Chapter 31 Impact of Mobile Apps on Building Customer Relationships and Financial Support for the Football Club: Findings from Ruch Chorzów



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Abstract Mobile applications have allowed football clubs to conduct marketing and sales activities. The purpose of this paper is to present the mobile application as a tool that allows for building lasting relationships between the football club and its fans, which translates into an increase in sales of the services and products offered, using the example of football club in Poland. Building relationships with fans is part of the process of running a sports club, and social media is the most popular mass medium that makes this possible. An attempt was made to show how they are used for these purposes by Polish football club. An example of a mobile app that directly impacts increasing the revenues of a football club and simultaneously allows building lasting relationships with fans is presented. Based on the research, attention was paid to how the mobile app increased the company's revenue.

31.1 Introduction

On social media, company profiles are no longer owned or set up not only by large corporations and well-established companies but also by local, stationary businesses that realize that the digitization of society is becoming a reality. To reach a wide range of people, they need to switch from the traditional form of advertising in the form of banner ads or advertising in traditional media to an active life in social media [1]. With easy and quick access to various sources of information, customers can choose the most favorable offers, so one of the key elements of doing business is a marketing strategy to encourage potential buyers of the product to take advantage of just their offer [2]. It is difficult, but it can be accomplished with the right marketing strategy. Building relationships with customers, or potential customers, is an integral part of running any business, which can translate into increased interest in the company,

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and ultimately increased sales resulting from attracting new customers [3]. Social media is a tool that, among other things, allows you to save financial resources while building lasting ties with the audience [4].

31.2 The Ruch Chorzów Mobile App

The Ruch Chorzów app was created in cooperation between the club and the Fan Foundation. It is available on the App Store and Google Play, so anyone using Android or iOS software can download it to their mobile device. According to the club's owners, the app is just an add-on that will help increase the club's budget revenue, so the club can afford expenses that would not be possible without fan support. What's important about the app is that users don't incur additional costs and don't have to donate their money directly. The main idea behind the app is that each person using it through their daily purchases, which they made before the app came out, supports the club [5].

The application has more than a dozen powerful modules that, when combined, provide various communication opportunities for the users and allow the club to improve its financial situation. Thus, it has become both a social media and a purchasing tool. The Ruch Chorzów application consists of modules like news, galleries, videos, schedule, table, team staff, and match reports. In one place, all users of the application can find all the necessary information on the functioning of the company and the course of football matches. In addition, the application developers decided to provide a board and a messenger through which all club supporters can exchange observations about the activities and post various information. The club's representatives are trying to build a relationship with fans and often interact with them by posting posts, surveys, and encouraging activities.

A key module of the app is the financial module. All app users can support the club financially through daily purchases without spending extra money. Such purchases are possible in two ways, both in stationary form and through online stores. To financially support the club by shopping stationery at local places, it is necessary to declare a payment card in the app. The club has created a network of local partner points that have decided to join the campaign. By paying at them with the payment card registered in the app, part of the money from the transaction goes directly to the club's account. Each partner point voluntarily decides what percentage of the purchases it shares with the club. As part of the business cooperation, the Ruch Chorzów club offers its partners advertising and promoting the local place among fans. The whole system is also based on partnership with payment terminal operators, so the owner of the partner point does not have to transfer the pledged money manually, but everything happens automatically. Online shopping is a bit simpler, as a user wishing to make a purchase and at the same time allocate a portion of the expenses to the club only needs to go through the application to the store website where the user intends to buy something.

The most important principle of the application's financial module is its transparency. The user is informed before starting shopping that the percentage of the transaction made in the store will go to the club's account. A user can check the number of transactions he has already made, for what amounts, and how many of these purchases were transferred to the club. The money that goes to the club's account is always allocated to a specified purpose, visible to all app users. They can see how much has been collected and how much money is missing to complete the goal. The app also included an auction module, where users can bid on unique memorabilia and ventures put up by the club.

Many football clubs choose to develop proprietary mobile apps for the company's customers and business partners [6]. Ruch Chorzów app is different. It is the case of a tool through which the customers of the company, being at the same time customers of other companies or stores without changing their lifestyles, support the club with real money. Such a tool improves communication between the enterprise and the audience and allows for building relationships, but often beyond that, it does not give direct revenues to the budget [7].

An example of such a solution is the Ruch Chorzów app. The app was created and presented at a press conference for the media and other business partners at the end of 2019, and from the first days of its release, it had a considerable interest. Within the first days after the release, the app developers could receive good results, as the app was downloaded more than 7500 times, and as many as 2600 people registered their payment cards.

Figure 31.1 shows an app menu allowing users to select the module they want to use. The Ruch Chorzów application functions as a social medium, a messenger, a place to exchange information, and a financial function that allows purchasing transactions and supporting the club.

31.2.1 Incomes to the Club

Entrepreneurs want to build relationships with their customers on a fair basis, so it was decided to create a fully transparent module so that all users have a full view of the funds credited to the club's account through their transactions. This solution lets the user know how much more money needs to be raised, over what period, and what it will be spent on.

For the money to be credited to the company's account, the user must make a purchase at a stationary store of a partner point. A list of such places can be found in the app. Geolocation helps the user to reach such a store. The only condition for a percentage of the money from such a transaction to go to the enterprise's account is that the purchase must be made through the app.

Using the financial module in the application, the user can select any store on the list of online stores. Once selected, using the application, the store's page is automatically opened, and the user only has to select the goods he is interested in and make a transaction. Before starting such a purchase, the user can see what amount





or percentage of the transaction will go to the club's account. After finalizing such a transaction, the user can see how much money from his purchases has already been transferred. In addition to an aggregate statement of all transactions, each user can check how much money went into the company's account due to his transactions with partner entities cooperating with the football club.

31.2.2 Building Relationships with Fans

The main element of Ruch Chorzów's mobile application is a financial module that allows the company to improve its finances. However, good customer contact is part of the company's long-term strategy, which in the future will enable increasing revenues resulting from the sale of offered products and services in the form of, among others, tickets to football matches [8]. The second important module is the community module, which allows interaction between all users using the application and the club [9]. Easy interface allows any person, regardless of the level of skill

in using mobile devices, to easily participate in the fan community. According to statistics kept by the club, the app is used not only by young people but also by older people who are eager to use the tools offered by the app. An example is the community board, with dozens of new posts published daily by the club and supporters.

In Fig. 31.2, we see an excerpt from a board where users post their thoughts, share insights with other app users, and often ask questions to the club owners, who are happy to answer them. This activity allows customers to feel that they are part of the club and are very important to it. Building relationships with football fans is quite specific because they are often hermetic groups with their own representatives, and young people usually follow the voice of their "bosses," so the club must try to avoid conflicts [10]. However, such conflicts do happen, as evidenced by the situation in 2019, when Ruch Chorzów fans dissatisfied with the actions of the management decided to boycott all home matches, and thus, the club lost tens of thousands of zlotys from tickets and gadgets sold on the day of the match [11]. It shows that relationships built over the years, often in one day, can be destroyed and have to be built from scratch. It has been happening since October 2019, and one of the solutions to improve it is the released app. It is intended to help improve communication, understand each other's needs and, above all, allow the company to improve its financial position [12].

31.3 Methodology

The first part of the study evaluates the mobile app's impact on building relationships with the football club's fans. The evaluation was made by providing a questionnaire as the web form to people who have used or are actively using the Ruch Chorzów mobile application. The second part of the study presented the impact of the mobile app on the football club's financial performance. Ruch Chorzów is a joint-stock company operating on the NewConnect stock exchange and is required to make its financial statements publicly available quarterly [13]. The study presented the amounts that went into the club's account from transactions made by app users.

In addition to the financial module, the mobile app is designed to allow club employees and fans to interact more, access information on the club's current activities more quickly, or exchange views between fans who have the app.

This is guaranteed by appropriate features and an intuitive interface that allows all people, regardless of age and IT skills, to use it easily and pleasantly via users' mobile devices.

The research problems that arose during the design phase of the survey were intended to provide answers to questions related to the app, both related to technical aspects and to assess the impact of the app on building relationships with fans. Here are the following questions used in the survey.

- 1. Usability of Ruch Chorzów app
 - Have users encountered problems downloading and installing the app?

Fig. 31.2 Social board in the Ruch Chorzów app



- Was the operation of the application smooth and intuitive?
- How did the application look graphically and aesthetically?
- Was the application free of errors?
- 2. Usage of Ruch Chorzów app
 - What influenced you to start using the Ruch Chorzów mobile app?
 - How often do users use the app?
 - What are the benefits to users of using the app?
 - Which of Ruch Chorzów's mobile app activities performed the best, and which the worst?
 - Which activities are most influential in building relationships with supporters, and which are not?

31.4 Results

31.4.1 Usability of Ruch Chorzów App

The survey began with a few questions about the respondents, who were asked to state their age and gender. A total of 155 people participated, the vast majority of whom were men, 138 (89%) of the surveyed group. Thus, only 17 women (11% of all respondents) took part in the survey. Next, the respondents were asked about their age. The results are somewhat surprising because as many as 100 people (64.5% of all respondents) are 30 or older. It is usually considered that only young people use this application, which is not entirely true in this case. The second most common age range in the responses was 26–29. Twenty-six respondents fell into this range (16.8%). The smallest number of respondents, only 12 (7.7%) of all respondents, said they were in the 22–25 age group.

The survey continued with 154 respondents, who were asked to answer questions related to the technical area of the mobile application. Respondents answered several questions intended to show whether the app was designed for people who are not necessarily up on technological innovations. Many football fans are middle-aged people who do not always boast high computer skills, making it important to adapt the app to people of all ages.

The survey began with questions related to the app's smoothness and level of difficulty of use. The mobile app was developed for Android and iOS users, but users typically have more or less powerful smartphones. It is often the case that older phones can't cope with overly demanding apps. Respondents were asked whether they thought the app's performance was smooth and encountered obstacles in the form of stuttering or other performance issues or the phone's memory when working with the app was heavily loaded.

Most respondents felt that using the mobile app was pleasant, did not put much strain on the phone, and could use the app's full potential. One hundred forty-seven respondents (95.5%) said that the application in terms of hardware requirements was adapted very well. Seven respondents, on the other hand, were of a different opinion. According to them, the smoothness of the application was disturbed, making it impossible to enjoy using it fully.

Since the app's audience is of different ages, the developers should adjust its design and operation to make it reasonably easy and possible to use without specialized training. As many as 100 respondents are 30 years old or older, making a question to find out their opinion on whether the app is easy to use. Again, an overwhelming majority of 148 people, which is 96.1% of the surveyed group, said that using the mobile application is easy and intuitive. According to them, there are no significant problems with its operation. Six people had a different opinion (3.9%). In the next part of the survey, respondents were asked about the app's appearance. They were asked their opinion on the app's graphics and aesthetic quality. The majority of respondents believe that the app is easy to read, easy to switch between modules, the graphical elements are well arranged, and they rate the overall aesthetics of the app good or very good.

The most significant number of respondents, 85 (55.2%), believe that the application was executed neatly and aesthetically, is characterized by simplicity and elegance, and, above all, the quality of the graphics stands at a high level. In contrast, 59 respondents gave a good rating (38.3%). On the other hand, only one person (0.6%) believes that the application is not very aesthetically pleasing. This part of the survey evaluated the technical aspects of the Ruch Chorzów mobile app. Most respondents did not encounter any problems while downloading, installing, and using the app. They believe the app has a very intuitive interface, making it easy to use. As for the graphical elements, the majority of respondents also give the app a good rating.

31.4.2 Usage of Ruch Chorzów App

This part of the study consisted of evaluating the mobile app, and more specifically, the activities of the football club with its help, on strengthening ties and building relationships with fans. The app provides several different opportunities that Ruch Chorzów uses to carry out the marketing strategy launched in 2019/2020, including the interaction between club employees and fans or providing a place called the board where fans can post their thoughts and discuss with other users.

The study to assess the impact of the mobile app on building club–fan relations began with a question about why respondents decided to start using a dedicated solution. Respondents were allowed to choose up to three reasons (Table 31.1).

The most common reason for using the mobile app was that the user was a fan of Ruch Chorzów. Such an answer appeared 153 times (which translates into 99.4%). It means that only one respondent did not declare that he is a supporter of this club. Another answer that appeared 71 times was that supporters were encouraged by the club's staff to support the club financially actively. So it follows that belonging to a particular club is one thing, but the club's action is also important, and the club should go out to supporters and encourage them to support by pursuing common goals. The results show that fans are an important part of any football club, as they are strongly attached to the club and do not expect too much from the club's employees. They

Reason	N	%
I am a fan of Ruch Chorzów	153	99.4
I was interested in advertising the club on social media	19	12.3
The popularity of any of the club's players	1	0.6
Encouragement by club employees to support	71	46.1
The overall popularity of the football club	34	22.1

Table 31.1 Reasons for using the mobile app

Benefit	Ν	%
Ability to follow the news	115	74.7
Opportunity to ask questions of footballers	37	24
Chance to win prizes	4	2.6
Opportunity to receive a discount coupon	1	0.6
Opportunity to express your opinion on the operation of the club	36	23.4
Exchanging views with other supporters	35	22.7
Opportunity to raise additional money for the club	135	87.7

Table 31.2 Benefits of using the mobile application

often come up with suggestions to support the club without the need for interference from others. However, a mobile application should come with a number of benefits that will make the user want to use it again and again. So respondents were asked what amenities the mobile app brings them and why they use it all the time (Table 31.2).

Respondents were allowed to select up to three main benefits of using the mobile app. The most significant number of respondents, as many as 135 (87.7%), said that the main benefit of using the app is the ability to support the club by gaining additional money, thanks to the financial module, which allows fans to shop with partners by which part of the money from the transaction goes to Ruch Chorzów's account. It shows that the respondents put first not their own benefit but the general good, in this case, the good of the football club, which can maintain liquidity and afford more expenses. In addition to the financial module, which directly supports the club, there are many other functions in the mobile application. Respondents perceive that they can, among other things, keep track of the latest information published on a specially adapted board (115 responses). Users can also exchange views with other fans of the club, as well as express their opinion on the activities carried out by the club. These two opportunities received 35 votes (22.7%) and 36 votes (23.4% of all responses), respectively.

What is important are specific actions that lead to improved relations with the sports club's customers. The respondents were therefore asked which activities carried out in the mobile application by Ruch Chorzów, according to them, most strongly affect the strengthening of ties and building relationships between the club and fans. The results were presented in the form of an aggregate statement. For each activity, an average was drawn, resulting from the number of responses to a given rating (on a Likert scale from 1 to 5) (Table 31.3).

According to those surveyed, three of the seven activities carried out by football clubs are most influential in strengthening ties and building customer relationships. These include "encouraging fans to come to games," "interacting with fans by providing opportunities to ask questions," and "publishing information about football matches. All these activities were rated highest, meaning respondents believe they have a meaningful impact on the relationship between fans and the club.

Table 31.3 Evaluation of theimpact of activities in themobile application onbuilding relationshipsbetween the club and fans	Action	Average
	Publishing information about football matches	4.02
	Publish information about news in the club store	3.86
	Interact with fans by providing opportunities to ask questions	4.04
	Organization of contests with prizes	3.79
	Encouraging fans to come to the game	4.02
	Offering discount coupons	3.67
	Posting frequency	3.88

31.4.3 Impact of Application on Financial Performance

In financial terms, the app's main idea was to provide functionality allowing fans to earn money for the club. However, this was a rather specific monetization, as the fans did not incur an additional cost from it. Agreements between the football club and business partners who decided to join the campaign allow that a certain percentage of the transactions made by Ruch Chorzów fans owning the mobile application went to the Ruch Chorzów account.

The app went live at the end of 2019, and the ability to use the financial module began with its launch. Ruch Chorzów decided to be fully transparent in what the money that would end up in the club's account would be spent on due to purchases that fans would make from the club's partners. A website was created where current goals and progress in raising money were posted. Once the appropriate amount had been raised, the club would show how the goal had been met by showing photos or receipts for specific services, among other things. As December is the period when no games are played due to the winter break, Ruch Chorzów decided to allocate the first money received to work on renovating the locker room in the club building. Table 31.4 shows the individual collection goals, the date they were completed, and the amounts that went directly into the club's account. The money was earned by app users who made purchase transactions at partners with which Ruch Chorzów cooperates. Each partner has an agreement, which guarantees that the club's account will receive a certain percentage of each transaction or a fixed amount pledged by the partner.

From December 2019 to mid-March 2020, Ruch Chorzów received more than 50 thousand zlotys. This is additional money received due to the involvement of fans who have a mobile app. For a club struggling financially, this is a substantial amount that will relieve the burden on the club's budget. The goals are usually not related to the repayment of specific debts incurred by the club but are things necessary for the operation of the football team. Most are mainly associated with purely sporting issues, such as organizing the team's trips to matches or the physiotherapy equipment needed for the players' wellness.

Table 31.4 Summary of collections and the money raised from them			
	Purpose of the collection	The amount collected	End date of collection
	Renovation of the first team's locker room	PLN 7199.00	31.12.2019
	Physiotherapy equipment	PLN 12,137.00	12.01.2020
	Subsidized grouping	PLN 15,007.79	04.02.2020
	Cup renovation	PLN 7036.67	19.02.2020
	First team outings	PLN 8771.37	15.03.2020
	Total	PLN 50,151.83	

31.5 Discussion

The survey results made it possible to answer all the research questions posed in the design phase of the study regarding a dedicated app for the Ruch Chorzów football club. Most respondents were in the 30+ age group, meaning that dedicated apps are more likely to be used by fans who identify with the team, go to matches and follow current trends. As for the technical aspects of the mobile app, respondents rated it very well, with almost no technical problems related to downloading or using the app. Users, moreover, were satisfied with the aesthetics of the app's design and all the features it contained.

According to the vast majority, the app was easy to use, intuitive, and had a decent interface that allowed it to be used regardless of the skill level and age of the respondents. In the opinion of respondents, the activities of Ruch Chorzów that were undertaken with the help of the mobile application were usually done well. In some cases, it was even a very good activity of actively participating in fan life by publishing posts daily and encouraging fans to ask questions and express opinions on issues related to the club and sports games.

Social media is becoming more and more a part of the tools supporting the marketing activities of companies in various industries every year. Companies are choosing to set up profiles on social media sites and microblogs, but recently one can also see an increase in accounts set up on content sites such as YouTube. In addition to the free services available on the market, some companies, wanting to get ahead of their competitors, decide on dedicated solutions, which include mobile applications.

Football clubs have the challenge of convincing their new customers, the fans [14]. The sporting aspect is crucial, as the results will determine whether interest in the club will increase, but it is also essential to keep a solid base, which is good contact between the club and the customer. Clubs using tools such as social media can reach a broad audience and try to establish a connection with them, and thus at a later time, build a relationship with them, which can give many benefits, such as increased sales from tickets for football matches or club gadgets. With the use of social media, clubs that do not choose to release own mobile application do not incur any costs related to technical infrastructure or the need to improve technology.

They can allocate these funds to marketing campaigns aimed at potential fans, who, seeing the commitment from the company, will decide to choose their offer.

31.6 Conclusions

In this study, we have presented a mobile app created for a Polish football club. The purpose of the app is to strengthen the fan bond between the club and its fans and create opportunities for financial aid to the club. We have asked app users about app usability, functionality, and reasons for app use. It has been established that the app is used by football club fans and generates income for the club. The possible limitations we see are third-party dependencies for the app to work. A developer company needs to be involved; a payment gate must always work. Despite the pros, the app has generated some costs for the club, such as the cost of developing and maintaining. The possible future work for this app is integrating the ticket sale for matches and connecting to popular social media networks to merge discussion into one place.

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