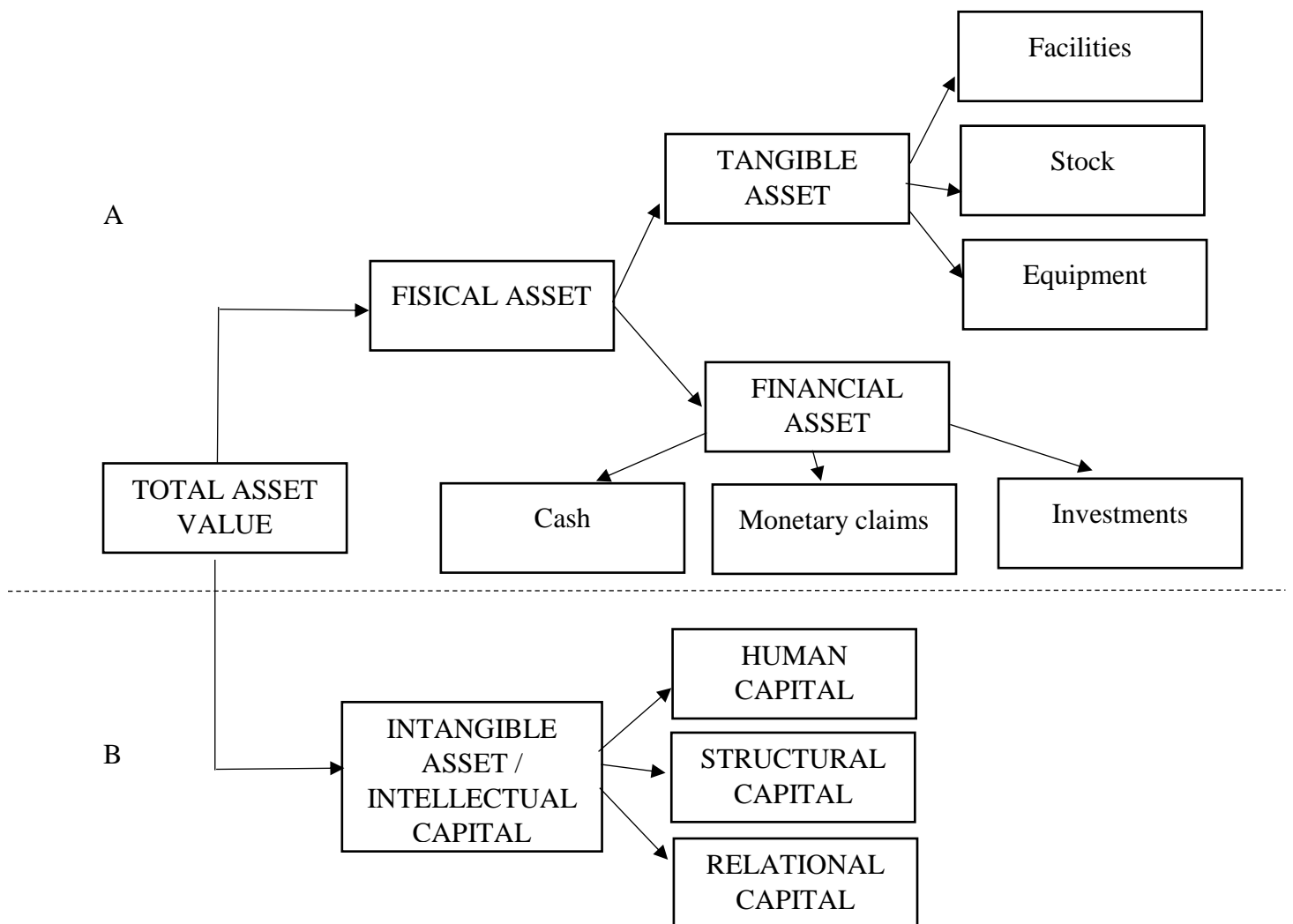
Therefore, the Intellectual Capital definition should clarify what is determined by the term of Intellectual Capital and which are the principal components of the term. Further, by having the generally accepted definition of the Intellectual Capital term would facilitate forward steps towards the standardization of the meaning of Intellectual Capital (in general and by the accounting point of view). However, as pointed out in the introduction part, despite a strong interest in regards to the Intellectual Capital concept, a commonly accepted and unique definition of the term has not been settled yet. For this reason, the study will be based on the literature and definitions of various notable authors and focused on what are all the common characteristics when defining the term of Intellectual Capital.

According to Abdulaali (2018) and H. Kym (2021), the Intellectual Capital is an intangible asset value within an organization that brings about competitiveness, future benefits and assists in creating and generating wealth for a business entity. Consequently, the Intellectual Capital can be considered as one of the most influential factors for the development and competitiveness of business entities. Furthermore, Abdulaali (2018) pointed out that many researchers concluded that organizational performances and successes are highly influenced by and depend on the Intellectual Capital. Additional important factors of the Intellectual Capital are its components and subcomponents. A deeper insight into the Intellectual Capital components and subcomponents will be discussed in the further chapter of the study. However, it is very important to highlight that for the efficiency of a company those subcomponents “value creators” act in line.

According to A. Andrikopoulos and N. Kaimenakis (2009), citing Andriessen (2004), a possible measurement and managerial aspect of the Intellectual Capital has three main purposes: it leads in improving the internal management, it is enhancing the external

reporting and it is resolving transactional and statutory issues. According to A. Andrikopoulos and N. Kaimenakis (2009), although Football Clubs are entities that usually are not studied as knowledge-based businesses, a similar approach can be applied since their value is highly influenced - impacted due to off-balance sheet intangibles (Intellectual Capital), as it is the case with knowledge-based entities.

Figure 1: Intellectual Capital position within a company value



Source: Modified to Sundač, Škalamera, Babic; “POSLOVNO OKRUŽENJE I INTELEKTUALNI KAPITAL”; Sveučilište u Rijeci, Ekonomski fakultet u Rijeci; (2016.); due to OECD report (2001).

In the Figure 1, it is possible to find the Intellectual Capital position within a company value, considering it as part of intangible asset. It is likely to conclude that the Intellectual Capital could have an important part when it comes to the overall company values. Accordingly, there are already accepted tools through which the upper part of the Figure 1 (Section A), is evaluated (basically, those components are mostly part of a company's financial statement). Such, cannot be applied for the section B of the scheme because most of those components are not part of financial statements and there are still not accepted tools and models for their valuation and standardization. Furthermore, besides the difficulty in the Intellectual Capital value reporting its tracing is as well very difficult. According to A. Andrikopoulos and N. Kaimenakis (2009) with the Intellectual Capital comprehensive identification and monetary valuation its legal protection could be supported, as well as its standardisation that could help with its financial reporting or financial statement inclusion. Thus, in line with Handy (1989), the Intellectual Capital even if it is not a part of financial statements can worth three or four times more than a company tangible asset. Additionally, according to R. Zenzerović et. al. (2014), contemporary financial reporting practice, accounting systems and consequently information provided are not adequately meeting all the information needs from stakeholders. The main reason is that the investment and contribution arising from the Intellectual Capital is not presented. Consequently, such can mislead stakeholders in taking action. Furthermore, according to e.g. Joia (2007) or H. Kym et al (2021), organisations wishing to obtain competitive advantages must understand that these intangible assets represent a greater value than traditional tangible assets.

Moreover, a quality reporting and valuation model of the Intellectual Capital would be of a high support for the organizational development and help for the stakeholders. Furthermore, an effective and creative Intellectual Capital has an impact on increasing the quality and the potential of company's services and products. Below, within the Figure 2, it is shown how knowledge and creativity can generate greater value-added for entities, which is considered as fundamental within contemporary business operations. In those circumstances, the Intellectual Capital becomes one of the entities' most valuable assets and resources. Thus, it is possible to point that it is the "wealth" of all the ideas within a company that gives the ability for innovation and further developments. However, according to K. Galbraith (1969), the Intellectual Capital is not just the intellect of the employees within a company but it also includes their intellectual activity and actions.

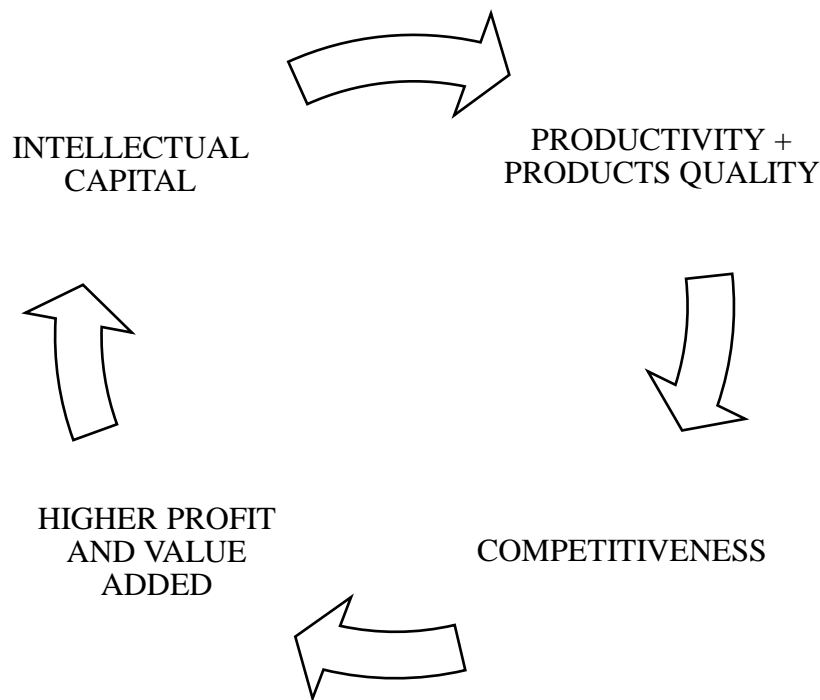
In line with A.N.A. Alkhateeb et. al. (2018), in the past, tangible assets were the most important and considered as vital capital for organizations, while nowadays one of the most significant factors that has a high and increasing impact on the organizational development is the Intellectual Capital. Further, according to H. Kym et al. (2021), the Intellectual Capital can be considered as the most important internal resource responsible for the comparative advantages and competitiveness of entities. The significance, impact and value of the Intellectual Capital will be further elaborated within this study. The Intellectual Capital insight can be observed from a dual dimension, the accounting point of view and the managerial point of view.

Moreover, according to Abdulaali (2018), thanks to the Intellectual Capital (and by introducing its valuation and reporting model) entities (Football Clubs as well) can gain numerous information that can offer support within a decision making process, as well as in conducting activities to improve their relations with all the stakeholders (investors, customers, creditors, shareholders, employees, suppliers, institutions, etc.). The mentioned also applies to Football Clubs, where information as an outcome of the existence of the Intellectual Capital is necessary for making business decisions, and especially for the relations with stakeholders.

On the other hand, the Intellectual Capital and intangible assets are often used as synonyms (Daum (2003), Roslender and Fincham (2003), Caruso (2008), Sonnier, Carson and Carson (2008). Sonnier et. al (2008) declare that the reason why they are often used as synonyms is that they are mostly knowledge-based assets (such as patents, copyrights, trade secrets, know-how, processes and procedures) and also because of their intangible components, such as organizational culture, the charisma of the leader, consumer loyalty, etc.

Accordingly, the characteristics of intangible assets and Intellectual Capital should be equal. However, the characteristics of the intangible assets that are cited in the literature are not fully applicable to Intellectual Capital. The conceptual differentiation of the two terms will be deeply discussed in the upcoming chapters (Chapter 4), whereas in this chapter, just a few main differences between the two terms will be elaborated. Thus, those differentiations can be: assesment of future economic benefits, difficulty to predict the period of use, amortization and depreciation – appreciation, etc. However the differentiations between the terms will be analysed in the fourth chapter.

Figure 2: Relationship between the Intellectual Capital and the value-added of the company



Source: Aligned with M. Babić; “Intelektualni kapital u funkciji unaprijeđenja korporativnog imidža uslužnih djelatnosti” doktorska disertacija, Ekonomski Fakultet u Rijeci, Rijeka 2009.

Entities that accurately identify, evaluate and manage their Intellectual Capital are increasing their comparative advantages thanks to a wider knowledge in regards to their assets potentials. Thus, in line with H. Hussinki, P. Ritala, M. Vanhala, and A. Kianto, (2017), entities with high level of Intellectual Capital are likely to outperform those organizations with a low overall level of Intellectual Capital, in both market and innovation performance measures. Several studies that were conducted (Bontis et al., (2000); Wang and Chang, (2005); Cabrita and Bontis, (2008); Kamukama et al., (2010), etc.) concluded that there is a significant positive relationship between the Intellectual Capital and the organizational performance (Abdulaali, 2018). Furthermore, according to Choong (2008) as a quality description of Figure 2 the Intellectual Capital definition of Harrison and Sullivan can be used, where they point out that the Intellectual Capital is the knowledge that entities can transform into profit.

Thus, according to Sundač, Škalamera and Babic (2016), the Intellectual Capital is one of the company’s most valuable asset and resource, because it has an impact on increasing productivity of products/services and their quality. By increasing productivity and quality of products and services (value-added) it leads to increase competitiveness which enables the

company's development. By improving competitiveness, revenues and profits are increasing and consequently the value-added and market value of a company is higher. Higher profits allow greater investments that are resulting in the increased company value, all due to the Intellectual Capital efficiency.

In the sports industry intangibles are starting to be of high importance in creating value from the managerial and sport domain. Furthermore, Football Clubs have a high level of intangible assets which has a high impact on the overall performances and results. Thus in line with A. Andrikopoulos and N. Kaimenakis (2006) a long term success and a process of value creation of a Football club is influenced by intangibles and Intellectual Capital which is not included in financial reports.

Table 1: Percentage of intangible asset within two famous Football Clubs

Club	Total asset	Intangibles	Int. % within total asset
RMD	€ 1,138,383,000.00	€ 324,266,000.00	28%
MANUTD	£ 1,496,525,000.00	£ 768,857,000.00	51%

Source: Authors calculation based on the 2019. Clubs financial statements

The Table 1, presents the percentual level of the intangible assets within Football Clubs. The table offers a very short insight into the significance of intangible assets within Football Clubs. Consequently, a more detailed analysis about the topic of the Intellectual Capital and intangible asset significance within Football Clubs will be elaborated in the upcoming chapters of the study (Chapters 6 and 7). However, it is important to highlight that many components of the Intellectual Capital are neither a part of the intangibles nor of any other financial statement it categories. Thus, their importance, influence and values are much higher than presented.

2.2. Intellectual Capital definitions and explanations

There is a consensus within the literature that the first idea of the Intellectual Capital as a concept was introduced by Kenneth Galbraith in 1969 (De Castro and Sáez (2008), ANA Abdullah et.al. (2018), Bontis (1998), Swart (2006), emphasizing that Intellectual Capital is not presenting only and exclusively the intellect but it also includes an intellectual activity of employees. Accordingly, the employees' knowledge and possessed skills are not presenting

value per se. Hence, employees should transform those skills and knowledge into actions and appropriately use them in order to create value.

The Intellectual Capital definitions are mostly describing the Intellectual Capital as a construct created of knowledge that results in giving value and “utility” for the entities. Just a few authors (like Choong, 2008) are distinguishing the definition of the Intellectual Capital and the Intellectual Capital indications or outlines. Furthermore, according to Chang and Hiesh (2011), there is still not a common accepted definition of the term and due to Marr and Moustaghfir (2005), neither an accepted valuation model, which should variate and depend on the industry and its characteristics.

No matter from the perspective considered in the relevant literature, the Intellectual Capital theories mainly relate to its intangible nature and the difficulty in determining, tracking and reporting about their values.

No matter the Intellectual Capital definition there will always be a so-called "temporal approach" when defining the term of Intellectual Capital. In brief, by some definitions i.e. Stewart (2006) the Intellectual Capital is characterised as something that has the potential of future value creation, while by other definitions the Intellectual Capital is essential for a business entity and by itself it already represents value.

Amongst the most common definitions of the Intellectual Capital, are those that are describing it in the context of value creation, enhancing a business entity's competitiveness on the market.

Thus, according to Khan (2014), the Intellectual Capital is taken as one of the vital strategic assets that provides sustainability and growth for the organization in a competitive environment. Furthermore, Sardo and Serrasqueiro, (2017) state that the Intellectual Capital is a very important resource for the organizations' value creation.

According to Arenas and Lavanderos, (2008), which refer to Edvinsson and Malone (1999), one of the simplest ways of explaining the concept of Intellectual Capital is a metaphorical depiction of a tree whose life depends on hidden roots. If such a concept of Intellectual Capital is attempted to be applied on business entities, then the Intellectual Capital, as the hidden resource on which the success of the business entity depends, can be identified as the roots on which the future fruits (outcomes – benefits) depend. In this context, the roots

mentioned are precisely the capabilities of future earnings while fruits are representing new and additional values.

One of the finest short definitions of the Intellectual Capital is the one pointed by Thomas Stewart (1997), where he described it like something that is intangible and that is slowly making you rich. While Sullivan (1998), is describing the Intellectual Capital as “knowledge that can be converted into profit”. According to Klein and Prusak (1994), the Intellectual Capital is a stacked material that can be used in a production of higher asset (Sundač et al., 2016).

According to the definition of Brooking and Matto (1996), Intellectual Capital is a combination of intangible assets that enable entities to operate. Stewart (1997) and Ross, et.al., (1997) defined that the Intellectual Capital can be seen as a package of useful knowledge that through practical transition has an impact on a company’s results. Furthermore, Ben et.al. (2005) stated that a very concise and indicative definition of the Intellectual Capital was given by Edvinsson, where he pointed that the Intellectual Capital can be observed as a potential of future earnings and a pattern of exponential value creation where “ $1 + 1 = 11$ ”, that is, a model of marginal utility.

Moreover, according to Marr and Moustaghfir (2005.), from a managerial and strategic perspective, the role of the Intellectual Capital is to identify patterns and creators of value within a business entity and to participate in formulating strategies utilizing human, organizational (structural) and relational potentials. Furthermore, Choong, (2008) referring on Rastogi (2002), states that Intellectual Capital can be seen as a holistic or “meta-level” ability for a business entity to regroup, coordinate and prepare its knowledge for the value creation that is in line with the business strategy.

According to Feiwal (1975), Bontis (1998). And W.S Chang and J. Hsieh (2011) the IC in general means more than just “pure intellect” it also menas a degree of “intellectual action”. Consequently, the Intellectual Capital per se is not just a static intangible asset, but a process - an ideological process. W.S Chang and J. Hsieh are stating also that it is a movement process from “having” knowledge and skills to “using” that knowledge and skills.

Thus in line with Marr et. al. the Intellectual Capital is a “*knowledge assets*” of a business entity that creates value-added for the stakeholders and improves business with competitive advantages.

For the research reason, the study will attempt to construct another definition proposal regarding the Intellectual Capital, thus the proposal of the Intellectual Capital definition is the following:

“The Intellectual Capital is a hidden part of a company asset whose value variates during time, and has the structure whose components differ among industries. However, it is a company’s treasure that needs to be detected, well managed, defined and structured in order to gain comparative advantages and high efficiencies”

Source: Authors’ definition of the Intellectual Capital based on the above exposed and elaborated Intellectual Capital definitions

The suggested definition of the Intellectual Capital is built on several facts that require to be enlightened in order to understand the definition in its full form. The first point exposed is describing the Intellectual Capital as a “hidden” part of the entity. In this direction, the term hidden can be associated with the inability of reporting about its value, the inability of detecting when and from where the Intellectual Capital arises, the inability of tracking the development, the non-material aspect. Further, the Intellectual Capital components and their correspondent subcomponents are not fixed among all the industries (the issue regarding the industry differentiation of its subcomponents will be further elaborated within the study). Moreover, it is possible to declare that the Intellectual Capital is the company’s “treasure” that has to be detected, and once it is detected, it needs to be well managed for the efficient achievements of all the goals set by the company and in order to gain comparative advantages.

2.3.Three-dimensional approach to Intellectual Capital definition

Due to Marr and Moustaghfir (2005), when it comes to the Intellectual Capital description, although there are many similar variables in describing the Intellectual Capital in respect to some other managerial concepts, their combination represents a unique concept that cannot be adequately described according to the existing managerial definitions or patterns. Some of the assumptions that they made are that every business entity has a certain form or structure of the Intellectual Capital, the Intellectual Capital can be described from different organizational levels, the Intellectual Capital is used to create value, the Intellectual Capital is used to achieve strategic goals, etc.

Marr and Moustaghfir (2005) as well, while analysing the term, variables and definitions of the Intellectual Capital and due to various different definitions, suggested the three-dimensional approach of the Intellectual Capital definition. With the intention to prove the assumption of a three-dimensional framework that will facilitate Intellectual Capital definition, authors studied over 900 different scientific papers related to the issue and problematics of defining the Intellectual Capital.

According to Marr and Moustaghfir (2005) one of the most essential conditions for the complete definition of the Intellectual Capital is the identification and categorization of its components. Consequently, the definition of Intellectual Capital should be precise and determined in terms of its components, its impact and its role within a business entity and the sectorial area from which the Intellectual Capital is defined.

In addition, that is confirming the previously defined thesis and the proposed Intellectual Capital definition which is defining that its interpretation depends also on the sectorial area of activity of a business entity. Thus in line with Černe (2011), the Intellectual Capital is a multidisciplinary concept, whose definition and recognition must be distinguished concerning to different disciplines and areas.

Furthermore, due to Černe (2011), the role of the Intellectual Capital is often indicated and associated with emphasizing its importance in creating values and competitive advantages for the business entity, while it is rarely framed within the Intellectual Capital definition.

As a second condition in defining the Intellectual Capital Marr and Moustaghfir (2005) pointed out that each definition of the Intellectual Capital should also include its purpose and clarify why it is essential to establish quality management of the Intellectual Capital and why its valuation is important within a business entity. The authors are also pointed out that in such a form of defining the Intellectual Capital, its role differs depending on whether it is intended for the internal or external use. However, even if a proposed uniform definition of the Intellectual Capital can be more comprehensive and can help science in further researches and analyses, in case of scarcity in its description it can lead to misinterpretations and misunderstandings.

Accordingly to Choong (2008), Černe (2011), Kaufmann and Schneider (2004); a similar three-dimensional approach in defining the Intellectual Capital can be seen also in K.E. Sveiby's (1997) within a work "The New Organizational Wealth: Managing and Measuring

Knowledge – based Assets” where he describes the Intellectual Capital by characterising its three dimensions in the form of employee competencies, internal and external structure.

Consequently, the study approaches the definition and reflection of the Intellectual Capital through its structure. The Intellectual Capital description is mostly presented through its three-dimensional structure that will be elaborated and studied in the following chapters of the study.

3. INTELLECTUAL CAPITAL STRUCTURE

3.1. Structural Dissection of the Intellectual Capital

To define the fundamentals and advantages that could arise from the Intellectual Capital, it is very important to divide it by structure. Therefore, each component of the Intellectual Capital represents an important strategic factor in the creation of benefits, successes and values for a business entity. Besides, to understand the meaning, effects and scope of each component of the Intellectual Capital separately, it is necessary to highlight their relation and interaction, which are leading to the creation of those benefits (utilities) in the overall success of a business entity.

According to Mohtar, Rahman Abbas (2015) it is crucial to completely understand the full concept and structure of the Intellectual Capital that enables companies to utilize their Intellectual Capital in the most efficient way.

There are several contributions in the literature that provide different definitions and frameworks for identifying and classifying the concept of Intellectual Capital. For the scope of this research, the study will use the Intellectual Capital structure differentiation that has been widely used by authors in their academic articles which is separating the Intellectual Capital structure into three components: Human Capital, Structural Capital and Relational Capital (e.g. O. Calhan et.al. (2020), Bhasin (2008), Yang (2009), R. Hosnavi; M. Ramezan (2011), Sundač; Švast (2009), Kim et al. (2021), etc.). It is very important to point out that all the Intellectual Capital components need to be, and act in line in order to offer the highest efficiency for entities.

Beside the Intellectual Capital structure components that are mentioned above, other categorizations of the Intellectual Capital structure components that can be found in the literature are: Social Capital, Technological Capital, Spiritual Capital, Entrepreneurial Capital, Renewal Capital, Trust Capital (A.N.A. Alkhateeb; L.Yao; J.K. Cheng; 2018).

Further, R.Dzinkowski is reporting about the Intellectual Capital and its characteristics as a phenomenon that sometimes can be fixed (such as patents) and sometimes can be flexible since it takes into account the human component that is based on behavioural principles. (R. Dzinkowski, 2000).

The Intellectual Capital and its components can have different resolutions at the same time. Examples of such can be proved with the relationships that a company has with its consumers, where they can be in a function of earnings but also in the function of building the brand (Relational Capital). A reservation system can simultaneously confirm the reservation for flights to separate locations (Structural Capital). An individual can simultaneously think about how to solve a specific business problem and drive a vehicle (Human Capital) (Roos, Pike and Fernström, 2005, and Černe, 2011).

P. Mettanen and A. Lönnquist, in defining Intellectual Capital, also identify some of its fundamental characteristics, which are⁴;

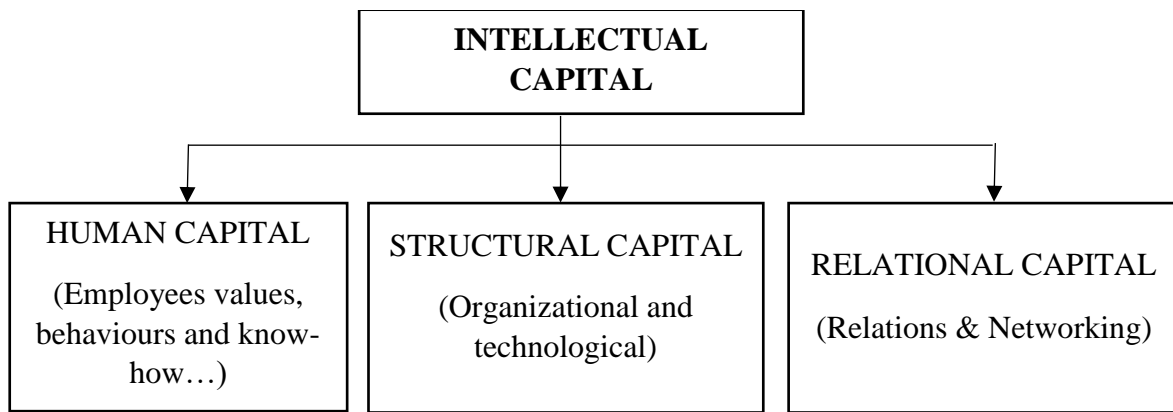
- It is invisible,
- No physical attributes,
- It is linked to knowledge, customers, technologies and experience of employees through which entities can generate benefits,
- It gives greater opportunities for entities to succeed on the market.

In brief, understanding the real value of assets (including Intellectual Capital) provides a range of opportunities and positive effects for the business entity. As it is already highlighted, although there are several definitions related to the Intellectual Capital, most agree that Intellectual Capital is composed of the following three components (R. Hosnavi; M. Ramezan, 2011):

- Human capital: it relates to employee values, behaviours and know-how,
- Structural capital: (implies organizational and technological) responsible for the coordination and integration within business entities,
- Relational (consumer) capital: collects values from relationships that the entity maintains with other externals.

⁴ (https://www.tlu.ee/~sirvir/IKM/Strategic_Issues/intellectual_capital.html, 2014.) (visited, Aug. 20.,2020.)

Figure 3: Dissection of the Intellectual Capital structure



Source: Authors graphical presentation of the Intellectual Capital components based on the relevant literature analysed and IC structure dissection of R. Hosnavi; M. Ramezan, (2011).

The presented Figure 3 represents the structural dissection of the Intellectual Capital. Based on the relevant literature examined, and as shown in the figure, the Intellectual Capital is composed of a structure that includes three main parts, Human Capital, Structural Capital and Relational Capital. The further elaboration of the Intellectual Capital components and subcomponents (“value creators”) will be elaborated in the following sub-chapters in this part of the study.

3.1.1. Human Capital

Through studying and analysing the literature and characteristics of Human Capital, it can be concluded that Human Capital is the initiator of Intellectual Capital and according to Mohtar, Rahman & Abbas (2015) Human Capital can be presented as a heart of the Intellectual Capital. As Tarus & Sitienei (2015) are describing Human Capital as one of the most influential factors in effectively increasing the organizational performances. The reason is that it relates to the accumulated value of investments in education and expertise from all the employees and management, including their ability to transform their knowledge, skills and experience into the creation of the value-added for a business entity (Černe, 2011). Thus, in line with Abdulaali (2018) Human Capital includes the creativity and all the skills of the employees which can also be improved through investments in various training programs.

However, it is particularly important to emphasize that employees are not Human Capital just by themselves, but they are becoming it only when they turn their knowledge and skills into

actions that are aligned with the business strategy and thus they can contribute to the creation of the value-added for a company. In other words, employees generate Intellectual Capital through their competencies, actions, attitudes and intellectual skills (Roos, Pike, Fernström, 2005).

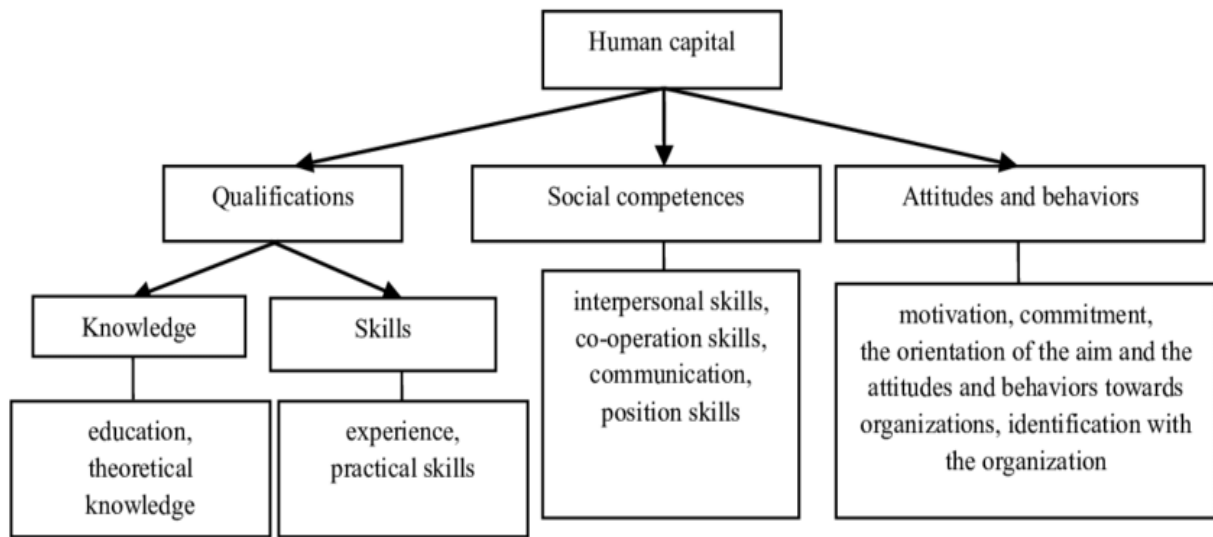
According to Sundač & Švast (2009), Human Capital is the only one able to accept and apply new knowledge and through its creativity transform it into new concepts. The success of a company is based on the expertise and motivation of employees, thus by giving them the independence to create new ideas can bring value-added for a business entity. Consequently, as A.N.A. Alkhateeb, L.Yao, J.K. Cheng (2018), are highlighting, Human Capital is the obtained knowledge of the individual that is used to contribute to the entity performances. Thus, in line with Dženopojac, Elkanj, Yaacoub and Bontis (2017), Human Capital is mainly influencing the market performance of a business entity. Moreover Human Capital usually gives comparative advantages to entities.

Therefore, the business entity's success mostly depends on the employees and management "brain workers". Knowledge is the most significant source of competitive advantage because it is "stored" in the minds of individuals, its characteristics are worth, rarity and inability to imitate (Sundač, Švast; 2009). Also, according to Mohtar, Rahman & Abbas (2015) Human Capital includes all the competencies and skills of employees, their know-how in specific fields that are significant and can influence the success of business entities, their aptitudes and attitudes. In addition to the characteristics mentioned above, Human Capital must have the ability to understand the "signals" from the external environment, thus to be able to establish quality strategies and set the right business goals at the right time. Abdulaali (2018) is describing the importance and impact of HC⁵ by highlighting that it is the most innovative feature for an entity to act according to the environmental changes and that through the knowledge, experience and capabilities workers can contribute to the organizational performances and improve the organizational efficiency. Besides, Human Capital does not act isolated but integrated with other forms of Intellectual Capital within a business entity, so it is necessary to create the environment that supports and encourages the creation, use and application of employees' knowledge and skills (Černe 2011).

Further, within Figure 4 the study presents which are the subcomponents arising from the Intellectual Capital component of Human Capital according to different authors.

⁵ Human Capital

Figure 5: Human Capital description according to I. Micilua (2016)



Source: Miciuła, Ireneusz; 2016, “The Measurement of Human Capital Methods” vol. 16; Folia Oeconomica Stetinensia

According to Miciuła (2016), currently, knowledge and technology are the key factors supporting the socio-economic growth and development. Thus, the Human Capital increased its importance for the development of entities, and became a major factor of success (Miciuła, 2016). The Human Capital category of Qualifications consists of the employees’ knowledge and practical skills (and experience). The category of social components (soft skills) are all the personal skills of people, which can have effect on building relationships with others, cooperation, communication skills, leadership abilities and similar. The third element of attitudes and behaviours include elements like motivation, attitudes and similar.

3.1.2. Structural Capital

According to many authors such as (Ross, 1997; Van Caenegem, 2002; Sundač and Švast 2009), the Structural Capital can be described as everything that remains within a company when employees are leaving their workplace. Those factors can be divided in two main groups; intellectual property and organizational processes (Sundač; Švast 2009). Ramirez, Tejada and Baidez (2014), are defining the Structural Capital as “specific knowledge” or according to Choong, (2008) it is a “non-human knowledge”, that is related with the interior processes of a company. However, Joia (2017), is highlighting that the Structural Capital usually tends to depend on Human Capital since it is developed and usually managed by it.

Therefore, when defining the company intellectual property it is likely to assume that it is the whole materialized and codified "knowledge". According to the Structural Capital definition of Edvinsson and Malone (2001), the Structural Capital derives from Human Capital and it is a combination of knowledge and intangible asset that derives from various organizational processes, has elements of efficiency, innovations and information access to generate new knowledge.

Consequently, the particularity of the Structural Capital is that it is the Intellectual Capital part that is owned and fully controlled by the entity thus; it is an important factor of the development that provides comparative advantages. Furthermore, it is even possible to trade with the Structural Capital, therefore sometimes it is necessary to invest resources into it (Černe, 2011).

Therefore, according to Ross, Pike and Ferstorm; Human Capital cannot be evaluated while Structural Capital sometimes can be quantified and evaluated within a company balance sheet.

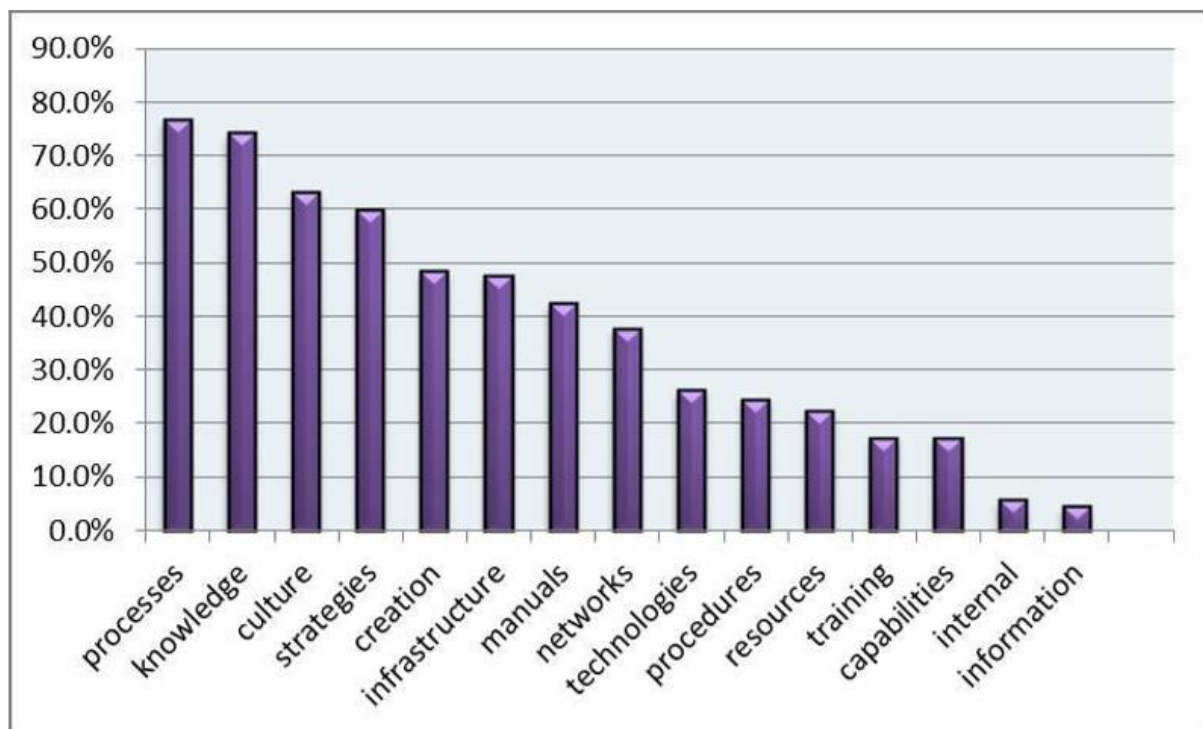
Furthermore, an individual (employee) may thus have a high level of intellect, however, if the entity where he or she works does not have well-identified guidelines of goals and achievements (like vision, mission, strategy, policies, daily routines) and has an inadequate set of procedures, communication channels and employees activity monitoring tools the overall Intellectual Capital potential of a company will not be able to achieve its full potential and subsequently businesses could face failure (Sundač; Švast 2009). Rossi; Citro and Bisogno, (2016) are pointing that the Structural Capital has the ability of achieving goals and handling changes by setting various procedures and routines that are supporting the decision-making processes.

Thus, Structural Capital gives the organization potentials to achieve competitive advantages by generating value-added to its product or services (A.N.A. Alkhateeb, L.Yao, J.K. Cheng (2018), therefore Novas, Alves and Sousa (2017) are pointing that Structural Capital has a significant and positive link concerning business entity performances.

Due to Edvinsson and Malone innovations and process capital have an impact on the Structural Capital of an entity, where process capital refers to the organizational systems, tools and techniques. Further, according to Gannon, Lynch and Harrington (2009), Remezan (2011.) et. al. the Structural Capital of an entity can be improved by investments in technology and internal processes.

As it is possible to realize by studying the correspondent literature, and as L.M. Gogan; D.C. Duran; A. Draghici (2014) are pointing out; there is still not a unique definition of the Structural Capital, the main reason is because the Structural Capital is flexible and has to adapt constantly to market demands. Therefore, the cited authors created a figure chart of various interpretations of the Structural Capital concept which includes 15 keywords mostly used when presenting and defining the Structural Capital concept. Therefore, their work is presented in the following Figure 6.

Figure 6: 15 keywords that are mostly used when presenting and defining the Structural Capital concept



Source: L.M. Gogan; D.C. Duran; A. Draghici (2014). / *Procedia Economics and Finance* 23 (2015) 1139 – 1146

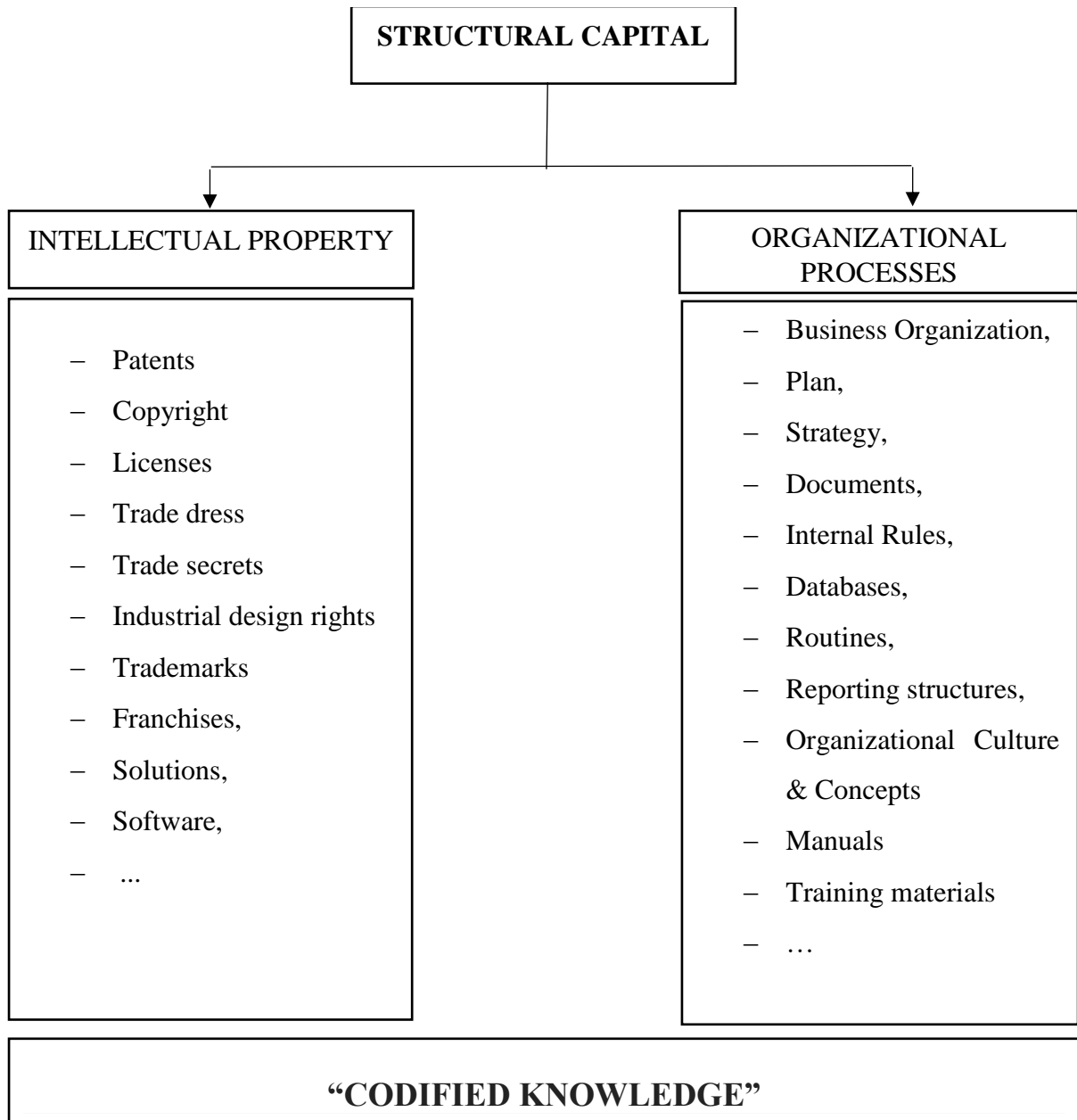
In brief, almost all definitions of the Structural Capital agree that is an entity asset composed by three main characteristics (L.M. Gogan; D.C. Duran; A. Draghici, 2014):

- Potential for economic profits,
- Lack of physical material,
- Organizational property that sometimes can be traded.

Further, within Figure 7 the study presents all the subcomponents and areas that are forming the Structural Capital according to different authors. Consequently, the Structural Capital is

formed by subcomponents that are born in two main areas (Intellectual property and organizational processes).

Figure 7: Representation of the Structural Capital components according to different authors



Source: author according to: D. Sundać, N. Švast. (2009); Marr (2005); Joia (2007); Van Caenegem (2002) et.al.

3.1.3. Relational Capital

Relational Capital (sometimes known as Customer Capital) relates to the relationships that a company has with all its stakeholders, thus according to A.N.A. Alkhateeb, L.Yao, J.K. Cheng (2018), it is the entity knowledge in relations that impacts the organization. For the research reasons, the study will use the term of Relational Capital, not the term Customer Capital. The reason is that the term of Relational Capital is a much wider concept, while Customer Capital is just a part of it.

The Relational Capital value does not represent just the impact of relationships that a company currently has with stakeholders but also the values of all those relationships that are associated with the future potential that can derive from it. Although the Relational Capital is not strictly owned or controlled by the entity, it greatly affects its development and operations.

As H. Inkiem (2016), is recommending the Relational Capital should be divided in two dimensions with a totally different set of stakeholders and impacts thus, those components should be external and internal. Furthermore, Asiaei and Joush (2015), states that Relational Capital is based on the relationships that the organization has with the outside and inside environment, therefore it is necessary to have the good relations with all the stakeholders in order to get valuable information and feedbacks in the exact time, which can have an impact on the organizational performance.

Furthermore, Joia (2007) is describing the Relational Capital represents all those relations from the internal and external environment that have an impact on the entity. It's important to highlight that it is a tool through which a company gets the knowledge and information from the external environment that can have an impact on the entity. Ross et. al., (2001), describes its significance as the strong relations that a company has in order to achieve competitive advantages on the market. Thus, the role of the Relational Capital in the value creation chain is high.

According to Chen, Zhu and Xie (2004), the Relational Capital value reflects customers' confidence in the organizational products and services. Consequently, due to Marr (2005), the information flows between the entity and the environment have an impact on its reputation and image. According to Daum (2003), relations with customers can be defined as an intangible asset due to a reason of their contractual relationship.

Further, a very good description of the Relational Capital was given by Ramirez et.al. (2014), where they stated that the Relational Capital collects a wide set of economic, social, institutional and political relationships that the organization has and requires. While Rossi et. al., (2016), define that Relational Capital is a combination of relationships, values and acts.

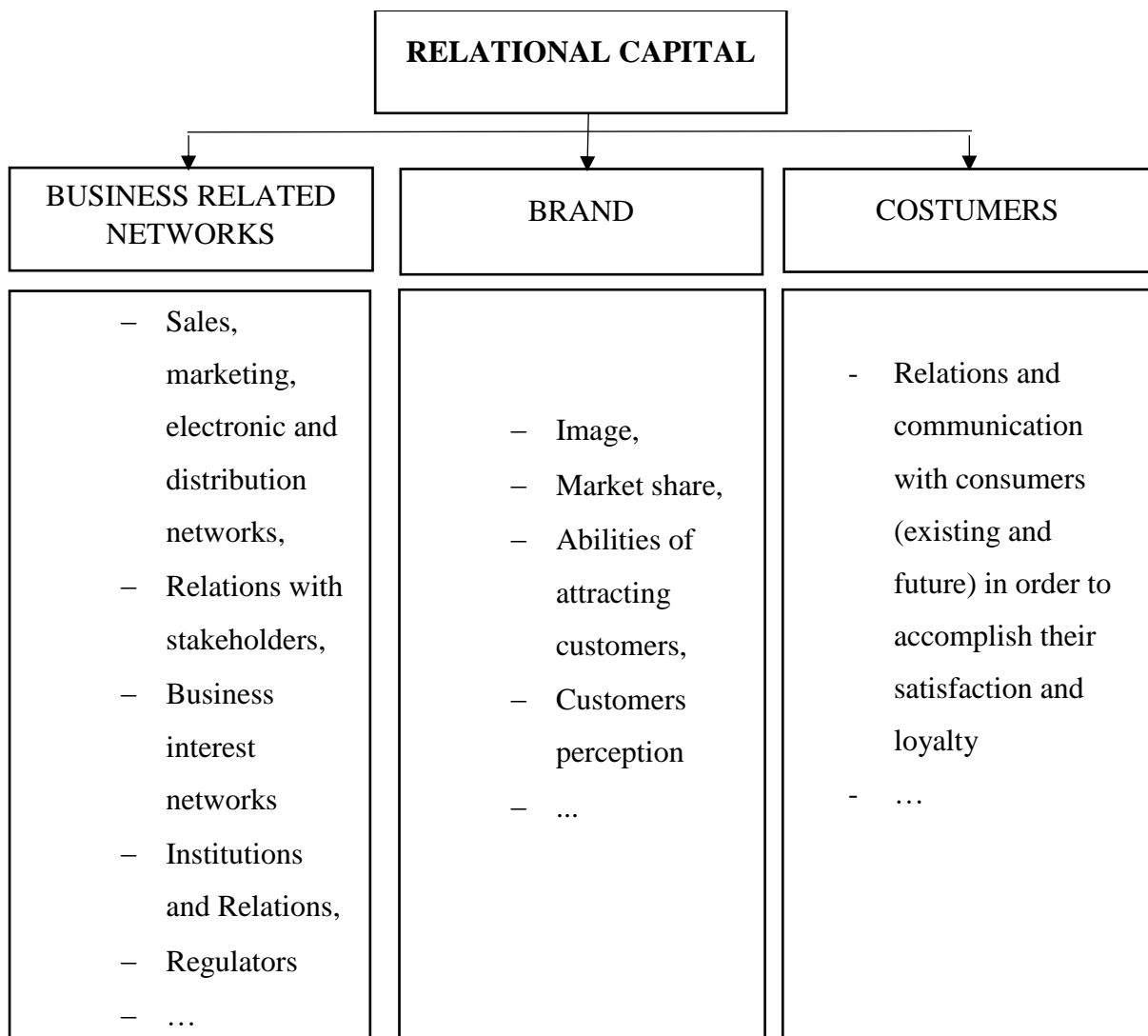
A particularly important subcomponent of the Relational Capital that is highly correlated with the value of Football Clubs is the brand. The Intellectual Capital subcomponents will be further elaborated within the paper, however, the subcomponent of a brand is highlighted here for the scope of further researches and findings related to its significance for sports clubs. The core meaning of a brand will be analysed in this section, while a further and more accurate elaboration of it and its impact on Football Clubs will be examined in the upcoming chapters of this study.

Therefore, according to T.S. Bonicci (2015) a brand can be considered as a set of intangible and tangible components designed to create awareness and identity, to build the reputation of a product, service, place, organization or person. According to Sundač, Švast (2009), the essence of a brand is in the feelings that it stimulates in consumers. Thus, with a brand it is possible to be indifferent, have a feeling of not trusting it, feel fear and anger, avoid it, as well as to personally identify with it, to be proud of it, to adore it, to admire it, to depend on it and to follow it.

Further, Sundač, Švast (2009), are citing Mr Howard Kosgrove (marketing director of Lindsay, Stone and Briggs Advertising) who pointed that a brand is the only element you can own, and others cannot rob it from you. Your brand can live forever because it generates long-term value that is above all other elements of your company.

Below, within Figure 8 the study presents all the subcomponents and areas that are forming the Intellectual Capital component of Relational Capital. The study claims that the Human Capital diversification of authors Sundač and Švast (2009) is of a great help for the Human Capital subcomponents classification. Such a diversification is allowing a better classification of all its subcomponents that other authors are exposing. According to Sundač and Švast (2009), the Relational Capital can be born in three categories which are: Business Networks, Brand and Customers.

Figure 8: Representation of the Relational Capital components according to different authors



Source: author modified according to D. Sundać, N. Švast. (2009); Bueno, (2004.); Roos, Pike, Fernström (2005).

4. INTANGIBLE ASSETS AND INTELLECTUAL CAPITAL

4.1. Definition and characteristics of the Intangible Assets

Modern business conditions and financial structures are almost unimaginable without the use and appearance of any kind of intangible assets. Besides, the characteristics of various activities from business entities (IT especially and knowledge based entities) require a significant percentage of intangible assets concerning the total value of asset within a company balance sheet. Nowadays, intangibles are one of the most essential sources of differentiation and reaching competitive advantages for business entities.

However, the possible element of intangible assets that, due to a lack of knowledge regarding its valuation and reporting, is not listed and evaluated in the entity financial report, can nowadays be considered even more significant for businesses. In the last few decades, intangible assets and elements of the Intellectual Capital started to be of high interest and attract the attention not only of scientists but also of managers, investors, bank analysts, auditors and other stakeholders.

As well, within this chapter, a full insight into the intangible assets from the accounting context will be analysed. Thus, its concept, types and identification, and the differentiation from the Intellectual Capital term will be described.

Further, R. F. Larkin and M. Di Tommaso (2019) proposed one of the most common and brief definitions for intangibles, stating that Intangible Assets are all those assets that provide an organization with future economic benefits but have no physical substance. Furthermore, one of the most essential characteristics of the Intangible Assets is that they can't be physically measured, are non-monetary assets, cannot be seen or touched and their development requires time.

According to R.M. Visconti (2019), intangibles are different and much more specific than other assets. They usually require a high amount of information for a specific area and there is a risk of their use and possible malfunctions (e.g. software). Moreover according to Gulin and Žager (2006), long-term intangible assets are acquired for the business use purposes. In addition to the intangible form, it is characterized by the difficulty of forecasting its life of use, by the difficulty of measuring the future economic benefits that can derive out of its use, it is very difficult to transfer it, it is highly linked with the business entity operations and

standards that sometimes its individual trading is very difficult (eg. business entity specialised software).

Intangible asset items differ from each other in terms of their characteristics and life of use. Due to Kolačević and Hreljac (2009), based on the principle of recognisability, intangible assets can be observed as separable and inseparable. Within the separable intangible assets category, it is possible to find all the intangible assets accounting categories except the category of goodwill. The main reason why goodwill is not part of the separable intangible assets is due to the fact that it cannot be acquired or sold separately from the entity. Furthermore, it is very important to point out and compare the inseparable intangible assets with the criterion of transferability (Černe, 2011), especially on the example of patents or franchise where, as separable intangible assets can be traded. According to the before mentioned author, separable intangible assets are mainly characterized by the possession of transferable property rights. Inseparable intangibles, generally classified as goodwill, are descriptive (such as a high market share). Although, as such, they do not possess the required elements to classify them as intangible assets, however, they can be considered as creators and conditions that contribute to the existence of separable intangible assets.

According to the IAS 38 recognition criteria for intangible assets, an entity can recognise intangibles, whether purchased (acquired separately⁶, as part of a business combinations⁷, through government grants⁸, or as an exchange for other assets) or internally generated (at cost) only if: [IAS⁹ 38.21]: if it can be identified, the cost of creating it can be attributed to it and measured reliably, and if it is certain that its use or sale will provide future economic benefits. The cost of obtaining internally generated intangibles is determined based on all the investments and costs incurred during its creation, production or preparation for its use.

⁶ E.g. by purchasing a software

⁷ Goodwill

⁸ Rights of use assigned by the government

⁹ International Accounting Standards

Based on the useful life classification for intangible assets, intangibles are classified as: (IAS 38.88)

- Finite life: with a limited period of benefit for the entity (time period or number of use).
- Indefinite life: if it is not possible to make a prediction of the period over which the entity will be able to generate net cash inflows.

According to IAS¹⁰ 38 and HSFI 5¹¹ (HSFI, 2008, paragraph 5.29), intangible assets with finite life of use are subject of amortization while intangible assets with indefinite life of use (trademarks, goodwill, franchises) are not amortized.

Concerning the characteristics of the intangible assets (respectively Intellectual Capital) and especially its importance, the issue of its valuation and recognition should be considered as a very important matter not only for the accounting area but also within the area of management.

The definition, recognition and valuation of intangible assets are in accordance with the accounting regulations and standards, respectively by the provisions of IAS 38 (Intangible Assets) and IFRS¹² 3 (Business Combinations).

The awareness regarding the existence of intangible and invisible resources within a business entity that highly affects the success and competitiveness of business entities is not sufficient for its recognition and presentation within the company financial statements. Analogously, this could mean that the Intellectual Capital can be regularly presented within the company financial statements, however, this is not the case and it is not as simple as it seems.

Particularly, following the actual accounting regulations and standards, a business entity can recognize a certain intangible resource as an intangible asset only in case if certain recognition criteria are met (in accordance with IAS and IFRS).

Apart from the recognition criteria, when it comes to intangible assets there is also an issue regarding the possibility of applying some of the existing methods of assets valuation (acquisition cost, market value, fair value...). Considering the previously mentioned definition of intangible assets in a more widespread sense, as well as the characteristics of intangible

¹⁰ IAS: International Accounting Standards

¹¹ HSFI: Hrvatski Standardi Financijskog Izvještavanja No. 5 – nematerijalna imovina / Croatian standards of Financial Reporting No. 5. – intangible asset

¹² IFRS: International Financial Reporting Standards

assets, it is possible to conclude that a certain part of intangible assets remains unrecognized, without value and not presented within the financial statements of a company (Černe, 2011). Thus, it could easily be concluded that it applies on the Intellectual Capital and its components, i.e. structure.

4.2. Intangible asset classification

According to the IFRS, examples of intangible assets include licences, computer software, trademarks, concessions, patents, copyrights, importing quotas and goodwill (under IFRS 3 thus outside the scope of IAS 38), development expenditures (in case they meet specified criteria - recognised as the cost of an intangible asset.). The internally generated goodwill, even if defined within the scope of IAS 38 due to a fact that it is not an identifiable¹³ resource, is not recognised as an asset within a company¹⁴. According to IAS there is not a clear list of intangible assets, however IAS 38 includes a list of intangible assets that are excluded from the definition set, thus, IAS 38 specifies that “IGG¹⁵, publishing titles, mastheads, brands, customer lists and similar items in substance should not be recognized as assets”. (H. Stolowy et.al; 2000). Some of the most frequent intangible asset items (licences, software, trademarks, concessions, patents, and goodwill) will be described and analysed below in the following subchapters.

4.2.1. Licences

A license is a purchased right of use of someone else's patented invention, experience, knowledge, trademark, model or sample. Furthermore, a licence is a right to use it in whole or just in part. In other words, the meaning of a term "license" is used for various legal and economic relations but always associated with a particular permit, approval or right under which a particular technology, trademark or service is being used (Gulin and Žager, 2006). Depending on the time period of use, the duration of the license may be limited or unlimited (HSFI, 2008). Depending on the agreement between the licence holder and the one who

¹³ Items with little or not tangible substances, with an economic life grather than one year. (B.J. Epstain; E.K. Jermakowicz, 2008)

¹⁴ According to: <https://www.ifrs.org/issued-standards/list-of-standards/ias-38-intangible-assets/> (visited: June 19, 2020)

¹⁵ Internally Generated Goodwill

wants to buy it, the licence fee can be fixed, variable or a combination of fixed and variable quotas. An entity that acquires the right of use through an exclusive license acquires the position of a monopolist. As well a great market position in case when the licence holders are limited. In both cases, a business entity gains a market and comparative advantage, as well as a cheaper and faster way of production possibilities, new products creation, etc. Depending on period of use of a licence (if limited or unlimited) the amortization of such an asset variate, usually when it is about an unlimited period of use the amortization is based on a 10y period (Černe, 2011; IFRS for SMEs, 2009).

4.2.2. Software

From the accounting aspect, it is necessary to distinguish among the operational and application software.

The operational software is an integral part of the hardware that supports and enables the work of the hardware and the application of the software. Thus, such a software solution is recognized in accordance with IAS 16 as property, plant and equipment (HSFI¹⁶ 6 Tangible fixed assets).

On the other hand, application software (Microsoft Office, SAP, etc.) is not an integral part of the hardware, thus as such, it represents a certain business solution and hence it is classified as a long-term intangible asset. The acquisition of the application computer software is shown as the acquisition of any other kind of intangible asset, taking into account the price of purchase and all the dependent acquisition costs.

Computer software - a solution can be purchased as already existing and a solution made from external providers, or developed internally, with the possibility of capitalizing expenditures for software development in accordance with the already mentioned conditions (IAS 38, point 57) (Černe, 2011).

When it is about the amortization of such an asset, accordingly to the IFRS, it is over the life of use, based on pattern of benefits (straight-line is the default)¹⁷.

¹⁶ Croatian Standards for Financial Reporting

¹⁷ <https://www.iasplus.com/en/standards/ias/ias38> (last time visited June 26, 2020)

4.2.3. Trademarks

Accordingly to G. Pisacane and D. Zibetti (2020), a trademark is a visible symbol or sign that displays the specific objective of identifying the goods and services of a commercial entity, thus enabling consumers to distinguish it easily on the market. Furthermore, it can be defined as the most distinctive feature among companies that differs them from business entities of the same, similar or different activity. Pursuant the Trademark Act (Narodne Novine¹⁸ 173/03), a trademark relates to any sign that can be represented in particular words or graphically, including drawings, personal names, numbers, letters, product shapes or their packaging, colours, as well as combinations of the mentioned signs, but in the way they are suitable for distinguishing the products or services of one business entity from the products or services of another business entity. A trademark has a promotional (commercial) purpose, and in order to protect it and prevent its misuse, it is necessary to patent it.

When developing a trademark external experts can be hired and consulted or it can be developed internally. In the first case when external experts are consulted, the cost of acquiring the trademark is in line with the purchase price paid for its production, thus a trademark is capitalized and recognized as an intangible asset item. Accordingly to IAS – 38, when a trademark is internally developed, those costs cannot be recognized as an item of intangible assets due to a fact that it is not possible to distinguish them from the costs of business developing. Costs of an internally generated trademark can be accepted as costs only if they meet the criteria of IAS 38, part 57; thus they incurred in the development phase of an internal project (Černe, 2011). As well, trademark is a subject of amortization.

A trademark can be subject of the international registration and as such, it can be internationally accepted and recognized.

4.2.4. Concessions

In brief, a concession is a contract (right - permit) by which the concession grantor assigns to the concessionaire a right of economic use of natural resources and other goods. For conducting such economic activities a concessionaire pays a certain fee. A Concession is

¹⁸ Official Croatian Law Gazette

mostly governed and assigned by the state and local and regional self-government units that assign those rights.

Concessions are usually divided into the following categories: those related to public benefits (such as road construction), those related to the exploitation of natural resources (such as water, oil, gas...), or concessions for the economic use of public or other goods, concessions for public works, and concessions for public services (transportation, etc...)¹⁹.

Accordingly to Gulin and Žager (2006), a concession is listed and accepted as a category of a long-term intangible asset if a fee is agreed and paid for several years in advance. In case a concession contract stipulates the payment of the concession in instalments, the cost of acquiring the concession is registered as an expense due to a fact that the acquisition cost is already conceded to the periods of future economic benefits.

4.2.5. Patents

According to the OGUSPO²⁰, a patent is the consent of a property right granted to the investor (grantee) by a sovereign authority (grantor). This right provides the inventor with the exclusive commercial right of use regarding a patented design, process or invention for the assigned period in exchange for a comprehensive and strict declaration regarding the invention. Thus, a patent is an exclusive right that protects the grantee concerning the economic exploitation of his invention.

A patent can be developed internally or it can be acquired from a third part. A patent holder can allow the patent use to other persons or business entities for a certain period by granting a license or transfer it entirely.

A patent is considered as part of the intangible asset due to a fact that is recognised as a right. In case a patent is acquired from other externally, it appears as a cost item, not as an item of intangible assets. In this case, the total cost of it includes the price of its acquisition plus all the related (dependent) acquisition costs. An internally developed patent is a result of internal researches and development activities thus is recognized as an item of intangible assets. Under the regulations ruling the issue of patents (C.J. Mesnooh, 1994), mostly a certain

¹⁹ According to the Croatian Official Gazette, Concessions Act (Article 1, paragraph 2, Official Gazette 125/08).

²⁰ Official Gazette of the United States Patent Office; Vol 58. No 13.

invention can be patented for a maximum period of twenty years, and thus its amortization and life of use can be assigned to a maximum of twenty years.

4.2.6. Goodwill

The topic of goodwill within the accounting and managerial area has been for long a subject of debate and remains as such even nowadays. Thus, to confirm it, the accounting domain of goodwill has been revised by regulators twice since 2001, respectively in 2001 and 2012 (H.Wen, R.M, Stephen; 2016). In the past, before having a wider knowledge in regards to goodwill and before accounting evolved, classical economists like Malthus and Ricardo, were naming the goodwill appearance as differential rent (R.M. Visconti, 2020).

Goodwill derives from specific factors which, although positively affect and are contributing to incomes, are not recorded in balance sheets neither have an autonomous value within them. I. Oyewobi (2019) describes the term of goodwill as the difference among the value of a business as a whole and the sum of the current fair values of its identifiable intangible and tangible net assets. Furthermore, according to SSAP-22²¹, goodwill is defined as a difference in the value of a business as a whole and the aggregate of the fair values of its separable net value.

According to R.M. Visconti (2020), some companies have the ability to generate and produce higher and extra-profits in regards to the average references of the sector; thus could be represented by a multiple set of intangible conditions (company prestige and image, the management, clientele, the organization, products quality, commercial networks, etc.) that express, the competitive capacity of the company on the market. Furthermore, according to R.M Visconti, one of the most important features of goodwill is the customers' portfolio. According to Gulin and Žager (2006), goodwill represents businesses and their results achieved according to their market reputation, position or competitive advantage.

Goodwill as such occurs when it comes to business acquisitions, thus it can be negative (badwill) and positive (goodwill). According to IAS 22.20²², goodwill is the difference between the cost of the acquisition and the acquiring enterprise's share of the fair values of the identifiable assets acquired less liabilities assumed. In fact, goodwill can be seen as a

²¹ Statements of Standard Accounting Practice

²² IAS 22 — Business Combinations

buyer motive to pay an additional amount of money in regards to a company book value due to a reason that in the future he expects higher economic benefits due to goodwill. Badwill occurs when in the acquisition of a company, the overall price is lower than the net book value of the assets and liabilities acquired (R.M. Visconti, 2020).

The value of goodwill can be internally calculated and evaluated (internally generated goodwill) but its worth as such cannot be incorporated and presented within the financial statements. The issue concerning the internally generated goodwill will be elaborated more within the upcoming chapters of this study.

According to IAS 22.44, when it comes to acquisitions the goodwill should be recognised as an asset, thus feature of an intangible asset and amortised over its useful life. A presumption is that a life of use of goodwill will exceed in twenty years, while there are cases when it can be even longer. A life of use of a goodwill can be longer than 20 years just in case if is so evident and it can be proven that benefits of the related asset can be over the mentioned period of 20 years. According to IAS 22.64, the negative goodwill is presented as an enterprise asset deduction, in the same position within a balance sheet as (positive) goodwill.

4.3.Theoretical differentiation between the terms of Intellectual Capital and Intangible Asset

In order to prove that the Intellectual Capital should be evaluated and presented as a part of the company asset (intangible asset component) and included in its financial statements, it is of a high necessity to analyse, define and highlight all the features of the term – asset as a company capital. The next step in qualifying why the Intellectual Capital should be evaluated and presented as a part of the company asset is to compare it with all the features of the term of asset and its benefits. Furthermore, it would be very useful to define the term of capital and utility in order to connect its features with the Intellectual Capital term.

Regarding the asset definition, it is necessary to keep in mind the description of assets as a resource that is controlled by the business entity as an outcome of past actions and events from which a future economic benefit is expected (Černe, 2011). According to IAS 38, an entity controls its assets if it can obtain and control future economic benefits that will flow from it and if it can limit others' access to those benefits. If it is attempted to connect the

Intellectual Capital definition and features to the same term then it is possible to find many similarities between them.

Furthermore, by the International Financial Reporting Standards (IFRS) framework the term of asset is defined as “a resource that is controlled by the enterprise as a result of the past events and from which future economic benefits are expected to flow to the enterprise.”

Already in the 19th century, the philosopher J. Bentham stated that utility means property in any kind of object (asset), whereby it tends to produce advantage, benefit and etc. (A. Kapteyn, 1985) in relation to other concurrent companies.

Despite all the Intellectual Capital characteristics it is very important to highlight once again that during time the Intellectual Capital tends to have higher value whereas when assets are concerned, the same cannot be exclusively applied.

It is possible to assume that for companies the utility that derives from the Intellectual Capital is no less important than the utility that comes out from all the other company assets that are part of the balance sheet (Ivinić, 2018). Therefore, the study claims that from the economical and accounting point of view it is justified to take into consideration the Intellectual Capital as part of the intangible assets of companies and Professional Football Clubs.

As a conclusion, reflecting on the definitions of assets and Intellectual Capital, the study presents a table (Table 2) whose purpose is to conduct a comparative analysis between the two terms mentioned.

Table 2: Facts comparison between the term of Asset and Intellectual Capital

STATEMENT	Asset	Intellectual Capital
It is usually a resource that is controlled by the enterprise	YES	YES
It is usually a result of past events	YES	YES
Future economic benefits are expected ²³	YES	YES
There is a limited access to those benefits from others	YES	YES
It tends to produce advantage, benefit and etc; in relation to other concurrent companies	YES	YES
It is not necessary to have physical attributes	YES	YES
It is usually possible to determinate and recognize the acquisition cost	YES	NO
Components are not in a reciprocal conflict	YES	NO
Value its often knowledge based	YES	YES
They are fully controlled by a business entity	YES	NO
Sometimes it tends to have higher value through time	NO	YES

Source: Authors table based on the definitions of the terms

Analysing the relevant literature often raises the question whether Intellectual Capital is part of intangible assets in its most widespread sense, or is the intangible assets a part of the Intellectual Capital? Practically, are these two terms completely separate categories from each other but with several similar variables? Some authors discuss the intangible assets and define them in the same way that other authors describe Intellectual Capital and vice versa.

Within the Table 2 it is possible to investigate and make an assessment between the terms of Asset and Intellectual Capital in some of the general statements regarding those terms. The mentioned supports the presumption whether it is justified or not to declare that the

²³ Regarding the recognition and accounting acceptance of an asset, it is necessary to comment on the criteria of the existence of future economic benefits. Some authors, such as Bornemann et al. (1999) state that no one can reliably determine with absolute certainty that there will be future economic benefits not only of intangible assets and Intellectual Capital but sometimes even from tangible assets. (Černe, 2011)

Intellectual Capital should be seen as part of intangible assets, and whether it should be presented in any form within the balance sheets of companies. Consequently, it is possible to state that studies and efforts in regards of finding its accepted valuation model are justified.

Referring to all mentioned by now, the problem of defining, separating or identifying the concepts of intangible assets and Intellectual Capital will be elaborated more in detail in the following parts of the study.

"Until where and in which form the intangible assets are representing the Intellectual Capital?" and "How visible are all the intangible assets in the balance sheet?"; were the main issues of the research conducted by Boekestein (2006) on a sample of fifty-two pharmaceutical companies, whose consolidated financial statements were observed in the periods between three years. Boekestein (2006) states that it is possible to expect that in the near future Intellectual Capital and intangible assets should be even more accurately defined and specified. Furthermore, the author states that this opens up the possibility of their convergence, which would facilitate the determination of the links between Intellectual Capital, intangible assets and the performance of business entities.

As well, one of the conclusions of the study was that elements of structural capital and intellectual property have a higher representation in the financial statements (part of intangibles) than other components of Intellectual Capital.

Some authors such as Edvisson (1997), Zambon (2003), Martin and Hartley (2006) point out that intangible assets are parts - a subcomponent of the Intellectual Capital in a broader sense. Thus, according to their studies and researches, almost every item of intangible assets is also an item of the Intellectual Capital, precisely, it is a part of its structure that is composed of the relational, structural and human capital. Consequently, if the same item is covered by intangible assets and is a component of Intellectual Capital, the question is why separate the two terms? Therefore, should everything simply be classified as Intellectual Capital or vice versa? In this case, the use of the terms "intangible assets" and "Intellectual Capital" as synonyms is acceptable (Černe, 2011).

However, the study considers that based on researches concerning the Intellectual Capital but it is still not possible to state all the mentioned. The main reason for that is that there is still not an accepted tool for the valuation of all the Intellectual Capital structure components. Therefore, it would be more precise to define that the Intellectual Capital and intangibles

cannot be synonyms, precisely due to the fact that the Intellectual Capital is, as stated already, a much wider concept than intangibles.

Consequently, another reason why it is difficult to link those two terms as synonyms is that intangible assets have a very narrow and strict definition by accounting standards and consequently do not include elements such as human resources, relational capital, reputation and other elements of the Intellectual Capital that have a high potential for the value creation and competitive advantage. Therefore as highlighted in the Meritum Report²⁴ the intangible asset is only a fragment of the Intellectual Capital that can be evaluated and reported within company financial statements.

Furthermore, according to Černe (2011), there are components of intangible assets like concessions that are not part of the Intellectual Capital, thus, identifying them as synonyms is fully acceptable.

Another reason why it is difficult to link the terms of Intellectual Capital and intangible asset as synonyms is that intangible assets are defined as a resource that is fully controlled by a business entity, while it is difficult to prove the presence of full control over the Intellectual Capital. The obvious example of a lack of control or difficulty in maintaining control over the Intellectual Capital is within the components of human and relational capital (parts of the Intellectual Capital structure). Therefore, it is possible to claim that there is an inability to prevent employees from leaving their position, as well as the inability to stop consumers from using competitors' products.

As well, intangible assets and Intellectual Capital differ when it comes to the recognition of acquisition costs. Consequently, according to all current accounting regulations and standards, it is almost impossible to recognize the costs that occur within the process of some Intellectual Capital components value creation, mostly because those costs are automatically recognized as expenses (Černe, 2011).

Therefore, according to all the studies and analyses conducted by now, linking and identifying the terms of Intellectual Capital and intangible assets as they are the same concept cannot be accepted; thus, the mentioned should be rejected. The identification of the mentioned terms, as they are equal, can be justified only within the context of specific parts of the Intellectual Capital structure subcomponents. Furthermore, according to the literature

²⁴ Meritum Report: Guidelines for managing and reporting on intangibles

analysed, the term of Intellectual Capital is a wider and much more comprehensive concept than intangible assets.

Linking of the mentioned terms could be justified only in case an adequate tool for all the Intellectual Capital components valuation is found and when an adequate standard related to its recognition, depreciation and reporting is established.

4.4. Market value and Balance Sheet (book) value differentiation

As previously mentioned within the study, values of business entities usually differentiate when their market value or their book value is compared.

The value of an asset is formed by its origin cost of acquisition adjusted for any subsequent changes. The market value is, in brief, the value that can be achieved within the property transfer, thus it varies according to different calculations and the acquirer's perception of value.

One of the key points of this study is to observe and conclude whether Intellectual Capital is the "key factor" responsible for those differences and the one that greatly affects the value of entities and Football Clubs as well.

Besides, as pointed by Choong (2009), many researchers define the Intellectual Capital as "the difference between a business entity market value and its book value". Furthermore, economic theorist O. de Pablos (2003), considers that the Intellectual Capital is the most responsible factor for that divergence.

As highlighted by Černe (2011), and according to Joia (2008) Edvinsson and Malone (1997), Rös et. al. (1997), Sveiby (1997), stated that the growing value of the ratio between the market and book value of business entities was the reason that influenced deeper studies and wider researches in regards to the theory, valuation and reporting models for the Intellectual Capital.

A notable insight in regards to the difference between the book value and the market value of entities (thus the possible Intellectual Capital value perspective) is explained within the research entitled "The information content of royalty income" written by Gu and Lev (2004). The authors made a research over five hundred business entities and calculated that the ratio

of market to book value averages on 4.5, which means that for every 4.5\$ of market value, just 1\$ appears in the balance sheet.

In this context, the importance of the Intellectual Capital stems from the fact that the market value of many business entities (especially those from the knowledge-intensive industries, as IT), can be several times higher than the value of the business entity determined by the generally accepted accounting framework (book value).

Based on the above, the question arises on what investors are buying, i.e. what are they paying for? The answer to such a question could be that investors are acquiring the Intellectual Capital (knowledge, expertise, experience, talent, ideas, social relations, relations that employees have and can bring value added in the future, etc.) of people who are working for the entity and planning its development.

Besides, as stated in the study conducted by A.N.A. Alkhateeb et.al. (2018), nowadays, the Intellectual Capital represents a high dimension of the overall rate of the business entity value. The question is if and how the same can be applied within many professional Football Clubs. A wider insight in regards to the market and book value of Football Clubs will be analysed in the upcoming chapters of this study.

Table 3: Difference between the market and book value of chosen entities (in Billions \$)

Company	Market value ²⁵	Asset Value	Difference between MV and AV	Internally Generated Goodwill	Net Income	Total liabilities ²⁶
Coca-Cola ²⁷	237	86	274%	+ 151	9	65
Microsoft ²⁸	1.202	286	420%	+ 916	39	184
Amazon	913	225	405%	+ 668	11	163
Apple	1.296	338	383%	+ 958	55	248
Walmart	311	219	142 %	+ 92	15	139
UnitedHealth	280	173	162 %	+ 107	13	113
Novartis	219	118	186 %	+ 101	7.2	63

²⁵ Market value on 31.12.2019.

²⁶ For all the values correspondent balance sheets were consulted as well as informations from <https://www.macrotrends.net/> (visited 20.08.2020.)

²⁷ <https://investors.coca-colacompany.com/financial-information/balance-sheet> (visited 20.08.2020.)

²⁸ <https://www.microsoft.com/investor/reports/ar19/index.html> (visited 20.08.2020.)

Source: Author

The main scope of the Table 3 is to compare the difference between market values and book values of companies. The sample is based on companies that have an asset value higher than 80B.\$, in order to prove that even such high asset values can be overlapped by the market values. Based on the sample, it is likely to conclude that the market value of business companies usually exceeds the asset value (book value) of those entities, especially for entities operating in the IT sector. However, it is necessary to highlight that there is not a unique pattern to define that the market value is always higher than the asset value of business entities.

IGG represents the Internally Generated Goodwill value based on a difference between the market value and a book value of business entities. Within the upcoming subchapter of this study a wider insight in regards to the Internally Generated Goodwill definition, value and regulations will be conducted.

In the Table 4 the study analyses the difference between market and book values of the chosen Football Clubs.

Table 4: Difference between the market and book value of chosen Football Clubs (in millions)

Club	Market /acquisition value	Asset value	TRMKT ²⁹ club Value ³⁰	TRMKT club Value + Asset value	IG G	Total / acquisition	TRMKT club Value + Asset value - Total debt
ACF	€ 180	€ 221	271 €	€ 492	€ - 41	€ 132	€ 360
MANUT D	\$ 3.280 ³¹	£ 1.497	762 €	€ 2.440	£ 960	\$ 1.399 ³²	€ 1. 035
AC Roma	€ 682 €591 ³³	€ 550	€ 386	€ 936	€ 132	€ 220	€ 714
FC JUVE ³⁴	€ 1.658	€ 1.141	€ 668	€ 1.809	€ 517	€ 326	€ 1. 483

Source: Author

The main scope of the Table 4 is to compare the difference between market or real acquisition value at the period and book values of the chosen Football Clubs. The sample is based on clubs that are listed in the stock market or their purchase value is known. The aim was to investigate whether the IGG is positive and if there are other factors that are affecting the acquisition value. Based on the sample, it is possible to conclude that the market - purchase value of Football Clubs usually exceeds the asset value (book value) of those entities. The Transfermarkt value + asset value differs from the acquisition or market value, the same is a base for further statements in regards to the IC and significant components for the value creation within FCs. There is not a unique pattern to define that the market value is

²⁹ Transfermarkt (TRMKT) is an application, website containing a wide range of information regarding football, football players, clubs and football leagues.

The Web site is famous mostly because of the players value estimation, where researchers Alex Bryson, Bernd Frick and Rob Simmons from the Centre for Economic Performance „CEP“ found that the players value estimation are largely accurate.

³⁰ Current value or value in the acquisition period

³¹ NYSE value (visited August 20, 2020)

³² <https://www.macrotrends.net/stocks/charts/MANU/manchester-united/total-liabilities> (visited August 20, 2020)

³³ Price paid for 86.6% of the shares

³⁴ 1.247 EUR p/s x 1330251988 shares

<https://www.borsaitaliana.it/borsa/azioni/scheda/IT0000336518.html?lang=it> (visited August 20, 2020)

always higher than the asset value or vice versa, there are several factors that can have an effect on both values and that will be investigated further within the study.

It is necessary to define what is usually included within the total assets of Football Clubs and what is not evaluated, as well as it is important to find an answer to how Football Clubs are currently evaluated. Thus, within further chapters of the study the topic of intangible assets and valuation of Football Clubs will be studied.

Therefore as a conclusion, the definition of the Intellectual Capital value based on the difference between the market and book value may be indicative but not completely independent and justified, and it is not desirable to point out with certainty that the value of the Intellectual Capital is based on the difference between the market capitalization value and the business entities (as well as Football Clubs) asset value.

The Intellectual Capital value based on the difference between the market capitalization value and the value of the total assets is still not clearly described and specified plus, it represents an area whose components should be thoroughly distinguished, evaluated and described in order to achieve further developments and theory testings.

In particular, the market value of a business entity, is not constant and is a subject of constant fluctuations, even not necessarily due to the activities of business entities but due to several factors and trends that are not directly and strictly related to business entities.

4.5. Internally Generated Goodwill (IGG)

The segment that attracts a lot of attention within the Intellectual Capital issue and which could, with the recognized and standardized model for its definition and valuation, somehow, be considered as a certain framework related to the value of the Intellectual Capital within a business entity is the Internally Generated (Developed) Goodwill.

As mentioned in the previous subchapter of this study, several authors are defining the Intellectual Capital as the difference between the book value and the market value of a company.

However, it is necessary to note that goodwill occurs only when it comes to company acquisitions and is the difference between the market value and the purchase amount. Thus, goodwill that will arise and be shown after the acquisition in the financial statements of the

acquirer, while the difference between the market and book value is the Internally Generated Goodwill which, pursuant all the accounting regulations and standards³⁵ can't be recognized as intangible asset. Moreover, the identification of Intellectual Capital and Goodwill as two same terms is not entirely correct. Furthermore, one of the reasons for that is stated by Brinker (1998) who affirmed that the Intellectual Capital as an asset has been inappropriately seen as goodwill for years although its value during time is increasing while the value of Goodwill during time within balance sheets is decreasing.

Furthermore, in line with Z. Petrović et. al. (2014), authors are highlighting that because of the fact that current accounting standards do not permit the Internally Generated Goodwill valuation and presentation within the balance sheet, the exclusive reliance of financial statements where this type of asset is not included can mislead users about the current and potential value of a company. The IGG³⁶ valuation and presentation could be very useful and of high interest for internal and external users like managers, owners, creditors, partners, possible investors and financial analysts.

Consequently, in line with Haxthausen (2009), investors' brand perception relies more on a perception of possible future value creations that on past value realizations. Therefore, it will not be so inappropriate to estimate the Internally Generated Goodwill value and point about it at least within the *Notes* of financial statements.

Z. Petrović et.al. (2014) gave a good definition in regards to the Internally Generated Goodwill, saying that it is the potential intangible asset that the company has, and from which it is expected that future economic benefits can occur.

Usually, internally generated intangible assets (like brands value, customers list, publishing titles, etc.) are not meeting the IAS criteria for their recognition within financial statements. The main reason for that is the incapability to distinguish the investment in their creation and development from the costs of a company's development. One of the reasons why it is not allowed to present the Internally Generated Goodwill within the company balance sheet is hidden in the fact that like that, it disables various tax avoidances³⁷ and misrepresentation of financial statements. Thus, as there are no adequate and accepted valuation measurement tools the overestimation of the company value and its asset can occur.

³⁵ IAS 38

³⁶ IGG= Internally Generated Goodwill

³⁷ Example: Rupert Murdoch case in Australia: <https://www.smh.com.au/business/rupert-murdochs-us-empire-siphons-45b-from-australian-business-virtually-taxfree-20150405-1meu0l.html> (visited: August 21, 2020)

The Financial Valuation Group (2001), states that there are certain "economic phenomenas" mostly descriptive and qualitative in nature that do not meet the conditions for their recognition as intangible assets in accounting terms and that there is no possibility of their separate presentation as intangible items. Nevertheless, those "phenomena" are creating conditions and contributing to the development of other intangible assets. Some of the examples are the high market share, reputation, profitability, market potential and others. Authors are pointing out that such examples are generally classified as goodwill. Although they do not state explicitly, it can be concluded that they are referring to the Internally Generated Goodwill which, in their work, they are correlating with the Intellectual Capital (Černe, 2011).

According to Z. Petrović et.al. (2014), the structure of the Internally Generated Goodwill is mostly composed from components of the Intellectual Capital structure (experience and knowledge of employees, customers and other relations, stakeholders expectations, reputations, etc.). Consequently, it is obvious that the value of the Internally Generated Goodwill is influenced by the human capital, structural capital, customer's loyalty, market share, various relations and others.

Brands (part of the Structural Capital) may have a greater value than a company net asset and its book value. As stated by Stefanović (2010), the IGG is often represented as the difference between the market value of a company and the book value of its net asset. Many factors are "guilty" for that difference and mostly those factors are arising from the Intellectual Capital structure components.

As a conclusion of this subchapter, companies that disclose more information (textual) about the IGG value within the *note* part of their financial statements are the once that are providing more realistic views in regards to the company's financial position (Z. Petrović et.al., 2014) and possible future economic benefits. Furthermore, the inability of presenting the Internally Generated Goodwill value as a position of the financial statements is in the exclusive Goodwill recognition as a result of acquisitions. The Internally Generated Goodwill has many characteristics and components of the Intellectual Capital structure however their identification as same terms is not fully precise.

5. EXISTING MODELS, METHODS AND OBSTACLES OF THE INTELLECTUAL CAPITAL VALUATION

According to N.K. Aksentijević (2012), the origins of the Intellectual Capital quantitative valuation can be linked with the beginnings of the 17th century, when a British economist W. Petty derived and compared his calculation as the total population earnings and the corresponding amount of capital required to bring those earnings if they were invested at a certain interest rate.

In addition, a significant impact on the development of the quantitative valuation of the Intellectual Capital was given by several authors that have to be highlighted, thus; F. Harbison and C. Myers, John and Friedrich Von Thunen, M.J. Browman, John Kenneth Galbraith, Hudson etc.

M. C. Wang in his study entitled “Value relevance on Intellectual Capital valuation methods: the role of corporate governance” highlights the importance of the Intellectual Capital measurement and its impact on the business exact value. Particularly, he assumes that the Intellectual Capital valuation is one of the key factors of a more reliable, accurate and realistic measurement of the values of business entities.

While Intellectual Capital is becoming an increasingly recognizable factor in the development of business entities and there is an increasing necessity of finding effective and standardized tools for its interpretation and valuation, it can be assumed that there is still not a standardized and consistent way of its presentation and valuation. J. A. Nazari (2014) states that, despite the high interest in the area of the Intellectual Capital and consequently the introduction and development of new models for the measurement and reporting of the Intellectual Capital value, no recent study has integrated and developed an accepted model for the mentioned, neither there is a scientific consensus related to one efficient model.

The absence of standards or a precise and complete pattern for determining the Intellectual Capital value (and including it in some form within balance sheets) is an incentive to constant efforts related to the development of various systems and models of the Intellectual Capital valuation and presentation methodologies.

Researches and efforts concerning finding the right methodology for the IC valuation and presentation have resulted in the development of a significant number of theories, systems

and methods. Thus, it is possible to assume that even if there are quality models and methods as such, there is still not a commonly accepted tool and methodology of the IC valuation and presentation. Consequently, currently there is not a unique methodology that can be applied as such, especially amongst different business areas.

Therefore in line with S.L. Chang and J. Hsieh (2011) within the last decade various studies were made, tools were proposed but nevertheless the reliability of every method still largely depends on the business characteristics and information objectivity. These methods are classified in the relevant literature according to different criteria's thus, the mentioned methods and models can be considered within four groups: Direct Methods of the Intellectual Capital valuation, Market Capitalization Methods, Methods of return on assets and Scorecard methods (L.A. Nazari, 2014). The methods categorized in this way are summarized and briefly presented within the following part.

Consequently, the methods that are analysed and described within the study are the following;

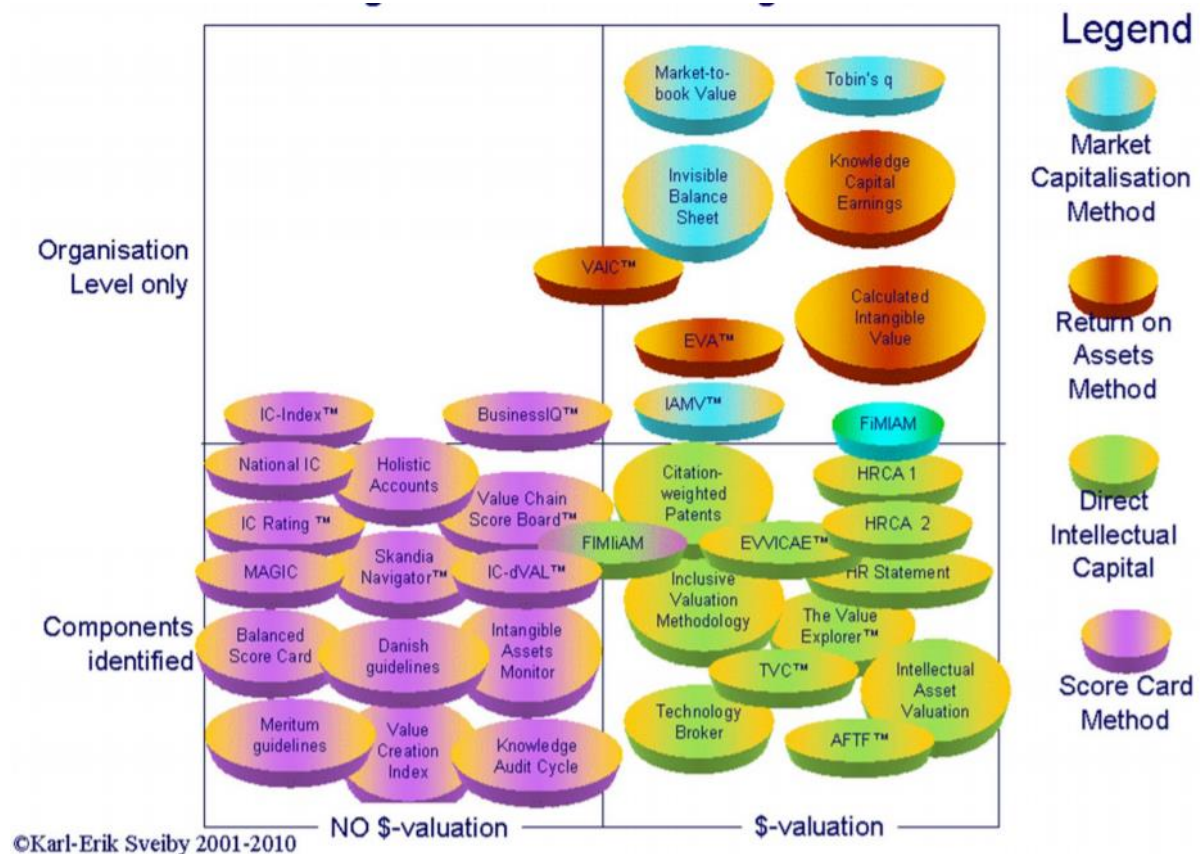
- The Direct Intellectual Capital Method – DIC: The DIC method estimates the straight monetary value of intangibles by identifying their various components. Once these components are identified, they can be evaluated, as an aggregated coefficient or individually (Sveby, 2010). The core of those methods are market components (such as consumer loyalty), technological components (such as know-how), intellectual property components (such as trademarks), human components (such as education and training) and structural components (such as IT systems). After determining the value of all these components, the total value of the Intellectual Capital of the business entity can be derived (Černe 2011). The main limitations of such methods are a large number of components needed to be identified and evaluated. On the other hand, Rodov and Leliaert (2002) state that such methods are the most complex but currently the most precise to determinate the IC value. Within this category it's possible to find: The Value Explorer™, Inclusive Valuation Methodology (IVM), Intellectual Asset Valuation, Total Value Creation (TVC™), Accounting for the Future (AFTF™), Technology Broker, HR Statement, Human Resource Costing & Accounting (HRCA1 i HRCA2), Citation – Weighted Patents, EVVICAETM and Dynamic monetary model (Sveby, 2010).

- The Market Capitalization Method – MCM: The Market Capitalization Method as the business entity Intellectual Capital measures the gap between a company market capitalization value and its stockholders' equity (Sveby, 2010). According to (Rodov and Leliaert, 2002), for the accurate IC value determination using such methods, it is necessary to review and correct prior financial statements for the inflation impact ratio or current replacement asset cost. Otherwise, the use of financial statements historical data may result in distorted values. It is also important to highlight that we cannot define that the IC is the exclusive factor responsible for this divergence, as well as that when defining this gap it's necessary to point on different market situations and factors. Within this category it is possible to find: Investor assigned market value (IAMV™), Market – to – Book Value, The Invisible Balance Sheet, Tobin's q, FiMIAM (Sveby, 2010).
- The Return on Assets Method – ROA: The ROA method is calculated as dividing the average pre-tax earnings of a company for a period of time by the average value of the tangible assets of the company for the same period (e.g. Rodov and Leliaert, 2002; Černe 2011, Sveiby 2010). The ROA company result is then compared with its industry average. If the difference is positive, it is assumed that the IC value is higher than the industry avg. The difference is multiplied by the average tangible assets to calculate an average annual earnings from Intangibles (Tan, Plowman and Hancock 2008; Sveiby, 2010). By dividing the above-average earnings by the average cost of capital or an interest rate of a company, it possible to obtain an Intellectual Capital estimate value (Sveiby, 2010). The problem of this method and for the company management to take appropriate actions are the use of past information therefore, they cannot be updated in time. Within this category it's possible to find: The Economic Value Added – EVA™, Knowledge Capital Earnings, Calculated Intangible Value (CIV). VAIC™ (Sveby, 2010)
- Scorecard Methods - SC: The SC methods are similar to the DIC methods, except without monetary valuations of the Intangible asset value. The core of this method is to identify various components of the Intellectual Capital and indicators. Those indices are generated and reported in various scorecards models or presented as graphs. Recently, the new methods of the IC valuation are based on the SC

models. Within this category it's possible to find: Regional Intellectual Capital Index (RICI), ICU Report, IAbM, SIPCAP, Intellectus model, Intangible assets statement, IC – Index™, Public sector IC, Topplinjen/Business IQ, MAGIC projekt, Danish Guidelines, National Intellectual Capital Indeks, IC-dVAL™, IC Rating™, Meritum guidelines, Knowledge Audit Cycle, Value Chain Scoreboard™, Hollistic Accounts, Skandia Navigator™, Value Creation Indeks (VCI), Intangible Asset Monitor, Balanced Score Card (Sveiby 2010; Černe 2011).

Further, within the Figure 9. is possible to have a visual representation regarding the valorisation models categorization of the Intellectual Capital.

Figure 9: Sveiby's Intellectual Capital models classification (Sveiby, 2010).



Source: https://www.sveiby.com/files/pdf/1537275071_methods-intangibleassets.pdf, (Visited Sept. 20, 2020)

Within the presented classification regarding different models presented by several authors of the Intellectual Capital valuation, Sveiby (2010) exposed an insight regarding the most cited definitions. The mentioned author took into account whether the Intellectual Capital value is expressed in monetary or non-monetary terms, whether it is determined for each component

separately or as a total value of the Intellectual Capital of the business entity (organization level only).

Toward the following part of the paper, some of the models presented within the classification of Intellectual Capital valuation of entities are described, such as; The Skandia Navigator, the Economic Value Added as one of the most frequently cited and explained valuation model in the relevant literature, the Value Added Intellectual Capital model as well as the FiMIAM method as a newer and promising method.

5.1.The Skandia Navigator

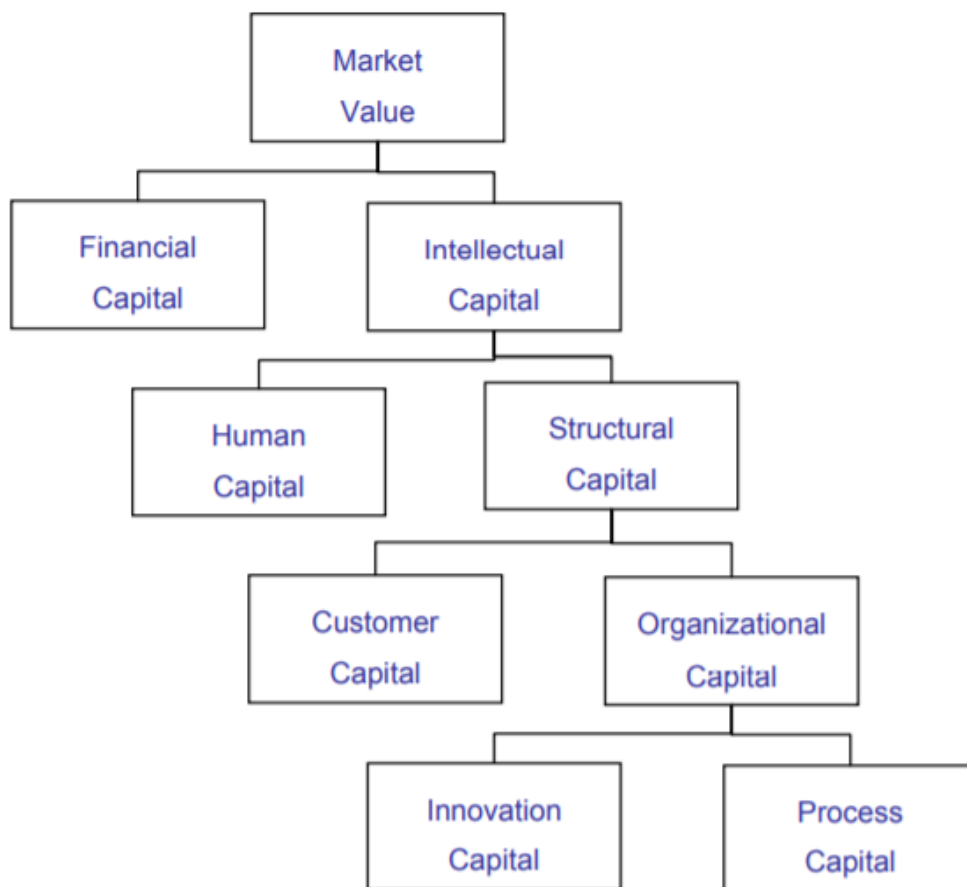
The Skandia Navigator, a method that appertains to the scorecard methods (non-monetary valuation model) of the Intellectual Capital valuation, is one of the first methods that attempt to quantify the Intellectual Capital value of business entities. The model dates back to 1994 and it was projected by a Swedish insurance company Skandia. Particularly throughout history, Sweden has been known as one of the first states to make efforts and conduct researches in finding methods related to the Intellectual Capital valuation. According to J. Guthrie et.al. (2017), even earlier, in the 1988, the Swedish Konrad Group tries to evaluate and describe the Intellectual Capital as the “invisible part” of the company that is not involved within financial reports.

The Skandia group was developing the Skandia model since 1985. Initially, such a report has been intended exclusively for their internal usage. In 1994., Skandia contributed to its shareholders by presenting for the first time in the traditional financial statements a report that was reflecting about the Intellectual Capital of their company (N. Bontis, 2000). The Skandia model assimilates (the assumption that is not proven) that the Intellectual Capital is representing the difference between the book value of the company and the company market value. (L. Edvinsson and Malone, 1997; Ross et.al. 2005; Luu, Wykes, Williams, Weir, 2001; H.Beng, 2002; K. Herouzi, 2020).

The concept of the presented model presumes that the market value of a company equals to the Intellectual Capital increased by the financial capital. According to the method the components of the Intellectual Capital that have to be evaluated are Human Capital and Structural Capital. Furthermore, the Structural Capital can be decomposed into Customer Capital and Organizational Capital, where the Organizational Capital can be turn into

Innovation Capital and Process Capital (Edvinsson & Malone, 1997). There are five key focus areas of valuation within the Skandia Navigator Model: Financial focus, Customer focus, processes, R&D and Human focus. Edvinsson and Malone (1997) declare that the Intellectual Capital represents a new and notable component in the valuation of entities. The financial focus relates to the company achievements from the past. The consumer, human and process focus are representing current results, while the focus of R&D takes into account an upcoming prospective.

Figure 9: Skandia Market Value Scheme



Resource: Edvinsson and Malone, 1997; H. Beng, 2002; J. Guthrie et. al. 2017.

Within the Skandia navigator report, there are over 100 different measurement indicators calculating the Intellectual Capital of entities. The following table summarizes only a few of them:

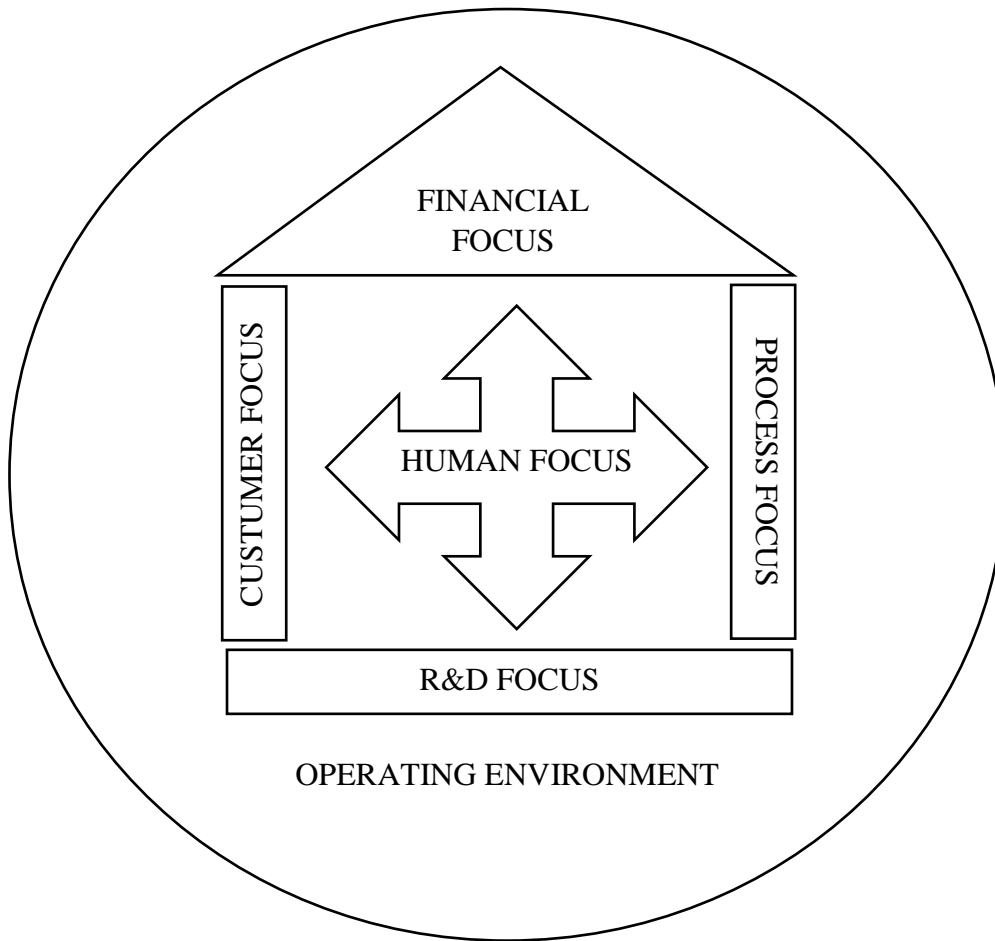
Table 5: Example of indicators for measuring Skandia's Intellectual Capital

Financial focus	<ul style="list-style-type: none"> • Income / employees (\$) • Revenue from new customers / total revenue (\$) • Profit from new business operations (\$) <p>And similar ...</p>
Customer focus	<ul style="list-style-type: none"> • Ratio of sales contacts and sales (%) • Number of new customers in relation to lost ones (%) <p>And similar ...</p>
Processes	<ul style="list-style-type: none"> • employees / IT infrastructure <p>And similar...</p>
R&D	<ul style="list-style-type: none"> • Employee satisfaction index • Training cost / administrative cost (%) • Average age of patents <p>And similar ...</p>
Human focus	<ul style="list-style-type: none"> • Highly educated managers (%) • Annual staff turnover (%) • Leadership index (%) <p>And similar ...</p>

Source: N. Bontis; „ASSESSING KNOWLEDGE ASSETS: A Review of the Models Used to Measure Intellectual Capital“; California; 2000.

The Skandia model is summarizing numerical, qualitative and financial parameters and presenting it as an Intellectual Capital index. Such is allowing management to "navigate" among the entity with a portfolio of highly aggregated knowledge-based assets, such as employee qualifications or experience, and the value they create (Reinhardt et al., 2001). Often, the model is metaphorically described through the house. Thus, the financial focus is considered as the roof of the house, the main walls are consumer and process capital while Human Capital is the centre of everything - "soul of the house" (Edvinsson 1997), the bases of the house are renewal and development. The environment where the company is operating and trying to create values and efficiently build entity is also very important for the management of a business entity. The following is presented in the Figure 11.

Figure 10: Skandia Navigator according to Edvisson and Malone 1997.



Source: author according to H.Berg, 2002.

Within literature, it is often highlighted that the development of Skandia Navigator motivated authors of different models of the Intellectual Capital valuation to start taking into consideration the importance of other non-traditional assumptions about value creation within business entities.

Usually, the objection of this model is the fact that it does not evaluate and show the flows of the Intellectual Capital of entities but its fix status (Reinhardt et al., 2001; Bontis, 2001). The Skandia Navigator reports of the IC are very visual and simple, thus the study considers it as an advantage in explaining and reporting about the value, importance and impact of the Intellectual Capital to for the final users. However, according to Edvisson (1997) the next necessary step should be to develop such methods in order to visualize the Intellectual Capital flows.

5.2. Balance Score Card Method – BSC

The Balance Scorecard method "BSC" - the methodology of balanced goals, is the concept that was founded in the early 1990s by the economists Robert D. Kaplan and David P. Norton (Bengtsson, Paulin and Svensson, 2003).

The author's principal concept of the idea is based on their following statements³⁸:

- Financial performance indicators of business entities are not sufficiently comprehensive indicators for managing complex organization systems in complex conditions. Answers to the four key dimensions form the basis for ensuring the long-term success of the business entity (Žager et al. 2003);
- A harmonious view of organizational performance must include at least four elements and areas: financial, internal business processes, customers, learning and development areas. Each of these perspectives should have defined specific goals that arise from the company's vision and strategy, defined activities that assist for the efficient achievement of the goals set and finally adequate tools to quantify those performances;
- The BSC model ensures the achievement strategies, including all the available resources for its realization and feedback.

According to Kaplan and Norton (1996), H. Berg (2002), The Balanced Score Card is helping the organization in tracking the scorecard 'balance' between the measures for shareholders and customers (external measures), and the internal once related to business processes, learning, growth and innovation.

Furthermore, the authors of the model emphasize that financial statements give only an illustrative picture of the business entity, while the relevant information for the future is created through investments. The BSC model results in allowing analysis from different perspectives and dimensions, thus one of the BSC concepts is also based is the prospect that business strategies are seen as a set of hypotheses related to cause-effect relationships (Banker, 2000; H. Berg, 2002). Besides, the authors indicate that financial and non-financial values should be available to employees at all levels within the business entity, and should form a significant part of the information system (L. Bengtsson, et al., 2003). Therefore, their fundamental idea was to connect non-financial and financial business indicators in an

³⁸ According to; <http://www.skladistenje.com/balanced-scorecard-bsc/> (visited: Nov. 17, 2020).

integrated model that will measure and evaluate the overall business performance (Žager et al. 2008). The value of this model is reflected in the fact that non-financial indicators are a significant complement of the overall financial indicators.

Table 6: Description of the four key BSC prospective

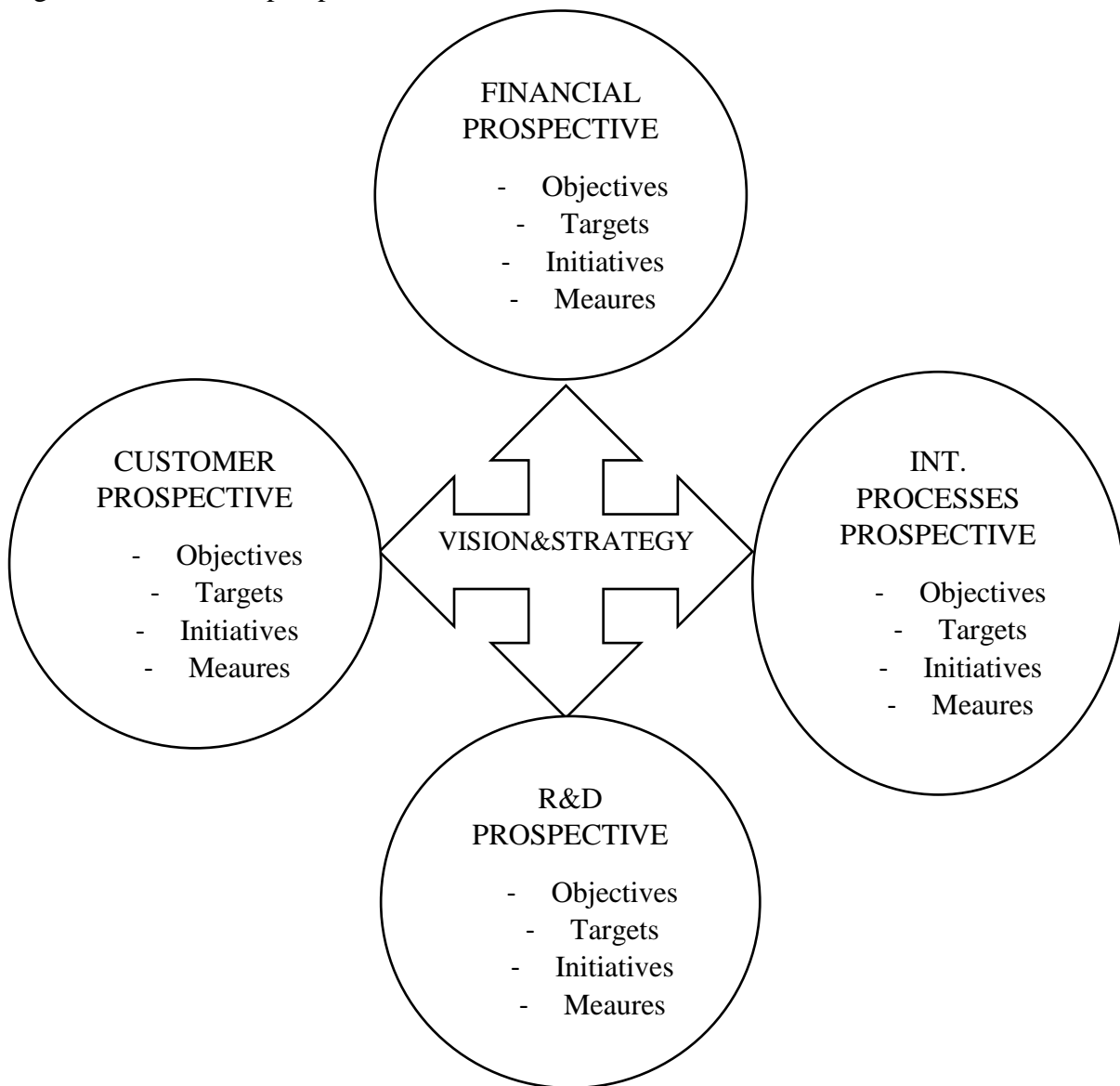
BSC prospective	Meaning
Financial prospective	Group of financial performance indicators that are creating the perception of the company to shareholders.
Customer prospective	Group indicators related to answer how we appear in the eyes of our customers. The company should achieve its vision and mission.
Internal business processes prospective	Indicate the key processes in order to achieve the company goals. To find processes for the most efficient realization of stakeholders expectations.
R&D prospective	The perspective focused on the infrastructure needed for long-term development. Where we can continuously improve our ability to create values.

Source: Authors table conceptualization of the four key BSC prospective according to Kaplan and Norton (1996).

Within the presented Table 6, it is possible to observe the four main categories (prospective) of the BSC model. According to Kaplan and Norton, Žager et al., 2008, Roos, Pike and Fernström, 2005, Černe 2013, each of the prospective is helping to collect data, develop metrics and analyse each perspective. The main idea is to achieve goals set within the company's vision and strategy through the key points (objectives, targets, initiatives, measures).

Further, within the Figure 12, the four main prospective of the BSC model are exposed. The figure describes how they are all connected with the company visions and strategy and what is the main part of each prospective.

Figure 11: Four BSC prospective



Source: Author crated based on similar descriptions and visual conceptualization of the Four BSC prospective

Within the literature, according to several authors as Roos, Pike and Fernström (2005), some shortcomings and weaknesses of the BSC model that are limiting its full use and potential are marked. Precisely, the model has often been criticized as a too rigid framework due to the fact that just four perspectives are not sufficient to cover all the areas of a business entity. Furthermore, the identification of the success key factors and indicators by each perspective separately can be considered as a limiting factor of a model. In addition to the above, criticisms (Bontis et al., 1999; Roos, Pike and Fernström, 2005) of the model have been related also to the fact that the model takes into account principally shareholders and

customers while suppliers, employees, and other stakeholders are considered as secondary. The aforementioned is explained through the fact that employees are observed together with IT systems within a R&D perspective. Besides, innovations (the result of human learning, knowledge and activities) are grouped in the perspective of internal business processes, which equalises them with routines.

Besides the critiques related to the model, there are variables that can be linked with the Intellectual Capital components. The perspective of R&D can be linked with Human Capital, the customer perspective with the Relational Capital while internal processes with the Structural Capital. The values of individual components are helping the valuation and achievement of the company strategies and goals. According to Holmen (2005), the model can contribute to the Intellectual Capital valuation by estimating how much each segment contributes to the realization of business strategies.

5.3. Economic Value Added method – EVA™

The Economic Value added method is an “extended” metric calculation made by the American consultancy company Stern Stewart & Co (Joia, 2007; Kolačević and Hreljac, 2009). It is very important to define that EVA is not a new model³⁹, it is just the variation and an extension of the residual income⁴⁰ (calculation that appeared within the accounting theory literature in 1917 by Church and 1924 by Scovell (Dodd and Chen, 1996; A.Herman, 2002) with many other variations on the calculation) in sense of the capital and income calculations adjustments. The EVA method is part of the ROA models of the Intellectual Capital models classification according to the Sveiby classification (2010).

According to Stern Stewart & Co., EVA is the net operating profit less the opportunity cost of the capital invested in a business entity. Thus, EVA is an estimate of the required “economic” profit or minimum return rate that investors - shareholders can achieve by investing in other business of similar risk (Kolačević and Hreljac, 2009; Xiao et. al. 2012). Basically, the heart of the concept arises from the general idea that only the part that exceeds the return that could be reached by investing in a relatively risk-free business can be considered as a real profit (Žager et al., 2008; Černe, 2013).

³⁹ Used by GM in the 90s.

⁴⁰ Term used already by Alfred Marshall in 1890.

The goal of the EVA method is to develop such performance measurements that are determining all the variables where the value of the entity can be increased (added) or where it can be decreased (lost). Besides, EVA supports managers in a decision making process by guiding them with the principle of the value maximization for shareholders. In a broader sense, EVA is a comprehensive valuation system metrics of financial management that can link and help various aspects of the company (financial planning, planning of long-term projects or purchase of fixed assets, goals frame, measuring the performance of the business entity, communication with shareholders, etc.).

According to Evans (1990) there are numerous accounting adjustments needed for the accurate and precise calculation of the EVA method. The reason for those adjustments is that the EVA calculation is based on the economic and not accounting profit. Those adjustments are required to eliminate all the accounting policies and standards (Žager et al., 2008; Joia, 2007; Černe, 2012). According to Stern Stewart, there are more than 164 potential adjustments identified and needed (depending on the circumstances) to convert accounting results into the actual economic profit (Žager et al., 2008). The mentioned is making the model calculation extremely complex and complicated.

Furthermore, the formula for the calculation of the EVA model is the following (P. Tracy, 2020)⁴¹;

$$\text{Economic Value Added "EVA"} = \text{Net Operating Profit After Tax} - (\text{Capital Invested} \times \text{WACC})$$

EVA = Operating profit Vs. Total cost of capital

⁴¹ ⁴¹ P. Tracy (2020.) <https://investinganswers.com/dictionary/e/economic-value-added-eva> (visited Nov. 26, 2020)

The three main variables of Economic Value Added (EVA) calculation are⁴²:

1. The Net Operating Profit After Tax – NOPAT - represents the value of a company potential earnings (cash) without the cost of capital. The deduction of tax from the Operating Profit is of a high importance in order to arrive at the company true operating incomes. Thus, the NOPAT formula is:

$$\text{NOPAT} = \text{Operating Income} \times (1 - \text{Tax Rate}).$$

2. The Capital Invested

The total capital invested represents the total amount of the invested capital in a company through equity or debt.

3. The WACC - Weighted Average Cost of Capital

The WACC represents the cost for sourcing funds. The cost of capital deduction from the Net Operating Profit is made in order to deduct the opportunity cost of the capital invested. Thus, $\text{WACC} = \text{RD} (1 - \text{Tc}) * (\text{D} / \text{V}) + \text{RE} * (\text{E} / \text{V})$

The explanation of the formula is helping to understand it much easier.

$$\text{Weighted Average Cost of Capital} = (1 - \text{Tax Rate}) * (\text{Cost of Debt}) * (\text{Proportion of debt}) + (\text{Cost of Equity}) * (\text{Proportion of equity})^{43}$$

Following, the explanation is:

Tc = Tax Rate

RD = Cost of Debt

V = Total Value of the firm simply calculated as Debt + Equity

D = Capital invested in the organization through Debt.

RE = Cost of Equity

E = Capital invested in the organization through Equity

In brief, the EVA model assists investors in finding answers related to how efficient the management of a business entity manages their resources concerning other investments of a similar character. According to Berg (2002) the goal of the EVATM calculation is to arrive at

⁴² P. Tracy (2020.) <https://investinganswers.com/dictionary/e/economic-value-added-eva> (visited Nov. 26, 2020)

⁴³ P. Tracy (2020) <https://investinganswers.com/dictionary/e/economic-value-added-eva> (visited Nov. 26, 2020)

those earnings that are close to cash and compare their return to a capital base that as well is expressed in cash equivalent terms.

One of the advantages of the EVA model is that the calculation includes a set of variables that assist the entity management to make decisions thinking about the assets and costs. Thus, it encourages the management to be guided by the principles of value maximization for shareholders.

Besides, the calculation EVA depends on the invested capital and is therefore most appropriate for the calculation of capital-intensive business entities. The same can be a problem for undeveloped financial markets where not all the statistical information are available (risk-free interest rates, beta coefficient for the systemic risk, market risk premiums, and interest on long-term loans). Žager et.al. (2008).

Furthermore, EVA has additionally been criticized for utilising historical costs data from balance sheets. Finally, EVA is not appropriate in attempts to quantify the value of intangible resources since there are not intangible variables used in its calculation (Bontis, 2002; Tan, Plowman and Hancock, 2008).

Although EVA is not directly related to the management of intangible resources, it is clear that the efficient management of knowledge-based assets will increase the economic added value, and that EVA can be a good model for measuring the return on the invested Intellectual Capital. (Bontis et al., 1999, according to Marchant and Barsky, 1997).

According to the fact that business entities generate values for their shareholders, in this context, the model can be used as one of the methods of the Intellectual Capital valuation.

5.4. The Valued Added Intellectual Coefficient VAIC™

The Valued Added Intellectual Coefficient model was developed by the prof. Ante Pulić – professor at the University of Zagreb and Wien, at the beginning of 2000. According to the Sveilby (2010) Intellectual Capital models classification, the Valued Added Intellectual Coefficient method is part of the ROA models⁴⁴.

⁴⁴ but with the note that it can be the most appropriate one but its core does not fit into any group exclusively because it has elements of both monetary and non-monetary methods.

There are many reviews within the literature (e.g. Kaplan and Norton 2002) pointing out that nowadays managers are still focusing too much on a company performance measurements that are based on financial indicators and results (such as net profit, Earnings Before Interest and Taxes, the profitability ratios – (ROE, ROA), the cash flows, etc.).

Furthermore, the author of the model professor Pulić, believes that regular accounting is based on the control of costs, while nowadays there is an increased necessity on focusing on the value creation and the management should concentrate on the long-term growth. Besides, Pulić is pointing out that traditional business success indicators are not providing adequate and efficient information whether the company actually creates values for its owners or it does not. According to J. Fijalkowska (2016), the measurements of a business entity's performances in today's economic relations cannot be guided exclusively by financial indicators. One of the reasons is that nowadays there are lots of investments required into intangible resources (such as investments in Structural and Human Capital) to obtain the further growth of the entity, greater image, success and development, to achieve competitive advantages and assure the long-term financial success (L. Canibano, et al. 2000). According to H. S Mohammad et.al., (2018), the VAICTM calculation is related to the valuation of the efficiency level of the business entity resources.

Consequently, based on the accounting standards all the investments mentioned are categorised as expenditures which often, as an implication, has the negative effect on financial results (treated as an achievement indicator of the business entity), but contribute to the long-term profitability of the entity. In other words, if investments are considered as costs it turns out that the profit as a difference between revenues and cost will be lower, but the investments are also going to be seen in balance sheet through the assets acquisition, which in long terms should bring benefits. Thus, the Value Added Intellectual Coefficient model (VAICTM) according to many authors (e.g. J. Fijalkowska; 2016) could be considered as an answer to all of those critics.

Besides, the Valued Added Intellectual Coefficient - VAIC TM is one of the most disputed methods within the literature when it comes to the Intellectual Capital valuation models. According to various authors, the model is not adequate and efficient for the valuation of the Intellectual Capital of a business entity. Thus, in line with S. Pirjo et.al. (2011). some authors are pointing out that in reality, the VAIC model has nothing to do with the valuation of the Intellectual Capital.

The main hypothesis of the VAIC model is related to the calculation of the economic income, which Pulic (2000) defines as value-added, in a way where the labour expenses are assumed as an asset (HC), not as a cost. According to H. S Mohammad et.al. (2018), the VAICTM model is built on the hypothesis that both, Intellectual Capital and Human Capital, are a function of production and mathematically computed as $VAIC = ICE + CEE$ (H. S Mohammad et.al; 2018).

The formula for the calculating of the VAICTM model is the following:

$VAIC^{TM} = ICE \text{ (Intellectual Capital Efficiency)} + CEE \text{ (Capital Employed Efficiency)}$

The variables that are needed for the calculation are;

- OP = Operating Profit
- EC = Employee Costs
- A = Amortization
- D = Depreciation
- HC = Human Capital
- SC = Structural Capital
- CE = Book value of net assets

The further calculations needed for the valuation of the VAICTM model are presented within the Table 7.

Table 7: VAICTM model calculation steps

FORMULA	VARIABLE
Value Added (VA)	$VA = OP + EC + D + A$
Intellectual Capital (IC)	$IC = EC + SC$
Structural Capital Efficiency (SCE)	$SCE = SC / VA$
Human Capital Efficiency (HCE)	$HCE = VA / HC$
Intellectual Capital Efficiency (ICE)	$ICE = HCE + SCE$
Capital Employed Efficiency (CEE)	$CEE = VA / CE$

Source: author adapted according to Puljic (2020), P. Stahle et.al. (2011), W. Fijalkowska (2016), Kujansivu & Lonnqvist (2007).

Within the presented Table 8, it is possible to have an insight into the steps required in order to calculate the Valued Added Intellectual Coefficient. Consequently, the formula is showing that the Intellectual Capital efficiency (ICE) is the sum of structural capital efficiency (SCE) and Human Capital Efficiency (HCE). Furthermore, the other steps needed for the calculation of the model are: to calculate the Value-added (VA) by summarizing the employee costs (EC), operating profit (OP), amortisation (A) and depreciation (D) (equation: $VA = OP + EC + D + A$). The next step is to make the calculation of the efficiency generator scores of Human capital Efficiency (HCE), Capital Employed Efficiency (CEE), Intellectual Capital Efficiency (ICE) and Structural Capital Efficiency (SCE) by their correspondent formulas ($CEE = VA / CE$, $ICE = HCE + SCE$, $SCE = SC / VA$, $HCE = VA / HC$) and ultimately the calculation of the Valued Added Intellectual Coefficient can be done using the formula ($VAIC^{TM} = ICE + CEE$).

The positive part of the model is that for the value creation efficiency analysis public data obtained from the traditional financial statements are used. Further, due to Andriessen (2004), the fact that data are publicly available makes the model a reliable tool for analysing the Intellectual Capital value within business entities. Furthermore, the data used are quantitative, thus the model is not based on subjective judgments.

The $VAIC^{TM}$ model turns two components of the Intellectual Capital (the Structural Capital and Human Capital) into financial values that are formulating the value-added intellectual coefficient that can be easily used. Furthermore, the model permits investors and managers a quick comparison of the potential value creation between entities.

According to all the mentioned by now and regarding the Valued Added Intellectual Coefficient, the study can accept the statements of several authors which are indicating that in its core the $VAIC^{TM}$ model is too “narrow” within its calculation, thus it is not using all the Intellectual Capital parameters, neither considering all the points of the Intellectual Capital structure (the Relational Capital). Further, a big problem of the model can be considered the Human Capital value simplification that turns the labour costs into asset thus, according to J. Fijalkowska (2016) the mentioned leads to an underestimation of the Human Capital value.

Besides, Chu et al. (2011) are directing attention on the problem of the inverse relation between the Structural Capital and Human Capital that can generate difficulties in establishing the exact value of the Intellectual Capital within a business entity. Further, it

cannot be used for all the business sectors the same. Additionally, nowadays there is a new model of VAIC, called extended VAIC model.

5.5. Financial Method of Intangible Assets Measurement – FiMIAM

The FiMIAM method is a method presented by Rodov and Leliaert (2002), and due to the Sveiby Intellectual Capital models classification the Financial Method of Intangible Assets Measurement – FiMIAM is part of the Market Capitalization models.

According to the authors, the FiMIAM method is designed with the aim to eliminate some of the weaknesses of the already existing methods of the Intellectual Capital valuation. Additionally, the model goal is to contribute to the creation of a new and complete balance sheet that will communicate about the tangible and intangible assets of the entity.

According to Rodov and Leliaert (2002), they are affirming that “FiMIAM enables the measurement of the monetary values of the associated Intellectual Capital components and their incorporation in the balance sheet of a business entity” (Rodov and Leliaert, 2002).

The FiMIAM model acquires ideas of other models of the Intellectual Capital valuation and it is upgrading their strengths. Furthermore, the model is linking the value of the Intellectual Capital with the difference between the book value and market value of a business entity. The FiMIAM model is based on the three-dimensional concept in which each dimension represents one of the Intellectual Capital components (Human Capital, Structural Capital and Customer Capital⁴⁵). Additionally, the model is linking the mutual interaction of each of the three dimensions.

Thus, according to the authors of the model (Rodov and Leliaert, 2002), the combination of the Structural Capital and Consumer Capital indicates the ability of the business entity to affect the consumer's perception of the brand, as well as to evaluate the impact that the customer has on the brand. Furthermore, the authors are reporting that the result of meeting specific consumer needs is the combination of Human Capital and Consumer Capital. Additionally, the interaction of the Structural and Human capital has the result of accompanying quality knowledge-intensive processes.

⁴⁵ According to the authors the third dimension is the Customer Capital that was defined as Relational Capital. Previously the study affirms that the Relational Capital is a much wider concept than the Customer Capital.

The authors are explaining all the methodology of the FiMIAM in six simple steps. According to several authors, the steps initially look very logical and feasible. However, when someone is trying to analyse an example given by the authors or, apply the model on another business entity, it begins to lose sense (Černe, 2012). For instance, a particular step is described but it is not clear to understand how to arrive at the numerical quantification that is used. Thus, the steps as such are clear but not the procedures and numerical quantifications obtained within them (Černe, 2012).

Table 8: The methodology of the six steps of the FiMIAM model

STEPS	DESCRIPTIN
Step 1 – Derive the realized Intellectual Capital Value	The first step is representing the difference between the book value and the market value (authors are naming it "realized Intellectual Capital"). The term "realized Intellectual Capital" indicates that the "real" Intellectual Capital may be higher or lower than the difference obtained by the calculation (due to market fluctuations). Besides, authors are distinguishing the terms between "attainable market value" (AMV) and "investors' assigned market value" (IAMV). The interval between these categories is recognized as the "Intellectual Capital Erosion" - ICE. Managers of business entities should achieve that the "erosion" between those two variables are as close as possible (Rodov and Leliaer (2002); Černe, 2012).
Step 2 – Intellectual Capital key components selection	Within this step, it is necessary to analyse the financial and non-financial components of the Intellectual Capital. Furthermore, the most important components should be categorized into the three-dimensional structure of the Intellectual Capital (Human Capital, Structural Capital and Customer Capital).
	Within this step, the business entity management is responsible for assigning to each of the revealed Intellectual Capital component their correspondent values. According to

Step 3 - Intellectual Capital components relative weights assessment	several authors, this step is one of the weaknesses of the FiMIAM method, due to a fact of its high subjectiveness when it comes to the values assessment.
Step 4 – Intellectual Capital coefficients assessment statement	For the identified components of the Intellectual Capital, made in the previous step, there are some indicators that are helping for their coefficients determination.
Step 5 - Multiplication Step 1 and Step 4	The earlier determined coefficients (Step 4) should be multiplied by the defined difference between the market value and book value of the business entity (Step 1 - the realized Intellectual Capital value).
Step 6 – FiMIAM result	Finally, adding the Intellectual Capital value determined in the previous step (Step5) to the book value of the business entity.

Source: author reformed according to: (Rodov and Leliaer (2002), (Černe, 2012).

Within the presented Table 8, it is possible to have an insight in the methodology of the six steps needed for the FiMIAM calculation.

When exposing about the FiMIAM method potential, it is necessary to point out the uncertainties and doubtfulness within it. For instance, within the first step, the IAMV (Investors' assigned market value) and AMV (Attainable market value) are not sufficiently explained. Furthermore, the selection of variables and its ponderation are very subjective and selective that means that there is always a possibility of exposing only those positive and significant components.

5.6.Exposed Intellectual Capital models benefits

Within this fifth chapter, the most mentioned methods and models of the Intellectual Capital valuation were presented. According to the presented models of the Intellectual Capital valuation and reporting principles, the study attempts to identify and recognize their brightest points in order to form a framework of items that the optimal valuation and reporting model of the Intellectual Capital should contain. Besides, in order to create such a framework the study tries to annualize which are the components that all those models have in common.

Table 9: Strengths of the presented Intellectual Capital valuation and reporting models

MODEL	POSITIVE OUTCOME
The Skandia Navigator	<ul style="list-style-type: none"> - Summarizing numerical, qualitative and financial parameters and presenting them as index of the Intellectual Capital. - The Skandia Navigator reports are quite simple and visual - The model is categorizing different Intellectual Capital components and focus areas
Balance Score Card Method – BSC	<ul style="list-style-type: none"> - The model differentiates between the four perspectives, the three of which can be easily linked with the Intellectual Capital (The perspective of R&D - linked with Human Capital, the Customer perspective with the Relational Capital and the perspective of internal processes can be linked with the Structural Capital) that is helping in the more efficient data collection. - Has developed metrics in order to analyse each of the perspectives. - It is helping in the achievements of goals that are set within the company’s vision and strategy through the key points (objectives, targets, initiatives, measures). - it is possible to make the estimation on how much each segment contributes to the realization of business strategies and what is their impact on the Intellectual Capital valuation Holmen (2005).
Economic Value Added method – EVA™	<ul style="list-style-type: none"> - It is matching the importance of the Intellectual Capital in a way that the EVA model assists investors in finding answers related to how efficiently the management of a business entity manages their resources concerning other investments of a similar character. - Further, one of the advantages of the EVA model is that it encourages the management of a business entity to be guided by the principle of value maximization for the shareholders, due to the fact that the calculation includes a set of variables that assist the entity management in a process of decision making thinking about the assets and costs. - The efficient management of knowledge-based assets will increase the economic added value thus, EVA can be a good model for measuring the return on the invested Intellectual Capital. (Bontis et

	al., 1999, according to Marchant and Barsky, 1997).
The Valued Added Intellectual Coefficient VAIC™	<ul style="list-style-type: none"> - For the calculation of the value creation efficiency, the model is using data from the traditional financial statements that are public and easy to obtain. - The data used are quantitative so the model is not based on subjective judgments. - The VAIC™ model is trying to turn two components of the Intellectual Capital (the Structural Capital and Human Capital) into financial values that are formulating the value-added intellectual coefficient that can be easily used. - The model permits investors and managers a quick comparison of the potential value creation between entities.
Financial Method of Intangible Assets Measurement – FiMIAM	<ul style="list-style-type: none"> - Providing quantitative measures the efforts of the model are trying to contribute to the creation of a new and complete balance sheet that will communicate and incorporate values of the tangible and intangible assets of a business entity. - The FiMIAM model can be highly linked with the Intellectual Capital structure since it is based on the three-dimensional concept where each dimension represents one of the Intellectual Capital components (Human Capital, Structural Capital and Customer Capital). Additionally, the model is linking the mutual interaction of each of the three dimensions.

Source: Authors elaboration of the strengths of the previously presented Intellectual Capital valuation models

The presented Table 9, is highlighting some of the most cited positive outcomes of the previously exposed models of the Intellectual Capital valuation. The purpose is to extract information that can be useful in creating a framework of the efficient Intellectual Capital valuation and the reporting model.

Table 10: Common points of the presented models of the Intellectual Capital valuation

Points in common / Method	Skandia	BSC	EVA™	VAIC™	FiMIAM
Reporting model – as an appendix of the financial statements	x	x	x	x	
Reporting model – as an additional category of the balance sheet					x ⁴⁶
Numerical quantification – quantitative method	x	x	x	x	x
Descriptive method	x	x			
Reporting about the Human Capital or any subcomponents of it	x	x			x
Reporting about the Structural Capital or any subcomponents of it	x	x			x
Reporting about a part of the Relational Capital ⁴⁷ or any subcomponents of it	x	x			x
Reporting about the Intellectual Capital – as indexes or ratios	x		x	x	x
Reporting about the Intellectual Capital – as a clear monetary quantification					
Based on the difference between the book and market value	x				x
The model is in any kind of correlation with the business entity plans, vision, strategies	x	x	x		

Source: Authors elaboration of the common points of the presented models of the Intellectual Capital valuation

Within the presented Table 10, it is possible to compare the common points of the five analysed models of the Intellectual Capital valuation and to perceive what they differ in and what they are specific about. Accordingly, it is possible to deduct that almost all of the

⁴⁶ Suggestion of the authors of the model

⁴⁷ Some model are using Customer Capital as part of the Relational Capital

models are suggesting that the Intellectual Capital report should be presented as an Appendix of the financial statements and not as a category of the balance sheet. The study claims that this state is the most relevant one, moreover, no one before raised the question how the audit of the Intellectual Capital value should be in case it is included as an additional category of the balance sheet and monetarised. Furthermore, the presented models are mostly based on the proposition that the Intellectual Capital valuation method, within the valuation, should include the main components of the Intellectual Capital (Human Capital, Structural Capital and Relational Capital), as well as that it should be aligned and in correlation with the business entity's vision, plans and strategies and that it should be of a quantitative nature.

The presented table can be of great help for the further development of this study and the study proposal for the Intellectual Capital valuation and reporting model that will be suitable for Football Clubs and other business entities.

5.7. Intellectual Capital valuation obstacles

The value of any good (and of a business entity) can be considered as the effect derived from "Utility". According to A. Kapteyn (1985), by "Utility" considers everything that is providing satisfaction, welfare, pleasure or happiness, in addition it is everything that is pushing us to undertake activities or to acquire desired goods.

Based on the previous statement, the term Utility can be taken as the fundamental segment of value perception. Furthermore, the problem of determining the generally accepted value of any kind of goods is usually arising because of the previously defined term of utility and subjective perceptions that the investor has.

When evaluating the business entity, investors are guided by proven ways of measuring the value more than by subjective perceptions. Therefore, no matter the evaluation model used, many authors are claiming that the price paid for an asset must reflect the values that are expected to be generated by those assets (D. Sprčić; O. Sulje, 2011). Consequently, such statements are opening various questions whether or not all those models are considering all the assets of entities, or whether is something "invisible and intangible" that is not incorporated in the evaluation and that greatly affects the current and future values? Furthermore Sprčić and Sulje (2011), declare that within the literature there is a common statement that every asset, whether financial or real, has its appropriate value. The statement

might be correct, but the question arises as what value is and whether it is the same for everyone? Furthermoe, J. A. Nazari (2014) states that there is a lack of consensus and bout the efficient model of the Intellectual Capital valuation due to a fact that its components are mostly of dynamic nature, and current models are too static to catch all its dynamic variables. By incorporating the Intellectual Capital valuation model within financial reporting, would conceivably enable a more accurate model regarding the possible benefits and "utilities" that a business entity can generate in regards to its products, services and concerning its stakeholders.

There is a clear fact on what is important to point and it relates to the volatility of the Intellectual Capital, especially in the area of Human Capital.

Thus, unlike financial and tangible assets, Intellectual Capital has a higher degree of uncertainty about its value, elements that are incorporated within it and there is no effective market for its trading (Ross et. al. 2005).

Some of the additional difficulties and obstacles related to the valuation of the Intellectual Capital within entities, that were not previously mention can be considered the as follows:

1. There is no accepted stand point whether the Intellectual Capital report should be based on qualitative or quantitative method basis
2. In case the Intellectual Capital report is incorporated within the financial statements of business entities, how the audit in regards to it should be conducted
3. There are items of the Intellectual Capital that within time are not following the same amortization logic as other assets of a business entity. Therefore, Human Capital is usually the asset that is increasing its value with time and not decreasing it. However, depending on the business area, individuals, and many other variables there can be a non-defined point where its value can start to decrease
4. All the obstacles are arising from the main issue that a classical accounting is not considering the IC as a part of intangibles within the classical reporting.
5. If the Intellectual Capital structure is varying among industries, consequently how to build an efficient valuation and reporting model in regards, etc.

5.8.Impossibility of the Intellectual Capital valuation among different business areas

Based on all the data collected in regards to the Intellectual Capital, it may be concluded that the need for the adequate Intellectual Capital valuation model is increasing. Furthermore, the Intellectual Capital could be considered as one of the foremost and inevitable assets of business entities, and the one that currently is not part of any kind of the standardised financial reporting.

With the knowledge, skills, experience, networks and actions the individual can be considered as one of the most important factors of business entities. The one that is responsible for the final financial result of the entity, he or she is responsible for conducting everyday activities and all the activities within the entity, responsible for its development, etc. Precisely because of the actions made by the individuals, business entities create or lose value, money, reputation, assets, and many other variables.

Further, because of all of the above, the need to find the right tools that will assist in the formulation of an efficient valuation and reporting model of the Intellectual Capital is highlighted once again.

Consequently, concerning the so far mentioned and the impacts of the Intellectual Capital the presented is offering an insight into the impact of the Intellectual Capital that may occur among different business areas and entities. Consequently, the Impact of the Intellectual Capital that can occur among different business areas and levels, for instance, can be seen as follows:

- The Management of a Business entity: Professional, tacit and other complementary knowledge and actions that are directly contributing to the business entity results. Impossibility of their quantification and direct value presentation within Financial statements.
- Sports: In this context there are numerous variables that can be taken into account, e.g. Fan base impact - Impossibility of their quantification and direct presentation within Financial statements. All players and coaches are not taken as values, instead they are seen as expenditures (salary cost), thus, it is another example of the impossibility of their quantification and direct value presentation within Financial statements.

- IT industry: It is likely to use the example of creative developers that can contribute to business growth and possible developments. Impossibility of their quantification and direct value presentation within Financial statements.
- Auto industry: Experienced operators possess the expertise to meet customers' needs which gain comparative advantages. Impossibility of the quantification and direct value presentation within Financial statements, just the cost of their salary is evaluated.
- Education: For example education institutions cannot quantify the value and direct contribution of their staff members. Impossibility of their quantification and direct value presentation within Financial statements.
- Research and development: Businesses engaged in R&D are not able to quantify the professional knowledge and capabilities of their employees. Impossibility of their quantification and direct value presentation within Financial statements.
- Hospitality: Experienced operators possess the expertise to meet customers' needs which gain comparative advantages. Impossibility of their value quantification and direct presentation within Financial statements.

Based on the presented, it is possible to highlight just one example of the appearance of the Intellectual Capital within eight focus areas. Consequently, the study points on the impossibility and non-existing tools for their direct valuation and representation within Financial Statements. Therefore, it is possible to deduct that there are elements of the Intellectual Capital that have an impact on the future value and market position of business entities, but currently there are no accepted tools and models for their valuation neither reporting.

6. IMPORTANCE OF THE INTELLECTUAL CAPITAL IN MANAGING FOOTBALL CLUBS

Within the study (feedbacks received from professionals) and based on the research conducted (according to the researches of e.g. P. Gurel et. al. (2012), A. Andrikopoulos and N. Kaimenakis (2006), D. Guseva and E. Rogova (2016), it is correct to point out that nowadays Football Clubs are managed like other business entities. Additionally, there is a high consensus between Football professionals of considering Football Clubs as entities with the same operations being conducted by them as by any other business entity from different business industries. Consequently, a professional Football Club is nothing more than a business entity operating and creating within the area of sports. Each club has its vision, mission, strategy and goals that are related to sports and business areas, and just like other business entities, they are subjects of financial reporting.

The importance and integration of the Intellectual Capital and its impact on financial and sports performances are arising as an outcome of actions done by all the people operating within the club (players, directors, managers, owners).

As already stated and in line with A. Andrikopoulos and N. Kaimenakis (2006) the long term success and the process of value creation of a Football club is highly influenced by intangibles and Intellectual Capital, which is not included in financial reportings. Furthermore, according to P. Gurel et. al. (2012), there are intangible resources within the sports industry (such as fan loyalty, the talent players, and the experience of the management team) that are of high importance for the value creation chain. Thus, according to the authors, Intellectual Capital should be considered as one of the key assets that reflects on the financial success of Football Clubs. Furthermore, according to A. Andrikopoulos and N, Kaimenakis (2009), there is a unique industry where Football Clubs are operating, and where a different set of tools (consequently different Intellectual Capital structure) should be particularised in order to provide the required and sufficient information for all the stakeholders. Additionally, according to Gerrard (2005), Kern and Sussmuth (2005), A. Andrikopoulos and N, Kaimenakis (2009), Football Clubs have a multidimensional organizational performance nature.

Moreover, within their research paper regarding the correlation between the Intellectual Capital and Football Clubs, D. Guseva and E. Rogova (2015) are pointing to the fact that the Intellectual Capital should be recognised as the key factor of Football Clubs' success (both in economic performances and sports results).

Nowadays, Football Clubs are high knowledge-based entities, and according to several authors e.g. B. Pratama (2020), the values of Football Clubs are highly affected by the off-balance-sheet intangible resources. According to different authors (for instance, Andreas Andrikopoulos (2004), Kern and Sussmuth (2005), and B. Pratama, (2020), the historical background, current rates and placements, the loyalty of fans, the fan base, number of young talents in the academy, skills and experiences of the business management and sports management, can be considered as some of those off-balance intangible resources that are giving values for clubs. Consequently, not finding an adequate tool and model for the assessment and reporting about the specified is a major setback.

The relation and importance between economics and football are increasing also due to the fact that nowadays intangibles and Intellectual Capital are playing an important role within the Football Clubs' financial performances. The mentioned can be justified by the increasing impact of media, advertising, retail, sponsorship and all the related networking knowledge of people operating within the Club.

On the other hand, sports results are based on the networking knowledge of the sports department and talent - skills possessed within a team. Furthermore, this study will investigate if there is a formed Intellectual Capital structure for Football Clubs, thus it will be strained to create the appropriate Intellectual Capital components and subcomponents structure of Football Clubs. Within this chapter, it will be strained to find answers related to importance, correlations, variables and the impact among the Intellectual Capital and Football Clubs. Additionally, one of the aims of this study is to find the most efficient tools and methods related to the implementation within financial reports, the Intellectual Capital assessment and reporting model for Football Clubs.

6.1. Present appearance of the Intellectual Capital within Football Club Financial Statements

Aiming to achieve the main goals set within the study, a survey has been conducted among professionals from the area of sports (especially Football) and professionals from other business areas. The survey's aim is to get the knowledge in regards to the Intellectual Capital and Football Clubs. Precisely, which variables can be added as subcomponents of the Intellectual Capital structure, what is the impact of the Intellectual Capital on a Football Club (on their financial and sports results), how significant is the Intellectual Capital impact for a Football Club, are there valuation tools and reporting models in regards to it, etc.

Besides, earlier within this research (Chapter 4.4), a table has been made in regards to the gap between the Football Clubs Market Value and Book Value, adjusted for the variables of TransferMarkt value and financial results has been made. All of it to recognise if there is a reason for considering Intellectual Capital as a significant factor of business entities and Football Clubs. In the sports industry, intangibles are starting to be of high importance in creating value from the managerial aspect and sports domain. Furthermore, intangibles within Football Clubs have a high rate within total assets and a notable impact on sports and business performances.

Table 5: Percentage of the intangible asset and debt ratio within several Football Clubs (in '000.000)

Club	Total asset	Intangibles ⁴⁸	% Intan. within total asset	Debt	% Debt
RMD	€ 1.138	€ 324	28%	€ 174	15%
MANUTD	£ 1.496	£ 768	51%	£ 203	14%
MAN. CITY	£ 756	£ 445	59%	£ 197	26%
DZG	€ 33	€ 7	24%	€ 9.9	30%
FC JUVENTUS	€ 941	€ 456	49%	€ 463	49%
FC BARCA	€ 1.474	€ 596	40%	€ 488	33%
AC MILAN	€ 455	€ 271	60%	€ 83	18%

⁴⁸ There are clubs that are specifically dividing the intangible assets into the category other intangible assets related to fees paid for players registrations. The topic will be further analysed (Chapter 6.2) and discussed within this research.

Source: author's calculation based on the 2019 Clubs' Financial Statements available on the official pages of correspondent clubs

The presented Table 11, reports about the total assets, the value of the intangible asset, the amount of debt, and the ratios of debt and intangible assets concerning the total assets of a Football Club. The main purpose of the table is to find out the ratio of debt and intangible assets concerning the total assets of Football Clubs. Consequently, the range of intangibles within total assets varies between 22% and 60%, while the debt ratio is between 18% and 50%. Furthermore, it's of high importance to highlight that clubs are estimating fees paid for players' registration as intangible assets, without a clearly defined nomenclature classification. Therefore, some clubs are calling it sports intangible assets, others are calling it sports assets, some are not dividing that and are calculating it directly as part of intangible assets, others are calling it registration rights, etc. This could emerge as one of the problems of the Financial Statements' interpretations between Football Clubs. Furthermore, it is possible to point that it could be a shape of the Intellectual Capital component evaluated within their balance sheets. The problematics of such a reporting will be elaborated in the following part of this study (Chapter 6.2.).

Consequently, the study presents a new table where the value of intangibles is decreased for the paid transfer fees, the mentioned relates to the clubs that are separating those two categories within their balance sheets. Moreover, the debt ratio of the adjusted assets for the paid fees is calculated and presented.

Table 12: Percentage of the intangible asset and debt ratio within several Football Clubs, adjusted (decreased) for sports intangibles (in '000000€)

Club	Total asset	Non-sports Intangibles	Adjusted Intangibles % within total asset	Debt	Total asset – sports int.	Adj. Debt ratio
RMD	1.138	4.042	0,3 %	174	818	22%
DZG	33	260	0,8 %	9.9	25	39%
FC JUVE	941	35.501	3,8 %	463	520	89%
FCB	1.474	23.000	1,5 %	488	595	82%
AC MILAN	455	39.173	8,6%	83	223	37%

Source: author's calculation based on the 2019 Clubs' Financial Statements available on the official pages of correspondent clubs

The presented Table 12 reports about the value of intangibles within Football Clubs decreased by the value of the sports intangible assets. Consequently, the new adjusted debt ratio is calculated and presented. Thus, with this assumption, the ratio of intangibles is drastically decreased to the range from 0.3% to 8.6%, while the debt ratio is increased on a range from 22% up to 89% in the clubs analysed. There are several reasons for such results which will be further discussed and analysed within the study. Some of the reasons for doing so are opening questions whether it is justified or not to calculate the sports intangibles in a way they are currently calculated within Football Clubs financial statements. Precisely, the non-sports intangibles are the “usual” known intangibles, so it is possible to conclude that their value within clubs is usually eight times less than sports intangible assets. The following chapter will analyse the problematics of such a reporting practice.

6.2. Problematic of the current sports intangible assets reporting within Football Clubs Financial Statements

According to the analysed Football Clubs financial statements and their balance sheets, it is possible to find a very interesting category whose shape can be associated with the Intellectual Capital, called “sports intangible assets”.

For the purpose of this research, the study will use the term of sports intangible assets, although, within Football Clubs balance sheets the term can be found under different specifications (players fees, sports non-tangible assets, or similar). Moreover, there is an inconsistency in regards to the reporting of such, due to the fact that there are professional clubs that are not unravelling the mentioned category of sports intangible assets from the traditional intangible assets. Such inconsistency in associating assets may lead to various misinterpretations of Football Clubs’ financial statements. Precisely this issue will be discussed within this part of the study. Furthermore, some researchers already pointed on the problematic of the Football Clubs financial reporting. Consequently, P. Gurel et. al. (2012) within their research paper when analysing the financial statements of all the twenty Turkish Super Lig clubs, pointed on the fact that for the research purposes they could use data from only two clubs. The main reason why they were not able to use data from all the other clubs is the lack of information regarding the category of sports intangible assets.

Furthermore, D. Guseva and E. Rogova (2016) analysed the sports intangible assets within 144 clubs playing under UEFA official championships. Consequently, only 30 clubs from 11 different countries were meeting the author's selection criteria (mostly based on transparency and unique nomenclature of intangibles).

For better understanding of the problematic of the sports intangible asset category within Football Club' financial statements, as the first step, the study will try to present the financial statement notes of a few famous clubs in regards to the category of the sports intangible asset.

In this line, the Manchester City Football Club, under the category of sports intangible assets and according to their notes, evaluates the following: The evaluation of the category is based on the registration cost paid for players including the transfer fees paid to other clubs, all the associated agents fees, Premier League levy fees and other directly attributable costs which are initially recognised at the fair value of the consideration payable for the acquisition. Additionally, the amortisation of costs is on a straight-line basis over the length of the player's contract.⁴⁹ Consequently, once again the study is highlighting the term and definition of asset which (according to the IASB Framework) says that it is a present resource derived from past events, controlled by the entity and from which future economic benefits are expected to flow to the entity⁵⁰.

Furthermore, Real Madrid Football Club within their notes in regards to the category of sports intangible assets is pointing that mainly player transfer rights are evaluated within this category ("transfers") and all the associated costs incurred to acquire such rights. The amortization is based on the straight-line basis in a period of the length of a player contract.⁵¹

Besides, it is possible to find an example in FC Barcelona where such a balance sheet category is naming intangible sporting assets.

All the clubs that are strictly separating the categories of sports intangible assets and intangible assets within their balance sheets have under their notes a similar description of the sports intangible assets position (such a uniform description is welcome and should be accepted within all the clubs, at least under the same roof organization they appertain). In such an evaluation of players, the study considers that it is possible to find the "outlines" of the Intellectual Capital, precisely Human Capital. However, However, it is necessary to point

⁴⁹ FC Manchester City financial statement 2019

⁵⁰ <https://www.iasplus.com/en/standards/other/framework> (visited: February, 2021)

⁵¹ FC Real Madrid Financial statement 2019

on the possible problems of such categorization and on the need of finding an adequate tool and method for the Intellectual Capital assessment within Football Clubs.

Based on the research conducted in regards to the possible weaknesses of such a reporting practice, this study claims that some of the weaknesses arising from the above mentioned can be considered as the following:

1. **Inconsistency of the financial reporting:** One of the main problems of the current financial reporting of Football Clubs is the inconsistency in (non) reporting about their intangible assets. Precisely, their categorization format and assessment. Football Clubs should have an explicit regulation regarding their financial reports, or at least they should have the same financial and reporting regulation based on the roof organization they are operating in (UEFA, CONCACAF, etc.). Such a regulation would allow an easier comparison between them, and a more structured data of balance sheets would be implemented. Furthermore, there is an inconsistency in evaluating players, in a sense that only players that are acquired are evaluated, not all the players that a club has.
2. **Free agents assessment:** Based on the current practice, clubs are evaluating in their balance sheets (as assets) the players that they acquired from other teams with all the correlated expenses that may occur within the transfer. Such a reporting practice may lead to the non-evaluation and non-reporting about the free agents that a club signed, and that can generate higher future value added (consequently an asset) for the club.
3. **Amortization:** Based on the accounting rules and regulations, the amortization of intangibles and consequently sports intangible assets is more than justified. The problem may occur in the situation when the value of certain players grows during time thanks to their performances. Consequently, this could be one more valuation obstacle of the Intellectual Capital and intangible assets' assessment of Football Clubs. The mentioned can mostly reflect on young talents which value may drastically increase during time thanks to their performance and possible word wiled recognition. The obstacle of amortization (that additionally cannot be applied in the same way for young talents and players that are closer to ending their careers) should and will be taken into consideration for the further development of the study and for

the proposal of an adequate valuation and reporting model of the Intellectual Capital for Football Clubs.

4. **Assets assessment:** Players can be interpreted as clubs assets whose values (based on their performances) may change during time. Once the values are reported in the balance sheet and the amortization rule is implemented, it is not possible to adjust the current player's value. Players' values are volatile, and they depend on numerous factors. Furthermore, based on the current practise clubs that are paying higher transfer fees (it can be due to a wicked sports department skills) have higher assets value regardless of whether the same will be justified or not in the future.
5. **Agents Fees:** The study claims that agents' fees shouldn't be presented within the paid transfer fees and reported as part of intangible assets. Managers' fees are third part cost originating from the transfer negotiations, thus they can't be evaluated within assets.
6. **Academy players assessment:** Based on the current financial reporting practise, young talents that can have high values and create value-added for the club in the future, are not presented as the club assets. Such practice would not be a problem if there is a consistency in the assessment (academy included) and assets evaluation of all the clubs' players, not just of those for whom the club paid a transfer fee. The following may lead to the marginalization of the club academy and previously mentioned free agents and all the other players that are not included in the valuation practice of FCs (consequently the same results with an incomplete reporting).
7. **Current players assessment:** Following the previously mentioned problematics of "Academy players' assessment", it's possible to state that current players registered for the club for whom the transfer fee has not been payed, are marginalized in terms of value and possible future club benefits.
8. **Marginalization of the sports management abilities:** Following the previously mentioned problematics of "Assets assessment", clubs that are paying higher transfer fees are reporting higher assets values. Accordingly, clubs that have sports directors and the sports department that have high negotiation abilities and consequently are paying less for players, have lower values of intangible assets.

9. **Marginalization of the football academy:** By exclusively presenting bought players as assets, the academy players (their value and possible benefits) and all the professionals operating within the academy (coaches included) are fully marginalized.

The presented points are interpreting the conclusion of the study regarding the key issues of the current sports intangible assets reporting. Consequently, with the current valuation and exclusive reporting of the value of just certain assets (acquired players) as part of the club assets, many segments of the club are marginalized. Thus, the table presents nine shortcomings of the current method of the sports intangible assets assessment reporting.

As a conclusion regarding everything mentioned so far within this chapter, the study claims that the current practice of reporting and valuation of the sports intangible assets within the Football Clubs balance sheet has the shape of reporting about components of the Intellectual Capital (mostly the Human Capital). Nevertheless, the current method has several shortcomings that the study previously pointed out. Consequently, due to all the mentioned limitations of the current category of “Sports Intangible Assets”, there is a high and justified need of finding a reliable and efficient tool and model of the Intellectual Capital assessment within Football Clubs. One of the first steps should be to define all the components that are forming the Intellectual Capital structure of Football Clubs. Accordingly, the marginalization of other areas, sectors and components of the Intellectual Capital in a FC, will be minimized. The categorization of the Intellectual Capital structure within Football Clubs will be further elaborated in this chapter.

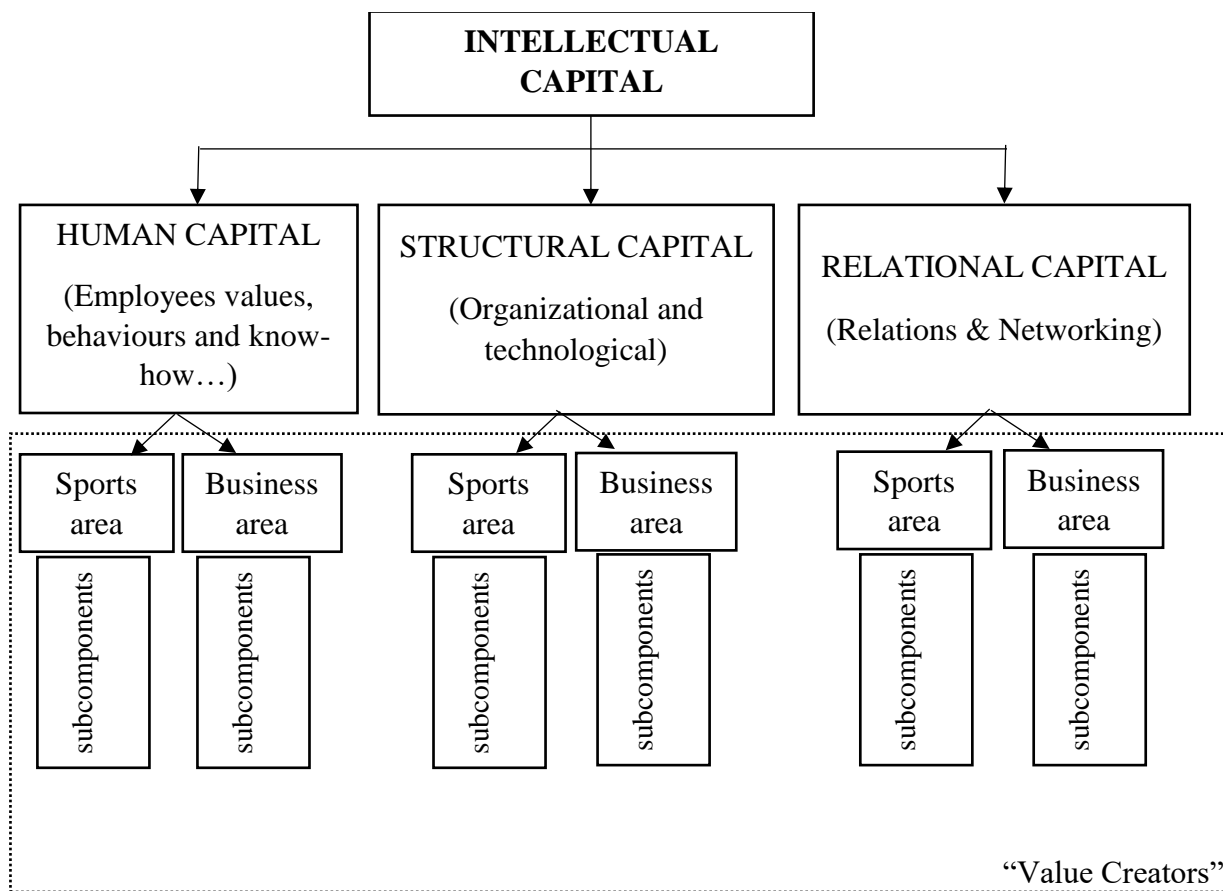
6.3. Intellectual Capital structure dissection for Football Clubs

As previously highlighted, there are many advantages for the entity that are arising from Intellectual Capital. Consequently, Intellectual Capital has a structure that may vary among different industries. To point on all the possible advantages and impacts of Intellectual Capital on entities, it is of high importance to separate it by its structure. According to Mohtar (2015), the entity aware of its Intellectual Capital’s possibilities and structure might gain several comparative advantages. Therefore, each component of Intellectual Capital represents an important strategic factor in creating benefits, success and value.

Therefore, according to H. Inkiken et. al. (2017), there is a consensus that Intellectual Capital is a phenomenon that is highly influenced by the institutional context of the activity. The Intellectual Capital structure - subcomponents variate among industries and focus areas. Consequently, in order to investigate the Intellectual Capital significance and impact in managing Football Clubs and create an adequate valuation model of the Intellectual Capital within it, one of the fundamental steps is to define the Intellectual Capital structure with the correspondent subcomponents (“value creators”) within Football Clubs. Accordingly, due to A. Andrikopoulos and N. Kaimenakis (2006), the purpose of the Intellectual Capital and its structure within Football Clubs is to serve with all the reliable and efficient information to stakeholders.

It is highly important to highlight that currently there are no researches and studies in regards to the dissection of the Intellectual Capital structure within Football Clubs. Consequently, for the research purposes and further development of this study, the study will use the previously defined structural dissection of the Intellectual Capital and update it with the correspondent subcomponents “value creators” that arise from the sports and business area of Football Clubs. Such a dissection and the subcomponents defined are those factors that may bring comparative advantages for Football Clubs. Once the structure and all the correspondent subcomponents are defined, the study claims such definition would be of great help for finding adequate tools and further developments of the efficient valuation model of the Intellectual Capital within Football Clubs.

Figure 12: Intellectual Capital structure proposal for Football Clubs



Source: authors' proposal of the Intellectual Capital structure for Football Clubs

The presented Figure 13 represents the proposal of the Intellectual Capital structure for Football Clubs. The presented structure is based on the most frequently used Intellectual Capital components dissection that is composed of Human Capital, Structural Capital and Relational Capital. The main proposal of the study is to differentiate the areas of Sports and Business within the main components of the structure. Furthermore, it is important to define which are the correspondent value creators' variables that can be linked with the Sports and Business areas of each Intellectual Capital component. The study claims that such a model will facilitate further researches and studies in regards to the adequate and efficient model of the Intellectual Capital valuation for Football Clubs. The previously mentioned dissection and subcomponents will be one of the key points in building a model proposal for the valuation and reporting model about the Intellectual Capital within Football Clubs. Once again the area of sports and business are highlighted as two main pillars of each component of the Intellectual Capital. The mentioned is taken into consideration because, within Football Clubs, it is necessary to divide the two areas in order to have a more accurate insight within

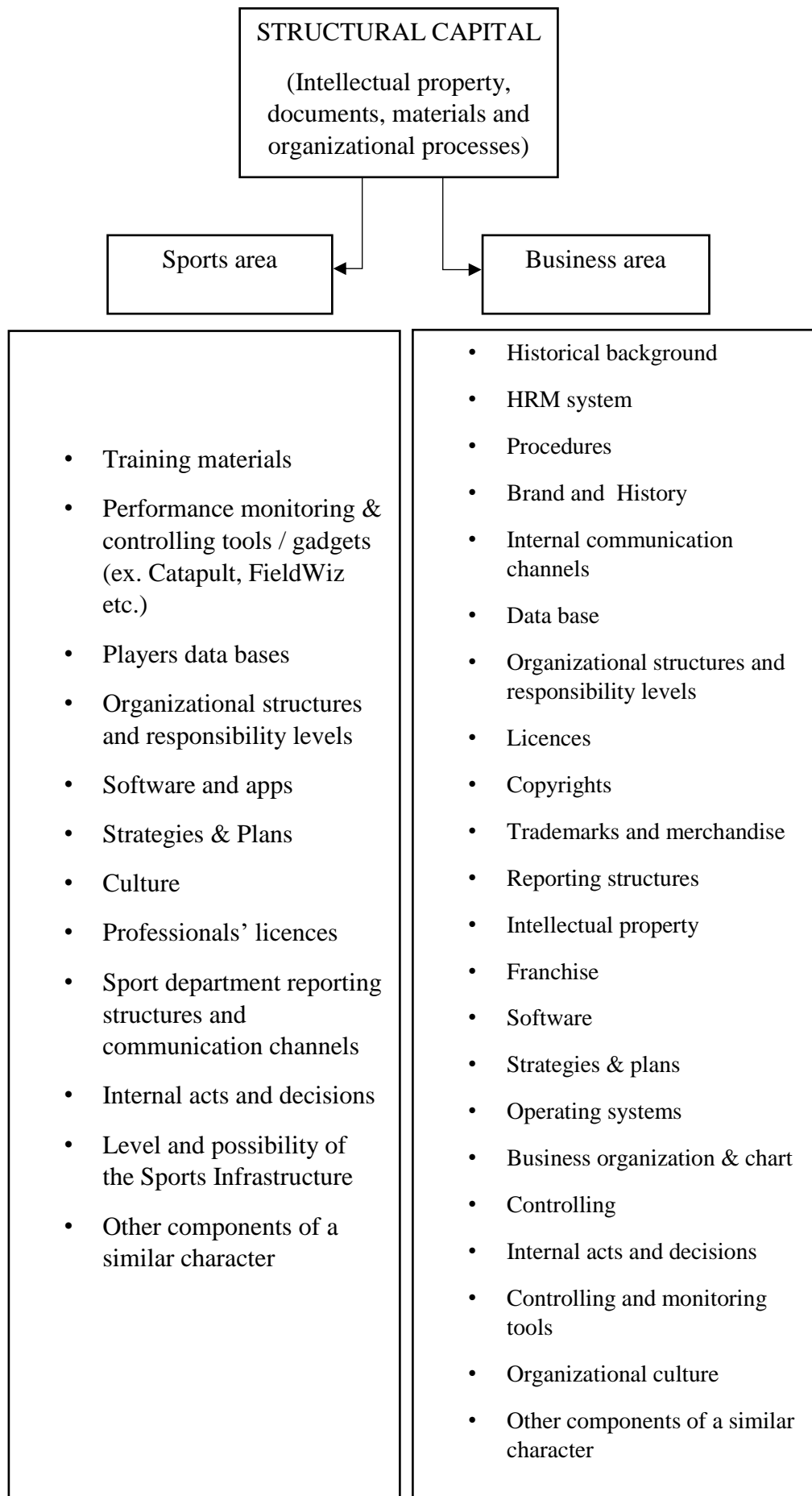
the operations of Football Clubs, as well as a more accurate valuation of the subcomponents' variables.

6.3.1. Structural Capital subcomponents within Football Clubs

As previously mentioned and according to several authors such as Ross, 1997; Van Caenegem, 2002; Sundač and Švast 2009, the Structural Capital represents everything (all the factors) that remains within a company when employees leave their workplace. Further, according to Rossi, Citro and Bisogno (2016), the Structural Capital has the ability to achieve goals and support changes by setting procedures and routines that are supporting the decision-making processes. Furthermore, according to Choong (2008) the Intellectual Capital is a “non-human knowledge”, that can be related with the interior processes of a company.

Consequently, the particularity of the Structural Capital is that it is the Intellectual Capital part that is owned and fully controlled by the entity. Thus, it is an important factor of the development that provides comparative advantages.

Figure 13: Structural Capital structure and subcomponents proposal for Football Clubs



Source: authors' proposal of the Structural Capital main subcomponents for Football Clubs based on previous studies about the Structural Capital

The presented Figure 14 represents the proposal of the study toward the adequate structure of the Structural Capital and its main subcomponents for Football Clubs. The scheme is submitting the previously mentioned two main pillars for the Intellectual Capital structure of Football Clubs. Consequently, within the two columns, it is possible to find some of the subcomponents that are providing comparative advantages within the areas of sports and business for Football Clubs. The subcomponents are based on the previously defined factors extended by others deriving from the study that are providing comparative advantages. Furthermore, those subcomponents are categorized within Football Clubs in the area of Sports and Business.

Despite the high and known impact of the Structural Capital for the general business area of entities, the Structural Capital highly supports and has an impact on the sports area of Football Clubs as well. For instance, the culture established within all the sports areas (academy, first-team, coaches) can differ clubs and generate additional values. Furthermore, the training equipment, performance monitoring and controlling gadgets, databases, software, strategies, plans, licences, infrastructure possibility and all the other components of a similar character that can be added in the column, are highly supporting the development and creating additional values for Football Clubs.

6.3.2. Human Capital subcomponents within Football Clubs

As already mentioned within the third chapter of the study and according to Mohtar, Rahman and Abbas (2015), the Human Capital can be considered as the heart of the Intellectual Capital. Furthermore, according to Tarus and Sitienei (2015), it is the most influential factor in adequately increasing organizational performances. The reason is that it relates to the accumulated expertise of all the employees and management, including their ability to transform knowledge, skills and experience into the creation of additional values for a business entity (Černe, 2011). Agents generate Intellectual Capital through their competencies, actions, attitudes and skills (Roos, Pike, Fernström, 2005). Consequently, as A.N.A. Alkhateeb, L.Yao, J.K. Cheng (2018) are highlighting, the Human Capital is an obtained knowledge of the individual that serves to the contribution of the entity's

performances. Further, according to B.F. Seyr and T.Hoffer (2020), the internal awareness about the abilities of employees can facilitate the company management in a way of setting quality strategies and achieving goals in a more efficient way, especially in contemporary global and fast-changing business environment. Due to all those facts, the Intellectual Capital component of Human Capital should be considered as one of the most important factors for the sports and business performances and results of Football Clubs.

Figure 14: Human Capital structure and subcomponents proposal for Football Clubs



Source: authors' proposal of the Human Capital main subcomponents for Football Clubs based on previous studies on Human Capital subcomponents

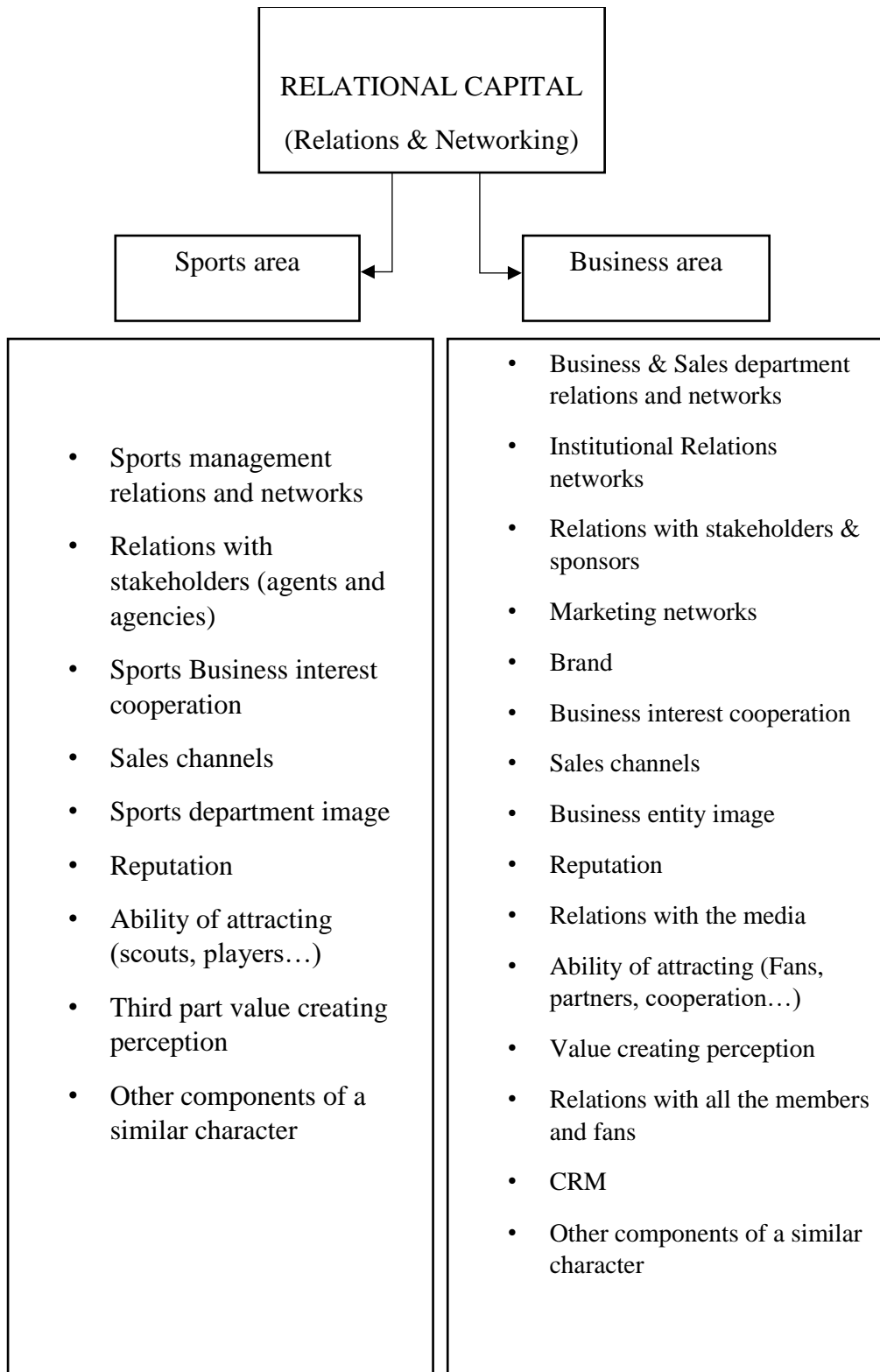
The presented Figure 15, represents the proposal for the adequate structure of the Human Capital and its main subcomponents for Football Clubs. The structure is deferring the two main pillars of the Intellectual Capital structure of Football Clubs respectively, the columns of Sports and Business areas. Based on the previously defined characteristics and definitions regarding the Intellectual Capital component of Human Capital, the study claims that for Football Clubs, it is justified to create and introduce an additional column related to the sports area within the structure, besides the business one. The subcomponents that are modelling the structure of the Human Capital have a high impact on Sports Club's success. Thus, when it comes to the Sports area and achievements within it, there are features of the Human Capital that cannot be ignored for the overall success and value creation of the sports department and consequently, Football Clubs. Some of those features are as mentioned in Figure 15: Innovations, Team spirit, Commitment, Experience, Motivations, Talent, Competences, Loyalty, Diligence, Productivity, Responsibility, Persistence, Proactivity, Managerial skills, Problems solving abilities, Flexibility and adaptability, Coaches - players and other similar components.

6.3.3. Relational Capital subcomponents within Football Clubs

The Relational Capital refers to all those relationships and networks that a company has with stakeholders. Thus, according to A.N.A. Alkhateeb, L.Yao, J.K. Cheng (2018), Relational Capital is the entity's knowledge in relations that impacts the organization. Furthermore, according to several authors like Joya (2007), Asiaei and Joush (2015), the Relational Capital is composed of the relationships that the organization has with the outside and inside environment and that have an impact on organizational performances. Therefore, Figure 16, presents the proposal of the study for the Relational Capital and its subcomponents within Football Clubs. It is of high importance and interest for Football Clubs to have good relationships with the stakeholders and professionals within the sports and business area. Having good relations and networks may lead the Club to various benefits and values. The mentioned especially refers to the sports department area when it is about signing and selling

players, while for the business area when it comes to sponsorships and projects related to institutional domains.

Figure 15: Relational Capital structure and subcomponents proposal for Football Clubs



Source: authors' proposal of the Relational Capital main subcomponents for Football Clubs based on previous studies on the Relational Capital subcomponents

As a conclusion to this chapter, the study suggests that an adequate Intellectual Capital structure for Football Clubs requires strictly separated areas concerning the main components of the Intellectual Capital, consequently the Sports and Business areas of the three main components. It is crucial to define those subcomponent variables that are creating additional values for clubs and allocate them adequately within the structure. The subcomponents can be additionally added to the structure presented as Sport or Business area just in case if they fulfil the requirements of the definitions related to each component of the Intellectual Capital structure. The suggestion of the study is based on the two-dimensional approach of the Intellectual Capital Structure subcomponents (Sports and Business areas). The outcome of such approach is related to an easier and more efficient overview, and a solid base for the further development of the Intellectual Capital valuation model. Additionally, the suggestion is that the before mentioned and set subcomponents cannot be excluded within the evaluation model, while other appropriate subcomponents can be added.

7. INTELLECTUAL CAPITAL ASSESSMENT FOR FOOTBALL CLUBS

According to P. Gurel et. al. (2012), due to their structural characteristics, Football Clubs are “industries” operating in a particular sector that is highly influenced by Intellectual Capital. Additionally, the authors declare that football overcame the area of sports and that it turned into an industry that has its characteristics that should be managed to meet the principles of profit maximization with specific strategic and financial techniques.

Furthermore, in line with A. Andrikopoulos and N. Kaimenakis (2006), Football Clubs are entities that are operating in an entirely distinct industry where the intangible and “invisible” assets are responsible for the large differences between the book and market values. Furthermore, they declare that Football Club’s market value equals its book value increased by the Intellectual Capital. According to various authors, the resource that is the most significant within the industry where Football Clubs operate is the intangible one. As well, D. Guseva and E. Rogova (2016) highlight the fact that Football Clubs are entities highly influenced by Intellectual Capital (mostly Human Capital) and that the Intellectual Capital can be considered as the main driver of Football Clubs’ success in financial performances and the sports area as well. Furthermore, the authors affirm that everyone who is involved in the club activity (no matter the sports or business side) affects the integrated Intellectual Capital. However, when it comes to the Intellectual Capital valuation model within Football Clubs, the study claims that current knowledge, researches and methods of the Intellectual Capital valuation for Football Clubs did not achieve the desired level necessary for the effective and adequate implementation of such a valuation.

There are a few reasons why there is still not a unique, accepted and efficient Intellectual Capital valuation model for Football Clubs. Mostly, all the current valuation models of the Intellectual Capital valuation (as well as those that are not related to Football Clubs) still do not reach the desired level for their common use. The current Intellectual Capital valuation models are based way too much on the entities’ financial performances while other segments of the value creation are overlooked, and not on how the Intellectual Capital is or may affect entities. Besides, many authors stated that current Intellectual Capital valuation models are based too much on subjective perceptions.

As previously mentioned and accordingly to A. Andrikopoulos and N. Kaimenakis (2006), Football Clubs are creating and operating in a special and unique industry where a different set of tools should be elaborated and used to create an adequate valuation model and provide the required and efficient information for stakeholders.

All of the mentioned supports the idea to proceed with further studies and analyses, related to the creation of an efficient and accepted model of the assessment (consequently reporting) of the Intellectual Capital within Football Clubs.

Further, an insight into the current valuation models of the Intellectual Capital within Football Clubs will be conducted. After a deep analysis of current models of the Intellectual Capital valuation and reporting models for entities and Football Clubs, the study will present a new proposal of the Intellectual Capital valuation and reporting model for Football Clubs.

7.1.The FOrNeX Index

The FOrNeX index is a model developed by Andreas Andrikopoulos (a professional in the area of intangible assets management and financial management) and Nikolaos Kaimenakis (specialist in the area of the public sector accounting and Intellectual Capital) in 2004.

Concerning all the problems mentioned in Chapter 6 regarding the off-balance intangible resources (Intellectual Capital) that are creating values for Football Clubs, the authors strained to develop the FOrNeX Index. The index is trying to give answers on what is creating value and how much all those sources of value effects the differences between the market value and the book value of Football Clubs. According to the authors, FOrNeX, is an analysis tool that helps in better understanding of the interactions and impacts among various components of the Intellectual Capital map.

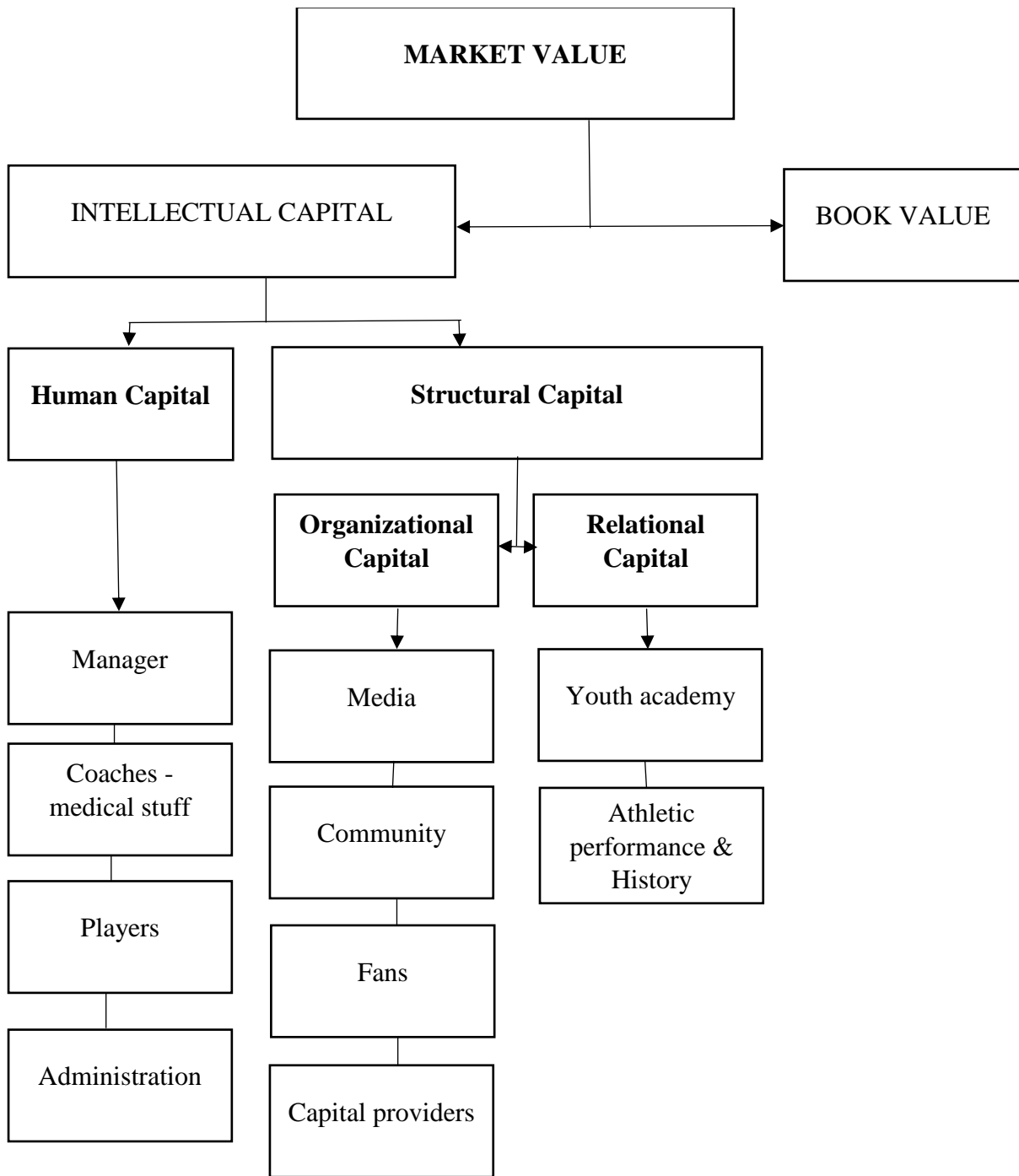
Furthermore, according to the authors, all those intangibles (and consequently Intellectual Capital) are establishing a chain - the “nexus” of the Intellectual Capital within Football Clubs. The development of the studies related to the Intellectual Capital impact within Football Clubs should be based on codifying and identifying all the Intellectual Capital. Precisely, to find out the intangible causes of value and therefore to quantify and map them into a correspondent report. Authors, A. Andrikopoulos and N. Kaimenakis (2006), are also questioning the possibility to integrate the Intellectual Capital, its value and sources in balance sheets of Football Clubs.

Furthermore, authors based the hypothesis related to the FOrNeX index study on the previous studies (e.g. Andriessen, 2004), that are affirming that there is a direct link between the Intellectual Capital and the Football Club value and that there is a necessity for the efficient Intellectual Capital management within Football Clubs. The index is also based on the study conducted by Kern and Sussmuth (2005) who are pointing out the multidimensional nature of Football Clubs.

According to the FOrNeX Index, the Intellectual Capital consists of many interdependent intangible resources that are forming a “nexus”, where, by their interactions, they are creating additional values for Football Clubs. For the index purposes, authors build an Intellectual Capital map for the Football Clubs value-creating intangible resources, applying a holistic organisational analysis and taking into consideration factors such as fan base, players talent, performance and similar. The map construction is quantifying the major qualitative factors and implementing them in existing measurements. As previously affirmed and according to the authors of the index, the value creation for Football Clubs mainly stem from intangibles that are not reported in financial statements.

The main construction of such a map consists of considering the Intellectual Capital as the nexus of the intangible resources that supports the effective implementation and achievements of its stakeholders’ intentions. The authors’ Intellectual Capital map is considering the clubs Market Value as the sum of the Book Value + Intellectual Capital. The map is presented in the following Figure 17.

Figure 16: The FOrNeX Index Intellectual Capital map for the Football Clubs



Source: A. Andrikopoulos, N. Kaimenakis; “Introducing FOrNeX: a composite index for the intangible resources of the football club”; International Journal of Sport Management and Marketing; Vol 5. Issue 3. p.258

The presented Figure 17 represents the Andrikopoulos and N. Kaimenakis' proposal of the Intellectual Capital map (structure) for Football Clubs. Based on the scheme presented, the study claims that the model proposal of the Intellectual Capital structure for Football Clubs (Figure 4) is of a much wider and comprehensive nature, where more areas and variables are taken into account. However, taking into consideration the previous knowledge and researches considering the topic, the Intellectual Capital map for Football Clubs developed by A. Andrikopoulos and N. Kaimenakis can be considered as a step forward when it comes to the researches related to the impact and correlations between the Intellectual Capital and Football Clubs.

Furthermore, the map conceptualization differs the values of Intellectual Capital and the Book Value, where summarized, both values form the Market Value of a Football Club ($MV = BV + ICV$). Additionally, within the area of the Intellectual Capital value, authors differ the Human Capital and Structural Capital. Besides, the authors are separating the Structural Capital into Relational Capital and Organizational Capital. The study considers that such a dissection of the Structural Capital cannot be appropriate with the main reason being that even if there are some studies that are accepting the Relational Capital as the outcome of the Structural Capital, most studies agreed that the Relational Capital is a much wider concept and should be presented and taken as a separate component of the Intellectual Capital. The Human Capital is, according to the authors, the main variable that creates corporate values in a high knowledge based entity and a major source of comparative advantages for Football Clubs.

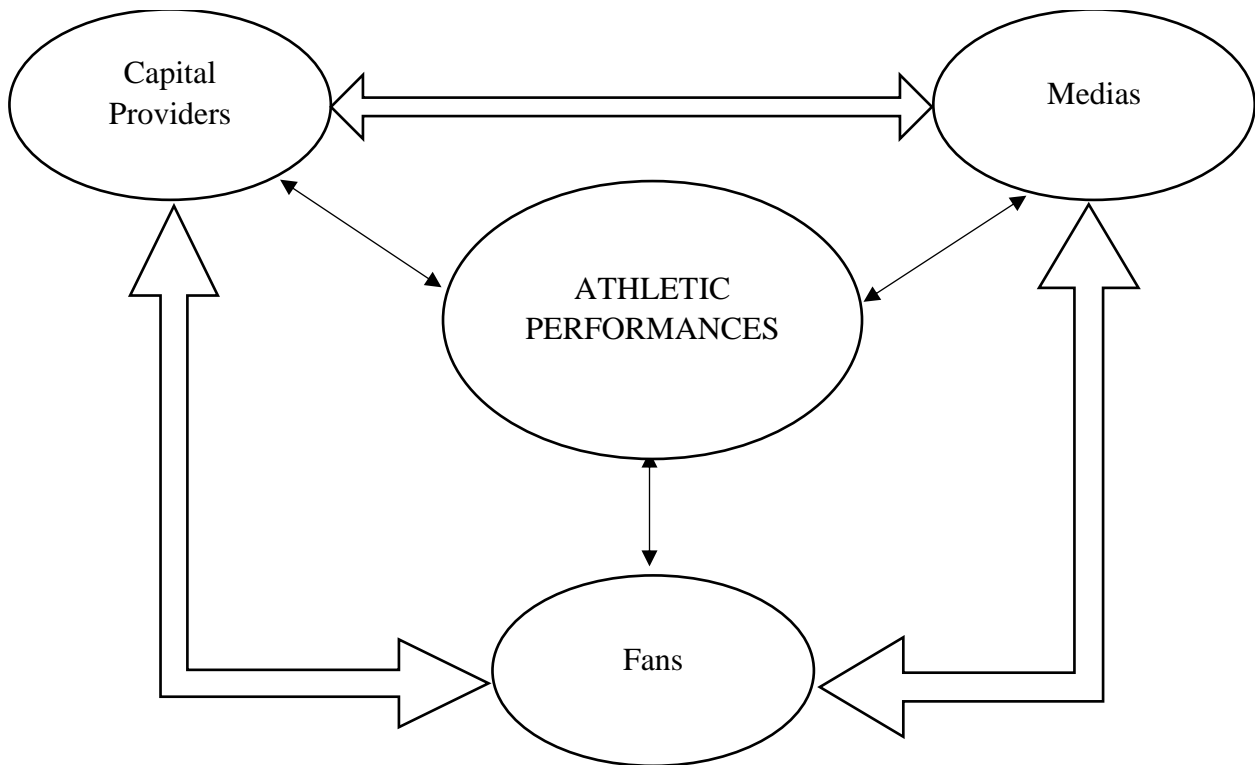
Finally, the proposed Intellectual Capital map (structure) for Football Clubs could be considered as a quality base for further developments and studies regarding the valuation tools and models of the Intellectual Capital within Football Clubs.

7.1.1. The Nexus Index concept

As the authors of the FOrNeX Index are pointing, the previously presented Football Club Intellectual Capital map (Figure 17), is of a quite static nature. Consequently, for the purposes of building an adequate valuation model and to be able to link all the components of the Intellectual Capital, thus, to discover how the value is being created within Football Clubs, the authors decided to combine and implement within their index two already existing models.

In this context, the authors are using the WSC⁵² approach and combining it with the analysis' features of the Skandia Navigator model.

Figure 17: Nexus Index map



Source: Authors draw based on the A. Andrikopoulos and N. Kaimenakis Fornex Nexus Index representation; A. Andrikopoulos, N. Kaimenakis; “Introducing FOrNeX: a composite index for the intangible resources of the football club”; International Journal of Sport Management and Marketing; Vol 5. Issue 3

The presented Figure 18 represents the authors' Nexus Index map that in its core, and as a central feature for the value creation, has the Football Clubs athletic performances. Furthermore, authors are detecting three other major dimensions responsible for such: the media, capital providers and fans. It is very clearly defined that all the components of the Intellectual Capital must interact and work in simultaneity in order to achieve efficient results and create additional values. However, taking into consideration the complexity of Football Clubs, pointing exclusively on three main dimensions can lead to inefficiencies of the model, especially in allocating subcomponents.

⁵² Weighted Scorecard, based on the Kaplan & Norton - Balanced Scorecard model (1996)

Furthermore, the Intellectual Capital valuation of the Nexus Index, for each of the organizational dimensions presented (fans, capital providers, media, and athletic performance), assigns weights 'w' whose sum is "1". The Club organizational performance is a weighted average of the performance of each organizational dimensions set. The result in each of the dimensions is a weighted average of the subdomains performances of a particular organizational dimension (A. Andrikopoulos and N. Kaimenakis, 2006).

Consequently, the FOrNeX Index can be considered as a quality base (especially the Nexus index calculation) for further studies and findings regarding the efficient model of the Intellectual Capital assessment for Football Clubs and business entities.

The authors' idea is to implement the index into balance sheets. The study claims that current studies did not reach the desired level of how to monetize the Intellectual Capital value thus, the reporting about it should be exposed as an appendix of the financial statements. The indexes are following the suggestion from most models of Intellectual Capital. Consequently, as most of the study shows, and according to the analyses conducted within this research the most "logic" way of reporting about the Intellectual Capital value currently is the SC method. Consequently the WSC⁵³ model conceptualization of this study should be considered as an appropriate and objective method of the Intellectual Capital valuation and reporting. Such a conceptualization of the variables and assessment of value creators would allow conducting various analyses and comparisons.

7.2. Intellectual Capital valuation and reporting model proposal for Football Clubs

Based on the so far examined literature and the analysis conducted over the Intellectual Capital, it is possible to deduct that there is still no generally accepted model of the Intellectual Capital valuation and reporting neither for business entities nor Football Clubs.

Consequently, following the analysis conducted, assumptions and gaps from the current models, the study attempts to suggest a structure that will facilitate the development of a new and efficient valuation and reporting model of the Intellectual Capital within Football Clubs. The suggested valuation platform is assembled based on the previously defined Intellectual Capital structure for Football Clubs (Figure 14). Based on the information gathered and study

⁵³ Weighted Score Card Index – more about the role of the WSC in the conceptualization of the suggested valuation and reporting model will be further elaborated within the study

conducted, it's likely to conclude that current state of research and development regarding the Intellectual Capital valuation is not at the level for a reliable monetary quantification of its values. Therefore, following some of the models and methods (e.g. The Skandia Navigator, the Economic Value Added method – EVA™, The Valued Added Intellectual Coefficient - VAIC™, Financial Method of Intangible Assets Measurement – FiMIAM), the study is proposing an index based model that, according to the suggestions, should be an efficient instrument and allow efficient cross - country comparisons, benchmarking and policymakings.

Below, within the Table 16 and based on the empirical study conducted, survey analysis, and suggestions from various authors, the study attempts to highlight all the features and assumptions that a current and efficient valuation and reporting model about the Intellectual Capital should contain. The survey was conducted through sport business (Football) professionals and the sample number is 36. Further, many prominent Football professionals with a high level of practical background within sports industry were consulted within this survey, and the representativeness of the sample covers a wide geographical area (Croatia, Spain, France, Germany, Austria, Japan, England, Italy, Turkey, Slovenia, etc.).

The survey is available and presented as “Appendix D” of the study conducted, while the results are presented within the Chapter eight.

Furthermore, the study is suggesting some features in order to create an efficient Intellectual Capital valuation and reporting model, consequently those are:

- a. **Structured model:** The first step in the determination of the Intellectual Capital of a Football Club, or any other business entity is to clearly define the appropriate Intellectual Capital structure. Moreover, it is necessary to develop and define the main subcomponents “value creators” for the industry. Furthermore, each entity can add (extend) those subcomponents which, according to their attributes and characteristics, are providers of additional values and belong to a certain category of the Intellectual Capital structure components: Human Capital, Structural Capital or Relational Capital.

- b. **Objectively oriented:** The weakness attributed to most of the models analysed is related to their valuation process subjectivity. The study aims to find a way for the maximal reduction of the model subjectivity. The proposal for reducing the subjectivity of the model and conceptualize it in a reasonably objective form, will be described in the further analysis of the dissertation, mostly through the points of *weighted index based (c)* and *audit comitee (e)*.

- c. **Weighted Index - based (WSC) areas:** Based on the study and information gathered, it is likely to conclude that the current state of development regarding the Intellectual Capital valuation is not at the level for a reliable monetary quantification of its values, therefore, following some of the suggestions from various models (e.g. The Skandia Navigator, the Economic Value Added method – EVA™, The Valued Added Intellectual Coefficient - VAIC™, Financial Method of Intangible Assets Measurement – FiMIAM...), the study proposal is that a reliable model of the Intellectual Capital valuation should be based on weighted indexes.

- d. **Correlated:** The model should be correlated with the company’s policies, strategies, plans and goals. Following the suggestions from some other models, the efficient Intellectual Capital model must be correlated – as previously defined it should be aligned with the company strategies and goals. The suggestion of the study is to rate the efficiency of such models while further comments at the end of the model are available to be added from the comitee (the concept of the audit committee will be further explained in the description of the Tables 16 and 17).

- e. **Descriptively and audit oriented – (audit committee):** This point can be correlated with the previousley set point of “Objectivity”. The study suggests the main auditor, that at the end of the model will expose a detailed and wide description of the evaluated points and moreover its opinion regarding the Intellectual Capital of the company evaluated. The explanation should point to all the weaknesses and strengths of the Intellectual Capital within the company, as well as point to the possible opportunities and further developments. To build an objective and reliable model, the auditing of it

should be conducted. The proposal of an objective and audited Intellectual Capital model will be described in the further analysis of the dissertation.

- f. **Simplicity:** The model should be conceptualized, in such a way that it is easily readable and visually very simple for the user.
- g. **Balance sheet appendix:** Based on the study and information gathered through the survey conducted and models analysed, it is likely to conclude that the current state of development regarding the Intellectual Capital valuation is not at the level for reliable monetary quantification of its values straight within the balance sheet of companies. Therefore, following some of the suggestions from various models and the analyses conducted, the Intellectual Capital assessment (model) should be presented and reported within the financial statements as an appendix of the company balance sheet – within the notes part.
- h. **Unique base:** As highlighted in the feature “structured”, one of the first and fundamental steps towards a quality valuation model, should be to compose the Intellectual Capital structure for a particular industry. Once the main Intellectual Capital structure of a particular industry is defined, the suggestion of prof. W.C. Neale (1964) that models should be designed in a way to allow comparisons, cross-country comparisons, improve the process of policymaking and benchmarking, is possible to achieve. Only a unique - main structure of the Intellectual Capital for a particular industry, will allow the model to be reliable and efficient in making comparisons and more detailed analyses. Consequently, the part that can be adapted within different business areas is the part of the subcomponents “value creators”.

The presented points are describing the suggested features concerning an efficient Intellectual Capital valuation and reporting model. The evaluation of the proposed concept will be projected and displayed in the upcoming part of this chapter (7.4). The concept presented suggests, describes and introduces a few new aspects (Structured model, Objectively oriented, Weighted Index-based, Correlated, Descriptively and audit oriented, Simple,

Balance sheet appendix, Unique base) that may help and support the development of an efficient Intellectual Capital valuation model. Furthermore, it can positively transform and affect on the currently attributed shortages of the Intellectual Capital models. Consequently, the new suggested items that may allow the efficient Intellectual Capital model conceptualization are the auditing committee of the model, weighted indexes, Intellectual Capital structural differentiation among industries - specific structure for entities.

- *Intellectual Capital structural differentiation*: as several authors like L. Jing et.al. (2012), Gurel et. al. (2006), H. Inkiken et. al. (2017) and studies are defining, the Intellectual Capital structure is not a fixed phenomenon, it is a variable that varies among industries and areas. Nevertheless, there are several studies and findings regarding the mentioned, there are still no defined Intellectual Capital structures for different areas, neither ideas about how to practically develop the mentioned. Consequently, the study considers as appropriate, and as a first step towards the efficient valuation and reporting model of the Intellectual Capital, to build one main Intellectual Capital structure that can be extended and divided by the users with the correspondent (personalized, industrial-based) subcomponents - “value creators” (e.g. Figure 4). Thus, the structure should be set with the differentiation of the main components Human Capital, Structural Capital and Relational Capital, while the subcomponents (“value - drivers”) can be extended by the user accordingly to their nature. The mentioned enables a wide use and precise design of the Intellectual Capital structure among different business areas and entities. The full structure should be internally generated, reviewed and accepted by the Intellectual Capital controlling the committee to process with further steps of the calculation of the weighted index.
- *Weighted index – based model*: based on the study and information gathered, the study follows some of the suggestions from various models that are proposing indexes for the valuation of the Intellectual Capital model. The study suggests that the efficient Intellectual Capital model should be based on weighted indexes, from the valuation of the Intellectual Capital structure. Consequently, the study is proposing a value for each component (i.e. variable - “value creator”) of the Intellectual Capital structure (Human Capital, Structural Capital and Relational Capital), where their

summarized value (the Intellectual Capital structure Value) is divided by the number of the components. Following the equation:

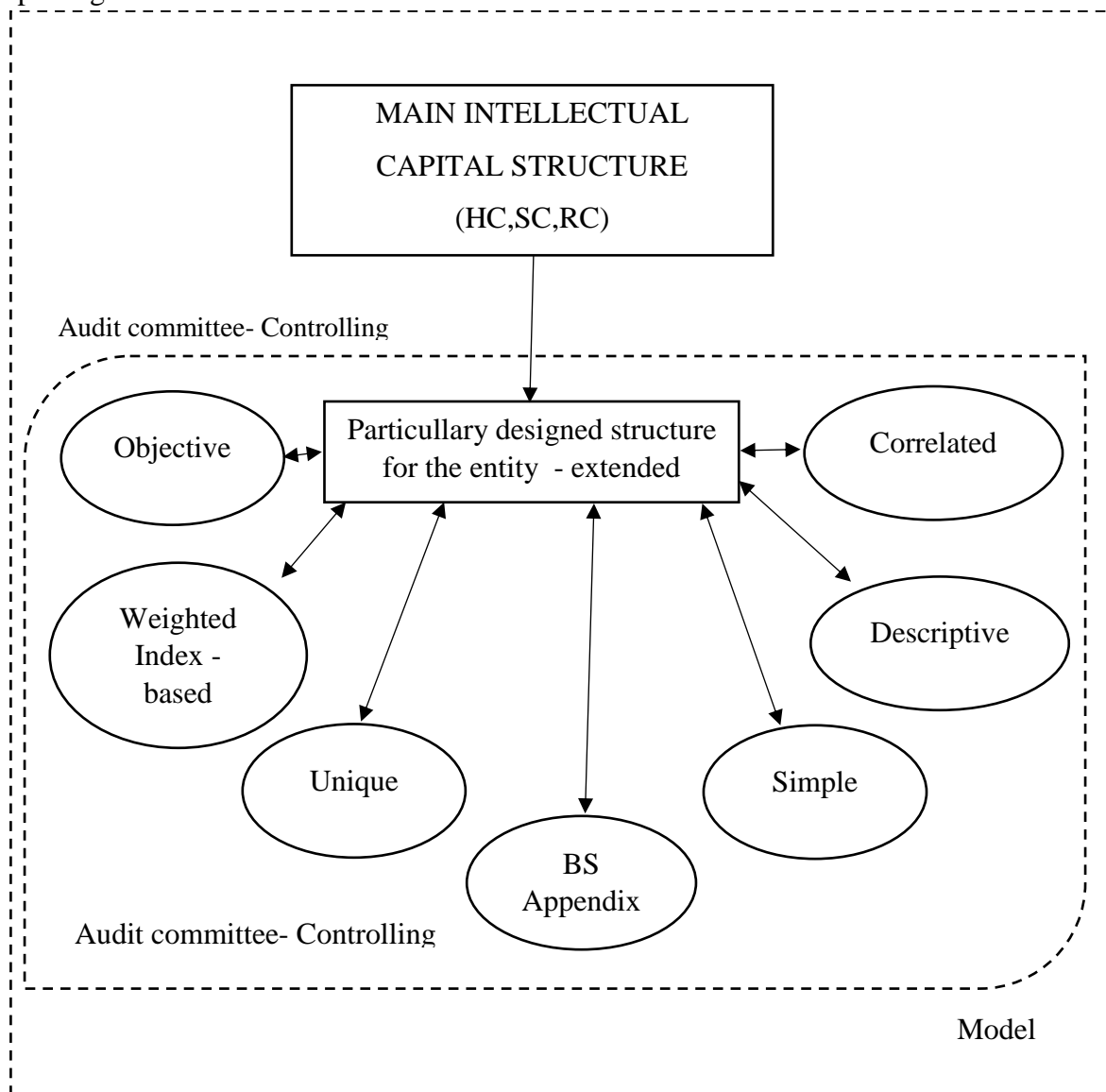
$$\frac{\Sigma \text{ points of variables per area structure}}{\text{n of variables}}$$

Furthermore, the component's result will be the weighted value of the subcomponents' rates. The example of the suggested model, with the explained steps of the calculation, is presented in the further chapter of this study. Some of the strengths of the suggested conception could be the following: better insight into the strengths and weaknesses of the Intellectual Capital within the company, support for the efficient decision-making process, support for the strategies, better insight into the Intellectual Capital of the company, the possibility of the straight reaction and improvement on the weaker parts of the Intellectual Capital subcomponents, enhance and support the SWAT analysis, reduce the subjectivity, quality monitoring tool and reporting system, supporting the benchmarking. The values (scores) of the subcomponents and consequently components should be assigned by the Intellectual Capital controlling committee. Finally, the Intellectual Capital value will be the aggregate of the area values.

- *The Intellectual Capital controlling committee:* The role of the Intellectual Capital controlling committee within the suggested model conceptualization is presenting one of the fundamental pillars for its efficient and reliable implementation and development. As illustrated and described in Figure 19, the Intellectual Capital controlling committee has a dualistic role within the model presented. One of the key roles of the committee is to reduce the subjectivity that was previously detected as one of the weaknesses of the existing models and turn it into an as much as possible objective framework. Additionally, its purpose is to point on all the possible threats and weaknesses that can derive from the Intellectual Capital within the entity and Football Clubs, supervise all the processes of the Intellectual Capital valuation, and similar. The Intellectual Capital controlling committee appears in almost all the segments of the model and plays a fundamental role within its evaluation. However, the role, usefulness and all the positive outcomes that the Intellectual Capital controlling committee provides will be described in more detail within a description

of Figure 10. Furthermore, to reduce the model subjectivity, the study suggests that the Intellectual Capital controlling committee is formed by experienced external and internal members (high ranked professionals from the business and sports - football industry). Thus, the study is proposing a minimum of two experienced internal members and another two external professionals from the Football industry.

Figure 19: Suggested representation of an efficient Intellectual Capital valuation and reporting model



Source: Author proposal of an efficient Intellectual Capital valuation scoring and reporting model based on the analysed Intellectual Capital models problematic.

The presented Figure 19, displays the suggested framework of the efficient Intellectual Capital valuation and reporting model. As previously highlighted, the first step is to define the main Intellectual Capital structure that will be unique among all the industries.

The proposal is that the main Intellectual Capital structure is formed by Human Capital, Structural Capital and Relational Capital. Furthermore, the “particularly designed structure for the entity” refers to the possibility of each entity or Football Club to categorize and extend the subcomponents in case they are previously not defined (Unique base), based on their characteristics. For instance, referring to Football Clubs, the study already set the main components and subcomponents of the Sports and Business areas. Further, it is allowed to extend the structure by other subcomponents ("value-creators"), in case they are aligned with their correspondent characteristics. Consequently, once the structure and its subcomponents are settled (internally), the first role of the committee is to accept and present their feedback concerning the proposal. Consequently, in the first step, the structure has to be based and aligned with the four previously suggested points (Structured model, Objectively oriented, Simple, Unique based). Once the structure is set and approved by the committee, the valuation (scoring) of the components and subcomponents with the grades for “1” (minimum value) to “7” (maximum value) should be conducted (Weighted Index-based component area) and the final value of the area is the sum of components areas (final values description within the part 7.4). One of the significant items in the valuation process should be to evaluate if the Intellectual Capital is aligned and follows (Correlated) the company policies and strategies (e.g. development, know-how, concepts, etc.). Once all the valuation processes and steps are done, the principal supervisor gives the committee opinion and remarks concerning the Intellectual Capital status of the entity (Descriptively and audit oriented). Therefore, the results of the valuation process with the committee remarks should be presented as an appendix of the company financial statements (BS appendix - notes).

The previously mentioned scale of the Intellectual Capital subcomponent is evaluating variables in the ranges between the minimum value of “1” (described as insufficient value) and the maximum value of “7” (described as excellent value). Consequently, the suggested scaling is the following;

Table 13: Intellectual Capital model scale values description proposal

1 – Insufficient value	2 – Extremely low value
3 – Bad value	4 – Acceptable value
5 – Good value	6 – High value
7 – Excellent value	

Source: Author

The example, the calculation steps and details about the suggested Intellectual Capital valuation model for Football Clubs are presented within the chapters 7.3 and 7.4. The suggested model has been applied and tested consequently, the results are presented as APPENDIX (A) and APPENDIX (B) of this study.

7.3. System of indicators for the valuation of the Intellectual Capital model proposal

Aiming to obtain an efficient, reliable, as much as possible objective model for the Intellectual Capital valuation, as well as a comprehensive reporting system for the analysis, monitoring and reporting about the Intellectual Capital, the study is developing a set of indicators and descriptions for the suggested variables of the Intellectual Capital subcomponents. All with the aim of creating an efficient framework for the IC valuation.

It is important to repeat and consider that the proposed model is based on the previously suggested Intellectual Capital structure for Football Clubs. Thus, it is important to highlight that the subcomponents are born within two main categories, the Spots area and the Business area. The proposed Intellectual Capital system indicators, together with their explanations that will be exposed further within this part, should form an integral part of the Intellectual Capital report.

Within the further tables, the study describes the assigned values of all the variables defined. All of it in order to facilitate the valuation process and create a model that is as much as possible objective. The presented variables, their description and index valuation are the suggestion of the study concerning an efficient model of the Intellectual Capital estimation within Football Clubs. In case there is a certain missing variable or factor that is playing an important role within a certain category of the Intellectual Capital, the consortium is allowed to define and add it, consequently evaluating its value within the part “Other components of a similar character”.

The scaling of the model presented is evaluating the variables and presenting the cumulative results with the points (scores - grades) from 1 (minimum value) to 7 (maximum value). Furthermore, it is very important to define what is included within the Sports area of a Football Club.

The Sports Department area is mostly composed of first-team coaches and assistant coaches, first-team players, academy coaches and assistant coaches, academy players, scouts, team managers, sports department administration, medical staff, sports direction, sports facilities possibilities and other equipment and gadgets related to the sports area of the Club.

Further, the presented tables 14 and 15 used examples of the Human Capital Business and Sports area indicators of the defined FC Intellectual Capital area subcomponents variables. All the variables and indicators are further presented within the APPENDIX E of the study.

Table 64: Human Capital Sports area subcomponents variables description and indicators

HUMAN CAPITAL SPORTS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Learning and education	How high is the educational and professional level of professionals in the area of sports (their licences' levels, education, continuous learning and personal development of people within the Sports area of the club) ?	1 – There are not acceptable levels of licenses and education required at all 2 – There is a minimum of 10% of people with professional competences and licences 3 – There is minimum of 30% of professionals within the sports structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period 4 – There is minimum of 50% of professionals within the sports structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period 5 – There is minimum of 80% of professionals within the sports structure have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period 6 – 90 to 95% of professionals within the sports structure have adequate licences for the position assigned and continually developing their knowledge 7 – All the professionals within the sports structure have adequate licences for the position assigned and continually developing their knowledge

<p>Innovations</p>	<p>How high you consider the use and development of innovations within the Club?</p>	<p>1 – There are not acceptable levels of innovations required at all the levels of the sports structure of the Club 2 – There is a minimum of 10% of professionals within the sports area that are innovative and developing their role in this direction 3 – There is minimum of 30% of professionals within the sports area that are innovative and developing their role in this direction 4 – There is minimum of 50% of professionals within the sports area that are innovative and developing their role in this direction 5 – There is minimum of 80% of professionals within the sports area that are innovative and developing their role in this direction 6 – 90 to 95% of professionals within the sports area that are innovative and developing their role in this direction 7 – All the professionals within the sports structure are innovative and are developing their role in this direction</p>
<p>Team spirit</p>	<p>How do you rate the team spirit between the first team and professionals in the sports structure, their will of doing the best?</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
<p>Commitment</p>	<p>Refers to the level of enthusiasm, responsibility for the goals and vision of the sports department and all the players and staff towards the tasks assigned.</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Experience	How experienced are professionals from the Sports area and how experienced is the squad?	<p>1 – There is an insufficient level of experience among the first team and the professionals in the sports area structure</p> <p>2 – There is an extremely low level of experience within the sports area structure and team</p> <p>3 – There is a bad level of experience within the sports area structure and team</p> <p>4 – There is an average level of experience within the sports area structure and team</p> <p>5 – There is minimum of 80% of professionals within the sports structure that are experienced in the role assigned or there is a good mix between experienced and young professionals within the area</p> <p>6 – There is minimum of 85% of professionals within the sports structure that are experienced in the role assigned or there is a high value mix between experienced and young professionals within the area</p> <p>7 – Professionals from the sports area and players have an excellent level of experience or there is a good mix between experienced and young professionals within the area</p>
Personal skills & development	How skilled for the role assigned are the people from the sports department area and how interested they are in studying and personal developments?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Motivations	How motivated you consider the people involved in the Sports area structure of the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Ability to innovate	How innovative are the people within the Sports area structure of the Club?	<p>1 – There are not acceptable levels of innovations required at all the levels of the sports structure of the Club</p> <p>2 – There is a minimum of 10% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>3 – There is minimum of 30% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>4 – There is minimum of 50% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p>

		<p>5 – There is minimum of 80% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>6 – 90 to 95% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>7 – All the professionals within the sports structure are innovative and are willing to introduce innovations for their role</p>
Competences	How do you rate the competences of the team and people involved in the sports area structure of the Club?	<p>1 – There are not acceptable levels of competences required at all the levels of the sports structure of the Club</p> <p>2 – There is a minimum of 10% of professionals within the sports area that are competent and efficient within the role and tasks assigned</p> <p>3 – There is minimum of 30% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>4 – There is minimum of 50% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>5 – There is minimum of 80% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>6 – 90 to 95% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>7 – All the professionals within the sports structure are competent and efficient within the position and role assigned</p>
Loyalty	How do you rate the loyalty of the team and people involved in the sports area structure in relation to the Club?	<p>1 – There are not acceptable levels of loyalty within the sports structure (players and professionals) required at all</p> <p>2 – There is a minimum of 10% of people from the sports area that are loyal to the Club and role assigned</p> <p>3 – There is minimum of 30% of professionals within the sports structure that are loyal to the Club and role assigned</p> <p>4 – There is minimum of 50% of professionals within the sports structure that are loyal to the Club and role assigned</p> <p>5 – There is minimum of 80% of professionals within the sports structure that are loyal to the Club and role assigned</p> <p>6 – 90 to 95% of professionals within the sports structure are loyal to the Club and role assigned</p> <p>7 – All the professionals within the sports structure are loyal to the Club and role assigned</p>

Diligence	How diligent are the people within the Sports area structure of the Club?	<p>1 – There are not acceptable levels of diligence within the sports area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are persistent and serious in their role</p> <p>3 – There is minimum of 30% of professionals within the sports structure that are diligent in their work within the position assigned</p> <p>4 – There is minimum of 50% of professionals within the sports structure that are diligent in their work within the position assigned</p> <p>5 – There is minimum of 80% of professionals within the sports structure that are diligent in their work within the position assigned</p> <p>6 – 90 to 95% of professionals within the sports structure are diligent in their work within the position assigned</p> <p>7 – All the professionals within the sports structure are diligent in their work within the position assigned</p>
Productivity	How do you evaluate the productivity of the people within the Sports Department?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Responsibility	How responsible for the role assigned are the people within the Sports area structure of the Club?	<p>1 – There are not acceptable levels of responsibility within the sports area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>3 – There is minimum 30% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>4 – There is minimum 50% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>5 – There is minimum 80% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>6 – 90 to 95% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>7 – All the professionals within the sports structure are responsible and serious for the tasks and role assigned</p>

<p>Persistence and resolution</p>	<p>How persistent are the people within the sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of persistence and resolution from the professionals from the sports area in the execution of their roles and tasks assigned 2 – There is a minimum of 10% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 3 – There is minimum 30% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 4 – There is minimum 50% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 5 – There is minimum 80% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 6 – 90 to 95% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 7 – All the professionals within the sports structure are persistent in the execution of their roles and tasks assigned</p>
<p>Proactivity</p>	<p>How proactive are the people within the sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of proactivity from the professionals from the sports area 2 – There is a minimum of 10% of people in the sports area structure that are proactive 3 – There is minimum 30% of people in the sports area structure that are proactive 4 – There is minimum 50% of people in the sports area structure that are proactive 5 – There is minimum 80% of people in the sports area structure that are proactive 6 – 90 to 95% of people in the sports area structure that are proactive 7 – All the professionals within the sports structure are proactive</p>
<p>Managerial skills</p>	<p>How do you evaluate the managerial skills of the people within the Sports Department?</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

<p>Problems solving abilities</p>	<p>How do you rate the skills for solving problems of the people involved in the sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of problem solving abilities of people from the sports of a Football Club 2 – There is a minimum of 10% of professionals within the sports area that have quality problem solving abilities 3 – There is minimum 30% of professionals within the sports area that have quality problem solving abilities 4 – There is minimum 50% of professionals within the sports area that have quality problem solving abilities 5 – There is minimum 80% of professionals within the sports area that have quality problem solving abilities 6 – 90 to 95% of professionals within the sports area that have quality problem solving abilities 7 – All the professionals within the sports structure have quality problem solving abilities</p>
<p>Flexibility and adaptability</p>	<p>How do you rate the flexibility and adaptability to the role assigned of the people involved in the Sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of working adaptability and flexibility of people from the sports area of a Club 2 – There is a minimum of 10% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 3 – There is minimum of 30% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 4 – There is minimum of 50% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 5 – There is minimum of 80% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 6 – 90 to 95% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 7 – All the professionals within the sports structure have excellent working adaptability and flexibility for the role assigned</p>

Critical reflection	How do you rate the positive and efficient critical reflection of the people involved in the sports area structure of the Club?	<p>1 – There are not acceptable levels of positive and efficient critical reflection within the sports area</p> <p>2 – There is a minimum of 10% of people in the structure that have positive and efficient critical reflection</p> <p>3 – There is minimum 30% of people in the structure that have positive and efficient critical reflection</p> <p>4 – There is minimum 50% of people in the structure that have positive and efficient critical reflection</p> <p>5 – There is minimum 80% of people in the structure that have positive and efficient critical reflection</p> <p>6 – 90 to 95% of people in the structure that have positive and efficient critical reflection</p> <p>7 – All the professionals within the sports structure have excellent and efficient critical reflection</p>
Coaches and players	How do you rate the quality of players and coaches within the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – There are not acceptable levels quality performances and knowledge neither possibility of future developments • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Communicational skills	How do you rate the communication of the people involved within the sports area	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Social skills	How do you rate the social abilities of the people involved within the sports area (except players)?	<p>1 – There are not acceptable levels of social skills from the professionals from the sports area</p> <p>2 – There is a minimum of 10% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>3 – There is minimum of 30% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>4 – There is minimum of 50% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>5 – There is minimum of 80% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>6 – 90 to 95% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>7 – All the professionals within the sports structure have social skills that can positively affect the Club</p>
Medical team	How do you rate the quality and expertise of the medical staff and possibilities of medical services that the Club can provide?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: author

The presented Table 14, represents the system of the Human Capital sports area variables and their correspondent descriptions and valuation indicators. Once again, it's important to highlight that the Sport Department area is formed by: first team coaches and assistant coaches, first team players, academy coaches and assistant coaches, academy players, scouts,

team managers, sports department administration, medical staff, sports direction, sports facilities and other equipment and gadgets related to the sports area of the Club.

Table 75: Human Capital Business area subcomponents variables description and indicators

HUMAN CAPITAL BUSINESS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Know - how concept	How do you rate the company know-how concept?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Learning and education	How high is the educational and professional level of professionals in the business area (their licences levels, education, continuous learning and personal development, etc.)?	<p>1 – There are not acceptable levels of licenses and education required at all</p> <p>2 – There is a minimum of 10% of people with professional competences and minimum required academic level for the role assigned</p> <p>3 – There is minimum 30% of people with professional competences and minimum required academic level for the role assigned</p> <p>4 – There is minimum 50% of people with professional competences and minimum required academic level for the role assigned</p> <p>5 – There is minimum 80% of people with professional competences and minimum required academic level for the role assigned</p> <p>6 – 90 to 95% of people with professional competences and minimum required academic level for the role assigned</p> <p>7 – All the professionals within the business area structure have adequate professional levels, some even higher than required and they are continually developing their knowledge</p>

Innovations	How do you rate the use and encouragement for innovations within the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Commitment	Refers to the level of enthusiasm, responsibility for the goals set and the tasks assigned within the position.	<p>1 – There are not acceptable levels of commitment within professionals from the business area of the Club</p> <p>2 – There is a minimum of 10% of people within the business area of the club that are committed to their job and role assigned</p> <p>3 – There is minimum 30% of people within the business area of the club that are committed to their job and role assigned</p> <p>4 – There is minimum 50% of people within the business area of the club that are committed to their job and role assigned</p> <p>5 – There is minimum 80% of people within the business area of the club that are committed to their job and role assigned</p> <p>6 – 90 to 95% of people within the business area of the club that are committed to their job and role assigned</p> <p>7 – All the professionals within the business area structure are committed for the role and tasks assigned</p>
Team spirit	How do you rate the team spirit and will for doing the best for the Club within the professionals from the Business area of the club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Experience	How experienced are the professionals within the Business area of the Club?	<p>1 – There is an insufficient level of experience among the professionals within the club Business area structure</p> <p>2 – There is an extremely low level of experience within the professionals from the business area structure</p> <p>3 – There is a bad level of experience within the business area structure</p> <p>4 – There is an average level of experience within the business area structure</p> <p>5 – There is minimum 80% of professionals within the business structure that are experienced in the role assigned or there is a good mix between experienced and young professionals within the area</p> <p>6 – There is minimum 85% of professionals within the business structure that are experienced in the role assigned or there is a high value mix between experienced and young professionals within the area</p> <p>7 – Professionals from the business area have an excellent level of experience or there is an excellent mix between experienced and young professionals within the area</p>
Personal skills & development	Evaluate based on how skilled for the role assigned are the professionals within the business area departments and how interested they are in studying and personal developments	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

<p>Motivations</p>	<p>How motivated you consider the people involved in the business area structure of the Club?</p>	<p>1 – There are not acceptable levels of motivations required at all 2 – There is a minimum of 10% of professionals from the business area that are motivated for the role, tasks assigned and company growth 3 – There is minimum 30% of professionals from the business area that are motivated for the role, tasks assigned and company growth 4 – There is minimum 50% of professionals from the business area that are motivated for the role, tasks assigned and company growth 5 – There is minimum 80% of professionals from the business area that are motivated for the role, tasks assigned and company growth 6 – 90 to 95% of professionals from the business area that are motivated for the role, tasks assigned and company growth 7 – All the professionals within the business area structure are motivated for the role, tasks assigned and company growth</p>
<p>Ability to innovate</p>	<p>How do you rate the ability of the professionals involved in the Business area of the Club to innovate?</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Competences	How do you rate the competences of the team and people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of competences required at all the levels of the business structure of the Club</p> <p>2 – There is a minimum of 10% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>3 – There is minimum 30% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>4 – There is minimum 50% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>5 – There is minimum 80% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>6 – 90 to 95% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>7 – All the professionals within the business structure are competent and efficient within the position and role assigned</p>
Loyalty	How do you rate the loyalty of the team - people involved in the business area structure in relation to the Club	<p>1 – There are not acceptable levels of loyalty</p> <p>2 – There is a minimum of 10% of people from the business area that are loyal to the Club and role assigned</p> <p>3 – There is minimum 30% of people from the business area that are loyal to the Club and role assigned</p> <p>4 – There is minimum 50% of people from the business area that are loyal to the Club and role assigned</p> <p>5 – There is minimum 80% of people from the business area that are loyal to the Club and role assigned</p> <p>6 – 90 to 95% of people from the business area that are loyal to the Club and role assigned</p> <p>7 – All the professionals within the business structure are loyal to the Club and role assigned</p>

Diligence	How Diligent are the people within the Business area structure of the Club	<p>1 – There are not acceptable levels of diligence within the business area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are persistent and serious in their role</p> <p>3 – There is minimum 30% of professionals within the business structure that are diligent for their work within the position assigned</p> <p>4 – There is minimum 50% of professionals within the business structure that are diligent for their work within the position assigned</p> <p>5 – There is minimum 80% of professionals within the business structure that are diligent for their work within the position assigned</p> <p>6 – 90 to 95% of professionals within the business structure are diligent for their work within the position assigned</p> <p>7 – All the professionals within the business structure are diligent for their work within the position and role assigned</p>
Social intelligence	How do you rate the social abilities and intelligence of the people from the top managerial position within the business department area	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Productivity	How do you evaluate the productivity of the people within the Business areas	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Education	How do you rate the overall academic education levels within professionals from the Business area of the Cub?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Responsibility	How responsible for the role assigned are the people within the Business area structure of the Club?	<p>1 – There are not acceptable levels of reasonability within the professionals from the business area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>3 – There is minimum 30% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>4 – There is minimum 50% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>5 – There is minimum 80% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>6 – 90 to 95% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>7 – All the professionals within the business structure are responsible and serious for the tasks and role assigned</p>

Persistence and resolution	How persistent are the people within the Business area structure of the Club?	<p>1 – There are not acceptable levels of persistence and resolute from the professionals from the Business area in the execution of their roles and tasks assigned</p> <p>2 – There is a minimum of 10% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>3 – There is minimum 30% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>4 – There is minimum 50% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>5 – There is minimum 80% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>6 – 90 to 95% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>7 – All the professionals within the Business structure are persistent in the execution of their roles and tasks assigned</p>
Proactivity	How proactive are the people within the Business area structure of the Club?	<p>1 – There are not acceptable levels of proactivity from the professionals involved in the business area structure of the Club</p> <p>2 – There is a minimum of 10% of professionals from the business area who are proactive</p> <p>3 – There is minimum of 30% of professionals from the business area who are proactive</p> <p>4 – There is minimum of 50% of professionals from the business area who are proactive</p> <p>5 – There is minimum of 80% of professionals from the business area who are proactive</p> <p>6 – 90 to 95% of professionals from the business area are proactive</p> <p>7 – All the professionals within the business area structure are proactive</p>
Communication al skills	How do you rate the communication of the people involved within the Business area of the club	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Managerial skills	How do you evaluate the managerial skills of the people within the Business Department?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Problems solving abilities	How do you rate the skills for solving problems of the people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of problem solving abilities of people from the business area</p> <p>2 – There is a minimum of 10% of professionals within the business area that have quality problem solving abilities</p> <p>3 – There is minimum 30% of professionals within the business area that have quality problem solving abilities</p> <p>4 – There is minimum 50% of professionals within the business area that have quality problem solving abilities</p> <p>5 – There is minimum 80% of professionals within the business area that have quality problem solving abilities</p> <p>6 – 90 to 95% of professionals within the business area that have quality problem solving abilities</p> <p>7 – All the professionals within the sports structure have quality problem solving abilities</p>
Flexibility and adaptability	How do you rate the flexibility and adaptability for the role assigned of the people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of working adaptability and flexibility of people from the business area of a Club</p> <p>2 – There is a minimum of 10% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>3 – There is minimum of 30% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>4 – There is minimum of 50% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>5 – There is minimum of 80% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>6 – 90 to 95% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>7 – All the professionals within the business structure have excellent working adaptability and flexibility for the role assigned</p>

Critical reflection	How do you rate the positive and efficient critical reflection of the people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of positive and efficient critical reflection within the sports area</p> <p>2 – There is a minimum of 10% of people in the structure that have positive and efficient critical reflection</p> <p>3 – There is minimum 30% of people in the structure that have positive and efficient critical reflection</p> <p>4 – There is minimum 50% of people in the structure that have positive and efficient critical reflection</p> <p>5 – There is minimum 80% of people in the structure that have positive and efficient critical reflection</p> <p>6 – 90 to 95% of people in the structure that have positive and efficient critical reflection</p> <p>7 – All the professionals within the sports structure have positive and efficient critical reflection</p>
Employees	How do you evaluate the overall value of the employees within the business structure of the Club	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: Author

The presented Table 15, represents the system of the Human Capital Business area variables and their correspondent suggested descriptions and valuation indicators.

7.4. Main Intellectual Capital Valuation tables and calculation steps

In order to support the previously suggested systems of indicators (scores) designed to create a suggestion for the Football Clubs' Intellectual Capital valuation model, the study produced a set of tables with calculations for defining the final value of the Intellectual Capital within Football Clubs. All of these tables are made with the intention of developing an efficient, reliable, as much as possible objective model for the Intellectual Capital valuation, as well as a comprehensive system for the analysis, monitoring and reporting about the Intellectual Capital.

Table 168: Intellectual Capital cumulative valuation template of one single committee member

AUDIT COMMITTEE MEMBER "A"	SPORTS AREA VALUE	BUSINESS AREA VALUE	CUMMULATIVE COMPONENT IC VALUE
HUMAN CAPITAL VALUE INDEX	SPORTS AREA INDEX "A" ⁵⁴	BUSINESS AREA INDEX "A"	SAI ⁵⁵ + BAI ⁵⁶
STRUCTURAL CAPITAL VALUE INDEX	SPORTS AREA INDEX "A"	BUSINESS AREA INDEX "A"	SAI + BAI
RELATIONAL CAPITAL VALUE INDEX	SPORTS AREA INDEX "A"	BUSINESS AREA INDEX "A"	SAI + BAI
INTELLECTUAL CAPITAL VALUE	SUM INDEX VALUES SPORTS AREA "A"/ 3	SUM INDEX VALUES BUSINESS AREA "A"/ 3	SIVSA⁵⁷ + SIVBA⁵⁸

Source: Authors proposal

The presented Table 16, represents the final table that summaries all the values assigned by one committee member in relation to the defined variables of the Intellectual Capital structure. The table provides the cumulative values - indexes of the Intellectual Capital structure within the two specified areas (Business area and Sports area) with the final

⁵⁴ „A“ = Committee member „A“

⁵⁵ SAI = Sports Area Index

⁵⁶ BAI = Business Area Index

⁵⁷ SIVSA = Sum Index Value Sports Area

⁵⁸ SIVBA = Sum Index Value Business Area

Intellectual Capital value, all according to the assesment of one committee member. The cumulative Intellectual Capital value assigned by one member is the result of SIVSA + SIVBA. It is important to highlight that once all the committee members evaluate the variables of the Intellectual Capital structure, the particular table of indexes is automatically calculated and it should be presented separately (as presented within Table 16). The further step of the calculation is described within the following Table 17.

Table 17: Intellectual Capital final valuation table with supervisor remarks

IC CUMMULATIVE RESULT	SPORTS AREA VALUE	BUSINESS AREA VALUE	CUMMULATIVE COMPONENTS IC VALUE
HUMAN CAPITAL VALUE INDEX	AGGREGATE HC INDEX VALUES SPORTS AREA $(A + B + C + D) / 4$	AGGREGATE HC INDEX VALUES BUSINESS AREA $(A + B + C + D) / 4$	CUMULATIVE HC VALUE CCSIVSA ⁵⁹ + CCSIVBA ⁶⁰ OR HC VALUES SPORTS AREA + HC VALUES BUSINESS AREA
STRUCTURAL CAPITAL VALUE INDEX	AGGREGATE SC INDEX VALUES SPORTS AREA $(A + B + C + D) / 4$	AGGREGATE SC INDEX VALUES BUSINESS AREA $(A + B + C + D) / 4$	CUMULATIVE SC VALUE CCSIVSA + CCSIVBA
RELATIONAL CAPITAL VALUE INDEX	AGGREGATE RC INDEX VALUES SPORTS AREA $(A + B + C + D) / 4$	AGGREGATE RC INDEX VALUES BUSINESS AREA $(A + B + C + D) / 4$	CUMULATIVE RC VALUE CCSIVSA + CCSIVBA
INTELLECTUAL CAPITAL VALUE OF THE ENTITY	SUM OF INDEX VALUES FOR SPORTS AREA	SUM OF INDEX VALUES FOR BUSINESS AREA	FSIVSA⁶¹ + FSIVBA⁶² “ICVE⁶³”

⁵⁹ CCSIVSA = Cumulative Component Sum Index Values of the Sports Area

⁶⁰ CCSIVBA = Cumulative Component Sum Index Values of the Business Area

⁶¹ FSIVSA = Final Sum Index Value Sports Area

⁶² FSIVBA = Final Sum Index Value Business Area

	$(A + B + C + D) / 3$	$(A + B + C + D) / 3$	
MAIN SUPERVISOR COMMENTS			
(Section where the main supervisor can expose his final remarks, opinion and the opinion of the other members in regards to the Intellectual Capital of the company.)			

Source: Authors proposal

The presented Table 17, presents all the cumulative values - indexes assigned by the committee members concerning the main areas of the Intellectual Capital structure. Once all the values are calculated it is possible to have an insight into the cumulative assessment of the Sports and Business areas of the main Intellectual Capital structure components (Human Capital, Structural Capital and Relational Capital).

The cumulative - aggregate results, are divided into three main pillars (areas), respectively the Sports area, the Business area and the cumulative value per component, and when summarized they estimate the final value of the Intellectual Capital of an entity. Their subcomponents' aggregate index values are representing the cumulative subcomponent value (aggregate index value per area and component). The Cumulative Component Value equals to CCSIVSA + CCSIVBA or - Component Index Values Sports Area + Component Index Values Business Area.

Once those steps are done it is possible to calculate the Final area Index Values of the Intellectual Capital (FSIVSA and FSIVBA). The final Intellectual Capital index value of the entity follows the equation: FSIVSA + FSIVBA or Σ of the Intellectual Capital component values. Consequently the maximum Intellectual Capital value of the entity can be 14, while the minimum value assigns 2.

Finally, in order to create the final Intellectual Capital assesment, the following presents the proposal for the final Intellectual Capital assesment proposal (note also area value)

- ▶ Insufficient value: 2 (< 14%)
- ▶ Extremely low value 3 - 4
- ▶ Bad value 5 - 6
- ▶ Acceptable value: 7 -9
- ▶ Good value: 10 -11

⁶³ ICVE = Intellectual Capital Value of the entity

- ▶ High value: 12
- ▶ Excellent value: 13 -14 (92% / 100%)

Once the valuation is completed, the main supervisor has the opportunity of exposing his or her opinion, and the opinion of other members in regards to the company's Intellectual Capital position. Within this section, the supervisor can point on the possible weaknesses and threats of the Intellectual Capital components as well as highlight the strengths and opportunities deriving from the company's Intellectual Capital.

As a conclusion of the model, it is possible to affirm that this concept allows the user to have an insight into the quality and weaker parts of the Intellectual Capital within the entity, and to react efficiently and directly to the possible problems and threats. Furthermore, the model allows an easy and fast benchmark comparison, conduction of various analyses, etc. Additionally, it is simple to use for all the stakeholders.

8. SURVEY RESULTS AND HYPOTHESIS ANALYSIS

The aim of conducting a survey analysis to test the hypothesis set within the study and gather efficient, reliable, and objective conclusions, is followed by the data collection that has been conducted among Football professionals. The survey is composed of 6 Likert scales, each one aiming to test a different hypothesis set. Additionally, each of these 6 Likert scales (one Likert scale per hypothesis) is composed of 10 or more Likert items. A participant's response on a given Likert scale is presented as the average of the responses the participants gave on each item belonging to the correspondent Likert scale. These average responses are dealt with as interval type data. This means that standard measures, like mean, median or standard deviation, can be calculated and that parametric test, like the t-test, can be performed on such data. A hypothesis being tested on a presented Likert scale can be accepted if there is a cumulative feedback assessment of over 75% in the Agree (4) and Strongly Agree (5) categories. To analyse the data form the survey a parametric one-sample t-test is used. This test enables hypothesis testing regarding the mean of a certain dataset with an unknown variance. Specifically, a one-tailed t-test is used to test whether the mean of the average responses on a certain Likert scale is above a certain threshold. The threshold used in this analysis is 4, which is more restrictive that the already mentioned 75% cumulative rating. The confidence interval is 95%. The t-test requires the data to be normally distributed or that the sample is large enough so that the Central Limit Theorem can be applied. In practice, the t-test gives good results even for data with a small sample size that are not normally distributed if the data is symmetrical. The data can be considered symmetrical under certain conditions:

- The boxplot of the data is relatively symmetrical
- The mean and median are approximately equal
- The histogram of the dataset is relatively symmetrical
- The coefficient of skewness is relatively small

These indicators will be discussed as part of the analysis of the results for each Likert scale individually. The size of the sample is 36⁶⁴. However, the sample is highly representative due to the high level of professional experience and practical background within managing Football Clubs. Consequently, such a sample is supporting to focus worldwide and has a clear perspective concerning the problematics.

The first Likert scale aims to test whether the participants feel that the IC is an important factor in organizational development. The following hypotheses are used for the hypothesis testing via the parametric t-test:

- H0: The IC is not an important factor in the organizational development ($\mu < 4$)
- H1: The IC is an important factor in the organizational development ($\mu \geq 4$)

Table 18: Overview of percentages of agreement with test questions in H1

	Level of agreement / disagreement with the statements: 1 - I Strongly disagree 2 - I disagree 3 - Can't estimate 4 - I agree 5 - I Strongly agree					Cumulative feedback value of the statements 4 and 5
	1	2	3	4	5	%
H1: "The IC is an important factor in the organizational development"						
The Intellectual Capital is an important factor of the organizational development	0	0	0	43.75	56.25	100
The creativity of employees is important for the organizational development	0	0	0	37.5	62.5	100
All the skills and abilities of employees can improve and increase the organizational performances	0	0	0	31.25	68.75	100
The relations that a company has with its stakeholders are important for the organizational development	0	0	0	25	75	100
Intellectual property are important for the organizational result	0	0	6.25	50	43.75	93.75
Organizational processes are important for the organizational development and result	0	0	0	6.25	93.75	100

⁶⁴ The population size is 96 since the five best divisions in Europe are containing 96 clubs. The sample size of 36 can be taken as representative according to the sample size calculator result with a Confidence Level value of 95% and a Confidence Interval of 13.

The Intellectual Capital importance is equal for business entities and Football Clubs	0	0	0	43.75	56.25	100
Employees actions and activities have an impact on the balance sheet results	0	0	0	18.75	81.25	100
The value added is mostly generated by employees actions	0	0	12.5	31.25	56.25	87.5
The Intellectual Capital from the level of importance can be compared with the financial capital of the business entity	0	0	6.25	31.25	62.5	93.75
Investing in the Intellectual Capital subcomponent (licences and intellectual property development) is useful for the company	0	0	0	37.5	62.5	100
A company that is aware about its Intellectual Capital responds faster to market challenges	0	0	0	25	75	100

Source: Survey results

Table 19: Quantitative analysis, and t-test results for the first Likert scale

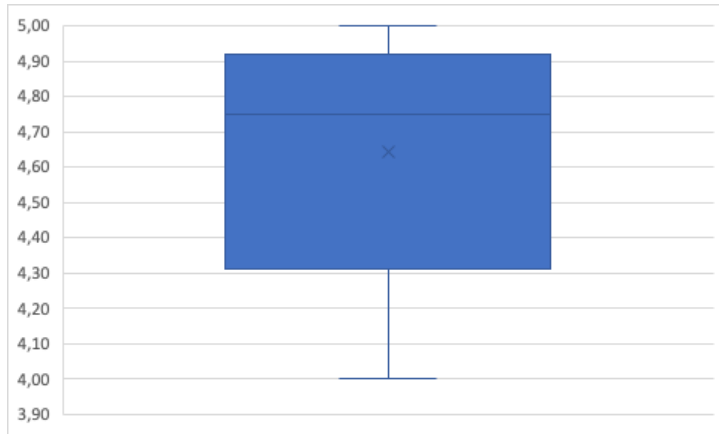
Mean	4,6425
Standard Deviation	0,35527
Median	4,75
Skewness	-0,793
t Statistic	7,23384
p Value ⁶⁵	1,45374E-06
t Statistic Critical Value	1,75305

Source: Survey results

Table 18 and Table 19 shows the average responses of the 36 participants, as well as the results of the quantitative analysis and the t-test. The t-test yields a very low p value meaning that the null hypothesis can be rejected in favour of the H1 hypothesis. This means that there is statistically significant evidence that the IC is indeed an important factor in organizational development. The box plot shown in the Figure 20, the histogram shown in the Figure 21, indicate as well the mentioned.

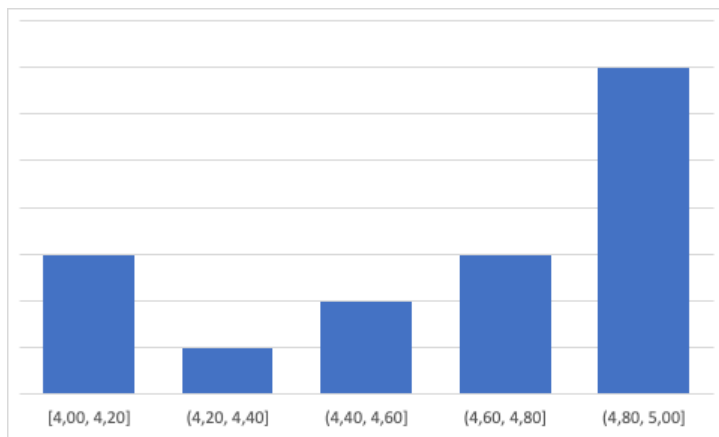
⁶⁵ Every t-value has a p-value to go with it. By the p-value is intended the probability that the results from the sample data occurred by chance. E.g. 5% = 0.05. Low p-values are good; They indicate that data did not occur by chance. For example, a p-value of .01 means there is only a 1% probability that the results from an experiment happened by chance. In practice, a p-value of 0.05 (5%) is accepted and datas are considered as valid (<https://www.statisticshowto.com/probability-and-statistics/t-test/>, visited: December, 10th 2021).

Figure 20: Box plot of the average responses for the first Likert scale



Source: Survey results

Figure 20: Histogram of the average responses for the first Likert scale



Source: Survey results

Some of the points that are worth highlighting based on the feedback provided by professionals are the following: the IC is an important factor in the organizational development; skills and abilities of employees can improve and increase the organizational

performances; organizational processes and relations that a company has with its stakeholders are important for the organizational development and results; the Intellectual Capital importance is equal for business entities and Football Clubs; a company that is aware of its Intellectual Capital responds faster on market challenges, etc.

The second Likert scale aims to test whether the participant thinks that the IC structure components have an impact on company business results. Taking this into account, the following hypothesis are used for hypotheses testing via the t-test:

- H0: The IC structure components do not have an impact on a company business result
- H1: The IC structure components have an impact on a company business result

Table 90: Overview of percentages of agreement with test questions in H2

	Level of agreement / disagreement with the statements: 1 - I Strongly disagree 2 - I disagree 3 - Can't estimate 4 - I agree 5 - I Strongly agree					Cumulative feedback value of the statements 4 and 5
	1	2	3	4	5	%
H2: “The IC structure components have an impact on a company business result”						
Entities are still not aware about the meaning of IC structure	0	6.25	6.25	50	37.5	87.5
Entities are not familiar with all the benefits coming from the IC structure	0	6.25	0	56.25	37.5	93.75
“Organizational processes” are helping the organization in creating the efficient working systematization	0	0	0	31.25	68.75	100
“Creativity”, bringd to the organization various positive business possibilities	0	0	0	31.25	68.75	100
“Sports performances monitoring tools” are helping the Football Club in its development and efficiency	0	0	0	43.75	56.25	100
“Relations with stakeholders” are important for a company business result and development	0	0	0	31.25	68.75	100
“Sport Club fans” are important for a company business result and development	0	0	0	62.5	37.5	100
“Softwares” are helping the entities in the development and business results	0	0	0	25	75	100

Management efforts and goals are often focused on keeping efficient and quality employees	0	0	25	62.5	12.5	75
IC structure subcomponent “employees ability to innovate” is helping entities in the creation of efficient strategies	0	0	12.5	31.25	56.25	87.5
IC structure subcomponents “proactivity” is helping entities to gain comparative advantages	0	0	0	37.5	62.5	100

Source: Survey results

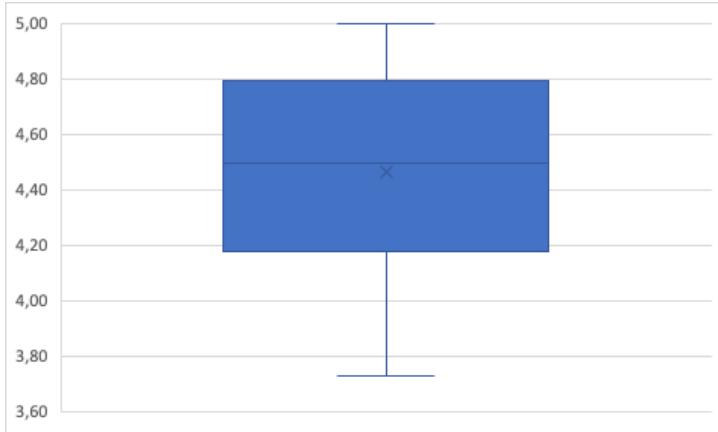
Table 21: Quantitative analysis, and t-test results for the first Likert scale

Mean	4,46625
Standard Deviation	0,36267
Median	4,5
Skewness	-0,293
t Statistic	5,14237
p Value	6,01682E-05
t Statistic Critical Value	1,75305

Source: Survey results

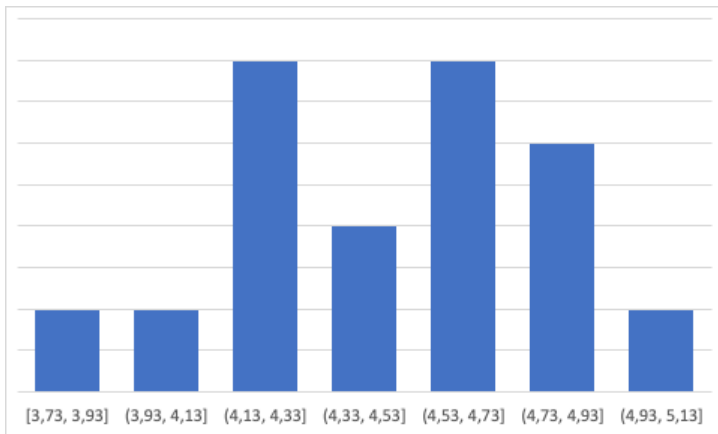
Table 20 and 21 show the average responses of the 36 participants. They also show the results of the quantitative analysis and the t-test. The p value received from the test is very low. Therefore, the null hypothesis can be rejected in favour of the H1 hypothesis. These are statistically significant evidence to support the hypothesis that football professionals think that the Intellectual Capital structure components have an impact on the company business results. The figure 22 shows a box plot of the data provided in table 20. The box plot in figure 22 is relatively symmetrical. The mean and median values are close, which can be seen either from the box plot in figure 22 or from the results in table 21. Furthermore, the histogram shown in figure 23 is also relatively symmetrical. Both, the box plot and histogram indicate an approximately symmetrical dataset.

Figure 22: Box plot of the average responses for the second Likert scale



Source: Survey results

Figure 23: Histogram of the average responses for the second Likert scale



Source: Survey results

Some of the points that are worth highlighting based on the feedback provided by professionals are the following: the entities are still not aware of the meaning of the IC structure (this leads one to continue with further studies and analysis in regards to the IC and its impact on business entities and Football Clubs); and the structure - components of the

Intellectual Capital are highly important for efficient organizational development and business results of an entity.

The third Likert scale aims to assess whether football professionals who have taken part in the survey think that the knowledge of the IC value is useful for the company stakeholders.

Given this, the following hypotheses are used for hypothesis testing:

- H0: Knowledge about the IC value is not useful for a company stakeholders
- H1: Knowledge about the IC value is useful for a company stakeholders

Table 22: Overview of percentages of agreement with test questions in H3

	Level of agreement / disagreement with the statements: 1 - I Strongly disagree 2 - I disagree 3 - Can't estimate 4 - I agree 5 - I Strongly agree					Cumulative feedback value of the statements 4 and 5
H3: “Knowledge about the IC value is useful for a company stakeholders”	1	2	3	4	5	%
Balance sheet data are not sufficient to obtain complete and precise information regarding the business entity	0	6.25	12.5	56.25	25	81.25
Based on the BS it's hard to the estimate the value creation possibilities of each employee	0	0	12.5	37.5	50	87.5
Awareness about the IC value is useful for a company stakeholders	0	0	6.25	31.25	62.5	93.75
When investing in a certain entity or club, investors are taking into consideration various factors and variables (not exclusively Balance Sheet data)	0	0	0	37.5	62.5	100
In case of employees (players) leaving the company / Club, companies can face negative effects on business activities and results	0	12.5	0	25	62.5	87.5
Stakeholders would like to have a precise value data and complete insight regarding the IC of a company	0	0	6.25	37.5	56.25	93.75
An experienced professional with a high relations network can generate higher values for a company	0	0	0	31.25	68.75	100
High IC value generates more opportunities for the entity	0	0	0	31.25	68.75	100

The category of “goodwill” can be considered as a “hidden” IC value	0	0	50	37.5	12.5	50
Investors will invest in projects that are presenting extensive and complete data	0	0	0	37.5	62.5	100

Source: Survey results

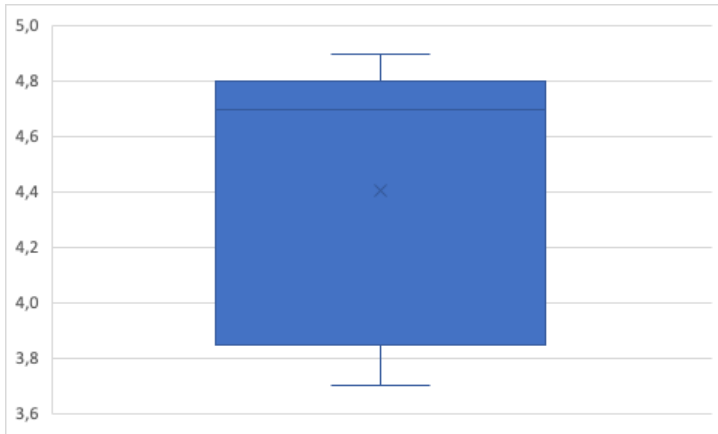
Table 23: Quantitative analysis, and t-test results for the first Likert scale

Mean	4.40625
Standard Deviation	0.45675
Median	4.7
Skewness	-0.483
t Statistic	3.55771
p Value	0.001431798
t Statistic Critical Value	1.75305

Source: Survey results

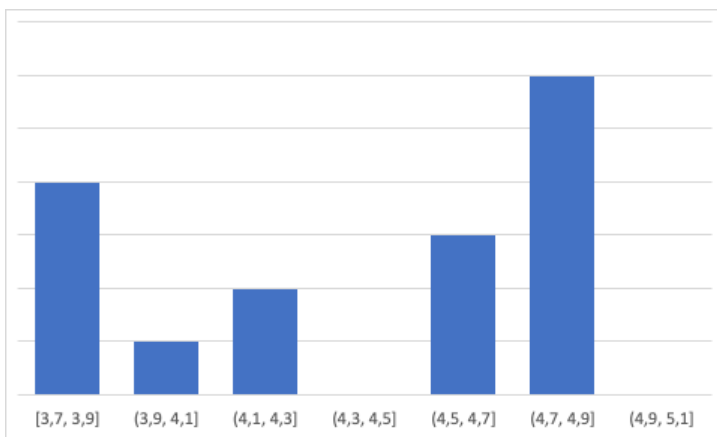
The table 22 and 23 shows the average responses of the 36 participants. It also shows the results of the t-test. The t-test results show a very low p value. Because of the low p value, the null hypothesis can be discarded in favour of the H1 hypothesis. In other word, there is statistically significant evidence in the data provided by the survey that the knowledge of the IC value is indeed useful to the company stakeholders. The figure 24 shows the boxplot of the average responses for the third Likert scale. The whiskers of the boxplot are symmetrical. There is a difference in the mean and median values of the data, as can also be noted from the table 23. The histogram shown in the Figure 25 is evenly distributed around the mean and relatively symmetrical. The given boxplot and histogram indicate that the dataset is slightly skewed.

Figure 24: Boxplot of the average responses for the third Likert scale



Source: Survey results

Figure 25: Histogram of the average responses for the third Likert scale



Source: Survey results

Some of the points that are worth highlighting based on the feedback provided by professionals are the following: balance sheet data are not always sufficient to obtain complete value data; value creation possibilities of the entity; higher IC value generates more opportunities for the entity; FCs can face negative effect when employees are leaving; etc.

The fourth Likert scale aims to assess how much the participants feel that the management of football clubs is aware of the IC presence in their clubs. The following hypotheses are used for hypothesis testing:

- H0: The management is not aware about the Intellectual Capital within Football Clubs
- H1: The management is aware about the Intellectual Capital within Football Clubs

Table 24: Overview of percentages of agreement with test questions in H4

	Level of agreement / disagreement with the statements: 1 - I Strongly disagree 2 - I disagree 3 - Can't estimate 4 - I agree 5 - I Strongly agree					Cumulative feedback value of the statements 4 and 5
	1	2	3	4	5	%
H4: “H4: The management is aware about the the Intellectual Capital within Football Clubs”						
Sport Directors with good reputation and social abilities (Relational Capital) have a capacity of generating opportunities	0	0	12.5	12.5	75	87.5
Sport Clubs are in need of quality employees that can face business challenges and support the organizational development	0	0	0	25	75	100
Football Clubs need a quality institutional relations management	0	0	0	25	75	100
Sales channels (sports and corporative) are important for Football Clubs	0	0	0	18.75	81.25	100
Business networks are important for the sport club corporative department success	0	0	0	18.75	81.25	100
A reputation is important for the sport club opportunities and success	0	0	0	43.75	56.25	100
The value creation perception is important for the FC Sports department success	0	0	0	43.75	56.25	100
The know-how concept of a Football Club is important for sports and business achievements	0	0	0	31.25	68.75	100
HRM is important for Football Clubs	0	0	0	68.75	31.25	100
Fans are generating values for Football Clubs	0	0	0	37.5	62.5	100
Players and coaches are generating values for Football Clubs	0	0	0	43.75	56.25	100

Source: Survey results

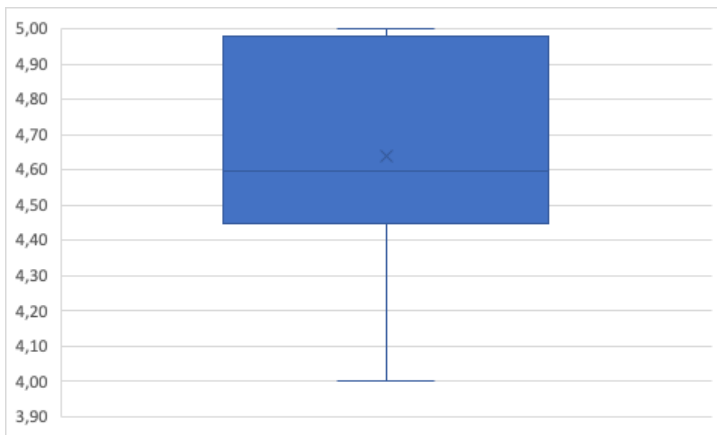
Table 25: Quantitative analysis, and t-test results for the first Likert scale

Mean	4,64125
Standard Deviation	0,32549
Median	4,595
Skewness	-0,375
t Statistic	7,88038
p Value	5,18065E-07
t Statistic Critical Value	1,75305

Source: Survey results

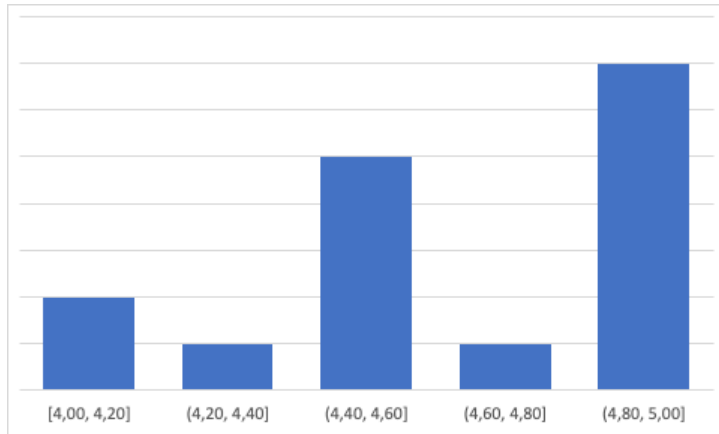
The table 24 and 25 show the average responses of the 36 participants. They also show the results of the quantitative analysis and t-test. The t-test gives a very low p value, which supports the rejection of the null hypothesis in favour of the H1 hypothesis. In other words, there is statistically significant evidence in the results of the survey that support the claim that the management of the Football Clubs is indeed aware of the IC within their clubs. The figure 26 shows the boxplot of the average responses for average responses provided in the table 25. The boxplot shows that the mean and median values are close.

Figure 26: The boxplot of the average responses for the fourth Likert scale



Source: Survey results

Figure 27: The histogram of the average responses for the fourth Likert scale



Source: Survey results

The fifth Likert scale aims to assess if the participants feel that the IC has an impact on the Football Club’s business results. Along these lines, the following hypotheses are used for hypothesis testing:

- H0: The IC does not have an impact on a Football Club business results
- H1: The IC has an impact on a Football Club business results

Table 26: Overview of percentages of agreement with test questions in H5

	Level of agreement / disagreement with the statements: 1 - I Strongly disagree 2 - I disagree 3 - Can’t estimate 4 - I agree 5 - I Strongly agree					Cumulative feedback value of the statements 4 and 5
	1	2	3	4	5	%
H5: “The IC has an impact on a Football Club business results”						
The Structural Capital subcomponent of “organizational processes” has an impact on a Football Club business results	0	0	0	43.75	56.25	100

The Human Capital subcomponent “motivation” has an impact on a Football Club business result	0	0	12.5	37.5	50	87.5
The Human Capital subcomponent “motivation” has an impact on a Football Club sport result	0	0	0	25	75	100
The IC doesn’t have any impact on a FC business results	81.25	18.75	0	0	0	0
Having an excellent corporative department Football Clubs can achieve higher financial and organizational results	0	0	0	31.25	68.75	100
IC value within Football Clubs is significant as the IC within other business entities (areas)	0	0	6.25	37.5	56.25	93.75
Well managed IC structure helps Football Clubs in their business achievements	0	0	0	43.75	56.25	100
The category of “goodwill” should be evaluated and considered as “hidden” IC value of Football Clubs	0	0	50	37.5	12.5	50
The key of a Football Club business and sport success are people	0	0	0	50	50	100
The Structural Capital subcomponent “Strategies & Plans” has an impact on a Football Club business and sports result	0	0	0	31.25	68.75	100
The Relational Capital subcomponent “Ability of attracting (partners, scouts, sponsors, fans etc.)” has an impact on a Football Club business result	0	0	0	18.75	81.25	100

Source: Survey results

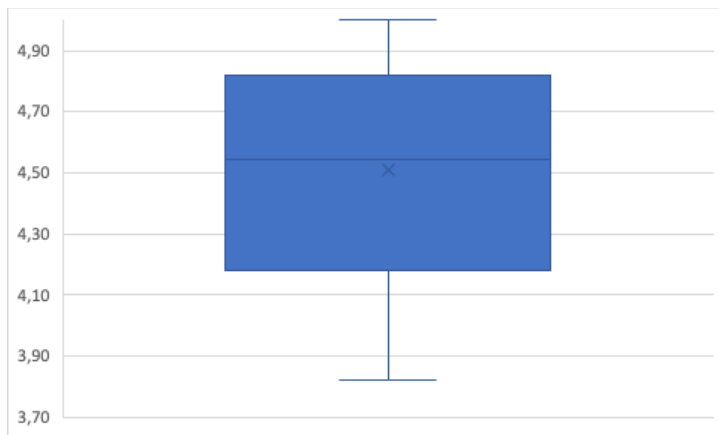
Table 27: Quantitative analysis, and t-test results for the first Likert scale

Mean	4,51125
Standard Deviation	0,39361
Median	4,545
Skewness	-0,168
t Statistic	5,19545
p Value	5,43478E-05
t Statistic Critical Value	1,75305

Source: Survey results

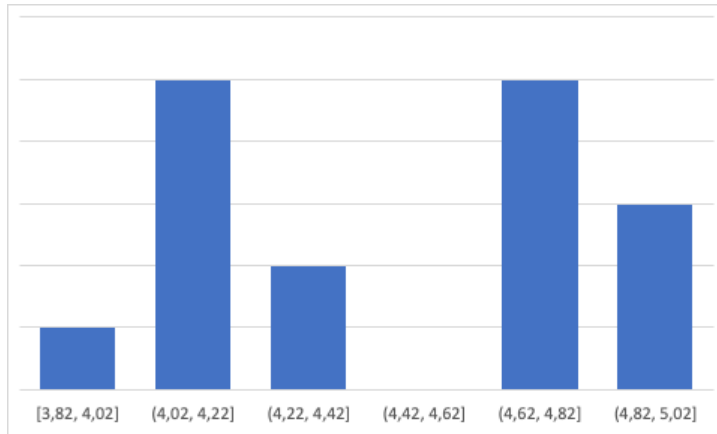
The average responses to the Likert items of the fifth Likert scale of the 36 participants are shown in the table 26 and 27. The results of the quantitative analysis and the t-test are also shown in the table 27. The t-test yield a very low p value. This low p value justifies the rejection of the null hypothesis in favour of the H1 hypothesis. This means that there is statistically significant evidence that support the claim that the IC has an impact on the business results of a Football Club. The boxplot shown in the figure 28, the histogram in figure 29, and the skewness factor provided in the table 27, all indicate that the data is approximately symmetrical.

Figure 28: The boxplot of the average responses on the fifth Likert scale



Source: Survey results

Figure 29: The histogram of the average responses on the fifth Likert scale



Source: Survey results

The sixth and final Likert scale aims to assess how useful is the IC valuation and reporting model is for Football Clubs. The following hypothesis are used for the hypotheses testing via the parametric t-test:

- H0: The IC valuation and reporting model is not useful for Football Clubs
- H1: The IC valuation and reporting model is useful for Football Clubs

Table 28: Overview of percentages of agreement with test questions in H6

	Level of agreement / disagreement with the statements: 1 - I Strongly disagree 2 - I disagree 3 - Can't estimate 4 - I agree 5 - I Strongly agree					Cumulative feedback value of the statements 4 and 5
	1	2	3	4	5	%
H6: “The IC valuation and reporting model is useful for Football Clubs”						
There is not a tool for the IC valuation within Football Clubs	0	0	12.5	81.25	6.25	87.5
There is not a tool for reporting about the IC within Football Clubs	0	0	12.5	81.25	6.25	87.5

The Intellectual Capital value of a company should be presented as an Appendix of the balance sheet	0	6.25	6.25	43.75	43.75	87.5
Having the information regarding the IC value would be useful for the more efficient wages policy	0	6.25	0	62.5	31.25	93.75
Having a full IC insight would be easier and more efficient for the labour systematization	0	0	6.25	37.5	56.25	93.75
An accurate IC report would be of a great help for investing in a Football Club	0	0	0	62.5	37.5	100
A quality IC valuation model would be useful for business entities	0	0	0	37.5	62.5	100
A quality IC valuation model would be useful for Football Clubs	0	0	0	37.5	62.5	100
A quality IC reporting model would be useful for business entities	0	0	0	37.5	62.5	100
A quality IC reporting model would be useful for Football Clubs	0	0	0	37.5	62.5	100

Source: Survey results

Table 29: Quantitative analysis, and t-test results for the first Likert scale

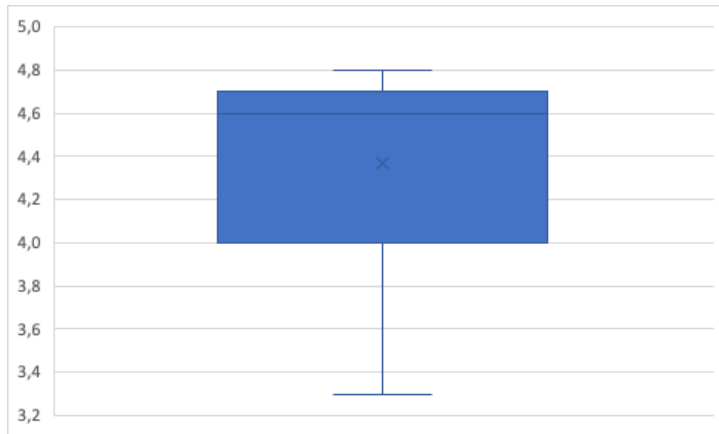
Mean	4,36875
Standard Deviation	0,44679
Median	4,6
Skewness	-1,020
t Statistic	3,30130
p Value	0,002423003
t Statistic Critical Value	1,75305

Source: Survey results

The average responses of the 36 participants are shown in the table 28. Table 29 also shows the results of the quantitative analysis and the t-test. The t-test yields a p value lower than 0.5. This means that the null hypothesis can be rejected in favour of the H1 hypothesis. In other

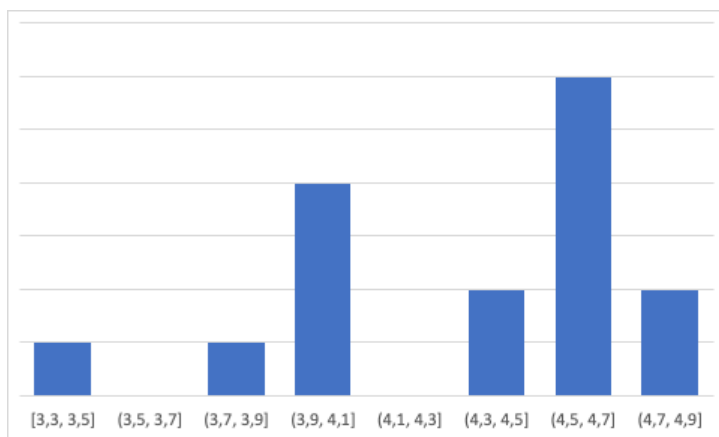
words, there is statistically significant evidence to support the claim that the IC evaluation and reporting models are useful for Football Clubs.

Figure 30: The boxplot of the average responses on the sixth Likert scale



Source: Survey results

Figure 31: The histogram of the average responses on the sixth Likert scale



Source: Survey results

Table 30: Dichotomous questions feedback ratios from Football professionals about the Intellectual Capital

%	YES	NO
Do you consider that your entity would have a higher value if the Intellectual Capital rate is included in the annual report?	100%	
Would you like to introduce any kind of the Intellectual Capital report within your annual report?	100%	
The knowledge regarding the Intellectual Capital area should be improved?	100%	

Source: Survey results

Based on the feedback from the Table 30 provided by the professionals from the Football area, it is possible to state that the Intellectual Capital area should be deeper studied and developed. It is also evident that Football Clubs are willing to introduce the Intellectual Capital report within their annual financial statements, and that they consider introducing the Intellectual Capital value to their statements (notes of financial statements) which can positively affect the Football Club value.

Table 31: Preferable Intellectual Capital reporting method

%	FS appendix	BS category
What kind of Intellectual Capital report do you prefer?	100%	

Source: Survey results

In relation to the previous question of adding the Intellectual Capital value report within their Financial Statements, professionals agreed that the best method should be an appendix to the financial statements. Such is in line with the suggestion of the study concerning the efficient valuation and reporting model of the Intellectual Capital.

Table 32: Level of agreement with the statement that nowadays professional Football Clubs are managed and organized like business entities

%	Agree	Disagree
Professional Football Clubs nowadays are managed and organized like business entities.	100%	

Source: Survey results

According to the feedback that professionals exposed concerning their level of agreement with the statement that nowadays professional Football Clubs are managed and organized like business entities, it is possible to state that such a statement can be accepted.

Table 33: Sample mean and mode of the market value of Football Clubs in relation to the book value

Market value of the club in relation to the book value	HIGHER	LOWER	VALUES
	100%	0	
MEAN			1.5
MODE			1.4

Source: Survey results

Based on the feedback from professionals from the Football area, and concerning the market value and book values of their Clubs, it is likely to conclude that the market value is usually 40% higher than the book value of those Football Clubs. The mentioned cant be considered as a pattern that the market values are always higher than book values.

9. DISSERTATION OUTCOMES AND CONCLUSION

The essence and the role of the Intellectual Capital are becoming crucial factors in the development, success and competitiveness of business entities in relation to current markets, economy and society (society of knowledge). As analysed and concluded within this study, the same can be applied to Football Clubs since nowadays they are managed and they operate like real business entities. Although there is no generally accepted definition of the Intellectual Capital, a significant step has been taken in its structural composition and classification which, is mainly observed through its three-dimensional postulate (Human, Relational and Structural Capital). Further, current accounting regulations and practices still do not provide an efficient and accepted model that will monetarise, identify, evaluate and report within balance sheets about the Intellectual Capital value within a certain entity, nor they offer an accepted model of reporting (in a non monetarised way) about the Intellectual Capital of an entity. A generally accepted definition and structural components dissection (including at least the principal area subcomponents) of the Intellectual Capital should be considered as a base for the creation of a standard in regards to the Intellectual Capital. Such standard would allow further efficient analysis and studies concerning the best valuation and reporting model of the Intellectual Capital. In this way, this study analyses current definitions

of the Intellectual Capital, and based on the literature analysed, gives its proposal for a comprehensive definition of the Intellectual Capital and a proposal for the efficient valuation and reporting model about the Intellectual Capital within Football Clubs. The proposed model conceptualization, with minor adjustments in the subcomponents classification (“value creators”) can be easily applied within different business areas.

Consequently, according to different authors (e.g. Abdullali 2018, R. Zenzerović et. al. 2014), a lack of information concerning Intellectual Capital can mislead stakeholders and the management of a company (and a Football Club) in a decision-making processes, allocating company resources, setting long-term goals and strategies as well as projecting future investments. By analysing the financial reports of Football Clubs and researching variables that influence sports and business results, it is possible to claim that there is a high necessity for creating a comprehensive and efficient valuation and reporting model of the Intellectual Capital.

Furthermore, based on the survey conducted and the feedback received from professionals of the field, this study claims that the Intellectual Capital is an important factor of organizational development where the structural components (i.e. subcomponents – “value creators”) have an impact on a business result. Consequently, information and knowledge about the value of the Intellectual Capital within a Football Club would be of high interest for the stakeholders and useful for the organizational development. Moreover, professionals agreed that it would be of high interest to create an efficient and adequate Intellectual Capital valuation and reporting model within Football Clubs.

Besides, professionals agreed that the most efficient Intellectual Capital valuation and reporting model within Football Clubs should be conceptualized as an appendix of financial statements. The model suggested within the study is following this suggestion and it is build exactly around those postulates given by professionals. Finally, the study came across only positive feedbacks concerning conceiving an exclusive system and model of the Intellectual Capital valuation and reporting within Football Clubs. The usefulness and the impacts that may arise out of it would in various respects positively contribute stakeholders by gaining several benefits.

Following the results of the study conducted and all the analysis that were made, the study is presenting a chronological review of all the outcomes and consequently, the possible benefits

of the study. Thus, if the focus is linked to the main research reasons that were set in the introduction part of the study, it is possible to affirm that the Intellectual Capital has an impact on the area of sports in general. Furthermore, considering theoretical background, model outcomes and feedbacks, and survey results, it's possible to state that the Intellectual Capital has an impact on Football Clubs in both, sports and business area results.

One of the main purposes of this study is to investigate the Intellectual Capital structure and to form an adequate structure for Football Clubs. The proposal for the mentioned is presented within the sixth chapter of the study. Consequently, the presented proposal of the Intellectual Capital structure and its subcomponents ("value creators") is the base that allows this study to take further steps in proposing the Intellectual Capital valuation model within Football Clubs. Following the results of the survey conducted and answers obtained from professionals, it is possible to confirm that all the hypothesis set within the study can be accepted. Furthermore, the study affirms that Football Clubs are overpassing the area of sports exclusively. Nowadays professional Football Clubs are real business entities with specific characteristics. The survey is presented in the appendix of the study (APPENDIX D).

Additionally, within the fifth chapter, the study investigates the existing reporting and valuation models of the Intellectual Capital. Consequently, the study is mapping their most common features, highlights their strengths and weaknesses and suggestions that other authors are exposing. The mentioned can be considered as fundamental in order to create the base for further development of the study in the direction of proposing an efficient model for the valuation and reporting of the Intellectual Capital within entities and Football Clubs. Thus, the sixth and seventh chapters are based on the study conducted and their main outcomes are the proposed configuration of the Intellectual Capital structure for Football Clubs (sixth chapter) and the proposed valuation and reporting model of the Intellectual Capital within Football Clubs (seventh chapter). Consequently, the overview of the main study outcomes is as follows:

- **Hypothesis:** Based on the quantitative analysis conducted and final results, all the hypotheses that were set within the study can be accepted.
- **Definition:** Concerning that there is not a commonly accepted definition of the Intellectual Capital, and according to the literature studied and correspondently analysed definitions of the term Intellectual Capital, the study is presenting its definition about the Intellectual Capital. Thus, "*The Intellectual Capital is a hidden*

part of a company asset whose value variates during time, and has the structure whose components differ among industries. However, it is a company's treasure that needs to be detected, well managed, defined and structured in order to gain comparative advantages and high efficiencies.”

- **Structure:** Concerning that there is not a defined structure of the Intellectual Capital for Football Clubs, following previous analysis and authors that were revealing about the Intellectual Capital structure; the study presents the proposal of the Intellectual Capital structure for Football Clubs, followed by the correspondent subcomponents “value creators”. The Intellectual Capital structure for Football Clubs can be considered as one of the first and fundamental steps towards the creation of the proposed Intellectual Capital valuation model. The mentioned scheme of such a structure was presented within Figure 13 of this study.
- **Intellectual Capital reporting and valuation model with indicators:** Based on the study conducted and literature examined about various models of the Intellectual Capital reporting and valuation, the study presents a proposal of the adequate and efficient model for such. The model is based on scores and indexes concerning the Intellectual Capital within Football Clubs. The model is accompanied by its correlated indicators that form the base for the subcomponents “value creators”. The proposed model enables the conducting of an efficient benchmarking, as well as pointing and responding faster to the possible weaknesses and threats of the Intellectual Capital within a Club. Further, it highlights the strengths and opportunities deriving from the company Intellectual Capital, all in order to react to the negative elements and maximize the business efficiency. Some of the strengths of the suggested conception could be: better insight into the weaknesses and strengths of the Intellectual Capital within the company, support in the efficient decision-making process, support in the creation of strategies, better insight into the Intellectual Capital of the company, enablement of the straight reaction and improvement on the weaker parts of the Intellectual Capital subcomponents, enhancement and support in the SWAT analysis, reducing the subjectivity, generating information and monitoring tool, supporting the benchmarking, etc. The model proposed has been tested and the final results with feedbacks from the respondents (professionals from the area) are presented as Appendixes A and B of this study.

- **Calculation steps:** Furthermore, the study presents the main table with all the calculation steps needed for the proposed valuation of the Intellectual Capital (Chapter 7.4, Tables 15 and 16). Consequentley, one of the highest achievements of the model is that once the valuation (calculation) is conducted, the model gives the opportunity to recognise and act directly on the weaknesses found within a company Intellectual Capital.

Finally, the model is highly applicable within the sports area (football), and the feedback from football professionals are highly positive. However, there can arise some questions related to the model and its possible future improvements that with further analysis and investigations can be accomplished. In this line, the suggestion would be directed on the quantitative improvements within the area of the subcomponents valuation. The mentioned could deliver an additional step in reducing, even more, the subjectivity of the model and maximise one of the key attributes of it - objectivity. Further, with deeper analysis and subcomponent dissections, the model can be taken as a quality base for developing an efficient Intellectual Capital valuation model within various business areas.

10.SUMMARY

Based on the study conducted, it is possible to conclude that for sports professionals and business experts, the Intellectual Capital can be recognized as one of the fundamental factors of the value creation, competitiveness and results of Football Clubs and businesses entities. The study starts with the research and definition of the Intellectual Capital highlighting its significance for entities based on the literature analyzed. Therefore, considering a various number of different definitions of the term, the study suggests a definition of the Intellectual Capital. Further, within the third chapter, the study researches the structure and components that mould the Intellectual Capital. Within the sixth chapter, one of the topics is to create an Intellectual Capital structure that can be applied to Football Clubs. The fourth chapter of the study analyses the intangible assets and compares the Intellectual Capital and intangibles. Moreover, it is important to point out that Intellectual Capital represents a much wider term than intangibles. Further within the same chapter, the study exposes initial fragments of the Intellectual Capital that can arise and be connected with different issues. The fifth chapter is studying and presenting current models of the Intellectual Capital valuation, with highlighted weaknesses and strengths of the same models. Finally, such an approach allows extracting the good parts necessary for the creation of an efficient Intellectual Capital valuation and

reporting model. The sixth chapter elaborates on the importance of the Intellectual Capital in managing Football Clubs. Additionally, it reviews financial reports of chosen Clubs and elaborates on the problematics of current reporting about the intangible assets and elements of Intellectual Capital. The seventh chapter studies the existing proposals of the Intellectual Capital valuation for Football Clubs. Based on the suggestions of those models and previously analysed valuation models of the Intellectual Capital for business entities, this chapter exposes the proposal for the efficient valuation and reporting of the Intellectual Capital for Football Clubs. Such a model, with minor changes, can be applied within other business areas as well. Further, a list of indicators for conducting such a valuation is presented. Additionally, a table with all the steps and calculations necessary for the valuation model is presented as well as all the study outcomes. The survey results are presented within the eight chapter of this study. Besides, the study presents the Survey (APPENDIX D) and the Intellectual Capital valuation model proposal accompanied with all the calculation steps and tables (APPENDIX C). Whereas APPENDIXES (A) and (B) present the results of the proposed model applied to the two Football Clubs. The system of indicators that supports the valuation process is presented as an APPENDIX (E).

CONTENT TABLES

Table 1: Percentage of intangible asset within two famous Football Clubs	15
Table 2: Facts comparison between the term of Asset and Intellectual Capital	43
Table 3: Difference between the market and book value of chosen entities (in Billions \$)	47
Table 4: Difference between the market and book value of chosen Football Clubs (in millions)	49
Table 11: Percentage of the intangible asset and debt ratio within several Football Clubs (in '000.000)	83
Table 14: Human Capital Sports area subcomponents variables description and indicators	115
Table 15: Human Capital Business area subcomponents variables description and indicators	124
Table 16: Intellectual Capital cumulative valuation template of one single committee member	134
Table 20: Overview of percentages of agreement with test questions in H2.....	142
Table 18: Human Capital Sports area subcomponents variables description and indicators	197

Table 19: Human Capital Business area subcomponents variables description and indicators	206
Table 20: Structural Capital Sports area subcomponents description and indicators	216
Table 21: Structural Capital Business area subcomponents variables description and indicators	220
Table 22: Relational Capital Sports area subcomponents variables description and indicators	225
Table 23: Relational Capital Business area subcomponents variables description and indicators	227

LIST OF FIGURES

Figure 1: Intellectual Capital position within a company value	11
Figure 2: Relationship between the Intellectual Capital and the value-added of the company	14
Figure 3: Dissection of the Intellectual Capital structure	23
Figure 4: Representation of the Human Capital Components according to different authors.	25
Figure 5: HC description according to Micilua (2016.).....	26
Figure 6: 15 keywords that are mostly used when presenting and defining the Structural Capital concept.....	28
Figure 7: Representation of the Structural Capital components according to different authors	29
Figure 8: Representation of the Relational Capital components according to different authors	32
Figure 9: Sveibys Intellectual Capital models classification (Sveiby, 2010.).	56
Figure 10: Skandia Market Value Scheme	58
Figure 11: Skandia Navigator according to Edvisson and Malone 1997.....	60
Figure 12: Four BSC prospective	63
Figure 13: Intellectual Capital structure proposal for Football Clubs	91
Figure 14: Structural Capital structure and subcomponents proposal for Football Clubs.....	93
Figure 15: Human Capital structure and subcomponents proposal for Football Clubs.....	96
Figure 16: Relational Capital structure and subcomponents proposal for Football Clubs	98
Figure 17: The FOrNeX Index Intellectual Capital map for the Football Clubs	103
Figure 18: Nexus Index map.....	105
Figure 19: Suggested representation of an efficient Intellectual Capital valuation and reporting model.....	112
Figure 20: Graphical representation of the level of agreement with test questions in H1....	162
Figure 21: Graphical representation of the level of agreement with test questions in H2....	164
Figure 22: Graphical representation of the level of agreement with test questions in H4....	167
Figure 23: Graphical representation of the level of agreement with test questions in H5....	169

REFERENCES

1. A. Andrikopoulos, N. Kaimenakis; “Introducing FOrNeX: a composite index for the intangible resources of the football club”; *International Journal of Sport Management and Marketing*; Vol 5. Issue 3.
2. A. Kapteyn, Utility and economics. *De Economist* 133, 1–20 (1985).
<https://doi.org/10.1007/BF01675959>
3. A. Kapteyn; “Utility and economics”, *De Economist* 133(1):1-20, DOI: 10.1007/BF01675959, January 1985.
4. Nazari, Jamal. (2014). *Intellectual Capital Measurement and Reporting Models*. 10.4018/978-1-4666-6457-9.ch008.
5. ÇALHAN, Özge & Akdağ, Gürkan & Oter, Zafer. (2020). *Intellectual Capital*. 10.5038/9781732127562.
6. Mutiasari, Astrid & Rizki, Amalia. (2020). THE EFFECT OF INTELLECTUAL CAPITAL, RATE OF GROWTH OF INTELLECTUAL CAPITAL (ROGIC) ON FINANCIAL PERFORMANCE WITH THE PROPORTION OF INDEPENDENT COMMISSIONERS AS MODERATED VARIABLES. *Journal of Security and Sustainability Issues*. 10. 438-448. 10.9770/jssi.2020.10.Oct(35).
7. A. Pulic, “VAIC™ – an accounting tool for IC management”; *International Journal of Technology Management*, 20(5-8), 702-714; (2000.)
8. A.N.A. Alkhateeb; L.Yao; J.K. Cheng; “Review of Intellectual Capital Components Research”, *Journal of Advanced Social Research*, June 2018.
9. A.R. Abdulaali; “The Impact of Intellectual Capital on Business Organization”; *Academy of Accounting and Financial Studies Journal* (2018).
10. B. Brinker.: *Intellectual Capital: Tomorrow's Asset, Today's Challenge*, Leader's Edge, Michigan Association of CPAs, August 1998
11. Kym, Hyogun & Moon, Yunji. (2021). *A Study on the Model Development for Intellectual Capital Valuation*.
12. B. Gerrard,: ‘A resource-utilization model of organizational efficiency in professional sports teams’, *Journal of Sport Management*, Vol. 19, 2005.
13. B.J. Epstein; E.K. Jermakowicz; “Interpretation and Application of IFRS 2008.”;
14. B: Boekestein; “The relation between Intellectual Capital and Intangible Asset of pharm. companies”; *Journal of Intellectual Capital* 7(2), 2006.

15. Bornemann et.al.: "Holistic Measurement of Intellectual Capital"; Conference: Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects; Amsterdam 1999.
16. C.J. Mensooh, "Law and Business in France: A Guide to French Commercial and Corporate Law"; M.N. Publishers, 1994.
17. D. Andriessen, "Making Sense of Intellectual Capital: Designing a Method for the Valuation of Intangibles"; Elsevier Butterworth-Heinemann, Oxford. (2004),
18. D. Sprčić, O. Sulje; „Procjena vrijednosti poduzeća“ Ekonomski fakultet Zagreb; (2011.).
19. D. Sundač, D.A Škalamera, M. Babić; "POSLOVNO OKRUŽENJE I INTELEKTUALNI KAPITAL"; Sveučilište u Rijeci, Ekonomski fakultet u Rijeci; (2016.).
20. D. Sundač, N. Švast. "Intelektualni Kapital temeljni čimbenik konkurentnosti poduzeća", Ministarstvo gospodarstva, rada i poduzetništva, Zagreb 2009.
21. E. Bueno, M.P. Salmador, O. Rodriguez; "The role of social capital in today's economy; empirical evidence and proposal of new model of Intellectual Capital", Journal of Intellectual Capital; (2004).
22. Filipe Sardo, Zélia Serrasqueiro, (2017); "A European empirical study of the relationship between firms' Intellectual Capital, financial performance and market value", Journal of Intellectual Capital, Vol. 18 Issue: 4, pp.771-788, <https://doi.org/10.1108/JIC-10-2016-0105>
23. G. Marchant, N.P. Barsky: Invisible but valuable? A framework for the measurement and management of intangible assets. 2nd World Congress of the Management of Intellectual Capital, Hamilton, 1997.
24. G. Pisacane and D. Zibetti; "Trademark. In: Intellectual Property in China"; China Law, Tax & Accounting. Springer, Singapore; (2020).
25. G. Roos, S. Pike, L. Fernstrom; "Managing Intellectual Capital in Practice" Butterworth-Heinemann, an imprint of Elsevier. USA; 2005.
26. H. Inkinen; "Intellectual Capital, knowledge management practices and firm performance"; Acta Universitatis Lappeenrantaensis; (2016).
27. H. Stolowy et.al; "Classification of Intangibles"; HEC Research Papers Series 712, HEC Paris, 2000.

28. H.P. Tan, D. Plowman, P. Hancock: The evolving research on the Intellectual Capital, *Journal of Intellectual Capital*, Vol. 9, 2008; No. 4.
29. H.Wen, R.M, Stephen; “Accounting for goodwill: An academic literature review and analysis to inform the debate”; *Research in Accounting Regulation*, Elsevier, 2016.
30. Hussinki, H., Ritala, P., Vanhala, M., Kianto, A. (2017). Intellectual Capital, knowledge management practices and firm performance. *Journal of Intellectual Capital*, vol. 18, issue 4. pp. 904-922. DOI: 10.1108/JIC-11-2016-0116
- I. Bujang and N. Naharu. “Measuring Intellectual Capital using VAIC Calculator.” *The International Journal of Academic Research in Business and Social Sciences* 8 (2018.)
31. I. Oyewobi; “What Valuation of Business and Goodwill Means”; *International Journal of Business and Management Invention (IJBMI)*, 2019.
32. Inkinen, H., Kianto, A., Vanhala, M. and Ritala, P. (2017), "Structure of Intellectual Capital – an international comparison", *Accounting, Auditing & Accountability Journal*, Vol. 30 No. 5, pp. 1160-1183
- Innovation” Chichester: John Wiley & Sons (1998.).
33. Ivinić, F. (2018). Značaj i vrednovanje intelektualnog kapitala u okviru nematerijalne imovine (Diplomski rad). Available at: <https://urn.nsk.hr/urn:nbn:hr:137:866468> (visited 15.03.2021)
34. J. C.Novas, M. C. G Alves, & A. Sousa; “The role of management accounting systems in the development of Intellectual Capital”. *Journal of Intellectual Capital*, (2017).
35. J. Chen, Z. Zhu, & H. Yuan Xie; “Measuring Intellectual Capital: a new model and empirical study”. *Journal of Intellectual Capital*; (2004).
36. J. Fijalkowska (2016.); “Value Added Intellectual Coefficient (VAIC™) as a Tool of Performance Measurement”; *Przedsiębiorczość i Zarządzanie*, University of Social Sciences Publishing House, ISSN 1733-2486 Volume XV, Issue 1, pp. 129–140
37. J. Guthrie; J.Dumay; F.Ricceri; C.Nielsen; „The Routledge Companion To Intellectual Capital“;Routlage 2017.; p. 351
38. J. Roos, G. Roos, N. Dragonetti, and L. Edvinsson; “Intellectual Capital: Navigating in the New Business Landscape”; New York University Press, New York, NY. (1997).

39. J.H. Daum; "Intangible Assets and Value Creation"; New York: John. John Wiley & Sons, Inc. (2003).
40. JL Dodd, S. Chen, (1996). EVA: A new panacea? *Business and Economic Review*, 42(4), 26-28.
41. K. E. Sveiby, "The Intangible Assets Monitor", *Journal of Human Resource Costing & Accounting*, 2(1), 73-97 (1997).
42. K. Asiaei, R. Jusoh; "A multidimensional view of Intellectual Capital: The impact on organizational performance"; (2015).
43. K. Černe; "Strateški računovodstveni sustav praćenja i proučavanja intelektualnog kapitala"; doktorska disertacija, Pula Odjel za ekonomiju i turizam "Dr. Mijo Mirković", 2011.
44. K.K. Choong; "Intellectual Capital: definitions, categorization and reporting models"; *Journal of Intellectual Capital*, Emerald Group Publishing Limited, Vol. 9, 2008; No. 4., (609 – 638).
45. Kolačević, S., Hreljac, B.: *Vrednovanje poduzeća, TEB – Poslovno savjetovanje d.o.o.*, Zagreb, 2009.
46. L. Canibano, M. Garcia-Ayuso, M.P. Sanchez; (2000), *Accounting for intangibles: a literature review*, "Journal of Accounting Literature", vol. 19.
47. L. Edvinsson, M. S Malone; "Intellectual Capital: Realizing your company's true value by finding its Hidden Brainpower", Harper Collins, New York, NY. (1997).
48. L. Jing, M.Musa, R. Pike; "The effect of audit committee characteristics on Intellectual Capital disclosure", *The British Accounting Review*, Volume 44, Issue 2, June 2012.
49. L.M. Gogan; D.C. Duran; A. Draghici; "Structural capital - A proposed measurement model" *Procedia Economics and Finance* 23 (2015) 1139 – 1146.
50. M. Abbas; "INTELLECTUAL CAPITAL AND ITS MAJOR COMPONENTS"; *Journal of Technology and Operations Management* 10(1), 15-21 (2015).
51. M. Babić; "Intelektualni kapital u funkciji unaprijeđenja korporativnog imidža uslužnih djelatnosti" doktorska disertacija, Ekonomski Fakultet u Rijeci, Rijeka 2009.
52. M. C. Whang; *Value relevance on Intellectual Capital valuation methods: the role of corporate governance*, 2012.

53. M. Kern, B. Sussmuth; ‘Managerial efficiency in German top-league soccer: an econometric analysis of club performances on and off the pitch’, German Economic Review, Vol. (2005.).
54. M. W. J. Khan; “A Critical Review of Empirical Studies in Intellectual Capital Literature” International Journal of Academic Research in Business and Social Sciences, 4(11), 159-176. (2014).
55. M.Kozak; “Strategic approach to Intellectual Capital development in regions”; International Journal of Learning and Intellectual Capital 8(1); December 2011.
56. Martin, C., Hartley, J.: SME Intangible assets, Research Report, The Association of Chartered Certified Accountants, London, 2006., No. 3., (1 – 79).
57. Miciuła, I. (2016). The Measurement of Human Capital Methods. Folia Oeconomica Stetinensia, 16, 37 - 49.
58. Miciuła, Ireneusz; 2016., “The Measurement of Human Capital Methods” vol. 16; Folia Oeconomica Stetinensia
59. Moro Visconti R. (2020) Goodwill Valuation. In: The Valuation of Digital Intangibles. Palgrave Macmillan, Cham
60. N. Bontis; “Assessing knowledge assets: a review of the models used to measure Intellectual Capital”; International journal of management reviews, 3(1), 41-60. (2001).
61. N. Bontis; „ASSESSING KNOWLEDGE ASSETS: A Review of the Models Used to Measure Intellectual Capital“; California; 2000.
62. N. Bontis; „ASSESSING KNOWLEDGE ASSETS: A Review of the Models Used to Measure Intellectual Capital“; California; 2000.
63. N.Karaman Aksentijević: „Ljudski potencijali i ekonomski razvoj“, Ekonomski Fakultet u Rijeci, 2012.
64. Obeidat, B. Y., Tarhini, A., Masadeh, R., & Aqqad, N. O. (2017). “The impact of Intellectual Capital on innovation via the mediating role of knowledge management: A structural equation modelling approach.” International Journal of Knowledge Management Studies, 8(3-4), 273-298.
65. Official Gazette of the United States Patent Office; Vol 58. No 13.
66. P.H. Sullivan; “Profiting from Intellectual Capital – Extracting Value from
67. Pınar Gürel; Y. Aytül Dağlı Ekmekçi; İlhan Küçükkapla; “MEASURING INTELLECTUAL CAPITAL FOR FOOTBALL CLUBS: EVIDENCE FROM

- TURKISH FIRST DIVISION FOOTBALL LEAGUE”; Pamukkale Journal of Sport Sciences 2013, Vol.4, No.1, Pg:36-47
68. R. Dzinkowski, “The measurement and management of Intellectual Capital, International Management Accounting Study”, 2000.
 69. R. F. Larkin, M. Di Tommaso; “Intangible Asset”; chepter from; Wiley Not-for-Profit GAAP 2019.
 70. R. Hosnavi, M. Ramezan; “Intellectual Capital and Organizational Organic Structure How are these Concepts Related?” Trends in Applied Sciences Research, 6: 256-268. 2011.
 71. R.M. Visconti; “The Valuation of Intangible Assets: An Introduction”; SSRN Electronic Journal; January 2019.
 72. Rodov, Irena, and Philippe Leliaert. "FiMIAM: financial method of intangible assets measurement." Journal of Intellectual Capital 3.3 (2002)
 73. Roos, G., Pike, S., Fernström, L.: Managing Intellectual Capital in Practice, Elsevier Butterworth – Heineman, Burlington, 2005.
 74. S. Mohtar, I.S.A. Rahman, M. Abbas; “INTELLECTUAL CAPITAL AND ITS MAJOR COMPONENTS”; Journal of Technology and Operations Management 10(1), 15-21 (2015)
 75. S. Pirijo, S.Stern, A. Samuli; “Value Added Intellectual Coefficient (VAIC): a critical analysis”; Journal of Intellectual Capital · October 2011.
 - 76.S. Svanadze, M. Kowalewska; “The measurement of Intellectual Capital by VAIC method – example of WIG20”Online Journal of Applied Knowledge Management, International Institute for Applied Knowledge Management Volume 3, Issue 2, 2015 36
 77. S.L. Chang; J. Hsieh; “Intellectual Capital and Value Creation-Is Innovation Capital a Missing Link?”; International Journal of Business and Management Vol. 6, No. 2; February 2011
 78. Ståhle, P., Ståhle, S. and Aho, S. (2011), "Value added intellectual coefficient (VAIC): a critical analysis", Journal of Intellectual Capital, Vol. 12 No. 4, pp. 531-551.
 79. T. A. Stewart; “Intellectual Capital: The new wealth of nations”. New York. (1997).

80. T. Arenas, L. Lavanderos; “Intellectual Capital: object or process?” *Journal of Intellectual Capital*, Emerald Group Publishing Limited, Vol. 9., 2008., No. 1., (77 – 85).
81. V.Dzenopoljac, C.Yaacoub, N.Elkanj, N. Bontis; “Impact of Intellectual Capital on corporate performance: evidence from the Arab region”; *Journal of Intellectual Capital* (2017).
82. W.C. Neale: ‘The peculiar economics of professional sports’; *Quarterly Journal of Economics*; Vol. 78, pp.1–14. (1964.)
83. W.S. Chand, J.Hiesh; “Intellectual Capital and Value CreationIs Innovation Capital a Missing Link?”; *International Journal of Business and Management* Vol. 6, No. 2; February 2011
84. Wayland, F. (1853). “The elements of political economy”. Boston: Gould and Lincoln.
85. Z. Petrović, D. Stefanović, M. Milojević, N. Stanić; “INTERNALLY GENERATED GOODWILL ASSESSMENT: CONTEMPORARY TIMES REQUIREMENT OR NOT?”; Finiz, Belgrade, 2014.

FH Burgenland University of Applied Sciences

International Joint Cross – Border PhD Programme

APPENDIX A – Model Proposal final valuation table applied on one Spanish LaLiga Club

- a) Applied Intellectual Capital valuation final result and supervisor remarks

IC CUMMULATIVE RESULT	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENTS IC VALUE
HUMAN CAPITAL VALUE INDEX	4.9	4.7	9.6
STRUCTURAL CAPITAL VALUE INDEX	5.2	3.5	8.7
RELATIONAL CAPITAL VALUE INDEX	3.4	4.4	7.7
INTELLECTUAL CAPITAL VALUE OF THE ENTITY	4.5	4.2	8.7

- b) Supervisor remarks:

Following the calculations and score value estimation, the final Intellectual Capital value of the Club examined is - Acceptable (Final Value: 8,7). The club presented the highest result within the area: Structural Capital Sports Area (5.2). The Sports Area cumulative result is slightly higher than the Business Area for a value of 0.3 the Club presented a highest value of the components within the Intellectual Capital component of Human Capital (result: good value). There are three variables valued with a maximal grade of (7), all the three are related to the Structural Capital of the sports area. The suggestion is that in a long term the club develops a stronger academy, the proposed shouldn't be difficult to obtain due to a fact that sports infrastructure is evaluated as good as well as other components of the Structural Capital of the Sports area. The highest evaluated variables within the sports area of the Human Capital are the Medical team and the responsibility of the Sports department. While the highest evaluated variables of the Structural Capital of the sports area are related to

training materials and used software. The variables evaluated with the highest scores within the Relational Capital component of the sports area are relations and networking with scouts. When it's about the business area then the highest evaluated variables are for the Relational Capital (experience and level of education), Structural Capital (history of the Club), Human Capital (networkings and institutional relations). Further analyses are possible to make by analysing the valuation conducted.

c) Supervisor professional opinion about the model proposed:

“The model produces an average that helps objectively to evaluate the perception of the clubs and their internal problems or strengths and the points that should be improved for their own benefit as well as pointing on the good sides. In order to increase the global value of the company the average must be closer to the maximum. The tool itself takes owners of clubs to identify the weaknesses to face and guide their decision making.

The outcome of the average in between the sections of clubs might release a problem of vision and mission internally. Owners of clubs must guide the club as a unit, no matter sections are differentiated. Big gaps in between sections in the same study can represent internal instability and need of change in politics, vision and mission of the club as a company. Finally, the model is very useful and it provides a wide range of quality information for users”. Board member of a FC.

APPENDIX B – Model proposal Final valuation table applied on one Croatian First Division Club

a) Applied Intellectual Capital valuation final result and supervisor remarks

IC CUMMULATIVE RESULT	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENTs IC VALUE
HUMAN CAPITAL VALUE INDEX	4.1	5.8	9.9
STRUCTURAL CAPITAL VALUE INDEX	4.3	5.0	9.3
RELATIONAL CAPITAL VALUE INDEX	5.1	5.9	11.1
INTELLECTUAL CAPITAL VALUE OF THE ENTITY	4.5	5.6	10.1

b) Supervisor remarks:

According to the valuation conducted it is possible to conclude that the Intellectual Capital of the evaluated Club has a final value: good value (10.1⁶⁶). of the maximum value of 14. The cumulative value of the business area (5.6) of the evaluated club is 16% higher than the cumulative value of the sports area (4.5). Based on the valuation conducted the club showed the highest value of the Relational Capital component (11.1) while the lowest value is related to the Structural Capital (9.3). Further, the highest value presented is related to the Relational Capital of the business area (5.9) while the lowest value is related to the Human Capital of the Sports area (4.1). Based on the valuation conducted the weaknesses and treats that are necessary to highlight are related to the sports area where some variables (sports infrastructure and productivity) are evaluated as extremely low (2). While several variables are valuated with (3) bad value. The highest presented values are related to the business area where few variables were evaluated with the maximal value of (7). Its important to point out that one significant variable (coaches and players - academy) was evaluated by all the members with a value (6). A detailed analysis and comparison of values and variables valuation is possible to conduct by analysing the model main calculation sheet.

c) Supervisor professional observations about the model proposed:

“The proposed model is a very simple and efficient tool for the valuation of the Intellectual Capital of a football club. Something similar was needed and the opinion is that it should be introduced within clubs as a mandatory model to present as the addition to the financial statements. It offers a wide range of opportunities to conduct comparisons between clubs and

⁶⁶ Score value

it could be used from the management in the decision making process. Owners and other interested groups can get a numerous volume of information and base for the problems solving. Finally, the model is a very useful and efficient tool for the valuation of the Intellectual Capital". FC, CEO.

**APPENDIX C – INTELLECTUAL CAPITAL VALUATION TABLES
MODEL PROPOSAL**

“Intellectual Capital as a value driver of Football Clubs”

Fabio Ivinić

University of Applied Sciences Burgenland

International Joint Cross – Border PhD Programme

Campus 1

7000, Eisenstadt - Austria

fivinic@gmail.com

a) Human Capital Valuation

HUMAN CAPITAL

SPORTS AREA HUMAN CAPITAL	
VARIABLES	VALUE TO ASSIGN (1 min -7 max)
Learning and educations	
Innovations	
Team spirit	
Commitment	
Experience	
Personal skills & development	
Motivations	
Ability to innovate	
Competences	
Loyalty	
Diligence	
Productivity	
Responsibility	
Persistence and resolution	
Proactivity	
Managerial skills	
Problems solving abilities	
Flexibility and adaptability	
Critical reflection	
Coaches and players	
Communicational skills	
Social abilities	
Medical team	
Other components of a similar character TO ADD BELOW	
VALUE	SPORTS AREA HC VARIABLES SUM “A” / n VARIABLES

BUSINESS AREA HUMAN CAPITAL	
VARIABLES	VALUE TO ASSIGN (1 min -7 max)
Know - how concept	
Learning and educations	
Innovations	
Commitment	
Team spirit	
Experience	
Personal skills & development	
Motivations	
Ability to innovate	
Competences	
Loyalty	
Diligence	
Social intelligence	
Productivity	
Education	
Responsibility	
Persistence and resolution	
Proactivity	
Communicational skills	
Managerial skills	
Problems solving abilities	

Flexibility and adaptability	
Critical reflection	
Employees	
Other components of a similar character TO ADD BELOW	
VALUE	BUSINESS AREA HC VARIABLES SUM "A" / n VARIABLES

AUDIT COMMITTEE MEMBER COMMENTS AND REMARKS FOR HUMAN CAPITAL

b) Structural Capital Valuation

STRUCTURAL CAPITAL

SPORTS AREA STRUCTURAL CAPITAL	
VARIABLES	VALUE TO ASSIGN (1 min -7 max)
Training materials	
Performance monitoring & controlling tools / gadgets	
Players data bases	
Organizational structures and responsibility levels	
Software's and apps	
Strategies & Plans	
Culture	
Professionals licences	
Sport department reporting structures and communication channels	
Internal acts and decisions	
Sports Infrastructure level	
Other components of a similar character TO ADD BELOW	
VALUE	SPORTS AREA SC VARIABLES SUM "A" / n VARIABLES

BUSINESS AREA STRUCTURAL CAPITAL	
VARIABLES	VALUE TO ASSIGN (1 min -7 max)
History	
HRM system	
Procedures	
Brand and History	
Internal communication channels	
Data base	
Organizational structures and responsibility levels	
Licences	
Copyrights	
Trademarks and merchandise	
Reporting structures	
Intellectual property	
Franchise	
Software	
Strategies & plans	
Operating systems	
Business organization & chart	
Controlling	
Internal acts and decisions	
Controlling and monitoring tools	
Organizational culture	
Other components of a similar character TO ADD BELOW	
VALUE	BUSINESS AREA SC VARIABLES SUM "A" / n VARIABLES

<p>AUDIT COMMITTEE MEMBER COMMENTS AND REMARKS FOR STRUCTURAL CAPITAL</p>

c) Relational Capital Valuation

RELATIONAL CAPITAL

SPORTS AREA RELATIONAL CAPITAL	
VARIABLES	VALUE TO ASSIGN (1 min -7 max)
Sports management relations and networks	
Relations with stakeholders (agents and agencies)	
Sports Business interest cooperation	
Sales channels	
Sports department image	
Reputation	
Ability of attracting (scouts, players...)	
Third part value creating perception	
Other components of a similar character TO ADD BELOW	
VALUE	SPORTS AREA RC VARIABLES SUM "A" / n VARIABLES

BUSINESS AREA RELATIONAL CAPITAL	
VARIABLES	VALUE TO ASSIGN (1 min -7 max)
Business & Sales department relations and networks	
Institutional Relations networks	
Relations with stakeholders & sponsors	
Marketing networks	
Brand	
Business interest cooperation	
Sales channels	
Business entity image	
Reputation	
Relations with the media	
Ability of attracting (Fans, partners, cooperation...)	
Value creating perception	
Relations with all the members and fans	
CRM	
Other components of a similar character TO ADD BELOW	
VALUE	BUSINESS AREA RC VARIABLES SUM "A" / n VARIABLES

<p>AUDIT COMMITTEE MEMBER COMMENTS AND REMARKS FOR RELATIONAL CAPITAL</p>

d) Cumulative values per committee members

AUDIT COMMITTEE MEMBER "A"	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENT IC VALUE
HUMAN CAPITAL VALUE INDEX	SPORTS AREA INDEX "A" ⁶⁷	BUSINESS AREA INDEX "A"	SAI ⁶⁸ + BAI ⁶⁹
STRUCTURAL CAPITAL VALUE INDEX	SPORTS AREA INDEX "A"	BUSINESS AREA INDEX "A"	SAI + BAI
RELATIONAL CAPITAL VALUE INDEX	SPORTS AREA INDEX "A"	BUSINESS AREA INDEX "A"	SAI + BAI
INTELLECTUAL CAPITAL VALUE	SUM INDEX VALUES SPORTS AREA "A"/ 3	SUM INDEX VALUES BUSINESS AREA "A"/ 3	SIVSA⁷⁰ + SIVBA⁷¹

AUDIT COMMITTEE MEMBER "B"	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENT IC VALUE
HUMAN CAPITAL VALUE INDEX	SPORTS AREA INDEX "B"	BUSINESS AREA INDEX "B"	SAI + BAI
STRUCTURAL CAPITAL VALUE INDEX	SPORTS AREA INDEX "B"	BUSINESS AREA INDEX "B"	SAI + BAI
RELATIONAL CAPITAL VALUE INDEX	SPORTS AREA INDEX "B"	BUSINESS AREA INDEX "B"	SAI + BAI
INTELLECTUAL CAPITAL VALUE	SUM INDEX VALUES SPORTS AREA "B"/ 3	SUM INDEX VALUES BUSINESS AREA "B"/ 3	SIVSA + SIVBA

⁶⁷ „A“ = Committee member „A“

⁶⁸ SAI = Sports Area Index

⁶⁹ BAI = Business Area Index

⁷⁰ SIVSA = Sum Index Value Sports Area

⁷¹ SIVBA = Sum Index Value Business Area

AUDIT COMMITTEE MEMBER “C”	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENT IC VALUE
HUMAN CAPITAL VALUE INDEX	SPORTS AREA INDEX “C”	BUSINESS AREA INDEX “C”	SAI + BAI
STRUCTURAL CAPITAL VALUE INDEX	SPORTS AREA INDEX “C”	BUSINESS AREA INDEX “C”	SAI + BAI
RELATIONAL CAPITAL VALUE INDEX	SPORTS AREA INDEX “C”	BUSINESS AREA INDEX “C”	SAI + BAI
INTELLECTUAL CAPITAL VALUE	SUM INDEX VALUES SPORTS AREA “C”/ 3	SUM INDEX VALUES BUSINESS AREA “C”/ 3	SIVSA + SIVBA

AUDIT COMMITTEE MEMBER “D”	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENT IC VALUE
HUMAN CAPITAL VALUE INDEX	SPORTS AREA INDEX “D”	BUSINESS AREA INDEX “D”	SAI + BAI
STRUCTURAL CAPITAL VALUE INDEX	SPORTS AREA INDEX “D”	BUSINESS AREA INDEX “D”	SAI + BAI
RELATIONAL CAPITAL VALUE INDEX	SPORTS AREA INDEX “D”	BUSINESS AREA INDEX “D”	SAI + BAI
INTELLECTUAL CAPITAL VALUE	SUM INDEX VALUES SPORTS AREA “D”/ 3	SUM INDEX VALUES BUSINESS AREA “D”/ 3	SIVSA + SIVBA

e) Intellectual Capital valuation result and supervisor remarks

IC CUMMULATIVE RESULT	VALUE SPORTS AREA	VALUE BUSINESS AREA	CUMMULATIVE COMPONENTS IC VALUE
HUMAN CAPITAL VALUE INDEX	HC INDEX VALUES SPORTS AREA “A + B + C + D” / 4	HC INDEX VALUES BUSINESS AREA “A + B + C + D” / 4	VSA + VBA
STRUCTURAL CAPITAL VALUE INDEX	SC INDEX VALUES SPORTS AREA “A + B + C + D” / 4	SC INDEX VALUES BUSINESS AREA “A + B + C + D” / 4	VSA + VBA
RELATIONAL CAPITAL VALUE INDEX	RC INDEX VALUES SPORTS AREA “A + B + C + D” / 4	RC INDEX VALUES BUSINESS AREA “A + B + C + D” / 4	VSA + VBA
INTELLECTUAL CAPITAL VALUE OF THE ENTITY	SUM INDEX VALUES SPORTS AREA “A + B + C + D” / 3	SUM INDEX VALUES BUSINESS AREA “A + B + C + D” / 3	SIVSA + SIVBA “ICVE”⁷²
MAIN SUPERVISOR COMMENTS			

⁷² ICVE = Intellectual Capital Value of the entity

APPENDIX D - SURVEY

“Intellectual Capital as a value driver of Football Clubs”

Fabio Ivinić

University of Applied Sciences Burgenland

International Joint Cross – Border PhD Programme

Campus 1

7000, Eisenstadt - Austria

fivinic@gmail.com

The scope of the survey is to test the hypotheses set in the PhD dissertation entitled “INTELLECTUAL CAPITAL AS A VALUE DRIVER OF FOOTBALL CLUBS”.

The results of the survey will be elaborated and used for the scope of a dissertation research of the author.

Figure 1: Authors Intellectual Capital definition proposal

“The Intellectual Capital is a hidden part of a company asset whose value variates during time, and has the structure whose components differ among industries. However, it is a company’s treasure that needs to be detected, well managed, defined and structured in order to gain comparative advantages and high efficiencies”

**1) SURVEY OPENING QUESTION – please mark your opinion with “x”
regarding the following statement**

	Agree	Neither agree neither disagree	Disagree
Professional Football Clubs nowadays are managed and organized like business entities.			

2) A) H1: “*The IC is an important factor in the organizational development*” -

Hypothesis testing questions

When filling in the questionnaire, please mark the level of agreement / disagreement with the following statements with an X:					
1 - I Strongly disagree 2 - I disagree 3 - I can't estimate 4 - I agree 5 - I Strongly agree					
	1	2	3	4	5
The Intellectual Capital is an important factor of the organizational development					
The creativity of employees is important for the organizational development					
All the skills and abilities of employees can improve and increase the organizational performances					
The relations that a company has with its stakeholders are important for the organizational development					
Intellectual property are important for the organizational result					
Organizational processes are important for the organizational development and result					
The Intellectual Capital importance is equal for business entities and Football Clubs					
Employees actions and activities have an impact on the balance sheet results					
The value added is mostly generated by employees actions					
The Intellectual Capital from the level of importance can be compared with the financial capital of the business entity					
Investing in the Intellectual Capital subcomponent (licences and intellectual property development) is useful for the company					
A company that is aware about its Intellectual Capital responds faster to market challenges					

B) H2: “The IC structure components have an impact on a company business result” - Hypothesis testing questions

When filling in the questionnaire, please mark the level of agreement / disagreement with the following statements with an X:					
1 - I Strongly disagree 2 - I disagree 3 - I can't estimate 4 - I agree 5 - I Strongly agree					
	1	2	3	4	5
Entities are still not aware about the meaning of IC structure					
Entities are not familiar with all the benefits coming from the IC structure					
“Organizational processes” are helping the organization in creating the efficient working systematization					
“Creativity”, is bringing to the organization various positive business possibilities					
“Sports performances monitoring tools” are helping the Football Club in its development and efficiency					
“Relations with stakeholders” are important for a company business result and development					
“Sport Club fans” are important for a company business result and development					
“Softwares” are helping the entities in the development and business results					
Management efforts and goals are often focused on keeping efficient and quality employees					
IC structure subcomponents “employees ability to innovate” is helping entities in the creation of efficient strategies					
IC structure subcomponents “proactivity” is helping entities to gain comparative advantages					

C) H3: “Knowledge about the IC value is useful for a company stakeholders” -

Hypothesis testing questions:

When filling in the questionnaire, please mark the level of agreement / disagreement with the following statements with an X: 1 - I Strongly disagree 2 - I disagree 3 - I can't estimate 4 - I agree 5 - I Strongly agree					
	1	2	3	4	5
Balance sheet data are not sufficient to obtain complete and precise information regarding the business entity					
Based on the BS it's hard to estimate the value creation possibilities of each employee					
Awareness about the IC value is useful for a company stakeholders					
When investing in a certain entity or club, investors are taking into consideration various factors and variables (not exclusively Balance Sheet data)					
In case of employees (players) leaving the company / Club, companies can face negative effects on business activities and results					
Stakeholders would like to have a precise value data and complete insight regarding the IC of a company					
An experienced professional with a high relations network can generate higher values for a company					
High IC value generates more opportunities for the entity					
The category of “goodwill” can be considered as a “hidden” IC value					
Investors will invest in projects that are presenting extensive and complete data					

D) H4: “The management is aware about the the Intellectual Capital within Football Clubs”- Hypothesis testing questions:

When filling in the questionnaire, please mark the level of agreement / disagreement with the following statements with an X:					
1 - I Strongly disagree 2 - I disagree 3 - I can't estimate 4 - I agree 5 - I Strongly agree					
	1	2	3	4	5
Sport Directors with good reputation and social abilities (Relational Capital) have a capacity of generating opportunities					
Sport Clubs are in need of quality employees that can face business challenges and support the organizational development					
Football Clubs need a quality institutional relations management					
Sales channels (sports and corporative) are important for Football Clubs					
Business networks are important for the sport club corporative department success					
A reputation is important for the sport club opportunities and success					
The value creation perception is important for the FC Sports department success					
The know-how concept of a Football Club is important for sports and business achievements					
HRM is important for Football Clubs					
Fans are generating values for Football Clubs					
Players and coaches are generating values for Football Clubs					

E) H5: “The IC has an impact on a Football Club business results” - Hypothesis

testing questions:

When filling in the questionnaire, please mark the level of agreement / disagreement with the following statements with an X: 1 - I Strongly disagree 2 - I disagree 3 - I can't estimate 4 - I agree 5 - I Strongly agree					
	1	2	3	4	5
The Structural Capital subcomponent of “organizational processes” has an impact on a Football Club business results					
The Human Capital subcomponent “motivation” has an impact on a Football Club business result					
The Human Capital subcomponent “motivation” has an impact on a Football Club sport result					
The IC doesn't have any impact on a FC business results					
Having an excellent corporative department Football Clubs can achieve higher financial and organizational results					
IC value within Football Clubs is significant as the IC within other business entities (areas)					
Well managed IC structure helps Football Clubs in their business achievements					
The category of “goodwill” should be evaluated and considered as “hidden” IC value of Football Clubs					
The key of a Football Club business and sport success are people					
The Structural Capital subcomponent “Strategies & Plans” has an impact on a Football Club business and sports result					
The Relational Capital subcomponent “Ability of attracting (partners, scouts, sponsors, fans etc.)” has an impact on a Football Club business result					

F) H6: “The IC valuation and reporting model is useful for Football Clubs” -

Hypothesis testing questions:

When filling in the questionnaire, please mark the level of agreement / disagreement with the following statements with an X:					
1 - I Strongly disagree 2 - I disagree 3 - I can't estimate 4 - I agree 5 - I Strongly agree					
	1	2	3	4	5
There is not a tool for the IC valuation within Football Clubs					
There is not a tool for reporting about the IC within Football Clubs					
The Intellectual Capital value of a company should be presented as an Appendix of the balance sheet					
Having the information regarding the IC value would be useful for the more efficient wages policy					
Having a full IC insight would be easier and more efficient for the labour systematization					
An accurate IC report would be of a great help for investing in a Football Club					
A quality IC valuation model would be useful for business entities					
A quality IC valuation model would be useful for Football Clubs					
A quality IC reporting model would be useful for business entities					
A quality IC reporting model would be useful for Football Clubs					

<u>If you are able</u>, please mark the approximate ratio of the market value and book value of your business entity
<p>In case the Market value of your entity is lower than the book value:</p> <p>Example; 0.1 = market value is 10% the book value</p> <p>0.3 0.4 0.5 0.6 0.7 0.8 0.9</p> <p>1 = Market value equals the book value</p> <p>In case the Market value of your entity is higher than the book value:</p> <p>Example; 1.1 = Market value is 10% (0,10) higher than the book value</p> <p>1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 Other; _____</p>

3) BUSINESS ENTITY MARKET AND BOOK VALUES

4) BUSINESS ENTITY ADDITIONAL INFORMATIONS

ADDITIONAL INFORMATIONS ABOUT YOUR BUSINESS ENTITY	
<p>Business entity name and your position within it:</p> <hr/> <p>Name and surname _____ (by writing your name you accept to be mentioned in a PhD dissertation as one of the prominent Professionals who helped in the development of the study)</p>	<p>Is there any practice within your business entity of reporting about the Intellectual Capital or at least some of its components?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, witch components : <input type="checkbox"/> Human Capital <input type="checkbox"/> Relational Capital <input type="checkbox"/> Structural Capital</p>
<p>Entity legal form: <input type="checkbox"/> craft <input type="checkbox"/> share company <input type="checkbox"/> LLC <input type="checkbox"/> public company</p> <p>Please indicate counties where you have been working in Football; _____</p>	<p>The IC value should be presented?</p> <p><input type="checkbox"/> as part of the balance sheet <input type="checkbox"/> as an balance sheet appendix <input type="checkbox"/> shouldn't be evaluated and presented</p>
	<p>If you have, how big is the yearly budget</p>

Stock market listing: <input type="checkbox"/> Yes <input type="checkbox"/> No	related for various employees' trainings and studies?
Business Activity: _____	Would you like to introduce any kind of the Intellectual Capital report within your annual report? <input type="checkbox"/> Yes <input type="checkbox"/> No
Number of employees _____	Do you consider that your entity would have a higher value if the Intellectual Capital rate is included in the annual report? <input type="checkbox"/> Yes <input type="checkbox"/> No
Approx. % of employees with: PhD _____ Mr.sc. _____ lower than listed _____	In your business, the role of strategical accounting decision making is intended for; <input type="checkbox"/> accountants <input type="checkbox"/> management <input type="checkbox"/> CFO
The knowledge regarding the Intellectual Capital area should be improved? <input type="checkbox"/> Yes <input type="checkbox"/> No	

FH Burgenland University of Applied Sciences

International Joint Cross – Border PhD Programme

APPENDIX E – INDICATORS

Table of the Human Capital Sports area subcomponents variables description and indicators

HUMAN CAPITAL SPORTS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Learning and education	How high is the educational and professional level of professionals in the area of sports (their licences' levels, education, continuous learning and personal development of people within the Sports area of the club) ?	<p>1 – There are not acceptable levels of licenses and education required at all</p> <p>2 – There is a minimum of 10% of people with professional competences and licences</p> <p>3 – There is minimum of 30% of professionals within the sports structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <p>4 – There is minimum of 50% of professionals within the sports structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <p>5 – There is minimum of 80% of professionals within the sports structure have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <p>6 – 90 to 95% of professionals within the sports structure have adequate licences for the position assigned and continually developing their knowledge</p> <p>7 – All the professionals within the sports structure have adequate licences for the position assigned and continually developing their knowledge</p>

<p>Innovations</p>	<p>How high you consider the use and development of innovations within the Club?</p>	<p>1 – There are not acceptable levels of innovations required at all the levels of the sports structure of the Club 2 – There is a minimum of 10% of professionals within the sports area that are innovative and developing their role in this direction 3 – There is minimum of 30% of professionals within the sports area that are innovative and developing their role in this direction 4 – There is minimum of 50% of professionals within the sports area that are innovative and developing their role in this direction 5 – There is minimum of 80% of professionals within the sports area that are innovative and developing their role in this direction 6 – 90 to 95% of professionals within the sports area that are innovative and developing their role in this direction 7 – All the professionals within the sports structure are innovative and are developing their role in this direction</p>
<p>Team spirit</p>	<p>How do you rate the team spirit between the first team and professionals in the sports structure, their will of doing the best?</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
<p>Commitment</p>	<p>Refers to the level of enthusiasm, responsibility for the goals and vision of the sports department and all the players and staff towards the tasks assigned.</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Experience	How experienced are professionals from the Sports area and how experienced is the squad?	<p>1 – There is an insufficient level of experience among the first team and the professionals in the sports area structure</p> <p>2 – There is an extremely low level of experience within the sports area structure and team</p> <p>3 – There is a bad level of experience within the sports area structure and team</p> <p>4 – There is an average level of experience within the sports area structure and team</p> <p>5 – There is minimum of 80% of professionals within the sports structure that are experienced in the role assigned or there is a good mix between experienced and young professionals within the area</p> <p>6 – There is minimum of 85% of professionals within the sports structure that are experienced in the role assigned or there is a high value mix between experienced and young professionals within the area</p> <p>7 – Professionals from the sports area and players have an excellent level of experience or there is a good mix between experienced and young professionals within the area</p>
Personal skills & development	How skilled for the role assigned are the people from the sports department area and how interested they are in studying and personal developments?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Motivations	How motivated you consider the people involved in the Sports area structure of the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Ability to innovate	How innovative are the people within the Sports area structure of the Club?	<p>1 – There are not acceptable levels of innovations required at all the levels of the sports structure of the Club</p> <p>2 – There is a minimum of 10% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>3 – There is minimum of 30% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>4 – There is minimum of 50% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p>

		<p>5 – There is minimum of 80% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>6 – 90 to 95% of professionals within the sports area that are willing and able to start innovations and apply them in their work</p> <p>7 – All the professionals within the sports structure are innovative and are willing to introduce innovations for their role</p>
Competences	How do you rate the competences of the team and people involved in the sports area structure of the Club?	<p>1 – There are not acceptable levels of competences required at all the levels of the sports structure of the Club</p> <p>2 – There is a minimum of 10% of professionals within the sports area that are competent and efficient within the role and tasks assigned</p> <p>3 – There is minimum of 30% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>4 – There is minimum of 50% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>5 – There is minimum of 80% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>6 – 90 to 95% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>7 – All the professionals within the sports structure are competent and efficient within the position and role assigned</p>
Loyalty	How do you rate the loyalty of the team and people involved in the sports area structure in relation to the Club?	<p>1 – There are not acceptable levels of loyalty within the sports structure (players and professionals) required at all</p> <p>2 – There is a minimum of 10% of people from the sports area that are loyal to the Club and role assigned</p> <p>3 – There is minimum of 30% of professionals within the sports structure that are loyal to the Club and role assigned</p> <p>4 – There is minimum of 50% of professionals within the sports structure that are loyal to the Club and role assigned</p> <p>5 – There is minimum of 80% of professionals within the sports structure that are loyal to the Club and role assigned</p> <p>6 – 90 to 95% of professionals within the sports structure are loyal to the Club and role assigned</p> <p>7 – All the professionals within the sports structure are loyal to the Club and role assigned</p>

Diligence	How diligent are the people within the Sports area structure of the Club?	<p>1 – There are not acceptable levels of diligence within the sports area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are persistent and serious in their role</p> <p>3 – There is minimum of 30% of professionals within the sports structure that are diligent in their work within the position assigned</p> <p>4 – There is minimum of 50% of professionals within the sports structure that are diligent in their work within the position assigned</p> <p>5 – There is minimum of 80% of professionals within the sports structure that are diligent in their work within the position assigned</p> <p>6 – 90 to 95% of professionals within the sports structure are diligent in their work within the position assigned</p> <p>7 – All the professionals within the sports structure are diligent in their work within the position assigned</p>
Productivity	How do you evaluate the productivity of the people within the Sports Department?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Responsibility	How responsible for the role assigned are the people within the Sports area structure of the Club?	<p>1 – There are not acceptable levels of responsibility within the sports area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>3 – There is minimum 30% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>4 – There is minimum 50% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>5 – There is minimum 80% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>6 – 90 to 95% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>7 – All the professionals within the sports structure are responsible and serious for the tasks and role assigned</p>

<p>Persistence and resolution</p>	<p>How persistent are the people within the sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of persistence and resolution from the professionals from the sports area in the execution of their roles and tasks assigned 2 – There is a minimum of 10% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 3 – There is minimum 30% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 4 – There is minimum 50% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 5 – There is minimum 80% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 6 – 90 to 95% of people in the sports area structure that are persistent in the execution of their roles and tasks assigned 7 – All the professionals within the sports structure are persistent in the execution of their roles and tasks assigned</p>
<p>Proactivity</p>	<p>How proactive are the people within the sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of proactivity from the professionals from the sports area 2 – There is a minimum of 10% of people in the sports area structure that are proactive 3 – There is minimum 30% of people in the sports area structure that are proactive 4 – There is minimum 50% of people in the sports area structure that are proactive 5 – There is minimum 80% of people in the sports area structure that are proactive 6 – 90 to 95% of people in the sports area structure that are proactive 7 – All the professionals within the sports structure are proactive</p>
<p>Managerial skills</p>	<p>How do you evaluate the managerial skills of the people within the Sports Department?</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

<p>Problems solving abilities</p>	<p>How do you rate the skills for solving problems of the people involved in the sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of problem solving abilities of people from the sports of a Football Club 2 – There is a minimum of 10% of professionals within the sports area that have quality problem solving abilities 3 – There is minimum 30% of professionals within the sports area that have quality problem solving abilities 4 – There is minimum 50% of professionals within the sports area that have quality problem solving abilities 5 – There is minimum 80% of professionals within the sports area that have quality problem solving abilities 6 – 90 to 95% of professionals within the sports area that have quality problem solving abilities 7 – All the professionals within the sports structure have quality problem solving abilities</p>
<p>Flexibility and adaptability</p>	<p>How do you rate the flexibility and adaptability to the role assigned of the people involved in the Sports area structure of the Club?</p>	<p>1 – There are not acceptable levels of working adaptability and flexibility of people from the sports area of a Club 2 – There is a minimum of 10% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 3 – There is minimum of 30% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 4 – There is minimum of 50% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 5 – There is minimum of 80% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 6 – 90 to 95% of professionals within the sports area that are flexible and easily adaptable to working challenges and requirements 7 – All the professionals within the sports structure have excellent working adaptability and flexibility for the role assigned</p>

Critical reflection	How do you rate the positive and efficient critical reflection of the people involved in the sports area structure of the Club?	<p>1 – There are not acceptable levels of positive and efficient critical reflection within the sports area</p> <p>2 – There is a minimum of 10% of people in the structure that have positive and efficient critical reflection</p> <p>3 – There is minimum 30% of people in the structure that have positive and efficient critical reflection</p> <p>4 – There is minimum 50% of people in the structure that have positive and efficient critical reflection</p> <p>5 – There is minimum 80% of people in the structure that have positive and efficient critical reflection</p> <p>6 – 90 to 95% of people in the structure that have positive and efficient critical reflection</p> <p>7 – All the professionals within the sports structure have excellent and efficient critical reflection</p>
Coaches and players	How do you rate the quality of players and coaches within the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – There are not acceptable levels quality performances and knowledge neither possibility of future developments • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Communicational skills	How do you rate the communication of the people involved within the sports area	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Social skills	How do you rate the social abilities of the people involved within the sports area (except players)?	<p>1 – There are not acceptable levels of social skills from the professionals from the sports area</p> <p>2 – There is a minimum of 10% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>3 – There is minimum of 30% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>4 – There is minimum of 50% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>5 – There is minimum of 80% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>6 – 90 to 95% of people in the sports area structure that have quality Social skills that can positively affect the Club</p> <p>7 – All the professionals within the sports structure have social skills that can positively affect the Club</p>
Medical team	How do you rate the quality and expertise of the medical staff and possibilities of medical services that the Club can provide?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: author

The presented, represents the system of the Human Capital sports area variables and their correspondent descriptions and valuation indicators. Once again, it's important to highlight that the Sport Department area is formed by: first team coaches and assistant coaches, first team players, academy coaches and assistant coaches, academy players, scouts, team

managers, sports department administration, medical staff, sports direction, sports facilities and other equipment and gadgets related to the sports area of the Club.

Table of the Human Capital Business area subcomponents variables description and indicators

HUMAN CAPITAL BUSINESS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Know - how concept	How do you rate the company know-how concept?	Values to be assigned • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Learning and education	How high is the educational and professional level of professionals in the business area (their licences levels, education, continuous learning and personal development, etc.)?	1 – There are not acceptable levels of licenses and education required at all 2 – There is a minimum of 10% of people with professional competences and minimum required academic level for the role assigned 3 – There is minimum 30% of people with professional competences and minimum required academic level for the role assigned 4 – There is minimum 50% of people with professional competences and minimum required academic level for the role assigned 5 – There is minimum 80% of people with professional competences and minimum required academic level for the role assigned 6 – 90 to 95% of people with professional competences and minimum required academic level for the role assigned 7 – All the professionals within the business area structure have adequate professional levels, some even higher than required and they are continually developing their knowledge

Innovations	How do you rate the use and encouragement for innovations within the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Commitment	Refers to the level of enthusiasm, responsibility for the goals set and the tasks assigned within the position.	<p>1 – There are not acceptable levels of commitment within professionals from the business area of the Club</p> <p>2 – There is a minimum of 10% of people within the business area of the club that are committed to their job and role assigned</p> <p>3 – There is minimum 30% of people within the business area of the club that are committed to their job and role assigned</p> <p>4 – There is minimum 50% of people within the business area of the club that are committed to their job and role assigned</p> <p>5 – There is minimum 80% of people within the business area of the club that are committed to their job and role assigned</p> <p>6 – 90 to 95% of people within the business area of the club that are committed to their job and role assigned</p> <p>7 – All the professionals within the business area structure are committed for the role and tasks assigned</p>
Team spirit	How do you rate the team spirit and will for doing the best for the Club within the professionals from the Business area of the club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Experience	How experienced are the professionals within the Business area of the Club?	<p>1 – There is an insufficient level of experience among the professionals within the club Business area structure</p> <p>2 – There is an extremely low level of experience within the professionals from the business area structure</p> <p>3 – There is a bad level of experience within the business area structure</p> <p>4 – There is an average level of experience within the business area structure</p> <p>5 – There is minimum 80% of professionals within the business structure that are experienced in the role assigned or there is a good mix between experienced and young professionals within the area</p> <p>6 – There is minimum 85% of professionals within the business structure that are experienced in the role assigned or there is a high value mix between experienced and young professionals within the area</p> <p>7 – Professionals from the business area have an excellent level of experience or there is an excellent mix between experienced and young professionals within the area</p>
Personal skills & development	Evaluate based on how skilled for the role assigned are the professionals within the business area departments and how interested they are in studying and personal developments	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

<p>Motivations</p>	<p>How motivated you consider the people involved in the business area structure of the Club?</p>	<p>1 – There are not acceptable levels of motivations required at all 2 – There is a minimum of 10% of professionals from the business area that are motivated for the role, tasks assigned and company growth 3 – There is minimum 30% of professionals from the business area that are motivated for the role, tasks assigned and company growth 4 – There is minimum 50% of professionals from the business area that are motivated for the role, tasks assigned and company growth 5 – There is minimum 80% of professionals from the business area that are motivated for the role, tasks assigned and company growth 6 – 90 to 95% of professionals from the business area that are motivated for the role, tasks assigned and company growth 7 – All the professionals within the business area structure are motivated for the role, tasks assigned and company growth</p>
<p>Ability to innovate</p>	<p>How do you rate the ability of the professionals involved in the Business area of the Club to innovate?</p>	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Competences	How do you rate the competences of the team and people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of competences required at all the levels of the business structure of the Club</p> <p>2 – There is a minimum of 10% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>3 – There is minimum 30% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>4 – There is minimum 50% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>5 – There is minimum 80% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>6 – 90 to 95% of professionals within the business area that are competent and efficient within the role and tasks assigned</p> <p>7 – All the professionals within the business structure are competent and efficient within the position and role assigned</p>
Loyalty	How do you rate the loyalty of the team - people involved in the business area structure in relation to the Club	<p>1 – There are not acceptable levels of loyalty</p> <p>2 – There is a minimum of 10% of people from the business area that are loyal to the Club and role assigned</p> <p>3 – There is minimum 30% of people from the business area that are loyal to the Club and role assigned</p> <p>4 – There is minimum 50% of people from the business area that are loyal to the Club and role assigned</p> <p>5 – There is minimum 80% of people from the business area that are loyal to the Club and role assigned</p> <p>6 – 90 to 95% of people from the business area that are loyal to the Club and role assigned</p> <p>7 – All the professionals within the business structure are loyal to the Club and role assigned</p>

Diligence	How Diligent are the people within the Business area structure of the Club	<p>1 – There are not acceptable levels of diligence within the business area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are persistent and serious in their role</p> <p>3 – There is minimum 30% of professionals within the business structure that are diligent for their work within the position assigned</p> <p>4 – There is minimum 50% of professionals within the business structure that are diligent for their work within the position assigned</p> <p>5 – There is minimum 80% of professionals within the business structure that are diligent for their work within the position assigned</p> <p>6 – 90 to 95% of professionals within the business structure are diligent for their work within the position assigned</p> <p>7 – All the professionals within the business structure are diligent for their work within the position and role assigned</p>
Social intelligence	How do you rate the social abilities and intelligence of the people from the top managerial position within the business department area	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Productivity	How do you evaluate the productivity of the people within the Business areas	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Education	How do you rate the overall academic education levels within professionals from the Business area of the Cub?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Responsibility	How responsible for the role assigned are the people within the Business area structure of the Club?	<p>1 – There are not acceptable levels of reasonability within the professionals from the business area required at all</p> <p>2 – There is a minimum of 10% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>3 – There is minimum 30% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>4 – There is minimum 50% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>5 – There is minimum 80% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>6 – 90 to 95% of people in the structure that are responsible and serious in their role and tasks assigned</p> <p>7 – All the professionals within the business structure are responsible and serious for the tasks and role assigned</p>

Persistence and resolution	How persistent are the people within the Business area structure of the Club?	<p>1 – There are not acceptable levels of persistence and resolute from the professionals from the Business area in the execution of their roles and tasks assigned</p> <p>2 – There is a minimum of 10% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>3 – There is minimum 30% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>4 – There is minimum 50% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>5 – There is minimum 80% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>6 – 90 to 95% of people in the Business area structure that are persistent in the execution of their roles and tasks assigned</p> <p>7 – All the professionals within the Business structure are persistent in the execution of their roles and tasks assigned</p>
Proactivity	How proactive are the people within the Business area structure of the Club?	<p>1 – There are not acceptable levels of proactivity from the professionals involved in the business area structure of the Club</p> <p>2 – There is a minimum of 10% of professionals from the business area who are proactive</p> <p>3 – There is minimum of 30% of professionals from the business area who are proactive</p> <p>4 – There is minimum of 50% of professionals from the business area who are proactive</p> <p>5 – There is minimum of 80% of professionals from the business area who are proactive</p> <p>6 – 90 to 95% of professionals from the business area are proactive</p> <p>7 – All the professionals within the business area structure are proactive</p>
Communication al skills	How do you rate the communication of the people involved within the Business area of the club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Managerial skills	How do you evaluate the managerial skills of the people within the Business Department?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Problems solving abilities	How do you rate the skills for solving problems of the people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of problem solving abilities of people from the business area</p> <p>2 – There is a minimum of 10% of professionals within the business area that have quality problem solving abilities</p> <p>3 – There is minimum 30% of professionals within the business area that have quality problem solving abilities</p> <p>4 – There is minimum 50% of professionals within the business area that have quality problem solving abilities</p> <p>5 – There is minimum 80% of professionals within the business area that have quality problem solving abilities</p> <p>6 – 90 to 95% of professionals within the business area that have quality problem solving abilities</p> <p>7 – All the professionals within the sports structure have quality problem solving abilities</p>
Flexibility and adaptability	How do you rate the flexibility and adaptability for the role assigned of the people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of working adaptability and flexibility of people from the business area of a Club</p> <p>2 – There is a minimum of 10% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>3 – There is minimum of 30% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>4 – There is minimum of 50% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>5 – There is minimum of 80% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>6 – 90 to 95% of professionals within the business area that are flexible and easily adaptable to working challenges and requirements</p> <p>7 – All the professionals within the business structure have excellent working adaptability and flexibility for the role assigned</p>

Critical reflection	How do you rate the positive and efficient critical reflection of the people involved in the Business area structure of the Club?	<p>1 – There are not acceptable levels of positive and efficient critical reflection within the sports area</p> <p>2 – There is a minimum of 10% of people in the structure that have positive and efficient critical reflection</p> <p>3 – There is minimum 30% of people in the structure that have positive and efficient critical reflection</p> <p>4 – There is minimum 50% of people in the structure that have positive and efficient critical reflection</p> <p>5 – There is minimum 80% of people in the structure that have positive and efficient critical reflection</p> <p>6 – 90 to 95% of people in the structure that have positive and efficient critical reflection</p> <p>7 – All the professionals within the sports structure have positive and efficient critical reflection</p>
Employees	How do you evaluate the overall value of the employees within the business structure of the Club?	<p>Values to be assigned</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: Author

The presented table, represents the system of the Human Capital Business area variables and their correspondent suggested descriptions and valuation indicators.

Table of the Structural Capital Sports area subcomponents description and indicators

STRUCTURAL CAPITAL SPORTS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Training materials	How do you evaluate the complete training equipment materials within the club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value, not enough for a normal training session • 2 – Extremely low value, just the basic equipment, not enough and required for all the categories of the Club • 3 – Bad value, not enough for conducting all the necessary training sessions • 4 – Acceptable value, the Club has at least 75% of the necessary and required training materials • 5 – Good value, the Club has at least 85% of the necessary and required training materials • 6 – High value, the Club has almost all the necessary and required training materials or is in process of attaining the missing • 7 – Excellent value, the Club has all the necessary and required training materials
Performance monitoring & controlling tools / gadgets	How do you evaluate the Performance monitoring & controlling tools / gadgets possessed by the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value, enough for conducting basic statistics and monitoring • 5 – Good value, the club is possessing all the basic performance monitoring tools • 6 – High value, the Club has almost all the necessary and required gadgets or is in process of attaining the missing once • 7 – Excellent value, last generations gadgets
Players data bases	How quality do you evaluate the data bases in regards to the current players within the Club and all the other players of the club scouts portfolio?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Organizational structures and responsibility levels	How do you evaluate the organizational structures and responsibility levels set within the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value of the organizational levels where professionals know their position and quality awareness with minor misunderstandings for the responsibility levels • 6 – High value of the organizational levels where everyone knows its position and quality awareness of the responsibility levels with not miss interactions • 7 – Excellent organization and responsibility levels set within the Club
Software’s and apps	How do you evaluate the overall software and apps used within the sports department of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Strategies & Plans	How do you evaluate the overall Strategies & Plans set within the sports department of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good strategies and with mostly all the correspondent plans for attaining the goals set with a possibility of having minor misunderstandings in the evaluation • 6 – High value of strategies and realistic quality plans for attaining the goals set • 7 – Excellent strategies and realistic with excellent plans for attaining the goals set in the most efficient way

Culture	How do you rate the company culture within the sports area department?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Professionals licences	How do your rate the overall licences level of professionals from the Sports department?	<p>1 – There are not acceptable levels of licenses required at all</p> <p>2 – There is a minimum of 10% of people with professional competences and licences</p> <p>3 – There is minimum 30% of professionals within the sports structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <p>4 – There is minimum 50% of professionals within the sports structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <ul style="list-style-type: none"> • 5 – There is minimum 80% of professionals within the sports structure have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period • 6 – High value, everyone on a high position has the required licence and few of the professionals on lower positions are in process of attaining it within one year period • 7 – Excellent value, everyone have required or higher level of licences needed for role assigned
Sport department reporting structures and communication channels	How do you evaluate the organizational reporting and communication channels set within the Sports area?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Internal acts and decisions	How do you evaluate the organisation of the decision making processes the within the Sports area?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Sports Infrastructure level	How do you evaluate the complete sports infrastructure possessed by the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value, not enough for a normal training sessions • 2 – Extremely low value, just the basic infrastructure not enough and required for all the categories of the Club • 3 – Bad value, not enough for conducting all the necessary training sessions • 4 – Acceptable value, enough to conduct training sessions with minor organisational problems • 5 – Good value, the club has all the necessary and requested infrastructure with minor upgrades necessities • 6 – High value, the Club has almost all the necessary and required infrastructure or is in process of attaining the missing within a period of one year • 7 – Excellent value, the Club has all the necessary and required, fully equipped infrastructure
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: Author

The presented table represents the system of the Structural Capital Sports area variables and their correspondent suggested descriptions and valuation indicators.

Table of the Structural Capital Business area subcomponents variables description and indicators

STRUCTURAL CAPITAL BUSINESS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
History	How do you evaluate the history that the Club has in terms of age, historical background and bright periods?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
HRM system	How do you evaluate the cumulative HRM systems within the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Procedures	How do you evaluate the efficiency of the organizational procedures and acts?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good with minor misunderstandings for the responsibility levels and roles for the execution of the work • 6 – High value of the organizational levels where everyone knows its position and quality awareness of the responsibility levels with not miss interactions • 7 – Excellent and efficient organization and responsibility procedures

Brand and History	How do you evaluate the Club brand in terms of recognition?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient • 2 – Extremely low • 3 – Bad • 4 – Acceptable • 5 – Good • 6 – High • 7 – Excellent
Internal communication channels	How do you evaluate the organizational reporting and communication channels set within the Business area?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Data base	How do you evaluate the data bases possessed by the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value – the club doesn't have any kind of useful databases • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value – the club has various databases for different sectors that are highly useful, up to date and efficient. They are supporting the decision making process as well as other activities
Organizational structures and responsibility levels	How do you evaluate the organizational structures and responsibility levels set within the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value of the organizational levels where professionals know their position and quality awareness with minor misunderstandings for the responsibility levels • 6 – High value of the organizational levels where everyone knows its position and quality awareness of the responsibility levels with not miss interactions • 7 – Excellent organization and responsibility levels set within the Club

Licences	How do you rate the overall licences (educational levels) level of professionals from the business department?	<p>1 – There are not acceptable levels of licenses required at all</p> <p>2 – There is a minimum of 10% of people with professional competences and licences</p> <p>3 – There is minimum 30% of professionals within the business structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <p>4 – There is minimum 50% of professionals within the business structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period</p> <ul style="list-style-type: none"> • 5 – There is minimum 80% of professionals within the business structure that have adequate licences for the position assigned and at least 10% are enrolled in the process for attaining them within 1y period • 6 – High value, everyone on a high position has the required licence and few of the professionals on lower positions are in process of attaining it within one year period • 7 – Excellent value, everyone have required or higher level of licences or educational levels needed for role assigned
Copyrights	How quality you evaluate the intellectual property - copyrights of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value or not at all things that can enter in the category • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value where everything is covered by copyrights
Trademarks and merchandise	How do you evaluate the merchandise options offered by the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Reporting structures	How do you evaluate the organizational reporting and communication channels set within the Business area?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value of the organizational levels where professionals know their position and quality awareness with minor misunderstandings for the responsibility levels • 6 – High value of the organizational levels where everyone knows its position and quality awareness of the responsibility levels with not miss interactions • 7 – Excellent organization and responsibility levels set within the Club
Intellectual property	How quality do you evaluate the possessed intellectual properties by the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Software	How do you evaluate the overall software and apps used within the business department of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Strategies & plans	How do you evaluate the overall Strategies & Plans set within the Business department of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good strategies and with mostly all the correspondent plans for attaining the goals set with a possibility of having minor misunderstandings in the evaluation • 6 – High value of strategies and realistic quality plans for attaining the goals set • 7 – Excellent strategies and realistic with excellent plans for attaining the goals set in the most efficient way
Business organization & chart	How do you evaluate the clearance and efficiency of the organizational chart and internal organization of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Controlling and monitoring tools	How do you evaluate the Controlling & monitoring tools / gadgets possessed by the Club	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Internal acts	How do you evaluate the organisational internal acts within the Business area ?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Organizational culture	How do you rate the company organizational culture within the business area department?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: author

The presented table represents the system of the Structural Capital Business area variables and their correspondent suggested descriptions and valuation indicators.

Table of the Relational Capital Sports area subcomponents variables description and indicators

RELATIONAL CAPITAL SPORTS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Sports management relations and networks	How do you rate all the established Sports management relations and networks of the Club?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value, the Club is always in a position to choose with whom to cooperate
Relations with stakeholders (agents and agencies)	How do you rate the established Sports management relations with other agents and agencies?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value, the Club position on the

		<p>market is respectable and there are usually high possibilities of effective outcomes</p> <ul style="list-style-type: none"> • 6 – High value, the Club is mostly always achieving the results desired in the market • 7 – Excellent value, the club is extremely efficient in the acquisition and sales of players, the Club can always choose with whom to cooperate
Sports department image	How do you evaluate the current sport management image on the market?	<ul style="list-style-type: none"> • 1 – Insufficient value, there is a current situation on the market that no one wants to cooperate with the Sports management of the Club • 2 – Extremely low value, there is a current situation on the market that almost no one wants to cooperate with the Sports management of the Club • 3 – Bad value, very bad image where other Clubs don't trust to the current management • 4 – Acceptable value • 5 – Good value, the management is seen as a quite good partner, minimal number of people from the department are not seen as perfect partners • 6 – High value, almost perfect image with a possibility minimal harms • 7 – Excellent value, the current management has an excellent position and image on the market
Reputation	How do you evaluate the cumulative Club sport department reputation on the market?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value – seen as leader in the area
Ability of attracting (scouts, players...)	How efficient do you consider the skills of the professionals within the sports department from the point of cooperating and attracting stakeholders?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Third part value creating perception	How do you evaluate the perception of others in regards to the value creation abilities of the	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value

	current sports department?	• 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: author

The presented table represents the system of the Relational Capital Sports area variables and their correspondent suggested descriptions and valuation indicators.

Table of the Relational Capital Business area subcomponents variables description and indicators

RELATIONAL CAPITAL BUSINESS AREA SUBCOMPONENTS		
VARIABLE	DESCRIPTION	INDEX VALUATION
Business & Sales department relations and networks	How do you rate all the established Business & Sales department relations and networks?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Institutional Relations networks	How do you rate the established Institutional Relations networks (associations, local and national politic relations etc.)?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value, • 6 – High value • 7 – Excellent value
Relations with stakeholders & sponsors	How do you rate the established Relations with stakeholders & sponsors?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value, the club has mostly positive

		<p>relations with stakeholders and sponsors where the sponsors network has minor negative results</p> <ul style="list-style-type: none"> • 5 – Good value, the club has mostly positive relations with stakeholders and sponsors where the sponsors network is usually constant • 6 – High value, the club has mostly positive relations with stakeholders and sponsors where the sponsors network is usually extending • 7 – Excellent value, the club is extremely efficient in the cooperation with current and new sponsors and all the other stakeholders and there is a constant growth
Marketing networks	How do you rate all the established cooperation with marketing agencies in relation to the possible sponsorships?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value, no marketing cooperation at all and if there are their outcomes were negative • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value, the club has mostly positive relations with minor negative results • 5 – Good value • 6 – High value • 7 – Excellent value, the club is extremely efficient in the cooperation with marketing agencies, there is a constant positive growth, the Club can choose with whom to cooperate
Brand	How do you evaluate the brand value of the Club?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Business interest cooperation	How do you rate the added values and businesses that a club is generating which are not connected to Sports?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value, the club is highly generating other kind of values not straight related to Sports and it is a reliable partner in the sense
Sales channels	How do you rate the established merchandise and tickets sales options and channels?	<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value, the Club has just web sales channels for merchandise and a fix point for tickets or

		<p>opposite</p> <ul style="list-style-type: none"> • 5 – Good value, the club has a quality established sales channels with minor problems • 6 – High value, the club has a quality established sales channels and constantly developing them • 7 – Excellent value, the club is extremely efficient and leader in the area
Reputation	How do you evaluate the cumulative Club reputation?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value – seen as leader in the area
Relations with the media and own media channels	Evaluate your opinion based on the quality and existence of the number of own club media (periodicals, YT channels, TVs and radio stations), the amount of club-friendly media, quality of the club social media and web page with the number of visits etc.	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value – seen as leader in the area
Ability of attracting fans	How efficient do you consider the club ability an actions for attracting new fans and maintaining old once?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value, minimal loses of current fans and no actions • 4 – Acceptable value, maintaining the fan base with a minimal attraction of new once • 5 – Good value, actions for attracting new once and maintaining old once bud not with so quality feedbacks • 6 – High value, a lot of effective and right actions • 7 – Excellent value, with efficient and right action where the new fan base is exponentially growing
Value creating perception	How do you evaluate the perception of others in regards to the total value creation abilities of Club?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Relations with all the members and fans	How do you evaluate the cumulative relations that the club has with all its stakeholders?	<ul style="list-style-type: none"> • 1 – Insufficient value – the Club has extremely bad relations and it’s not taking care about the members neither supporting their activities • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value – the Club has an excellent communication and relations with fans and members, conducting common activities and creating benefits for them, supporting and planning the expand of members
CRM	How do you rate the used CRM by the club?	<ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value
Other components of a similar character TO ADD BELOW		<p>Values to be assigned for the additional components have to follow the scaling:</p> <ul style="list-style-type: none"> • 1 – Insufficient value • 2 – Extremely low value • 3 – Bad value • 4 – Acceptable value • 5 – Good value • 6 – High value • 7 – Excellent value

Source: Author

The presented table represents the system of the Relational Capital Sports area variables and their correspondent suggested descriptions and valuation indicators.