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Permission Marketing and Privacy Concerns — Why Do Customers (Not) Grant Permissions?



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Abstract

Little is known about the influence of motivators that drive consumers to grant permission to be contacted via personalized communication. In this study, a framework is developed to investigate the effect of select drivers of consumers granting permission to receive personalized messages. The authors distinguish between drivers related to benefit and cost to the consumers. They identify the influence of perceived personal relevance, entertainment, and consumer information control as well as monetary incentives and lottery participation as benefit-related factors. Cost-related factors entail the registration process, privacy concerns, and perceived intrusiveness. The authors find that, except for monetary incentives and lottery participation, the identified drivers significantly influence consumers' decision to grant permission. The strong negative influence of privacy concerns on the probability of granting permission can be lessened by two benefit-related factors, namely message content with entertainment value or personal relevance for the consumer. The study helps to improve firm measures aimed at getting more permissions — granted by customers for interactive campaigns.

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Introduction

Nowadays, potential customers can be reached with relevant and individualized messages. However, consumers often perceive such messages as an intrusion of their privacy, which creates a challenge for companies. To address such concerns and meet legal requirements, upfront permission by consumers provides an interesting option for future interaction. This concept, known as *permission marketing* (Godin 1999), refers to direct marketing activities that require consumers' consent to be contacted by a specific company. These messages are mutually beneficial as they are anticipated, personal, and relevant (Godin 1999).

Permissions do not only have a positive influence on consumers' responses towards interactive marketing activities (Tsang, Ho, and Liang 2004), but they are also a legal requirement and, therefore, crucial for companies that use direct marketing

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media. In the USA, this issue was triggered by the global discussion about data exchange and misuse (Court of Justice of the European Union 2015). Similarly, the most recent European data protection law impedes the targeted dissemination of individualized interactive marketing activities. Aimed at giving consumers more control of their personal data, the revised law extends the definition of personal data and establishes a universal need regarding consent for any use of personal data. Experts anticipate this law to cause a damaging impact on the online advertising industry (O'Reilly 2015) and wipe out the enormous profit potential of, for instance, targeted mobile marketing offers (Fong, Fang, and Luo 2015).

Permission marketing appears to be an auspicious solution to legal issues and privacy concerns and provides a suitable way of reaching out to customers (Kumar, Zhang, and Luo 2014). Consumers are likely to choose from a large set of vendors, but will probably only grant permission to a few firms. Consequently, companies with a substantial number of consenting customers have a competitive advantage over their business rivals. These companies are not only able to use targeted media to engage with

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current customers, but might also be able to use the existing relationship for cross-selling activities. Without permissions by their clients, in many countries firms are not allowed to actively target customers and are, thus, reduced to passive order-takers.

Designing a permission process aimed at increasing consumer consent is therefore a priority for several companies. Organizations face the question of which factors influence this decision process. On the one side, there is a growing potential for the personalization of messages in the context of online marketing. On the other side, a higher degree of personalization might also cause increased privacy concerns (Tucker 2014). In line with this, the current discussion on consequences of privacy concerns is more and more focusing on the permissible use of data next to the growing potential of illegal data misuse (Shah 2015).

Despite the growing importance of permission-based interactive communication and detrimental privacy concerns, scant research attention has been paid to investigate drivers of and impediments to customers granting permission. So far, researchers have primarily focused on responses to personalized marketing, effects of privacy concerns and opt-in and opt-out decisions, but did not focus on granting permission decisions. There is yet no study that develops and tests a conceptual model with a large number of theorybased determinants of the decision to grant permission. A major contribution to the existing literature is that we focus more on costs of permission marketing than earlier studies by including a number of cost variables in study. This is urgently required given the increasing use of (big) data in marketing to target customers with personalized messages (e.g., Verhoef et al. 2010; Wedel and Kannan 2016), that may potentially harm customer relationships (e.g., van Doorn and Hoekstra 2013). To close this gap, the main research objective of this study is the identification and investigation of a list of factors that motivate or discourage customers to grant permission for interactive marketing activities. Our main objective is thus to assess the impact of different determinants of a customer's decision to grant permission for personalized marketing activities by firms.

This is important because recent market studies confirm that consumers are concerned about who has access to their data, would like to have more information about how it is used and are looking for benefits in return for releasing personal information, which is linked to granting permission (see e.g., Groopman 2015). Moreover, the Marketing Science Institute (MSI) named "establishing optimal social contracts with customers" as one of their 11 research priorities for 2014 to 2016. MSI also stresses the relevance investigating the trade-off between personal and relevant content versus potential privacy invasion (The Marketing Science Institute 2016).

We organize the paper as follows. First, we review existing literature to identify potentially relevant factors that influence the permission processes. We examine previous work on permission marketing as well as on related research areas, such as relationship marketing and privacy concerns. Drawing on this review, we develop a framework based on theory and empirical literature. Next, we analyze a representative sample of 1,397 respondents to test our hypotheses. We end with a discussion on the implications of our study for science and practice.

Theoretical Background

Permission-based marketing mainly has its background in the direct marketing literature of the 1990s. With the upcoming of online and digital marketing, direct marketing communication has partially been replaced by personalized online marketing on multiple devices, such as mobile (e.g., Chung, Rust, and Wedel 2009). In this section we thus discuss existing research within the domain of personalized marketing. Because granting permission decisions is related to privacy decisions where customers have to grant permission to firms to collect and store data, we also discuss literature in the area of privacy (e.g., Martin, Borah, and Palmatier 2017). In granting permission, customers approve having the firm contacting them directly with personalized messages through different channels such as direct mail, e-mail or telephone. Importantly, existing research suggests that granting permission improves the effectiveness of personalized communication (e.g., Jolley et al. 2013; Kumar, Zhang, and Luo 2014).

Relevant research on personalized communication for our study considers the formation of attitudes towards personalization (e.g., evaluation of direct mailing activities), as well as (intended) behavior regarding the participation in personalized marketing communication. Beyond these studies there is also research focusing on the design of the permission process by studying specific opt-in or opt-out procedures (e.g., Johnson, Bellman, and Lohse 2002). Prior research mainly considers the decisions with regard to receiving personalized communication as a benefit-cost trade-off (e.g., Krishnamurthy 2001; Milne and Gordon 1993). The use of a benefit-cost trade-off has been described in various theories and research streams, such as in Homans' (1961) social exchange theory. This theory explains that humans only decide to engage in an exchange situation if they expect the net outcome to be positive. Social exchange theory serves to explain the basics of human interaction and has been frequently applied in the context of information exchange (Culnan and Armstrong 1999; Schumann, Von Wangenheim, and Groene 2014).

In the literature, several benefits and costs have been considered. We summarize this literature in Table 1. One dominant benefit in these studies is the level of personalization resulting in a higher relevance for customers. This has been confirmed by studies showing that personalized marketing campaigns have a higher response (e.g., Ansari and Mela 2003). Table 1 also reveals that incentives and the type of content and specifically entertainment can be important benefits. Cost factors gained less attention in the existing literature. However, existing research suggests that consumers anticipating higher costs to maintain their permission (e.g., by feeling a pressure to regularly update personal information) are less likely to grant permission. Furthermore, an anticipated loss of privacy is considered as an important cost factor, as customers granting permission allow the firm to send them (personalized) communication, which may be considered as potentially intrusive (van Doorn and Hoekstra 2013).

Given the importance of privacy in general and for our study in particular, we also provide an overview of relevant *literature on privacy*. This research has extensively studied the consumers'

Table 1 Chronological overview of benefits and costs considered in selected prior research.

Study	Context	Benefits	Costs		
Milne and Gordon (1993)	Evaluation of personalized communication	Targeting (suggesting relevance)	Volume of received communication		
Krishnamurthy (2001)	Granting permission	Relevance	Personal information entry		
		Monetary incentives	Modification and message processing costs		
			Privacy concern		
Tezinde, Smith and Murphy (2002)	Enrollment in alumni-networking program	Personalization (relevance)			
Tsang, Ho and Liang (2004)	Evaluation of mobile advertising	Entertainment			
		Informational value			
		Credibility of advertisement			
		Incentives			
Van Doorn and Hoekstra (2013)	Targeted online advertising	Personalization	Intrusiveness		
Schumann, Von Wangenheim, and Groene (2014)	Targeted online advertising		Privacy loss		
Tucker (2014)	Targeted online advertising	Perceived control			

decision to allow firms to collect and use their personal data (e.g., Martin, Borah, and Palmatier 2017). Extensive research has been conducted on this decision in both the (interactive) marketing and information systems literature. Smith, Diney, and Xu (2011) present an interdisciplinary review and concentrate on the so-called privacy calculus, which constitutes a trade-off analysis of risk and benefits of sharing personal information with others. Hence, and similar to the literature on personalized communication, studies frequently use a benefit-cost perspective in this decision. Not surprisingly, the main costs involved here are the costs of a loss of privacy. Most previous studies thus report a negative impact of privacy concerns on consumers' willingness to share personal information (e.g., Son and Kim 2008). Additional negative consequences of pronounced privacy concerns can be a lower propensity to register online, providing incomplete or incorrect information, opt-out decisions, negative word-of-mouth, or active complaints (Lwin, Wirtz, and Williams 2007; Sheehan and Hoy 1999; Son and Kim 2008). Providing consumers with more control can reduce the effects of privacy concerns (e.g., Tucker 2014). Interestingly, factors like company reputation, consumer-sided trust, and data protection seals can create confidence and attenuate the negative impact of privacy concerns (Xie, Teo, and Wan 2006). This research thus suggests

that the effect of privacy concerns can be reduced by some factors. In the following section, we consider and integrate insights from this section's discussion of theoretical approaches, literature on personalized communication and privacy concerns to substantiate our conceptual framework.

Conceptual Framework

In our conceptual model we include determinants of the decision to grant permission to a firm to send personalized advertising. Based on our literature overview we adopt a benefit– cost framework. Specifically, following the approach of a consumer calculus, we assume that individuals face a cost–benefit trade-off when they decide to engage in interactions that entail the disclosure of personal data (Dinev and Hart 2006; Smith, Dinev, and Xu 2011; Xie, Teo, and Wan 2006; Zhao, Lu, and Gupta 2012). The use of a "utility maximization framework" follows the idea of the *privacy calculus* by creating a function that confronts

costs and benefits (Awad and Krishnan 2006; Rust, Kannan, and Peng 2002).

In our research, we distinguish between more economic and psychological benefits and costs. Economic benefits relate to specific monetary and quality benefits that customers may derive from better offers, reduced prices etc., while economic costs include the efforts customers may require to grant permission. We include personal relevance, entertainment, incentives and lottery as our main perceived economic benefits, and include registration costs as perceived economic costs. We consider perceived control, which consumers generally tend to value, as a rather psychological benefit (e.g., Tucker 2014). While we are aware that the chosen factors do not cover the full range of costs and benefits, they represent almost all factors investigated in selected prior research and, to the best of our knowledge, have never been studied together in the context of (not) granting permissions (see Table 1).

We base our inclusion of psychological costs mainly on arguments from reactance theory. It can be assumed that consumers refuse to accept restrictions of their personal freedom. Those restrictions can be provoked via certain factors or actions in the permission context. Psychological reactance is defined as the "motivational state directed toward the re-establishment of the free behaviors which have been eliminated or threatened with elimination" (Brehm 1966, p. 9). In this context, reactance is determined by an unpleasant emotional state and motivates individuals to refuse the restriction in order to demonstrate that their decision power or free will has not been constricted (Brehm 1966). With respect to the reactance approach, permission can be regarded as an "austerity freedom-constriction" (Clee and Wicklund 1980, p. 389), defined as the consumer-sided reactance towards manipulative attempts via communication media. Such effects have been reported in several studies related to direct marketing (Baek and Morimoto 2012; Edwards, Li, and Lee 2002; Fitzsimons and Lehmann 2004; Godfrey, Seiders, and Voss 2011; White et al. 2008). We therefore include intrusiveness as an important driver (e.g., van Doorn and Hoekstra 2013). Based on our overview (see Table 1) and in addition to intrusiveness, we include privacy concerns and thus the fear of a privacy loss when granting permission as an important driver. In our conceptual model, we also assume that privacy costs may decrease the positive effects of perceived benefits. So far, research has mainly shown that specific factors, such as trust, reduce the negative effect of privacy concerns on decisions to share information (e.g., Xie, Teo, and Wan 2006). We thus take a different approach and assume that the fear of a privacy loss is such an important emotion that it may reduce the effects of the considered economic and psychological benefits. Our conceptual model excluding control variables is shown in Fig. 1.

Importantly, our main dependent variable is binary considering the decision (yes/no) to grant permission. We thus focus on actual behavior. One could theoretically argue (e.g., Theory of Reasoned Action) that perceived benefits and costs lead to a general attitude that subsequently drives behavior (e.g., Fishbein and Ajzen 2010). In our model we have chosen to directly link perceived benefits and costs to behavior, where we assume that these benefits and costs influence a latent underlying utility. This approach is very common in marketing when studying purchase decisions (e.g., Konus, Verhoef, and Neslin 2008; Rust, Lemon, and Zeithaml 2004). We thus do not include mediating attitudes in our conceptual model.

Finally, in our model we focus on consumer decisions following from actual permission granting requests of firms. Because customers evaluate firm-specific factors, such as personal relevance of offers, the benefits and costs primarily reflect firmlevel variables. To control for general firm level effects, we also include trust and offer affinity in our model. To control for customer-specific effects, we include involvement, attitude towards direct marketing and information search behavior, as well as socio-demographic variables (e.g., age, gender) in our model. Because we asked respondents to think of the last event when they had been asked to grant permission, we were also able to control for industry or firm effects by including dummy variables.

Benefit-related Drivers

Personal Relevance

The need for personally relevant information can be identified as a main factor that drives consumers to interact with a company. With regard to interactive marketing communication, such information represents substantial value and, thus, positively affects consumers' willingness to grant permission.

In order to receive relevant and consumer-specific information, consumers are often willing to engage in data interchange with companies. In the context of interactive marketing, Milne and Gordon (1993) confirm that relevance has a positive impact on attitudes towards direct marketing activities. Consumers' willingness to engage in a relationship with a company is higher if they anticipate receiving personalized information and offers (Berry 1995; Gwinner, Gremler, and Bitner 1998). Beyond that, Baek and Morimoto (2012) reveal that perceived personalization is negatively related to advertising skepticism as well as advertising avoidance and that the degree of personalization reduces skepticism towards communication media.



Hypothesized relationships for the empirical study

Italicized constructs are psychological rather than economic in nature

Fig. 1. Hypothesized relationships for the empirical study.

In the context of location-based marketing, Zhao, Lu, and Gupta (2012) show that personalization, defined as an extrinsic benefit, has a positive impact on consumers' intention to disclose information. Tezinde, Smith, and Murphy (2002) emphasize the effect of both relevance and personalization on consumers' willingness to grant permission for e-mail marketing. Generally, there is sufficient evidence that more personalization is leading to more relevant offers in direct marketing, thus inducing higher response rates (e.g., Ansari and Mela 2003; Feld et al. 2013).

Following those arguments and findings, we postulate:

H1. The higher the perceived personal relevance of the direct communication, the higher the probability that consumers will grant permission for interactive marketing activities.

Entertainment

Referring to the benefit–cost approach, consumers look for factors that enhance the expected value of direct communication media. Along with the personal relevance of the media, the expected level of entertainment plays a fundamental role (see Table 1).

Tsang, Ho, and Liang (2004) emphasize the positive influence of granted permissions and a high level of entertainment on consumer attitudes, intentions, and behavior regarding mobile marketing activities. Similarly, Nysveen, Pedersen, and Thorbjørnsen (2005) show that perceived enjoyment has a significant positive direct effect on the intention to use mobile services. High entertainment value also increases the acceptance of e-commerce and upcoming technologies (Hausman and Siekpe 2009; Oh et al. 2009).

Based on these findings, we postulate:

H2. The higher the perceived entertainment value of the direct communication, the higher the probability that consumers will grant permission for interactive marketing activities.

Incentive and Lottery

Consumers might be looking for financial incentives like vouchers and discounts, or offers to participate in a lottery, as a compensation for disclosing personal information. Firms frequently use such incentives to persuade consumers to provide personal information like their phone numbers or date of birth.

Monetary compensation, along with the relevance of the message, is expected to raise consumers' interest in permission marketing. The study of Milne and Gordon (1993) provides evidence that monetary incentives are even more meaningful to consumers than message relevance. Such incentives can raise consumers' willingness to receive advertisements via mobile messages (Tsang, Ho, and Liang 2004) and to provide personal information online (Hui, Teo, and Lee 2007). In the field of relationship marketing, numerous studies support the value of incentives in driving consumers to obtain and maintain relationships with companies (De Wulf, Odekerken-Schröder, and Iacobucci 2001; Gwinner, Gremler, and Bitner 1998; Yoon, Choi, and Sohn 2008). However, not all empirical findings fully support the positive role of incentives (Xie, Teo, and Wan 2006). This may occur because consumers experience incentives like

monetary benefits or lotteries as manipulative, causing them to respond negatively (e.g., Pick et al. 2016).

Notably there might also be differences in the effects of monetary incentives and lotteries. Whereas monetary incentives provide an immediate financial benefit, there is only a small chance to win in a lottery. We therefore expect a perceived difference between direct monetary incentives and lotteries, and postulate two separate hypotheses for these types of permission drivers:

H3. The higher the perceived value of the incentive, the higher the probability that consumers will grant permission for interactive marketing activities.

H4. The higher the perceived value of participating in a lottery, the higher the probability that consumers will grant permission for interactive marketing activities.

Consumer Information Control

Consumer-sided information control is yet another determinant that might influence consumers' permission decisions. It refers to consumers' awareness of whether they remain in control of the usage of the provided data and the volume of direct marketing messages they receive (Son and Kim 2008). Laufer and Wolfe (1977) consider the loss of control over data management when disclosing information as one of the three major reasons why individuals do not want to share personal information. A high level of perceived control reduces reactance and is assumed to increase the likelihood that a consumer will engage in permissionbased data exchange with a company.

Malhotra, Kim, and Agarwal (2004) show "that online consumers consider it most important to (1) be aware of and (2) have direct control over personal information stored in marketers' databases" (p. 350). Phelps, Nowak, and Ferrell (2000) provide evidence that a high level of control can even positively influence purchase decisions and that most people would prefer to have more control over unwanted commercial advertisements that are based on their personal data. If consumers feel to be in control of the data they provide, they are willing to share even more information online (Mothersbaugh et al. 2012). Tucker (2014) finds that consumers are more likely to click on personalized advertisements if the perceived privacy control is high. Tucker's findings suggest "that publicly giving users control of their private information can benefit advertising-supported media and advertisers on social networking sites" (p. 557).

Thus, we hypothesize:

H5. The higher the perceived control of the consumer regarding permission marketing, the higher the probability that consumers will grant permission for interactive marketing activities.

Cost-related Drivers

Registration Cost

Every consumer has to go through sign-up steps in order to receive permission-based direct communication media. The perceived cost of the registration process (time and/or effort) can be a simple pitfall in the process of agreeing to receive interactive marketing communication. Complicated phrasing and long-winded terms and conditions during the registration process may annoy, confuse, or even frighten consumers, making them abort the permission process. Consequently, high registration effort is named as one of the main barriers to enrollment in consumer relation programs. However, we have to be aware that literature on registration cost is both limited and rather old, so more current developments such as big data are not reflected in those publications.

Noble and Phillips (2004) discussed that consumers are likely to decide against enrollment in relational exchanges with a company if the perceived effort that is required before they are able to profit from benefits is high or if the sign-up process takes a long time or requires much effort. The perceived registration cost depends on the extent of information required by the company, therefore it is assumed that the amount and complexity of the required information have a negative influence on the willingness of consumers to enroll in permission marketing programs (Krishnamurthy 2001, Dickinger et al. 2004).

H6. The higher the perceived registration cost, the lower the probability that consumers will grant permission for interactive marketing activities.

Intrusiveness

Previous research shows that consumers respond less positively to communication when it is perceived as irritating, intrusive, or annoying. A negative response is likely to occur if consumers expect the communication to cause displeasure or negative emotions (Aaker and Bruzzone 1985). Such expectations can even lead to an attempt to avoid any form of contact with the sender (Baek and Morimoto 2012).

Participants in the study of Noble and Phillips (2004) stated that the fear of being bothered too much is a crucial reason for deciding against initiating an interaction with a company. Tsang, Ho, and Liang (2004) show that perceived annoyance, defined as one aspect of irritation, has a negative effect on consumers' attitude towards mobile advertising. In the context of online banners, perceived intrusiveness explains consumers' negative responses (Van Doorn and Hoekstra 2013).

Because these findings support the existence of a negative impact of anticipated intrusiveness on the consumer–company relationship, we conclude:

H7. The higher the perceived intrusiveness caused by the direct communication medium, the lower the probability that consumers will grant permission for interactive marketing activities.

Privacy Concerns

As soon as consumers decide to enroll for interactive marketing activities and grant permission, they need to provide personal information to the relevant company. Such information will at least entail a contact address, but can include further details like demographics or personal preferences (Krishnamurthy 2001). Privacy concerns may occur, depending on consumers' perception of the value of their personal information. Frequently, consumers perceive the disclosure of private data as a personal sacrifice (Milne and Gordon 1993; Son and Kim 2008).

As discussed, several researchers have found evidence for a negative impact of privacy concerns in various research fields, for instance mobile marketing and consumer lovalty programs (Demoulin and Zidda 2009; Leenheer et al. 2007; Noble and Phillips 2004; Zhao, Lu, and Gupta 2012). Tsai et al. (2011), for example, find that consumers are even willing to pay a higher price to buy products from websites they consider as privacy protective. Their research discloses that consumers are aware of the monetary value of their data. In the context of interactive marketing, privacy concerns were found to have a detrimental influence on the acceptance of data storage, as well as on mail-order purchase behavior (Culnan and Armstrong 1999; Phelps, D'Souza, and Nowak 2001). Finally, Baek and Morimoto (2012) find support that privacy concerns lead to an increase in advertising skepticism and advertising avoidance.

Based on these arguments and the emergent findings that privacy concerns are an important variable in many decisions regarding providing information, we hypothesize:

H8. The higher the perceived privacy concerns, the lower the probability that consumers will grant permission for interactive marketing activities.

Interaction Effects Between Privacy Concerns and Perceived Benefits

Consumers with strong privacy concerns have a general negative attitude to all forms of personalized communication (e.g., Martin, Borah, and Palmatier 2017). They have a strong fear that their data are used wrongly and usually do not trust the good intentions of firms either. Given this, we already assumed a direct, negative impact of privacy concerns on the decision to grant permission. However, we also assume that privacy concerns reduce the impact of the considered benefits of permission-based marketing on this decision. We have two major rationales for this moderating role of privacy concern. First, privacy concerns are strongly related with distrust in firms (e.g., Schumann, Von Wangenheim, and Groene 2014; Son and Kim 2008). This distrust may induce that consumers do not believe that permission-based marketing will be beneficial for them even if they observe some benefits. Hence, the impact of these benefits on the permission-based marketing decision will be reduced. Secondly, privacy concerns may create stronger feelings of reactance. These emotional reactance feelings might be so strong that they partly overrule the effects of the perceived benefits of permission-based marketing. As a consequence, privacy concerns attenuate the positive impact of benefits on the decision to grant permission. So in general, our assumption is that privacy concerns can provoke strong general negative emotions against the idea of granting permission, that it even reduces the positive effects of the benefits of granting permission. As such, we assume that customers with strong privacy concerns discount the role of these benefits. Hence we hypothesize:

H9a–e. Privacy concerns attenuate the positive impact of (a) personal relevance, (b) entertainment value, (c) perceived value of the incentive, (d) participation in a lottery, and (e) perceived

consumer information control on the probability that consumers will grant permission for direct marketing activities.

One could probably argue that privacy concerns might also reinforce the absolute effect of costs on the granting permission decision because consumers with a strong privacy concern would focus more on the negative side of granting permissions as well. Given that we aim to focus on how privacy concerns reduce the impact of perceived benefits, we do not hypothesize these moderating effects of privacy concerns. However, we will explore whether privacy concerns moderate the effects of the other two costs factors on the permission grating decision. In particular, one would expect that consumers with a strong privacy concern would emphasize the costs of granting permission more, leading to a negative interaction effect in our model.

In a similar vein one could argue that trust moderates some of the studied relationships (e.g., Xie, Teo, and Wan 2006). Given that our study does not focus on the role of trust and only includes trust as a control variable, we do not hypothesize moderating effects of trust. However, we will explore, whether trust specifically reduces the effects of privacy concern and intrusiveness in line with prior research (Xie, Teo, and Wan 2006).

Research Methodology

Sampling and Data Collection

We collected data by means of an online questionnaire administered by Research Now, a digital data collection provider. This market research firm provided a stratified sample mirroring consumers in Germany with regard to age, gender, monthly income, household size, and region. Thus, we could ascertain that proportions of age groups, male or female respondents etc. in our sample are not significantly different from the demographic structure as reported in the statistical yearbook of the Federal Statistical Office (www.destatis.de). Within each stratum, the names were selected following a random procedure. Prior to the actual survey, we conducted pretests with students, academic experts, and employees of a telephone company, leading to minor changes in the design and wording of the questionnaire.

At the beginning of the survey, participants received information about the topic of the study, as well as the concept of personalized communication and meaning of permission. Thereafter, we asked the respondents to remember their last permission situation, their decision (granting permission or not) and to indicate the applicable company name and industry. The participants answered questions regarding their attitude towards the company, the permission situation as well as selected consumer characteristics. Thus, as noted in our conceptual model section, the permission granting variables are mainly firm specific.

Conducting the study by means of an online questionnaire allowed us to provide participants with individualized questions, as we could use the respective firm name throughout the survey. To address common concerns with online data collection (Granello and Wheaton 2004), we eliminated responses as follows. First, we analyzed the response time and excluded participants who completed the survey in less than 8 minutes (with 15 minutes being the average response time). We also discarded non-existent company names and searched for noticeable response patterns, leading to a final sample of 1,397 usable responses out of 1,858 completed questionnaires.

Measures

We could also differentiate between consumers actually granting (1) or denying (0) permission, which constitutes the binary dependent variable of our study. Of the respondents, 64.3% granted permission. On average, the likelihood of women granting permission is somewhat higher than for men (66.2% vs.)62.3%), and singles show a lower propensity to grant permission than larger households with four or more members (61.3% vs. 68.6%). However, household size or gender differences are not significant at a 5% level. We also observe that respondents with college degree or higher are less likely to grant permission than people with less than college as their highest degree (58.6% against 66.3%). A t test revealed that this difference is significant at a 5% level. While we do not find substantial differences for age or duration of the customer relationship regarding the likelihood to grant permissions, our data reveals differences for firms asking for permissions to contact customers via emails, mail, mobile phones or telephone. Customers are much more likely to grant permissions for emails and mail (70.3%) than for mobile and fixed-line phones (45.0%). This difference is significant at a 1% level.

The measures of our independent variables employed in this study are taken from existing literature, with the exception of the two new measures of lottery participation and monetary incentives. All constructs dealing with perceptions were measured using seven-point Likert scales (1 = strongly disagree and 7 = strongly agree), with the exception of registration cost, where we used semantic differentials. All in all, we considered eight latent constructs as our focal independent variables personal relevance, monetary incentives, lottery participation, entertainment, registration cost, privacy concerns, intrusiveness, and consumer information control. These were further categorized into benefit-related and cost-related factors. A number of control variables such as involvement, offer affinity, attitude towards interactive marketing activities, expertise, trust, and information search behavior together with sociodemographics such as age, sex, education, income, household size, and state of residence were measured. The descriptive statistics and measurement properties of the scales are depicted in Table 1.

Benefit-related Factors

We measured perceived personal relevance by using items from two scales, i.e., the perceived relevance of the message and the degree of personalization. To measure perceived relevance, we applied a four-item scale based on Zaichkowsky (1985). It reflects the extent to which consumers perceive personalized communication as interesting or relevant. We measured degree of personalization by adapting a four-item scale suggested by Srinivasan, Anderson, and Ponnavolu (2002). The items reflect consumers' expectations regarding the extent to which a firm's communication will be tailored to their particular needs. We measured both the expectation about monetary incentives and the perceived benefit of participating in a lottery with two single-item scales and entertainment by a three-item scale adapted from Dabholkar (1994). The scale reflects the perceived entertainment value of direct communication based on hedonic motives like fun and amusement. We operationalized consumer information control by a three-item scale based on Mothersbaugh et al. (2012) that measures firm-specific information control. It reflects "the extent to which a consumer believes that she or he can influence if and how the firm uses their personal information for marketing purposes" (Mothersbaugh et al. 2012, p. 87).

Cost-related Factors

To measure perceived registration cost, we applied a three-item scale based on Dabholkar (1994). The items reflect consumers' perception of the time and effort needed to enroll in a company's personalized communication activities. The construct of perceived privacy concerns is operationalized as the likelihood of being concerned about the company's trustworthiness with respect to private information. The four-item scale is adapted from Lwin, Wirtz, and Williams (2007). Intrusiveness is defined as "a perception or psychological consequence that occurs when an audience's cognitive processes are interrupted" (Li, Edwards, and Lee 2002, p. 39). In other words, it is not the communication media itself that is considered as more or less intrusive or annoving. Rather, to be considered as intrusive, the current or future campaigns must be perceived as interrupting the goals of the receiver. The three-item scale measures whether consumers anticipate a certain degree of prospective intrusiveness caused by future communication (Baek and Morimoto 2012).

Common Method Bias and Construct Validity

To rule out potential common method bias, we followed Podsakoff et al. (2003). First, we tried to avoid unclear verbalizations and to ensure clarity of the questionnaire based on the results of our pretest. Second, we relied on different construct formats by using a binary dependent variable and independent variables with multiple items based on seven-point Likert scales or semantic differentials. We assessed a potential bias ex-post by performing Harman's single-factor test and ran competing confirmatory factor analysis models, since our data on all constructs came from one source. The results indicate that common method bias is not a serious issue in our study (Podsakoff et al. 2003). We further used partial correlation with a marker variable in order to confirm those findings. Lindell and Whitney (2001) indicate that a marker variable is hardly relevant to the dependent variable. Here we used the variable consumer expertise as a marker variable. By using this marker variable, we found that the change in correlation of the indicators and probability that consumers will grant permission for direct marketing activities is small, i.e., approximately 1% after controlling for consumer expertise. Accordingly, the results indicate that a common method bias is very unlikely, thus confirming the outcome of the single-factor test.

The results of a confirmatory factor analysis indicate that the scales are sufficiently valid and reliable. As presented in Table 2, all multi-item scales reveal average variance extracted (AVE) and composite reliabilities above .8, which is way above common critical thresholds of .5 and .6 (Bagozzi and Yi 1988). Similarly, Cronbach's alpha for all scales is well above the .7 level that Nunnally and Bernstein (1994) suggested. As further shown in Table 3, the AVE for each construct exceeds the shared variance with all other constructs, which exhibits discriminant validity for our constructs (Fornell and Larcker 1981).

Empirical Results

We estimated the decision of whether to grant permission (permission decision; yes = 1, no = 0) by using logistic regression. To analyze the influence of the different benefit-related and cost-related factors, interaction effects, consumer-related and company-related characteristics as well as sociodemographics on the permission decision, we included them as sets of variables in our binary logistic regression in a stepwise fashion, leading to five models, A to E (Table 4).

To assess the explanatory power of these five nested models, we used Nagelkerke's R² (Nagelkerke 1991) and Cox & Snell's R^2 , which generally tends to be lower than Nagelkerke's R^2 . The chi-square (χ^2) statistics reported in Table 4 indicate whether adding a block of variables significantly improves the goodness of the model, as compared to the previous step. We also report the hit rate, which is generally around 80% and increases if the model becomes more comprehensive. While Model A already provided a Nagelkerke's R^2 of .423, implying that focusing on benefitrelated factors already leads to a useful and parsimonious model, the explanatory power significantly increases by adding costrelated factors (Model B), interactions (C), or consumer-related and company-related characteristics (D). However, the model improvement from model (D) to (E) is not significant, indicating that including sociodemographics does not add explanatory power. The final model with all variables and interactions (E) exhibits the highest Nagelkerke's R^2 value of .512. The results of the five models (A) to (E) for different groups of variables show a high level of consistency, thus providing evidence for the robustness of our findings. In the following, we discuss the results referring to the findings from the final model E.

The Impact of Benefit-related Factors on Granting Permission (H1, H2, H3, H4, H5)

The expected benefits that recipients derive from interactive marketing activities positively affect their willingness to grant permission, as the results for Model E in Table 4 reveal. Overall, a positive effect can be supported for three out of five benefit-related factors. Confirming our H1, personal relevance is positively related to the probability of granting permission (b = .894, p < .01). Similarly, our results also confirm H2, supporting that the perceived level of entertainment has a positive influence on permission probability (b = .572, p < .01).

Interestingly, the effects of monetary incentives (b = -.003, p > .05) as well as lotteries (b = .026, p > .05) are not significant.

Table 2

Constructs and measurements.

Constructs (taken or adapted from)	Mean	SD	α	CR	AVE
Personal relevance (Zaichkowsky 1985 and Srinivasan, Anderson, and Ponnavolu 2002)	4.05	1.65	.97	.98	.95
The personalized communication of the company will					
be supposedly relevant to my needs.					
be supposedly meaningful to me.					
be supposedly useful to me.					
be supposedly interesting to me.					
supposedly provide purchase recommendations that match my needs.					
I think this personalized communication of the company enables me to order products that are tailor-made for me.					
Overall, this personalized communication of the company is tailored to my situation.					
I believe this personalized communication of the company is customized to my needs.					
Entertainment (Dabholkar 1994)	3.04	1.65	.92	.97	.96
I expect personalized communication media of the company to be					
entertaining.					
enjoyable.					
fun to watch.					
Monetary incentives (new scale)	3.40	2.16			
The granting of permission in personalized communication is combined with financial or material incentives.					
Lottery (new scale)	3.44	2.14			
The granting of permission in personalized communication allows me to participate in lotteries/sweepstakes.					
Registration cost (Dabholkar 1994)	2.35	1.63	.91	.97	.95
Will be complicated for me will be easy for me.					
Will take a long time for me will take little time for me.					
Will take a lot of effort for me will take little effort for me.					
Privacy concerns (Lwin, Wirtz, and Williams 2007)	4.16	1.63	.86	.96	.95
I am concerned that the company will					
gather too much personal information about me.					
use my personal data for purposes other than the reason I provided the information for.					
share my personal information with other parties.					
I am concerned about my privacy at this company.					
Intrusiveness (Li, Edwards, and Lee 2002)	3.69	2.00	.95	.98	.97
I expect personalized communication media of the company to be					
distracting.					
intrusive.					
obtrusive.					
Consumer information control (Mothersbaugh et al. 2012)	3.73	1.57	.72	.89	.81
I can easily control the number of messages I receive.					
I choose the ways in which my personal information may be used for marketing personalized communication.					
I have complete power over how the information I provide will later be used for personalized communication.					

The scales range from "strongly disagree" (1) to "strongly agree" (7).

SD = standard deviation; α = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted.

Because firms frequently incentivize their requests for permissions, this finding implies that promised monetary incentives or the chance to win in a lottery does not directly affect the probability of permission. Thus, H3 and H4 are not supported. However, as it is not known whether such stimuli were actually offered in a firm's request for permission, we cannot infer with

Table 3

Correlation matrix for the latent constructs and the dependent variable.

		*						
	Personal relevance	Entertainment	Monetary incentives	Lottery	Consumer information control	Registration cost	Intrusiveness	Privacy concerns
Personal relevance	.857							
Entertainment	.612 **	.958						
Monetary incentives	.346 **	.334 **	_					
Lottery	.171 **	.292 **	.518**	_				
Consumer information control	.522 **	.437 **	.127 **	.073 *	.849			
Registration cost	188 **	140 **	051	060 *	141 **	.955		
Intrusiveness	534 **	431 **	113 **	004	463 **	.120 **	.973	
Privacy concerns	464 **	380 **	077 **	.007	433 **	.155 **	.578 **	.929
Permission granted (yes = 1)	.563 **	.411 **	.194 **	.098 **	.388 **	150 **	472 **	420 **

Square roots of the AVE values are given in the diagonal elements; N = 1,397.

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

Table 4

Results.

	Model A		Model B		Model C		Model D		Model E	
	b	SE	b	SE	b	SE	b	SE	b	SE
Intercept	0.875 **	0.074	1.001 **	0.081	1.009 **	0.086	1.012 **	0.087	0.829	0.498
Personal relevance	1.269 **	0.085	0.964 **	0.092	1.028 **	0.097	0.897 **	0.106	0.894 **	0.106
Entertainment	0.911 **	0.083	0.606 **	0.091	0.659 **	0.096	0.564 **	0.101	0.572 **	0.102
Monetary incentives	-0.031	0.074	0.033	0.080	0.016	0.083	0.006	0.084	-0.003	0.086
Lottery	-0.090	0.072	0.034	0.077	0.025	0.081	0.024	0.082	0.026	0.083
Consumer information control	0.161*	0.078	0.449 **	0.088	0.435 **	0.093	0.418 **	0.094	0.412 **	0.096
Registration cost			-0.260 **	0.072	-0.259 **	0.073	-0.229 **	0.075	-0.228 **	0.076
Privacy concerns			-0.607 **	0.080	-0.726**	0.092	-0.689 **	0.096	-0.691 **	0.097
Intrusiveness			-0.641 **	0.079	-0.623 **	0.078	-0.591 **	0.081	-0.592 **	0.082
Interaction effects										
Privacy concerns · personal relevance					-0.259 **	0.090	-0.268 **	0.091	-0.264 **	0.091
Privacy concerns · entertainment					-0.226*	0.095	-0.243 *	0.097	-0.240*	0.097
Privacy concerns · monetary incentives					0.103	0.083	0.128	0.084	0.129	0.084
Privacy concerns · lottery					0.018	0.077	0.018	0.078	0.018	0.078
Privacy concerns · consumer information control					0.013	0.076	0.008	0.078	0.013	0.078
Control variables										
Involvement							0.178 *	0.078	0.190 *	0.078
Offer affinity							0.089	0.076	0.087	0.078
Attitude towards direct marketing							0.215 *	0.088	0.217*	0.089
Trust towards the company							0.162	0.084	0.163	0.084
Information search behavior							-0.038	0.075	-0.042	0.076
Age									0.003	0.006
Sex									-0.160	0.155
Region									0.018	0.016
Household size									0.093	0.074
Education									-0.025	0.077
Income									-0.009	0.073
Model statistics										
-2 log likelihood	1,306.849		1,195.983		1,184.827		1,173.357		1,169.129	
χ^2 (block)	514.243 *	*	110.865 **		11.157*		11.470*		4.228 n.s.	
Nagelkerke's R ²	.423		.495		.502		.509		.512	
Cox & Snell's R^2	.308		.361		.366		.371		.373	
% correctly classified	78.2		79.8		80.4		80.7		81.0	

N = 1,397.

* p < .05.

** p < .01.

certainty that incentives or lotteries do not work. Finally, the impact of consumer information control is positive and significant (b = .412, p < .01), thus supporting H5.

The Impact of Cost-related Factors on Granting Permission (H6, H7, and H8)

All cost-related factors, i.e., registration cost (b = -.228, p < .01), privacy concerns (b = -.691, p < .01), and intrusiveness (b = -.592, p < .01), uniformly reveal highly significant negative effects on the probability of granting permission, thus confirming H6, H7, and H8. Privacy concerns show the most pronounced negative impact on the probability that consumers grant permission, as indicated by its b value.

Interaction Effects with Privacy Concerns (H9a–e)

As shown, perceived personal relevance of future communication has a positive impact on granting permission. This effect is significantly attenuated when consumers are simultaneously driven by pronounced privacy concerns (b = -.264, p < .01), thus confirming H9a.

Similarly, and again as hypothesized, the negative effect of privacy concerns also mitigates the strong positive effect of entertainment (b = -.240, p < .05), supporting H9b. We do not find any significant interaction effects of privacy concerns with monetary incentives (b = .129, p > .05), lottery participation (b = .018, p > .05) and perceived consumer control (b = .013, p > .05).

To further understand both the direct and interaction effects, we also graphically displayed these effects. This is important given that the interpretation of direct and particularly interaction effects in a logistic regression is not straightforward (e.g., Konus, Neslin, and Verhoef 2014). In Fig. 2a and b we visualize the marginal changes of the predicted probability to grant permission, if one of the significant direct or interaction effects is changed by one standard deviation, keeping all other variables at their mean values (Fox 2003; Mitchell and Chen 2005). Our baseline scenario, where all variables are set at their means, provided an expected probability of 71.9% to grant permission. This likelihood is increased substantially if our respondents



Fig. 2. a and b: Marginal effects of benefits, costs, interactions and control variables.

perceived the benefit factors of personal relevance, entertainment, or information control as high (+1 SD), or if the cost factors privacy concerns or perceived intrusiveness were rather low (-1 SD). Opposite effects can be observed for below-average values of variables representing benefits, and above-average values of cost factors. As Fig. 2b indicates, the marginal effects of any interaction or control variables are far less pronounced.

Exploratory Analysis and Robustness Checks

We also assessed the interaction effects of privacy concerns with the other two cost related factors, i.e., registration costs and intrusiveness. However, we could not find any significant interaction effects. Furthermore, we explored whether trust possibly moderates the effects of privacy concerns and intrusiveness, respectively, because consumers with a high level of trust might focus less on these psychological costs. Again, we could not find any statistical evidence for such moderating effects. We also explored whether there were interactions between the different benefit related factors (e.g., between lottery and entertainment), because benefits might reinforce each other. All these additional interactions were not significant and did not improve the overall model fit. Though we could test more interactions (e.g., between benefits and registration costs or intrusiveness), we do not have sound reasons to test these interactions and it would thus only lead to a kind of data mining for interaction effects.

We also executed some robustness checks, which we briefly report. First, we included six firm dummies for the firms that were mentioned by more than ten respondents, to control for firm-specific effects. The estimation results remain similar, and we only find a positive main effect of the firm dummy for Amazon. It is also noteworthy that the 1,397 respondents mentioned 832 different firms, so it is unlikely that firmspecific effects play a role. However, with 678 distinct firms only mentioned by one respondent, we are not able to separate out firm effects and customer effects for many respondents. To account for industry effects, we also included four dummies for the largest industries representing 55% of the responses. Again, the estimation results remain unaffected. Interestingly, the decision to grant permission is significantly higher only in the apparel and textile industry (b = 0.547, p < .05), while we observe no significant effects for financial services, retailing, or telecommunications.

Discussion

Summary of Results and Implications

Interactive marketing communication is frequently perceived as a disruption of privacy that can result in serious reactance (Diamond and Noble 2001; Van Diepen, Donkers, and Franses 2009). Similarly, the storage and use of personal information are known to trigger sustained privacy concerns of individuals (Dolnicar and Jordaan 2007). Permission marketing represents a potential solution to this dilemma (Tsang, Ho, and Liang 2004). It aims to meet legal requirements as well as provide informational self-determination to the consumer. Thus, permission-based marketing activities can reduce reactance and enhance attention concerning the interactive marketing content. However, companies need to know which factors influence consumers to grant permission (Krishnamurthy 2001).

The results obtained from our representative study offer insights into important drivers and barriers relevant to consumers' consent behavior. We identify eight cost-related and benefitrelated drivers as well as 12 additional control variables to explain why consumers grant permission. By executing this study, we contribute to the literature on personalization, privacy and direct marketing by developing and testing a rich conceptual model on the drivers of granting permission decisions. We demonstrate that permission decisions are primarily based on a consumer-sided benefit–cost calculus, which is in line with the existing literature on privacy (e.g., Dinev and Hart 2006; Martin, Borah, and Palmatier 2017).

In particular, our study illustrates that expected personal relevance, entertainment, and consumer information control directly affect the probability of consumers granting permission for interactive marketing activities. Additionally, pronounced registration cost, privacy concerns, and anticipated intrusiveness reveal negative effects on the likelihood of granting permission, whereas monetary incentives or the offer to participate in a lottery do not affect consent decisions.

We can therefore conclude that immediate incentives such as coupons, rebates, or lotteries on average do not increase the willingness to grant permission, but that consumers prefer communication that matches their interests and provides relevant and individualized content. In line with the findings of Andrade, Kaltcheva, and Weitz (2002), we therefore caution managers about costly incentive campaigns that try to "buy" permissions. Consumers might perceive those appeals as insufficient to convince them to grant permission or even respond negatively to what they might consider as manipulative financial baits. Our results also reveal that consumers tend to grant permission for entertaining communication.

The significant impact of information control is in line with studies by Malhotra, Kim, and Agarwal (2004) as well as Phelps, Nowak, and Ferrell (2000). This implies that consumers like to have control over the relationships they engage in. Based on our study's results, we advise managers to focus on hedonistic aspects as well as potential personalized relevance of the content they offer. This means that managers should emphasize the benefits of engaging in permission-based interactions with the company; whereas positive refers to content that is personally relevant and entertaining. It is also helpful to make consumers feel that they remain in charge of the provided information. For example, a log-in area that gives consumers an overview of the scope of information collected by the firm might create a feeling of control and security.

In contrast, factors such as high registration effort, privacy concerns, or the anticipation of annoying or intrusive communication may prevent consumers from granting permission. Supporting the benefit–cost calculus approach, it might not be sufficient to stress the positive aspects of a permission-based interaction between consumer and company, but it may also be necessary to deal with perceived and anticipated costs and threats. Especially privacy concerns represent a strong negative influence on the probability that consumers will grant permission to receive interactive marketing campaigns.

To reduce privacy concerns, the usage of transparent privacy policies and official seals of independent institutions has been suggested (Pan and Zinkhan 2006; Xie, Teo, and Wan 2006). The negative influence of privacy concerns is even found to attenuate the positive effects of personal relevance and entertainment. As soon as the receiver develops substantial privacy concerns, the influence of the expected personal relevance of the message will affect the decision much less. In other words, the consumer frequently faces a trade-off between revealing sensitive personal information to receive interesting offers or content, or declining to share such information and receiving standardized offers.

Our findings on the interactions of benefits with privacy concerns are in line with insights from related streams of literature (Awad and Krishnan 2006; Edwards, Li, and Lee 2002; van Doorn and Hoekstra 2013). We show that if consumers are very concerned about their privacy, the negative effects can at least be compensated for by designing interactive marketing content that fits their needs. The same attenuating interaction effect can be observed when both expected entertaining content and privacy concerns are pronounced. As soon as individuals are concerned about their personal data, the strong positive effect of anticipated entertainment on the willingness to grant permission will be mitigated. However, we could not find any significant interaction between privacy concerns and perceived consumer information control. Whereas privacy concerns focus on the potential misuse of provided information (Lwin, Wirtz, and Williams 2007), consumer-sided information control rather refers to perceived control regarding receiving permission-based content, such as the number of messages (Mothersbaugh et al. 2012). Overall, we argue that privacy concerns and consumer-sided information control are rather unrelated constructs, which might explain the missing interaction.

The negative impact of anticipated intrusiveness and expected high registration cost could be reduced by designing permission campaigns accordingly. This means that the ease of the registration process should be emphasized, for instance by adding messages such as "just one click to register." Companies should carefully consider and decide what kind and amount of data they really need, otherwise customers might be scared off during registration. Those processes as well as permission-focused campaigns should provide information about the number of messages or contacts a consumer can expect. Phrases like "from time to time," "once in a while," or "as often as YOU like" will probably be more appealing to customers than messages like "regularly" or "frequently." Thus, firms avoid that consumers anticipate future direct media communication to be intrusive or annoying.

Limitations and Future Research

Despite its large-scale, representative empirical data, this study has limitations. Our study was conducted in one country, which underlies the limitation that cultural values such as privacy concerns and uncertainty avoidance vary across nations (Samaha, Beck, and Palmatier 2014; Wetzel, Hammerschmidt, and Zablah 2014). Given the fact that we used a German sample, we should be aware that privacy concerns tend to be relatively high in this country (Interactive Advertising Bureau 2010). In other words, we cannot ensure that our findings hold true for other countries and therefore recommend further research in other countries.

This study is an attempt to provide an extensive model to explain the decision to grant permission. However, future research could extend this model and investigate an even more comprehensive framework. In terms of the included antecedents the use of a benefit-cost framework seems useful. However, one may speculate that benefits are inherently economic and costs inherently psychological, as four out of five benefits are rather economic in nature, while two out of three benefits are rather psychological. Interestingly, prior research on benefits has focused on economic aspects, and only recently benefits such as perceived control have been emphasized (e.g., Tucker 2014). To improve our understanding of online and mobile advertising as well as the process of granting permissions, we encourage future research to add psychological benefits and economic costs to the current framework. For example, benefits such as informational self-determination or customer empowerment are promising avenues (e.g., Broniarczyk and Griffin 2014). Additionally, one could consider smart shopper feelings due to the ability to get good deals through targeted campaigns (e.g., Verhoef, Neslin, and Vroomen 2007). Furthermore, and going beyond registration costs, a stronger set of economic costs could be included. In this regard, time costs could be a relevant addition (DeSerpa 1971), while also control costs (e.g., monitoring the permission status and available information) could be added. Future research could thus include a more comprehensive list of determinants, which has a stronger balance in economic and psychological benefits and costs. Moreover, because many decisions have gained a stronger social element, social benefits and costs could be included. In this study we did not include attitudes as mediators in our model, but linked the perceived benefits directly to the permission decision. However, because consumers frequently trade-off benefits and costs based on attitudes, there are ample reasons to include such mediating variables in our current framework. One could consider a privacy calculus construct as a kind of mediating variable, or integrate a general attitude towards permission-based marketing as a mediator. Given the strong notion of benefits and costs in our research, we strongly pledge for a measure of privacy calculus as a mediator (e.g., Martin, Borah, and Palmatier 2017). As a third addition to the current framework one could explicitly include situational moderators both at the service level as well as the customer level. Specifically, the type of service could serve as a moderator. There could also be differences between services or media with strong social characteristics, and services with less social elements. From our prior qualitative research, we know that a context to ask for permissions is when new customers get acquired, register at a firm's website, or call the company hotline. We suggest to also investigate the quality of permissions granted (for which media, frequency of contacts, degree of personalization, also for partner firms) together with other situational factors such as purchase frequency, risk, or customer relationship quality. Though our analyses on industry- or firm-specific effects did not reveal significant effects, it could still be that familiarity with firms and brand trust are important moderators. Thus, we have outlined an enhanced conceptual model that includes a richer set of determinants, privacy calculus as a mediating variable and context variables at the service, permission situation and customer level as moderators.

Beyond developing and testing the sketched conceptual model, it would also be interesting to know how people would respond if they had been explicitly informed about the benefits of granting permission for a specific campaign. While our study is cross-sectional, future studies could investigate longitudinal data of consumer attitudes towards personalized direct communication. It would be interesting to observe how consumers respond if their expectations that did lead to granting permission in the first place are not met and, in particular, what kinds of drivers of permissions are helping to establish the best consumer relationships. This means that further research should investigate what kind of permission campaigns provides the highest long-term revenue and profitability. And, which benefit-related or cost-related drivers are associated with opt-out behavior of consumers?

Finally, our finding of no impact of monetary incentives or lottery participation provides room for further analysis. As stated earlier, previous research in this field is scattered and the results reported in literature are to some degree contradictory. Whereas for example De Wulf, Odekerken-Schröder, and Iacobucci (2001) report a positive effect of monetary incentives on the development of consumer relationships, our results support the findings of Xie, Teo, and Wan (2006), who find that monetary incentives do not influence consumers' willingness to provide sensitive, demographic information. Nevertheless, compensating customers for granting permission appears to still be common practice. We encourage future research, in particular field studies, on whether such stimuli offered by firms increase customers' propensity to grant permission, or remain ineffective.

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