

The Pulse of the Corporate Blogosphere

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ABSTRACT

Blogging at work has gained considerable interest in the knowledge management community. It is not clear, however, how much of work blogging is related to work versus social, or when work blogging takes place. In this poster, we present results from our examination of the temporal aspects of blogging within a large internal corporate blogging community. We compared our findings to similar analyses of employee email use and to college student Facebook use. We found that blog posting is temporally similar to email, while blog reading is more similar to Facebook messaging. Our results suggest that participation is both work-related and social, indicating a desire to connect to coworkers at multiple levels.

INTRODUCTION

Research on blogging at work has described possible benefits of blogging for fostering collaboration among coworkers (*e.g.* [1,3]), but it is not known how much of internal blogging is work-related versus social, nor is it clear how to measure the value of the social interactions that take place.

Previous work has explored internal corporate blogging using conversation analysis, social network analysis, interviews, surveys, and log files. Efimova and Grudin studied Microsoft's internal blogging community to understand how and why employees blog [1]. Jackson, Yates, and Orlikowski report on IBM's internal blog community, describing types of users, frequency of use, and benefits for both the individual and the community [4]. Huh *et al.*, also at IBM, discuss ways that blogging can support collaboration and knowledge sharing [3]. However, there is little work examining temporal patterns of blog use. These patterns are particularly interesting where traditional boundaries between "work time" and "personal time" are blurred because employees can access the internal network from work or from home.

METHOD

We analyzed log files from July 2007-July 2008 from the internal blog server at Hewlett-Packard (HP). HP has over

170,000 employees worldwide. Over 1,000 identifiable (non-anonymous) blog authors and over 10,000 readers are included in our sample. We removed all hits from outside of the United States from our sample, since we could not identify time zones for some non-U.S. IP addresses and normalized all remaining timestamps to the user's local time. The remaining 13,996 posts and comments, and 2.7 million hits (including indirect hits, such as feeds) are plotted by hour of day (Fig. 1c,d).

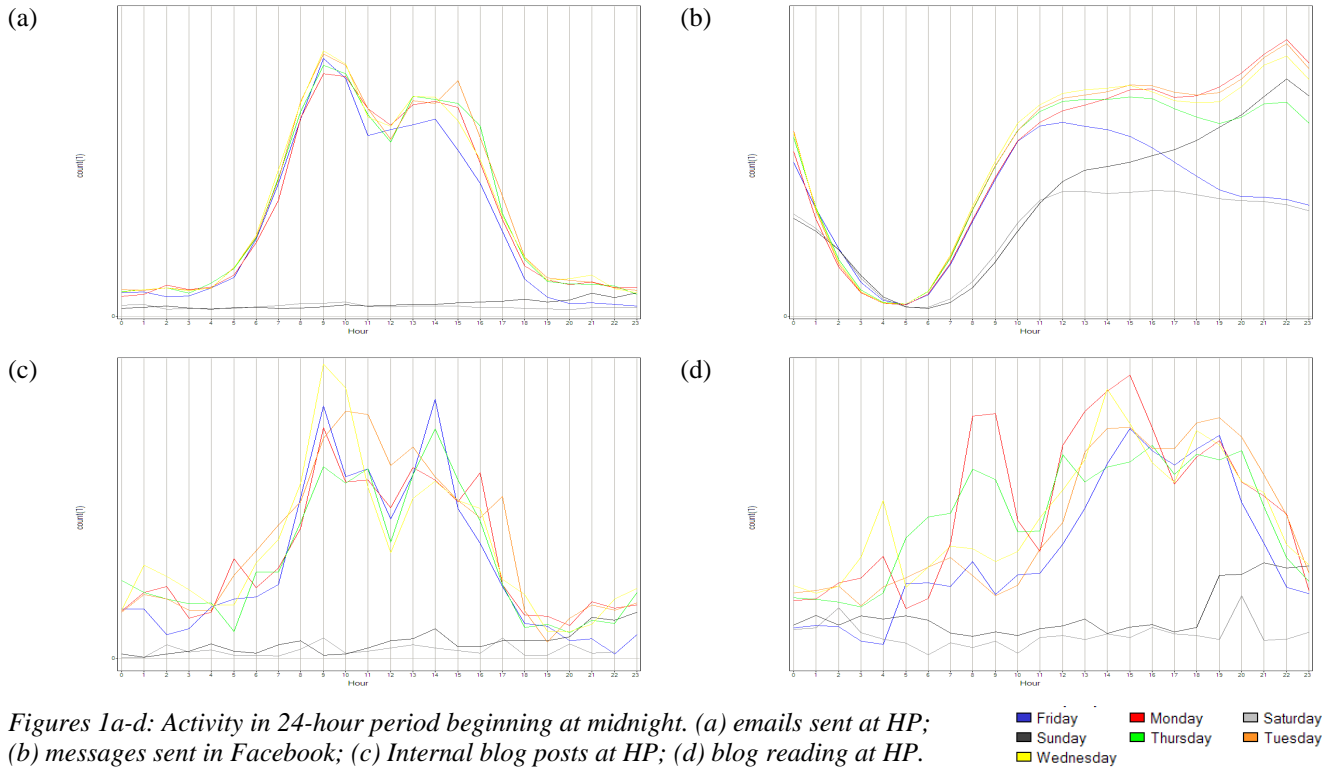
We compared these data to two existing datasets described in [2]. The first dataset contained 5.9 million emails between HP employees over a 21-month period (Fig. 1a) and the second contained 162 million messages exchanged by 4.2 million college users of Facebook.com, an online social network service, during a 26-month period (Fig. 1b).

RESULTS

Based on our observations of discussion topics within HP's internal blogging community, we hypothesized that temporal patterns would reflect both social and work uses. We consider "work hours" in the context of the normative 9-to-5 workday; the pattern of email messages (Fig. 1a) supports this. However, the normative workday may or may not reflect when people are actually doing work; we describe our observations and suggest possible explanations. While email, blogging and Facebook are different from one another in many ways, we use each dataset as a proxy for activity in their respective domains.

Figures 1a-d show hourly traffic in a 24-hour cycle, beginning at midnight. Each line represents a day of the week. The graphs indicate a number of interesting trends:

- Email messages and blog posts follow a similar pattern that maps to the normative 9-to-5 workday.
- Specifically, activity decreases during lunch and dinner hours for employee email and blog use, but not for college students using Facebook. Office workers may have more regular meal hours than college students, or may choose to disconnect from the Internet (and work) during these times.



Figures 1a-d: Activity in 24-hour period beginning at midnight. (a) emails sent at HP; (b) messages sent in Facebook; (c) Internal blog posts at HP; (d) blog reading at HP.

Legend for Figures 1a-d:
 Friday (blue), Monday (red), Saturday (grey)
 Sunday (black), Thursday (green), Tuesday (orange)
 Wednesday (yellow)

- Email, blog writing, and blog reading all decrease at the end of the workday although blog reading increases slightly after dinnertime. In contrast, Facebook use does not drop during dinnertime hours and increases into the late evening.
- College students' decreased Facebook use spans midday Friday to midday Sunday [2]. Work communication (*i.e.* both blogs and email) exhibit little use on Saturday and Sunday, although, like Facebook, Sunday afternoon blog reading increases slightly. The discussion of displacement theory in [2] suggests that Internet use during weekends decreases while people are socializing, and increases again when social activity (typically Friday and Saturday evenings) is over.
- Blog readership is significantly higher on Mondays, especially in the morning. Blog reading may serve as a useful transition from the weekend to a new workweek.
- Email use sharply increases between 8 and 10 AM, while blog reading lags 1-2 hours behind. Blog reading is likely to be lower priority (whether work or social in nature) than email, given that prompt email response can help signal a “responsiveness profile” [5] to management and coworkers.

CONCLUSION

Our results suggest that employee blogging takes place both during typical work hours and outside of work. We are currently interviewing HP employees about their use

of internal blogs, more generally. Preliminary results suggest that those who perceive the value of internal blogging to correlate with top-down support from management are more likely to blog while at work, about work related topics, while those who participate in purely social or semi-social (*e.g.* rumors about company reorganizations), may blog either during work hours or on their own time.

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