Toward Reducing Institutional Digital Divides in the Media Industry: Examining Social Media Use in Ethnic Media Organizations

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Ethnic media serve critical information needs of ethnic and immigrant communities, thereby facilitating social integration and reduction of social inequalities. Social media may extend the capacity of ethnic media to deliver information to such communities. Despite research on social media use by mainstream media, little is known about social media use among ethnic media. We investigate determinants of social media use by 100 ethnic media organizations in New York City using the unified theory of acceptance and use of technology (UTAUT). We extend UTAUT by examining the roles of (1) interorganizational competition on technology adoption, (2) organizational culture, (3) communication about technology in the workplace and. Findings indicate that strengthening employees' beliefs in the usefulness of social media and nurturing conversations about technology at the workplace are key factors in social media adoption. We conclude with recommendations for integrating social media into ethnic media producers' professional practices.

Keywords: ethnic media, social media, digital divides, communication inequalities, unified theory of acceptance and use of technology

Technology has been transforming the media industry over the past two decades. New communication technologies allow media organizations to effectively promote news content, expand their advertising base, and enhance their relationship with audiences (Hermida, Fletcher, Korell, & Logan, 2012; Hong, 2012). That said, media organizations, industry experts, and policy makers continue to try to better understand and adapt to the changes caused by the ongoing evolution of media technology. In this larger context, researchers, policy makers, ethnic community and media advocates have suggested that ethnic media—media that are created for and frequently produced by immigrants, ethnic minority and linguistic

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minority groups, and indigenous populations—have found it to be difficult or less necessary to adapt to the new industry realities (Matsaganis, Katz, & Ball-Rokeach, 2011; Stonbely & Advincula, 2019). Additionally, there is a paucity of research on technology-use trends among ethnic media organizations in this rapidly changing technological landscape; especially of studies employing quantitative methods to describe trends across this vital sector of the media industry.

The urgency of filling this gap in the literature is accentuated by research showing that ethnic media serve critical information needs (frequently referred to by policy makers as CINs) of millions of individuals and families across the United States. These are needs for information about job and educational opportunities, health-related issues and policies, emergency preparedness, and politics and civic affairs (Lloyd & Friedland, 2016). As this information is increasingly made available online (including social media), for ethnic media to continue to effectively fill the CINs for which their audiences and government agencies (e.g., State Departments of Consumer Protection, the U.S. Census Bureau) depend on them, ethnic media must get ahead of the technological innovation curve (Matsaganis & Katz, 2016).

Brown (2015) addressed similar concerns in a study of nonprofit organizations that provide social services in the United States and represent the interests of immigrant communities. He found evidence of an "institutional digital divide" (p. 2). Fewer than 50% of the nonprofits Brown (2015) studied were using social media to serve immigrant communities. In contrast, in a study that included 246 of the top 400 charities and nonprofit organizations in the United States, Barnes (2014) found that 98% of them were using at least one type of social media for work. Brown (2015) suggested that the low social media adoption rates by immigrant-serving nonprofits could be attributed to several factors, including low degree of institutionalization and lack of resources.

In this context, we focus on social media use by ethnic media organizations and professionals working for them. In particular, we seek to identify influential factors that can predict social media use by ethnic media producers. To accomplish this goal, we apply and elaborate the unified theory of acceptance and use of technology (UTAUT), employ quantitative research methods, and focus on ethnic media organizations serving immigrant communities in the greater New York City metropolitan area. We conclude by discussing suggestions for promoting social media use to reduce digital divides among producers in the larger media industry (between ethnic and mainstream media), so that ethnic media can continue to serve the CINs of immigrant and ethnic communities in the digital age.

Social Media and News Media Organizations

Organizations of all kinds seek various ways to incorporate social media platforms into their daily operations, in hopes of accomplishing different goals, such as encouraging collaboration among employees and increasing productivity (Pathak, 2015), enhancing the sense of community within the organization (Waters, Burnett, Lamm, & Lucas, 2009), and building favorable publicity (DePaula & Dincelli, 2018). Studies have also highlighted several functions of social media in organizational settings. They are useful for work-related networking and socialization, reaching out to experts, searching and sharing work-related information (Olmstead, Lampe, & Ellison, 2016; Treem & Leonardi, 2013).

Among news media organizations in particular, the importance of social media has been growing in recent years. Many major news organizations have been strategically incorporating social media into their practices to distribute news content, engage audiences, expand their advertising base, and increase online readership (Hermida et al., 2012; Hong, 2012). However, little is known about if and how ethnic media organizations are incorporating social media into their everyday practice. In this study, we aim to address this gap.

Theoretical Framework

Several theoretical models from different disciplines have been employed to examine employees' intention to use and actual use of new technologies in the workplace. Examples include the theory of planned behavior (TPB) from social psychology (Ajzen & Madden, 1986), and the technology acceptance model (TAM) from the field of information systems (Davis, Bagozzi, & Warshaw, 1989). In this study, we apply the UTAUT to investigate social media use by ethnic media producers. We also expand UTAUT by considering the effects of three previously unexamined factors in social media use, including (1) producers' perception of their competition in the broader media markets in which they work; (2) organizational culture, and (3) communication about technology in the workplace. The following sections elaborate on the interplay between these constructs and their influence on social media use in ethnic media organizations.

Unified Theory of Acceptance and Use of Technology

UTAUT was initially developed for the examination of individual- and organizational-level predictors of acceptance of a technology within an organization. UTAUT is an evidence-based conceptual model that incorporates constructs from the aforementioned TPB, TAM, diffusion of innovation theory, social cognitive theory and four other models that have been widely used to explain technology adoption and information system usage behavior. UTAUT takes all the key antecedents of technology use into account, such as attitudes toward a given technology and perceived ease of use of the technology. Venkatesh, Morris, Davis, and Davis (2003) validated this theory and compared it to eight other technology adoption models. They found that UTAUT explained 69% of the variance in users' behavior and outperformed other models (Venkatesh et al., 2003). Thus, UTAUT can be a useful model for assessing the likelihood of new technology use. UTAUT can also help managers better understand the drivers of technology acceptance, enabling the design of more effective interventions targeted at organizations or employees that are less likely to use a new technology. Therefore, we started our investigation by applying this model comprising five key factors— namely, attitude toward using technology, performance expectancy, effort expectancy, social influence, and facilitating conditions.

Attitude toward using technology (ATT) refers to individuals' overall affective reaction to and feeling about a given technology (Venkatesh et al., 2003), such as enjoyment. Performance expectancy (PE) refers to the degree that individuals believe a given technology would be helpful for completing work-related tasks, and effort expectancy (EE) is the degree of perceived ease associated with the use of the technology. Social influence (SI) refers to the degree to which individuals perceive important others in their social environment believe they should use the technology. Individuals' intention to adopt a technology (INT) emerges in the literature as the primary predictor of the actual use of technology (e.g., Davis et al.,

1989), and INT is predicted by PE, EE, and SI (e.g., Curtis et al., 2010; Gupta, Dasgupta, & Gupta, 2008). To the best of our knowledge, relationships among these constructs have yet to be confirmed in ethnic media organizations. Thus, we propose the following research question (RQ):

RQ1:   How do ATT, PE, EE, SI, and INT affect social media use in ethnic media organizations?

UTAUT also suggests that certain aspects of an organization or features of specific technologies can facilitate adoption and thereby have direct effects on actual use. These aspects are referred to as facilitating conditions (FCs) (Brown & Venkatesh, 2005; Venkatesh et al., 2003). We include and examine three of these in our theoretical model. We discuss them next.

Perceived Interorganizational Competition as a Factor in Technology Adoption

Employees' perception of competition with mainstream media may act as a facilitating or inhibiting factor. When it comes to the adoption and use of technology in ethnic media organizations, it is possible that both individual and organizational factors come into play, including members' perception of how ahead or behind the curve ethnic media are in adopting social media compared with their mainstream industry counterparts. Perceptions that ethnic media lag behind mainstream media might operate as a motivator encouraging adoption. Such perceptions, though, may also just reinforce the notion that ethnic media are technology laggards, thereby discouraging efforts leading to adoption. Although FCs, such as age and gender, have been found to be associated with individuals' intention to use and the actual use of technology (e.g., Venkatesh et al., 2003), there is lack of research that treats individuals' perception of competition against a socially relevant reference group as an FC in the adoption of a new technology in the media industry.

Outside the media industry specifically, Flanagin (2000) tested the effect of social pressure on the adoption of websites among 288 organizations. His findings showed that social pressure originating at the interorganizational level was the most significant factor that distinguished between adopters and nonadopters, especially during the early phases of innovation diffusion. In addition to that, based on institutional theory (DiMaggio & Powell, 1983), an organization's actions are largely influenced by surrounding organizations. It is possible that the adoption of social media by a few organizations could encourage larger scale adoption. Despite the insight that studies of Flanagin (2000) and DiMaggio and Powell (1983) provide, how perceived competition between ethnic and mainstream media affects social media adoption is still unclear, particularly as ethnic media are frequently considered specialist media organizations whose professional practices are juxtaposed to those of mainstream media (Matsaganis & Katz, 2013). Hence, we propose the following research question:

RQ2:   How does perception of competition against mainstream media influence the intention to use and
        actual use of social media in ethnic media organizations?

Besides ATT, PE, EE, SI, and FC, higher level antecedents might also impact intention to use and the actual use of social media by shaping the abovementioned factors. The following sections elaborate the

interplay between two possible such antecedents—namely, organizational culture and communication about technology and their relationship with social media use.

Organizational Culture and Communication as Determinants of Social Media Adoption

Promoting the use of a new technology within an organization is more successful if the functions of the technology align with the organization's culture (Kuikka & Äkkinen, 2011; Sharma, 1994). Organizational culture represents the collective beliefs and values of organizational members and it provides guidance on how to interact with other members and perform tasks (Papa, Daniels, & Spiker, 2007). In fact, organizational culture can serve as a barrier that inhibits the penetration of a given technology (Fuchs-Kittowski, Klassen, Faust, & Einhaus, 2009). For example, resistance to change and strict policies are two features of organizational culture that can hamper adoption of communication technologies that enable interactive communication within the organization and staying on top of current affairs outside of the organization (Li, 2010). Taking social media as an example, if an organization's culture does not encourage informal communication among employees across the organization (a process that social media are designed to facilitate), it is likely that promoting a social media platform will be unsuccessful.

In an effort to integrate organizational culture into UTAUT, in a study of Internet adoption in a government organization in India, Dasgupta and Gupta (2010) found that organizational culture was a higher level antecedent that influenced PE, EE, SI, and FC. Organizational culture can influence the capacity of organizations to adopt new communication technologies and do so successfully (Harrington & Guimaraes, 2005). Additionally, it can shape the diffusion of technology in organizations (Dasgupta, Agarwal, Ioannidis, & Gopalakrishnan, 1999). Here we argue that organizational culture, as a higher level construct, may have an indirect effect on the adoption of social media among ethnic media producers through its effects on ATT, PE, EE, and SI. Considering Dasgupta and Gupta's (2010) study was carried out in a different context, it is unknown how the interplay among organizational culture, ATT, PE, EE, and SI influences the intention and the actual use of social media in ethnic media organizations. Thus, we propose the following research question:

RQ3:   *How does organizational culture influence the intention to use and the actual use of social media in ethnic media organizations?*

Different frameworks and measures have been developed to operationalize organizational culture, such as the competing values framework (Cameron & Freeman, 1991), and the organizational culture inventory (Cooke & Szumal, 1993). Most of them treat communication as a subdimension of organizational culture. For example, in an organizational culture survey developed by Tucker, McCoy, and Evans (1990), "communication/openness" was one of the 13 dimensions. In other organizational culture measures, researchers (e.g., García-Morales, Matías-Reche, & Verdú-Jover, 2011; Mackenzie, 1995) have included items that elicit information about social interactions among employees (i.e., interpersonal communication). In this study and based on the definition provided earlier, we employ an index of organizational culture that emphasizes collective beliefs and values that ethnic media producers believe underlie communication behavior and decision making in their organizations. We consider communication about technology in the organization specifically as a separate factor and discuss it below.

Communication About Technology Use in Ethnic Media Organizations

Communication about technology use may be shaped by the values and beliefs that characterize organizational culture, but it may also have distinct influences on adoption and use of a new technology. First, individuals' communication-related behaviors may not align with the cultural values of their organization. For example, although employees and management in an organization may value collaboration and encourage the exchange of opinions, in practice employees may not engage in dialogue with colleagues due to various reasons (e.g., lack of time). Thus, in this study, we treat communication about technology as a separate determinant of social media adoption. Communication about technology may indicate how sensitive and tuned in a news organization is to the ongoing conversations across the media industry about how established practices are changing due to new technologies. Thus, it is possible that what employees communicate among themselves about social media could influence how they use these channels to accomplish their professional and organizational goals. Hence, we propose our final research question:

RQ4:   *How does communication about technology use in the workplace influence the intention to use and actual use of social media in ethnic media organizations?*

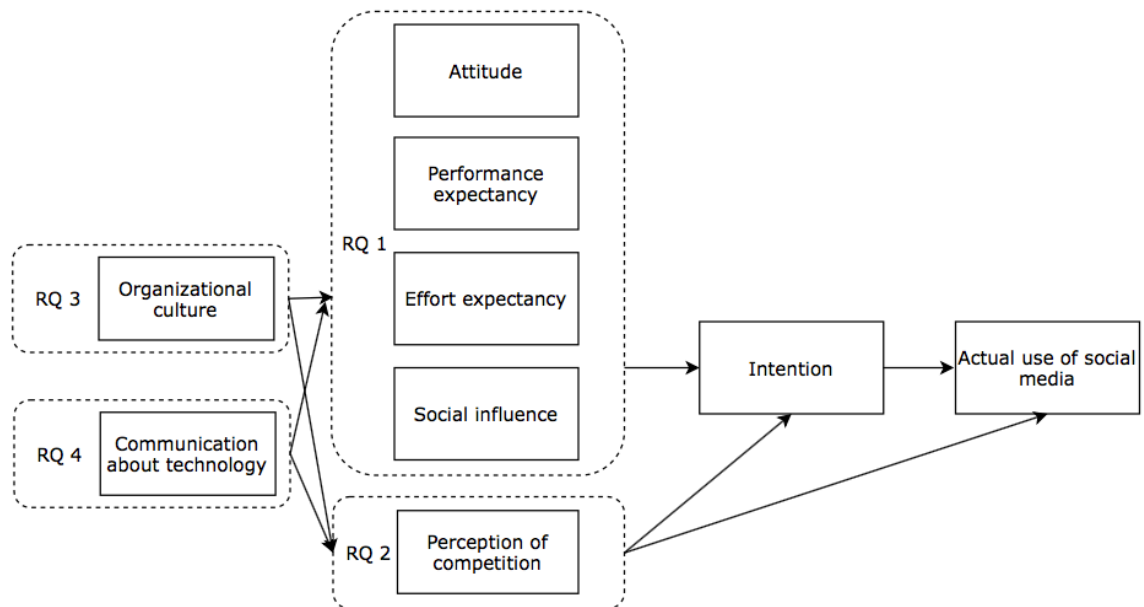The aforementioned research questions are presented in Figure 1.

Figure 1. Theoretical model.

Methodology

Participants and Procedures

As mentioned above, ethnic media are media produced for and by immigrants, ethnic minority and linguistic minority groups, and indigenous populations (Matsaganis et al., 2011). This study focused primarily on ethnic media organizations and producers serving immigrant communities. The reason for this choice was that ethnic minority and immigrant media are likely to differ in how they orientate toward technology. Ethnic minority media (such as African American and Native American media) are less likely to worry, for instance, about competition from media based in a country other than the United States, to which their audience members have ties. Also, ethnic media serving immigrant communities (of older and younger generations) are likely to have different missions compared with ethnic minority media. For example, the former face challenges related to migration, settlement, and orientation in U.S. society; challenges that are not shared by long-established minority communities (Adoni, Caspi, & Cohen, 2006; Elias, 2008).

We invited ethnic media organizations listed in the directory produced by the Center for Community and Ethnic Media (CCEM) in 2014. CCEM is an organization that provides professional support and training for ethnic media outlets across the greater New York City (NYC) metropolitan area (Center for Community and Ethnic Media, 2017). We focused on NYC, because of the "vibrant ecosystem of ethnic media [that] serve a population that speaks more than 170 languages" (Bartlett, 2013). From the CCEM list, 270 ethnic media outlets were invited via e-mail to participate a survey administered via online platform Qualtrics, and 120 agreed to participate. Research assistants also reached out to organizations by phone to inform them about the study and encourage them to participate. We offered producers free access to two workshops about marketing and news editing as an incentive. Our university institutional review board (IRB) approved all protocols and materials developed for the study.

Each respondent represented an ethnic media organization. Five (4.2%) of these organizations produced news content on the Internet only, 56 (46.7%) did not produce news content on the Internet, and 35 (29.2%) produced news for a combination of Internet-based and other platforms (e.g., print, radio, television). Most of our participants represented small-size organizations. Specifically, 55 (74.3%) of the organizations had less than nine staff members, eight (10.8%) reported having between 10 and 19 staff members, and 11 (15.1%) had 20 or more members. As for the individual participants themselves, the majority reported working in middle or upper level management within their organization. In describing their jobs, 45 (43.7%) reported owning the organization, 36 (35.0%) and 44 (42.7%) of them, respectively, indicated they were producers or editors that oversaw the work of others; 20 (19.4%) said they were in charge of hiring, and 14 (13.6%) indicated they managed organizational finances. After accounting for incomplete responses, 100 responses were included in our analyses. All of them reported serving populations of people who either were born in or traced their ancestry to more than 30 different countries. Examples of ethnic media that participated include a daily Polish-language newspaper, a Pakistani media organization that produced print and online newspapers and magazines, a Haitian online-only publication, and a Bangladeshi radio and television station.

Measures

Previously validated scales in the organizational communication and communication technology literature were adapted for most of the study constructs. Where there were no such scales available, we developed new measures to capture constructs of interest (e.g., perception of competition against mainstream media). We ran exploratory factor analyses (EFA) to identify the number of dimensions for each construct. All of the study constructs were found to be unidimensional. Means, standard deviations, and Cronbach's alphas for all constructs are presented in Table 1.

Table 1. Means, Standard Deviations, Correlation Matrix, and Cronbach's Alpha for the Study Variables (n = 100).

	M	SD	1	2	3	4	5	6	7	8	9	a
1. Organizational culture	3.92	.87	1									.77
2. Communication about technology use in the workplace	3.73	1.08	.59**	1								.93
3. Attitude toward using social media	4.16	.79	.04	.24	1							.91
4. Performance expectancy	3.95	.74	−.01	.28*	.61**	1						.93
5. Effort expectancy	3.94	.80	.00	.23	.48**	.63**	1					.90
6. Social influence	3.91	.76	−.11	.33**	.54**	.68**	.45**	1				.90
7. Perception of competition against mainstream media	1.45	.80	.14	.28*	−.04	.18	.15	.17	1			NA
8. Intention to use social media for work	4.13	.67	.09	.31*	.78**	.74**	.60**	.63**	.20	1		.88
9. Actual use of social media for work	3.02	.88	.05	.08	−.07	.10	.09	.05	.22*	.20	1	NA

Note. $^*p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Organizational Culture (OC)

We focused on ethnic media producers' assessment of the values and beliefs that characterized communication in their organizations. We adopted three items from García-Morales et al.'s (2011) study that reflect organization culture. Our scale included three items: "the organization encourages its members to express different opinions," "members of the organization are usually informed about major changes (e.g., changes in the organization's goals) that affect their job before changes take place," "members of the organization are not afraid to speak up during the meetings with superiors and managers." Participants indicated their level of agreement with the statements on a 4-point Likert-type scale. Responses were reverse coded (i.e., 1 = *strongly disagree*, 4 = *strongly agree*).

Communication About Technology Use in the Workplace (CT)

This construct was measured using three items, "members of the organization talk often among themselves about how to use social media so that they can do their job better," "members of the organization talk a lot about how to make the best use of the Internet so as to achieve the organization's goals," "members of the organization talk often among themselves about how to use social media to better reach their audience." Participants indicated their level of agreement, using a 4-point Likert-type scale. Responses were reverse coded for analysis (i.e., 1 = *strongly disagree*, 4 = *strongly agree*).

Attitude Toward Using Social Media (ATT)

This construct was measured by three items, such as "using social media for work is a very good idea." Participants indicated their level of agreement with each item using a 5-point Likert-type scale, and responses were reverse coded (i.e., 1 = *strongly disagree*, 5 = *strongly agree*).

Performance Expectancy (PE)

This construct was measured by eight items adapted from Davis (1989) and Davis et al.'s (1989) study. The original scale was used to capture perceived usefulness in the TAM. Scale items included, for example, "using social media improves the productivity of our organization." Participants indicated their level of agreement with each item using a 5-item point Likert-type scale. Responses were reverse coded (i.e., 1 = *strongly disagree*, 5 = *strongly agree*).

Effort Expectancy (EE)

EE was measured using three items adapted from Davis (1989) and Davis et al.'s (1989) study. The original scale was used to capture the perceived ease of use employing the TAM. Scale items included, "I feel that using social media is easy." Participants indicated their level of agreement with each item using a 5-item point Likert-type scale. Responses were reverse coded (i.e., 1 = *strongly disagree*, 5 = *strongly agree*).

Social Influence (SI)

SI was measured using three items adapted from Taylor and Todd's (1995) study. The original scale was used to capture the influence of others in an organization (e.g., colleagues, managers) on employees' opinions about technology. The scale included items, such as, "people who influence me think I should use social media." Participants indicated their level of agreement to each item using a 5-item point Likert scale. Responses were reverse coded (i.e., 1 = *strongly disagree*, 5 = *strongly agree*).

Perception of Competition Against Mainstream Media (PC)

This construct was measured by asking "how does your organization compare to mainstream media in terms of how much they use new communication and information technologies, like the Internet and

social media? Would you say that your organization is . . . .” Participants indicated their answers using a 3-point scale (1 = *ahead of the curve*, 3 = *behind the curve*). Answers were reverse coded before analysis.

Intention to Use Social Media for Work (INT)

Intention was measured using six items adapted from Davis (1989) and Davis et al.’s (1989) study. Scale items included, for example, “I intend to keep using social media in the future.” Participants indicated their level of agreement with each item using a 5-point Likert-type scale (1 = *strongly agree*, 5 = *strongly disagree*), and responses were subsequently reverse coded.

Actual Use of Social Media for Work (AU)

This construct was assessed by asking participants, “How many people working for the organization would you say use social media (like Twitter, Facebook, or other similar sites and services) to do their job?” Participants indicated their answers using a 4-point Likert-type scale (1 = *no one does*, 4 = *everyone does*).

Data Analysis

As mentioned above, EFA showed that each construct was unidimensional. Thus, we treated each as an observed variable in path analyses. Amos 23.0 was used to estimate path coefficients for the research questions. We followed the basic four steps suggested by Kenny (1979) and Kline (2005) to conduct the path analyses. First, we ran the analysis by including all the hypothesized paths and nonhypothesized paths, and then we deleted the nonhypothesized paths that had a *p* value greater than .01. We subsequently ran the analysis again and deleted the nonsignificant hypothesized paths for which the *p* value was greater than .05. We then consulted modification indices to revise the model and sought to achieve the most parsimonious model possible that also fit the data best. Table 1 contains the means, standard deviations, and correlations used to construct the covariance matrix that was used in the path analysis.

Results

Test of the Theoretical Model

Figure 2 summarizes the results of the analyses based on the conceptual model. As shown in the figure, the findings were generally in line with our expectations.
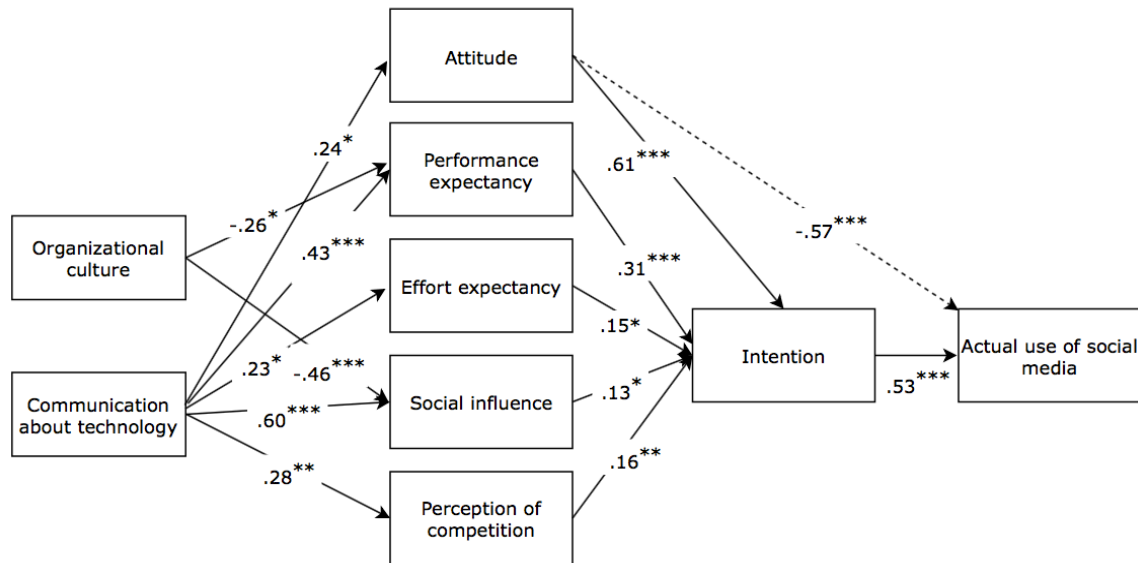
Figure 2. The theoretical model with standardized path coefficients.

——————— : Significant hypothesized paths.

- - - - - - - - - : Significant non-hypothesized path.

Note. $^*p < .05.$ $^{**}p < .01.$ $^{***}p < .001.$ *Communication about technology = communication about technology use in the workplace; attitude = attitude toward using social media; intention = intention to use social media for work; actual use of social media = actual use of social media for work*.

We used chi-square (χ^2) values, the normed fit index (NFI; Bentler & Bonett, 1980), the Tucker–Lewis index (TLI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993) to estimate the goodness of fit. Specifically, $\chi^2(21, n = 100) = 152.93$, $p < .001$, NFI = .63, TLI = .40, CFI = .65, and RMSEA = .25. Values closer to .95 for NFI, CFI, and TLI would indicate good model fit (Bentler & Bonett, 1980; Hu & Bentler, 1998; Kenny, 1979). As suggested by MacCallum, Browne, and Sugawara (1996), .05 for RMSEA indicates a good, and .01 indicates an excellent model fit. Thus, the initial model did not achieve a good fit, and we considered revisions to the model.

Tests of a Revised Model and the Final Model

Based on our theoretical framework and guided by modification indices, we added three direct paths between constructs in the model (i.e., the direct paths from PE to EE, to ATT, and to SI). It is possible that perceived usefulness of a technology in an organization (i.e., PE) influences individuals' assessment of how easy it is to use it (i.e., EE), how favorable an attitude they have toward a new technology (i.e., ATT), and how much they value what other people think about whether or not they should use the technology for work (i.e., SI).

The Revised Model

After adding the aforementioned paths, the nonsignificant paths (e.g., communication about technology in the workplace to attitude), and a hanging variable (i.e., SI) were removed from the final model. Our final model achieved a good fit, $\chi^2(16, n = 100) = 12.62, p > .05$. NFI = .96, TLI = 1.00, CFI = 1.00, and RMSEA = .00. An RMSEA value of zero and a value of one for TLI and CFI occur when the chi-square is smaller than the degrees of freedom (Chen, Curran, Bollen, Kirby, & Paxton, 2008). Also, all the path coefficients were significant. Figure 3 presents the final model with standardized path coefficients after deleting the three nonsignificant paths (CT→ATT, CT→EE, SI→INT), and after removing the hanging variable (SI).

Organizational culture did not have direct effects on attitude, effort expectancy, or competition. Interestingly, organizational culture had a negative direct effect on performance expectancy ($\beta = -.26, p < .05$). Communication about technology had a positive direct effect on performance expectancy ($\beta = .43, p < .001$) and perception of competition against mainstream media ($\beta = .28, p < .01$). These results were in line with our argument that organizational culture and communication about technology should be treated as distinct variables as they have different effects on the constructs of UTAUT. Ethnic media producers' perceptions of competition against mainstream media, which was treated as a facilitating condition in UTAUT language, did not have a direct effect on actual use of social media. Instead, it had a direct effect on intention to use social media for work ($\beta = .14, p < .01$). Also, attitude had a negative direct effect on actual use of social media ($\beta = -.58, p < .001$).
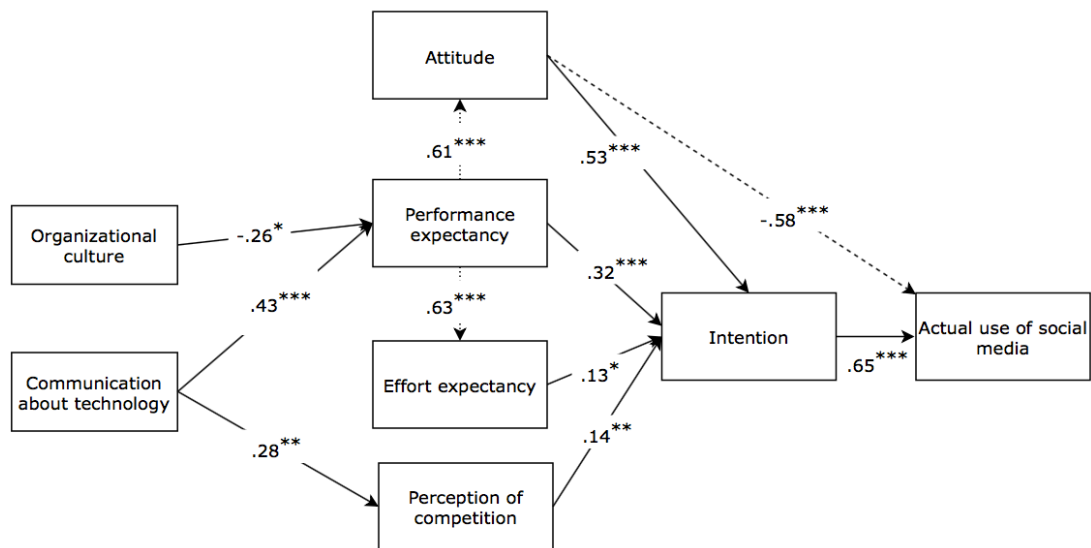

Figure 3. The final model.

————— : Significant hypothesized paths.
················· : Significant non-hypothesized path.
--------------- : Significant non-hypothesized paths as suggested by modification indices.

Note. $^*p < .05.$ $^{**}p < .01.$ $^{***}p < .001.$ *Communication about technology = communication about technology use in the workplace; attitude = attitude toward using social media; intention = intention to use social media for work; actual use of social media = actual use of social media for work.*

Post Hoc Analysis

Additionally, we considered whether the types of platforms (e.g., Internet, print, broadcasting) these ethnic media organizations reported using for news production and dissemination played a role in their social media use. To examine this possibility, we conducted a one-way analysis of variance to see if social media use was different across three groups, including ethnic media organizations that (1) reported not producing news content for the Internet ($M = 3.04$, $SD = .85$); (2) produced news content for the Internet only ($M = 3.60$, $SD = .89$); (3) produced news for a combination of Internet-based and other platforms (e.g., print, radio, television; $M = 2.94$, $SD = .91$). However, there was no significant difference in social media use across these three groups, $F (2, 93) = 1.24$, $p > .05$.

Discussion

As new technologies continue to transform the media landscape, concerns about the nature and impact of digital inequalities at the level of the individual consumer also spill over into the production level (Katz, Matsaganis, & Ball-Rokeach, 2012). In this study, we focused on ethnic media, as organizations that continue today—as they did a century ago—to serve CINs of ethnic minorities and new immigrant populations that are disproportionately affected by communication, health, and other social disparities. We argue that for ethnic media to effectively play a role in reducing such disparities, they, as organizations, must keep up with technological innovation. Little is known, however, about the extent to which they are on top of technology innovations. With this study, we intend to contribute in the direction of filling this gap.

Applying UTAUT in the Ethnic Media Sector and Implications

Attitude, performance expectancy, effort expectancy, and perceptions of competition against mainstream media, were found to have significant effects on intention, and indirect effects on the actual use of social media, which echoes earlier, related studies (e.g., Venkatesh et al., 2003). These results showed that ethnic media producers were more likely to adopt social media if they (1) were favorably disposed toward these media, (2) believed that using these technological platforms would help them complete work-related tasks, (3) did not experience difficulties while using social media, and (4) were more likely to believe that they were ahead of the curve compared with mainstream media with respect to using social media.

The Role of Attitude

Attitude had a negative direct effect on the actual use of social media, despite a positive direct effect on intention to use. This may be due to how we operationalized these constructs in our study. Attitude and intention were operationalized to represent individuals' personal affective response and inclination toward social media. On the other hand, actual use of social media was operationalized as individuals'

perception on how their organizations were, at the time, using social media for work. Our results suggest that although members in ethnic media organizations held a favorable attitude toward social media for work, this attitude may not have translated to actual use across the organization. Other factors related to the nature of the participating organizations, such as their size, could have played a role. Most ethnic media organizations are relatively small-scale operations. In our study, 74.3% of the organizations had fewer than nine staff members, and 10.8% of them reported having between 10 and 19 staff members. Additionally, 72% reported an annual budget of up to $349,000, and 44% indicated their annual budget was less than $150,000. Hence, their financial resources, as media organizations, were relatively small. Therefore, it is possible that lack of financial or human resources acted as a barrier to adoption even among producers who were favorably disposed to using social media for work. It is also possible that although ethnic media producers may have had a positive attitude toward social media, their superiors could have suppressed social media use, fearing their staff might use social media at work for nonwork-related purposes (Fuchs-Kittowski et al., 2009; Kuikka & Äkkinen, 2011).

The Effects of Performance Expectancy

We also found that performance expectancy had positive effects on attitude and effort expectancy. This means that ethnic media producers' perceptions about the usefulness of social media for work influenced whether or not they favored the use of this technology, and it also influenced their perception about social media's ease of use in the work environment. In other words, the more useful producers believed the technology was, the more likely they were to also be favorably disposed toward it, and the more user friendly they were likely to consider it to be. Thus, performance expectancy might be a root cause of actual use of social media in ethnic media organizations. Theoretically, this finding indicates that performance expectancy operates as a higher level construct than attitude and effort expectancy. From a practical standpoint, this finding suggests that to promote a positive attitude toward using social media and to alleviate concerns about ease of use of social media, the first step would be to demonstrate to ethnic media producers the usefulness of these new media technologies.

The Role of Perceived Intermedia/Interorganization Competition

The facilitating condition we included in our theoretical model—that is, perception of competition against mainstream media did not have a direct effect on the actual use of social media; but it had an indirect effect through intention to use social media ($\beta = .09$). Producers who perceived their organization to be more advanced in terms of incorporating technology for work were more likely to report intention to adopt social media. Those who committed to doing so were more likely to actually use social media. One possible explanation for the lack of a direct relationship between the facilitating condition and actual use is that this construct is more about individuals' perceptions, while actual use might depend more on an organization's human and financial resources. Given that ethnic media audiences (especially immigrant communities) may also connect to mainstream media produced in their countries of origin, future research should examine, too, if local ethnic media producers' adoption of social media is shaped by perceived competition to those media.

The Role of Social Influence

Interestingly, social influence was found to be unrelated to intention to use or the actual use of social media, which is in line with some earlier studies. Mandal and McQueen (2012) used UTAUT to examine social media use by small businesses and they, too, found that social influence did not have an effect on intention to use or the actual use of social media. Instead, they found that business owner characteristics, such as being talkative and motivated to use technology, determined social media use. It is possible that in small organizations, like most ethnic media organizations, the effect of how influential others think of a given technology is outweighed by individual producer characteristics (e.g., performance expectancy).

Organizational Culture and Communication About Technology

Both organizational culture and communication about technology influenced the actual use of social media in ethnic media organizations, but through different paths (see Figure 3). Organizational culture had an indirect effect on the actual use of social media through performance expectancy and intention ($\beta = -.03$). In contrast, communication about technology use in the workplace shaped the actual use of social media indirectly through performance expectancy and perceptions of competition against mainstream media ($\beta = .08$). These findings support our argument that organizational culture and communication specifically about technology in the workplace should be treated as distinct constructs. It is possible that more conversation about technology in the workplace exposes ethnic media producers to recent trends in the news media industry and sensitizes them to what mainstream media are doing with respect to technology. This, in turn, leads to actual use of social media. Additionally, more conversation about technology in the workplace might also help producers realize the usefulness of social media, which could encourage the use of these platforms for work-related purposes.

These findings provide insight into how to promote social media use in ethnic media organizations. Doing so can help reduce the institutional digital divide between ethnic and mainstream media and, by extension, help ensure that CINs of vulnerable populations are better served in the digital age. Provided that they also have the financial resources required, ethnic media that are technologically adept and can evolve as new technologies emerge are also more likely to be able to serve CINs regarding, for instance, health resources, job and educational opportunities, legal services, and other resources to facilitate the social integration of new immigrant families, politics, and civil affairs.

Encouraging an ongoing conversation about technology across the organization could be critical for social media adoption and use in ethnic media. Such conversations might be the best way to bring into the organization new ways to think about these technologies, as organizational members will be urged to stay on top of developments in the media industry related to social media (e.g., new uses, success and failure stories that they can learn from). Second, encouraging organizations to initiate discussion about the topic on an ongoing basis—fueled by new information, studies, and experiences—could help dispel possible misperceptions and allay fears regarding social media use among employees (e.g., the fear that social media use may affect work efficiency). Future research can provide insight into how to strategically structure and frame these conversations to promote better use of social media in the workplace.

We also found that organizational culture had only a negative indirect effect on the actual use of social media via performance expectancy. This is contradictory to the findings of Dasgupta and Gupta's (2010) study, who found that organizational culture had an indirect positive effect on the actual use of technology through performance expectancy, effort expectancy, social influence, and the facilitating condition. In our study, and informed by the literature, we operationalized organizational culture in a way that allowed us to gain insight into the beliefs and values that underlay communication practices in ethnic media. Our findings indicated that the more producers agreed that (1) different opinions could be expressed openly in their organization, (2) staff could speak up in meetings with superiors, and (3) employees were informed about organizational changes before they were implemented, the less useful they thought social media would be for accomplishing work-related goals. This effect eventually had a negative impact on actual use of social media for work-related purposes.

The nature of ethnic media organizations might partially account for this finding. Li (2010) argued that promoting a given technology is more likely to be successful if the nature of the technology is aligned with that of the organization. For example, in an organization where dialogue and communication among lower and higher level staff are encouraged, technology, such as social media that also encourages ongoing, multidirectional, and largely informal communication, would likely be welcomed. As discussed earlier, organizations that participated in our study were mostly small-scale operations. Hence, even though participants' answers to the questions about their organization's culture reflected their organization's size—communication tends to be multidirectional, and decision-making processes more participatory in smaller and "flatter" organizations—negative evaluations of social media usefulness might have ultimately been driven more by one or both of the following:

(a) lack of resources that comes with being part of a smaller organization, where there may be less time and capital to spend on thinking about whether or not (and how) to adopt a new technology, like social media; and
(b) a perception that social media cannot help or are unnecessary for reaching their core audience.

In the latter case, the mismatch that accounts for nonadoption is not that between the nature of an organization's culture and the nature of technology, but more precisely a mismatch between the nature of technology and an organization's goals. Future research can investigate these relationships in the media industry and other organizational contexts. Especially if the latter explanation holds true, beginning and preserving a conversation about social media within the workplace (a factor that had a positive impact on actual use in our study) might be critical for identifying how social media might help achieve particular organization goals, thereby leading to their adoption in everyday organizational life.

Limitations

There are a few limitations that should be noted. The sample represents a broad cross-section of ethnic media organizations in NYC, serving more than 30 ethnic communities. Given the constraints that most ethnic media have to contemplate because of limited resouces, being able to recruit 120 producers of a possible 270 was deemed a success. However, a larger sample would have enabled additional analyses, such as multigroup analysis to explore the extent to which organizational size and culture interact to shape

PE. Moreover, our study focused on the media ecosystem of NYC, which is one of the largest and most diverse media markets in the United States. However, a study that would include media from across the United States would enable comparisons across markets and facilitate comparisons across ethnic media serving specific populations. Second, where possible, we used validated scales for most of the study constructs. However, some of the constructs were measured by one item or by newly constructed scales (e.g., actual use of social media for work and communication about technology at work). Future studies could contribute to the elaboration of indicators to measure these constructs, thereby reducing the likelihood of measurement error. Third, most of the participants in this study were at least in middle-level management within their organizations. Future studies should consider recruiting participants from lower levels of the organizational hierarchy, such as staff reporters, as their perceptions about social media use could be slightly different compared with those of editors. That said, as indicated in the discussion session, most of the participants reported that their organizations were small in size, with 74% of them having fewer than nine employees. Therefore, our participants' (most of them editors) opinions about social media use very likely accurately reflected the actual use of social media within their organizations.

Conclusion

This study contributes to the burgeoning literature regarding the adoption of new technologies in organizational settings at both a theoretical and practical level. We applied the UTAUT in a new organizational context and extended it by considering the role of organizational culture and of communication about technology in the workplace as antecedents to attitude toward technology, performance expectancy, and effort expectancy (all three of which have been studied in the past as determinants of technology adoption). Additionally, our analyses provide insight into factors that can facilitate social media use among ethnic media organizations. Our findings illustrate the centrality of performance expectancy as a determinant of actual use of social media in ethnic media organizations, but also reveal the significance of ongoing conversations about technology in the workplace.

Future research on how to preserve such an ongoing conversation (especially in media organizations with limited resources), and what its content should be for technology to best serve an organization's mission, may be helpful for two reasons: (1) for addressing the institutional dimension of the digital divide between ethnic and mainstram media in the broader industry and (2), by extension, for overcoming communication and social inequalities that affect millions of people that identify as members of ethnic communities in the United States today.

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