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## The digital transformation of football clubs based on the example of social media

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### Abstract

**Purpose:** Digital transformation has significant growth potential for countries and organizations, and this also applies to sports. One of the examples of digital transformation is the use of social media by football clubs. Their goal is to arouse interest and maintain relationships with as many fans as possible. The article aims to present the significance of social media in football clubs, as well as to identify factors that may affect the number of clubs' followers.

**Design/methodology/approach:** The article presents which football clubs are the most popular on social media today, and on the example of FC Barcelona, Juventus F.C., and Paris Saint-Germain F.C. shows how the number of followers has changed in last few years. What's more, on the example of the top Polish football league – Ekstraklasa, it was checked what factors affect the number of clubs' followers.

**Findings:** In the analysed clubs, the highest increase in followers was recorded among Instagram users. The study based on Ekstraklasa, showed that there is a significant correlation between sports results and the number of followers. This means that a better position in the league is associated with more followers on social media. The example of the Ekstraklasa also showed that the club's city population is strongly positively correlated with the number of its followers.

**Research and practical limitations/implications:** The limitation of the study is that it focuses only on football and selected clubs. Accordingly, in some countries or sports may occur different dependencies.

**Originality/value:** Nowadays, the number of social media followers is an indicator of a club's popularity and commercial appeal, all of which is directly related to the finances of a club. Therefore, identifying the factors that may affect the number of football clubs' followers seems to be important from the perspective of the whole professional sport.

**Keywords:** digital transformation, social media, football clubs, football fans.

## Introduction

Technology has transformed and will continue to transform many industries, altering both the customer experience and the inner workings of organizations (Deloitte, 2018). Digital transformation is possible thanks to the continuous development of the Internet – it is estimated that roughly 4.66 billion people around the world now use the Internet, which is approximately 60% of the world's total population (Datareportal, 2020). Social media use also continues to grow, with 4.14 billion people using various platforms as of October 2020 (53% of the global population) (Datareportal, 2020). Social media are platforms that facilitate the creation or sharing of information, photos, videos, ideas, and other forms of expression via virtual communities and networks. The most popular social media today include Facebook, Instagram, and Twitter. Some believe that with the emergence of social media in 2003, the technological development of communication has reached its peak (Kocoglu et al., 2020). The increase in the number of social media users is impressive, for example in 2013-2020, Instagram recorded an increase in the number of users from 90 million to 1 billion, and during this period was the fastest growing social media platform in the world, currently occupying third place in terms of the number of users (Iqbal, 2020; Leszczyński & Metelski, 2021; Omnicore, 2020; Ortiz-Ospina, 2019). Every day, over 100 million photos or videos are published on Instagram, generating 4.2 billion likes (Droesch, 2019; Omnicore, 2020).

Many football clubs and athletes are now investing their resources in the use of social media. Their goal is to arouse interest and maintain relationships with as many fans as possible. Social media may also act as a set of effective tools to stay in touch with the occasional fan who may have "liked" the club on Facebook or Instagram, but is not quite willing to go to a game, install the club's applications on his or her phone or register on the club's website. This kind of fan is also, or at least could be, an important resource for the club. An interesting trend is that athletes on social media are more likely to post on personal than professional topics (Frederick et al., 2014; Pegoraro, 2016). Thanks to this type of posts, fans have the opportunity to obtain information about the everyday lives of their favorite sports personalities. In conclusion, it can be stated that social media have exceptional value for sports fans because they provide access to information that is rarely available via traditional media, and also enable interaction with favorite players and clubs.

Digital transformation opens up unprecedented opportunities for the development of the sports industry. On the one hand, it offers fans a new quality of products, services and related experiences, on the other, it is changing the functioning of sports organizations (Nielsen, 2017). The digitization of sport and fan experience can strengthen engagement, build brand value and drive revenue growth (Capgemini Research Institute, 2019). Nowadays, social media followers are an indicator of a club's popularity and size of fan base and therefore its commercial appeal (KPMG, 2020). The aim of the article is to present the significance of

social media in football clubs, as well as to identify factors that may affect the number of clubs' social media followers.

## Social media in football

At the outset, it must be stated that the number of football fans on social media is continuously growing. A list of the most popular football clubs on social media in the world is presented in Table 1. The leaders in terms of the number of followers are clubs from Spain and England, then from Italy, France, and Germany. It's worth mentioning that in the football industry, it is commonly believed that the best 5 football leagues in Europe are: the English Premier League, the Spanish Liga, the German Bundesliga, the Italian Serie A, and the French Ligue 1 (so-called Big 5) (Poli et al., 2019).

Table 1. Football clubs with the most followers on social media (in millions)

No.	Team	Total followers	Facebook	Instagram	Twitter
1	Real Madrid CF	239.1	111.2	34.2	88.0
2	FC Barcelona	232.4	104.0	86.4	32.6
3	Manchester United F.C.	133.7	73.2	35.6	22.0
4	Juventus F.C.	92.0	41.4	40.0	8.0
5	Chelsea F.C.	86.2	48.0	22.1	14.3
6	Liverpool F.C.	81.7	36.3	26.1	14.6
7	Paris Saint-Germain F.C.	80.5	41.3	29.1	7.8
8	FC Bayern Munich	77.2	49.5	21.4	4.8
9	Arsenal F.C.	72.7	37.6	17.5	15.8
10	Manchester City F.C.	69.2	39.8	19.0	7.9

Source: Dupare, 2020.

It should be noted that the top 10 clubs presented above have together more than one billion followers on social media. In the past, the number of fans of a given club was evidenced by the spectators at the stadium. In the 2018/19 season, the highest numbers of spectators watched FC Barcelona matches, a total of 1,428,956 people – a 75,208 average per game (WorldFootball, 2021). Comparing the number of football fans on social media with the one in the stands, it should be stated that in modern times the first-mentioned is much larger. What's more, attendance at the best sports leagues in the world has been even declining in the last few seasons. This is especially true of the National Football League (NFL), Major League Baseball (MLB), the National Hockey League (NHL), and the National Basketball Association (NBA) (Deloitte, 2018). Many sports fans are no longer interested in the game alone – they crave the kind of exclusive and shareable experiences that can be amplified by technology. New technologies can also increase fan engagement by tailoring experiences to individual fan preferences (Deloitte, 2018). It is also worth adding that popularity on social media is related to the value of a given club. In 2020, the highest-rated football club in the world was Real Madrid CF with an estimated value of 3,478 million EUR, the second was Manchester United F.C. – 3,343 million EUR, and the third FC Barcelona – 3,193 million EUR (KPMG, 2020).

As shown above, the top football clubs have many followers on social media, but it is also worth presenting the popularity of the best footballers in the world. Chart 1 presents the number of Cristiano Ronaldo's followers, until recently a player of Juventus F.C. and now Manchester United F.C. and Portugal national team player. Together on various social media, he has a total of 574,955,634 followers, which makes him the most popular person on social media (Wallach, 2021). It is also worth noting that more than half of Cristiano Ronaldo's followers are Instagram users. Additionally, it is interesting how the transfer of Cristiano Ronaldo in July 2018 influenced the popularity of Juventus F.C. in social media. In the 24 hours after his transfer to Turin was made official, between July 10 and 11, Juventus F.C.'s various social media accounts were boosted by more than 2.2 million followers (ESPN, 2018). Another good example is Lionel Messi, who transferred from FC Barcelona to Paris Saint-Germain F.C. on August 10, 2021. After his signing was announced, the club's Instagram followers increased by about 3 million in 24 hours (Norton, 2021).

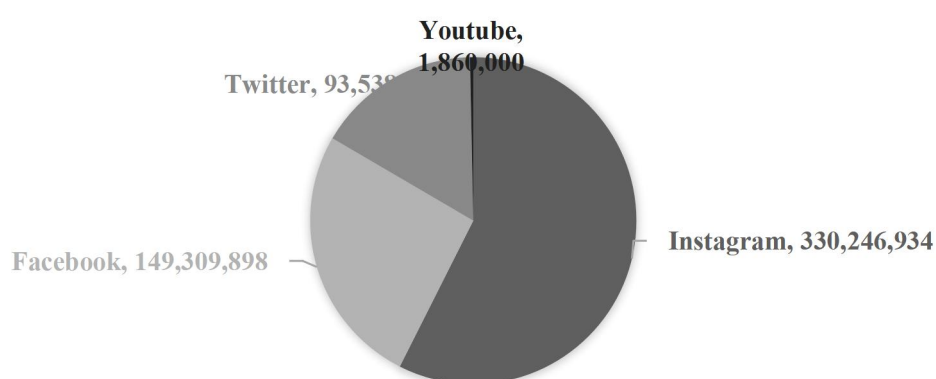


Chart 1. The number of Cristiano Ronaldo's followers on selected social media platforms (on August 20, 2021)

Source: own elaboration.

The article presents the results of a study that consisted of observing the social media profiles of selected football clubs for 2.5 years. It was decided to observe some of the most popular football clubs in the world: the multiple champions of Spain – FC Barcelona, the multiple champions of Italy – Juventus F.C., and the multiple champions of France – Paris Saint-Germain F.C. The results of these 3 clubs in their national league competitions are presented in Table 2. As can be seen, these clubs were the best in their countries during the analyzed period.

Table 2. The position of selected clubs in their national league competitions

Club	2019/20	2018/19	2017/18	2016/17
FC Barcelona	2	1	1	2
Juventus F.C.	1	1	1	1
Paris Saint-Germain F.C.	1	1	1	2

Source: own elaboration.

According to the IFFHS (International Federation of Football History & Statistics), FC Barcelona was the best football club in the world in the decade 2011-2020 (FC Barcelona, 2021). In the last decade, FC Barcelona claimed 22 trophies, namely: six league titles, five Copas del Rey, two Champions Leagues, two UEFA Super Cups, two Club World Cups, and five Spanish Super Cups (FC Barcelona, 2021). Excellent sports results also translate into

great popularity among fans. Most people follow FC Barcelona's profile on Facebook, and the number of Facebook followers increased by about 8% in 2.5 years. However, it is worth paying attention to the increase in the number of followers among Twitter and Instagram users, which in the analyzed period amounted to 55% and 70%, respectively. Detailed data is presented in Chart 2. These results show how the popularity of social networking sites is changing – like previously mentioned, in recent years Instagram has recorded the greatest increases in popularity (Iqbal, 2020).

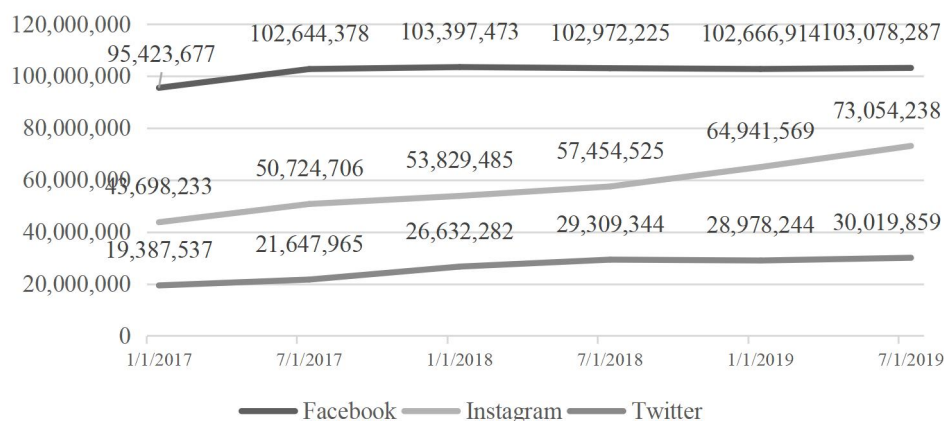


Chart 2. The number of FC Barcelona followers on selected social media platforms  
Source: own elaboration.

The second club analyzed is Juventus F.C. Having dominated Italian football for a decade, Juventus F.C. main shortcoming from the past 10 years is their inability to win the Champions League (the most prestigious club competition in Europe). Previously mentioned Cristiano Ronaldo was signed on an impressive contract from Real Madrid in 2018 specifically to bring the European Cup back to Turin. The club lost in the final of this competition in 2015 and 2017, and since Cristiano Ronaldo's arrival, they haven't even come close to that stage. However, when it comes to the biggest clubs in the world Juventus F.C. is certainly up there (Short, 2021). In the analyzed period the most people followed Juventus F.C. profile on Facebook, where the number of followers increased by about 51% in 2.5 years. However, like in case of the FC Barcelona, it is worth paying attention to the increase in the number of followers among Instagram users, which in the analyzed period grew up by more than 7 times. Detailed data are presented in Chart 3.

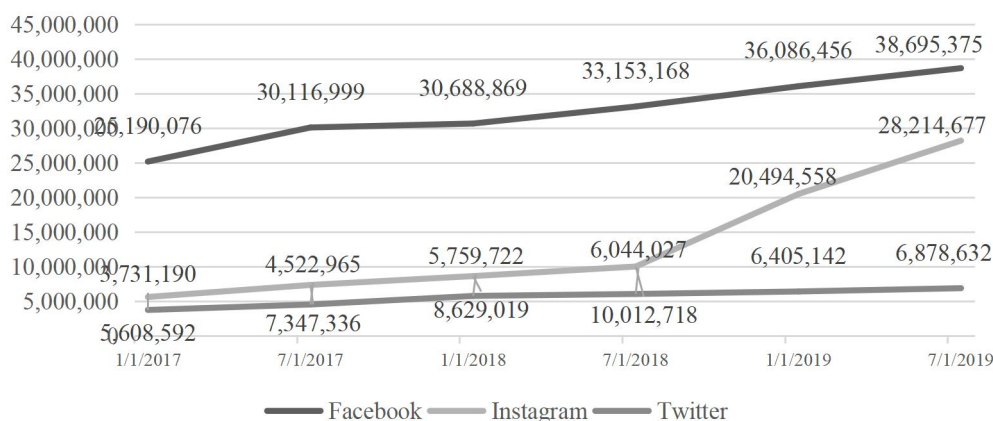


Chart 3. The number of Juventus F.C. followers on selected social media platforms  
Source: own elaboration.

Since 2018, Paris Saint-Germain F.C. has more than doubled its valuation, now estimated at 2.5 billion USD (PSG, 2021). Since the takeover by Qatar Sport Investment in 2011, and particularly in the last five years, Paris Saint-Germain F.C. has established itself as one of the most dynamic clubs in the world (Deloitte, 2021). As a curiosity, it is also worth adding that Paris Saint-Germain F.C. made the most expensive player transfer in the history of football. Neymar completed his move from FC Barcelona to Paris Saint-Germain F.C. for a fee of 222 million EUR in the summer of 2017 (Doyle, 2021). Most people follow the Paris Saint-Germain F.C. profile on Facebook, but the most impressive increase was again recorded in the case of Instagram, where the number of followers increased by more than 5 times in the analyzed period. Detailed results are presented in Chart 4.

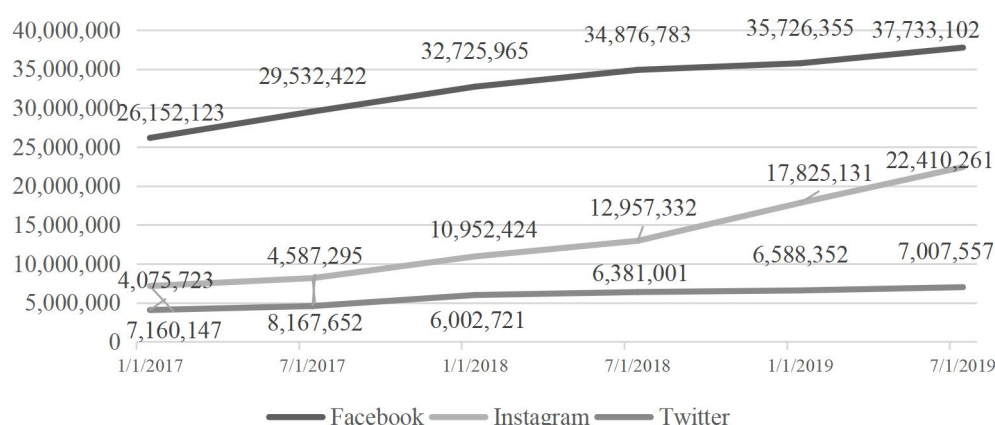


Chart 4. The number of Paris Saint-Germain F.C. followers on selected social media platforms

Source: own elaboration.

Summing up, it should be stated that in the analyzed period, presented clubs had the most fans on Facebook, but the largest increases of followers were recorded in the case of Instagram. This shows that the popularity of various social media platforms is changing. In addition, it should be said that despite the different growth rates, the number of followers on all platforms increased in the analyzed period.

### Factors affecting the number of followers

One of the goals of the article was to identify factors that may affect the number of clubs' followers. It was decided to use the example of Ekstraklasa – the best football league in Poland. There are 16 clubs in the Ekstraklasa, and a system of promotions and relegations from the 1 Liga is carried out. Seasons start in July and end in May or June the following year. In the 2020/21 season, teams played a total of 30 games each. The current champions are Legia Warszawa, who won their 15th overall title. The Ekstraklasa, is in 19th place in the European ranking in terms of league revenue, with the result of 125 million EUR a year (UEFA, 2020). The Ekstraklasa has already been a subject of various scientific works (Metelski, 2021).

The number of Ekstraklasa clubs' followers on social media was noted at the end of the 2019/20 season, after the first round of the 2020/21 season, and at the end of the 2020/21 season. The social media platforms analyzed in the study were Facebook, Instagram, Twitter, as well as YouTube (focused on sharing videos) and the new platform – TikTok. The league position of Ekstraklasa clubs was also checked in each period. The goal was to find out if the

position in the league table correlates with the overall number of social media followers. Detailed results are presented in Table 3.

Table 3. Position in the league table and the number of followers on social media of Ekstraklasa clubs

Team	June 2020		December 2020		June 2021		Average place
	Place	Total followers	Place	Total followers	Place	Total followers	
Legia Warszawa	1	1,548,831	1	1,619,135	1	1,627,914	1.0
Śląsk Wrocław	3	300,397	4	314,615	4	314,183	3.7
Pogoń Szczecin	6	240,262	3	252,170	3	266,099	4.0
Raków Częstochowa	10	62,829	2	76,538	2	93,802	4.7
Piast Gliwice	2	81,162	13	86,326	6	89,527	7.0
Jagiellonia Białystok	7	182,665	7	185,897	9	188,276	7.7
Lechia Gdańsk	8	620,478	8	614,195	7	556,895	7.7
Górnik Zabrze	9	210,102	5	217,526	10	220,852	8.0
Lech Poznań	4	920,096	9	969,073	11	966,450	8.0
Zagłębie Lubin	11	84,830	6	88,817	8	93,802	8.3
Warta Poznań	-	-	14	62,853	5	72,451	9.5
Cracovia	5	173,022	10	183,331	14	185,805	9.7
Wisła Płock	12	87,983	11	94,051	12	108,169	11.7
Wisła Kraków	13	431,942	12	447,867	13	448,283	12.7
Stal Mielec	-	-	15	50,577	15	53,790	15
Podbeskidzie	-	-	16	70,778	16	73,033	16

Source: own elaboration.

Results of the Pearson correlation indicate that there is a negative association between league position and number of followers,  $r(48) = -0.42$ ,  $p = 0.003$ . This means that the better the position in the table (closer to the first one), the higher the number of followers. Indeed, when looking at Table 3, it can be seen that the multiple Polish champions – Legia Warszawa, has the most followers on social media. However, that there are a few exceptions, such as Lech Poznań, Lechia Gdańsk or Wisła Kraków, which have relatively many followers, but their place in the league was not high in the analyzed period. Their popularity can be explained, inter alia, by the fact that they are clubs from the respectively 5<sup>th</sup>, 6<sup>th</sup>, and 2<sup>nd</sup> largest cities in Poland in terms of population. Additionally, despite the recent poor results, Lech Poznań and Wisła Kraków are among the best football clubs in Poland in the 21st century. In the case of Lechia Gdańsk, the large number of followers can be explained by many fans from Indonesia (Michalek, 2021). It happened thanks to the contracting of a talented player from Indonesia. This practice shows how a club can get followers from different regions of the world. However, because that this player did not play too much and his contact with Lechia Gdańsk ended in June 2021, it is one of a few clubs in which the total number of followers decreased.

It is also worth looking at the results of Raków Częstochowa. This club was promoted to Ekstraklasa a few years ago and is starting to play better and better. In the first analyzed period, it was 10<sup>th</sup> in the table, and in the second and third periods it was already at 2<sup>nd</sup> place, and its number of followers increased by 49% during this period. It is a great example of how good sports results influence popularity among fans. Another example is Warta Poznań, which in 2020/21 played its first season in Ekstraklasa after being promoted from the 1st

league. In the middle of the season, they were only 14<sup>th</sup> in the league, and in the end, they managed to finish at 5<sup>th</sup> place – during this time their number of followers increased by 15%.

The size of the city that the club comes from also influences the club's number of followers. Legia Warszawa, which is based in the largest Polish city – Warszawa (population: 1,793,579), has the most social media followers in Ekstraklasa. On the other hand, Stal Mielec, a club from the smallest town in Ekstraklasa – Mielec (population: 60,229), has the least followers on social media. Results of the Pearson correlation indicate that there is a strong positive association between the population of the city and the number of followers on social media,  $r(14) = 0.95$ ,  $p < 0.001$ . A good example is also that if we divided Ekstraklasa clubs into two halves in terms of the number of inhabitants, these 8 clubs from cities with larger population would have a total of 4,438,080 followers on social media. In turn, 8 clubs from smaller cities would only have a total of 921,251 followers.

## Discussion

Digital transformation opens up new opportunities for the sports industry. Many football clubs and athletes are investing nowadays their resources in the use of social media because the number of social media followers is one of the main indicators of popularity and commercial appeal. The popularity of social media comes from the fact that they have exceptional value for sports fans because they enable interaction with favorite players and clubs, and also provide access to information that is rarely available via traditional media. An additional reason is that many sports fans are no longer interested in the game alone – they crave the kind of exclusive and shareable experiences that can be amplified by technology.

Today, there are many social media platforms, and their popularity is changing over time. Using the example of 3 leading European football clubs (FC Barcelona, Juventus F.C., and Paris Saint-Germain F.C.), it was shown that Facebook is still very popular, but Instagram has recorded the greatest increase in popularity in recent years. It is also possible that other social media will be very popular in the future; TikTok, for example, has been gaining significant popularity recently especially among young people.

The article aimed to describe the significance of social media in football clubs, as well as to identify factors that may affect the number of followers. First of all the results indicate that the club's popularity on social media is influenced by the level of the league. In the football industry, it is commonly believed that the best 5 football leagues in Europe are: the English Premier League, the Spanish Liga, the German Bundesliga, the Italian Serie A, and the French Ligue 1 (Poli et al., 2019). Looking at the 10 most popular football clubs in the world, it can be seen that there are only representatives of these leagues.

The study also attempted to determine how the club's sports results affect its number of followers. The study was based on the example of Ekstraklasa – the best Polish football league. It turned out that there is a significant negative correlation, which indicates that the better position of the club in the league table, the higher the number of its followers. It means that sports success builds popularity among fans, and a good position in the league makes more people interested in a given club. Another factor that influences the number of followers is the size of the city because clubs from larger cities usually have more fans. Other factors that may also affect the number of followers are past sports results and the popularity of contracted players.

In many cases, footballers help their clubs in building popularity on social media. One of the examples is Cristiano Ronaldo, who after his transfer to Juventus F.C. significantly increased the club's number of followers on social media. The second one is Lionel Messi, who signed with Paris Saint-Germain F.C. on August 10, 2021, and in 24 hours after his signing was announced, the club's Instagram followers increased by about 3 million (Norton,



2021). Examples may also apply to smaller clubs, such as Lechia Gdańsk, which by contacting a well-known player from Indonesia, gained many followers from this country on social media.

## Conclusion

Digital transformation affects the whole world, so there are many examples of it in sport as well. The leading football clubs are currently followed on social media by hundreds of millions of people, which makes them attractive to potential sponsors and investors. There are many social media platforms, and in football, the most popular are Facebook, Instagram, and Twitter. The popularity of social media platforms, however, changes over time, and in the analyzed clubs the number of followers on Instagram grew the fastest.

Various factors may affect the number of followers on social media, and this article focused on the following: league level, players' popularity, sports performance, and city size. Among the most popular football clubs in the world on social media, it is difficult to find clubs outside the so-called Big 5, that is, England, Spain, Germany, Italy, and France. The football leagues in these countries are by far the best in Europe, so they have fans from all over the world. On the other hand, when it comes to players' popularity, sometimes a player can be more popular than a club, and contracting this type of player can significantly improve the club's numbers on social media. The study based on the best football league in Poland – Ekstraklasa, also showed that there is a significant correlation between sports results and the number of followers. This means that a better position in the league is associated with more followers on social media. The example of the Polish Ekstraklasa also showed that the club's city population is strongly positively correlated with the number of its followers.

However, the presented results are characterized by some limitations. First of all, it is not known if the same trends also occur in other football clubs and leagues. The analysis also focused only on the most popular social media and did not consider other platforms (like LinkedIn). It should be remembered that each social media platform has its characteristics. Therefore, subsequent research in this area should take the above-mentioned into account and verify whether such trends also occur in other clubs, leagues, and social media.

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