Digital Gifts at the Workplace: An Exploratory Study on the Impact of E-Hongbao

Chiachi Chang, Xi’an Jiaotong-Liverpool University, China  
https://orcid.org/0000-0003-2192-2939

Eddy Fang, Xi’an Jiaotong-Liverpool University, China*  
https://orcid.org/0000-0002-7865-5213

Yuliani Suseno, Royal Melbourne Institute of Technology, Australia  
https://orcid.org/0000-0002-7865-5213

Marek Hudik, Prague University of Economics and Business, Czech Republic  
https://orcid.org/0000-0002-1670-2555

ABSTRACT

This study builds on the emergence of new gifting practices using e-hongbaos which are monetary gifts transferred between individuals made possible by digital communication platforms. This is an exploratory study on the impact of these innovations on intra-organizational relationships. Three types of intra-organizational relationships are considered: the employee’s relationship with the organization, with the team, and with the manager. The findings of the study indicate positive impacts of e-hongbao at all organizational levels. The authors also identify the varying effects of e-hongbao on intra-organizational relationship outcomes depending on the occasion of gifting, as well as the mode, direction, and measure. Specifically, ‘group’ e-hongbao, a gamified group-gift enabled by the digitalization of gifting, has the strongest influence on intra-organizational relationships. The authors discuss the implications of these findings for theory and practice in the workplace and also offer future research directions.

KEYWORDS

China, Digital Innovation, E-Hongbao, Gifting, Intra-Organizational Relationships, Workplace

1. INTRODUCTION

Despite the growing body of research on digital innovation and the rich conceptualizations of the adoption of digital technologies, the outcomes of digital innovation have not been extensively examined in the literature (Kohli & Melville, 2019). In examining innovation as a field of research, Janssen et al. (2004, p. 129) outlined that “the virtually exclusive focus on determinants of innovation implies that too little attention has yet been given to the outcomes of innovation.” Interestingly, this also applies to the limited number of studies examining the outcomes of digital innovation. In particular, to our knowledge, the outcomes of digital innovation on intra-organizational relationships have not been examined. While there are several studies that have outlined the role of an innovative environment and/or innovative work behavior in influencing firm’s performance (e.g., Dul and Ceylan, 2014), there are

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very few studies examining the impact of digital innovation on work relations within an organization. Driven by this gap in the literature, we focus on exploring the outcomes of digital innovation in the context of digital gifting in the workplace and how this influences intra-organizational relationships.

In exploring digital gifts and gifting practices, we set this research in the context of China, one of the leading countries for the implementation and diffusion of digital innovations (McKinsey Global Institute, 2017). The concept of a ‘cashless society’, for instance, started as early as the 1950s as a futuristic projection in Western countries (Garcia-Swartz et al., 2006), but it is in China that most advances were made over the past decade, which is also where the first cashless society is expected to emerge in the near future (Abkowitz, 2018). The implementation of digitalization in China is led by the ubiquity of platforms such as WeChat and Alipay in every aspect of life, ranging from applying for micro-loans to settling driving penalty points. Indeed, a combination of the rapidly increasing market penetration of internet usage, with 802 million users as of 2018 (China Internet Network Information Centre) and the high degree of consolidation of digital service providers in China have enabled a rapid increase in the scope and pace of digitalization. In this context, many new phenomena occurring in China are bound to be novel in nature with yet-to-be-determined market and social outcomes.

In this paper, we explore new questions opened up by rapid digitalization in China by conducting an exploratory study on the impact of digital gifting – *e-hongbao* - at the workplace. Traditionally, *hongbao* (meaning ‘red packet’ in Mandarin Chinese) are red envelopes containing banknotes which are exchanged on special occasions such as the Chinese New Year (CNY), weddings, or other celebrations. The motivation behind the gifting of *hongbao* varies, including tradition, altruism, reciprocity, networking, or even bribery (Siu, 2001). With WeChat and Alipay increasingly emerging as the preferred payment method, an electronic red packet or *e-hongbao* function became available in 2014 to send ‘electronic money’ to one’s contacts. Within just four years after its launch, *e-hongbao* has become a popular way of gifting, with 768 million people exchanging *e-hongbao* through WeChat on Chinese New Year’s eve 2018 (Tencent, 2018).

Two main ways of gifting *e-hongbao* are now available and represent innovations at different levels: (i) a one-to-one gift in a private chatroom, which effectively brings the existing tradition of *hongbao* to the digital sphere; and (ii) a gamified version involving a group gift from one sender in a group chatroom, with a randomized amount for each receiver. The former, while appearing to be a simple application of the *hongbao* custom to online channels, differs in terms of how, when, and under which context it is gifted (Hudik & Fang, 2019), thereby forming a new social practice. The latter represents an entirely new, technology enabled, digital gifting practice that can be used at the workplace. For institutions and firms, both of these gifting practices are organizational innovations, which are defined as mechanisms used by organizations to respond to changing external pressures and competition by providing unique products, services, systems or methods (Alharbi et al., 2019).

Against this backdrop of *e-hongbao* as a new digital practice in China, we seek to consider the effect of *e-hongbao* gifting on employees’ relationship with their organization, team, and manager. We argue that digitally enabled innovations can play an important role in altering work relations and interactions, and as such, we focus on examining work relations at different levels.

As a first engagement between digital gifting and organizational behavior, this study is exploratory in nature and aims to establish the potential role of new digital practices on a range of outcomes typically studied in the organizational behavior literature. These include organizational-level relations such as Perceived Organizational Support (POS) and Organizational Identification (OI), team-level relations such as Prosocial Motivation (PM), Team Satisfaction (TS), and Team Cohesion (TC), and manager-employee dyadic relationship such as Leader-Member Exchange (LMX). These constructs are further defined in Section 3.

These work relations are selected to provide a first assessment of the broader impact of these digital innovations at the workplace based on the extent of the literature related to these factors and their relationships with innovation. For example, Lyubovnikova et al. (2018) examined the effects of perceived organizational support on team productivity and innovation, while Liu et al. (2020)
found that organizational identification can help individuals to develop creativity. Other studies have considered the effect of prosocial motivation on innovation (Bendell, 2017), the effect of innovation on satisfaction (Cheng et al., 2010), the relationship between cohesion and innovation (e.g., van der Voet & Steijn, 2020) as well as the link between leader-member exchange and innovation (Montani et al., 2017). These factors are largely examined as antecedents to innovation in existing studies but focusing on the impact of digital innovation on work relations is critical given the need to further understand how innovation alters current working relationships within an organization through the introduction of a new product/process/service or even a new way of doing things. The emphasis on work relations also allows disentangling gift exchanges from those that occur within families, which are often motivated by filial piety or other social norms around intra-household transfers. At the same time, given the relatively small amounts exchanged and the digital footprint left by those exchanges, the issue of bribery (often associated with gifting in business relations in emerging economies) can also be set aside. This essentially enables us to better understand the context of gift exchanges at work and how this influences employee relationships in the workplace.

Based on survey data of 994 employees, our results indicate positive impacts of e-hongbao at all organizational levels. We also identify the varying effects of e-hongbao on intra-organizational relationship outcomes depending on the occasion of gifting as well as the mode, direction, and measure. Specifically, ‘group’ e-hongbao, a new type of gifting channel enabled by digitalization, has the strongest influence on intra-organizational relationships. This paper hence highlights our contributions to the literature of digital innovation on several fronts. First, the emergence of e-hongbao is not merely an electronic alternative to physical hongbao, but it has allowed new gifting options and new ways of sharing to emerge. In comparison to prior studies that presumed the discrete nature of innovation, digital innovation is less bounded, allowing new possibilities in innovation processes and outcomes (Nambisan et al., 2017). For example, Dougherty and Dunne (2012) highlighted that digitalization serves as a new source of knowledge in managing complex innovation. In the same way, the digitalization of hongbao opened up new dimensions for their use (e.g., group gifting), which provides us with a novel and valuable angle to study the gifting phenomenon.

Second, we highlight the dynamic exchange process of gifting and how this influences intra-organizational relationships. We explore not only the ways e-hongbaos are gifted, but also examine the outcomes of e-hongbao gifting in improving the different types of relationships at the workplace. This directly contributes to the innovation literature as studies examining digital innovation outcomes are still limited (Kohli & Melville, 2019). At the same time, with this exploratory study, we establish the existence of relationships which will hopefully form the basis for further research and modelling on organizational behaviour in the increasingly digitalized workplace.

The rest of this paper is structured as follows. In Section 2, we outline the context of the study by highlighting the literature around gifting. We then elaborate on the emergence of e-hongbao in recent years. We also illustrate a detailed description of the gifting options of e-hongbao on WeChat. Next, we present the theoretical basis of this study, presenting the literature on POS, OI, PM, TS, TC, and LMX, and our theoretical model and hypotheses. Section 4 describes the methodology, including the sample, procedures, and measures in this study, followed by the presentation of our findings. We then discuss these and provide theoretical and practical implications of the study, as well as the limitations and directions for future research.

2. GIFTING AND E-HONGBAO

In Chinese communities around the world, the practice of gifting hongbao has stood as one of the main means of gifting, both within and outside of family networks. With the rapid diffusion of payment platforms such as WeChat and AliPay, the practice of gifting hongbaos was propelled into the digital sphere in 2014 with Tencent introducing an e-hongbao function for individuals to exchange ‘money’. After a series of marketing campaigns to promote digital hongbao in 2015 (Bischoff, 2015),
e-hongbao has become one of the most common gifting tools in China. CNY’s Eve 2018 has seen the number of e-hongbao users increased by 10% compared to the previous year, and the gifting of e-hongbao reached nearly 800 million users (Lucas, 2018).

2.1 Gift-Giving and Receipt
An important reason why individuals engage in gift-giving is to start or enhance a cooperative relationship (Johnson et al., 2001). Gift exchanges often serve as signals that can help to distinguish cooperative individuals from uncooperative ones (e.g., Prendergast and Stole, 2001). The rationale behind this practice is that only the individuals who seek a long-term relationship are willing to incur short-term costs in the form of gift-giving. For example, Yamaguchi et al. (2015) provided evidence supporting the signaling model of gift-giving in friendships and romantic relationships. In addition, gift exchanges can also be viewed as a way to accumulate and maintain social capital (Dolfsma et al., 2009), which is often understood in a broad sense as constituting relationship ties that can be utilized to achieve specific outcomes (Suseno and Pinnington, 2018). The practices of gift-giving and social capital in the context of guanxi, the complex network of relationships in Chinese society, have also been widely studied (e.g., Qi, 2013).

Many studies, mostly using data from Western countries, find that money is traditionally not acceptable as a gift (Mortelmans & Sinardet, 2004). Starting with the seminal work of Waldfogel (1993), it is, however, generally recognized that in-kind gifts are inefficient as the receiver very often values the gift less than what the giver has paid for them. Theoretical economic models hence prescribe, against commonly accepted practices, that altruistic givers should give money because in-kind gifts may be unappreciated by the receivers (Waldfogel, 2002).

The general assumption of the unacceptability of money as a gift also stands true in China as directly handing out cash is generally viewed as inappropriate (Hudik and Fang, 2020). However, in China and some other Asian cultures, money wrapped in the form of red packets (hongbao) is commonly used as a gift (Siu, 2001). The popularity of hongbao as gifts in Chinese cultures can essentially be explained by the complex nexus of traditions and rituals regarding the exchange. Indeed, gifting cash placed in red envelopes is an acceptable and widespread practice in Chinese cultures (Siu, 2001). The acceptance of gifting currency hence opened the door for new digital alternatives to emerge.

2.2 e-Hongbao Platform
For simplicity, this section details the operation of the e-hongbao function on the WeChat mobile application only. Similar functions are also available on the AliPay application, but at the time of writing, WeChat is by far the most common option, capturing almost all of the digital gifts exchanged in the country (Armstrong and Wang, 2019). The description here is based on version 7.0.3 of the WeChat application as of March 2019. The e-hongbao function, denoted as ‘Red Packet’, is directly embedded as one of the functions of every chatroom in the WeChat application.

There are two distinctive types of e-hongbao, and these are differentiated based on the number of recipients: one-to-one e-hongbao and group e-hongbao. In the case of the one-to-one e-hongbao, these are gifted in private chat rooms and transferred from a sender to a single receiver. This function in the WeChat application is a ‘simple’ electronic substitute to a ‘physical’ hongbao. The one-to-one e-hongbao is limited to RMB 200 per transfer, but the number of transfers is not restricted. It should be noted that the application also has a ‘transfer’ option, which is not called hongbao, and has no fixed limit in terms of the transferred amount.

For the group e-hongbao, these are gifted in group chat rooms from a sender to multiple receivers. This type of gifting is novel, and the function has also recently introduced various new possibilities brought by the digitalization of gifting. The sender inputs the total amount he/she wants to gift to the group and also the number of people to share the e-hongbao. The application will then assign a random amount to the receivers once they ‘open’ the e-hongbao. Receivers can then see the random amount they receive in comparison to what their peers in the group receive.
3. THEORETICAL FRAMEWORK

This section illustrates the theoretical background of intra-organizational relationships, focusing on three relationship levels: organizational-level (POS and OI), team-level (PM, TS, and TC), and dyadic level (LMX). Interestingly, studies in organizational behavior and innovation investigating these concepts have not extensively examined the antecedents of these constructs. This lack of engagement was established for all of the aforementioned relationships, including POS (Zhang et al., 2012), OI (Ngo et al., 2013), TS (de la Torre-Ruiz et al., 2014), and LMX (Aryee and Chen, 2006). Existing studies are primarily focused on these constructs as potential antecedents to innovation or innovative work behavior, but there are very few studies that consider these constructs as outcomes of innovation. Thus, exploring associations between the practices of e-hongbao – a new digital trend, and the various intra-organizational relationship outcomes, is warranted as this is an area that is relatively unexplored in scholarly literature.

3.1 Perceived Organizational Support

Perceived organizational support (POS) illustrates the extent to which employees perceive how much the organization values their contributions and cares for their well-being (Eisenberger et al., 2001). Grounded in the theory of social exchange (Blau, 1964), this concept highlights that an organization fulfills the socio-emotional needs of its employees, such as the need for affiliation, esteem, and respect. In return, employees are obligated to reciprocate by being committed to the organization. Employees therefore consider favorable or unfavorable treatment they receive from their organization; if they were to perceive that the organization treats them well, they would believe that the organization has a high POS to its employees. Such a perception of high POS often results in benefits for the employees as well as the organization.

Studies examining POS have found that employees who perceive that the organization provides high levels of POS are more likely to demonstrate psychological well-being (Riggle et al., 2009) and high commitment (Eisenberger et al., 2001). In addition, they are likely to display more favorable work attitudes and performance (Muse and Stamper, 2007), such as demonstrating in-role and extra-role behaviors (Riggle et al., 2009) and knowledge sharing (Yang et al., 2018). Consequently, they tend to experience low turnover intention, job stress, and absenteeism (e.g., Allen et al., 2003) and have increased organizational citizenship behaviors (OCB) (Kaufman et al., 2001).

3.2 Organizational Identification

Organizational identification (OI) is a process of self-definition, reflecting individual employees’ psychological attachment and how they define themselves with respect to the organization (Ashforth et al., 2008). Based on the social identity theory (Tajfel & Turner, 1986), OI embodies a cognitive self-categorization and identity connection between the employee and the organization, where the employee sees the organization as part of his/her identity (Dutton et al., 1994). Employees with high OI view the organization as self-defining where they feel their values are congruent, aligned, and inseparable from those of the organization (Brickson, 2013).

Several existing studies on OI have identified it as playing an important role in the exchange relationship between employees and the organization, thereby influencing certain outcomes. For instance, employees with high OI have been found to demonstrate high commitment (Foreman & Whetten, 2002) and work effort (Bartel, 2001). Ngo et al. (2013) indicated that OI leads to employees’ affective commitment, job satisfaction, and intentions to leave. Indeed, employees with high OI are shown to be willing to engage in behaviors that are even personally costly to them (Ashforth et al., 2008). They can also have a dark side (Conroy et al., 2017) in that they are more likely to engage in unethical pro-organizational behavior (Umphress et al., 2010). Li et al. (2015) further noted that OI could be a double-edged sword where one can be over-investing at work and consequently are more likely to neglect non-work roles.
3.3 Prosocial Motivation

Prosocial motivation (PM) reflects one’s desire to help others and promote the well-being of others. This action can be directed toward individuals or groups inside the organization such as colleagues, or outside the organization such as clients and suppliers (Grant & Berg, 2012). As noted by Grant (2007, p. 404), individuals who are prosocially motivated “are likely to invest time and energy in voluntary helping behaviors without being deterred by the personal costs of these behaviors.” Indeed, studies such as one done by Grant and Bolino (2016) suggest that individuals who are prosocially motivated can deplete their energy to serve others.

Research on PM has outlined its various outcomes, including OCB (Grant & Mayer, 2009), performance (Grant & Sumanth, 2009), creativity (Grant & Berry, 2011), and effectiveness (Hu & Liden, 2015). Prosocially motivated individuals are more likely to engage in perspective-taking (Grant & Berry, 2011), which is the cognitive process to understand the motives and feelings of others in a nonjudgmental way (Parker et al., 2008). Grant and Berg (2012) further noted that individuals who are prosocially motivated might be driven to achieve external rewards to avoid guilt, adhere to norms, or obtain positive self-rewards.

3.4 Team Satisfaction

Team satisfaction (TS) is important for the functioning of the team (Mathieu et al., 2008). Most existing studies indicate that TS is related to positive outcomes. For example, TS is positively associated with an individual’s self-efficacy for teamwork (de la Torre-Ruiz et al., 2014). Robert and You (2018) also found that TS is strongly related to the performance of virtual teams. When members of the team are dissatisfied with the intra-team relationships, information sharing can be inhibited, and team effectiveness is consequently affected (Tekleab et al., 2009). Interestingly, Kong et al. (2015) found that team member satisfaction is related to team performance when team agreeableness is low.

3.5 Team Cohesion

Team cohesion (TC) has been extensively examined in the management literature (Greer, 2012). A cohesive team is where team members are drawn to and motivated to achieve a task and remain as a team (Wendt et al., 2009). Although numerous studies have examined TC, findings are contradictory (Chiocchio & Essiembre, 2009). Some studies have found TC to be positively linked to team performance, such as innovation (e.g., Chiniara & Bentein, 2018). Cohesion has also been linked to creativity for new product performance (Im et al., 2013). Shaner et al. (2016) further indicated that within team cohesion and between team cohesion are related to new services performance. Other studies however note the negative effects of TC on performance. For instance, a cohesive team has been found to be more likely to experience conformity pressures and therefore, groupthink (Büschgens et al., 2013). Carbonell and Rodríguez Escudero (2019) further noted that team cohesion reduces the positive effect of team boundary spanning on new product competitive advantage.

One of the reasons for the conflicting findings is the fact that cohesion can imply different meanings, with some research conceptualizing cohesion in terms of a task (i.e., formal) while others conceptualize it as social (i.e., informal) cohesion (e.g., González et al., 2003). Task cohesion refers to the group’s commitment and integration to achieve the group task (Eys and Carron, 2001), while social cohesion reflects the extent to which the individual team members are socially integrated or bonded with each other (Shaner et al., 2016). In some teams, while the task cohesion may be high, the social cohesion is not that positive, or vice versa. The different conceptualizations of cohesion therefore suggest different outcomes.

3.6 Leader-Member Exchange

Leader-member exchange (LMX) represents the quality relationship between a manager and his/her subordinate/member (e.g., Graen & Uhl-Bien, 1995). LMX is based on the fundamental tenet that
employees consider their leaders as organizational agents, and they therefore generalize their exchange relationship with the leaders as reflective of their relationship to the organization. A subordinate who experiences a higher quality of LMX will view the relationship with his/her as a positive one.

Several studies have outlined the positive outcomes of LMX. Employees who are considered as being ‘in-group’ are more likely to demonstrate a high level of LMX, and they tend to be able to access information, knowledge, and resources from their leader. Consequently, they are more likely to show positive attitudes and behaviors (Dulebohn et al., 2012). LMX quality has been reported to be positively related to OCB (e.g., Anand et al., 2018) and job satisfaction (e.g., Fisk and Friesen, 2012). Martin et al. (2016) further highlighted that LMX leads to task performance, OCB, and negatively influences counterproductive performance. Lai et al. (2018) also noted that LMX could reduce followers’ job burnout.

3.7 Theoretical Model

The theoretical model of this study is presented in Figure 1.

As managers are often viewed as representatives of the organization, the employees’ perceptions of their managers could be generalized to the organizational level (Sluss & Ashforth, 2007). Employees who perceive that their manager cares for them are more likely to experience a high-quality relationship with the organization in terms of high POS (e.g., Riggle et al., 2009) and high OI (e.g., Lee et al., 2015). The gifting of *e-hongbaos* is likely to suggest that managers take a more participative approach in valuing their employees. It gives signals to employees that the managers care for them. These employees may also perceive that their socio-emotional needs, particularly the need for affiliation and respect, are met by the gifting of *e-hongbaos*. In traditional Chinese culture, the gifting of *hongbaos* is normally done from the elder to the young, and it is rather uncommon for *hongbaos* to be reciprocated the other way around. However, in professional relationships, the perception of the manager’s care and support may make employees feel compelled to reciprocate the
‘gesture’ of gifting. They do so not by returning the hongbaos but rather by taking more proactive actions at work and being more committed to the organization because they perceive a high POS (e.g., Kurtessis et al., 2017).

Additionally, employees are more likely to have a higher sense of belonging to the organization when they receive e-hongbaos from their manager. The gifting of e-hongbaos, whether on special occasions or not, is likely to forge a bond between the employee and the manager, which may be further nurtured for mutual benefit. Accordingly, employees regard the gifting of e-hongbaos as an indication that they are treated well by the organization and that their work is appreciated. They are therefore more likely to feel that their values are congruent with the organization’s values (Brickson, 2013), making them identify better with the organization. Thus, we hypothesize that:

H1: The practice of the gifting of e-hongbao is positively related to the employee’s relationship with the organization in terms of POS (H1a) and OI (H1b).

The gifting of e-hongbaos may suggest that the intra-team relationship is favorable with the sharing of ‘gifts’ on various occasions. It shows an overall positive attitude among team members and between the manager and the members. Team members who receive the gifts of e-hongbaos from their manager are more likely to view their manager as trustworthy and supportive of them (Grant and Sumanth, 2009). They are more likely to believe that if they are taken care of, they should in return take care of others too (Parker et al., 2008). The positive nature of relationships helps to build a collectivistic team spirit where employees become more prosocially motivated and are driven to help others (Grant and Berg, 2012). Particularly in the Chinese culture, interpersonal relationships are embedded in trust and reciprocity. The concept of guanxi based on network ties characterized by close, trusting relationships fosters face preservation and harmony over the long term (Davison et al., 2018). The gifting of e-hongbaos essentially cultivates personal relationships and satisfies the need for affiliation. This sense of appreciation upon receiving the gift of e-hongbao is more likely to encourage employees to return the ‘favor’ by being prosocially motivated to help others (e.g., colleagues, customers) in various social exchanges.

Consistent with social exchange theory, the gifting of e-hongbaos creates opportunities for employees to feel that they are valued by the organization. They may feel that their good work is recognized as they are rewarded by e-hongbaos. Such social exchange has been found to increase trust (Bstieler, 2006), and therefore positive emotional affect in employees (Dirks and Ferrin, 2001). As such, employees with high levels of social exchange with their manager are more likely to feel secure and have a sense of attachment. The sharing/gifting of e-hongbaos essentially builds morale and also acts in building trust between the manager and members, leading to higher team satisfaction.

In addition, the gifting of e-hongbaos may highlight a positive team culture where team members are closely connected. Hongbaos symbolize good luck and are normally given to family members, close friends, work colleagues, business associates, or friends. The gifting of hongbaos thus suggests the importance of the relationship. As such, when e-hongbaos are gifted, personal ties strengthen. Apart from formal task-oriented ties (Eys and Carron, 2001), friendship ties are expected to be developed and sustained with the gifting of e-hongbaos, with the manager and his/her team members forming social cohesion that potentially builds emotional connections between them (Shaner et al., 2016). Employees feel that they are more likely to be socially integrated or bonded with the manager and other team members through the sharing of e-hongbaos. A sense of positive team culture is then built, which leads to higher social team cohesion (Shaner et al., 2016). We thus hypothesize that:

H2: The practice of the gifting of e-hongbao is positively related to the employee’s relationship with the team in terms of PM (H2a), TS (H2b), and TC (H2c).
The gifting of e-hongbaos illustrates positive personal relationships between the manager and the employees. Such a relationship provides exchange ideologies that are important in building high-quality LMX (Kim et al., 2017). The gifting of e-hongbaos also represents a positive exchange of ‘tangible resources’, which may result in the socio-emotional aspects of exchange and a better quality of the relationship itself (Shore et al., 2009). Financial gifting such as e-hongbaos not only provides economic exchange but also reflects social exchange in the relationship (Shore et al., 2006). Even though digital innovation has made it convenient to give hongbaos, a manager who gives e-hongbaos to staff members still takes time to do so. They are proactive in gifting e-hongbaos to their employees as they have the intention to build a positive relationship that lasts a long time. Such proactivity in social exchange makes employees feel that they are valued by the manager, resulting in higher quality LMX relationship (Zhang et al., 2013). Accordingly, we hypothesize that:

H3: The practice of the gifting of e-hongbao is positively related to the employee’s relationship with the manager in terms of LMX.

4. METHODOLOGY

4.1 Sample and Procedures

This study is exploratory given the novelty of e-hongbaos in general and its recent emergence as a common gifting practice among connected individuals in China. Data collection was conducted through WJX (WenJuanXing), the largest online panel service in China. The timing of the data collection was scheduled to start right after CNY 2019 (February 5th, 2019), thereby increasing the accuracy of the information associated with this specific event. A pilot data collection was launched in mid-February (N=461), followed by the final data collection completed in early March 2019 (N=994). Following the standard procedures in online panels, participants were recruited from WJX’s database and received compensation for their participation. The sampling criteria ensured that we collected data from respondents who were employed at the time of the study. No other filters were applied since the pool of respondents from WJX closely matched our target population, comprising of young professionals, white collars, and regular users of digital services.

Given the number of explanatory variables to be tested, we used stepwise multiple regression analysis with forward selection. Stepwise regression is a technique to select predictive variables and identify the linear relationship that provides the best fit used in exploratory data analysis (Berger, 2018). We used SPSS 25 to carry out the regression analysis for each of the six intra-organizational relationship measurements.

4.2 Measures

Since no prior research on the topic of e-hongbao has been published, we developed a broader framework to account for the practices of e-hongbao gifting. We then explored the correlations of e-hongbao gifting with the intended measures of intra-organizational relationships. Four main dimensions are identified, yielding 16 (or 4²) measurements of e-hongbao gifting, as shown in Table 1:

- **Occasion of gifting:** e-hongbaos can be given throughout the year. However, following the norms of traditional hongbaos gifting, most of the exchanges of e-hongbaos are conducted (and expected) during the CNY celebrations. It is the time when managers and colleagues start sharing – and due to the reciprocity in gifting in the Chinese culture, this created an exchange ‘cascade’, leading to the extreme volumes of exchanges. We account for gifts received during CNY, and also the rest of the year excluding CNY (YR).
- **Mode of gifting:** This reflects the two distinct modes of e-hongbao gifting: one-to-one e-hongbaos (IND) and group e-hongbaos (GRP).
Direction of gifting: The intra-organizational exchange of e-hongbao can be done vertically from the manager to the employee, or horizontally between colleagues at the same level. It may be possible that the amount and type of e-hongbaos exchanged in these two contexts differ in terms of the amount, count, and also the likely impact on intra-organizational relationships. We refer to the vertical gifting as MAN (manager) and the horizontal gifting as COL (colleagues).

Measure of gifting: Two different units to measure e-hongbaos gifting are used to capture data relevant to both IND and GRP e-hongbaos. These are AMT, referring to the total cash value received through a specific type of e-hongbao, and CT, or ‘count’, referring to the number of individual e-hongbaos received.

To illustrate this, variable CNY-IND-MAN-AMT (Table 1), for instance, refers to the total cash value (AMT) received from the line manager (MAN) in the form of a one-to-one e-hongbao (IND) given during Chinese New Year (CNY). As for the measures of intra-organizational relationships, i.e., POS, OI, PM, TS, TC, LMX, these are built based on existing literature in organizational behavior studies. We briefly introduce each of the measures below and also report on their internal consistency (Cronbach’s α), with all measures indicating high reliability:

- **POS**: POS was measured by 8 items developed by Eisenberger et al. (2001). Participants reported how much they receive support from the organization with statements such as “The organization cares about my general satisfaction at work” (α = 0.85).

- **OI**: OI was measured with Mael and Ashforth’s (1992) 6-item measure. Participants were asked to state how much they agreed with statements such as “It feels like a personal compliment if someone praises my company” (α = 0.79).
- **PM**: PM was assessed with the 5-item measure developed by Grant and Sumanth (2009). A sample item is “I get energized by working on tasks that have the potential to benefit my team members” ($\alpha = 0.74$).
- **TS**: TS was measured by Gladstein’s (1984) 3-item measure. A sample item is “I am pleased with the way my team member and I work together” ($\alpha = 0.77$).
- **TC**: We measured TC by two items from Bollen and Hoyle’s (1990) scale, such as “I am enthusiastic about being a member of this team” ($\alpha = 0.74$).
- **LMX**: This was assessed using the 7-item measure developed by Scandura and Graen (1984). A sample item is “My manager recognizes my potential” ($\alpha = 0.87$).

5. RESULTS

The final data collection yielded 1,071 responses, 994 of which were usable for analysis (93%). 7% of the responses were discarded after the respondents failed the coherence questions embedded in the questionnaire. The median respondent is female, aged 30-34, with a bachelor’s degree and a household income of RMB 15,000-19,999 per month (Table 2). This is in line with our target population of respondents who are employed, as well as the average income and education level.

The gifting of *e-hongbao* stands out as a very common practice given that 91.5% of our respondents have received *e-hongbaos* at the workplace at least once over the past year. Figure 2

| Table 2. The socio-demographic distribution of the sample (N=994) |
|-----------------|-----------------|-----------------|-----------------|
| **Gender**      | **Value**       | **Percentage (%)** |
| Male            | 43.1            |                  |
| Female          | 56.9            |                  |
| Less than 24    | 11.9            |                  |
| 25-29           | 27.6            |                  |
| 30-34           | 30.9            |                  |
| 35-39           | 16.5            |                  |
| 40-44           | 6.7             |                  |
| 45-49           | 3.9             |                  |
| More than 49    | 2.8             |                  |
| **Education**   |                 |                  |
| High School (and below) | 10.9         |                  |
| Bachelor        | 78.0            |                  |
| Master          | 10.6            |                  |
| PhD             | 0.5             |                  |
| **Household income (RMB/Month)** |                 |                  |
| Less than 10,000 | 15.3            |                  |
| 10,000-14,999   | 27.9            |                  |
| 15,000-19,999   | 21.4            |                  |
| 20,000-24,999   | 15.7            |                  |
| 25,000-29,999   | 8.5             |                  |
| 30,000-34,999   | 5.3             |                  |
| 35,000-39,999   | 2.0             |                  |
| More than 39,999| 4.0             |                  |
provides more detailed statistics on the occasion and mode through which respondents have received *e-hongbaos*. While the numbers are relatively consistent throughout the four quadrants in Figure 2, we note that line managers are more active givers overall. On a comparative basis, managers give out more during the CNY (76.1%), while colleagues at the same hierarchical level give out more during the rest of the year (64.7%). Our findings also indicate that group *e-hongbao* is the most dominant form of *e-hongbaos* being exchanged. Indeed, the share of respondents that only receive one-to-one *e-hongbaos* is only 11.6% during the CNY (top right quadrant of Figure 2) and 8.9% during the rest of the year (bottom right quadrant of Figure 2).

Results of the stepwise multiple regressions are shown in Table 3, showing the outcomes of the six regressions in our study. All the hypotheses are supported, given that positive and statistically significant relation between at least one *e-hongbao* gifting alternative was identified for each of the six measurements of intra-organizational relationships. Thus, we confirm positive relationships between *e-hongbao* gifting and the employee’s perceived relationships with the organization they work for (POS, OI), with their team (PM, TS, TC), and with their manager (LMX).

In addition to validating our hypotheses, our results also highlight interesting dynamics on how *e-hongbao* gifting influence intra-organizational relationship outcomes. Considering the relationship between *e-hongbao* gifting and the employee’s relationship with the organization in terms of POS (H1a) and OI (H1b), our results indicate a positive influence of the amount of cash value of group *e-hongbaos* received from the manager during CNY (CNY-GRP-MAN-AMT) and the number of one-to-one *e-hongbaos* received from colleagues during CNY (CNY-IND-COL-CT). These two predictors influence both POS and OI. For POS, there are also other predictors that are significant: the amount of cash value of individual *e-hongbaos* that are given by a manager during the rest of the year, and also the number of group *e-hongbaos* given during the CNY period. Another predictor that influences an employee’s OI is the number of group *e-hongbaos* given by a manager during the rest of the year.

Regarding the *e-hongbao* gifts from colleagues, only the number of one-to-one *e-hongbaos* has an impact on the employee’s relationship with the organization in terms of POS and OI. By contrast, for the *e-hongbao* gifts from the manager, both the number of gifts and the amount given, matter. In

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**Figure 2. Descriptive statistics of *e-hongbao* sharing based on occasion and mode of gifting (N=994)**
addition, for the gifting of e-hongbaos during the year, the amount of one-to-one e-hongbaos given by the manager is significant to influence employees’ POS, while the number of group e-hongbaos given by the manager is important to increase employees’ OI. Overall, our results provide support to both H1a and H1b, albeit the occasion, mode, direction, and measure of gifting do matter in subtle ways.

Considering the relationship between e-hongbao gifting and the employees’ relationship with the team in terms of PM (H2a), TS (H2b), and TC (H2c), one result that stands out is the importance

Table 3. Results of stepwise multiple regression (N=994)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Predictor</th>
<th>β</th>
<th>SE</th>
<th>Std. β</th>
<th>t</th>
<th>p-value</th>
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<td>.011</td>
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<td>.007</td>
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of the Chinese New Year (CNY) giving as opposed to giving during the rest of the year. Both PM and TC are positively related only to CNY giving. Regarding TS, we also find a positive influence of CNY giving. Our finding further indicates a positive influence of the number of group e-hongbaos received from the manager given throughout the year (YR-GRP-MAN-CT). Similar to H1a and H1b, we find that, between colleagues, the number of gifts, whether group e-hongbao or one-to-one e-hongbao, given during CNY is significant in influencing PM, TS, and TC, but the amount of cash value of one-to-one e-hongbao given between colleagues during CNY is important only in influencing PM. Interestingly, for the gifts from managers, the amount of cash value, and the number of times e-hongbaos are given during CNY are important in influencing PM and TC. In order to increase TS, however, managers need to carefully consider the amount of one-to-one e-hongbao given during CNY and also increase the number of times group e-hongbaos are given throughout the year. In sum, our results support H2a, H2b, and H2c, but once again, the occasion, measure, direction, and measure of gifting, do matter.

Considering the relationship between e-hongbao gifting and the employees’ relationship with the manager (H3) measured by LMX, our results again show the importance of CNY gifting. In fact, we find that the gifting of e-hongbaos throughout the year is unrelated to an increase in LMX. We find that as far as gifting from the manager is concerned, both the number of gifts and the amount given, matter. However, regarding gifting from colleagues, we find that it is the amount of cash value of group e-hongbao given, instead of the number of gifts, that matters for LMX. Overall, our results give support to H3, but we highlight the importance of gifting during the CNY period as opposed to gifting throughout the year.

Figure 3 illustrates the sixteen different alternatives for the gifting of e-hongbaos based on the (i) occasion (or time) of gifting, (ii) mode of gifting, (ii) direction of gifting, and (iii) measure of gifting. It further displays how each of these alternatives is hypothesized in terms of the relationships with the intra-organizational outcomes, i.e., POS, OI, PM, TS, TC, and LMX. Based on the sixteen different e-hongbao gifting alternatives, out of the twenty-one correlation links identified in this study (Figure 3), eighteen (or 85.7%) are attributed to e-hongbao exchanges happening during CNY. Moreover, three out of our six measurements are solely influenced by e-hongbao gifted during CNY – i.e., LMX, PM, TC (see Table 3).
Finally, due to the random allocation, we find that the number of group e-hongbao received has a greater overall influence on intra-organizational relationships in comparison to the amount of cash value received. This stands true for horizontal gifting between colleagues at the same level but does not hold for vertical gifting as the actual cash amount received also has a positive impact in the latter case.

6. DISCUSSION

The purpose of the study is to examine the impact of e-hongbao gifting on employees’ relationships with the organization, team, and the manager. Given that digital gifting is a relatively recent phenomenon that mainly occurs in China, its analysis has received little prior attention in the scholarly literature on digital product innovation. With China emerging as a global leader in implementing digital innovations, we attempt to fill the gap in existing empirical studies by conducting the study in China, addressing the need to focus on embedding the cultural aspects in the digitalization of products/services in this region (Ngo et al., 2013).

Our study highlights the aspects of digital innovation, i.e., e-hongbao, and we have illustrated a broader framework to account for the practices of e-hongbao gifting in terms of the occasion, mode, direction, and measure of gifting. We found that the occasions in which e-hongbaos are given play a crucial role. Our outcomes significantly improved when e-hongbaos are gifted during CNY, an auspicious and important occasion in the Chinese calendar. Also, our findings indicate that three gifting alternatives stand out, each with four significant predictors: CNY-GRP-MAN-CT, CNY-GRP-MAN-AMT, and CNY-IND-COL-CT (see Figure 3). The results highlight the importance of gifts received from managers through group e-hongbao as both the amount and count have significant yet different impacts on intra-organizational relationship outcomes. The three gifting alternatives relate to LMX, PM, TC, and POS, thereby impacting all three levels of relationships. CNY-IND-COL-CT, referring to the number of times gifts are given between colleagues during CNY, is also identified as an important gifting alternative for organizational outcomes.

Our study opens a new perspective on the relationship between digitalization and organizational behavior in terms of intra-organizational relationships. Our findings highlight that the digital gifting of e-hongbao can influence positive organizational relationships in terms of POS, OI, PM, TS, TC, and LMX. These findings confirm that the organizational environment, e.g., ways of working, routines, “can shape and be shaped by digital innovation initiatives” (Kohli and Melville, 2019: 202). We further found that the direction of exchange, either vertical gifting (from manager to employee) or horizontal gifting (from colleagues within the same hierarchical level), contributes to intra-organizational relationships. However, the outcomes differ depending on the direction of exchange. The gifting of e-hongbao between colleagues at the same level contributes to intra-organizational relationships primarily based on the quantity exchanged. In contrast, in the case of vertical gifting, it does so primarily based on the actual cash amount received.

Our study also explores the importance of cultural context and traditions. The gifting of hongbao has been a tradition in China and many East Asian countries. It suggests reciprocity in the relationship, which we argue forms the basis of the mechanism driving the relationships identified in this paper. Although the recipient may not necessarily reciprocate in the form of another hongbao but may contribute in other aspects such as demonstrating filial piety or performing well in tasks. With e-hongbao, the tradition of social exchange is not only maintained, but the digitalization of hongbao enables new ways of sharing and gifting, which has led to an increase in sharing activities between individuals at the workplace and in turn increasing reciprocal exchange. The reciprocity in the relationship is illustrated in our study where e-hongbao gifting encourages employees to build positive relationships with the organization, the team, and the manager. Indeed, group e-hongbao, a gamified group-gift that is enabled by the digitalization of gifting, has the strongest influence on intra-organizational relationships (see Table 3). With e-hongbao becoming an important part of the social exchange that takes place in the workplace, our results are in line with the literature emphasizing
reciprocity of relationships (e.g., Shore et al., 2009). Our study can essentially serve as the foundation in future research on the impact of gifting at the workplace, particularly examining the organizational impact of new digital product innovation.

6.1 Theoretical and Practical Implications

Our study highlights important theoretical implications on innovation management and intra-organizational relationships. First, our study answers call from scholars to examine the outcomes of digital innovation. To date, only a handful of studies has examined digital innovation outcomes, suggesting an area for further research (Kohli and Melville, 2019). In particular, we focus on intra-organizational relationship outcomes, as to our knowledge, little research has documented the association of digital innovation initiatives on these relationship outcomes. We explained how digital innovation, e-hongbao, changes the dynamic exchange process of gifting and how this influences intra-organizational relationships, which may ultimately play a role in building employees’ morale and productivity.

Second, we contribute to the literature in terms of the unique nature of a new phenomenon, i.e., digital gifting or e-hongbao. In this way, our study is unique as we are not dwelling on topics that have been the focus of prior innovation studies such as the adoption of innovation (e.g., Fichman, 2004), the external environment factors (e.g., Liu et al., 2017) or the internal organizational aspects that foster digital innovation (e.g., Chan et al., 2019). We essentially highlight how digital innovation creates new possibilities in innovation processes and outcomes (Nambisan et al., 2017) by showing how e-hongbao enables new ways of organizing and sharing. We further explain the specific features of the digital innovation, i.e., what the e-hongbao function entails, its mechanism, and how it encourages sharing through the different modes of gifting, either as a one-to-one gift or a gamified version of a group e-hongbao.

Third, the study’s results advance the research on the association of digital innovation on workplace practices and outcomes. In particular, drawing on the vast literature at different levels (organization, team, and leader-member relationship), we consider how e-hongbao as a new digital product innovation influences intra-organizational outcomes. We highlight the role of digital innovation in influencing perceived organizational support, organizational identification, prosocial motivation, team satisfaction, team cohesion, as well as leader-member exchange. Extant studies on the various constructs such as POS usually neglect the antecedents of these constructs (e.g., Zhang et al., 2012). In this study, we filled this gap by exploring the antecedents of workplace outcomes through social exchanges in the form of digital gifting in the workplace. This is, to the authors’ understanding, the first study that examines and tests the proposed relationships.

Our findings also reveal important practical implications. First, managers are important in the social exchange between employees and the organization. The frequency of giving and the amount of e-hongbao given by the manager have been shown to influence employees’ POS, OI, PM, TS, TC, and LMX. Managers thus play a significant role in building a positive organizational culture by ensuring that employees’ values and their perceptions of the relationships with the organization are aligned. Managers can further use digital products such as e-hongbao to engage their employees because they are ultimately the gatekeepers between employees and the organization.

Second, for most of the relationship outcomes, we identified the importance of the Chinese New Year giving. Our findings indicate that in order to influence employees’ relationship with the organization, team, and the managers themselves, managers should consider social exchanges during CNY as this is an auspicious and important event in the Chinese calendar. In general, managers should not only pay attention to the amounts given but also the frequency of the gifting of e-hongbao. We found that depending on the outcomes considered, both group and one-to-one e-hongbaos from the managers are important. Since group e-hongbaos are typically less costly to the manager in terms of both money and time, group e-hongbaos is a more efficient option. This has practical implications
for not only Chinese managers but also Western managers who want to build good relationships and social capital with their Chinese employees.

Third, our study provides practical implications in terms of how organizations design and utilize digital product innovation. Given that firms are continuously involved in innovation, workplace changes may provide affordances for new capabilities, organizational practices, and innovation for product development. Additionally, the study provides implications in terms of how the gamified group e-hongbao changes the symbolic nature of the gift-giving relationship. The expected monetary values of e-hongbao received in the gamified version of the group setting allow lower expected monetary values given to recipients. The lower expected monetary values are seen as more socially acceptable, contrary to a one-to-one e-hongbao gifting. The ludic aspect of such gamification also influences intra-organizational relationships with minimal or even negligible costs for the sender. It enables the manager and also colleagues to exchange e-hongbaos with each other, with no uniform amount given to recipients due to the gamified nature of the e-hongbao function. Thus, the creation of digital product innovation, such as e-hongbao, enables organizations to create a culture that would encourage positive social exchanges. This will consequently have beneficial effects on the employees’ perceptions of their relationships with the organization, the team, and the manager.

6.2 Limitations and Future Research

The present study has limitations, and there are several areas that warrant further investigation. First, we focused our data collection in China on the segment of the population that is considered highly ‘digitalized’. In this way, our respondents are more likely to exchange e-hongbaos at the workplace. In addition, the social and cultural environments of China are unique, and therefore, results may not be generalizable across different contexts. In particular, as digital gifting is bound to diffuse to a wider audience, further studies should consider this variance. For example, future studies could consider the context of the migrant worker community in China, who are likely to engage with both gifting and digitalization in markedly different ways than urban white collars. Future studies could also examine gift exchanges at the workplace in other cultures to test the validity and generalizability of the findings.

Second, we relied on cross-sectional and self-reported information as to the gifting and exchange of e-hongbaos. Due to the self-reported data, our study is limited in terms of the uneven quality of data collected due to imperfect recollection and availability heuristics, i.e., the reliance on instances that immediately come to the respondents’ minds (Tversky & Kahneman, 1973). Given that the data collection was done right after the CNY period, data on e-hongbao received during CNY might be more accurate than those received during the rest of the year due to this recall bias. In addition, using self-reported data also does not rule out a potential correlation between reporting errors and the variables we aim to study. Retrieval from big datasets would have provided more accurate values for those exchanges, but such retrieval may not enable the collection of individual measurements of intra-organizational relationships.

Furthermore, the exploratory character of our study leaves a lot of room for further extensions. We acknowledge the limitations of stepwise regression method as an exploratory data analysis technique (Berger, 2018), so other techniques can be used in future studies to replicate the study. Future studies may also examine the influence of e-hongbao gifting on employees’ effort. While we focused on the socio-cognitive perception of intra-organizational relationships, we have not determined the discretionary effort that employees put in to achieve high POS, OI, PM, TS, TC, and LMX when they embrace new digital innovation. For instance, the extensive use of mobile phones in the workplace may divert employees’ attention from work-related issues to work-unrelated issues. This could imply that the gifting of e-hongbao through mobile phones may increase the likelihood of incidents of counterproductive work behavior and consequently may have a negative influence on employees’ effort in building intra-organizational relationships.
Future studies could further explore employees’ expectations about e-hongbao gifting on procedural justice. For instance, if both the number and amount of e-hongbao gifting are high but less than expected, such gifting may have a negative effect on intra-organizational relationships as employees may consider lower-than-expected amounts or frequency of gifting as unfair. We hope this study has provided a starting point to examine the impact of digital product innovation on intra-organizational relationships, and future research can certainly examine different scenarios of new digital innovation in the workplace.

COMPETING INTERESTS

All authors of this article declare there are no competing interest.

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REFERENCES


Chiachi Chang received his PhD degree at LSE and is now the Assistant Professor in Organisational Behaviour in Xian-Jiatong Liverpool University. The research interest of Dr. Chiachi Chang is employee psychology in employee-organization relationship. He has published journal paper in Motivation and emotion, and Annual Review of Organizational Psychology and Organizational Behavior. He also published chapters in the Handbook of Industrial, Work, and Organizational Psychology as well as the Oxford Handbook of Organizational Citizenship Behaviour.

Eddy Fang is a Professor in the Department of Intelligent Operations and Marketing. He holds a PhD from the University of Cambridge, where he focused his research on the diffusion and adoption of innovations. Upon arrival in China in 2012, Eddy opened up new research directions to contribute to the development of the Chinese market, his research has been published in leading international journal such as Technological Forecasting and Social Change, Journal of Business Ethics, Review of International Political Economy, among others. Eddy’s current stream of research was funded by several grants from the National Science Foundation of China. He also regularly contributes to academic and practitioners’ forums to talk about consumer behaviour in China, and leads market studies for international firms interested in accessing the local market.

Yuliani Suseno (PhD, The University of Queensland, Australia) is Professor of Management in the School of Management, RMIT, Australia. Her research interests are in the areas of social capital, technology and innovation management, and human resource management. She has published several book chapters and articles in leading journals, including in the Information Systems Journal, Journal of Strategic Information Systems, Journal of Business Ethics, Technological Forecasting and Social Change, Journal of Business Research, Asia Pacific Journal of Management, International Journal of Human Resource Management, and Journal of Knowledge Management.

Marek Hudik is an Associate Professor with the Department of Managerial Economics, Faculty of Business Administration, Prague University of Economics and Business, Prague. His primary research interests include institutional economics, decision theory, and game theory. His articles were published in journals such as Journal of Institutional Economics, Theory and Decision, International Journal of Game Theory, International Journal of Production Economics, Rationality and Society, among others.

