

---

# Money as a Social Currency to Manage Group Dynamics: Red Packet Gifting in Chinese Online Communities

**Ziming Wu**

The Hong Kong University of  
Science and Technology  
Kowloon, Hong Kong  
zwual@connect.ust.hk

**Xiaojuan Ma**

The Hong Kong University of  
Science and Technology  
Kowloon, Hong Kong  
mxj@cse.ust.hk

Permission to make digital or hard copies of part or all 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. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author.  
Copyright is held by the owner/author(s).  
*CHI'17 Extended Abstracts, May 06-11, 2017, Denver, CO, USA*  
ACM 978-1-4503-4656-6/17/05.  
<http://dx.doi.org/10.1145/3027063.3053153>

**Abstract**

Gifting is a primal practice to establish and maintain relationships within social communities. The integration of online transaction services into social networking platforms makes it possible to exercise (monetary) gifting in the digital world. Using WeChat Red Packet as an example, this paper provides a novel perspective of how digital social currency is shaping social experience and group dynamic in online communities. We gain an in-depth understanding of Chinese users' perceptions and behaviors via an archival analysis of Red Packet activities in 16 WeChat groups, a survey with 300 WeChat users, and an interviews with 20 participants.

**Author Keywords**

Gifting; social currency; red packet; online group dynamics.

**ACM Classification Keywords**

H.5.3. Group and Organization Interfaces: Computer-supported cooperative work.

**Introduction**

Gift giving, a primitive phenomenon and long-term practice of sociality in our everyday lives [12], has emerged in the digital world. For example, users' sharing of photos and videos over the Internet can be viewed as gifting in action [1, 17]. The recent rise of



Figure 1. Screenshots of WeChat Red Packets for stimulation (up) and for welcoming new group members (down).

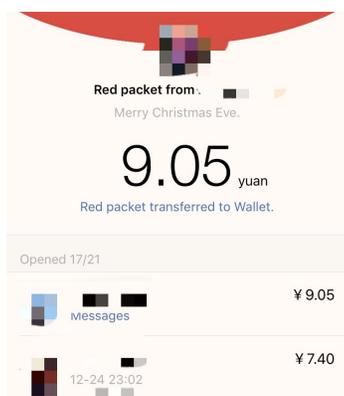


Figure 2. Receipt of WeChat group Red Packets for celebrating Christmas.

social commerce, i.e., online transactions in social networking contexts [19], has provided a fertile ground for a thriving gift economy [1, 18]. Moreover, sending gift money instead of buying actual items is becoming a popular practice among online communities [7]. Although often used as a material representation of market exchange, money also has social and cultural significance [26]. In certain scenarios, its allocation and quantity may serve as a token of social relationships, transcending the utilitarian value [26]. Gift money is one of such “special monies”, ranging from a Christmas bonus to employees, wedding gift cards and vouchers, to tips at a restaurant.

In particular, many Asian (especially Chinese) cultures have a long-standing tradition of giving lucky money in a red packet as a token of celebration or appreciation at special occasions, which occurs in families, business [13, 11], and even the public service [24] settings. Introducing this practice into the digital space, WeChat, a popular Chinese social networking service, has launched a feature called Red Packet (a.k.a. Red Envelope) within its digital wallet WeChat Pay[24], which quickly became a national craze during the Chinese New Year period in 2015 and 2016 [7].

Prior lab studies suggest that tie strength and group participation rate in red packet activities may influence lucky money gifting behaviors [4]. However, there is a lack of investigation into 1) what are the motivations and scenarios of gifting money through Red Packets in online communities? 2) How does Red Packet as a monetary gift influence group dynamic? And 3) what are users’ perceptions and potential social norms established in the process? To address these questions, we conduct an archival analysis of Red

ID	Theme	St.	Size	#Day	#Msg	#RP
1	Alumni: activity	L	230	82/82	2.30k	37
2	Alumni: info	D	423	191/19	2.04k	25
3	Female: diverse	L	500	304/30	20.20	11
4	Female: similar	D	241	423/45	61.00	40
5	City: cultural	L	126	340/34	0.48k	19
6	City: financial	D	367	106/16	1.50k	6
7	Career: design	L	368	345/46	2.88k	59
8	Career:	D	46	19/47	0.20k	2
9	Org.: regional	L	214	150/20	3.45k	37
10	Org.:	S	87	34/480	0.68k	8
11	Work: long-term	L	7	453/45	2.36k	15
12	Work: short-term	L	35	78/117	0.94k	1
13	Interest: reading	L	98	161/48	0.49k	6
14	Interest: health	L	500	225/25	2.68k	10
15	Event: gala	D	139	57/424	1.26k	7
16	Event: seminar	S	357	18/61	0.92k	4

**Table 1.** Attributes of the 16 WeChat groups, including the key theme of each group, style of management (L=led by founder, D=decentralized, S=semi-led), group size, the number of active days versus the total number of days under monitoring, the number of group messages, and the number of Red Packets.

Packet events in 16 different WeChat groups, a survey with 300 WeChat users, and interviews with 20 participants.

### Related work

Gifting is a conceptual social practice that integrates four functions, i.e. communication, social exchange, economic exchange and socialization [30]. Gifting can affect interpersonal relationship by reshaping social behaviors [29, 31] and evoking social emotions [28, 32]. Giving such benefits, gifting practice have been adopted in online communities to establish and sustain social connections [33].

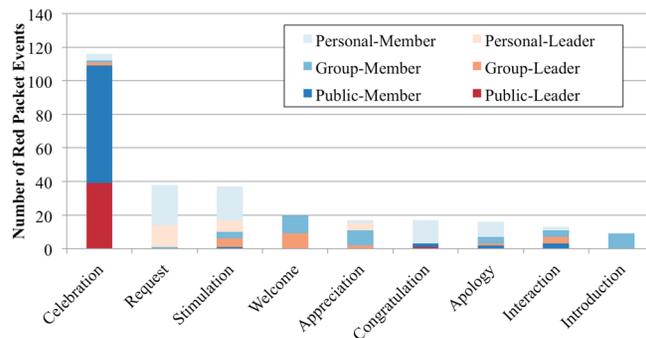


Figure 3. (Archival) Distributions of the numbers of Red Packet the contexts, purposes, and roles of the senders.

Previous ethnographic studies reveal that young adults use their mobile phones and text messages stored in the devices to participate in ritual gift exchange [20]. Researchers also look into gifting behaviors in mediated social networks. A typical example is Internet users’ contribution of digital goods that they create or own, e.g., photos, music, videos, etc., over social networking platforms [1, 17, 18]. The emergent social commerce makes it easier to purchase and send actual gifts to friends over social networking sites. For example, users can purchase items that their friends liked on Facebook through Amazon, or even directly via buyable pins shared on Pinterest [10, 16]. Some services enable money transfer between individual accounts within its social network, e.g., Facebook [5] and Venmo [21], making it possible to bestow money as a gift online. WeChat’s Red Packet function creates a special channel for such a purpose.

On one hand, in the real world, giving and receiving physical red envelopes is a common way to shape social relationships (a.k.a. guanxi in the Chinese culture) [13, 11,3]. On the other hand, existing literature shows that generalized reciprocity, altruism and bonding value [31, 23, 6], three characteristics related to Red Packet gifting, can affect member participation in online communities [23, 18]. Therefore, it is interesting to explore the potential of leveraging Red Packet gifting to manage group dynamics, through analysis of archival, survey, and interview data.

### Methodology

#### Part 1: ARCHIVAL ANALYSIS

To understand users’ actual practices, we perform an archival analysis of Red Packet events in 16 WeChat groups of different characteristics (Table 1). In total, we collect 287 Red Packet activities from the 16 groups selected by convenience sampling due to private issues. We manually record the timestamp, associated messages, role of the sender (group leader versus member), targeted recipient(s) (all members or a specific person), and related responses in the group chat for each Red Packet. Three researchers collectively label the context and purpose of each activity via open coding. We identify three contexts, i.e., public events (e.g., holidays), group activities, and personal matters, as well as nine categories of purposes, i.e., apology, appreciation, celebration, congratulation, interaction, introduction, request, stimulation, and welcome. Since the archival data has no information on the amount of the attached money, the actual recipients of the gifts, and whether they took consequent actions without mentioning in the group chat, it is hard to fully assess the efficacy of those activities. So we further conduct a survey and an interview to attain more details.

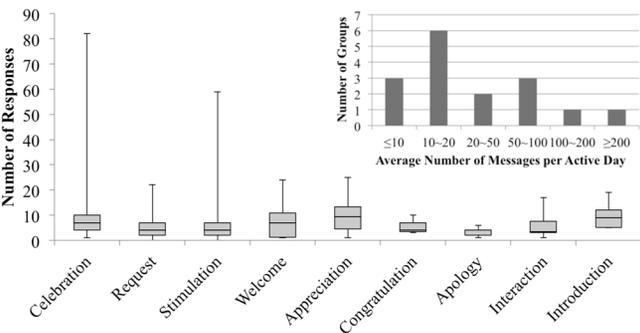


Figure 4. (Archival) Box plots of the distributions of the numbers of responses to different kinds of Red Packets, and histogram of average number of messages per active day (upper right).

WeChat’s Red Packet feature allows users to post a digital red envelope with real cash in specified group(s). Each red packet can contain up to 200RMB (no lower bound). The sender can specify the number of recipients, decide whether each recipient will get an even or randomized share of the money, and customize the message on the cover. Competition, the sense of “luck”, and possible financial gains turn such money gifting into an exciting, game-like online social activity [9].

	Survey	Interview
Male	48%	45%
Female	52%	55%
Age: <21	14%	5%
Age: 21-30	48%	80%
Age: 31-40	28%	10%
Age: >40	10%	5%
Full-Time	59%	45%
Part/Stud.	41%	55%

Table 2: Demographic of 300 survey respondents and 20 interviewees.

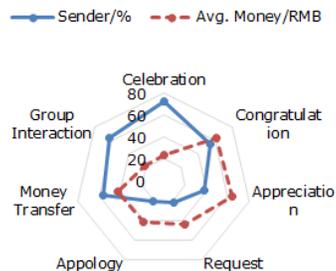


Figure 5. (Survey) Distribution of the percentage of Red Packets in different scenarios and their average attached monetary value.

**Part 2: SURVEY AND INTERVIEWS**

We recruit 300 WeChat Red Packet users via a Chinese online survey service. Moreover, we conduct an in-depth interview with 20 participants recruited from our social circle via WeChat. Each interview takes around 15 to 20 minutes and are audio recorded. Their demographic is shown in Table 2.

**Analysis and Discussion**

Via data analysis, we gain insights into the three research questions regarding Red Packet gifting.

*Q1: What are the motivations and scenarios of gifting money through Red Packets in online communities?*

To the interest of users who enjoy the information and social value of WeChat groups, it is crucial to sustain group connectedness through investment in social currencies [22]. Money gifting is one of such social currencies. Figure 3(archival) and Figure 5(survey) show the distribution of Red Packets sent for diverse purposes under various social contexts from users of different roles. Figure 4(archival) shows the numbers of individuals responding in group chats to the monetary gifts intended for all members. On average, a single Red Packet can evoke 6.92 explicit responses (SD=2.29), while nine out of the 16 groups have fewer than 20 messages exchanged on an active day (Figure 4 top). This suggests that Red Packets have the ability to induce prompt engagement. A member in WeChat Group G6 deliberately posted a red envelope to test its attractiveness, showing that 59 out of 367 people accepted the gift within 10 minutes, whereas the usual activeness of G6 is 10.68 messages per day. Our survey also confirms the arousal effect of Red Packets. 52% of the respondents would always react actively after receiving a Red Packet, and another 33% would

do so based on the actual scenarios. Only 13% fail to get active feedback after sending out Red Packets.

Users exploit the benefits of Red Packet in arousing group dynamic in different scenarios. First, 41% of the monetary gifts are used to invite members to join the celebration of public holidays and triumphs (39%), group achievement (e.g., membership reaching 100), and personal success (e.g., business and marriage), which is also the most common use of a red envelope in the physical world (Figure 3). Second, when someone joins a group, posting a welcome Red Packet (7%) can encourage existing members to greet the newcomer (Figure 1 top). Alternatively, newcomers can bestow some lucky money as part of the self-introduction (3%) to attract more attention. Archival analysis shows that an average of 9.33 people said hello to new members joining with a Red Packet (Figure 4), while in the cases without it, at most three people (and most often none) would show up. Third, when group activeness goes down, a red envelope can serve as the pebble splashing the pond (3%, Figure 1 top). For example, a person in a regional organization group G9 put down a Red Packet during a discussion on a topic of his interests. Fourth, if an individual has some personal matter that wants immediate, wide attention, some gift money is a good stepping stone (22%). For example, in the alumni information sharing group G2, a person seeking help for a family member’s surgery with a red envelop attached received two responses and 19 blessings. In contrast, a similar post in the same group without the gift had no respondent.

*Q2: How does Red Packet influence group dynamic?*

We propose that there are three characteristics of Red Packets contributing to group dynamic:

## CHARACTERISTICS OF RED PACKET GIFTING 1: BONDING VALUE

An important aspect of a Red Packet that one can leverage is its social and symbolic meanings. Users either acknowledge this in the note on the wrap or as a separate message. The lucky money can be a token of appreciation (7%). For example, in the working group G12, the leader sent a “fighting” red envelope to the members staying up late for the project. The gift can also express one’s apology (6%). For instance, a member of the all-female group G4 posted a “Pretty and happy everyday” gift for her sharp remarks in a discussion. Congratulation, e.g., to wedding announcement, is another common connotation of gift money (6%). Red Packet gifting can serve as a social lubricant to smooth interaction (3%, e.g., too shy to reply), relieve tension, and enhance group bonding. As a user said, “Let the Red Packet speak.”

## CHARACTERISTICS OF RED PACKET GIFTING 2: ALTRUISM

In many of the scenarios described above, the act of gifting is other-oriented. In particular, the nine group leaders that we can identify in the archival analysis contributed 35% of the public and group red envelopes. Feeling responsible for managing group participation, they sent out gift money for 93% of the holiday celebration events recorded (sometimes till their wallets were empty), and were the first to do so in 83% of the cases. The leaders welcome newcomers with lucky money on behalf of the groups 45% of the time. We record three cases in which the members ask the new recruits for red envelopes, but the leaders took the gifts out of their own pockets instead. The leader of G7 even bestowed four red envelopes for other members’ book, experiment, and workshop advertisements. Many people recognize the leaders’ dedication with designated thank you Red Packets. Some active

members also put in gift money to enhance the growth (4%), stability (2%), and liveness (2%) of the groups.

## CHARACTERISTICS OF RED PACKET GIFTING 3: RECIPROCITY

Unlike paying virtual currency for desired actions [25], Red Packet gifting carries flexibility and indeterminateness of reciprocal behaviors [8]. Prior literature suggests that positive reciprocity is more likely to occur in groups of closer relationships with higher interpersonal trust [27]. Therefore, though people have little control over whether others would accept their gifts and/or act, if expected, as a return, they tend to show their sincerity through the gifting behaviors. For example, during the online interview with a special guest via group chats, a person in the alumni activity group G1 posted a red envelope saying, “People from Beijing, let’s show our agreement.” Soon a relay of Red Packets occurred. Many people try to show their support if accepting a request-related gift, by either performing the intended behaviors (sometimes with screenshots as a proof) or giving verbal feedback. In G5, a member apologized and returned the gift money after realizing that she could not help with the matter.

*Q3: What are users’ perceptions and potential social norms established in the process?*

Red Packet gifting has been a general social media activity that performs positive effect on user activeness. Both the survey (87%) and interview (95%) results confirm the benefits of Red Packets. On one hand, it can ameliorate the bond between senders and receivers (relational). As an interviewee said, “I have much more communications with my friends and parents after using Red Packets. Sometimes, I send them a Red Packet just to say hi. I feel much closer to them... (P5, female, aged 21 to 30)”. This suggests

that other than a social currency, Red Packet also serves as a new mean of communication. On the other hand, it plays a role as a social service that helps get problem solved (functional). Fifteen interviewees claim that they can get more support instantly after attaching a Red Packet to a group request.

Attaching money is a typical feature of Red Packets. As for physical red envelope, there are unspoken rules for senders to follow when deciding on how much money to enclose given the recipients and scenarios. However, there is no such constraint in the practice of Red Packets. Most of the survey respondents do not mind the actual amount of money attached in a Red Packet. Also, 85% of the interviewees suggest that Red Packet gifting is not about the monetary value, but the social messages conveyed through it, especially in groups consisting of close ties. As a participant said, *"We simply use Red Packets to express our best wishes or for fun. It's nothing to do with the amount of money. We often choose a lucky number as the amount, such as '8.88' for good fortune (P3, female, aged 21 to 30)."*

Undoubtedly, there are negative practices of Red Packets accused by users. Two interviewees point out that social pressure (e.g., frequently asked for Red Packets by friends and always have to attach a Red Packet to a request) and competition (to see who send or receive Red Packets with highest monetary value) may sometimes lead to unpleasant experience.

In sum, as a social currency to facilitate group dynamics, Red Packet functions with both its bonding value and monetary value, with the former often perceptually outweighs the latter in general practice. Therefore, it would be beneficial if the digital gifting

system can help enrich the bonding value of a Red Packet by suggesting customized the cover message, proper monetary value with social implication, as well as timing and candidate recipients to maximize the likelihood of getting attention and feedback. In particular, Red Packet may be relatively less effective in building new connections, as 70% interviewees feel reluctant or awkward opening a Red Packet from strangers even if they are in the same WeChat group. The participants are more protective and conservative on getting involved in financial activities with strangers. Better framing and supplementary ice breaking mechanisms would be necessary. In addition, as some interviewees mentioned, the group activeness aroused by Red Packets may only last for a short period. How to maintain a long-term effect needs further investigation.

### **Conclusion**

This paper provides an interesting perspective of how digital social currency is shaping social experience and group dynamic in online communities via an archival analysis of Red Packet activities in 16 WeChat groups, a survey with 300 WeChat users, and interviews with 20 participants. Results suggest that it is the bonding value, altruism and reciprocity of Red Packets that help manage group dynamic. We further identify the relational and functional benefits of Red Packets, which has little to do with the actual monetary value.

### **Acknowledgment**

We thank the WeChat-HKUST Joint Lab on AI Technology (WHAT LAB) grant#15161440-0.

## References

1. Richard Barbrook. 1998. The Hi-Tech Gift Economy. *First Monday*. 3 (12).
2. Helmuth Berking. 1999. *Sociology of giving*. Sage, London.
3. Liqun Cao, Lanying Huang, and Ivan Y. Sun. 2014. Policing in Taiwan: from authoritarianism to democracy. Vol. 18. Routledge. DOI=<http://dx.doi.org/10.1080/00472336.2014.976833>
4. Na Chen and Pei-Luen Patrick Rau. 2016. Group Participation Influence on Members' Gifting Behaviors in a Social Game. In *International Conference on Cross-Cultural Design*, 34-42. Springer. DOI=[http://dx.doi.org/10.1007/978-3-319-40093-8\\_4](http://dx.doi.org/10.1007/978-3-319-40093-8_4)
5. Facebook. Payment in Messenger. Retrieved August 22, 2016 from <https://www.facebook.com/help/863171203733904/>.
6. Jacques T. Godbout and Alain C. Caille. 1998. *World of the Gift*. McGill-Queen's Press-MQUP.
7. Huifeng He. 2016. WeChat red envelopes help drive online payments use in China. Retrieved August 23, 2016 from <http://www.scmp.com/tech/article/1913340/wechat-red-envelopes-help-drive-online-payments-use-china>.
8. Aafke Komter. 2007. Gifts and social relations the mechanisms of reciprocity. *International Sociology*. 22, 1: 93-107. DOI=<http://dx.doi.org/10.1177/0268580907070127>
9. Wei Liu, Xudong He, and Peiyi Zhang. 2015. Application of Red Envelopes—New Weapon of WeChat Payment. In *2015 International Conference on Education, Management, Information and Medicine*. Atlantis Press. DOI=<http://dx.doi.org/10.2991/emim-15.2015.139>.
10. Victor Luckerson. 2015. Here's Why 'Buy Buttons' Are Invading the Internet. Retrieved on August 22, 2016 from <http://time.com/4075560/buy-button-facebook-youtube-pinterest/>.
11. Yadong Luo. 2008. The changing Chinese culture and business behavior: The perspective of intertwinement between guanxi and corruption. *International Business Review*. 17, 2: 188-193. DOI=<http://dx.doi.org/10.1016/j.ibusrev.2008.02.002>
12. Marcel Mauss and Wilfred Douglas Halls. 2000. The gift: The form and reason for exchange in archaic societies. 378. WW Norton & Company.
13. Andrew Millington, Markus Eberhardt, and Barry Wilkinson. 2005. Gift giving, guanxi and illicit payments in buyer–supplier relations in China: Analysing the experience of UK companies. *Journal of business ethics*. 57, 3: 255-268. DOI=<http://dx.doi.org/10.1007/s10551-004-6712-y>
14. Atif Nazir, Alex Waagen, Vikram S. Vijayaraghavan, Chen-Nee Chuah, Raissa M. D'Souza, and Balachander Krishnamurthy. 2012. Beyond friendship: modeling user activity graphs on social network-based gifting applications. In *Proceedings of the 2012 ACM conference on Internet measurement conference (IMC '12)*. ACM, New York, NY, USA, 467-480. DOI=<http://dx.doi.org/10.1145/2398776.2398826>
15. Periscope. What are Hearts. Retrieved August 22, 2016 from <https://help.periscope.tv/customer/portal/articles/2051922-what-are-hearts->.
16. Pinterest. Retrieved August 22, 2016 from <https://www.pinterest.com/>.

17. Lee Rainie, Joanna Brenner, and Kristen Purcell. 2012. Photos and videos as social currency online. Pew Internet & American Life Project.
18. Jörgen Skågeby. 2010. Gift-giving as a conceptual framework: framing social behavior in online networks. *Journal of Information Technology*. 25, 2: 170-177. DOI=<http://dx.doi.org/10.1057/jit.2010.5>
19. Andrew T. Stephen and Olivier Toubia. 2010. Deriving value from social commerce networks. *Journal of marketing research*. 47, 2: 215-228. DOI=<http://dx.doi.org/10.1509/jmkr.47.2.215>
20. Alex S. Taylor and Richard Harper. 2002. Age-old practices in the 'new world': a study of gift-giving between teenage mobile phone users. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '02)*. ACM, New York, NY, USA, 4, 439-446. DOI=<http://dx.doi.org/10.1145/503376.503455>
21. Venmo. Retrieved August 22, 2016 from <https://venmo.com/about/product/>.
22. Norma C. Ware, Kim Hopper, Toni Tugenberg, Barbara Dickey, and Daniel Fisher. 2007. Connectedness and citizenship: Redefining social integration. *Psychiatric Services*. 58, 4: 469-474. DOI=<http://dx.doi.org/10.1176/ps.2007.58.4.469>
23. M. McLure Wasko and Samer Faraj. 2000. "It is what one does": why people participate and help others in electronic communities of practice. *The Journal of Strategic Information Systems*, 9, 2: 155-173. DOI= [http://dx.doi.org/10.1016/S0963-8687\(00\)00045-7](http://dx.doi.org/10.1016/S0963-8687(00)00045-7)
24. WeChat. Group Chat. Retrieved on August 23, 2016 from <http://www.wechat.com/en/features.html#group>.
25. Jiang Yang, Mark S. Ackerman, and Lada A. Adamic. 2011. Virtual gifts and guanxi: supporting social exchange in a chinese online community. In *Proceedings of the ACM 2011 conference on Computer supported cooperative work (CSCW '11)*. ACM, New York, NY, USA, 45-54. DOI=<http://dx.doi.org/10.1145/1958824.1958832>
26. Viviana A. Zelizer. 1989. The Social Meaning of Money: "Special Monies". *American Journal of Sociology*. 95, 2: 342-77. <http://www.jstor.org/stable/2780903>.
27. Offer, A. (1997). Between the gift and the market: the economy of regard. *The Economic history review*, 50(3), 450-476. DOI=<http://dx.doi.org/10.1111/1468-0289.00064>
28. Chakrabarti, R. and Berthon, P. (2012), Gift giving and social emotions: experience as content. *J. Public Affairs*, 12: 154-161. DOI= <http://dx.doi.org/10.1002/pa.1417>
29. Butler, B. S. and Matook, S. 2015. Social Media and Relationships. *The International Encyclopedia of Digital Communication and Society*. 1-12. DOI=<http://dx.doi.org/10.1002/9781118767771.w.biedcs097>
30. Belk, R.W. (1979). Gift-giving behaviour. *Research in Marketing*, 2, pp. 95-126.
31. Skågeby, J. (2010). Gift-giving as a conceptual framework: framing social behavior in online networks. *Journal of Information Technology*, 25(2), 170-177. DOI= <http://dx.doi.org/10.1057/jit.2010.5>
32. Prendergast, C., & Stole, L. (2001). The non-monetary nature of gifts. *European Economic Review*, 45(10), 1793-1810. DOI=[http://dx.doi.org/10.1016/S0014-2921\(00\)00102-1](http://dx.doi.org/10.1016/S0014-2921(00)00102-1)
33. Lampel, J., & Bhalla, A. (2007). The role of status seeking in online communities: Giving the gift of experience. *Journal of Computer - Mediated Communication*, 12(2), 434-455. DOI=<http://dx.doi.org/10.1111/j.1083-6101.2007.00332.x>