

Organizational Acculturation and Social Networking

Jennifer Thom-Santelli, David R. Millen
IBM T.J. Watson Research
1 Rogers Street
Cambridge MA 02142
{jthomsa, david_r_millen}@us.ibm.com

Darren Gergle
Dept. of Communication Studies
Northwestern University
Evanston, IL 60208
dgergle@northwestern.edu

ABSTRACT

For large global enterprises, providing adequate resources for organizational acculturation, the process in which employees learn about an organization's culture, remains a challenge. We present results from a survey of 802 users from an enterprise social networking site that identifies two groups of employees (new to the company and geographically distant from headquarters) that perceive higher benefit from using a SNS to learn about the organization's values and beliefs. In addition, we observe regional differences in viewing behaviors between two groups of new employees. These results suggest that a SNS can also potentially contribute to the information-seeking and sense-making activities that underlie organization acculturation.

Author Keywords

Social networking, organizational acculturation

ACM Classification Keywords

H5.3. Group and Organization Interfaces: Computer-supported cooperative work

General Terms

Human Factors

INTRODUCTION

Large enterprises typically have a steady stream of newcomers entering as employees, whether as new hires or through acquisition. For a global enterprise, these employees work in distributed locations around the world, far from an organization's headquarters. This geographic dispersion can pose a challenge to successful organizational acculturation, the process in which employees make sense of an organization's culture (e.g. the beliefs and values shared by an organization) [4]. Acculturation can be supported by formal training sponsored by the organization, or informally through social interaction with co-workers and observation while on the job [3]. This process differs conceptually from socialization, which deals with the

strategies newcomers employ to become accepted members of a group [5], in that acculturation focuses on the learning and integration of these values into one's identity as an employee [3].

Supporting organizational acculturation with adequate resources can be especially helpful for two groups of employees. New members of the organization need to learn about its characteristic beliefs and values as they adjust to employment in a new environment [3]. In addition, employees working in globally distributed locations may require additional support in the acculturation process, particularly as they may not be able to draw on the same resources as those who are located closer to headquarters [6].

We suggest that social networking sites may be a potentially valuable resource for organizational acculturation for new employees and employees who are geographically distant from headquarters. First, their informal nature and frequent updates of multimedia content can encourage frequent viewing, which can provide users with a low risk way to learn more about an organization [8]. Second, new employees who were active users of an enterprise SNS deployed within a large IT organization reported greater access to new people and expertise [7]. Third, users of this same system, from areas outside of the United States, were more likely to use the site more and reported slightly higher levels of access to expertise and social capital, suggesting that these systems provide value to a global audience [7].

These findings suggest that employees in these two categories already turn to social networking sites for expertise location and building social capital. It is unclear, however, whether they use social networking sites in ways that would suggest that these systems would be a worthwhile resource for organizational acculturation in a global corporation. In this study, we assess whether new employees and geographically distant employees perceive a social networking site as useful in this process.

RESEARCH QUESTIONS

Our hypotheses are as follows: *H1: New employees will perceive greater benefit from a social networking site for activities associated with acculturation.*

H2: Employees that are geographically distant from headquarters will perceive greater benefit from a social networking site for activities associated with acculturation.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

CSCW 2011, March 19–23, 2011, Hangzhou, China.

Copyright 2011 ACM 978-1-4503-0556-3/11/03...\$10.00..

	Mean	SD	Acculturation	Productivity	Satisfaction
Using the SNS makes me curious about other cultures.	0.64	1.14	0.67	0.25	0.34
Using the SNS makes me interested in other divisions.	0.59	1.16	0.63	0.35	0.32
I learn about IBM's values by viewing photos.	0.11	1.18	0.63	0.46	0.00
I learn about IBM's values by reading status messages.	0.27	1.15	0.70	0.45	0.04
I learn about IBM's values by reading lists.	0.41	1.14	0.76	0.34	0.14
I learn about IBM's values by attending events.	0.42	1.16	0.64	0.37	0.18
I learn about IBM's values by reading profile information.	0.48	1.13	0.74	0.41	0.07
I learn about other cultures by viewing photos.	0.79	1.08	0.85	0.08	0.20
I learn about other cultures by reading status messages.	0.57	1.12	0.83	0.19	0.17
I learn about other cultures by reading lists.	0.65	1.12	0.83	0.11	0.27
I learn about other cultures by attending events.	0.43	1.14	0.72	0.26	0.23
I learn about other cultures by reading profile information.	0.70	1.08	0.85	0.16	0.21
Using the SNS is an important part of performing my job.	-0.33	1.27	0.16	0.85	0.20
Using the SNS helps me to be more innovative in my job.	0.06	1.28	0.29	0.79	0.29
Using the SNS adds significant business value.	0.16	1.23	0.33	0.75	0.27
Using the SNS helps me to be more productive in my job.	-0.17	1.25	0.25	0.84	0.24
Using the SNS helps me to advance my career.	-0.05	1.19	0.37	0.67	0.24
Using the SNS helps me to advance my work projects.	-0.20	1.23	0.29	0.79	0.19
How satisfied are you with the features of the SNS?	0.60	0.92	0.21	0.38	0.77
How satisfied are you with the ease of use of the SNS?	0.68	0.97	0.18	0.26	0.83
How satisfied are you with the reliability of the SNS?	0.87	0.90	0.25	0.08	0.79
How satisfied are you with the SNS overall?	0.61	0.97	0.30	0.41	0.75
Eigenvalue and Percent Variance			12.3 (53.7)	2.3 (10.1)	1.6 (7.0)
Scale Means (2=strongly agree, -2=strongly disagree) and SD			0.47(0.96)	-0.09(1.1)	0.8(0.69)
Cronbach's alpha			0.96	0.94	0.90

Table 1. Exploratory factor analysis of survey items

Consistent with Louis [3], we focus on viewing and reading as one characteristic activity for organizational acculturation. Previous research [2,8] has also suggested employees indicate that viewing content on a SNS serves as a resource for learning about each other and their workplace. We also measured perceived overall benefit by new employees and geographically distant employees to corroborate prior findings that suggest differences would emerge between these two groups and longer-tenured employees and employees within the headquarters country [7]. Lastly, we measure the effect of frequency of use on perceptions of organizational acculturation.

The current study focuses on users of an internal SNS deployed within IBM, a large IT corporation headquartered in the northeastern United States with approximately 400,000 employees worldwide. SocialBlue (formerly known as Beehive) was deployed internally at IBM in 2007. Since launching, 67,000 employees have joined the site, or approximately 17% of the company. The overall design of the SNS was similar to non-corporate social network sites (e.g. Facebook) in that the site supported users connecting to other employees to build a network, creating profiles, sharing content (e.g. lists and photos), and leaving comments on profiles and content.

METHODS

We conducted a survey with recently active SNS members, consisting of a sample drawn from 9715 users who have logged into the site, or accepted or created a friend invitation in a recent 12-month period (July 2009-July 2010). Invitations to participate in the survey were sent via email with a single reminder at the midpoint of the 2-week administration period in July 2010.

We developed questions based on Steinfield et al.'s [7] instruments to measure interest in creating global connections and questions regarding content viewing as a way to learn about culture, as observed by prior user interviews [8]. Additional questions about user satisfaction and its helpfulness to one's job were also included to gauge how members integrated the SNS into their work and to assess perceptions of overall benefit. All rating scales were 5-point Likert scales ranging from "strongly agree" or "highly satisfied" (2) to "strongly disagree" or "highly dissatisfied" (-2). We asked respondents about organizational membership, country and length of employment within the corporation as demographic questions. IBM policy, however, does not allow employees to be surveyed on their age and gender; therefore, we did not obtain this information.

There were 802 survey respondents out of 9715 email invitations successfully delivered to active employees for

	Acculturation		Productivity		Satisfaction	
	β	SE	β	SE	β	SE
(Constant)	.44	0.07	-.32	.08	.61	0.06
Manager	.05	0.09	.02	.10	-.05	0.08
Use frequently	.59***	0.10	1.09***	.10	.54***	0.08
Years with company	.02***	0.00	-.02***	.00	-.01	0.00
Outside U.S.	.15*	0.07	.35***	.08	.09	0.06
	$R^2=.10$		$R^2=.21$		$R^2=.08$	
	*** p < .001 ** p < .01 * p < .05					

Table 2. OLS regressions based on employee characteristics.

an 8.3% response rate. 16% of the respondents were managers and 84% were non-managers, consistent with the general population of IBM (16% managers, 84% non-managers). Respondents were from a range of business units: 25% consulting services (25% in general population), 18% technology outsourcing (7% in general population), 15% software (13% in general population), 11% hardware (6% in general population), 10% sales (15% in general population) and 9% corporate headquarters (6% in general population). The work roles identified by the survey respondents were quite varied with the top three including: IT Specialist (17%), IT architect (11%), and project management (11%).

Generally, the survey sample followed the geographic distribution of the general population with the exception of the United States having a slightly higher rate of response (30%) and India (22%), a lower rate. 37% of the respondents were from the United States, followed by 14% from India, 10% from Germany, 5%, from the UK, 4% from Brazil, 4% from Canada, and 2% or less from Australia, China, Japan, Netherlands, Denmark, Philippines, France, Italy, and Spain. 15% of the respondents indicated “other” for geographic location, compared to 16% of the general population on SocialBlue.

As a first step in analyzing this data, we performed an exploratory factor analysis, using principal components with varimax rotation. Table 1 describes the three emergent dimensions. We labeled the first of these factors **acculturation**. These items reflect the degree to which various features of the SNS supported learning about IBM’s organizational values or learning about other cultures. The second factor related to **work productivity** and included items, such as “I am more productive in my job as a result of using this innovation (SNS).” The third factor contained items related to **user satisfaction** with the features and user experience with the SNS.

RESULTS

Table 2 describes the results of a general OLS model using employee characteristic variables. Manager status was included in the model as a control, with no significant differences observed. In addition, we observed no

	Acculturation	Productivity	Satisfaction
	Mean (SD)	Mean (SD)	Mean (SD)
Years at Company			
0 to 5	0.65 (0.91)	0.22 (1.06)	0.77 (0.82)
6 to 10	0.60 (0.82)	-0.16 (1.02)	0.69 (0.78)
11 to 15	0.43 (0.92)	-0.18 (1.00)	0.72 (0.78)
16 to 25	0.22 (1.05)	-0.22 (1.05)	0.56 (0.90)
> 25	0.16 (1.09)	-0.49 (1.25)	0.59 (0.92)
Geography			
Outside U.S.	0.58 (0.89)	0.12 (1.01)	0.76 (0.79)
U.S.	0.27 (1.04)	-0.46 (1.13)	0.58 (0.88)
Frequency of Use			
Several times/day	0.78 (1.20)	1.44 (0.72)	1.40 (0.62)
Once/day	1.20 (0.68)	0.78 (0.89)	1.48 (0.65)
Several times/week	1.05 (0.61)	0.90 (0.68)	1.03 (0.72)
Once/week	0.80 (0.78)	0.42 (0.86)	0.99 (0.74)
Once/every few weeks	0.28 (0.97)	-0.41 (1.02)	0.52 (0.81)
Total	0.47 (0.96)	-0.09 (1.09)	0.69 (0.83)

Table 3. Descriptive statistics of scale items.

significant interaction effects between the predictor variables.

New employees (e.g. those with less years with company) rated SocialBlue more highly on the work productivity scale, suggesting that this group derived more benefit from SNS use on the job. In addition, they responded more favorably to the acculturation scale, indicating that they used the SNS for activities associated with organizational acculturation. Table 3 shows the higher mean response on this scale for those with 0-5 and 6-10 years of employment at IBM. Taken together, these results confirm H1.

To create a measure of geographic distance from headquarters, we recoded respondents into two categories, U.S. employees and those who are not located in the U.S. Employees located outside the U.S. reported higher agreement with the work productivity scale. They also indicated higher levels of use of the SocialBlue for learning about IBM’s values and culture on the acculturation scale, as illustrated by Table 3. This pattern is consistent with the predicted relationship and confirms H2.

Frequency of use was positively correlated with higher satisfaction, work productivity and acculturation-related activities. As might be expected, more frequent users reported higher satisfaction with SocialBlue. Since use of the SNS is not required, this suggests that satisfied users continue to return to the SNS, whereas those who derive little satisfaction do not.

Based upon the survey results and the demographic information available for SocialBlue, we analyzed profile and photo viewing for new employees located in India and the United States to provide corroboration with the survey data. We focus on India and the United States to further investigate regional differences because they are the top two countries in the survey sample and SocialBlue’s

membership population. Profiles on SocialBlue contain directory information, a profile image, status message, customizable profile information (e.g. past work experience), and user comments. Photos can be viewed through the profile page and also through the top-level navigation. We characterize a view as an active click on a profile page or a photo thumbnail. To find a sample of new employees in India and the United States, we searched for each member within our survey sample that provided their start date information in his/her profile.¹ 170 SocialBlue members from India and 58 members from the United States indicated a start date of 5 years ago or less.

Photo and profile viewing followed power law distributions so we transformed these variables on a log scale (after adding 1 to start) for analysis. We report raw variables here for readability. New employees from India viewed an average of 154.41 photos (SD=384.87) while new employees from the US viewed an average of 12.28 photos (SD=29.23). Profile views followed a similar trend with new employees from India viewing an average of 182.27 profiles (SD=434.67) and new employees from the US viewing an average of 16.31 profiles (SD=42.67). Independent-samples t-test reveal significant differences for photo viewing [$t(145.58)=7.54, p<0.01$] and profile viewing [$t(165.84)=4.89, p<0.01$], with new employees in India more actively consuming content than those in the United States.

DISCUSSION

In this study, we observe that new employees and employees who are geographically distant from headquarters are willing to use a SNS for acculturation by consuming content, confirming previous qualitative research that suggested that such systems could be used learn about an organization's culture. Our data also reveal that new employees and geographically distant employees perceive that the SNS offers benefits for work productivity, more so than their longer-tenured counterparts and employees located within the headquarters country. Finally, we observe that there are regional differences in new employee viewing patterns, with new employees in India consuming more photo and profile content than their counterparts in the United States.

One interpretation of these findings is that new employees and geographically distant employees find value in the consumption of content in an enterprise setting where social ties are weaker and more diverse, in contrast to a social networking site where networks are more personal and more homogenous in nature. As a result, monitoring content produced by colleagues or potential colleagues provides a different type of benefit (e.g. advancing one's career) than keeping track of distant friends on Facebook [1]. In this

specific context, learning may occur first from consumption and reading of SNS content, which can provide a lower risk environment in which to explore without fear of appearing less knowledgeable about the organization.

Limitations to this study include the caveats regarding self-report data, and another potential drawback to a survey research approach is the existence of latent constructs that were not measured that influence our findings. We make no claims about causality, as we have not looked at whether or not organizational acculturation has occurred but instead assessed possible means of support. We also acknowledge that we do not have a complete picture of user motivation, particularly regarding the observed geographic differences. Future work in this area will be qualitative in nature to deeply understand how such systems are embedded within local practices.

ACKNOWLEDGEMENTS

We thank Joan DiMicco for her feedback and Tom Immich for his assistance in administering the survey.

REFERENCES

1. Burke, M., Marlow, C., and Lento, T. Social network activity and social well-being. *Proc.CHI2010*, ACM (2010), 1909-1912.
2. DiMicco, J., Millen, D.R., Geyer, W., Dugan, C., Brownholtz, B., and Muller, M. Motivations for social networking at work. *Proc.CSCW2008*, ACM (2008), 711-720.
3. Louis, M.R. Acculturation in the workplace: Newcomers as lay ethnographers. In *Organizational Climate and Culture*. Jossey-Bass, 1990.
4. Nahavandi, A. and Malekzadeh, A.R. Acculturation in Mergers and Acquisitions. *The Academy of Management Review* 13, 1 (1988), 79-90.
5. Saks, A.M., Uggerslev, K.L., and Fassina, N.E. Socialization tactics and newcomer adjustment: A meta-analytic review and test of a model. *Journal of Vocational Behavior* 70, 3 (2007), 413-446.
6. Selmer, J. and Leon, C.D. Parent cultural control through organizational acculturation: HCN employees learning new work values in foreign business subsidiaries. *Journal of Organizational Behavior* 17, S1 (1996), 557-572.
7. Steinfield, C., DiMicco, J.M., Ellison, N.B., and Lampe, C. Bowling online: social networking and social capital within the organization. *Proc.C&T2009*, ACM (2009), 245-254.
8. Thom-Santelli, J. and Millen, D.R. Learning by seeing: photo viewing in the workplace. *Proc.CHI2009*, ACM (2009), 2081-2090.

¹ IBM policy does not allow the collection of email and IP addresses for employee surveys and does not disclose the start date of employees in the corporate directory.