The Changing Role of Media for High School Sports Fans Creates an Opportunity for Website Development and Social Media Use

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Abstract

Sports fans are no exception when it comes to demanding instant information. They utilize websites, social media, and traditional media in their quest for information about the teams and leagues that they follow. However, as fans become more acquainted with search engines and social media, developers now have the opportunity to create websites to cater to specific groups of fans.

INTRODUCTION

The use of the Internet is changing the way many fans follow their favorite sports teams. From junior high teams to professional teams, the use of the Internet by fans continues to increase at astounding rates. It allows them to connect with the team, and the team's brand, in a way that was not previously possible. "Recent research by Global Sports Forum Barcelona has suggested more fans aged 18-35 are now watching sports online than on TV. This trend means that everyone involved with sport needs to develop content across platforms" (How can sports marketing utilize social media? 2012).

Sports fans are consuming three times more digital content than non-sport fans. Much of this activity comes through social media platforms (e.g. Facebook and Twitter), and official school websites and school-driven apps. The content is driven by the fan's need for information and interaction with the sports, teams, and leagues to which they have built a relationship. (Lowe's, IMG College Sign Unprecedented Strategic Agreement to Reach College Sports Fans via Official Social Media Channels, 2012). It also knows no geographical boundaries, which opens up new opportunities for teams and fans alike (Infinity pro sports(TM) and KickApps partner on sports and social media, 2009).

Because of the Internet and social media, marketing activities can now be tailored to meet specific needs of target markets. "Sports organizations of all types of teams, leagues, sporting goods companies, sponsors, marketing agencies and governing bodies have expanded their online marketing tactics beyond e-mail marketing and are now embracing the rapidly expanding world of social media and digital broadcast programming on computers, tablets and smartphones" (Research and Markets: Social Media & Online Viewership Market 2012 Features a Sample of Consumers Large Enough to Enable Sport-By-Sport Comparisons, 2012).

While the Internet has obviously changed how news is disseminated, the rate at which the information can be dispersed is perhaps more astonishing. Fans at games disseminate information via social media before news stories can be written and posted on the Internet. "Social media has dramatically changed how the traditional media operates. At the first hint of news, it goes out on Twitter. Once the story is posted online, writers and editors promote it on Twitter and Facebook in the modern version of a newsboy screaming 'Extra, extra, read all about it!'" (Davis, 2011).

In general, sports fans are very passionate about the teams they follow. They often have an on-going relationship with teams throughout their lives. "Sports fans always have something to say! They are the most vocal, most dedicated, most social people in the world. They always have an opinion about the team, the game, the athletes, the officials, the season or the 30 ft. jump shot that won the game!" (Access Sports Media Launches Access Sports Connect: Aimed at Integrating Brands into Team Social and Mobile Marketing Platforms, 2012).

So, while teams and leagues still need traditional media—such as newspaper articles and magazines--they also have an opportunity to connect with fans on a more personal level through websites dedicated to sports teams, beliefs, fans, etc. According to Dhiraj Murthy, assistant professor of sociology at Bowdoin College, fans like to see digital media as a way to stay connected to other fans. "The only consensus is that social media's role in football will continue to change at the rate of a hurry-up offense. It's this juggernaut that keeps growing and growing," Murthy said. "Just like any new communications technology—like with the telephone—uptake becomes quite rapid. And once it becomes pervasive, it's a bit of a snowball effect, so it takes over." (Davis, 2011).

Fans are taking their phones with them to sporting events, and taking it upon themselves to "report" as quickly as possible to other fans. This gives them even more opportunity to connect with the brand and other brand loyalists. "Already, smartphones and tablets such as iPad are pushing the personal computer in the direction of dinosaurs. According to comScore, 69.5 million people in the U.S. owned smartphones during the three months ending in February 2011, up 13 percent from the preceding three-month period. NPD Online Research found that 83 percent of smartphone owners use them to send e-mail and 76 percent for browsing online. About half are using them for social networking." (Davis, 2011).

COMPANY BACKGROUND

Kpreps.com (Kpreps) is a website that first went online in August 2008. It describes itself as the "information source for Kansas High School Football." Every high school football program in the state of Kansas has a page on Kpreps. Each page contains up-to-date information on the football team such as the team's schedule, scores, game statistics, links to news articles, etc. The website traffic is very seasonal in nature coinciding with the sport of football. Kpreps experiences its peak traffic volume during the high school football season, August to December. The highest volume of traffic occurs from late October through November. It is during these weeks that the state playoffs takes place culminating with the state title game for all classes being played on the third Saturday of November. There are two main target markets of Kpreps--football fans of Kansas high school teams and Kansas high school athletes, primarily football players.

In the first four years of operation, Kpreps has experienced steady growth, as measured by number of visits per month and number of unique visitors per month. (See Table 1.) Unique visitors refer to distinct or separate visitors to the website as determined by a unique IP address.

Table 1. Number of Visits and Unique Visitors to Kpreps.com, 2008 – 2011
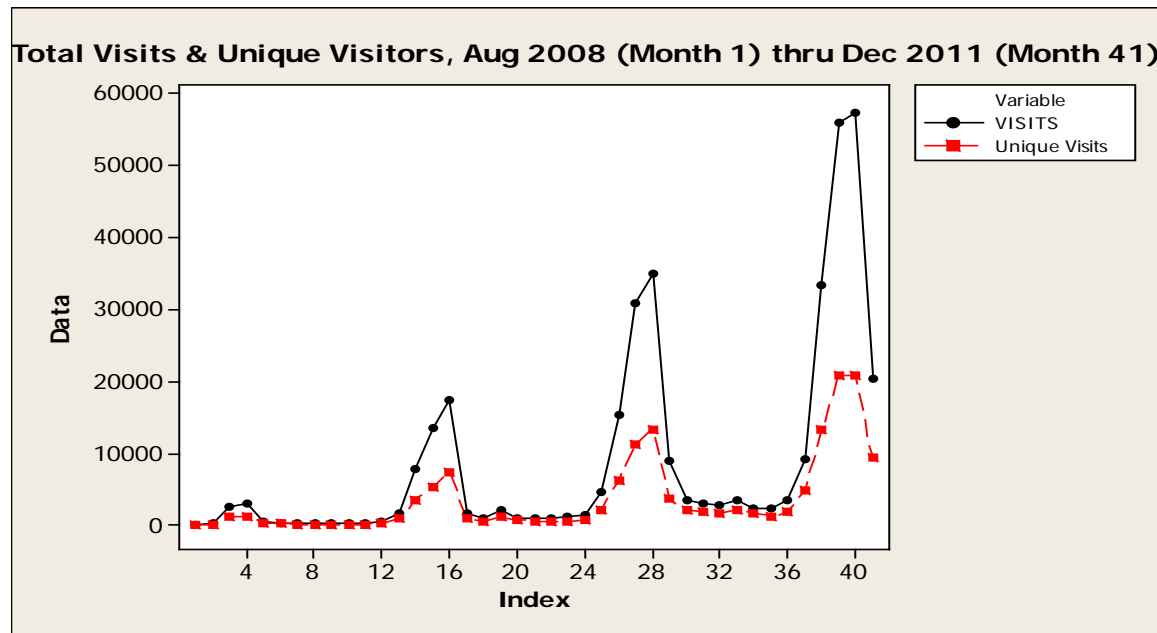
Strategies to Attract Traffic to the Website

Kpreps has experienced a healthy increase in web traffic with each passing year. Various web marketing programs have been implemented each year to help improve the traffic. During the first year of operation, 2008, as the site was initializing its services, no formal promotional campaigns were put in place. The company relied on word-of-mouth communication to help promote the site. In the second year of operation, 2009, Kpreps partnered with the magazine, *Kansas Pregame.* This magazine is an annual publication with a circulation of approximately 15,000 copies. The magazine highlights high school football teams in the state of Kansas. Kpreps placed an advertisement on the cover of this magazine and smaller ads were placed on many pages throughout the magazine. In turn, the magazine placed a banner ad on the Kpreps website. In the third year of operation, 2010, Kpreps continued their cooperative advertising with *Kansas Pregame*.

In 2010, Kpreps began to focus more on Search Engine Optimization (SEO). Since search engines typically display the page title and meta description in the organic search results, the company changed the page coding in an effort to improve its ranking on search engines after a keyword search. Kpreps began utilizing dynamically generated page titles, coding its pages by using hidden keywords in its page content. For example, a football fan searching for a particular football team might use the school name in the keyword search of a search engine. If Kpreps codes the school name as part of its dynamically generated page title, Kpreps would most likely rank higher on the search engine results page. The increased visibility should result in more people finding the website. In the fourth year, 2011, the website began sharing information, news articles, and website links on various social media such as Facebook and Twitter. Also in this year, Kansaspregame.com went offline and was only available through a page on Kpreps.com.

Kpreps became the official web partner of *Kansas Pregame* Magazine. Any Internet search for *Kansas Pregame* Magazine would be redirected to the website of Kpreps.com.

Measuring the Success of Marketing Strategies

Kpreps recognized that to develop a user base, they must get people talking about their website. Also, to be able to sell advertising, they had to prove that the site generates traffic. As such, their goals changed as the organization grew and matured. Their strategies for each year were as follows:

Season 1: August 2008 – December 2008
STRATEGY: First year of operation; Organic Word-of-Mouth

Season 2: August 2009 – December 2009
STRATEGY: Cooperative Advertising with *Kansas Pregame* Magazine

Season 3: August 2010 – December 2010
STRATEGY: Cooperative Advertising with *Kansas Pregame* Magazine, SEO, Facebook campaigns

Season 4: August 2011 – December 2011
STRATEGY: Kpreps became the official web partner of *Kansas Pregame* Magazine, SEO, Facebook campaigns, and minimal Twitter campaigns

Table 2. Results of Strategies

SEASON (Aug.-Dec.)	Page Views	Pages/Visit	Avg. Visit Duration	Bounce Rate
2008	54,923	9.06	00:04:20	16.63%
2009	368,631	8.84	00:05:31	24.31%
2010	656,490	6.97	00:05:05	28.94%
2011	1,060,911	6.02	00:04:30	33.83%

The website increasingly attracted users through word-of-mouth, and eventually paid advertising. However, social media possibly accounted for a larger viewership in the years 2010-2012. It is not surprising that football fans are gravitating to social media in line with the trend throughout society. While the number of page views has increased substantially for each year of operation, the number of pages viewed per visit has declined by about a page per year. One explanation for this slight downward trend may be related to familiarity of the website as time passes. As web users become more familiar with the site, they are able to find their desired information with less effort and possibly less pages would be viewed per visit.

The average duration spent on the site per visit increased by about a minute from 2008 to 2009, but then slowly declined in the following two years. Though it is difficult to pinpoint the reason for the decrease in time, there is a possibility that many users were beginning to utilize more social media for information during this time period. "A recent survey by the Pew Research Center showed that social media is the most rapidly growing online activity, with 65

percent of Internet users interacting with sites such as Facebook and Twitter. That is up from 11 percent in 2005 and about 17 percent as recently as 2007" (Davis, 2011).

The bounce rate, defined as the percentage of visitors who enter the site but leave ("bounce") without viewing more than one page, has increased by approximately 5%-7% each year. Normally speaking, a high or increased bounce rate is a bad thing. There are many possible reasons for a site to experience an increase in bounce rate, such as problems with the site design or difficulty of navigation. However, if the web developer views bounce rate simply as the percentage of single-page visits, there may be other more positive reasons for an increased bounce rate. This may be the case for Kpreps. A few gradual changes in the website design and user habits over the four year time period could be related to a slight increase in bounce rate for Kpreps.

- **Cover stories:** The cover stories appear on the home page and change each week. The articles usually feature a big game of the week or an interesting current event relating to Kansas high school football. Links to these cover stories are posted on other sports-related websites and social media such as Facebook and Twitter. If a visitor is entering the site to read the cover story only, an increase in bounce rate, i.e. single page visit, could occur.

- **User Familiarity:** As a user becomes more familiar with site navigation, he/she may be able to navigate directly to the one page they prefer without needing to visit other pages of the site. For example, an avid fan of a particular football team might bookmark his/her favorite team's page. That may be the only page that is viewed. If the user visits no other page than the one team's page, an increase in bounce rate could occur.

- **Improved Website Design:** Categories or "tabs" added to the home page allow the user to navigate to his/her preferred area of interest with less effort. For example, the "Scores" tab provides scores for all games played in Kansas during that week. A user may visit the site every Friday night to obtain weekly game scores across the state. Another tab, "Magazine", takes the user to *Kansas Pregame* Magazine, a popular and well-promoted page of the site. If any of these pages are bookmarked on the user's computer, it may be the only page that is viewed on a single visit. This could also result in an increase in bounce rate.

- **Social Media Links:** Since 2010, Kpreps has used social media to introduce feature articles and trivia questions posted on its site. A Facebook or Twitter follower may click these links to investigate that specific content without browsing around and staying on the site. The time periods that these social media strategies were introduced coincide with the increase in bounce rate, i.e., single page visits.

- **News Media:** As the site has gained in popularity, various news media outlets have begun to use Kpreps as a source of information and data. These reporters will often open one page of the site to obtain a single piece of information, and then close the page without browsing around the site.

Based upon the information needs and usage patterns of high school football fans and reporters, it is theorized that the pages for scores, rankings, teams, and *Kansas Pregame* magazine would be common single page visits. Therefore, the bounce rate for these landing pages would increase as a user becomes more familiar with the site. In other words, the visitor would go directly to his/her landing page of choice, find the information for which he/she is searching, and then leave the site without visiting other pages. As time passes and user frequency increases, the user's familiarity with the site would further lead to an increase in the bounce rate. As the Table 3 shows, the increase in bounce rates for these landing pages from 2008-2011 support this theory.

Table 3. Landing Page Bounce Rate

Season (Aug.-Dec.)	/scores.php	/rankings.php	/teams.php	/magazine.php
2008	3%	N/A	14%	N/A
2009	5%	3%	7%	N/A
2010	11%	19%	12%	22%
2011	18%	17%	18%	22%

Another possible reason for the increase in bounce rates on these popular landing pages relates to the sports fan's more frequent usage of social media to obtain similar information. "A recent survey on sports and social media showed that 42 percent of NFL fans and more than half of college football fans (51.5 percent) are using Twitter during games. Twitter activity spikes higher after the game—62.5 percent for the NFL, 53.1 percent for college football—as fans throw their two cents worth into the social media commentary about what they just watched. Look for those numbers to increase. Twitter has been in operation for only five years. Facebook has been around longer and is by far the most popular social media for fans to follow and discuss their favorite teams, according to the study by Catalyst Public Relations. It is used for that purpose by 86 percent of NFL fans and 79 percent of college football fans" (Davis, 2011).

Table 4. Traffic Sources Overview (Number of Visits / % of all Visits)

SEASON	Search Traffic[1]	Referral Traffic[2]	Direct Traffic[3]	Total Traffic
Aug. – Dec. 2008	1072 (17.7%)	3370 (55.6%)	1618 (26.7%)	6060 (100%)
Aug. – Dec. 2009	12,821 (30.8%)	17,432 (41.8%)	11,447 (27.4%)	41,700 (100%)
Aug. – Dec. 2010	29,822 (31.6%)	27,428 (29.1%)	36,990 (39.3%)	94,240 (100%)
Aug. - Dec. 2011	65,079 (37%)	47,788 (27%)	63,264 (36%)	176,132 (100%)

[1] Search Traffic refers to users landing on Kpreps from a search engine.
[2] Referral Traffic refers to users landing on Kpreps from another independent website.
[3] Direct Traffic refers to users who manually enter kpreps.com as the URL.

In the first two years of operation, referral traffic accounted for the majority of traffic to Kpreps. *Kansaspregame.com* was the top referral site during this time, coinciding with the cooperative advertising campaign that was utilized in 2008-2009. In the following two years, traffic volume was distributed more evenly among the three traffic sources (search traffic, referral traffic, and direct traffic). Search traffic to Kpreps has increased each year with the most substantial increases in search traffic occurring after 2010. This increase correlates with the SEO efforts initialized in 2010. The majority of search traffic is coming from Google and Yahoo.

Table 5. Number of Visits by Source of Traffic

Season	Direct	Kansas Pregame.com	Google	Yahoo	Kansas Prepfootball.com	Facebook	Twitter
2008	1618	0	366	417			
2009	11,447	9749	4334	4937	95	72	
2010	36,990	1250	19,143	4779	6417	5806	516
2011	63,264	469	44,759	8294	10,032	20,493	1823

Referral Traffic to Kpreps has increased at a steady rate during the four year time period. While *Kansaspregame.com* was the top referral site in the first two years, Facebook and *Kansasprepfootball.com* became the top referral sites in the following two years. The 2010-2011 Facebook social media campaign implemented by Kpreps correlates with this traffic pattern.

Direct Traffic that occurs when a visitor manually enters kpreps.com as the URL has experienced a steady and significant increase over the four years of operation. The introduction and continuation of word-of-mouth and the promotional strategies over the four years correlates with this direct traffic volume.

Table 6. New vs. Returning Visitors

Season (Aug.-Dec.)	New Visitors	Returning Visitors
2008	2191 (36%)	3869 (64%)
2009	15080 (36%)	26620 (64%)
2010	29472 (31%)	64768 (69%)
2011	54565 (31%)	121566 (69%)

Both the number of new visitors and the number of returning visitors to the site have increased significantly over the course of the four seasons. In addition, it is notable that the breakdown of New vs. Returning visitors has not changed substantially. Approximately 31%-36% of all visitors are new visitors for all four seasons. And approximately 64%-69% of all visitors are returning visitors for all four seasons. The fact that these percentages are stabilizing over time is a sign that Kpreps is continuing to attract new visitors to the site while at the same time managing to preserve their loyal core group of users.

A comparison of page views per visit, average visit duration and bounce rate between New Visitors and Returning Visitors indicates that Kprep's returning visitors are much more

engaged in the site. These returning visitors are probably the site's core users. But among both groups of visitors (New and Returning), the number of page views per visit and the average visit duration appear to be decreasing while bounce rate is increasing over time. (See Tables 7, 8, and 9.) As noted earlier, one reason for these trends could be that football fans are following the societal trend of relying more heavily on social media to obtain their information. In addition, these trends could also be a sign that loyal Kpreps users are becoming more familiar with the site and are therefore able to find their favorite information with more ease and in less time.

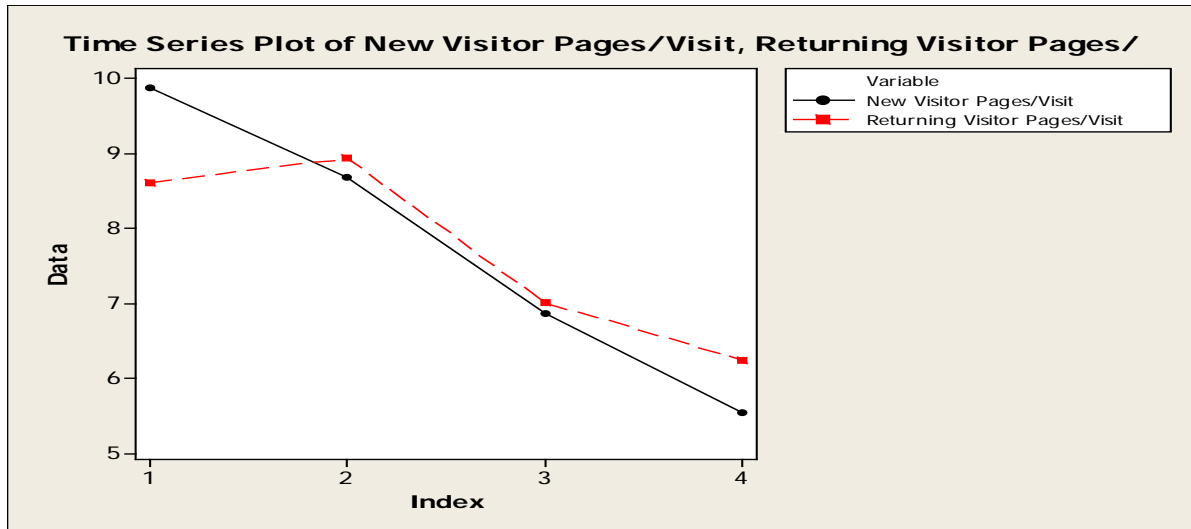Table 7. New Visitor Pages Per Visit to Returning Visitor Pages Per Visit

Table 8. New Visitor Average Duration Compared to Returning Visitor Average Duration
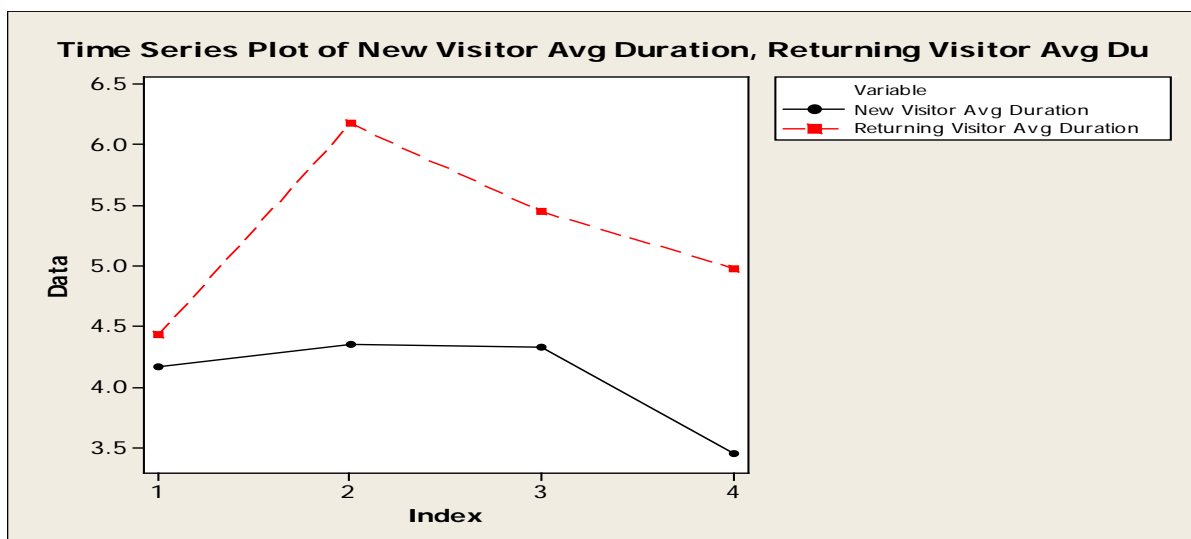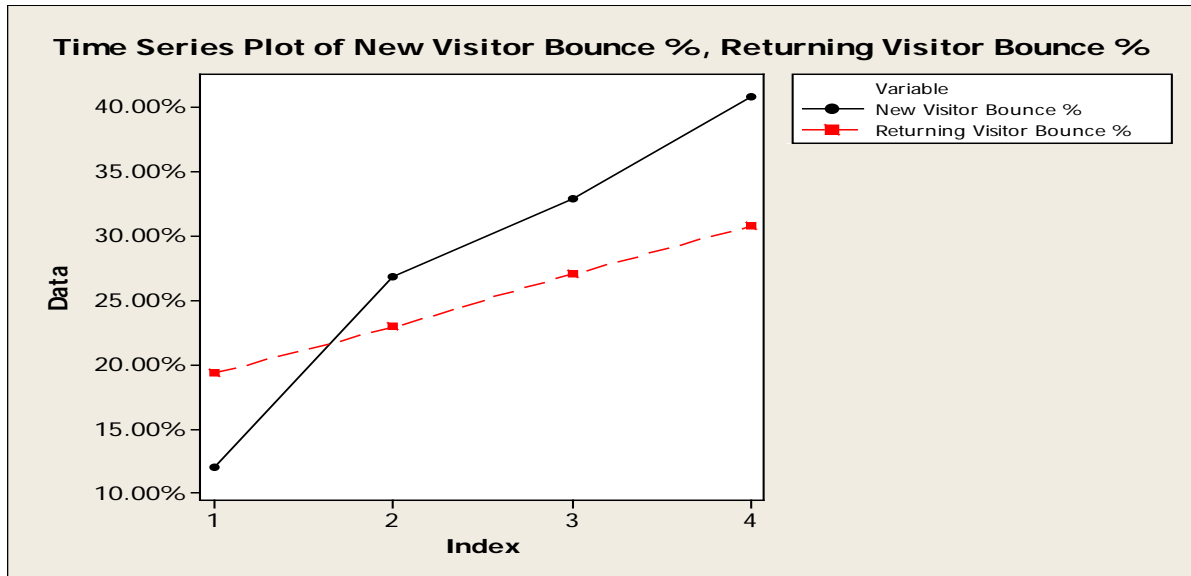

Table 9. New Visitor Bounce Rate Compared to Returning Visitor Bounce Rate

THE STUDY

A sample of the most recent 25 months of operation was taken. Data was collected on the percent of new visits to Kpreps coming from the search engine Google, Facebook, and Direct traffic (when a visitor manually enters kpreps.com as the URL). In addition, data was also collected on bounce rates (or one-page visits) coming from Google, Facebook and Direct traffic. Four t-tests were conducted to determine if significant relationships existed between social media and the website. (See Table 10.)

The first t-test examined the difference of the average percent of new visits coming from Google and the average percent of new visits coming from Facebook.

H_o: μ (% New Visits from Google) - μ (% New Visits from Facebook) = 0

H_A: μ (% New Visits from Google) - μ (% New Visits from Facebook) ≠ 0

Result: There was a significant effect. The values support the conclusion that the average percent of new visits to Kpreps coming from Google is significantly more than the average percent of new visits coming from Facebook. This test result suggests that Kpreps should further develop their social media marketing campaigns in an effort to improve their new visitor traffic coming from various social mediums such as Facebook.

The second t-test examined the difference between the average percent of new visits coming from Facebook and the average percent of new visits coming from Direct Traffic.

H_o: μ (% New Visits from Facebook) - μ (% New Visits from Direct Traffic) = 0
H_A: μ (% New Visits from Facebook) - μ (% New Visits from Direct Traffic) ≠ 0

Result: There was not a significant effect. As such there is not a significant difference between the average percent of new visits coming from Facebook and the average percent of new visits coming from Direct Traffic.

The third t-test tested for a significant difference between the average bounce rate of visitors coming from Facebook and the average bounce rate of visitors coming from Google.

H_o: μ (Bounce % of Visitors from Facebook) - μ (Bounce % of Visitors from Google) = 0
$H_{A:}$ μ (Bounce % of Visitors from Facebook) - μ (Bounce % of Visitors from Google) ≠ 0

Result: There was a significant effect, which supports the conclusion that the average bounce rate of visitors coming to Kpreps from Facebook is significantly higher than the average bounce rate of visitors coming from Google. This test result suggests that visitors coming from Facebook are more likely to be one-page visitors. Social media campaigns typically attempt to entice a visitor to the website looking for a specific piece of information. A Facebook visitor may be directed to Kpreps to obtain this information without browsing around the site, thus leading to a higher bounce rate.

The fourth t-test examined the difference between the average bounce rate of visitors coming from Facebook and the average bounce rate of visitors coming from Direct Traffic.

H_o: μ (Bounce % of Visitors from Facebook) - μ (Bounce % of Visitors from Direct) = 0
$H_{A:}$ μ (Bounce % of Visitors from Facebook) - μ (Bounce % of Visitors from Direct) ≠ 0

Result: There was not a significant effect, and thus, does not support the conclusion that there is a significant difference between the average bounce rate of visitors coming to Kpreps from Facebook and the average bounce rate of visitors coming from Direct Traffic.

Table 10. T-test and P-value Results

	T-value	P-value
Avg. % of New Visits from Google vs. Avg. % of New Visits from Facebook	2.21	.032*
Avg. % of New Visits from Facebook vs. Avg. % of New Visits from Direct Traffic	-1.40	.171
Avg. Bounce Rate Visitors from Facebook vs. Avg. Bounce Rate of Visitors from Google	2.33	.024*
Avg. Bounce Rate Visitors from Facebook vs. Avg. Bounce Rate Visitors from Direct Traffic	1.50	.141

*indicates significance

LIMITATIONS OF STUDY

This study looked at one website that focused on high school football in a Mid-Western state. It was not compared to other states or other websites. Also, the state has a considerable amount of rural areas where obtaining information can be challenging. As such, fans of these teams might not behave the same as fans in urban areas.

Another limitation was that there were no demographics of the sample. It is assumed that the users are predominantly male and middle-to upper-income.

CONCLUSION

The overriding conclusion to this study is that social media can be used to impact the use of a sports website. Search engine optimization will continue to be important to consumers and marketers. Though many users turn immediately to Google for information, the trend is for consumers to increasingly use social media. Football fans are following this societal trend of relying more heavily on social media to obtain their information. Websites provide an opportunity to further brand an organization, a league, and a team, as users develop relationships with websites. In this particular case, as users became more familiar with the site they are able to find their favorite information with more ease and in less time.

The most important finding of this study was that digital media provided developers with important information regarding their users. As such, the use of analytics can be used to determine the success or failure of marketing strategies and direct future growth opportunities. Fans have to get to the site to ever be engaged in the site—and social media can often offer the platform to attract users.

REFERENCES

Access sports media launches access sports connect. (2012, Sep 13). *PR Newswire,* pp. n/a. Retrieved from http://search.proquest.com/docview/1039206599?accountid=13211

Best social media advertising campaigns to be named by web marketing association. (2011, Nov 14). *PR Newswire,* pp. n/a. Retrieved from http://search.proquest.com/docview/903679588?accountid=13211

Davis, C. (2011, Sep 01). Social media a game-changer in all aspects of football. *McClatchy - Tribune Business News,* pp. n/a. Retrieved from http://search.proquest.com/docview/886860291?accountid=13211

GroundFloor media expands digital & social media strategy team with addition of two new members. (2012, Jul 26). *Business Wire,* pp. n/a. Retrieved from http://search.proquest.com/docview/1027914395?accountid=13211

Ham, N. (2011, Mar 31). Social media brings the sports world closer. *McClatchy - Tribune Business News,* pp. n/a. Retrieved from http://search.proquest.com/docview/859429137?accountid=13211

How can sports marketing utilise social media? (2012). *Campaign,* , 21-21. Retrieved from http://search.proquest.com/docview/1009895995?accountid=13211

How social media is helping student athletes make recoveries from sports injuries. (2012, Mar 01). *PR Newswire,* pp. n/a. Retrieved from http://search.proquest.com/docview/925162950?accountid=13211
Hunn, C. (2012, Mar 25).

Social media provides benefits, potential pitfalls in high school sports. *McClatchy - Tribune Business News,* pp. n/a. Retrieved from http://search.proquest.com/docview/940495288?accountid=13211

Infinity pro sports(TM) and KickApps partner on sports and social media. (2009, Feb 12). *Business Wire,* pp. n/a. Retrieved from http://search.proquest.com/docview/444261094?accountid=13211
KONTZER, T. (2011, Oct 03).

H.S. athletes, colleges putting twitter, YouTube in game plan QB brown also A marketer social media presence has become a must in the sports recruitment game. *Investor's Business Daily,* pp. 06. Retrieved from http://search.proquest.com/docview/915245205?accountid=13211

Lowe's, IMG college sign unprecedented strategic agreement to reach college sports fans via official social media channels. (2012, Aug 30). *Business Wire,* pp. n/a. Retrieved from http://search.proquest.com/docview/1036950143?accountid=13211

Neolane and FanOne present sports and entertainment marketing webinar: Digital case studies and social media integration that works. (2010, Sep 22). *Business Wire,* pp. n/a. Retrieved from http://search.proquest.com/docview/752023490?accountid=13211

Paid, inc. raises the bar for brand management, social media marketing services for music, sports, entertainment talent. (2009, Jun 18). *Business Wire,* pp. n/a. Retrieved from http://search.proquest.com/docview/444072663?accountid=13211

Research and markets: Social media & online viewership sports market 2012 features a sample of consumers large enough to enable sport-by-sport comparisons. (2012, Feb 28). *Business Wire,* pp. n/a. Retrieved from http://search.proquest.com/docview/923760039?accountid=13211

Social media a game-changer in all aspects of football. David, Craig. McClathy-Tribune Business News [Washington] 01 Sep 2011.

Social media provides benefits, potential pitfalls in high school sports. Hunn, Chris. McClathy-Tribune Business News [Washington] 25 March 2012.

Sponsor me introduces the world's first action sports social media site to offer full functionality on the iPad and iPhone. (2010, Sep 08). *PR Newswire,* pp. n/a. Retrieved from http://search.proquest.com/docview/749947477?accountid=13211

XOS technologies empowers sports organizations with new social media platform. (2007, May 07). *Business Wire,* pp. n/a-n/a. Retrieved from http://search.proquest.com/docview/445040658?accountid=13211

yapAgame - a new mobile social media app for sports fans to launch at SXSW. (2012, Mar 08). *PR Newswire,* pp. n/a. Retrieved from http://search.proquest.com/docview/926672872?accountid=13211