

Voice of the Employees Resonated in Online Bamboo Forests

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Abstract

While employee voice has been realized a critical element of organizational success, many employees often remain silent and withdraw useful information and ideas. In this paper, we present how employees utilize existing social media platform in a creative, collective way to anonymously share their voices—a phenomenon called the bamboo forests in Korea. We present the key characteristics of bamboo forests including self-mention and connectivity, and discuss the main topics and sentiments of such bamboo forests. Our analysis indicates that employees find such anonymous platform useful. We provide insights on the potential for utilizing the voice of the employees online.

Introduction

Over the recent years, the notion of employee voice has become an important concept for workforce management and organizational performance, because employees often have information and ideas that can improve the work environment. Voice of the employees, which contains the shared experiences, feedbacks, and dissatisfactions from workplaces, is valuable for decision-making. It is a key factor for effective human resource management in organizations, as employers can adopt such voices to make a better workplace and minimize dissatisfaction of the employees to incur positive psychology (Gavin and Mason 2004).

Existing research categorized employee voice into four types: (i) individual dissatisfaction and complaint; (ii) expression of collective organization, which is a countervailing source of power to management; (iii) contribution to decision-making that achieves quality and productivity improvements; and (iv) demonstration of mutuality and cooperative relations to secure long-term viability and sustainability for the organization and its employees. These frameworks provide an analytical tool to assess the purpose and the meaning of voice of the employees (Dundon et al. 2004).

Despite potential benefits to organizational management, employees usually keep silence and withhold their ideas, information, and opinions due to several reasons. First, when employees believe they do not have the ability to make a difference, they are likely to behave with acquiescent silence.

Second, defensive silence is self-protective behavior based on fear, in places where expression of ideas is personally risky. Third, prosocial silence is proactive and is based on altruism. To avoid silence and promote employee voice, ensuring psychological safety (Edmondson 1999) and voice opportunity (Avery and Quiñones 2002) are considered as critical preconditions. Psychological safety means a shared belief that the team members are safe from interpersonal risk taking, while voice opportunity means granting a right and a chance to speak.

The two conditions for promoting employee voice, psychological safety and voice opportunity, can be fulfilled by ensuring anonymity, where the highest level of such anonymity in a corporate structure is called the “lack of identification” (Morio and Buchholz 2009). This level of anonymity enforces that there is no information provided about the writer of a given content, and is also known to promote sharing of new and useful information (Azechi 2005). One such example is the *bamboo forest* phenomenon in Korea, where employees share an account on Twitter and communicate collaboratively through it. The shared account can be used by seemingly anyone on the Internet and multiple accounts exist for employees in different industries (e.g., research laboratory, publishers, artists).

In this paper, we analyze the key characteristics of 30 bamboo forest accounts on Twitter and discuss their roles, topologies, and implications. While preliminary, our findings highlight how an existing social media platform can be transformed to promote voice of the employees.

The Bamboo Forests

About 1138 years ago, Kyungmun, the 48th king of the Silla dynasty in the Korean peninsula, had long ears and only one of his servants knew that secret. The servant couldn’t tell anyone about the secret because of king’s order. The servant, who could no longer bare the secret alone to himself, one day went to a bamboo forest and shouted “The king has donkey’s ears!”. Afterwards, whenever a wind blew, the bamboo forest repeated what the servant shouted. This story is similar to the tale of Midas’s Ears. Nowadays, there are a lot of employees, who are in a similar situation as the servant and have to hold a secret. The Bamboo Forest phenomenon, which attracted much attention in Korea, is rooted in this old tale and the employees started to voice themselves in the

Type	Industry	#following (bamboos)	#followers	#tweets (mean per day)	#self-mention tweets(%)
Employees at traditional businesses	Publishing	3 (2)	3134	15171 (892.4)	40.2
	Film studios	2 (1)	1384	6723 (336.2)	25.3
	Newspaper	1 (1)	2258	5615 (350.9)	38.3
	Broadcasting	3 (2)	2244	3998 (190.4)	26.6
	IT	1 (1)	1426	2919 (153.6)	45.5
	Design	18 (13)	2120	4351 (207.2)	32.9
Self-employed and others	Grad students of humanities	1 (1)	571	7911 (494.4)	43.3
	The unemployed	42 (21)	372	4851 (231.0)	26.8
	Grad students	1 (1)	883	5789 (361.8)	22.6
	Painting artists	1 (1)	988	2116 (118.0)	37.0

Table 1: Summary of the 10 most prolific online bamboo forests in Twitter



Figure 1: Tale of the bamboo forest (a) The king who had long ears (b) The servant who knew the secret shouting “The king has dongkey’s ears!” in a bamboo forest

online version of the bamboo forests.

The online version of the bamboo forests started when people created a few anonymous accounts in Twitter and named them "bamboo forest beside Industry-X," where Industry-X could be anything from publishing, design, graduate schools, to even unemployed. Anyone can post tweets through these accounts, as user IDs and passwords are known to the public. The password of bamboo forests accounts are revealed at the profile page or often is the account name itself. For example, the password of the account, "bamboo20120913", is "20120913". Therefore, any dissatisfaction such as conflicts with the boss or accusations of wrong-doings at work place can be discussed anonymously through these accounts.

Although these accounts have been relatively well preserved, they are vulnerable since anyone can delete them without restriction. Indeed, many bamboo forest tweets have been deleted, potentially by those users who may be disadvantaged when some secrets are revealed. This led birth to the backup Twitter accounts or blogs of the original bamboo forests that primarily archive all the tweets posted.

Data description

We crawled the status updates and the followers of all of the known bamboo forest accounts used by Korean Twitter users from September 12th to October 3rd, 2012. Table 1 summarizes the statistics of the top 10 active bamboo forests in use. We can classify them into largely two types: (i) traditional businesses and (ii) other bamboo forests for those self-employed, students, and unemployed. Most bamboo forests are utilized by people working in specific areas (e.g., pub-



Figure 2: Self mention usage in Bamboo accounts

lishing, film studio). Non-employees also log in to Twitter through Bamboo account. As an example of this, graduate students share their thoughts about their situation and lives.

Characteristics of Bamboo Forests

Based on the data gathered, we present high-level characteristics of the bamboo forest accounts in Twitter.

High rates of self-mentions

As bamboo forests are shared accounts, several users are typically logged on at one account simultaneously. The interesting situation leads to a novel activity called “self-mention,” which represents the behavior that an account posts a message by mentioning its own ID. Figure 2 shows an example, where someone posts a tweet and another user responds to that message through the same account. In fact, self-mentions are prevalent across most bamboo accounts taking up an average 33.9% of all tweets. However, self-mentions happen rarely for a typical Twitter user.

Connectivity across different bamboo forests

Another unique characteristic is that the number of following is low. While bamboo forests are highly active and produce hundreds of tweets per day, they followed only a handful of other accounts. Furthermore, they are inclined to follow other bamboo forests. Figure 3 depicts the follow relationship between 30 bamboo forests, where 26 of them form a large connected component. Each node represents a bamboo forest and the size of a node represents its

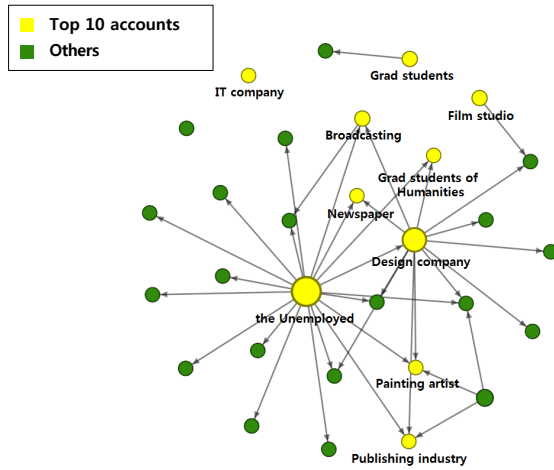


Figure 3: Following relationship among the bamboo forests

popularity based on outdegree. We find that bamboo forests for the unemployed and the design industry have the highest degree and betweenness centrality in that users of these accounts liked to hear tweets from other bamboo forests. We also find that bamboo forests for the standard businesses and non-standard areas also follow each other. In addition, unpopular accounts are prone to follow fewer accounts. It implies that people using bamboo forests do not show usual behaviors in Twitter, such as following others or communicating with others. Since the objective of bamboo forests is different from a typical use of Twitter, its interconnection behaviors may deviate from the usual behavior.

Sentiment analysis of tweets

In order to quantitatively measure the types of words mentioned in bamboo forests, we used Linguistic Inquiry and Word Count (LIWC), which is a transparent text analysis program that counts words in psychologically meaningful categories (Tausczik and Pennebaker 2010).¹ Figure 4 shows the top categories of the LIWC that appeared in tweets of various bamboo forests, where social and perception words were the most frequently found. The words related to work ranked top 6 out of all 44 LIWC categories, and bamboo forest tweets exhibited strong negative affect as one might expect. This confirms that people used online bamboo forests as a discussion forum expressing their difficulties at work. To investigate the detailed meaning and the sentiment of contents, we conduct a qualitative content analysis.

Content analysis of tweets

In bamboo forests, users actively converse with each other through a single account; thus, there are a lot of conversation threads. Therefore, we randomly selected one time window containing 400 tweets from the most popular bamboo forest, the bamboo forest beside publishing industry. Since there are no prior methodologies for sampling tweets, we chose

¹We used Korean version of LIWC from <http://k-liwc.ajou.ac.kr>

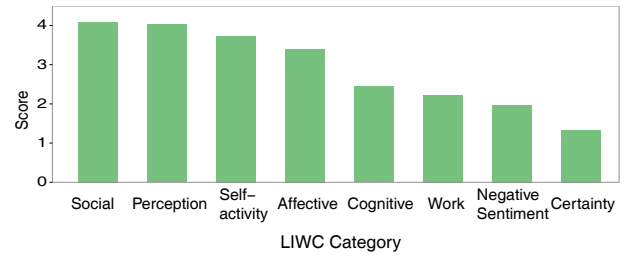


Figure 4: Top LIWC categories of the bamboo forest tweets

our sample size based on 95% confidence interval with a margin of 5% error. The recommended sample size was 380, and we analyzed 400 tweets considered missing data. After excluding tweets with missing content or containing ambiguous statements, we analyzed a total 395 tweets.

When people posted tweets in bamboo forests, following three representative types emerged. Note that these types are not mutually exclusive.

1. **Dissatisfaction:** Some users expressed dissatisfaction of their employment via bamboo forests, for example,

“I don’t expect high salary, but please just pay me on time.”

“The owner of my company deleted an entire paragraph of a book to be published just because he didn’t like it.”

2. **Suggestion:** Some tweets suggest ideas for better system about one’s industry, for example,

“This is not a problem of a few crazy people, but a problem of the whole publishing industry. Therefore we should find a systematic solution and it will need many participants’ cooperation. Let’s make an allied union for editors, designers, and interpreters!”

“I am worried that all these complaints are just gone and only discouraging ideas like “the same problem happens everywhere” remain. Bamboo forests are merely a beginning, but why don’t we look for a solution together?”

3. **Compliment:** Some users express happy sentiment or cheers, for example,

“There are people like me who like to make books. I don’t earn much, but I believe this field has a vision. I also believe issues mentioned here are not the generic problems in the publishing industry.”

“The interpreter I met before e-mailed to the author directly to check any ambiguities, and the quality of the interpretation was fantastic. Of course the revising process was necessary, but still he was the best!”

The majority of tweets (209 out of the 395) were categorized as dissatisfaction. These tweets mentioned about problems with their boss, systematic problems at workplace, self-criticism, and broad problems of the industry. These tweets contained problems without any solutions. Some tweets of dissatisfaction were about the usage of bamboo forests itself. Most tweets were light complaints on workplace, and no tweets contained the real name of a person or a company.

One day, after a lot of tweets in one bamboo forest were deleted by a malicious user(s), many users posted complaints. Many suspected that tweets mentioning serious problems of the publishing industry (although were not specifically mentioning any names) had been deleted by those who would be disadvantaged by the content shared.

Then, we categorized 39 out of the 395 tweets as suggestion. These tweets expressed not only problems but also solutions to the problem. The suggestions handle various subject from the stale convention in the publishing industry to the labor union. Finally, only eight tweets expressed compliments about the satisfaction of one's company, salary, and co-workers. It is interesting to find that not all tweets in bamboo forests contain negative sentiment.

Online bamboo forests acted as an anonymous forum for employees to share their private thoughts and opinions about workplace. The fact that people do so with complete strangers may be related to a paradox known as the "stranger on a train" phenomenon (Rubin 1975). Although being strangers, bamboo forests users may have a strong sense of community and can easily sympathize with others because they work in the same industry. Indeed, there are lots of conversations in bamboo by using self-mentions. For example, after one person shared an opinion about the parental leave, 16 tweets discussed this topic. We observed that 107 out of the 395 tweets were answers to others' tweets.

Conclusion

In the era of social media, companies and employers are concerned about employee voice. While traditional media channels for employees primarily existed internally within a company thereby limiting the voices to come out, the Internet-based anonymous platforms like the bamboo forests allow for frank opinions from employees. Although bamboo forest users do not name specific person or a company (by convention), voice of the employees from bamboo forests will be useful for companies to recognize widespread problems in their industry. Moreover, as long as the culture of the bamboo forests keeps prospering, it can be expected that the bamboo forests named after specific companies will appear eventually. If the companies are willing to tolerate this cultural phenomenon, these bamboo forests can be settled as an attractive platform for them to hear forthright statements from their employees without biases or filters. These raw comments can be used to build sounder labor-management relations as well.

In addition, as mentioned earlier psychological safety and voice opportunity are important to avoid silence and stimulate voice of the employees. Bamboo forests are able to provide both psychological safety and voice opportunity, since these channels are offering almost perfect anonymity. In this respect, bamboo forests are fine tools for those companies interested in knowing the true employee voice through social media channels and building a more productive and sustainable environment (Dundon et al. 2004).

While preliminary, this work provides a first look at the new phenomenon of online users sharing the experiences and opinions as employees through an anonymous account in Twitter. The growing popularity, prolific posting and

self-monitoring behaviors, and a high-degree of connectivity seen from our analysis indicate that employees find such anonymous platform useful.

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