Artificial Intelligence Supporting Scouts and Sport Clubs in Player Recruitment

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Abstract

The use of artificial intelligence (AI) in scouting and player recruitment has gained a lot of attention in the recent years due to a few football clubs achieving sporting and financial success with its help. This success comes from innovation and collaborations that have established Brentford FC and Sevilla FC as pioneers in the industry. Even though the topic has received vast media attention, the academic literature and research around it is still scarce.

The research objective of understanding how the use of AI in player recruitment can support scouts and the organizational performance of a sport club was reached through action research comprising of a thorough literature review and analysis of many secondary data sources related to the research objects.

The results of the research were established through organizational performance, impact on scouts and organizational preparedness. According to the findings artificial intelligence can have a positive impact on organizational performance regarding economic impact, sporting success and brand awareness. For scouts, AI can help in assisting in the workload, developing the scout's talent and by mitigating risks associated with player recruitment. The key aspects for a sport organization to be prepared to adopt AI were found to be leadership commitment, robust strategy and tech literacy.

In conclusion, artificial intelligence can have a positive impact on the work of scouts and on sport organizations' performance when its use is implemented strategically. It can support the scouts in working more efficiently and reducing potential bias. This has a direct impact on organizational performance of the club as player recruitment plays a vital part for its success.

Keywords/tags (subjects)

Sport Scouting, Player Recruitment, Artificial Intelligence, Change Management, Change Leadership, Organizational Performance

Miscellaneous (Confidential information)

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1 Introduction

If I told you Brad Pitt has had a major impact on the world of player recruitment and scouting, would you believe me right off the bat? In case your mind went to the movie “Moneyball”, you will likely catch my intended baseball related pun there and believe the statement to be true, at least partially.

Moneyball is a book (Lewis, 2004) turned movie (Sony Pictures Entertainment, 2011) where Brad Pitt plays the lead role of the general manager of Oakland Athletics, Billy Beane. Beane is forced to assemble a baseball team with a limited budget and therefore, turns to analytics to try and beat the conventional system and approach to player recruitment (*Sony Pictures Entertainment*, n.d.). Although Pitt did not have a direct impact on the use of analytics in the game of baseball, it is likely that his involvement in the film had an impact on the popularization of the topic. Moneyball reached a box office of over 100 million dollars and received six 2012 Academy Award nominations (*IMDb*, n.d.). Also Frost et al. (2025) estimate that the success of Lewis’s book had an impact on how popular the use of quantitative data in the identification of unknown talent became in the mainstream. “Moneyball” has since become a concept that refers to data use in sports, more specifically in sport recruitment (Stewart, 2021).

Although sports industry may sometimes play catch up compared to other industries, artificial intelligence has played a part in the industry for quite some time ranging from creating better fan experience to preventing player injuries and from boosting the value of sponsorships to analyzing game performance. The use of analytics and data is constantly evolving and reaching new territories in terms of its use and development.

Player recruitment and scouting is a crucial building block for competition-based sport organizations and clubs. Considering resource optimization, the challenge with this crucial function is that it is time-consuming, many times expensive, decisions carry a risk, and sometimes the evaluation of an athlete’s performance can be subjective to the scout. Especially for smaller organizations, this can present a serious issue with the risk-reward ratio. Money is usually a scarce resource and the investment in experienced scouts might not be a possibility.

Research around the topic is scarce and the aim of the thesis is to provide better understanding and draw conclusions regarding how scouts and sport organizations can benefit from the use of AI and what the organization needs to have in place to do so. The research helps also in understanding how these technologies can support the scouts who carry much of the responsibility for finding talent and matching that with organization's needs.

The study has been conducted through action research and secondary data has been used to reach the objective of the thesis. Three football clubs were selected to be the objects of the research: Brentford FC, Sevilla FC and FC Midtjylland. These clubs are pioneers in their way of leading with data especially when it comes to player recruitment and scouting. The research focuses on secondary data to provide also a knowledge base on which to build future research that could be conducted with primary data.

Overall, the topic provides a valuable addition to the academic research around sport business management while also complimenting and providing another perspective considering research done on AI and recruitment in general.

1.1 Research Problem and Objective

Artificial Intelligence is used in many areas and functions in sport organizations. However, as evident in literature, the work of scouts has received limited attention in academia. Literature is consistent with how the sport industry is benefitting from the use of artificial intelligence in a broader sense, nevertheless, there is a lack in academic literature when it comes to player recruitment and scouting. The gap in knowledge is what forms the basis for this study as its research problem.

As for the research objective, the thesis aims to explore how the use of Artificial Intelligence in player recruitment and scouting can support the organizational performance of a sport club and the daily work of scouts. An additional purpose of the work is to provide practical insights to industry professionals of what organizational readiness and career development in the hybrid era entail around this specific area.

1.2 Research Questions

To fulfill the research objective and the aim of the thesis, the following questions will be explored and answered:

1. What kind of impact can the integration of AI tools have on organizational performance in terms of player recruitment and scouting?
2. How can AI support the work of scouts?
3. What is needed from a sport organization to successfully adopt and benefit from AI in scouting and recruitment?

1.3 Delimitations

Sport organization can be defined in many ways but since the research focuses on player recruitment and scouting, the emphasis is on organizations and clubs that compete in a team sport environment and have player recruitment as one of the organizational functions. Due to this, when referred to sport organizations later in the work, they do not include marketing or tech companies or sport clubs that do not recruit athletes. Artificial intelligence can be an asset in many ways for an individual athlete or for a sport organization that does not compete, however, they fall out of the scope of the research.

The thesis will not have a sole focus on a specific sport or a geography in its literature, as examples are drawn from various sports and regions relevant to the context. Even so, a notable fact is that the economic impact varies vastly between different level of leagues and can also vary regarding the country in question. When thinking of football, in Finland the financial opportunities are incomparable with those of a bigger football country like Spain, for example. Due to this, the thesis does not specify a quantifiable monetary impact the use of artificial intelligence can have even if it talks about resource optimization and economic impact.

It is also worth mentioning that a lot of the literature and prior research comes from football as it tends to be the most developed sport in terms of its business environment. As football is the most popular sport in the world when considering various viewpoints, it is likely why it has spiked the interest of researchers, and more literature is generated around it. When it comes to the research approach, secondary data that is used is also gathered from football clubs as there were clear cases that corresponded the theme of the study.

2 Methodology

2.1 Research Approach

The research approach chosen for the thesis was inductive for it allows more flexibility in the research process and because the collection of data was to be qualitative (Saunders et al., 2009). The research strategy was chosen to be action research that entails identifying and mapping out a problem (Jyrkämä, n.d). From the basis of the problem, a research and change plan is built which is then reflected upon. While executing the plan, it is being evaluated and refined as many times as needed to achieve the desired change. Action research is not based on a specific theory and can consist of many kinds of references and data. The essential part of action research is the reflective nature of the process, and it requires manual labor from its executors (Jyrkämä, n.d). The scope of this thesis and its research on sport scouting and player recruitment fills the most essential part of the action research requirement which is the constant reflection of the plan and manual labor in terms of data analysis. The initial research questions were more emphasized on the strategic decision making and economic impact the use of artificial intelligence would have on the sport organization. However, through several rounds of evaluation and analysis, it was evident that the perspective on scouts themselves was necessary for the research because they are such an integral part of organizational performance, and their work is highly impacted by the advances in technology. It was also thought that since the additional aim of the thesis is to make an impact and provide insight to the people working in the industry, not having a research question related to scouts' work would hinder that goal.

In addition to the research questions, the data collection method evolved along the way. The initial goal was to collect primary data by holding interviews with sport organizations and potentially scouts, but reading through the literature and seeing how little data had been gathered directly from sport scouts and recruiters, it became clear that the research at hand would need to be the first step to understanding how organizations and scouts can leverage artificial intelligence to improve organizational performance through case studies and data already available. Based on those results and information, it would be determined what kind of further research would be suggested that could consider interviews with different parties.

Action research as a strategy made sense also due to its focus often on resolving issues at organizations especially regarding situations of change (Saunders et al., 2009). Due to the overwhelming amount of data used nowadays and the quick advancements in technology, specifically in generative AI, change is evident. Organizations experience these changes in a major way but so do the scouts who feed information to the other parties in a sport organization about potential recruits. Although the thesis is not researching any particular organization or group of scouts, the insights it provides can help in initiating and understanding change in organizations or even serve as a point of inspiration for a singular scout. Even though in the data there may be references to numbers, the thesis uses mono method through generating qualitative results (Saunders et al., 2009) as the goal is to provide understanding not only limited to, for example, monetary value the organizations might gain from implementing AI.

2.2 Implementation

When ideating the research topic for the thesis and doing preliminary research, two cases came up several times on searches for artificial intelligence and player recruitment. These were Sevilla FC, a Spanish football club playing at an elite level at LaLiga, who teamed up with IBM to bridge the gap between traditional and data-driven scouting (Sevilla FC, 2024) and Brentford FC, another football club playing also at an elite level but in the English Premier League, who relies on data analytics in their player recruitment and has achieved to profit from undervalued players. Simultaneously, a Danish football club FC Midtjylland playing also at an elite level at Superliga was identified for retrieval of secondary data as it has a similar model with Brentford FC and the same former owner (Stewart, 2021).

According to Transfermarkt (2025), Sevilla FC was founded in 1890, holds a total market value of 179,50 million euros and has a current transfer record worth 16,55 million euros. Brentford FC, in turn, was founded in 1889, holds a total market value of 414,08 million euros and has a transfer record worth -23,90 million euros. Lastly, FC Midtjylland was founded in 1999, holds a total market value of 64,40 million euros and has a transfer record worth -2,40 million euros. These figures are to provide understanding of the clubs that have been the research objects and to provide brief insight on the level in which they operate. All clubs are worth millions of euros and player transfers and recruitment plays a significant role in the finances of these organizations.

2.3 Data Collection and Analysis

The research focuses on documentary-based secondary data that were collected from written and non-written materials. as due to geographical and time constraints, conducting interviews with the needed parties was not possible for this scope of work. Four cases were selected for the research as they were highly relevant and provided sufficient information about the impact of implementing artificial intelligence in sport organizations. The data consists of case studies, academic literature, industry reports, media articles and club communications retrieved from official sites of the clubs.

The analysis of the data was conducted in a thematic manner. At the collection phase, anything that touched upon the themes was reviewed to determine if there was information that corresponded to the research questions. Nevertheless, since the research questions provided clear themes to cover, the data was organized and analyzed in accordance with these themes (Saunders et al., 2009). To provide an example, Brentford FC multiplied their financial investments with players when they sold them, which goes together with organizational performance. Whereas Sevilla FC provided a view to discover the connection between human led scouting and data analytics which in turn, fits together with how the scouts themselves can benefit from the data.

To conclude, the qualitative data was organized and analyzed from the perspective of 1) organizational performance, 2) AI supporting scouts and 3) organizational readiness and requirements. By synthesizing the material the secondary data consist of, it was possible to draw conclusions that were also qualitative in their kind. The analysis was manual and time-consuming, much like building a puzzle with finding pieces here and there and seeing what fits to the research. Whenever going through data and finding something related to the research questions, it would be digitally color coded based on themes and topics. Similarities were also searched for in a way that if something came up in one of the case clubs, similar information would be searched for in the data for the other clubs to see if they have data related to the finding and whether it contradicts or reinforces it.

2.4 Research Ethics

Research ethics relates to the behavior exhibited during the overall research process and the way with which interactions are conducted, how data is stored and how the participating subjects' rights are respected, to name a few examples (Saunders et al., 2009). In addition to general ethical guidelines, JAMK University of Applied Sciences ethical principles (2024) have been applied and followed. Since the research has relied on secondary data, the ethical considerations do not come into question with as much force as if there were interview participants that shared confidential information or if there had been access granted to confidential organizational data. Even so, it must be ensured that the sources of information are reliable and accessible and referenced correctly. The thesis has been produced respecting ethical guidelines, and all sources of information and data have been listed to the reference list. To avoid even accidental plagiarism, also the references that have served to build knowledge during the process of the literature review and data analysis have been listed out, even if no direct information has been retrieved to produce the writing.

3 Theoretical Framework

In this section, relevant literature is covered to deep dive into the research from various aspects. The theoretical framework establishes understanding around the considerable impact player recruitment has in organizations and about the status of artificial intelligence (AI) in the sport industry. In addition to these two themes, the literature dives into the ever-evolving role of a scout and the organizational preparedness for changes that AI brings about.

3.1 Artificial Intelligence (AI) and Generative AI (Gen AI)

Due to artificial intelligence being talked about in many parts of the literature, we will proceed to defining what it is before focusing on specific literature that supports us in answering the research questions. Artificial intelligence in sports context will be talked about in further chapters and the general understanding of what artificial intelligence is covered here.

There may be confusion around what artificial intelligence entails, how it affects our daily lives and how it may change our lives. Therefore, it is important to cover some bits of the history of artificial

intelligence to produce understanding around how long it has truly been around. New technologies often produce resistance and fear of the unknown. Although there are many ethical considerations that need to be remembered and there is a lot of harm that can be done with artificial intelligence, specifically with generative artificial intelligence, these technologies have been long time coming and are not as foreign to us as we may sometimes believe.

> *"Artificial intelligence (AI) is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy." - Stryker & Kavlakoglu (n.d.)*

As the authors from IBM note, majority of the discussion and headlines around artificial intelligence is focus on generative AI and the breakthroughs happening with it. AI generates numerous opinions; some love it, and some are even afraid of it. Nevertheless, it may come as surprise to some that artificial intelligence has formed a part of our lives since the 1950s due to generative AI being so predominant in its popularity and development. AI as such can replace human intelligence by seeing and identifying objects, understanding and responding to human language, and learning from new information. This way it can make recommendations to its users. (Stryker & Kavlakoglu, n.d.) In 1950 Claude Shannon published an article on developing a program for a computer for it to play chess. Also in 1950, Alan Turing started his article "Computing Machinery and Intelligence" by posing the question of whether machines can think. The imitation game he proposes in the article later becomes known as the "Turing Test" (Press, 2016). Turing Test overly simplified tests whether a human interrogator can distinguish between a machine and a human in the responses to the questioning (Grant, n.d).

I dare to argue that when majority of the common people refer to artificial intelligence, we do not date our view of it to the fifties, and it could be that many of us are not even aware of the fact that when we watch the movie called "The Imitation Game", we are watching a movie that lays out parts of the birth of artificial intelligence. As briefly mentioned already, generative artificial intelligence has popularized to the extent, that many times when you hear talk about artificial intelligence, it indeed refers to generative AI. To help us understand the distinction Stryker & Kavlakoglu (n.d.) illustrate the different layers of artificial intelligence as follows in figure 1:

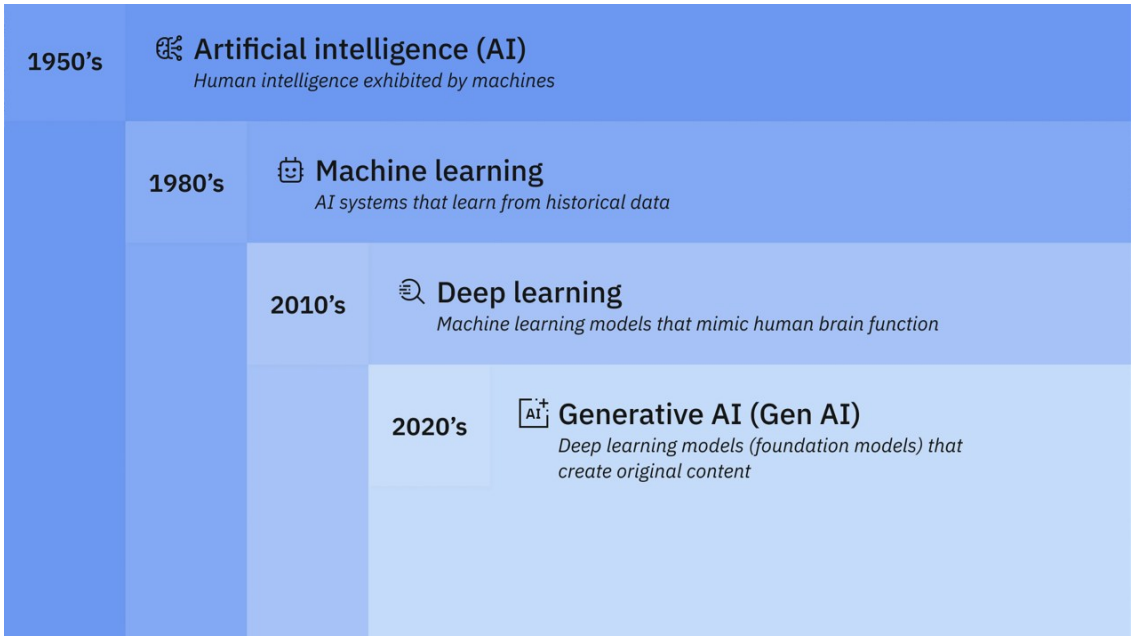

Figure 1 - Relationship between AI, ML, DL and GenAI

To maintain the focus in the scope of the research, we will not deep dive into all layers in detail but provide a general outlook on these concepts. **Machine learning** can be summarized by the algorithm being trained to make data bound decisions and predictions through creating models. In this supervised learning, the algorithm is introduced labeled data sets for the model to learn from predetermined input and output to build the mapping in such way that it can predict the labels of new data. **Deep learning,** in contrast, does not rely on supervised learning or human intervention. However, it simulates the complexity of a human brain regarding its decision-making power and due to the automation in extraction of data and its independence, the machine learning happens at an enormous scale. The term **Generative AI** is used when referring to deep learning models that work as response to user's request or prompt creating complex original content (IBM, 2024).

3.2 Player Recruitment and Organizational Performance

In the context of the thesis, player recruitment means the selection of athletes, players, to a sports team. The way player recruitment is executed varies between different sports, professional and amateur sports, and different regions. Player recruitment is a complex function where many individuals are involved. The biggest responsibility for player recruitment usually falls on the head coach and sport scouts.

Organizational performance has various definitions in literature, many of them focusing on economic factors. In short, organizational performance can be described as how well an organization is able to meet its own needs and those of its stakeholders. Also, it can be categorized into three aspects which are the financial performance, business performance and organizational effectiveness. Defining organizational performance and its measurements differs between context and available data (McGivern, 1997). Although important in other industries as well, in sports, the community presence is more pronounced due to the presence of fans as customers. Affecting sports is also the fact that competition is needed for a sports team to be able to compete, a team wants to win, but there is no such thing as conquering a market. If there are no rival teams, there is no league to compete in. Organizational performance is sports is therefore a combination of factors and even if the team does not have sport success, it does not mean it cannot have good organizational performance. Many times, however, these two go hand in hand and sport success contributes to organizational performance whether it is in negative or positive manner (Doherty & Cuskelly, 2020).

According to the resource-based theory in Human Resource Management, an organization can achieve a competitive advantage when its resources are valuable, rare and costly to imitate (Armstrong, 2012). People, in this context players, and the organizational culture can be considered valuable resources and therefore, they create an advantage a competitor cannot copy. Although sport organizations' organizational culture and how they build strategy differ vastly from how these are approached in more traditional industries, the head coach and players in a team are likely a bigger source of competitive advantage for a sport organization than company's workforce are in other industries. Due to this, one or two wrong recruitments could cause a major downfall for a sport club, where that might not be the case in other less dynamic, less pressure prone and slower-paced industries.

3.2.1 What Goes into Recruitment

Many aspects go into recruiting players to a team in a sport organization. If we take a moment to think about the industries outside of sports, generally, when an employee is recruited the aim is that they remain in the company for as long as possible unless the recruitment happens for a project type of an assignment. From personal observations as someone who has worked in the field of Human Resources in different companies and industries for several years internationally, and

backed up by literature (Armstrong, 2012; Elsevier, 2009), strategic human resource management and the recruitment processes have many different components and phases.

To paint a brief picture for comparison purposes, a recruitment process in a company might take anywhere from days to sometimes even months. Although some get headhunted, majority of the new employees get hired because they found the job ad online, thought they would be a good fit and sent an application in. Depending on the industry and company, there are set positions and functions that are needed for the operations to run smoothly, and headcount planning is based on those insights. Positions are often locked in once a year but based on a longer-term strategic planning. It is rare that a team working in a corporation, whether it is an operational team or a team within a support function, would dramatically change from one day to another. Big changes even from one year to another would require the company to be restructuring its operational structure from a legal perspective.

When a candidate is interviewed and selected, emphasis is placed on how long the company representatives believe the person will be motivated working in the job to ensure the position does not have to be refilled again any time soon. Depending on the country, there is a need to justify a temporary contract made with an employee and sometimes a limit to how many of them can be made with one employee.

For a sport organization with a competitive athletic team, recruitment and the goals of it differ immensely from what is described above. Team strategy shifts from one year to another and even though a new season starts once a year, the roster with which a team starts their season can look very different from with which it ends it. There are no such things as permanent contracts and the team's operational strategy varies even from one game to another based on available players, who the opponent is, what the geographical demands are and how the competitive season has shaped out thus far. The players are often headhunted, meaning scouted, and many times the scouts have followed the players since they were junior players.

The player selection and strategic plans are dynamic, and they are reviewed on semi-regular basis, potentially monthly, due to sudden changes in the operating environment (Robertson & Joyce, 2018). As can be observed on GotMyTeam (n.d.), which is a platform that connects ice hockey

players to clubs, semi-professional teams might create job ads when they need players especially in the areas where a specific sport is not as popular. Even so, at an elite level, you will not see team posting a job ad to have players send in applications to fill the position. Headhunting, or in the context of sport, scouting, is how players get recruited into a team.

Although other industries navigate legal frameworks as well, there are variety of governing bodies, stakeholders and rules in sport that a club needs to consider with player recruitment in addition to national and international laws. The team might face a league set salary cap where they cannot sign a contract with a player because they would exceed the salary expenses allowed by the league, there might be an ideal player skill wise, but they cannot be recruited because of image issues that could affect sponsorships. The public nature of competitive sports has its own role in the equation as sometimes an exciting recruit can draw in more fans, which means more ticket and merchandise sales and therefore, better economic standing. The team's sport managerial authority, therefore, has to study, analyze and evaluate together with the rest of the leadership how to balance the recruitment based on the technical needs of the team and other aspects (Urrutia de Hoyos, 2008).

Based on different resources, some of the key items that come up consistently in literature for what goes into assembling a successful sports team are the organizational philosophy and culture, the head coach and their impact on the players, and the aim the organization has for the season. The goals for the organization and team could be many and according to Sapient (2021), they need to come before any personal objectives. The team could set its sight on winning the league, moving up to a higher one, making it to the playoffs or simply avoiding relegation. This speaks to for why strategy needs to be revisited consistently because in theory, if a team competes in an open league, relegation could happen to any of the teams. Sights could be set on making it to the finals, however, if the team under-performs dramatically, the goal might change from winning it all to staying in the league.

To tie it together, player recruitment needs to happen along the lines of who fits into the organizational atmosphere, who responds well to the coaching style, who has the skills and capacities the team needs to accomplish their goals, and who is available in the market. Contracts may vary from individual games to lasting several seasons. However, there may be clauses in the contracts that

allow for sudden or semi sudden changes from the side of the organization or from the players themselves. Based on multiple general observations portrayed in the media, injuries or behavioral issues might also play a role in how the roster develops throughout a season and a player might be released from their contract if they violate the club's code of conduct.

3.2.2 Strategic Importance and Organizational Impact of Player Recruitment

Needless to say, for a competitive team sport, the coach and the players in the team are everything. They are the ones battling the opponents game after game, fans come watch their favorite players live wearing team merchandise, the team itself wears gear displaying the sponsors' logos, and the players are in a vital role for how the organization's brand and image are portrayed.

A successful or unsuccessful player recruitment can make or break a team. Therefore, it can also make or break organization's performance as it is usually in direct in correlation with the team's performance and how well or unwell the season unfolds. Urrutia de Hoyos (2008) states that the strategic objectives of soccer clubs could be split into sport success and economic viability. Although the author focuses on football and its international atmosphere, the same idea can be applied to other competitive sport clubs and organizations regardless of the sport or region.

Sport success and economic viability

As briefly mentioned in the previous chapter, the organization needs to have sights set on what sport success means for the team in the upcoming or ongoing season. If the goal is set at the team making it to the finals, the management then needs to evaluate what kind of roster is needed for that to happen, what kind of players the team already has and what they are lacking. It cannot be stressed enough how fundamental of a role player recruitment has. If the club decides to take a direction where they sign an expensive player because they foresee them boosting merchandise and ticket sales, for example, the impact of this can be fading if the player does not respond well to the coaching philosophy and is unable to aid the team toward sport success (Urrutia de Hoyos, 2008). There may be a momentary spike in positive organizational and financial impact, however, if the season progresses with a loss after a loss, the club becomes less attractive and successful in the overall sport ecosystem. This can mean players, fans, sponsorships, investors, media attention, brand value and prize money to name a few (The Centre for Sport and Human Rights, n.d.).

When player recruitments in the team are successful, the organizational impact of that success can provide a lasting impact. The club might be able to enter into a years-long sponsorship agreements, season ticket owners renew their tickets before the new season kicks off and social media channels grow. With more success, more eyes are on the team. Success brings media attention, potential new business opportunities and builds the confidence in internal operations as well because there is likely more trust in decision-making and leadership as well. Depending on a team and leagues, the success can bring about international fans as well (Urrutia de Hoyos, 2008) which would help team transcend the national borders. All this further emphasizes the strategic importance of the function as it can have either a positive or negative impact that reaches beyond one game or season.

Whether the focus is on sport success or economic viability, the pathway to both is player recruitment being treated as a core strategic function. When a team has sport success it translates into economic success, and when the team has economic success, it often rotates back to sport success. A more successful team is able to attract and retain better players and those players then contribute to the team's sporting success. As Urrutia de Hoyos (2008) mentioned, the methods of recruitment are impacted by this self-feeding cycle as well. He also reminds that the players' fees have inflated throughout the years which causes recruitments to carry a significant financial risk. At elite levels, an unsuccessful recruitment may have repercussions worth millions of dollars. This can be result of too high salaries paid, losing sponsorships and experiencing a drop in ticket sales and fan merchandise (Cunningham, 2025). Missing out on playoff bonuses alone could potentially mean the loss of millions of dollars (Akabas & Badenhausen, 2025; Brinkerhoff, 2023).

Intangible Organizational Impact

Not only the measurable economic impact, but player recruitment also plays a crucial part of maintaining and developing the organizational culture, team morale and the mentality of winning. As in other industries and teams, it is evident that one person can have an immense negative impact on the rest of the team and its performance. In sports, this is amplified due to team sports being built around such intense level of unison in team effort required in consistently high-pressure environments. Athletes being in the public eye more than other members of the organization,

the clubs often need to manage stars with high salaries, deal with their egos and manage their expectations (Hughes, 2018).

Although the success of a club is highly dependent on its athletic team, the organization employs other personnel as well who run the business operations and execute complex commercial decisions for the team to have an organization in which to play (Fangni, 2025). The sport success could have an impact on the professionals the organization is able to attract into its other functions and how well they perform in their jobs. These roles are crucial for the club's success because they handle everything from marketing and public relations to sponsorships, finances and legal matters. As Urrutia de Hoyos (2008) reflected, the clubs tend to be better also at marketing their brand and image when they have a good managerial ability within the organization.

Often, in competitive sport organizations and clubs that do not have limitless resources, the people in business operations have multiple roles. Any administrative help or support in the workload benefits the staff to free up time for other more important tasks. Specifically for player recruitment and scouting this means that if the use of AI allows for more time to be put into more complex parts of the analysis that AI cannot cover.

3.2.3 Approaches and Organizational Challenges

The approach to player recruitment and strategy varies between sports, leagues and clubs. Some clubs may still be stuck in an old ways of working due to lack of knowledge or resources whereas other bigger clubs and organizations have been able to move towards more efficient and modern processes including the implementation of artificial intelligence in their operations and strategy (Dubois & Walzak, 2025).

In an optimal situation the recruitment strategy is built and executed in a way that is intentional and provides something to go back to for the organization in times of trouble. Sports are unpredictable regarding the operating environment and where players might get traded, they might also get injured. If the recruitment has been carried out just by signing star players that bring face value to the team rather than strengthening the skillsets and filling in the gaps on where the team lacks, the organization is in trouble if these star players get injured or traded. Whereas when the team has been built on certain competencies and strategic goals in mind, it is also easier to react

to sudden changes and formulate a game plan behind the scenes quicker which then transfers into the playing field as sport success and to the books as economic success (Robertson & Joyce, 2018).

Having an initial strategy is vital during the season as well so that it can be adjusted. As discussed, the strategy might change from one game to another, and a team never knows what it is up against until the season properly kicks off. There may be factors that need to be considered and adjustments that need to be made for the team to succeed and navigate in the competitive environment. Now, if all decisions have been made without a proper strategy, it is likely to impact the management's ability to make corrective actions along with the season's developments. Clear strategies aid in development of youth academies as recruitment channels as the clubs could instill work ethic and desired mentality into the athletes from early on (Fangni, 2025).

There are several aspects that impact organization's ability to implement the optimal and preferred recruitment strategy. Limited resources and subjectivity covered below are what could be found the most relevant in terms of the scope of the research and available literature. Literature collected from various sources finds that often the challenges come from limited resources, subjectivity of the recruiters, inconsistent data and the high cost of poor recruitment decisions. High cost of poor decisions has been talked about earlier in the literature and will not be deep dived into below to avoid repetition. Inconsistency in data could result from limited resources, knowledge gaps, and from poor work on scouting end.

Limited resources

Regardless of the sport or the level at which the club competes, resources, especially financial, are always under scrutiny. This may be due to poor financial situation of the club, or it may be league imposed expense limits that impact decision-making in the organization and therefore, the player recruitment. Resources can be of many kinds. In addition to financial resources, human resources, time, competence and networks may pose a challenge. Depending on the organization, it may not have the right people participating in strategy formulation or to evaluate whether the strategy and player recruitment strategy proposed are viable and optimal.

Lack of financial resources might mean that besides being able to sign the players the team needs, the organization does not have the financial ability to access a pool of candidates or insights through scouting networks nor pay a great scout for their services. In smaller organizations, the person responsible for putting a team together with the head coach, might hold other responsibilities as well and does not have the luxury to focus their full efforts in player recruitment.

Specifically in the context of player recruitment, limited resources may lead to data being inconsistent between scouts and the directive body of the sport organization. It is also possible that the systems the organization and clubs use are poorly maintained leading to decisions potentially not being based on reliable data. Then again, from the perspective of artificial intelligence and the adoption of new technologies, the organization may lack the funds to invest and in addition to that, the personnel who could understand and develop processes related (PwC, 2024).

Subjectivity

Much depends on interpersonal relationships whether it is between the coach and players, the coach and general management or the coach and the scout. As identified by Larkin et al. (2020), the relationship the scouts have with head coaches is fundamental and impacts player recruitment significantly. Now, if the head coach and scout do not have a good understanding with one another and there is friction between them, deliberating between players, opinions and suggestions may become a power struggle where heart and ego rule more than the logic and future projections.

The role of a scout will be covered thoroughly later in the theoretical framework, but it is worth mentioning that if the organization or a scout has not implemented the use of data in a proficient manner, much is based on subjective measures the scout and coaching staff relies on. Subconscious bias may come into play and as mentioned by Kuper et el. (2015), even the weather may impact on how a scout perceives a player's performance as their state of mind may be affected by outside factors that have nothing to do with the player who is being observed. As also discussed by Dubois and Walzak (2025), recruiters are prone to bias and sometimes even pay more attention to aesthetics and how a player looks rather than the tactical skill.

To revisit the literature covered earlier about the high cost of poor decisions, it is important to understand that subjectivity in player recruitment can mean that the recruitment process is not overall robust and due to this, have negative implications to organization's competitive advantage, sporting success and therefore, overall organizational performance (Dubois & Walzak, 2025).

3.3 Artificial Intelligence in Sport

Already in 2020, PwC's sport survey stated how sports industry is playing catch up regarding innovation and transformation to stay relevant and competitive in the increasingly competitive industry. Less than 50% of the respondents were implementing concrete strategies which suggests the framework and pillars for transformation and innovation is something not many were building at the time. Similar trend can be observed in the survey published in 2024 by PwC as over a half of the respondents did not yet have a plan for generative AI and 16% did not find it relevant for their business. The survey identified a likely 'wait and see' approach being used by organizations to discover the development of technologies. Localized implementation of generative AI was also predicted which would mean that there will not be an enterprise-wide implementation rather it would happen according to departments of interest.

3.3.1 Current Applications in Sport

The use of artificial intelligence has many shapes and forms in the sport industry. In addition to similar uses that a sport organization can have compared to a company in another industry to impact the efficiency of business operations and administrative tasks, the use transcends from practical purposes into entertainment purposes as well. Overall, AI is the most present in competitive sport organizations to enhance athlete performance and prevent injuries, to personalize fan engagement and to optimize decision-making for the management in organizations.

Over the years, technology has evolved to offer athletes a way to track data through wearable technology that follow heart rate and other biomechanics. This helps in understanding performance, load and the quality of recovery for the athletes. Some may use also AI powered video analysis to be able to identify stress patterns and therefore, mitigate the risk of injury. Understanding the specifics of how training and games impact the body, allow athletes to prioritize different elements in their training not only to enhance performance, but also to understand when

the body needs rest or to optimize rehabilitation after injury. These technologies provide valuable information to the athlete themselves as they do to their professional support network. A coach or physiotherapist might benefit from the biomechanical data to strategize the needs better.

As for the coaches, they might use AI to design different kinds of training programs and customize them according to specifics needs of the team. The coach can use AI to simulate games or to formulate a strategy against an opponent. Game analysis is one of the most important things for a team in preparation for games and competitions. Game analysis is also important for sport scouts as they gather information of prospects and players of interest. AI powered video and game analysis evidently differs when it is a player being followed and not necessarily a playing style or strategy analyzed for a specific game. It is worth mentioning though that similar tools and technology can serve multiple purposes when it comes to AI in sports. For recruitment, AI has the capacity to analyze large sets of data and potentially detect undervalued talent.

Another good example of the versatility of the technology is the wearables, although they provide valuable information to players and potentially their support network to enhance performance, they are also used for entertainment purposes for the fans to receive data during a game. Evidently, personal biomechanical information is not shared with fans, however, the speed of ice skating or the number of kilometers ran are something that fans can receive statistics on during the live broadcast they are watching. Fan engagement overall is of focus with artificial intelligence as fans are provided with interactive experiences and their behavior, for example, on social media can be analyzed through different technologies. The impact can be observed in ticket sales, pricing, merchandise and targeted marketing among other things.

3.3.2 AI in Recruitment: Strengths and Gaps

The technology used for player recruitment is both owned by tech companies and sometimes even the sport organizations themselves. Tech companies own core technology and then license the use of it to sport clubs. Some clubs like Sevilla FC, together with IBM, may have developed their own technology where they have more control over how the tool works and how it is being built (Sevilla FC, 2024). There are many benefits but also many challenges when it comes to the use of artificial intelligence and although there are many more for both strengths and gaps, below you can find the most relevant for the scope of this research.

Strengths

Artificial intelligence has the capacity to evaluate large sets of data and advice scouts based on those insights. Scouts gather information from the past and present to evaluate the strength of the potential recruit (Larkin et al., 2020). This is a time-consuming task that AI could alleviate the workload of recruiters. Margin of error decreases and there can be factors AI can pick up on where a scout might miss it. The time-consuming nature of player recruitment is also a factor because to find the best fit, the organization should go through large sets of data from a big pool of players. This may not be possible, and the reality is that if someone gets to a player first with a better offer, the likelihood of signing a potential star player goes out the window (Ewing, 2024).

As found by a study done on "blind scouting" (Dubois & Walzak, 2025) where players had been anonymized by AI technology, the scouts were more prone to focus on tactical abilities rather than the physiological considerations. This helps in decreasing bias, sometimes even subconscious, a sport scout might have towards players and yield in reliable assessment. While bias and manual workload can be alleviated through AI technology, the fact that scouts may also rely on game analyzing technology and not assist every single event and game in person helps also in the workload and mental strain a scout may be under. As discussed by Biermann (2019) and mentioned in earlier chapters, the state of mind of a scout can impact the assessment where it does not produce as reliable or consistent reporting on prospects.

Likely, the biggest strength of AI is its ability to act as a partner and a teammate. The use of artificial intelligence does not exclude or devalue a scout's sometimes lifelong experience on a specific sport, rather it brings in another set of eyes and can support the workload and help the scout reach a wider set of players.

Gaps

Although data analysis is crucial, not everything can be assessed with data. As vital as technical skills, physique and eye for the game are, how a player fits into a team cannot be assessed only through these factors. Player can be given a psychology-based form to fill, and AI can analyze it, but it still does not provide the full picture of how the player will fit in culturally. A great example

of this is when Barcelona FC signed a start player who everyone, including the fans, were incredibly excited about, but the player did not fit the team culture nor the coaching style and could not perform to their accustomed level. The player was released from the contract and the club posted a financial loss on the trade as they were the most expensive signing the team had made at that point (Hughes, 2018).

Although Dubois & Walzak (2025) determined that scouting practices can be improved by using the AI technology that anonymizes players, they also reminded that artificial intelligence may come with its own bias and needs human intervention to make sure that is bias free. In this case that would mean that the anonymizing is done in a neutral manner. Overall, AI could unwittingly operate from a place or prejudice and discrimination as the models are built based on historical datasets (Kamila & Jasrotia, 2025).

It could be argued that AI has not reached a level where it could determine the kind of relationship the player will have with the head coach and how well they are able to integrate into the culture overall. Human intervention is necessary whether coming from the scout or other sportive authorities in the club such a s the head coach. This is even more fundamental when talking about clubs that spend tens of millions in their signed players. As Hughes (2018) described in his book, Barcelona's style was very modest and almost family-like during the reign of a specific head coach. No flashy cars were wanted at the stadium, punctuality was vital and overall, the culture was described to be an integral part of how the team operated and what kind of players excelled coming from the youth academies and who did so as traded and scouted players.

As already determined, the relationship between the head coach and scout is important. To further elaborate on this from AI's gaps perspective, a point brought up by Christensen (2009) states that activities related to talent identification by expert coaches are built on complex unison of knowledge and memory of similar situations in the past which has developed throughout years. Artificial intelligence is trained by humans and to achieve the result wanted, AI needs to be taught what to look for when identifying talent. Simultaneously, the commands and models built into a tool that serves ice hockey cannot be used for basketball which means that the people building the tool need to be paired up with individuals who know the sport inside out and are able to communicate it to AI consultants. As explained by Stryker & Kavlakoglu (n.d.), generative AI works in

three phases, first, the foundation model is established through training. Second, the model needs to be adapted to a specific application which would mean tuning it. Finally, the third phase would be about improving accuracy through generating data, evaluating and tuning it again.

To conclude both the strengths and the gaps, what could be considered both is the cost of the use or artificial intelligence. The implementation of AI technology can be a significant financial investment for an organization which creates a challenge and means the introduction of just any kind of solution is not possible for all organizations. For the investment to be worthwhile, the organization should know what they need, and how they will proceed with the information and the tool to not have an investment on a tool that it later left redundant in its use (Goldman Sachs, 2024). For an organization to build its own scouting tool, and for it to be worth the time and financial investment, it could be argued the tools should be something that are built with eyes set own later licensing of the product unless the club building the tool is one of the giants of its particular industry where profits and losses can skyrocket.

Where technology can be expensive, it can also be affordable. There are multiple free or low-cost options that can speed up scout's and organization's workload and reach which is a definite strength. This means that the first steps towards AI implementation can be quick and possible to implement if there is a will to do so. To provide a practical example, a scout could write what they think is the perfect report on a player and then provide that to a tool such as ChatGPT and ask them to formulate the same kind of report on another player with the data that is available. This would speed up the process tremendously in case scout was still writing all reports manually. It would also help the organization because all reports would be consistent in formatting and the data needed would be easier to spot while also the delivery of the report would happen faster (OpenAI, 2024).

3.4 The Evolving Role of a Scout

We have dived into recruitment and artificial intelligence in the earlier chapters. Almost all big sport teams that perform on a high-level count on sport scouts with their recruitment strategy. Scouting in sports consists of observing and analyzing athletes' performance using different tactics and technologies. The person performing this activity is a scout that can also be referred to as the

recruiter. Not only are scouts to have a deep understanding of the sport, but they also are required to understand the needs of the team they are scouting and recruiting players for. In addition to being able to capture the talent a player possesses, scout's role expands to negotiating with the player, analyzing the big picture of the sportive panorama to eventually assist the sport organization's sport directors who usually consist of the head coach among other personnel (Pérez Mosquera, 2024).

Scout's role is multi layered as it requires stamina for a lot of travel to attend games live, social and interpersonal skills when negotiating with a player and their support network and when communicating and advising the club they are scouting for. Scouts are also required to analyze data and write reports about the prospective players. It goes without saying that there are many skills and competences that need to be developed while some of the attributes may also be natural characteristics of a person who is a talented scout. The willingness to adapt to the ever-evolving landscape of the sports industry and to new technology plays a crucial role as well. Even for a great scout, their opinion is still subjective and to lessen that subjectivity, in comes data analysis. As mentioned by Biermann (2019), even the weather can impact scout's perception of a player which is something that happens on a subconscious level due to the way the environment makes the person feel.

Considering all that goes into the profession, scouts need to evolve together with the world of sports, new technologies and the overall sporting environment to maintain success at their roles. Recruiting players is not only demanding as such, but as we have determined in the earlier chapters, player recruitment in a sport organization and club holds a critical and fundamental role. Since the role of a scout is multifaceted and they operate inside and outside of the club, they are under a lot of pressure. As Larkin et al. (2020) pointed out, the recruitment decisions can be criticized by not only the sport organization itself, but also the fans and media. The failure of successful recruitment can then hit a scout hard whereas a successful recruitment might not give the recruiter the recognition they deserve.

Larkin et al. (2020) found in their research about Australian youth football that scouts or recruiters, as they would refer to them, watch players tens of times to make a proper assessment. Taking

this into a more general context, scouts need to cross-reference players with other scouts especially when recruiting for the same team, but at the same time, they may be competing against other scouts for the same players. The environment can therefore be incredibly challenging. One needs to be able to work as part of a team while compete against others in the same profession to convince they player why they should choose the team the scout represents. The player needs to have faith and trust in the scout while the scout is promising the player and the club something based on their belief, analysis and intuition about what the specific player can achieve in the future.

Based on these learnings, scouts act as a bridge in many ways. They are a bridge between an athlete and a sport club, a bridge between the past, present and the future, and they also bridge, or bring together, analytics and intuition. A great scout likely operates from a place of logic but also from a place or emotional intelligence.

3.5 Leading Change in Sport Organizations

Managing and leading change is a demanding process in any organization and there are likely more companies that fail than succeed at implementing change. With great advances in technology, global challenges that have impacted many business sectors and overall evolution of our business environment require change management constantly and consistently. Change management consultants many times talk about psychology when they teach and guide about the processes and emphasize that proper steps in the right order need to be taken to drive change home successfully. One of the most important things in today's commercial world is not only our own attitude towards change but also how well we are able to either lead it or act as agents of change to move others (CCEA, 2022). The world will not stop and from years of professional experience in human resources, often, you are told that people want and need a break from change. You could even listen some of your peers say that they cannot wait until the following month for something to be finalized or ponder on whether the fifth supervisor they have been assigned in the past 2 years will hold the position for longer than a few months.

One of the key aspects of change is that the organization and people are ready to change. Weiner (2009) explained organizational readiness to be a multi-faceted construct that requires the members of the organization wanting to make a change which translates into their commitment to

change, and the members' trust in that they can make the change happen which can be referred to as change efficacy. Factors impacting organizational readiness are task demands, resource availability and situational factors. Some change management leaders believe in change resistance, yet some believe there would not be any resistance if change was led the right way from the very beginning.

Even the smallest of changes could be considered something that change management principles should be applied to. Given the topic of the research, though, the focus will be on managing and leading change when it comes to technology and deployment of artificial intelligence. Overall, these changes are usually major changes and successfully leading change around them would potentially indicate ability to lead change around other areas of business processes as well.

3.5.1 Attitudes around Change

In the earlier chapter, we referred to sport industry playing catch up (PwC, 2019). As can be interpreted from the results, considering the adoption of artificial intelligence, the industry is on standby especially when it comes to generative AI. Uses for artificial intelligence are many, and many organizations are using and benefitting from it. However, it could be argued, based on literature, that sport organizations specifically league, teams and federations are more reactive than proactive in their way of operating specifically when it comes to adopting to technological opportunities and advances (PwC, 2024).

Evidently, for these organizations the focus tends to be on the competition and that is where the organizations may be more proactive and ahead of the curve. It seems though that when it comes to business operations and a futuristic approach regarding them, these organizations are slower to act. This is likely due to the scarce resources with finances and people which makes it more challenging to predict and develop operations that could benefit from the use of AI. The sport industry is a fast-paced and dynamic environment where change management should be in the absolute key role and one of the key pillars of organizational functions. Maybe it is because long standing club traditions or attributes in the game that never change that cause attitudes that do not welcome novelty and new way of operating. It is worth mentioning the fact that many sports operate in an outdated world where diversity and inclusion is not always a given, but it might also not be worked at either. This could mean, for example, women in leadership positions. This goes to show

that it is possible that at some level, sport organizations play catch up when it comes to readiness and ability to change.

New technology particularly can cause havoc as new learning needs to take place. Not everyone likes technology and are not interested in learning new systems of transferring from the old to new. Technology can be problematic due to this because it sometimes is complex and difficult to understand especially if one has no context or prior learning. Technology, and moreover Artificial Intelligence, is one of the fundamentals to secure growth and sometimes to even secure existence at one's sector. In sport context, processes can stay the same and only minor things could be altered and the organizations would still likely exist. The organizational success, however, could experience a significant drop. This is because even if the organization survives, as the world evolves, fans will expect more, sponsors will expect more, and other organizations might be implementing processes and operational models that challenge others. When one organization finds a way to deliver better experience whether it is for fans, athletes or sponsors, it will become evident to the stakeholders that more could be achieved. Due to many times scarce resources that we have already talked about, more cannot be achieved with existing models and existing personnel. Nothing changes if nothing changes. The personnel might already be at their limit with the workload or there is no one who has the skillset to lead the organization to a different direction or more robust processes and use of resources.

3.5.2 Keys to Change

In a study reviewing different change models (Errida & Lotfi, 2021), it was found that the most important factors for successful change are the leadership of the one managing the change, communication during the change, engagement of stakeholders and the motivation both in employees and change agents. Leaders need to be able to build the grounds for why the organization needs to change and support the employees along the way in multiple ways (Dame, 2023). This calls for the leadership commitment. If a leader or the one communicating the change has not bought into it, it will be a challenging mission to drive change in an organization. Leaders need to understand why the change must happen, what other options there are and listen to the stakeholders to paint a clear picture of if the planned change is viable and if it will resolve the problem the leadership believes it will.

Sport organizations face constant change specifically when it comes to the team and its of players. The roster may change from one day to another and teams and head coaches are likely to have their processes on bringing new players in and managing changes in the overall roster (Vuorenmaa, 2015). However, even if the sport team handles change well, it does not mean the rest of the organization operates the same way as the coaches and players do. Especially with digital transformation and change, the impacts to the organization can be experienced in many different forms such as how the company is structured and how it operates and competes, that leadership and actual change management are vital (Maazmi et al., 2024).

The right stakeholders should be involved from the very beginning so that the organization and leadership can evaluate the reach of the change. This allows for proper resource management, change agent identification and planning on various scales. People are naturally concerned when it comes to change because it is unknown, and the workforce cannot predict how their daily work will look like after the transformation (Dame, 2023). There may also be fear of losing one's job altogether and questions that feel like answers are not given to. It is fundamental that employees trust their leaders and crucial for leadership to foster the trust build with the personnel before, during and after the change (Errida & Lotfi, 2021).

3.5.3 Sustaining Value from AI in Player Recruitment and Scouting

As has been discussed, recruitment strategy is vital regarding player recruitment, implementation strategy in crucial for managing and succeeding change, and the same applies for the use of AI: strategy is key. The tools around artificial intelligence evolve and develop constantly which is why an organization must know what it is implementing, why and how the knowledge will be acquired, maintained and updated regarding AI tools. The investments can be costly and as identified by PwC (2024), choosing the deployment model is fundamental in the success of aligning and fulfilling the business goals. The organization needs to decide whether they are to build AI tools and solutions internally or consume them as a service. Attention should be placed in the evaluation especially based on security, cost-effectiveness and customization opportunities (PwC, 2024).

A crucial part of ensuring long-term value is the proper groundwork done prior to making decisions. As can be seen in Figure 3 below, PwC (2024) groups responsible AI strategy and implementation in eight different blocks. These are thought to ensure the proper and responsible AI deployment in an organization.

Figure 2 - Responsible AI Approach (PwC, 2024)

First, value hypothesis refers to the risk and reward ration considering the potential value to the company and the implementation process itself. Second block is use case which refers to the development of the designing that use experience and journey in relation to the value hypothesis. As a third block there is one called patterns. This refers to aligning the chosen cases, the demand, with supply. Tooling is the fourth block that ensures the tech is not left redundant. Solutions, fifth block, mean the development of the appropriate solutions to match patterns. Sixth block is cost and carbon that refers to evaluating the cost associated with development and deployment. Carbon impact should also be evaluated. With deploy and learn, the blocks mean releasing the tool to for example, a control group and assessing the deployment and associated risk and governance. Last one at eight is adjacent scale that means exploring similar options for lower cost.

Specific to the scope of this study, one of the factors impacting adoption of new technologies and changes is that they are directed to the right people, but also that they are directed for the right purpose. As identified by Dubois & Walak (2025), tools powered by artificial intelligence could also be used as training avenues for scouts to be more aware of their own bias. Using this logic, it could be beneficial for an organization to identify if it would suffice to have their scouts participate in training that involves the use of AI to awaken consciousness around certain topics or if there is a tool they truly want the scouts to integrate into their daily tasks. This could be a part of the discussion for responsible AI approach seen above.

3.6 Ethical and Responsibility Considerations

This section is a result of many different articles from the literature reviewed combined together with study done by Kamila & Jasrotia (2025) on “Ethical issues in the development of artificial intelligence: recognizing the risks”.

In traditional fields, job evaluations are highly confidential data, however, in the AI tools, notes from scouts and evaluations on performance are visible to anyone using it. Evidently, some of the data that AI platforms withhold is necessary to have as it is so closely tied to the performance of an athlete in the. This could refer to height and weight, for example. Although athletes already operate under different rules in terms of privacy, as their health information might be available even to the public, it is a concern and deserves the question on how all biomechanical data is stored and is it something that can at some point be removed from the databases.

In the highly sensitive data, such as medical data gathered from wearables and gadgets, the storage should be handled with extreme care and athletes’’ data be safe from hackers. Although, especially in Europe, General Data Protection Regulation (GDPR) has posed a safer environment for data storage and handling (Wolford, n.d.), it is still not a given that an organization would follow the regulations to an extent that all this data is safe.

As seen below in figure 3 abut preparedness for GenAI implementation (PwC, 2024), well over half of the respondents from teams, leagues and federations do not have anything in the works considering GenAI implementations. From ethical and responsibility aspect this is potentially a good thing as it is better that organizations only implement these solutions when they are ready for

them and when they have all the necessary responsibility measures deployed. Ethics and responsibility wise, once organizations start implementing, they need to evaluate the potential and process thoroughly as seen in figure 2 about the responsible AI approach.

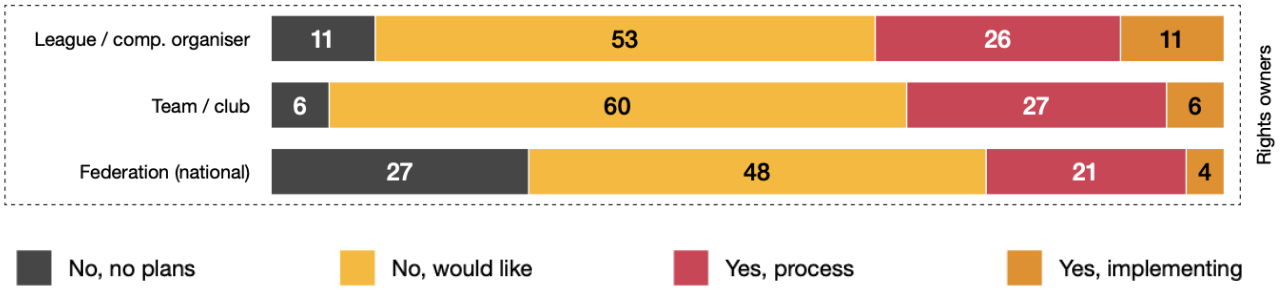

Figure 3 - Preparedness for Incorporating AI (PwC, 2024)

3.7 Relevance to Research Objectives

The research objective is to explore how the use of Artificial Intelligence in player recruitment and scouting can support the organizational performance of a sport club and the work of scouts. The literature is based on building a framework and understanding around how player recruitment happens, what its role is in an organization performance wise, how artificial intelligence is used currently in the sport industry, and how organizations in general manage change and the adoption of artificial intelligence. The theoretical framework successfully builds up the knowledge to be able to answer the research questions and support the analysis of the secondary data to formulate research results.

4 Research Results

To build base for the research results and to provide context, the clubs researched should be reintroduced more thoroughly. Below you can find why these football clubs are of interest. The research results are shared in the subchapters based on research questions at hand. The reasoning for the further introduction of the research objects as a part of the results is due to the nature of

the information provided as it partially contributes to the research findings. References are partially listed within the results, but for some parts, it is not possible to identify a single source rather the information and findings are a combination of having gone through a lot of qualitative data from different sources and combining the learnings and drawing conclusions. All references have however been listed at their respective section at the end of the thesis.

Brentford FC & FC Midtjylland

An English football club Brentford FC, formerly owned by a professional gambler Matthew Benham, is overall one of the most known football clubs in terms of their data-driven approach. Benham created a company that analyzed undervalued bets and made millions from it. This success translated into a realization that similar approach could be used to identify undervalued talent in football. Brentford was promoted into the English Premier League in 2021 while also posting a profit of 25 million British pounds. This speaks to the team's sporting and organizational performance (Barney, 2024). In 2014 Benham acquired a majority stake in FC Midtjylland, a club at the verge of a bankruptcy, to implement a similar approach to operations leveraging data. It took only one year since that acquisition and the club celebrated its first Danish Championships in 2015 (Ingle, 2015). Again, the data-driven approach proved its success in creating success in sports and to achieve the unthinkable. Benson does not only lead with data when it comes to scouting and player recruitment, analytics lie at the heart of the operations in many other levels as well (Stewart, 2021).

Although Benson sold his majority stake at the Danish club in 2023 (Harris, 2023) and transferred his majority stake of Brentford to a holding company in 2025 (Brentford FC, 2025), the clubs led by him serve as great points of research because specifically for Brentford FC, the available resources speak about the AI and scout collaboration, the organizational performance can be evaluated in quantifiable profits posted, and conclusions can be drawn about organizational readiness. FC Midtjylland serves as a reference point adding into the research data but also showing that Brentford as not been a strike of luck, rather the systems or at least mindsets can be integrated into a different team in a different country.

Sevilla FC

Sevilla football club is one of the oldest football clubs in Spain and has been successful throughout the years. As Sevilla FC's Chief Data Officer Elías Zamora Sillero stated (2024), the club is highly interested in data and technology for all its processes. He also identified the key success factor being scouting in the past 30 years. Sevilla's interest in enhancing scouting through technology is not limited to using a third-party tools and platforms, rather they teamed up with the technology and AI giant IBM who is known for hybrid cloud and consulting expertise with clients in more than 175 countries ranging from private to public sectors (IBM, 2024). As also detailed out by Zamora Sillero (2024), Sevilla had already relied on data prior to the partnership with IBM but the collaboration made it possible to create a tool called Scout Advisor that will take into account more data and further improve the analysis the club had been able to do thus far.

These organizations and clubs have received much media time and are pioneers in what they are doing. The secondary data available has allowed for the research objective to be filled and the questions below have helped us in answering how the use of Artificial Intelligence in player recruitment and scouting can support the organizational performance of a sport club and the work of scouts. The questions will be gone through in each dedicated subchapter.

- **RQ1**: What kind of impact can the integration of AI tools have on organizational performance in terms of player recruitment and scouting?
- **RQ2**: How can AI support the work of scouts?
- **RQ3**: What is needed from a sport organization to successfully adopt and benefit from AI in scouting and recruitment?

4.1 Organizational Performance

To answer what kind of impact the integration of AI tools has on organizational performance in terms of player recruitment and scouting, we can establish three major impacts: 1) economic impact, 2) sporting success and 3) brand awareness. Although there are many ways AI can impact organizational performance, based on the learnings from academic literature combined with the data analyzed, these three are considered the most relevant as per the positive impact the implementation of AI can have.

4.1.1 Economic impact

Brentford FC has made tens of millions of British pounds through buying undervalued players for lesser expense and then sold them for a significant profit. Selling their player Neal Maupay, for example, brought in an over 20 million profit when looking at the difference between what he had been bought and sold for (Stewart, 2021).

Although the player acquisitions and selling the for profit potentially provide an incredible return on investment, the economic impact for the organization can also be indirect or less quantifiable. The Sporting Director Victor Orta for Sevilla FC stated that where in the past, he might have needed to review 45 reports to know what his team of scouts think of a player, he can now get that information in minutes time because of Scout Advisor (Lemire, 2024). This kind of an impact time wise may not be quantifiable to financial figures, however, organizations in general invest in streamlining operations to free up time for more important tasks and this is exactly what the generative AI tool accomplishes for Sevilla FC.

A factor that can be also considered as worth mentioning even though not quantifiable, is the media attention all three research objects have received and what yields from that. FC Midtjylland is a club at a Danish league that most likely would not have many articles written about it or research done on the club in English had it not been a pioneer in using data in the Danish league. Supporting the academic viewpoint is Sevilla FC's collaboration with the University of Sevilla. The media interest potentially also lifts academic interest and through that, the clubs may benefit from free or low-cost research work done to improve their processes further. For why this is considered a finding is because there was a big number of articles, interviews and literature that specifically talked about the use of data, "moneyball" approach and the pioneer work.

The pioneer work and publicity around the development of technology is likely to bring about sponsorships that would have a positive economic impact for the organization as well. Even so, partnership related factors are covered in the subchapter about brand awareness.

4.1.2 Sporting success

Besides the financial success, all the research objects have had success in their respective leagues. Brentford FC rose to Premier League (Stewart, 2021), FC Midtjylland won Superliga for the first time (IFREQ, 2024) and Sevilla FC has numerous national and international titles won (Sevilla FC, n.d). Although for Sevilla, the implementation of Scout Advisor is hard to connect to sporting success, it must be remembered that the team has already used AI in a simpler format, and the new tool developed and deployed has been generative AI. As mentioned before, the club's representatives have stated that data has already been used prior to Scout Advisor, and also the Chief Data Officer of Sevilla pinned the use of data as one of the keys to their sporting success.

In connection to economic impact for the organization, it is not only about the sale and profit when signing an undervalued player. When the club has fast processes, they can get to the players quicker. The transfer market can get chaotic and there is a possibility someone signs the player the club wants to sign before they reached them. Using data allows for potential recruits to be identified earlier and the decisions about signing are therefore possible to make sooner. This ensures that when a talent is spotted that helps the team composition, the organization is ahead of the curve in offering the player a contract.

Using AI in player recruitment, ideal team composition is also easier to accomplish. Having AI filtering and analyzing data, the club can identify the kind of players they need and decide on whether they are a good fit for the team or not. This helps the organizations evaluate players specifically based on the skills needed and ensure the team's recruits build a cohesive group of players that suit one another. When the skills are in balance and complement one another, better sporting success is very likely as well.

4.1.3 Brand awareness

In one of the articles about Brentford FC's Moneyball approach the club was described to be a movement. Not only a club, a movement. A video by Stewart and Devine for the Athletic (2021) has had over 700 000 views on YouTube. The advances, innovation and success promote the club on their own as described in above for economic impact. Media and other parties want to know how the approach works, what is that the organization does differently and what the outcomes

have been. Brentford FC has been covered even in the academic literature, but the number of media articles and interviews around the club is quite significant. Even this thesis topic and research might not have happened had it not been for Brentford's success with AI and its data strategy and the media attention it brought about.

As discussed also as a part of the economic impact, these clubs have attracted the attention of scholars as well and research papers have been written about them. Beyond economic impact that new research could bring about, there is also a chance to bring awareness of the organizations to students that may have not developed an interest towards the organizations was it not for the media attention, innovation and collaborations happening due to their AI initiatives. This kind of brand awareness may even attract new workforce into the clubs. Specifically for Sevilla FC the academic collaborations are already steps ahead of the rest as the club has collaborated with Sports Data Campus to provide master's degree studies around innovation and technology for sports organizations but also a master's degree in big data applied to specifically to scouting in football (Sevilla FC, n.d).

The advancements in data and AI applied to recruitment in Sevilla FC's organization have not only yielded visibility and collaboration in the academic world. According to Sevilla FC's statement from March 2025, the club has taken a part in an AI Alliance which promotes the development of artificial intelligence and comprises of tech companies and academic institutions. Sevilla FC is the one of the first sports clubs to join this alliance. In addition to this, the club has participated IBM Think event in 2024 and 2025 which is considered a prestigious event. This brings about international and cross-industrial visibility for a football club from Spain.

The high profile in data and the use of AI has likely attracted several other collaborations for all clubs including the naming of Brentford FC's stadium to Gtech Community Stadium naming rights (Brentford FC, 2024) and STATSports for performance tracking for Midtjylland FC (STATSports, 2020). Through sponsorships and inclusion in alliances and forums, the clubs can reach audiences they have not reached before and gain even more international fanbase.

4.2 Organizational Preparedness

For clarity purposes, the third research question on what is needed from a sport organization to successfully adopt and benefit from AI in scouting and recruitment is covered before moving onto the results for scouts due to strong ties with the findings for organizational performance. As like for the first question, three important elements could be identified based on the combination of the theoretical framework covered and the findings from the data analyzed: 1) robust strategy especially in player recruitment and scouting, 2) leadership commitment and 3) tech literacy.

4.2.1 Robust strategy

Even though the use of AI has a positive impact on organizational performance, it must be considered that if an organization or a club makes significant investments in technology but does not have their player recruitment strategy well formulated, the economic impact could be negative. The use of AI alone does not provide a quick fix, but other pillars need to stand firm in the organization prior to deployment. However, if the club is to implement AI solutions that are not costly, even without proper strategy, the impact on organizational performance would likely be neutral or slightly positive of kind.

Literature proved that strategy is vital, the football clubs that were researched indicate the same fact. The Chief Data Officer of Sevilla FC mentions in an interview (2024) that the club has thrived because of its approach to player recruitment and described how into technology they are. The football club's official sites (2024) highlight a phrase saying that technology is part of the club's DNA. Sevilla FC had already established their own data base with 200 000 scouting reports (Sevilla FC, 2024) and they decided to partner up with IBM to create Scout Advisor that helps the organization process the data using natural language processing. This shows us a strategy is at the heart of everything. Sevilla had already implemented innovative scouting in the past, they had built their own database, and they took a step forward with generative AI. For an organization to be able to build such a tool, even if it is with the help of a tech giant, they must have it crystal clear what it is that they want out of that collaboration and why to fully leverage these technologies and reach a return on investment.

Similarly for Brentford FC and FC Midtjylland, the strategy is what has enabled the clubs to thrive. As explained by the Athletic in their take on Brentford's Moneyball approach, if the organization does not know what they are after, even a great recruit can be wasted. Phil Giles (2024), who is the director of football at Brentford, emphasizes the need for long-term thinking. He stressed that one cannot buy a player to solve a problem in the short-term if that purchase turns into a problem in the long-term. This statement and reflection were in association with player injuries and how the club was going to solve these challenges. This view is also supported in literature as the club's initial strategy should be revisited consistently. In this case Brentford shows how they are facing challenges through injuries that have not been prevented and due to a solid operating model and strategy, the club does not make decisions and moves in panic more, rather they are more proactive and strategic about how the current problems can be solve in alignment with long-term plans. Brentford's Technical Director Lee Dykes (2023) has voiced similar statements in the media explaining that the team tracks key metrics to aid decision-making to be based on facts and not panic or emotion.

4.2.2 Leadership commitment

For change management, several sources revealed that leadership commitment is one of the key elements for succeeding in change. In the case of Sevilla FC, a press conference recording has been uploaded onto the club's site together with a press release about the deployment of Scout Advisor (2024). In the video, you can see the President of the club as well as the Head of Scouting and Chief Data Officer. Although Sevilla's organizational chart (n.d.) does not determine and name all leadership positions in the club, the club is organized around various positions and for there to exist a Chief Data Officer as one of the positions of the club, it demonstrates a firm take on the data being at the core of the operations. These positions also help us understand the mentality in the club. The operations are likely organized in a way that these individuals lead teams which means the executive leadership has had to determine that data for the organization is so important, it requires a Chief Officer position.

Additionally, the presence and the positive statements about the tool and collaboration with IBM from these figures at the press conference showcases the commitment to innovation and development to external stakeholders and to the overall sport ecosystem. Even though there is no data on how employees of the organization see the leadership commitment, an educated guess can be

made based on the statements given by the parties that these individuals drive change and are committed to leading the organization forward with the new technology. The pairing together with IBM is also something that increases credibility for the organization's leadership externally, but it is also likely to have an effect internally in the organization. When organizations pair up in this way for the caliber of projects as Scout Advisor, based on the statements of months' worth of work going into it, it is expected that the leadership has required change management and get the so called "buy in" from rest of the staff. This kind of work would not happen without strong leadership commitment to the project.

Another example for strong leadership can be drawn from Brentford FC. Matthew Benson came into the club already with the idea in mind that data can transform how the club operates. In similar manner as for Sevilla FC, Brentford's leadership also holds up a strong sense of data-driven leadership to the external world. Statements about the use and benefits of data can be found from Technical Director, Head of Scouting and the Director of Football. Again, we cannot know how their leadership showcases internally in an organization but the strong presence and impact towards the exterior would indicate the leadership standing strong and firm behind technology adaptation. The results also prove it, the club would not have had the sporting or financial success it has had unless they leadership had been successful in driving data-based practices and processes within the organization. Additionally, Benson selling his majority stake of FC Midtjylland and transferring his majority stake of Brentford to a holding company provides a point of reflection to how the clubs have been able to integrate the data as vital part of the processes as the changes in ownership do not seem to have critically changed operating models regarding data (Harris, 2023; Brentford FC, 2025).

4.2.3 Tech literacy

Brentford FC has been able to leverage data in major way because not only are they gathering it, but they also know how to leverage it. The angles in the recruitment strategy the club has accounted for are numerous. One factor the organization looks at is the team composition and how the players suit each other, as well as how they can help each other grow as players. One fundament in looking at the team composition is that there is no value in having a player with a specific talent or skill unless there is another player that can leverage it in their playing position. In addi-

tion to this, they have looked at the goals scored not only in quantity, but also in from which positions those goals have been scored. This has led the club to be able to predict that a player who has scored less goals but from harder positions than another player, will likely be a better recruit and grow into scoring more goals also from the easier positions. This kind of analysis has helped the club in identifying players that are undervalued overall, and they have been able to buy them for significantly less than what they have sold them for later (Stewart, 2021). Understanding this approach evidently requires tech literacy and being able to come up with innovative ways of using data. Even so, currently there is so much information available that even if one does not come up with innovative solutions, one can learn from the solutions applied in other sports or other teams and apply them to their own cases, processes and operations. Tech literacy is something that can be developed and although it is true that some have more natural capacities and tendencies to understanding the ever-evolving world of technology and artificial intelligence, it is also possible for those who do not to stay ahead of the curve due to the resources available online which of many were discovered during the data collection phase.

Tech literacy comes into play for Sevilla FC as well as the tool Scout Advisor has been built together with IBM. Likely IBM has provided consultancy in a way that the knowledge that Sevilla's data team has not had, the tech giant has been able to fill in. However, the development of a tool such as Scout Advisor would likely not be possible if the collaborating organization did not have a high level of data practices already integrated into the operations. In addition to the development of the tool, the tool needs to be maintained, and the investment needs to bring return on it. This means that the organization is required to keep their knowledge and practices up and potentially further develop the tool when other clubs catch up and when artificial intelligence faces new updates and capacities. As it was identified also by IBM (2024) in their breakdown of what artificial intelligence is, the tools need to be tested and then finetuned along the way. This approach requires for the users to stay alert and be able to report back on what is working, what is not and what kind of changes are wished to be implemented.

The Technical Director of Brentford FC, Lee Dykes, said that their biggest weapon is the structure of their club. He mentioned they use numbers cleverly both in recruitment and in performance (Lewis & Zayn, 2023). This statement is an important one in understanding how important tech literacy is and to what extent it deserves the attention and potential investment. Although Brentford

has a market value of hundreds of millions of euros, it is still competing against even bigger giants in the Premier League which is why the club's representatives have stated they need to bridge the gap between budgets through intelligent use of data.

4.3 AI supporting Scouts

To answer how AI can support scouts, again, three pillars can be identified: 1) providing a teammate, 2) developing scout's talent and 3) mitigating risks. Eyeball was found through studying Brentford FC as it was discussed that they were to renew their contract with the provide. Through Eyeball, information was retrieved for the purposes of the research results although, it was not the object of the research.

The most impactful statement discovered during the research whether academic literature or other sources is from a press event held by Sevilla FC and IBM (2024) to introduce the Scout Advisor and showcase its performance. The Scouting Manager of Sevilla FC, Emilio De Dios, said that the implementation of Scout Advisor was like going from candles to electricity referring to how transformational the tool is for scouts' everyday work.

4.3.1 Providing a teammate

All findings from the research data suggest that these sport organizations see AI as providing another approach and a helping hand to scouts and sport organizations. Not a single club has suggested the technology could replace scouts entirely and especially from Brentford FC, the Technical Director referred to "good eyes" being needed to spot the best talent from what AI offers up as potential fits for the team. Artificial intelligence can help scouts operate quicker and pull data and statistics faster than they would have been able to without it. The time analyzing games can be reduced with technology where AI can do at least part of the analysis and the scout's time frees up for the evaluations AI is not able to perform and where their expertise is providing an additional value. A big part of the more administrative side is reporting which is something AI can aid in as well to produce reports faster for the scouts to send forward (SportsDataCampus, n.d).

Artificial intelligence as described by Eyeball (n.d.), a service provider known to have been used by Brentford FC, has the potential to expand scout's networks and help them reach a diversity of players in different regions internationally. By using the tools powered up by artificial intelligence, the scout has the opportunity to gain a teammate that in a way acts as an assistant but at the same time, a networker and a "junior" scout itself who does not yet have all the capacities of a true scout.

4.3.2 Developing scout's talent

AI has the potential for scouts to spot talent from wider ranges and provide them with more efficient ways of working. However, in addition to spotting talent, AI helps the scout foster and develop their own professional talent. As discussed in earlier chapters, scouts have a variety of different roles and need to have a combination of hard and soft skills to manage their jobs. Even for a scout who is skilled and exceptionally good at what they do, learning about artificial intelligence and the tools and strategies in relation to it, a scout can gain a competitive advantage in the pressure prone industry. Especially in the current market situation, there is a great opportunity for the scouts to be ahead of the curve and competition in the constantly evolving sector. Sevilla FC and Sports Data Campus provide a master's degree specifically designed for football scouts to leverage big data which goes to show the value the football club and academics place on data-driven scouting. The master's program also provides a so-called cheat sheet for scouts to understand what the future skillsets required might be. As the program is suitable for people who have not worked in the industry yet, it also provides a take in how the future profile of a scout might look like in a few years from now.

4.3.3 Mitigating risks

Operating in an industry where a single trade can bring the club 20 million euros or pounds, does not consist of low pressure. Decisions must happen fast and there are other clubs competing for the same players. Due to this, scouts need to work meticulously but fast at the same time. The use of AI provides a way to mitigate the risk in terms of missing out something important regarding a potential recruit while maintaining the speed and efficiency in operations. Human errors are common especially when the pressure builds up, but AI can provide another set of eyes and is separate from the pressures an individual scout might experience.

As for Sevilla FC (2024), they stated to have 200 000 scouting reports in their data bases. The implementation of the generative AI tool allows the organization to find the prospects quickly combining the technical data of the players and the data gathered through a scout's input. Both the team behind Brentford FC and Sevilla FC emphasize on the collaboration of having "good eyes", referring to the scout's input and expertise, and the technology supporting one another. Especially from Brentford's side, this was described as a process of missing nothing (Lewis & Zayn, 2023) when filtering through players and then attaching the scouting expertise to the players the club has been able to spot thanks to data.

5 Research Reliability and Validity

5.1 Reliability

Data collection's reliability is measured through whether 1) the results will be the same on other occasions, 2) other observers come to the same conclusions and 3) there is transparency on how the interpretations have been made (Saunders et al., 2009).

For the first measurement criteria, the results of the study would be the same on other occasions given the factors controllable by the researcher. The second measurement criteria, however, is a more complex one as one of the characteristics of action research is the involvement of the researcher themselves. Therefore, if another researcher from another field were to evaluate the data collected for the study, they might not come to the absolute same conclusions because they might not have developed the knowledge and understanding around the sport industry as someone who has studied it for a few years. Similarly, language could pose an issue as some of the data collected are videos of interviews that are in Spanish. There could be something missed by another researcher who does not speak Spanish fluently or there could be some sources that would not have been found due to the same reason. It should also be mentioned that thew researcher's professional background can play a factor in how they analyze the data and findings and how they understand the world of recruitment overall. If the data analysis was conducted by someone with the same professional and academic background with the same language skills, the results would likely be the same. Overall, the importance of scouting and player recruitment was so evident in

the literature and in the organizations the secondary data was retrieved from that results would likely indicate the same outcome but potentially with fewer insights.

For the third point, there is transparency for how interpretations have been made and although secondary data poses challenges because it has often not been collected for the particular research topic, as Saunders et al. (2009) explains, it provides a credible source of information because third parties can access the same information the researcher has accessed. This way the research results are more open to public scrutiny which further reinforces data integrity as the researcher cannot state something that does not exist in the sources. All in all, the research fills the criteria for reliability well with the slight notion on the researcher's involvement as one might interpret things differently from others and due to the secondary data collected not having been specifically created for this study at hand.

Reliability could be improved with primary data, however, as it became clear when reading literature and some media articles, access is not easily granted for research purposes and at least one of the writers stated (Larkin et al., 2020) they had had it somewhat easier as they had established a presence or a name within the specific sport in question. Therefore, conducting this kind of study from Finland, secondary data was eventually the only possible option unless the topic of the thesis was changed to something else.

5.2 Validity

Validity of the research refers to the findings being what they appear to be. There are several factors especially in primary research that could affect the validity of the data retrieved, for example, the timing of it or the research settings changing (Saunders et al., 2009). In the case of this research, the biggest threats to validity are again the fact that the data has not been generated for this research and the researcher is reliant on what others have produced. Also, as the data accessed is public, there may be a more positive image being portrayed to the media in interviews or the media itself might dramatize interviews and take things out of context. Care has been placed on analyzing the sources to ensure validity of the data and cross-checking has been conducted when possible. The results are to an extent generalizable; however, this is likely the one factor that most can hinder the validity. It has been stated that the most available information is about

football and evidently, when it comes to artificial intelligence and information about its implementation in organizations, the clubs tend to be big ones as they have more resources. This means not all results are something that can be applied to every single sport club on the planet but even so, the red thread of the findings can be applied to practically any sport club, although adjustments need to be made based on possible resources. Conclusively, validity can be deemed as acceptable.

6 Conclusions

The research aimed to study how the use of artificial intelligence can support scouts and sport organizations in player recruitment. The research problem formed around a gap in the literature about the impact artificial intelligence in player recruitment and specifically the literature regarding scouts is scarce. To solve the research problem by providing understanding around a topic that has not been researched practically at all with the same exact perspective three research questions were answered with the help of literature and the data gathered around the research objects.

Literature and the research findings suggest that the impact for organizational performance can be significant when implementing AI solutions. Firstly, the role of player recruitment is vital for a competitive sport organization as the sporting success, which is tied closely intertwined with organizational performance, depends on it. As literature shows, player recruitment must be treated as a core strategic function. The research findings indicate that three core areas can be detected when it comes to the impact using AI can produce. These are economic impact, sporting success and brand awareness.

As supported by literature, when player recruitment is successful, sporting success is more likely and when the team and organization succeed in their competitive league, it directly translates into economic impact. This could happen through sponsorships, ticket sales or price funds. Economic impact can also be seen through player transfers as depending on the league and sports club, the transfer sums for players can be in tens of millions of euros. AI has the potential to help scouts and organizations make better recruitment decisions to ensure the team has skills that complement one another, but it also can identity undervalued talent through game analysis where organizations with technologies can predict the player's growth into a much more valuable player than at

the time of purchase. Brand awareness can be achieved through success and what comes with it, but also through innovation around these new and emerging tools and technologies. Brentford FC and Sevilla FC are key examples of the collaborations and media attention that can be achieved simply by being successful at leading with data. Sevilla FC has gained international attention due to their collaboration with IBM and is in key circles when it comes to the further development of AI. Therefore, the integration of AI tools can have a significantly positive impact on organizational performance both directly and indirectly. Even so, it is evident both in literature and in the research finding that AI tools need to be implemented strategically while also having a solid recruitment strategy and understanding of what the team needs to have the ability to leverage AI.

Scouts, or recruiters, have a versatile role and as suggested by literature, they carry many responsibilities that range from data analyst and a negotiator to a matchmaker between the club and an athlete. Scouts need to be able to work in a high-pressure environment and to produce reports on athletes quickly. Where player recruitment advances, so must the scouts. A significant finding in literature that did not come up in the data analysis of the football clubs is the subjectivity of the scouts. Scouts may have subconscious bias that can be mitigated using Ai that anonymizes players and this way the scouts may focus more on evaluating technical ability, for example. Literature and research findings show that AI can support the work of a scout in three ways. These are becoming a teammate, developing scout's talent and by mitigating risks.

AI can help the scouts in by performing administrative tasks such as writing the reports, while analyzing large sets of data and reaching new territories that the scout themselves might not have networks in. Scout's talent can be developed through formal education and even if one were not to pursue a degree, the availability of such programs helps the scouts in understanding what may be expected of them at some point or what their competitors might have as a skillset. With risk mitigation we refer to the large sets of data and reports there are available and the possibility to miss something if artificial intelligence is not used. AI helps in spotting players or factors that a scout might not even have time to review. Literature and the research findings actively speak about the collaboration between the human and technology driven processes. AI is not thought to be replacing scouts as there is a lot that it cannot see and analyze, which is why AI is truly a team-

mate a scout can have. The positive impact AI can have on scout's work is immense and as a representative from Sevilla FC stated, using these tools is like going from candles to electricity in terms of its transformative nature.

As for the third research question to what is needed from a sport organization to successfully adopt and benefit from AI in scouting and recruitment, the literature suggests that overall, for organizational readiness task demands, resource availability and situational factors are what play a major role. Keys to successful change are leadership, communication during the change, engagement of stakeholders and motivation of employees and change agents. The research findings were in line with the literature and again, three factors could be identified. Sport organization needs to have leadership commitment, robust strategy and tech literacy to successfully adopt and benefit from AI in scouting and recruitment. The research objects all demonstrated the leadership commitment especially towards the external stakeholders and strong media presence on leaders of the clubs advocating and praising their use of artificial intelligence. The findings show that the strategy in these clubs has been in place in a way that AI deployment has been possible. Tech literacy was also something that was present in all clubs that acted as research objects as the organizations have not only been able to use artificial intelligence, but they have also been able to innovate with it and around it and therefore, fully leverage it.

Overall, the use of artificial intelligence for player recruitment can provide both the scouts and the sport organizations a major competitive advantage against competitors in the rapid environment of the player market. When implemented with proper strategy and intention, AI can revolutionize the operations in an organization and generate significant financial profit. Lastly for the scouts, AI can provide a partner and a teammate that not only assists but also develops the competences of the scout while decreasing the margin of error in handing large sets of data and information, as well as subjectivity in decisions.

7 Discussion

When reflecting on the research, it has provided more insight than initially expected. The goal was to build understanding around how artificial intelligence can support the scouts and organizational performance of a sport club and that was achieved. A surprising factor was, however, how scarce

the academic literature around the topic truly was. Therefore, the significance of the study is bigger than initially thought. During the literature review and data collection there was not one study that would have been the same even around a different sport.

To understand the impact of AI, we needed to understand what the key pillars are around organizational performance, scouts' work and where the success of change management lies. Literature provided a good amount of information around these expect for when it came to scouts' work. It was also stated in one of the articles that scouts' work has not been vastly covered in literature. The same could be observed when analyzing data related to the football clubs. There was a lot of information, deep diving into what a scout's work looks like was not possible. No individual statements were found from scouts, they were from the Head of Scouting or Technical Manager or such.

Research results were formulated, and they are cohesive with what could be found in the literature. A positive remark was how one finding from one club could be reinforced with a similar finding from another one which allowed for conclusions. As the results have been summarized in the chapter above, the discussion around them will be more general and reflective.

Overall, the use of artificial intelligence, specifically generative AI, requires the organization to be ready to change. It required mindset shifts all around the organization and its staff, but as literature and results show, leadership is in key position. It cannot be denied that the use of artificial intelligence in player recruitment and scouting can in fact have a positive economic impact on a club, however, it does not guarantee success. One part that has not been covered in the literature nor in the findings from the clubs is who buys and sells the players. Artificial intelligence cannot do that job, which means the organization still needs to have talented negotiators and people who can act in a proactively instead or reactively. AI is not a quick fix to make money, rather the organization structure needs to allow for it, or it needs to be molded in a way that it does.

There also must be a, so called, buy-in from all necessary parties because in a case of the head coach or sportive management not believing in the strategy regarding the use of AI, they could enter a confirmation bias where they look for flaws in the AI assisted recruits that might not even be there. They might overlook the use of data, even if it was there. It must be remembered that the

sport sector is sometimes very traditional and as found in literature, sometimes slow to change. This is why leadership is crucial for any organization wanting to implement new processes especially if it comes to generative AI that revolutionizes and transforms systems and processes. As was explained in some of the sources, Matthew Benson who acquired the majority stake in FC Midtjylland was rejected by other clubs in Denmark. There were clubs that did not believe in data-driven leadership and would not get onboard with it. It takes a leadership team and change agents to promote this kind of change.

In reference to the sport industry sometimes operating with traditional views, what Sevilla FC is accomplishing with the data holds even more weight. The club was founded in 1890 and Spain as a country tends to still have very conservative views around certain areas and specifically in football, scandals and critique is nothing out of the ordinary. Even so, there is a club like Sevilla who is investing and speaking on behalf of the development of artificial intelligence. The university programs they offer is another testament to that a scout's work will look highly different in the future.

As explained, not much can be found on scouts' work directly from the scouts themselves. However, reading through the job requirements and profiling, one can understand that scouting can be a lonely job. It involves a lot of traveling, and a lot of time spent away from the family. The peers are sometimes the ones who the scouts are competing against in the player market. Based on the results and personal reflection, having AI as a tool can provide a certain sense of security and especially when the scout is under an enormous amount of pressure. It can help them feel supported during the times there is no human connection or linkage. A lot goes into the development of these tools, and one what seems to be missing at least from the data available online with an open access, is what scouts would hope the AI tools do. However, after all learnings, it could be thought that an integrated function where the scout can have a conversation with the tool about a specific player could help them process and reflect their own thoughts in a different way from the current reality.

If we look at traditional industries, you have tools available where you can ask AI to support you in preparing for a difficult conversation with your subordinate or help you hold better performance evaluation meetings. It can guide you through conflict and leadership. With this in mind, having an overall sophisticated tool where, first of all, you can gather data analyze data, but where one can

also have support for conversation and decision making could potentially help scouts when they are uncertain of a prospect and cannot cross-check with a peer in the fears of someone getting to the player before a decision is reached. Another significant area where AI can help is when it comes to scouts' reputation. As identified in the literature as well, the scouts are under constant scrutiny from many directions. We found that the use of AI may aid in subconscious bias, and it can potentially aid in situations where a scout is accused of discrimination or bias because the scout has a better backing to the opinions they have voiced. Likely, it will also hold them a bit more accountable because if they do make a biased decision, the data is available for someone else to check upon as well.

It can be determined based on the literature and findings from data analysis that AI is able to support both scouts and organizations. The time to do that would be now. The pace is picking up but from what it looks like from the point of the research, the industry is still at a place where scouts and sport clubs can achieve competitive advantage through AI and take those steps now before resulting to a situation where the competitors have done it, and one will need to play catch up. Evidently AI is already used to an extent and many organizations have it integrated into covering player recruitment. The question is, however, is it being leveraged to its full extent? This is what the sport organizations need to look into, to not get complacent and wait around.

As for reflection around reliability and ethics, the study is reliable to what can be researched without an access to the respective organizations. The data analysis is believed to provide similar results if another researcher were to take it on although some limitations could exist and there is transparency on how conclusions have been drawn. As the industry is in rapid motion, if the study where to be conducted again a year from now, results would likely provide similarities, however, the rapid development of technology could mean there is more data available and more organizations leading the change and new discoveries and conclusions could be drawn with more complete set of data and more outcomes to be analyzed from varying organizations.

Good research ethics have been followed and guidelines taken into account in all parts of the thesis. As the data has been secondary, the privacy aspects are not as strict as when collecting primary data as the access to the data is also public. Findings have been objective in their kind and

conclusions have been drawn based on available information. Although the research results showcase positive impact from artificial intelligence, the research shows critical thinking and reflects on other aspects of the results as well. As per the regulations around AI, artificial intelligence (ChatGPT and Consensus) has been used in this research to find some of the references. AI has not been used to generate any of the writing for the thesis directly or indirectly.

To conclude, the work has provided a lot of information that can be used in sport organizations and especially considering that the research has been performed secondary data, it can be deemed successful. The thesis adds value in the sport sector for sport organizations, individual scouts or to people who are curious about the implementation of AI. Even more so, the research adds value in the academic literature by providing research on a topic that is not well-researched.

7.1 Future research

When it comes to further research, there are several avenues that come to mind evidently due to the large scope of to what artificial intelligence can be used. As this study has emphasized largely on football due to available resources, it would be interesting to understand more about how the current situation with the implementation of AI is in other sports. A large part of the literature discussing player recruitment and scouting is about football, and even though many articles and media talk about other sports as well, academic literature is not as easy to come across in variety of sports to build the big picture.

A comparative study between clubs who are more progressed in the use of artificial data versus the ones who barely use it would be beneficial to draw findings from. In the best-case scenario this would be conducted between two or more clubs who play the same sport in the same country. Region wise, it could be also studied whether there are differences between leagues in different countries. For example, mapping out the use of artificial intelligence in ice hockey in different European leagues.

As noted previously, the research has been based on secondary data and drawing conclusions and findings from larger surveys and interviews would further benefit in understanding the scouts' point of view. Currently, the thesis lacks perspective on how scouts see artificial intelligence and what could potentially be limitations to why they are not using it, and those who are, who have

they been able to incorporate it in their work. Based on the athletic environment, it is likely that majority of sport scouts use artificial intelligence to some extent especially when it comes to data analysis, however, it would be interesting to know what the differences between scouts who are using AI in a more advanced level and those who use it for strictly necessary purposes. The scouts themselves are in a key position for the development of the technologies and as was stated by Larkin et al. (2020), academic research has lacked understanding around how the recruiters perform their roles. This could indicate that the development of the tools needs more research and data about how scouts in different sports operate to have the technology best serve them.

Artificial intelligence raises ethical dilemmas and discussion around them. Given the quantity of data and factors that are analyzed by scouts, the athletes are the ones in the most vulnerable of positions because so much data is retrieved from them. One topic of research could therefore be how the use of AI impacts the players that are being scouted. This could be the psychological factors of knowing that their every move is being analyzed and knowing that the more data that is being retrieved for fans, the more there is to critique as well.

Lastly, implementation of technology and licenses can be costly which is why research on how small sport clubs and organizations can best harness AI with limited financial resources would be topical and provide valuable information. Artificial intelligence has the potential to minimize administrative burden and help organizations that operate with scarce resources which is why it is somewhat ironic that these organizations are probably the ones least using the technologies due to lack of financial possibilities to invest in AI or the lack of knowledge to benefit from it.

A highly interesting experiment would be to take a club that uses little to no artificial intelligence in their scouting, identify the minimum budget tools and competences that could be learned and see how that impacts the scout's daily work as well as the sport club or organization. There are a ton of free or low-cost AI tools that could be implemented, and for 50 dollars a month the operations and quality of scouting could be improved immensely, at least that would be the hypothesis.

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