

# Sustaining a Fan Base through Social Media

Lisa S. Rufer<sup>1</sup> and Rosalyn J. Rufer<sup>2</sup>

<sup>1</sup>Ph.D. Candidate\*, Center for Sport Leadership  
Virginia Commonwealth University. Email: [rufers@vcu.edu](mailto:rufers@vcu.edu),

<sup>2</sup>Rosalyn J. Rufer, Associate Professor, School for Graduate Studies  
Empire State College. Email: [rosalyn.rufer@esc.edu](mailto:rosalyn.rufer@esc.edu)

## Abstract

With so many people using social media, it is no surprise that sports team at all levels are looking to use social media to increase interactions with the spectators. One of the main reasons that teams use social media channels is that they are “user-friendly, inexpensive, scalable internet and mobile based technologies” (Ang, 2011). Consumers on the other hand appear to choose to use social media to connect with the team, other fans and feel a sense of belonging to a community. There are many articles that discuss the relationship between social media and sports, however many of them are not supported with empirical data (Pronschinske, Groza, & Walker, 2012). This study uses empirical data to provide statistical evidence that there is a relationship between social media and creating a brand community for teams in the National Basketball Association (NBA). Furthermore, the findings empirically identify the effects of brand communities and its relationship to the number of wins of a sports team and the effect on ticket sales from both independent variables.

## Introduction

In most industries today engaging customers through social media has become an important part of the promotion strategy (Rufer, 2014). As such, social media is being used by sports teams in order to create these strong brand communities: it has been a common practice to connect with fans through Facebook, Twitter, and YouTube (Witkemper, Lim, & Waldburger, 2012). Using a variety of social media platforms addresses the type of diversity in the fan base. Stewert, Smith, and Nicholoso (2003) attribute diversity in the fans for sports organization causes a need for different motivational elements in the organizations marketing mix. In an integrated marketing communication strategy, different social media platforms provide the fan with a different source of information, meeting the diverse needs of the fan base. Facebook is recognized as a venue for comments and even contests that keep fans engaged. Whereas, YouTube allows the fan to relive the experience and Twitter provides for quick information and a reminder about their fan status. Using social media helps to create allegiance to the team by reminding them about their connection and by creating two-way communications that engage the fans (Watkins, 2014). What is now needed is the connection between social media channels and its influence in purchase decisions for sport organizations. One of the objectives in this study will be to empirically support this relationship through observation using secondary data.

## **Literature Review and Hypothesis**

Williams and Chinn (2010) argue that “fans who perceived higher levels of relationship quality intended to consume more sport through media, buy more licensed products, and attend more games” (p.425). The creation of a fan base through social media appears to attribute to its brand allegiance. As such, it appears that those relationships between the sports organization and their fans are strengthened through social media and interaction with brand communities. Using social media is not just a customer relationship marketing strategy but one of customer interaction strategy to build a brand community (Ang, 2011). A recent study by Watkins (2014) found support for a relationship between brand communities and social media. However, this study failed to find the relationship between brand equity and social media. Unlike the study by Watkins (2014), this study will use a research method of observation to better identify this relationship or allegiance to the brand, as measured by the interactions between the fan and social media, and how these interactions result in an increase in ticket sales.

Strong brand connections are essential for brand communities by building on the relationships that firms have with their customers. For the sports field, social media provides a platform for sustaining the team’s relationship it has with its fans (Williams & Chinn, 2010). Allegiance to the team has been the result of building a brand community according to Funk & James (2011). One such example can be identified by the effect of the strong brand community for the University of Miami. Allegiance was important for the University of Miami to restore its image after the scandal of improper benefits to their scholarship athletes (Brown & Billing, 2013). Their strong brand community encouraged fans to remain loyal through Facebook comments and tweets. Allegiance to the team has been proposed to be an important product of a strong brand community because sports teams rely on repeat ticket sales and merchandise sales to sustain the organization (Williams & Chinn, 2010). In this study we hypothesize (1) allegiance to the brand can be measured by the number of Facebook likes. Previous studies have shown that Facebook likes are a good measure for the allegiance of the fan (Chih-Yu, Hsi-Peng, & Chao-Ming, 2015). For example, Pronschinske, Groza, and Walker, (2012) used the number of likes of a team’s Facebook page to determine the degree to which a Facebook page (1) communicates authenticity, (2) discloses details about the business aspect of the sport organization, (3) engages fans, and (4) the relationship between the number of wins and the number of Facebook fans. Based on these earlier studies, we propose that (II) that tickets sales will correlate with the number of Facebook likes; and furthermore, we propose (III) team performance affects the engagement with social media which in turn will affect the number of ticket sales in the sports industry.

## **Empirical Research Study**

We find that sports organizations have Facebook pages but there is little empirical literature that supports the use of social media and building a loyal fan based (Pronschinske et al., 2012). Even though Pronschinske et al. (2012) found supporting evidence of the use of social media to build a loyal fan base, as measured by the number of likes on a team’s Facebook page, the literature is lacking the empirical connection between using social media and ticket sales. Based on previous studies in non-sport industries, we propose that (I) there is a correlation between allegiance as measure by Facebook likes for sports teams and (II) this in turn will affect ticket subsequent ticket sales. In addition, Funk and James (2001) proposed that fan loyalty or

allegiance is based on the number of wins; the empirical data presented here evaluated the relationship between the number of wins and Facebook likes. Our first two hypothesis test the relationship between allegiance and Facebook likes in the sports industry. We further hypothesize that (III) ticket sales are dependent upon the number of Facebook likes and the number of wins that a team has. It could be argued that both independent variables may exhibit collinearity; since the number of wins may also affect the number of Facebook likes. As such we will use regression analysis to evaluate our model as opposed to other methods such as structural equation modeling (Kock & Lynn, 2012).

## **Methodology**

This empirical study first uses secondary data to identify the importance of a social media communication strategy in creating a loyal fan base and its implication for sports organization. The study looked at the number of likes on the sports pages for teams in the National Basketball Association (NBA) and the likelihood of individuals purchasing tickets to a game. This method of observation produced ratio data that could easily be analyzed through a regression analysis.

For the study presented here we will limit our study to team Facebook pages. Facebook was chosen to conduct this analysis because of the strong connection between fans with allegiance and Facebook likes from previous studies (Pronschinske et al., 2012). With over 500 million users spending over 700 billion hours on Facebook a month, fans connect to their team's Facebook community (Ang, 2011). Furthermore, the number of likes can easily be observed and thus we will limit our study to this platform as did Pronschinske et al. (2012). In this study we focused on the NBA as opposed to other sports. On the other hand, the study by Pronschinske et al. (2012) included not only basketball teams but also football and hockey. They found that the type of sports program did not have an impact on the findings, thus we believe that our sampling frame is valid.

## **Data Collection**

Using a method of observation, the relationship between brand loyalty, team performance, and tickets sales was evaluated. Facebook "likes" was used to measure brand loyalty or allegiance, and team performance was measured by number of wins, additionally ticket sales data was reported. The data was then run through a backward regression analysis using SPSS to determine any causal relationship between Facebook likes, team performance, and ticket sales. As stated earlier, regression was selected as our method of analysis since we believe that collinearity may exist between Facebook likes and the number of wins. The proposed dependent variable is ticket sales. Data was collected as the total tickets sales per game during a nine-week study. To collect this variable, NBA.com was used and relied on to give accurate ticket sales on their website for each individual game during the 2012-2013 basketball season. To run a regression analysis, the number of ticket sales was averaged per week over the nine-week period. The reported number of tickets sold included season ticket sales; a constant each week. Hence we believe the difference, on a week to week basis, is the net effect from the number of wins and team allegiance.

For proper calculation finding the effect of social media on ticket sales, all the independent variables are counted a week prior to which ticket sales are counted. For example, the number Facebook likes that a team achieved for week 1 will be compared with ticket sales in week 2. Since Facebook likes may exhibit collinearity with the number of wins both Facebook likes and number of wins will be observed the week prior to ticket sales. The variable, labeled 'overall,' identifies the teams' overall record for the season; and the variable Facebook likes indicate the number of likes in the current week for each team. While we did consider other independent variables such as a favorite athlete might be included in the relationship, we wanted to focus on the effect of social media and the number of wins on ticket sales. Since this other variable is not being measured, we may see a lower correlation coefficient in our model.

Two backward linear regression analyses were run to test the relationship between average tickets sold and team Facebook likes per week. The first backward linear regression evaluated the relationship between the dependent variable ticket sales and the observed variables: team wins per week, team wins per season, team Facebook likes per week, and sponsors Facebook likes per week. Zauner, Koller, & Fink (2012) have identified that top athlete endorsements may also affect ticket sales as well as the relationship with company sponsors such as Nike. In order to include this independent variable, we looked at the top scoring and rebounding leaders and looked at the number of likes on the sponsor Facebook pages as a third independent variable. Since we also wanted to know if Facebook "likes" was an intervening variable or exhibited collinearity with the number of wins, we also ran a second backward regression analysis to test the relationships between Facebook likes and the number of wins and Facebook likes and the number of ticket sales.

### **Analysis and Results**

Before running the backward regression, we ran a bivariate correlation analysis, as seen in table 1. This helped us to identify the relationship between the dependent and independent variable. The Pearson Correlation was significant for relationships between average ticket sales per week and the number of wins and Facebook likes (support for our second and third hypothesis) but not the number of likes on a sponsor's Facebook page. Since our data analysis failed to provide supporting evidence of the relationship between ticket sales and sponsor Facebook likes (significance levels were greater than .05), sponsorship was eliminated from our final model.

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Insert Correlation Table 1 about here

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After running the backward linear regression shown in table II, it appears that at an alpha level of .01, wins per season and team Facebook likes per week are both significant for predicting the average number of tickets sold. Thus the data seems to support our third hypothesis that tickets sales are dependent upon the number of wins per season and that Facebook likes is an indicator of the strength of a brand as measured by ticket sales.

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Insert Regression II Tables about here

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The number of Facebook likes proved to be significant to the number of tickets sold as well as the number of wins. However as mentioned earlier, it is not clear if there was collinearity with these independent variables. To get a better understanding of the true relationships between the number of Facebook likes and the other observed variables, a second backward linear regression was run with Facebook likes as the dependent variable. While the regression in Table III clearly shows that the number of wins and average tickets sold are significant for determining Facebook likes, the r-squared was only .19. Therefore, the model is weak at predicting the relationship between Facebook likes as the dependent variable and average tickets sold as the independent. Based on the significance level and the strength of the correlation coefficient, we believe that the number of Facebook likes may be an intervening variable for the average number of ticket sold per week, based on the number of wins per week.

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Insert Regression III Tables about here

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Based on the data presented here and the literature review Facebook likes is a good measure of brand community. While this doesn't provide for the full model it helps to support our thesis that a strong brand community is a predictor of the number of tickets sold. Our data also indicates that the number of wins per week will influence the number of Facebook likes. This supports both of our hypotheses and adds to the body of knowledge for sports management.

### **Discussion**

Based on the findings of the empirical analysis, it is apparent that teams should continue to use social media to create brand communities and support their loyal fan base. The literature clearly supports the relationship between strong brand communities and ticket sales (Williams & Chinn, 2010). This study provides empirical evidence of this relationship. This analysis indicates that strong ticket sales are dependent upon the number of wins, but neither Facebook likes alone nor the number of wins alone is a good model based on the correlation coefficient. There is statistical evidence that supports both our second and third hypotheses: The number of ticket sales was found to be statistically dependent upon the number of Facebook likes and the number of wins, each contributing to the model.

These findings provide further support for the work by Watkins (2014) and Pronschinske et al., (2012). These earlier studies found supporting evidence for the importance of creating brand communities but stopped short of supporting how brand communities support the sustainability of an organization as defined by ticket sales.

### **Directions for Future Research**

Much of the literature proposes that the benefit, of brand communities, is that of creating loyal fan base. Different platforms of social media can be used to create the brand community and increase fan loyalty. Facebook is thought to be beneficial in creating a connection with the fan for sports, whereas YouTube and Twitter may help to create a stronger allegiance (Funk and James, 2011). The study presented here empirically supports the benefits of Facebook as part of a relationship marketing strategy (creating fan allegiance) for sports teams (Rufer, 2014). Future research should be used to evaluate the relationship between different social media platforms such as Twitter and YouTube, and ticket sales.

An important construct identified in this study was the concept of allegiance to the brand. Further research may also identify how integrated marketing communications beyond social media can support the brand such as personal communication and sales promotion elements of the mix.

### **Managerial implications**

Social media when properly managed has become an important communication strategy because it provides a way in which organizations can build relationships with its customers. Unlike traditional promotion channels, social media becomes a two-way communication channel, supporting the relationship with the customer. These communication channels provide for increased customer feedback, which allows the organization to adapt to the market environment by incorporating customer feedback into future marketing and product plans. When properly managed it can engage fans by creating brand communities and result in higher ticket sales. The use of social media was during the 2012 Olympics in London increased allegiance with the national teams. While the number of wins' increases ticket sales, brand communities help to further increase ticket sales beyond just having a winning season. This empirical study has provided supporting evidence that social media is an important element in the communication strategy for sports teams, by creating strong brand communities. Thus the use of social media for creating brand communities is not only important in the U.S. but also globally (Tang and Cooper, 2013). Thus it is important for both international and national sports teams to engage in a marketing communication strategy of using social media to engage and sustain their fan base.

### **Limitations of the study**

One of the limitations of this study is that the methodology utilized observation of Facebook likes and tickets sales. While this method has good reliability as noted by Pronschinske et al., (2012), we do not know the actual reason that an individual identifies with a brand. Thus content validity would need to be validated by a survey. However, the work of Watkins (2014) seems to support our analysis of the relationship between social media and brand community. Watkins study also provides evidence of another limitation of this study: we only observed the presence of brand community on Facebook, and could have had stronger correlation if we had used additional social media platforms. Another limitation of this study and others that have used Facebook likes is that there are no Facebook dislikes and that previous research has used Facebook likes to represent strong brand communities but without additional supporting

evidence it may only measure brand engagement. The final limitation of this study is that we only gathered data for one NBA season. Additional seasonal data should be evaluated as well as other sports to provide for further support of our hypothesis.

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**Table 1**  
**Means, Standard Deviations, and Pearson Correlations**

Variable	Mean	SD	1	2	3	4	5
1. Team wins per week	1.67	1.10	1				
2. Team wins per season	32.91	11.0	.49*	1			
3. Team Facebook likes per week	1,422,241.98	2,208,625.14	.19*	.31*	1		
4. Sponsors Facebook likes per week	6,397,723.31	12,392,677.7	-.07	-.02	-.01	1	
5. Average tickets sold per week	17,788.56	1,690.22	.19*	.42*	.35*	.00	1

Note. N=270 except for Sponsors Facebook likes per week (N=172).

\* Significant at  $p < .01$  level (2-tailed).

**Table II**  
**Regression summary of Average Tickets sold per week**

Predictor Variable	Average Tickets Sold per week		
	$\beta$	$R^2$	$\Delta R^2$
Step 1:		.25	--
Team wins per season	.29*		
Team wins per week	.04		
Sponsor Facebook likes per week	.02		
Team Facebook likes per week	.30*		
Step 2:		.25	-.00
Team wins per season	.32*		
Team Facebook likes per week	.30*		

Note: N=270. Standardized regression coefficients ( $\beta$ s) are shown for the predictor variables removed at each model.

\* $p < .01$

\*\* $< .05$

**Table III**  
**Regression summary of Team Facebook likes per week**

Predictor Variable	Team Facebook likes per week		
	$\beta$	$R^2$	$\Delta R^2$
Step 1:		.19	--
Team wins per season	.20**		
Team wins per week	-.03		
Sponsor Facebook likes per week	-.01		
Average tickets sold per week	.33*		
Step 2:		.19	-.00
Team wins per season	.18**		
Average tickets sold per week	.33*		

Note: N=270. Standardized regression coefficients ( $\beta$ s) are shown for the predictor variables removed at each model.

\* $p < .01$

\*\* $< .05$