

6-2014

# Social Media Choice: An Explorative Study on Information Transmission via Social Media

Mirko Jan Zülch

*University of Göttingen, Germany, mirko.zuelch@wiwi.uni-goettingen.de*

Moritz Christian Weber

*Goethe University Frankfurt, Germany, moweber@wiwi.uni-frankfurt.de*

Jan Muntermann

*University of Göttingen, Germany, muntermann@wiwi.uni-goettingen.de*

Follow this and additional works at: <http://aisel.aisnet.org/bled2014>

---

## Recommended Citation

Zülch, Mirko Jan; Weber, Moritz Christian; and Muntermann, Jan, "Social Media Choice: An Explorative Study on Information Transmission via Social Media" (2014). *BLED 2014 Proceedings*. 44.

<http://aisel.aisnet.org/bled2014/44>

This material is brought to you by the BLED Proceedings at AIS Electronic Library (AISeL). It has been accepted for inclusion in BLED 2014 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

27<sup>th</sup> Bled eConference

eEcosystems

June 1 - 5, 2014; Bled, Slovenia

---

## Social Media Choice: An Explorative Study on Information Transmission via Social Media

**Mirko Jan Zülch**

University of Göttingen, Germany  
mirko.zuelch@wiwi.uni-goettingen.de

**Moritz Christian Weber**

Goethe University Frankfurt, Germany  
moweber@wiwi.uni-frankfurt.de

**Jan Muntermann**

University of Göttingen, Germany  
muntermann@wiwi.uni-goettingen.de

### **Abstract**

*From Facebook (i.e. a social network site) to Twitter (i.e. a microblog), a large variety of social media types and platforms facilitate information exchange among individuals. The information systems literature provides theoretical approaches to understand media choice, especially when multiple electronic media are available. In this empirical study, we seek to understand social media choice in the context of major business events. We explore how individuals make use of different social media types at different times during the communication process subsequent to the announcement of major business events. While controlling for other task-related influencing factors, our analysis provides evidence that the successive choices of social media types determine the task-related communication process.*

**Keywords:** Social Media Types, Media Capabilities, Media Choice, Information Transmission

### **1 Introduction**

Social media in general can be defined as: “a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content” (Kaplan and Haenlein, 2010, p.61). According to a survey of the Pew Research Center (2013), 42% of adults that are using social media, use multiple social media types and platforms. This raises two questions: Why do people use multiple social media types and platforms, and when do they favor one over the other?

Questions of media choice have always been an important topic in the IS literature. A large variety of empirical studies investigated media choice with respect to traditional media (e.g. fax, email or video/telephone conferences) (Daft and Lengel, 1986). Yet, to the best of our knowledge, no empirical study sheds light into the topic of social media choice.

According to the provided definition of social media, the generation of user-generated content (UGC) is a result of the use of social media by individuals on the internet. UGC can be defined as “i) content made publicly available over the internet, ii) which reflects a certain amount of creative effort, and iii) which is created outside of professional routines and practices” (OECD, 2007, p. 4). Therefore, the occurrence of UGC across different social media types related to a certain task can provide insights into the phenomenon of social media choice. In our empirical analysis we aim to explore social media choice by analyzing the communication process following merger announcements, where social media users are incentivized to transmit and process information in order to reduce merger-related uncertainties.

In the next section, we provide a review of the relevant literature and formulation of our research question followed by a description of used datasets and variables. Then we present our methodology and analysis results, followed by a discussion of our findings. We conclude with a summary of our findings, present limitations and describe potential future research directions.

## **2 Background and Research Question**

Social media continue to pervade the life of internet users and are the primary choice of online social interaction and communication (Goh et al., 2013). Social media enables users to share information, to express feelings and opinions, and to build interpersonal relationships among users (Chiu et al., 2006). Burnett (2000) developed a typology of information exchange and classified information behavior of social media users. In addition, with respect to various topic areas (e.g. politics, business and products), social media are considered a reliable information source that supports users in their decision making process (e.g. consumer decisions or investment decisions) (Aggarwal and Singh, 2013; Weiss et al., 2008). Especially in the presence of informational uncertainties, individuals approach social media in order to satisfy their information needs and reduce uncertainties (Lu and Yang, 2011; Weiss et al., 2008). This explains why social media is responsible for the increased frequency of online information exchange and the creation of UGC.

Various types of social media have been identified by the literature. These social media types differ in their nature and functionalities. Social media types are e.g., blogs, microblogs, social network sites, message boards, collaborative projects, virtual social worlds and virtual game worlds. Kaplan and Haenlein (2010) propose a classification of social media types based upon media richness and social presence theory. These social media types are represented by existing social media platforms (e.g. Facebook, Twitter, YouTube or Second Life). Kietzmann et al. (2011) identified functionalities by which social media platforms can be classified: identity, conversations, sharing, presence, relationships, reputation, and groups. In our study we focus on social media types that are responsible for the generation of text-based UGC: blogs, microblogs, social network

sites, and message boards (Boyd and Ellison, 2007; Schmidt, 2007; Stieglitz and Dang-Xuan, 2013; Im and Chee, 2006).

While earlier media theory on media richness (Daft and Lengel, 1986) had a focus on medium's information richness, i.e. its capability to reproduce information, later theory also focuses on other, more functional, media capabilities. Media synchronicity theory (Dennis et. al, 2008) presents different media capabilities, which describe how a medium supports individuals that want to transmit and process information to accomplish a certain task, e.g. to acquire useful information in situations of uncertainty. These media capabilities are transmission velocity, parallelism, symbol sets, rehearsability, and reprocessability. Given these diverse media capabilities, media synchronicity theory suggests that "the 'best medium' for a given situation may be a combination of media" (Dennis et al., 2008, p. 588). Thus, there are repeated choices to use media at certain points in time during task-related communication processes. Each individual media choice and usage will then be affected by the fit of media capabilities and the task-related information needs at a particular time.

In this paper, we aim to explore individuals' combined usage of social media to transmit and process information in the context of situations of uncertainty. We therefore explore the communication process following a major business event (merger announcement) and the subsequent choice and usage of diverse social media types during this process. While existent research has explored the different capabilities and usage of more traditional media during communication processes (e.g. Mohan et al., 2009), to the best of our knowledge, there is no empirical study that explores the combined choice of social media (e.g. microblogs or social network sites) in the context of task-related communication processes.

Given the central hypothesis of media synchronicity theory that "communication performance will be enhanced when different media are used at different times" (Dennis et al., 2008, p. 576), we aim to empirically explore the usage of different social media types during the business-related communication processes following the announcements of major business events. On this basis, using the business context of a merger event we state the following research question:

*How do individuals make use of different social media types at different times during the communication process subsequent to the announcement of major business events?*

The event of a merger announcement (i.e. a major business event) represents an adequate context to investigate usage of social media in the presence of uncertainties. In the context of merger-acquisition events, Zülch et al. (2014) showed that information quantity in social media is driven by certain event and firm characteristics. In general, a merger announcement represents a situation of information asymmetries for investors and is followed by severe price reactions (Healy and Palepu, 2001; Asquith, 1983). Furthermore, information concerning a merger disseminated into the market is very complex (Loughran and McDonald, 2013). Investors and potential investors have to assess if a combination of two companies will achieve future strategic or synergetic gains (Chakravorty, 2012). Given the described circumstances, investors are incentivized to engage in information exchange via social media in order to reduce informational uncertainties (Herrmann, 2007). Several merger-related factors (i.e. event-related factors) represent reasons to exchange information concerning a merger. These

factors concern the strategic fit of the two merging companies (Goergen and Renneborg, 2004), the financial risk of the transaction (Louis and Sun, 2010), or the chosen method of payment (where cash-acquisitions signal confidence in a positive post-merger performance) (Yook, 2003; Goergen and Renneborg, 2004).

In addition, it is reasonable to assume that the extent of information exchange in social media concerning merger events is also affected by the characteristics of merging companies. Some events are more likely to be talked about than others based on the fact that people are more aware about some companies compared to others. Companies that are bigger in size, or receive more media coverage, or sell goods and services to consumers are more visible to social media users (Capriotti, 2009). These firm-related factors create visibility among people which may influence the extent of information exchange in social media that needs to be controlled for.

## **3 Data**

### **3.1 Sample**

Thomson Reuters SDC Platinum database (SDC) was used in our sample selection process. Our sample selection had several objectives. First, we focused on merger attempts of publicly listed companies with a deal value equal or higher \$100 million in order to ensure that these transactions quicken interest for individual investors (Kau et al., 2008). Second, we focused on US mergers in order to ensure communication in English language. Third, in order to ensure increased social media coverage we restricted our sample to merger attempts in recent years that have been announced between 2010 and 2011. At last, our study is focused on the online communication in the time period between the announcement of a merger attempt and the announcement of its final outcome. Therefore, we restricted our sample to merger attempts where the final outcome was known (Bates and Lemmon, 2003). These objectives lead us to a sample of 159 merger transactions.

### **3.2 Data Collection**

We used a variety of databases for collecting data. Our data collection of social media data had several objectives. First, our study aims to investigate communication patterns across a large variety of social media types. In contrast to other social media studies, we do not restrict our empirical analysis to a specific social media type (Aggarwal et al., 2012; Bollen et al., 2011; Das and Chen, 2007). Second, we want to ensure that the social media data is publicly available for reproducibility purposes. Therefore, we collected social media data by using Social Intelligence Solutions' SM2 database (SDL-SM2). SDL-SM2 provides several advantages for collecting historical social media data. SDL-SM2's assignment of UGC to a specific social media type is consistent with classification schemes of social media types from the literature (Kaplan and Haenlein, 2010) and all relevant social media types that enable text based information exchange for social media users are identified by SDL-SM2. In addition, SDL-SM2 provides a large variety of query functions. We were able to use specific search terms, limit our search to UGC written in English, and to specify a date range for which UGC was

obtained. An overview on the relevant information available for each identified UGC obtained from SDL-SM2 is provided by table 1.

Data Field	Description
Author Name	Name of the author of UGC
Title	Title of the UGC
Full Content	Content of UGC
URL	URL of UGC
Time Published	Time and date of publication of UGC
Social Media Type	Identified social media types: Message Boards, Microblogs, Blogs, Social Network Sites
Social Media Platform	Identified social media platform (e.g. Twitter or Facebook)

**Table 1:** Data Description – SDL-SM2

For collecting merger-related data and data related to companies in our sample we made use of databases that are commonly used in financial studies. Thomson Reuters SDC Platinum database (SDC) was used for collecting merger-related data (Bates and Lemmon, 2003). Thomson Reuters Datastream (Datastream) was used for collecting company-related data (Faccio and Masulis, 2005). Finally, we used LexisNexis to collect press articles related to companies in our sample (Wattal et al., 2010).

## 4 Variables

### 4.1 Dependent Variable

In order to explore the choice of diverse social media types subsequent to a merger announcement, we measure the occurrence of postings across different social media types by using the following dependent variable:

- **Posting Lag of UGC (PL):** For each merger attempt in our sample, we identified merger-related postings across previously mentioned social media types (see section 2) by applying the following Boolean search string: “*name of the acquiring company*” AND “*name of the target company*”. For each query, we restricted the date range to the date of announcement of a merger attempt and the date when the final outcome of the merger attempt was known. SDL-SM2 identified a total of 137,668 social media postings that are related to merger attempts in our sample. For each posting that was related to a specific merger attempt, we calculated the difference between the time of announcement of that merger attempt and the related posting time of UGC (time difference was measured in hours).

### 4.2 Independent Variables

In the following we present a list of variables by which we differentiate social media postings according to their identified social media type:

- **Microblog (MICB):** A dummy variable where the value of one indicates that identified UGC was posted on a microblog.
- **Blog (BG):** A dummy variable where the value of one indicates that identified UGC was posted on a blog.

- **Social Network Site (SNS):** A dummy variable where the value of one indicates that identified UGC was posted on a social network site.
- **Message Board (MB):** A dummy variable where the value of one indicates that identified UGC was posted on an online message board.

### 4.3 Control Variables

In the following we present a list of variables by which we control for event-related (i.e. merger-related) factors that also may influence information exchange in social media:

- **Duration of Merger (D):** Number of days between date of announcement of a merger attempt and the date when the final outcome of the merger attempt is known.
- **Relatedness (R):** We measure merging firm's industry relatedness by using a dummy variable that takes "the value of one if the two merging partners are in the same two-digit SIC code and zero otherwise" (Louis and Sun, 2010, p. 1784).
- **Method of Payment (MP):** A dummy variable where the value of one indicates that cash was chosen as a method of payment for a merger and the value of zero indicates other forms of payment (e.g. stock) (Yook, 2003).
- **Transaction Value (TV):** The transaction value represents the announced amount of consideration that is paid (in million USD) by the acquiring company (Luo, 2005).

In addition, we also control for firm-related factors (determined for the acquiring company (A) and the target company (T)) that may influence information exchange in social media:

- **News Coverage (A-NC, T-NC):** We collected the total number of news articles citing a company's name involved in a merger published in The New York Times and The Wall Street Journal within one year prior to the respective merger attempt (Antweiler and Frank, 2004). A dummy variable was created to further distinguish between companies with a high and a low news presence. We defined companies with a high news presence as companies that are in the top quartile of total number of news citations in our sample (Pfarrer et al., 2010).
- **Business Focus (A-BF, T-BF):** A dummy variable where the value of one indicates that a company in our sample is focused on selling goods and services to consumers and zero otherwise. The classification is based on a company's four-digit SIC code.
- **Firm size (A-E, T-E):** The enterprise value of a company involved in a merger attempt is determined as of the end of the fiscal year prior to a respective merger announcement (Agrawal and Nasser, 2012).

Table 2 provides a list of all variables and their respective data source.

Type of Variable	Factor Category	Variable	Abbreviation	Data Source
Dependent Variable		Posting Lag of UGC	PL	SDL-SM2
Independent Variables	Social Media Types	Microblog	MICB	SDL-SM2
		Blog	BG	SDL-SM2
		Social Network Site	SNS	SDL-SM2
		Message Board	MB	SDL-SM2
Control Variables	Event-related Factors	Duration of Merger	D	SDC
		Relatedness	R	SDC
		Method of Payment	MP	SDC
		Transaction Value	TV	SDC
	Firm-related Factors	News Coverage	A-NC, T-NC	LexisNexis
		Business Focus	A-BF, T-BF	SDC
		Firm Size	A-E, T-E	Datastream

**Table 2:** List of Variables

## 5 Empirical Analysis

### 5.1 Methodology

Our analysis will investigate how individuals make use of different social media types at different times during the communication process subsequent to the announcement of a merger attempt. As we observe information processing by individuals in terms of total posting lags of UGC, we select a hazard function model regression (Greene, 1997). This supports the non-linear behavior of posting lags as well as the strict positive characteristics of the model variables and avoids broken assumptions compared to a linear regression (Greene, 1997). Designed to estimate how long an entity will stay in a certain state, these models have been applied to divorce rates, length of studies and pensions, and mortality expectations in social science (Greene, 1997).

The hazard rate  $\lambda$  is the likelihood at which an event observer (author of UGC) does not change the state to post UGC about an event within a given period. The model estimates the likelihood with given influencing factors and allows to estimate the likelihood of influencing the posting lag. Thus, if the model estimates a positive coefficient then the likelihood of longer posting lags increases in the percentage value of the coefficient and vis-à-vis. We expect that the posting lag is dependent to their influencing factors:

$$PostingLagOfUGC_i(t) = PostingLagOfUGC_0(t) \exp(\beta_1 SocialMediaTypes_{i1} + \beta_2 EventRelatedFactors_{i2} + \beta_3 FirmRelatedFactors_{i3})$$

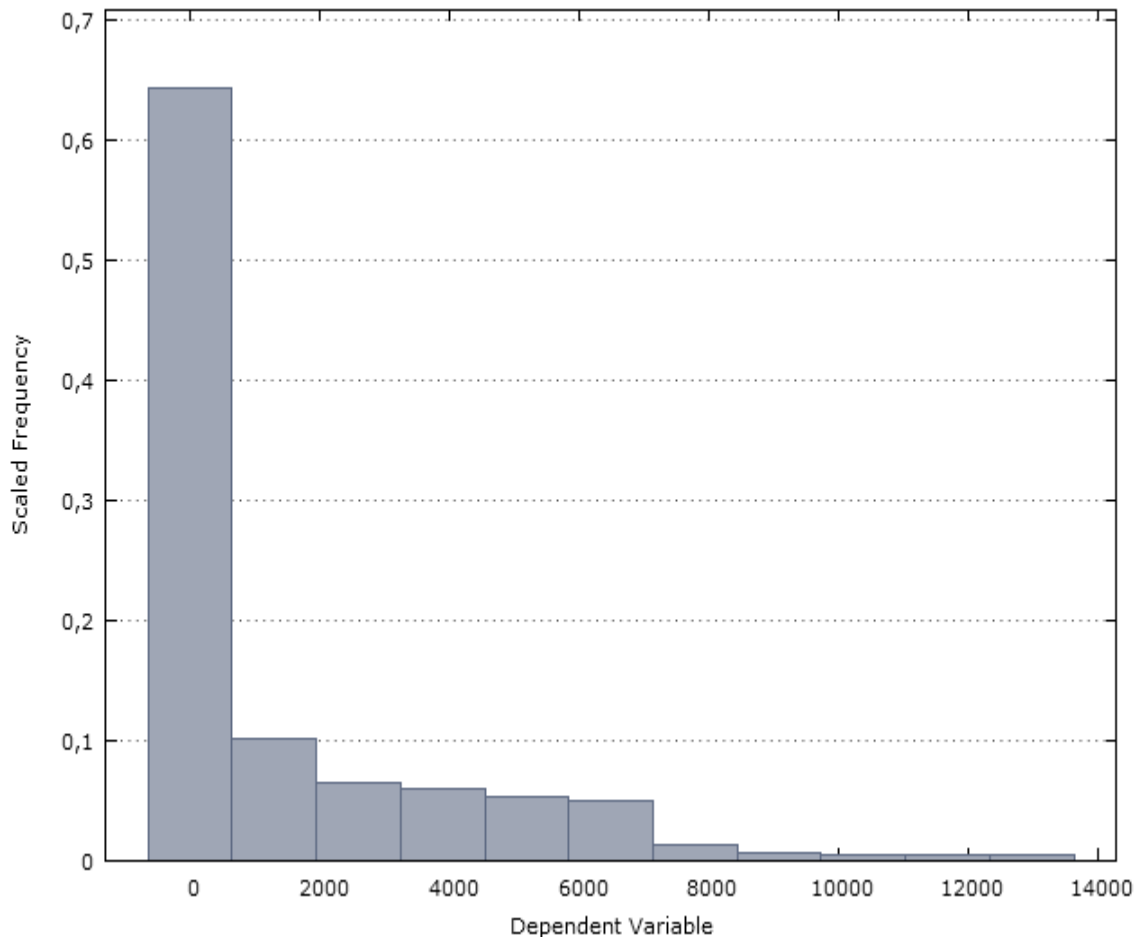
As the incentive to publish UGC decreases over time (longer posting lags are much less likely than shorter ones) we expect a Weibull distribution of posting lags (positive random variables and not normal-distributed) that is also often used in previous research and validate this assumption with the descriptive statistics in the next section (Fréchet, 1927). The significance of all dummy variables is tested by a Chi-squared test for each factor category as well as for the overall model.



## 5.2 Descriptive Statistics and Results

Our resulting cross-sectional dataset consists of 136,935 valid UGC postings addressing a specific merger including the posting lag, the variables for 4 social media types, 3 event-related factors and 6 firm-related factors. 5,962 observations are discarded due to missing values, so that the final dataset consists of 130,973 complete UGC postings. Posting lags are measured in hours with an average length of 1,479 hours (61 days). The median is 251.35 hours (10.45 days). Half of the UGC is posted within 245 hours, but it needs 3,064 hours (4.2 month) that more than 80% of the postings appeared. It takes 6,711 hours after which 95% of postings can be observed. On the one hand, there exist postings that appeared within the first hour, while on the other hand, the longest posting lag is 12,981 hours (580 days). The total posting lag has a standard deviation of 2,375.7 hours. The difference between average and median indicates a right-skewed distribution.

The histogram depicted in figure 1 indicates a Weibull distribution that approximates the distribution of posting lags best compared to other distributions used in survival analysis.



**Figure 1:** Frequency Distribution of the Dependent Variable - Posting Lag of UGC (measured in hours)

In addition, figure 1 illustrates that the distribution of observations shows declining posting lags and that this time measure is positively, randomly ordinary and not normal-

distributed. Consequently, we treat all 130,973 UGC posting lags as a cross-sectional dataset and investigate the influences using a Weibull-distributed hazard function model. In our final regression we dropped the variable T-E as it shows expectable collinearity with the transaction value. In addition, the microblog variable MICB is removed from the data set due to perfect collinearity with other variables from the social media type category. As a result the remaining coefficients of the social media type category show the likelihood of each social media type having longer posting lags compared to microblogs in percentage. Results of the regression analysis (table 3) explain the influence of each individual entity within the four factor categories to the posting lag.

	<b>Coefficient</b>	<b>Std. Error</b>	<b>z-Value</b>
Const.	4.658590***	0.022	212.437
BG	0.591258***	0.011	52.916
MB	0.551301***	0.011	51.948
SNS	0.499597***	0.026	19.517
D	0.007829***	<0.001	147.615
TV	0.000011***	<0.001	12.232
MP	0.148425***	0.015	10.043
R	-0.159902***	0.014	-11.673
T-NC	0.211914***	0.013	16.387
A-NC	0.415368***	0.014	30.733
A-E	-0.000007***	<0.001	-58.702
T-BF	0.481590***	0.015	31.823
A-BF	-0.241236***	0.015	-16.114
sigma	1.73579***	0.003	501.076
Chi-square (12)	43,414.92***		

\*\*\* indicates 1% level of significance

**Table 3:** Extract of Regression Results for Posting Lag of UGC

### 5.3 Discussion and Conclusions

A Chi-squared test indicates the overall model validity. Interestingly, all variables are highly significant at the 1% level ( $p < 0.01$ ), providing evidence that all factor categories (i.e. social media types, event-related factors, and firm-related factors) influence the posting lag of UGC (PL).

To recall, coefficients of the social media category show the likelihood of each social media type not having published UGC compared to microblogs in percentage. Social network sites have a 49.96%, message boards a 55.13%, and blogs a 59.13% higher likelihood to be slower in posting UGC than microblogs. This provides several indications with regard to choice and usage of social media types subsequent to a major business event. Our results correlate with the expected length of UGC. While microblogs and SNS are more likely to publish shorter postings, MB and blogs are typical channels to publish longer postings that need a longer time to be written. In addition, our results provide evidence concerning the successive usage of social media types. Microblogs are faster in providing UGC and are responsible for early buzz with

regard to a new announced merger event. Microblogs are followed by SNS and the discussion is then carried on to MB and blogs, where a more in-depth information exchange concerning a merger event can be established. Overall, our results provide evidence that different social media types are used at different times during the business-related communication process following the announcement of a merger.

The variable duration of a merger process (D) indicates an increase of posting lag of UGC. The transaction value (TV) has a minor positive influence and relatedness (R) has a negative influence on the likelihood of not having published merger-related UGC. Higher information needs and thus increased information processing activity by social media users due to the magnitude and the financial risk of the transaction, as well as a lack of strategic fit of merging companies (i.e. no industry relatedness between companies), are responsible for longer posting lags. The signaling effect of transactions not carried out by cash ( $MP = 0$ ) negatively influences posting lags of UGC, which indicates that uncertainties due to the chosen method of payment are responsible for faster information processing in social media.

Both news coverage variables (A-NC and T-NC) positively influence the likelihood of not having published UGC. It is reasonable to assume that companies that in general receive high media coverage also receive higher levels of media coverage during a merger event. Therefore, information processing activity of social media users is increased by higher levels of news coverage. The processing time of UGC is fast for mergers where acquirers are larger in size (A-E) and that are focused on selling goods and service to consumers (A-BF). This indicates that a higher awareness of a company among users results in a faster information processing in social media. Surprisingly T-BF has a stronger positive influence on the likelihood of having lagged publishing merger-related UGC compared to A-BF. An interpretation of this finding is subject to further inquiries.

Overall, our analysis provides strong evidence that the choice of social media types determines the task-related communication process (i.e. information exchange in order to evaluate a major business event) when controlling for other task-related influencing factors. The observed difference in the usage of social media types may be explained by their specific media capabilities. It is subject to future research to investigate which distinct characteristics of each social media type are responsible for this effect.

Our findings bear important practical implications. Companies that are interested in leveraging the power of monitoring social media activity have to take into account that different social media types are used at different times during the communication process with respect to company-related events and actions.

## **6 Limitations and Further Research**

While our results provide empirical insights into social media choice during a task-related communication process, our research provides motivation for future research directions. The relationship between posting lags of UGC and our binary control variables may be more nuanced and the binary coding may not uncover all the dynamics. In addition, a merger passes through several phases (e.g. shareholder voting or regulatory approval) which we did not account for in this study, except for controlling for the duration of the merger attempt.

Future research should further investigate social media choice by taking into account the distinct capabilities of different social media types and platforms.

## **References**

- Aggarwal, R., Gopal, R., Gupta, A. & Singh, H. (2012). Putting Money Where the Mouths Are: The Relation Between Venture Financing and Electronic Word-of-Mouth. *Information Systems Research*. 23 (3), 976–992.
- Aggarwal, R. & Singh, H. (2013). Differential Influence of Blogs Across Different Stages of Decision Making: The Case of Venture Capitalists. *MIS Quarterly*. 37 (4), 1093–1112.
- Agrawal, A. & Nasser, T. (2012). Insider trading in takeover targets. *Journal of Corporate Finance*. 18 (3), 598–625.
- Antweiler, W. & Frank, M.Z. (2004). Is all that talk just noise? The information content of internet stock message boards. *The Journal of Finance*. 59 (3), 1259–1294.
- Asquith, P. (1983). Merger Bids, Uncertainty, and Stockholder Returns. *Journal of Financial Economics*. 11 (1-4), 51–83.
- Bates, T.W. & Lemmon, M.L. (2003). Breaking up is hard to do? An analysis of termination fee provisions and merger outcomes. *Journal of Financial Economics*. 69 (3), 469–504.
- Bollen, J., Mao, H. & Zeng, X. (2011). Twitter mood predicts the stock market. *Journal of Computational Science*. 2 (1), 1–8.
- Boyd, D. & Ellison, N. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*. 13 (1), 210–230.
- Burnett, G. (2000). Information exchange in virtual communities: a typology. *Information Research*. 5 (4), 1–25.
- Capriotti, P. (2009). Economic and Social Roles of Companies in the Mass Media: The Impact Media Visibility Has on Businesses' Being Recognized as Economic and Social Actors. *Business & Society*. 48 (2), 225–242.
- Chakravorty, J. (2012). Why do Mergers and Acquisitions quite often Fail?. *Advances In Management*. 5 (5), 21–28.
- Chiu, C.-M., Hsu, M.-H. & Wang, E.T.G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision support systems*. 42 (3), 1872–1888.
- Daft, R.L. & Lengel, R.H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*. 32 (5), 554-571.
- Das, S.R. & Chen, M.Y. (2007). Yahoo! for Amazon: Sentiment Extraction from Small Talk on the Web. *Management Science*. 53 (9), 1375–1388.
- Dennis, A.R., Fuller, R.M. & Valacich, J.S. (2008). Media, tasks, and communication processes: A theory of media synchronicity. *MIS Quarterly*. 32 (3), 575-600.
- Faccio, M. & Masulis, R. (2005). The choice of payment method in European mergers and acquisitions. *The Journal of Finance*. 60 (3), 1345–1388.

- Fréchet, M. (1927). Sur la loi de probabilité de l'écart maximum. *Annales de la société Polonaise de Mathématique* (Vol. 6). Bibliothèque des Sciences Humaines: Editions Gallimard.
- Goergen, M. & Renneboog, L. (2004). Shareholder Wealth Effects of European Domestic and Cross-border Takeover Bids. *European Financial Management*. 10 (1), 9–45.
- Goh, K.-Y., Heng, C.-S. & Lin, Z. (2013). Social Media Brand Community and Consumer Behavior: Quantifying the Relative Impact of User- and Marketer-Generated Content. *Information Systems Research*. 24 (1), 88–107.
- Greene, W.H. (1997). *Econometric Analysis* (3rd ed.). London: Prentice-Hall International.
- Healy, P. & Palepu, K. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*. 31 (1-3), 405–440.
- Herrmann, A.F. (2007). Stockholders in Cyberspace: Weick's Sensemaking Online. *Journal of Business Communication*. 44 (1), 13–35.
- Im, E.-O. & Chee, W. (2006). An online forum as qualitative research method: Practical issues. *Nursing Research*. 55 (4), 267–273.
- Kaplan, A.M. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*. 53 (1), 59–68.
- Kau, J.B., Linck, J.S. & Rubin, P.H. (2008). Do Managers Listen to the Market?. *Journal of Corporate Finance*. 14 (4), 347–362.
- Kietzmann, J.H., Hermkens, K., McCarthy, I.P. & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*. 54 (3), 241–251.
- Loughran, T. & McDonald, B. (2013). Measuring readability in financial disclosures. *Journal of Finance Forthcoming*, 1–44.
- Louis, H. & Sun, A. (2010). Investor Inattention and the Market Reaction to Merger Announcements. *Management Science*. 56 (10), 1781–1793.
- Lu, Y. & Yang, D. (2011). Information exchange in virtual communities under extreme disaster conditions. *Decision Support Systems*. 50 (2), 529–538.
- Luo, Y. (2005). Do Insiders Learn from Outsiders? Evidence from Mergers and Acquisitions. *The Journal of Finance*. 60 (4), 1951–1982.
- Mohan, K., Kuamr, N. & Benbunan-Fich, R. (2009). Examining communication media selection and information processing in software development traceability: An empirical investigation. *IEEE Transactions on Professional Communication*. 52 (1), 17-39.
- OECD (2007). *Participative Web and User-Created Content - Web 2.0, Wikis, and Social Networking*. Paris: OECD Publishing.

- Pew Research Center. (2013). Social Media Update 2013. 16.03.2014, from <http://www.pewinternet.org/2013/12/30/social-media-update-2013/>.
- Pfarrer, M.D., Pollock, T.G. & Rindova, V.P. (2010). A Tale of Two Assets: The Effects of Firm Reputation and Celebrity on Earnings Surprises and Investors' Reactions. *Academy of Management Journal*. 53 (5), 1131–1152.
- Schmidt, J. (2007). Blogging Practices: An Analytical Framework. *Journal of Computer-Mediated Communication*. 12 (4), 1409–1427.
- Stieglitz, S. & Dang-Xuan, L. (2013). Emotions and Information Diffusion in Social Media—Sentiment of Microblogs and Sharing Behavior. *Journal of Management Information Systems*. 29 (4), 217–248.
- Wattal, S., Schuff, D., Mandviwalla, M. & Williams, C. B. (2010). Web 2.0 and Politics: The 2008 U.S. Presidential Election and an E-Politics Research Agenda. *MIS Quarterly*. 34 (4), 669–688.
- Weiss, A., Lurie, N. & Macinnis, D. (2008). Listening to Strangers: Whose Responses Are Valuable, How Valuable Are They, and Why?. *Journal of Marketing Research*. 45 (4), 425–436.
- Yook, K. (2003). Larger return to cash acquisitions: Signaling effect or leverage effect?. *The Journal of Business*. 76 (3), 477–498.
- Zülch, M.J., Rajagopalan, B. & Muntermann, J. (2014). Drivers of Information Quantity: The Case of Merger-Acquisition Events. In *Proceedings of the 18th Pacific Asia Conference on Information Systems (PACIS 2014)*. Chengdu, China.