Consumer Data Privacy in Marketing Research: A Study of Value-Based and Cognate-Based Approaches

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ABSTRACT

In this paper, we used Smith et al. (2011)’s classification of privacy definitions based on cognate-based and value-based approaches and reviewed the marketing literature for the past five years on consumer information privacy. We added an extra dimension to this classification by looking at whether the research has a regulatory emphasis or not. Our results indicate that there are plenty of research articles on cognate-based and non-regulatory underscoring research as well as value-based and regulatory emphasis articles. There is exigent need for more research on cognate-based, regulation focused and value-based, non-regulation focused accentuation.

INTRODUCTION

As the practice of marketing is profoundly reshaped by ever-changing technology, researches are more and more inclined to study its implications in the literature. They commonly adapt the exiting theories as well as try new approaches into the previously unexplored research questions about technological challenges. An important aspect of the research in this domain involves data and information privacy where such considerations are commonly part of theoretical and empirical research models. Even though data privacy is studied in other disciplines such as information systems and computer technology, there is a dearth of research that reviews the marketing literature on information privacy. This is surprising, given the fact that data privacy is commonly added to marketing research models that deal with technology such as technology acceptance model (TAM).

This article attempts to find out how we can categorize the marketing literature on information privacy by building upon existing classification systems. We aim to guide future marketing researchers through our classification by pointing at fruitful research areas where more scrutiny is needed.

Cognate vs. Value-based Approaches to Information Privacy

Smith et al. (2011) studied information privacy in the MIS discipline and used an interdisciplinary lens. They stated that privacy can be studied using two approaches: cognate-
based and value-based emphases. Cognate-based approaches define privacy as behavioral state-of-mind that is tied to consumer behavior. In contrast, value-based approaches emphasize economic and legal perspectives on privacy and social protections. Taylor, Ferguson and Ellen (2015) added that cognate-based approaches to privacy are very common in marketing literature because personality traits, perceptions, and cognitions are primarily studied in this domain. Stemming from this congruity, we adopted cognate-based and value-based approaches to privacy into our analysis of current marketing literature.

We also expanded this reference frame by adding whether existing research has a regulation focus or not. Regulation of information privacy is an issue common to cognate and value-based marketing research. This is probably because when data privacy is added to the research models, managerial implications typically involve whether and how regulations are needed. Therefore, whether a regulatory emphasis exists or not in a research study is important. We built a new classification system where all articles from the past five years are placed into four quadrants on whether they are value vs. cognate-based and regulation vs. non regulation focused. We accessed ABI Informs Business Data Base using the keywords of “consumer” “information”, and “privacy”. We limited our search with peer reviewed academic articles published between January, 2014 – December, 2019 marketing/business journals. In order to keep our perspective with marketing/business discipline, we included marketing and business journals and excluded law, information systems and economics journals from our search scope (Table 1). In total, our search results listed 46 articles. We eliminated four articles that were not information privacy based, leaving a total of 42 articles in our review. We placed the final set of articles into four quadrants based on our proposed classification scheme (Table 2).
Table 1. List of Journals

<table>
<thead>
<tr>
<th>List of Journals Included in the Study:</th>
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<tbody>
<tr>
<td>The Journal of Consumer Marketing</td>
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<tr>
<td>Journal of Research in Interactive Marketing</td>
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<td>Journal of Consumer Policy</td>
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<tr>
<td>Journal of Direct, Data and Digital Marketing Practice</td>
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<td>Electronic Markets</td>
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<tr>
<td>The Journal of Consumer Affairs</td>
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<tr>
<td>Asia Pacific Journal of Marketing and Logistics</td>
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<tr>
<td>Journal of Electronic Commerce Research</td>
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<tr>
<td>Journal of Marketing Theory and Practice</td>
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<tr>
<td>Academy of Marketing Studies Journal</td>
</tr>
<tr>
<td>Contemporary Management Research</td>
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<tr>
<td>Electronic Commerce Research</td>
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<tr>
<td>European Journal of Marketing</td>
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<tr>
<td>Information Technology and Management</td>
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<tr>
<td>International Journal of Business and Information</td>
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<tr>
<td>International Journal of Contemporary Hospitality Management</td>
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<tr>
<td>International Journal of Electronic Commerce Studies</td>
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<tr>
<td>International Journal of Retail &amp; Distribution Management</td>
</tr>
<tr>
<td>Journal of Advertising</td>
</tr>
<tr>
<td>Journal of Business Ethics</td>
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<tr>
<td>Journal of Marketing Development and Competitiveness</td>
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<tr>
<td>Journal of Service Theory and Practice</td>
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<tr>
<td>Journal of the Academy of Marketing Science</td>
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<tr>
<td>Journal of Theoretical and Applied Electronic Commerce Research</td>
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<tr>
<td>Marketing Letters</td>
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<tr>
<td>MIT Sloan Management Review</td>
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<td>Nankai Business Review International</td>
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<tr>
<td>The Journal of Product and Brand Management</td>
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<tr>
<td>Advances in Management</td>
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<tr>
<td>American Journal of Business Education</td>
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<td>Asia Pacific Journal of Management &amp; Entrepreneurship Research</td>
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<td>Asian Journal of Business Ethics</td>
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<tr>
<td>Aslib Journal of Information Management</td>
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<tr>
<td>Global Business and Management Research</td>
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<tr>
<td>Global Management Journal for Academic &amp; Corporate Studies</td>
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<tr>
<td>Harvard Journal of Law and Public Policy</td>
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Table 2. Classification Framework

<table>
<thead>
<tr>
<th></th>
<th>Cognate-based</th>
<th>Value-based</th>
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</thead>
<tbody>
<tr>
<td><strong>Non-regulation Focused</strong></td>
<td>Lee and Rha (2017); Tandon, Kiran and Sah (2017); Ridley-Siegert (2015); Lee, Lee and Rha (2019); Song et al (2016); Taylor, Ferguson and Ellen (2015); Winegar and Sunstein (2019); Schadle et al. (2018); Li et al. (2016); Morosan and DeFranco (2016); Wright and Xie (2019); Fox and Royne (2018); Pasternak, Veloutsou and Morgan-Thomas (2017); Featherman and Hajli (2016); Mahadevan and Puthur (2018); Alhouti, Johnson and D’Souza (2016); Gimpel, Kleindienst and Waldmann (2018); Peer and Acquisti (2016); Aguirre et al. (2016); Logan, Bright, and Grau (2018); Ainsworth et al. (2017); Shankar (2015); Hilken et al. (2017); Reimers, Chao and Gorman (2015); Roy and Moorthy (2017); Thu, Jebarajakirthy and Thaichon (2016); Ruiz-Mafe, Tronch and Sanz-Blas (2016); Wei et al. (2017)</td>
<td>Martin and Murphy (2017)</td>
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<tr>
<td><strong>Regulation Focused</strong></td>
<td>Mahipal and Shankaraiah (2018); Kaur and Quareshi (2014); Im and Ha (2015); Roeber, Rehse and Knorek (2015); Wang (2019)</td>
<td>Sayago et al. (2015); Li (2018); Moos (2015); Borgesius and Poort (2017); Luzak (2014); Mayfield (2016); Seizov, Wulf and Luzak (2019); Menon (2019)</td>
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Cognate-based, Non-Regulation Focused Research
Lee and Rha (2017) studied the effects of ambivalence in relationship to personalized technologies. They found that ambivalence toward personalized technologies has an indirect negative effect, mediated by internal conflict and a direct positive effect on intention to use location based mobile commerce. They also added gender into their model as a moderating variable. Tandon, Kiran and Sah (2017) studied the attributes of websites, perceived usefulness and perceived usability in relationship with customer satisfaction. They added security and privacy into their model through the website functionality construct which also includes the navigation characteristics and website design.

Ridley-Siegert (2015) compiled the results of Direct Marketing Association’s research that studied consumer attitudes on data exchange, protection and privacy. They found that in order to have access to services, consumers are more accepting of giving up their private data. They also indicate that the meaning of privacy is altered due to widespread use of social media. They highlight the fact that in UK, in 2015, 73% of consumers have agreed that in order to buy products and services over the internet, online sharing of personal information is a part of current economic environment. Lee, Lee and Rha (2019) explored the antecedents of consumer intentions to use mobile payments with a focus on gender. They found that privacy risk is negatively related to intentions to use such services whereas social influence and performance expectancy has positive effects.

Song et al (2016) investigated the effects of email messages that are personalized for consumers. They focused on perceptions of risk and moderator variables of message intimacy and consumer’s control. They indicated that email personalization increases risk perceptions whereas allowing for consumers’ privacy control reduces risk perceptions. Taylor, Ferguson and Ellen (2015) studied privacy in consumer behavior from a value based and cognate based classification. They created a model composed of information privacy orientation, individual traits and consumer privacy concerns where they linked these constructs to consumer attitudes. They suggest that companies can increase consumer collaboration in the collection of marketing data by highlighting consumers the necessity data collection and providing them of warranties that limit personal information sharing.

Winegar and Sunstein (2019) used the Willingness to Pay and Willingness to Accept general theory and found that the average consumer is willing to pay little to maintain data privacy. On the contrary, consumers demand way more to let companies access their data, especially when primed about health or demographics data is at stake. Schade et al. (2018) find that privacy concerns negatively affect consumer intentions to use location-based advertising whereas advertising value, brand trust and privacy self-efficacy has a positive affect. For the German market, they argue that location-based advertising providers must let consumers feel more control and strengthen their brand in order to increase consumer location-based advertising.

Li et al. (2016) looked at what increases consumers’ willingness to disclose private information on Social Networking Sites. They find that perceived benefits increase such intentions where they model it as related to social network size, incentives and personal innovativeness. They add that perceived risks decrease intentions to share personal information. Morosan and DeFranco
approached data privacy in the context of hospitality industry. They studied intentions to use hotel apps and found that involvement and personalization options were important positive variables for intentions to use such apps whereas privacy concerns played a negative role.

Wright and Xie (2019) studied how companies distribute information about consumers to third parties and how this may go against privacy expectations and norms. They hypothesize that intentional data sharing when data is sensitive generates more negative attitudes. They also suggest that privacy expectations and nature of consent will mediate this relationship. Fox and Royne (2018) study fear and its relationship to consumers’ understanding of social media privacy policies by developing a scale and use it to understand how text, audio and pictures affect this construct. They find that pictures and audio are more effective than text alone when consumer cognition and affect are concerned.

Pasternak, Veloutsou and Morgan-Thomas (2017) approach electronic word-of-mouth (eWOM) by adding concern for privacy and self-presentation as antecedents to brand related eWOM. They suggest that companies be careful when approaching consumers over social media in relationship with their privacy and add that brands can consider levels of privacy settings to address privacy concerns. Featherman and Hajli (2016) discusses the social media commerce and focus on the negative relationship between risk concerns for usage and its relationship to perceived usefulness and intentions to use. They added subjective norm in their model as a factor that has an effect on the relationship of perceived usefulness on usage behavior.

Mahadevan and Puthur (2018) study public Wifi on consumer intentions to use smartphones for transactions in India. By using Smart PLS method, they modelled perceived tracking, trust in internet, and task privacy as antecedents to wifi usage for transactions as moderated by individual need for privacy. Alhouti, Johnson and D’Souza (2016) brought a new perspective on consumer privacy concerns by adding materialism and religiosity as antecedents to privacy concerns. They link extrinsic religiosity to materialism and argue that materialism decreases privacy concerns.

Gimpel, Kleindienst and Waldmann (2018) attempt to design a metric that can calculate risk-benefit paradox where consumers do not act rational in assessing benefits versus risks for their online behavior. They frame their metric as an instrument to be used by companies in order to provide consumers suggestions on alternative online services according to the level of their privacy needs. Peer and Acquisti (2016) studied reversibility of personal information disclosure. They found that making reversibility an issue in information disclosure may make self-disclosure of personal data more limited.

Aguirre et al. (2016) also study personalization-privacy paradox which emphasizes that personalization my improve electronic communications between business and consumers unless it infringes on consumer privacy concerns. They come up with a set of research questions that future research may address as related to social, mobile, display and mobile marketing communications. Logan, Bright, and Grau (2018) use Rational Choice Theory to understand how
social media fatigue is a result of privacy concerns. They argue that consumers continuing the use of social media indicates there are still some positive outcomes in excess of negative effects. They created a model based on consumer confidence and self-efficacy on a given social media platform usage affecting their perceptions of a given media’s helpfulness. They then positively link social media platform helpfulness to increased privacy concerns and a consequent social media fatigue.

Ainsworth et al. (2017) attempts to incorporate self-efficacy in mobile payment usage, mobile payment privacy concerns and new technology anxiety into TAM. They find support for their model and suggest that businesses emphasize consumer data privacy and understand the importance of consumer self-efficacy in relationship to tap-and-go payments. Shankar (2015) focused on gender and concluded that there are differences in online shopping preferences on the dimensions of information security, quality privacy and reliability. Hilken et al. (2017) used situated cognition theory and studied AR technologies. They focused on value perceptions, consumer decision comfort which is altered by the use of AR technology that provides environmental embedding and simulated physical control for the consumers. They also added consumer verbal vs. visual information processing tendencies and privacy concerns into their model.

Reimers, Chao and Gorman (2015) studied the effect of permission email marketing (PEM) by using Technology Acceptance Model (TAM). They used an online survey and SEM and found that PEM increases enjoyment, perceptions of ease of use, and perceived usefulness. Furthermore, they found that permission email marketing reduces perceived risk. Roy and Moorthi (2017) studied mobile commerce (M-commerce) by combining technology readiness concept into technology acceptance model (TAM). They listed several antecedents for mobile commerce adoption that includes perceived usefulness and perceived ease of use from the TAM and perceived ubiquity and technology readiness as moderated by privacy concerns. They indicate that marketing managers must use safeguards to deliver safety for the mobile commerce users in order to enhance perceptions of ubiquity and resulting M-commerce consumer adoption.

Thu, Jebarajakirthy and Thaichon (2016) studied the internet service providers’ service quality dimensions which included information privacy and quality, customer service and network quality. They linked service quality to customer behavior for internet services usage such as switching to another provider, complaints and repurchase intentions. Overall, their model indicates that consumers expect the internet service providers (ISP) to maintain and protect users’ information security or they may consider complaints or switching service providers as a consequence. Ruiz-Mafe, Tronch and Sanz-Blas (2016) studied loyalty for online travel communities such as Trip Advisor from the perspective of social influences and emotions. They linked negative emotions for online travel communities such as frustration, stress and fear with risk based on perceived security and privacy whereas social influences are linked with positive effect on loyalty through social impact theory.
Finally, Wei et al. (2017) explored the hospitality industry and error management processes for an information security breach. Error management culture at hotels are believed to influence consumer trust in the hotel and result in consumer engagement behaviors. The perceived controllability is also modeled as moderating these relationships. From a managerial standpoint, this implies that in the hospitality industry, businesses must communicate customers their error management culture through corrective and protective measures in order to maintain customer trust and engagement.

Value-based, Regulation Focused Research

Sayago et al. (2015) looked at supply chains for coffee and studied the challenges of data integration among different actors. They found that collection of accurate data, technological limitations among members, issues related to data ownership, privacy and costs associated with data disclosure are main hurdles before a successful data architecture. Li (2018) studied the online privacy policies for B2C e-commerce firms in Asia through a content analysis of business websites. They found that the accepted standards of online information privacy were more closely observed in Taiwan and Hong Kong compared to China.

Moos (2015) discussed how German Data Protection Agency (DPA) punished the insurance giant Debeka by a fine of more than a million Euros due to its employees’ disclosure of business consumer data to other sales staff in order to make more sales. The agency is now required to enhance its internal business data collection and storage framework. Borgesius and Poort (2017) explored personalized pricing by approaching the topic from a legal and economic perspective. They argue that in the context of European law, companies must inform consumers if they personalize prices based on consumer data and ask for consent.

Luzak (2014) studied the cookies and informed consent requirements of European law. They argue that there is a need for a clear and comprehensible information disclosure that meets consumer needs. Mayfield (2016) study privacy by design in organizations and how they structure data. She argues that this concept essentially entails organizations collect and store data by making sure privacy concerns are taken into account. As a result, organizations become more competitive and less subject to scrutiny by regulatory penalties. Seizov, Wulf and Luzak (2019) discuss how online privacy safeguards can be enhanced by interdisciplinary and empirically tested criteria of information disclosure in the perspective of European Regulations. They provide a list of avenues for future research approaches by an extensive review of existing theoretical frameworks.

Finally, Menon (2019) outlines the European General Data Protection Regulation and states that companies will have to implement data protection into their system design instead of making it an afterthought. They argue that the initiative of European Union may require other advanced economies to create similar comprehensive regulatory frameworks.

Cognate-based, Regulation Focused Research
Mahipal and Shankaraiah (2018) analyzed the e-commerce practices in India. They found that if Indian government promptly adopted the privacy and security laws that are practiced internationally, there is a large potential for widespread e-commerce usage. Kaur and Quareshi (2014) studied why consumers in India do not buy online extensively. They found that some of the major concerns include security risks and inability to physically examine the products. Other reasons are missing product information and unattractive layouts. However, consumer indicated interest to buy online more in the future.

Im and Ha (2015) used Transaction Utility Theory and studied consumer mobile coupon usage process. They emphasized permission-granting intentions are an important factor that may reduce perceived privacy risk. Gender is also related to mobile coupon usage behavior. Roeber, Rehse and Knorrek (2015) used a conjoint analysis and found that almost all consumers may share their data in Europe if the benefits are large, there are reasonable terms and if the right to be forgotten is an option. Consumers also choose between companies for data sharing and pay attention to context rather than the particular data type.

Wang (2019) studied consumer online risk perceptions for privacy as related to privacy legislations and online business brand image. Their model is unique in that it antecedes regulatory practices over consumer perceptions of privacy risk.

**Value-based, Non-Regulation Focused Research**

Martin and Murphy (2017) group marketing privacy literature under the psychology, economics of privacy and the role of privacy in society and point at the need to expand privacy discussion under more than one of these domains. They discuss privacy/vulnerability issues, business recovery strategies from privacy breaches, cross-cultural privacy issues, normative vs. legal frameworks of privacy and theoretical approaches of privacy as areas for future research.

**CONCLUSIONS**

We note that most marketing articles on information privacy deals with cognate-based, non-regulatory emphasis research. This is followed by value-based and regulatory emphasis publications. There are plenty of articles on these two areas with fruitful research avenues highlighted under these topics at these articles. This is not true for research on cognate-based, regulation focused and value-based, non-regulation focused articles where there is a dearth of studies.

This means that marketers must emphasize how consumers perceive and think about existing regulations. Research questions such as whether consumers understand the regulations or information privacy disclaimers and how these affect their perceptions of companies are important subjects that need urgent attention. The same is true for privacy as a social and
economic issue within marketing and consumer research without making regulation as the focal point. This essentially means we need to study how the marketing field can deal with privacy as a socioeconomic consumer problem from a macro perspective without resorting to regulations is an important consideration. Such topics include vulnerability and business recovery tactics from breaches, cross-cultural data privacy research and new theoretical perspectives for privacy and marketing.

REFERENCES


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**ABOUT THE AUTHORS**

**Selcuk Ertekin** Dr. Ertekin is currently serving as an Associate Professor of Marketing at Brenau University in Gainesville, GA. He published articles in several academic journals, including *Marketing Management Journal, Academy of Marketing Studies Journal*, and *Journal of Marketing Development and Competitiveness*. He also presented at more than two-dozen national and regional marketing conferences. His main research interests are in electronic/mobile marketing and cross-cultural perspectives in consumer behavior and retailing.