

New Media Marketing: The Innovative Use of Technology in NCAA Athletic Department E-Branding Initiatives

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With the competitive nature of the entertainment industry, sport organizations are being challenged to identify marketing strategies to improve their brand with consumers. The purpose of the current research was to survey NCAA Division I (FBS and FCS) administrators (N = 152) to gain an understanding of the technologies that athletic department's value in electronic branding initiatives. In addition to identifying technologies used on athletic department websites, the research also demonstrated that administrators placed the highest level of criticality on social network sites, texting, and video sharing sites when attempting to build brand equity through independent technological mediums.

INTRODUCTION

The constant evolution of the marketplace has made it extremely difficult for sport organizations to be viable from a financial standpoint (Smith & Stewart, 2010). In addition to the increasing competition in the entertainment industry, sport entities such as National Collegiate Athletic Association (NCAA) athletic departments are also being challenged by the high consumption expectations among consumers and stakeholders (Mullin, Hardy, & Sutton, 2007). Further, with the economic recession in the United States economy, many NCAA athletic departments are now facing deficits in their budget due to the fact that boosters, corporate sponsors, and consumers now have less discretionary income (Drape & Evans, 2008). Thus, with the various competitive challenges facing these sport entities, there is a strong need for athletic departments to develop strategies to differentiate themselves from their competitors (Mullin et al., 2007; Ross, 2007).

As previous research has illustrated, marketing has become a primary driver for sport organizations striving to gain “a leg up” on the competition (Mullin et al., 2007). Despite slight variations on how to differentiate effectively, many scholars have emphasized the importance of the realization of strong brand equity for sport organizations looking to enhance their competitive positioning in the marketplace (Gladden & Funk, 2001; Robinson & Miller, 2003; Ross, Russell, & Bang, 2008). In essence, it is the development of this effective “brand” that allows sport entities to maximize their financial efficiency when interacting with consumers and stakeholders (Gladden & Funk, 2001). Thus, with the potential monetary benefits at stake, brand equity has become a primary area of emphasis in the sport marketing literature.

BRAND EQUITY

Brand equity has been characterized by the assets linked to a brand's name that add consumer value to the product being offered by a business entity (Aaker, 1991). In a pioneer study on brand management, Gardner and Levy (1955) explained that "a brand name is more than the label employed to differentiate among manufacturers of a product. It is a complex symbol that represents a variety of ideas and attributes" (p. 34). Similarly, this understanding of brand management was clarified when Brandt and Johnson (1997) described brand as a combination of the physical product, intangible values, and consumer expectations attached to a product by a consumer. Thus, it is the successful implementation of these public associations that allows a sport organization to build brand equity in a productive manner (Dickey & Lewis, 2009).

From a practical standpoint, sport organizations are allowed to differentiate themselves in a competitive marketplace by developing a brand that portrays a promise to consistently deliver specific features, benefits, and/or services to buyers (Kaferer, 1992). In coordination with the successful communication of these associations, sport organizations are afforded with the opportunity to develop a strong brand image within their surrounding communities (Brandt & Johnson, 1997; Dickey & Lewis, 2009; Gardner & Levy, 1955). Further, the pursuit of effective brand management is desirable because strong brand equity has been associated with the following monetary benefits: enhanced product value (Dodds, Monroe, & Grewal, 1991; Keller, 2003), improved purchase intention (Cobb-Walgren, Ruble, & Donthu, 1995), and immunity to product-associated crises (Dewar & Pillutla, 2000). Further, when focusing on college athletics, scholars have demonstrated that sport organizations with strong brand equity are less likely to lose fans when their team struggles from a performance standpoint (Gladden, Milne, & Sutton, 1998). Thus, with the valuable benefits afforded to sport organizations, there is a growing need to understand the new media strategies that NCAA athletic department's value when attempting to communicate their brand effectively with consumers and stakeholders.

Electronic Branding

During the past decade, the Internet has drastically changed the way that business organizations manage their brand (de Chernatony, 2006). With the popularization of interactive devices available via the Internet, brand management principles dictate the need for utilizing blogs, podcasting, and social network sites (e.g., Facebook) to build and enhance brand image with consumers (Christodoulides, 2009). However, despite the undeniable importance of modern communication with consumers and stakeholders, there is a lack of empirical evidence focusing on the electronic branding strategies available in the sport industry (Van den Bulte & Wuyts, 2007). Thus, there is a strong need for research that examines the potential uses of technological mediums as part of the overall marketing plan (de Chernatony & Christodoulides, 2004). Prior to discussing the method implemented in the current study, signaling theory will be discussed as a theoretical framework for the research.

THEORETICAL FRAMEWORK

When focusing on marketing-based research, signaling theory has been used as a framework to understand how consumers come to recognize a brand (Aaker, 1996). In essence, brand awareness is created when directed signals (communication and related marketing activities) are sent to consumers of a product (Erdem & Swait, 1998). When a marketing signal is strong, then the interaction creates consumer value through the reduction of information search costs and perceived risk of purchase (Christodoulides, de Chernatony, Furrer, Shiu, & Abimbola, 2006). Further, with consistency in the communication process, the information creates a credible signal that increases the brand equity of the sport organization delivering the content (Christodoulides et al., 2006). Thus, as previously discussed, sport organizations are able to use this understanding to improve the interactions with their consumers, and as a result they are able to realize all the monetary benefits associated with strong brand equity (Cobb-Walgren et al., 1995; Gladden et al., 1998; Keller, 2003).

While the previous branding strategies have been proposed in conceptual models, there is little empirical evidence that is available on the technologies that are implemented by NCAA athletic departments in their branding efforts. With the growing popularity of new media applications in popular culture (Christodoulides, 2009), there is a growing need to understand the way that technology is used to interact with consumers in sport settings. With this in mind, the purpose of the current research was to survey NCAA Division I (Football Bowl Subdivision [FBS] and Football Championship Subdivision [FCS]) administrators to gain an understanding of the technologies that athletic department's value in electronic branding initiatives. Based on a review of the related electronic branding (e-branding) literature, the following research questions were created to guide the study:

[RQ 1]: What technologies do NCAA Division I Football Bowl Subdivision (FBS) and Football Championship (FCS) athletic administrators feel are critical when engaging in electronic branding strategies with consumers and stakeholders via their websites?

[RQ 2]: What technologies do NCAA Division I Football Bowl Subdivision (FBS) and Football Championship (FCS) athletic administrators feel are critical when engaging in electronic branding strategies with consumers and stakeholders via independent mediums?

[RQ 3]: What role does NCAA Division I Football Bowl Subdivision (FBS) and Football Championship (FCS) athletic administrators feel that technology will play when engaging in electronic branding strategies with consumers and stakeholders in the future?

METHOD

Sample

The current research featured an online survey designed to understand the technologies that NCAA Division I (FBS and FCS) athletic departments' value in their e-branding initiatives. The Division I level was chosen as a sampling frame because it represents the NCAA athletic departments operating at the highest level of college athletics from a competitive and financial standpoint. In order to ensure a representative sample, an email invitation was sent to the senior athletic administrators at each of the institutions in the areas most closely corresponding to the branding research topic (e.g., Senior Associate Athletic Director in Marketing). As a precaution to avoid duplication in the responses, the administrators were asked to have only one individual per athletic department respond to the survey. Following the two rounds of invitations (with one month lapse between emails), there were a total of 152 NCAA Division I athletic departments (FBS [$n = 64$]; FCS [$n = 88$]) that participated in the research. Thus, the sample was representative of well over 50% of the NCAA FBS and FCS athletic departments featured at the Division I level.

Research Instrument

The current research utilized a 16-item survey instrument to gain an understanding of the e-branding strategies that NCAA athletic departments use when interacting with their consumers. Based on consultation with a panel of marketing experts (one athletic administrator [marketing], two sport management researchers [marketing], and one expert in research design), the decision was made to include six electronic branding questions (with subscale items) in three primary categories: (1) athletic department websites, (2) independent media outlets, and (3) the role of technology in future branding initiatives (see Table 1). For the questions featured in these sections, a six-point Likert-type scale (1=strongly disagree; 6=strongly agree) was used to identify that strategies that administrators view as critical in today's college sport industry. In addition, the survey collected marketing-based background information (e.g., FBS/FCS conference affiliation, marketing budget, marketing employees, content control on website, frequency of website updates) on the athletic departments participating in the research.

Data Analysis

Descriptive statistics were used in the research to understand the e-branding strategies that NCAA athletic departments implement in their interactions with consumers. In addition to the calculation of means and standard deviations for the survey items, the research also used one sample t-tests to identify the technologies that are critical in e-branding efforts. Further, a one-way ANOVA was used to identify the significant differences in the use of technologies when focusing on the FBS and FCS affiliation of athletic departments participating in the research. The purpose of this statistical analysis was to identify if varying e-branding philosophies exist between FBS and FCS schools with varying levels of athletic budgets. Thus, the statistical analyses offered a unique opportunity to understand e-branding strategies implemented within FBS athletic departments.

TABLE 1
SURVEY ITEMS RELATED TO ELECTRONIC BRANDING STRATEGIES

Survey Section	Question
Athletic Department Website	<i>The following website technologies are critical when attempting to build brand image with consumers on your athletic website:</i> Audio Broadcasts Blogs Interactive Chat (Coaches/Players) Interactive Fan Polls Message Boards Newsletters Podcasts Video Broadcasts
Independent Media Platforms	<i>The following independent communication mediums are critical when attempting to build your brand image with consumers:</i> Blogs Message Boards Mobile Applications Podcasts Social Network Sites Text Messaging Twittering Video Sharing Sites
Role of Technology in Future	<i>Social network sites will become a primary database marketing tool to reach younger fan segments.</i> <i>Video sharing sites will become a primary marketing tool for organizations looking to build their brand image with consumers.</i> <i>Database text messaging will play a much larger role when promoting events to consumers.</i> <i>Younger generations will continue to grow more reliant on the Internet and technology in the future.</i>

Note. Six-Point Likert scale used to rank items (1=strongly disagree; 6=strongly agree).

RESULTS

The investigation of the data illustrated that there were a variety of different FBS ($n = 64$) and FCS ($n = 88$) athletic departments represented in the sample. When focusing on the background information of the institutions, the results illustrated that FBS conferences on average had four employees and a budget of \$150,000 for marketing purposes. In contrast, FCS institutions had an average of two employees and a budget of \$75,000 for marketing purposes. Further, when examining the usage of athletic websites, the data demonstrated similar trends in the control of content (FBS = 78% control site content; FCS = 86% control site content) and frequency of updates on their websites (both update multiple times daily). The remaining responses to the criticality of electronic branding strategies will be discussed in the following three sections.

E-Branding on Athletic Websites

As shown in Table 2, the mean and standard deviations (Division I [Overall], FBS, and FCS) were calculated for each of the “athletic department website” subscale items included in the survey instrument. In addition, a one-sample T-Test was conducted on each of the items to investigate Research Question 1. When focusing on all of the institutions at the Division I level, four of the website technologies were significantly higher than “agreement” ($\mu \geq 4$) at the $p = .05$ level: video broadcasts [$t(151) = 12.58, p < .05$], audio broadcasts [$t(150) = 12.21, p < .05$], social network links [$t(149) = 2.43, p < .05$], and electronic newsletters [$t(149) = 2.33, p < .05$]. Similarly, when examining the segmented FBS and FCS responses, the data supported the notion that audio and video broadcasts were significantly greater than 4, “agreement,” for both types of institutions. Further, the responses also illustrated that both FBS and FCS administrators both felt that message boards were the least effective technological strategy to implement to build brand image on department websites.

TABLE 2
NCAA ATHLETIC ADMINISTRATORS CRITICALITY OF WEBSITE
TECHNOLOGIES TO BUILD BRAND IMAGE

	Division I		FBS		FCS	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Video Broadcasts	5.24*	1.21	5.31*	1.19	5.18*	1.23
Audio Broadcasts	5.13*	1.13	5.15*	1.23	5.10*	1.06
Social Network Links	4.28*	1.38	3.75	1.29	4.66*	1.32
Newsletter	4.24*	1.26	4.26	1.20	4.22	1.31
Blog	3.97	1.22	4.16	1.25	3.83	1.19
Podcast	3.95	1.24	4.30*	1.16	3.70	1.24
Interactive Fan Poll	3.77	1.25	3.81	1.23	3.74	1.26
Interactive Chat	3.74	1.27	3.90	1.28	3.62	1.25
Message Board	3.16*	1.44	3.03*	1.39	3.25*	1.48

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6). The Division I category encompassed all NCAA athletic departments and FBS and FCS categories featured segmented responses.

* $p < .05$ ($\mu \geq 4$)

Further analysis demonstrated the varying levels of emphasis placed on website e-branding strategies when focusing on the affiliation of NCAA athletic departments. In particular, the data illustrated that FCS

athletic administrators placed a significantly higher criticality on the importance of social network links [$F(1,149) = 17.63, p < .05$] when in comparison to FBS administrators. In contrast, the results also supported the notion that FBS administrators placed a higher criticality on podcasts [$F(1,150) = 8.96, p < .05$] than FCS administrators when using websites to build brand image with consumers.

E-Branding Through Independent Technologies

In response to Research Question 2, a one-sample t-test was performed on each of the “independent technology” subscale items included in the research. As illustrated in Table 3, four of the independent technologies were significantly higher than “agreement” ($\mu = 4$) when focusing on each of the NCAA Division I programs in the sample: social network sites [$t(142) = 6.47, p < .05$], video sharing sites [$t(142) = 4.79, p < .05$], texting [$t(142) = 3.76, p < .05$], and microblogging [$t(141) = 2.37, p < .05$]. Similarly, when focusing on the segmented responses provided by FBS and FCS administrators, the results illustrated that both types of institutions rated the criticality of social network sites, video sharing sites, and texting significantly higher than 4, “agreement,” when engaging in e-branding initiatives.

TABLE 3
NCAA ATHLETIC ADMINISTRATORS CRITICALITY OF INDEPENDENT TECHNOLOGIES TO BUILD IMAGE

	Division I		FBS		FCS	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Social Network Sites	4.69*	1.28	4.67*	1.19	4.85*	1.25
Video Sharing Sites	4.53*	1.33	4.53*	1.24	4.53*	1.39
Texting	4.41*	1.29	4.48*	1.17	4.34*	1.37
Microblogging	4.23*	1.17	3.97	1.05	4.42*	1.22
Mobile Applications	4.13	1.32	--	--	4.13	1.32
Podcasts	3.96	1.17	4.25	1.01	3.75	1.24
Blogs	3.91	1.18	4.10	1.05	3.77	1.25
Message Boards	3.48*	1.45	3.43*	1.42	3.51*	1.48

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6). The Division I category encompassed all NCAA athletic departments and FBS and FCS categories featured segmented responses.

* $p < .05$ ($\mu \geq 4$)

Further analysis of the segmented responses revealed the varying levels of criticality among independent technologies when focusing on the affiliation of athletic institutions. In particular, the results showed that FCS athletic administrators placed a higher level of criticality on microblogging [$F(1,141) = 7.16, p < .05$] sites than FBS administrators when engaging in e-branding initiatives. Further, the data also supported the notion that FBS administrators placed a higher criticality on podcasts [$F(1,140) = 6.42, p < .05$] in e-branding efforts than FCS administrators.

Future of E-Branding

In terms of the role of technology in e-branding initiatives in the future (Research Question 3), both FBS and FCS athletic administrators agreed that younger generations of consumers will become more reliant on the Internet and technology in future years [$t(136) = 21.84, p < .05$]. Further, as illustrated in Table 4, the results demonstrated that administrators felt that social network sites [$t(136) = 9.24, p < .05$], text messaging [$t(134) = 9.39, p < .05$], and video sharing [$t(7.25) = 135, p < .05$] will all have a significant influence on electronic branding strategies in the future. Further, when focusing on the

affiliation of athletic departments, the data supported the notion that FCS administrators placed a higher level of criticality on video sharing in future e-branding initiatives than FBS administrators [$F(1,136) = 7.28, p < .05$].

DISCUSSION

With the role of successful communication in building brand equity with consumers (Dickey & Lewis, 2009), it is extremely important that NCAA athletic departments effectively use new media when interacting with consumers (Christodoulides, 2009). In fact, with the growing popularity of new media among younger generations of consumers, it seems likely that Internet-based applications will continue to play a larger role in the way that sport organizations send marketing-based signals to current and potential fan segments. With that being said, research has emphasized the need to ensure that NCAA athletic departments are using the right technological mediums to reach consumers so that they are maximizing their opportunity to build organizational brand equity in the marketplace (Christodoulides, 2009).

TABLE 4
NCAA ATHLETIC ADMINISTRATORS ON ROLE OF TECHNOLOGY IN THE FUTURE

	Division I		FBS		FCS	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Social Network Sites	4.83*	1.05	4.67*	1.19	4.93*	0.95
Video Sharing	4.68*	1.10	4.38	1.21	4.89*	0.97
Texting	4.81*	1.01	4.78*	1.09	4.84*	0.95
Reliance on Internet and Technology	5.61*	0.86	5.55*	1.03	5.65*	0.72

Note. The scale ranged from Strongly Disagree (1) to Strongly Agree (6). The Division I category encompassed all NCAA athletic departments and FBS and FCS categories featured segmented responses.

* $p < .05$ ($\mu \geq 4$)

NCAA E-Branding Trends

There are several results within the current research that are worth noting when discussing the implications of building organizational brand equity. When focusing on the trends present at the Division I level, it seems evident that athletic administrators value the audio and visual delivery of content on their home websites when attempting to build their brand with consumers. With the innovative capabilities available through these technologies, it makes sense that NCAA athletic departments would value these strategies as a viable e-branding mechanism on their home websites. In fact, the use of intimate video messages (signals) from head coaches (e.g., Nick Saban) is one example of how athletic departments can use these technologies to build brand loyalty with consumers. Thus, when combined with effective technological delivery strategies, the received signals have the capability to bring several monetary benefits that come from the realization of strong brand equity with consumers (Cobb-Walgren et al., 1995; Gladden et al., 1998; Keller, 2003).

In addition to the use of technologies on athletic websites, athletic departments have also turned to independent technologies in order to build their brand equity with consumers. Not surprisingly, with the growing popularity of the Internet, administrators have identified social network and video sharing sites as the primary e-branding outlets when communicating messages with current and potential fan segments. Further, with the increasing focus on mobile marketing, athletic departments have also emphasized text messaging as a critical outlet to deliver signals effectively in the marketplace. In essence, it is the efficient use of these new media outlets that allow athletic departments to build their brand equity with younger generations of consumer segments (Christodoulides, 2009).

In direct contrast to the previous sections, the results also illustrated the technologies that administrators felt were least valuable in electronic branding initiatives. As discussed in the results, message boards were rated as the least beneficial technology when attempting to communicate with consumers on athletic department's home website. Similarly, this type of medium was also shown to be the least critical technology when engaging in branding strategies through independent media platforms. While there are a variety of reasons for this lack of interest among administrators, the explanation can most likely be found in the fact that there is so much negativity communicated by consumers on message boards. In fact, the anonymous nature of these mediums often allows fans to "bash" on coaches, student-athletes, and staff members within NCAA athletic departments. Thus, with conflicting messages being delivered through message boards, it seems reasonable that athletic departments would attempt to avoid these types of technologies. After all, the negative publicity could send unconstructive messages that could hurt the brand equity of the athletic department (Christodoulides et al., 2006).

E-Branding in FBS and FCS Institutions

The previous results demonstrated that there were clearly technologies that all NCAA Division I athletic departments embrace in their pursuit to build their brand equity with consumers. However, the analysis also supported the notion that FBS and FCS institutions had slight variations in e-branding initiatives that they engaged in. The fact that FBS institutions placed a higher value on podcasts is not surprising considering the fact that these institutions have significantly more money to spend on the development of intimate videos as content. Further, the variation in the use of microblogging (higher for FCS) as a tool to build brand equity is explained by the fact that many Division I athletic departments have independent entities that carry out Twitter feeds for them. In contrast, without this type of attention, FCS institutions are reliant on microblogging sites such as Twitter to communicate with consumers.

The Future of E-Branding

In addition to the various technologies, the current research also focused on future role of technologies in e-branding efforts. The results unanimously support the notion that administrators feel that new media will play a major role in marketing initiatives in the future. In particular, the data illustrated the fact that athletic departments anticipate a stronger emphasis on technologies when attempting to effectively communicate with consumers in future years. Further, within this context, administrators indicated that social network sites, texting, and video sharing sites will continue to play a major role in building brand equity in the marketplace. Thus, there is a growing need to understand the way that these technologies are being used to communicate with consumers.

The Bottom Line

The bottom line is that sport organizations must capitalize on new media opportunities if they are going to be successful in future marketing endeavors (Christodoulides, 2009). As part of this process, administrators (and marketing employees) must invest in technologies that allow them to communicate effectively with younger generations of consumers. In essence, the effective use of new media provides athletic departments with a channel to communicate messages that build credibility with consumers who they are targeting. Thus, when this message is strong, NCAA athletic departments have the opportunity to create consumer value through the reduction of information search costs and perceived risk of purchase (Christodoulides et al., 2006). As a result, they are provided with all of the monetary benefits (e.g., repeat purchasing) that are associated with strong organizational brand equity (Cobb-Walgren et al., 1995; Gladden et al., 1998; Keller, 2003).

CONCLUSIONS

Based on the results in the research, it is clear that technology will play a major role in the communication of marketing-based signals to younger generations of consumers in future years. When considering the fact that younger consumers represent a significant portion of future revenues for sport

organizations, it becomes extremely important that these NCAA athletic departments identify and leverage new media outlets that allow them to communicate effectively with this particular consumer segment. Thus, the current research offers an initial opportunity to understand the technologies that athletic departments deem as critical when attempting to build brand with consumers. The understanding of these mediums is simply the first step in building brand equity through innovative technologies, and the related consumer benefits that result from loyalty are incentive to understand this process.

There are a few limitations to the current research that need to be addressed. With a focus on Division I athletic departments, the findings are clearly limited to the FBS and FCS institutions included in the sample. In addition, while the research identifies administrator's opinions on the criticality of technologies in building brand, the study did not address the ways that these mediums are used to communicate with consumers. Thus, future studies should emphasize the innovative use of technologies at all NCAA levels when engaging in e-branding initiatives. Further, the literature would benefit a great deal from the examination of consumer preferences when using technologies to consume sport. This is clearly another limitation of the current research. These suggestions can all be carried out when examining e-branding trends at the professional and International levels of sport as well.

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