

# Impact of SMS Marketing Attributes on Purchase Intention: The Mediating Role of Consumer Attitude in Hyderabad City

Dr. Mohd Arif Shaikh<sup>1</sup>, Dr. P. Suganda Devi<sup>2</sup>, Houreen Khanam<sup>3</sup>

<sup>1</sup>Commerce and Business Management, Chaitanya deemed to be university, Hyderabad, India  
Email: mdarifet[at]gmail.com

<sup>1,2,3</sup> Commerce and Business Management, Chaitanya deemed to be university, Hyderabad, India  
Email: sugandhashaikh81[at]gmail.com

<sup>1,2,3</sup> Commerce and Business Management, Chaitanya deemed to be university, Hyderabad, India  
Email: houreenkhanam0423[at]gmail.com

**Abstract:** *In the developing world the mobile communication technologies has significantly transformed modern marketing practices. Among various digital marketing tools, SMS marketing has come up with an effective medium for sending promotional messages directly to consumers. SMS marketing enables businesses to communicate product information, promotional offers, and service updates instantly, thereby enhancing customer engagement and influencing purchasing behavior. However, consumer responses to SMS marketing largely depend on how marketing messages are perceived in terms of their informativeness, personalization, credibility, and level of irritation. This study explores to know the effect of SMS marketing attributes on consumers' purchase intention. In particular, it analyzes how attributes like credibility, informativeness, personalization, and irritation shape consumer perceptions of SMS marketing, thereby influencing their purchasing decisions. Data were gathered from 494 participants through a questionnaire by using a five-point Likert scale. The analysis of the data was conducted to know descriptive statistics, reliability, correlation, and multiple regression analysis by using IBM SPSS 23. As findings reveal that informativeness, personalization, and credibility have a significant and positive effect on consumer attitudes toward SMS marketing and irritation has a negative effect. Furthermore, consumer attitude toward SMS marketing significantly influences purchase intention. The results focused the importance of developing informative, credible, and personalized SMS marketing and minimizing consumer irritation caused by excessive promotional communication. The research offers significant insights for marketers and organizations aiming to develop effective SMS marketing strategies that improve customer engagement and boost consumer purchase intention.*

**Keywords:** SMS Marketing, Mobile Advertising, Consumer Attitude, Purchase Intention, Digital Marketing

## 1. Introduction

As the rapid changes in the information technologies has profoundly altered modern marketing strategies. As mobile phone usage continues to rise globally, mobile marketing has surfaced as an influential means for businesses to engage directly with their customers. Among the diverse array of mobile marketing methods, SMS marketing has established itself as the most dominant types of direct marketing communication. SMS marketing allows businesses to send promotional messages, product information, and special offers directly to consumers' mobile devices, enabling companies to establish immediate and personalized communication with their customers (1,24).

SMS marketing has gained popularity due to its simplicity, cost effectiveness, and high message open rates. Studies indicate that SMS messages are typically read within a few minutes of being received, making them an efficient channel for delivering marketing information (10). Unlike traditional advertising channels, SMS marketing enables companies to reach customers instantly and provide time-sensitive promotional offers, thereby increasing customer engagement and response rates. As a result, many organizations integrate SMS marketing into their digital marketing strategies to strengthen customer relationships and improve marketing performance.

Though, the achievement of SMS marketing mainly depends on how consumers perceive the messages they receive. Consumer attitude regarding mobile advertising is shaped by various factors of the message, including informativeness, personalization, credibility, and irritation (5). Informativeness pertains to advertising messages which convey useful and valuable information regarding products and services. Research suggests that informative advertisements help consumers make better purchase decisions and generate positive attitudes toward marketing messages (26).

Personalization is another important factor affecting consumer responses to SMS marketing. Personalized marketing messages that are tailored to consumers' preferences and interests tend to increase message relevance and customer engagement. Personalized mobile advertising messages are more likely to capture consumer attention and influence purchasing intention. When consumers perceive that marketing messages resonate with their needs, they develop more favorable attitudes towards both the advertisement and the brand (2).

Credibility also plays an important role to identify the impact of SMS marketing. Credibility means the degree of which consumers observe marketing messages as trustworthy and reliable. If consumers trust the information provided in SMS advertisements, they are more likely to respond positively and

consider purchasing the promoted products (25). Conversely, lack of credibility may create skepticism and reduce the effectiveness of marketing communication.

Despite these positive aspects, SMS marketing may also create negative reactions among consumers if it is perceived as intrusive or irritating. Frequent or irrelevant promotional messages can annoy consumers and generate negative attitudes toward the advertiser. Irritation has been identified as a major challenge in mobile advertising because excessive marketing messages may disturb consumers' daily activities and reduce their willingness to engage with promotional content (26).

Consumer attitude toward marketing communication is an important determinant of behavioral outcomes such as purchase intention. Positive attitudes toward SMS marketing can encourage consumers to evaluate products favorably and increase their likelihood of purchasing the advertised products.

Despite the growing attention mobile marketing has received in recent years, empirical evidence on how specific attributes of SMS marketing shape consumer purchase intentions remains limited—particularly within emerging urban markets. This research aims to fill that gap by investigating the impact of four essential characteristics of SMS marketing, namely informativeness, personalization, credibility, and irritation, on consumer attitude of SMS messages and their resulting purchasing intention. Drawing on data collected from consumers in Hyderabad, the results offer significant insights for marketers who seek to create more effective and consumer-focused SMS marketing campaigns.

## 2. Literature Review

### *Emergence of SMS marketing*

As mobile communication technologies have emerging and transformed the marketing ways. Mobile have become an essential part daily life, providing marketers to approach directly with consumers. Mobile marketing refers by using different devices like smartphones and tablets etc., as channels for delivering marketing messages and promotional content to consumers. Mobile represents a new paradigm in marketing interaction with consumers in a highly personalized and interactive manner (24).

Among various types of mobile marketing, SMS advertising has known due to its ability to deliver promotional messages instantly to consumers' mobile phones. SMS marketing is widely used by organizations to inform customers about product launches, discounts, promotional campaigns, and service updates. Compared with other traditional advertising media, SMS marketing offers several advantages, including immediacy, cost efficiency, and direct communication with consumers (10).

Barwise and Strong argue that SMS marketing can be particularly effective when it is based on permission-based marketing strategies. It involves obtaining consumers' consent before sending promotional messages, which shows positive consumer responses. When individuals willingly opt to receive promotional SMS communications, they tend to

view these messages as more valuable and pertinent (2).

However, despite the increasing popularity of SMS marketing, consumer responses to such messages may differ on the characteristics of the advertising message and the perceptions of the recipients. Previous research suggests that factors such as informativeness, credibility, personalization, and irritation play a key role to know customer intention (5; 26).

### *Advertising Value*

The view of advertising value is extensively utilized in advertising research to elucidate consumer reactions to marketing communications. Advertising messages that provide useful information and relevant content tend to generate higher advertising value and positive consumer attitudes. Conversely, advertisements that are perceived as intrusive or irritating may lead to negative consumer responses (5).

A theoretical framework aimed at understanding consumer acceptance of mobile marketing indicates that the perceived value having crucial role in shaping consumer attitudes towards mobile advertising, which subsequently impacts their behavioral intentions (1).

### *Informativeness*

Informativeness is a central attributes of current advertising messages. Informative advertisements provide important information about products, services, and promotional offers to consumers. Such information helps consumers make informed purchase decisions and reduces uncertainty about product characteristics.

Advertising messages that provide relevant and useful information generate positive consumer responses. In the context of SMS marketing, informative messages may include details about product features, price discounts, promotional campaigns, and service updates (5).

The level of informativeness has impact on consumer attitudes towards mobile advertising. Consumers typically view mobile ads as beneficial when it provides valuable and relevant information (26).

Mobile advertisements that are informative can boost consumer engagement and enhance perceptions of the effectiveness of advertising. Moreover, informativeness as a factor which influencing consumer preference of mobile marketing in developing markets (6). Their research reveals that consumers give respond to favorably SMS advertisements when it is useful and informative (17).

### *Personalization in SMS Marketing*

Personalization means marketing messages are customized to the specific preferences, needs, according to individual consumers. Personalized marketing communication has become increasingly important in digital marketing strategies because it allows organizations to deliver relevant messages to targeted consumers.

Those personalized mobile advertisements tend to attract greater consumer attention and generate higher response rates.

Personalized SMS messages can increase the relevance of marketing communication by aligning promotional messages with consumers' interests (2).

Personalized mobile advertising messages is important to engage consumer and acceptance of mobile marketing campaigns. When consumers perceive that marketing messages are customized according to their preferences, it develop positive attitudes (19).

Personalization improves the effectiveness of SMS marketing by increasing consumer involvement with promotional messages. Personalized advertising messages create a sense of relevance and importance, which encourages consumers to be focused on that message (12).

#### ***Credibility of SMS Advertising***

Credibility constitutes a significant element that affects how consumers perceive advertising messages. Advertising credibility is when consumers view promotional messages as dependable and trustworthy. Credibility is essential to influencing the consumer of mobile marketing. When consumers have confidence in the information presented in an advertisement, they are more inclined to react favorably to the advertising messages. It affects consumer attitudes toward mobile advertising. When consumers perceive SMS advertisements as credible and reliable, develop positive attitudes for advertised products (6;21).

Consumer trust within marketing communications, thereby elevating the probability of purchase intentions. Advertising messages that are deemed credible diminish skepticism and bolster consumer assurance in the products or services being promoted (29).

#### ***Irritation in Mobile Advertising***

While SMS marketing offers several advantages, it may also create negative consumer responses when promotional messages are perceived as intrusive or annoying. Irritation occurs when consumers feel disturbed or annoyed by excessive advertising messages. And further indicate that frequent or irrelevant mobile advertisements can create negative perceptions and reduce consumer acceptance of marketing messages (26).

It also highlights that irritation negatively affects consumer attitudes toward online advertising. Advertisements that interrupt consumers' activities or deliver irrelevant content are likely to generate negative emotional responses (3).

Excessive SMS advertising may reduce the effectiveness of mobile marketing campaigns. When consumers receive too many promotional messages, they may perceive such communication as intrusive and undesirable (24).

#### ***Consumer Attitude and Purchase Intention***

Consumer attitudes towards advertising are a fundamental factor influencing behavioral outcomes, including purchase intention. Attitude is defined as an individual's comprehensive assessment of advertising messages or marketing communications (8). Marketing communication is essential in shaping consumer perceptions and affecting purchase decisions. Favorable attitudes towards advertising can

enhance consumers' readiness to buy the products being promoted (13).

Studies show that consumer perceptions of mobile advertising greatly influence their intention to make purchases. When consumers regard mobile ads as informative, trustworthy, and relevant, they are more likely to react favorably and consider buying the advertised products (30). Consumer attitudes are vital in determining the effectiveness of mobile advertising campaigns (28).

### **3. Research Methodology**

#### ***Methods Design***

Quantitative research design is used to explore the impact of SMS marketing characteristics on consumer purchase intention. Quantitative research facilitates the methodical examination of relationships between variables through statistical methods. The study analyzes how elements like informativeness, personalization, credibility, and irritation shape consumer perceptions of SMS marketing and, its influence their purchase intention.

The focus of this research is on mobile phone users in Hyderabad who receive promotional SMS messages. As the population is unknown (A sample size of 384 respondents is needed to draw valid conclusions) respondents were chosen for the study by using a convenience sampling technique, which is commonly used in marketing research when the target population is large and easily accessible. (14)

#### ***Instruments & Measures***

Structured questionnaire is used to collect the data. A Likert like scale of 1 to 5 were used from strongly disagree to strongly agree. IBM SPSS version 23 is used analyse independent and dependent variables.

#### ***Proposed model***

The proposed regression model is expressed as follows:

$$PI = \beta_0 + \beta_1 INF + \beta_2 PER + \beta_3 CRE + \beta_4 IRR + \beta_5 ATT + \varepsilon$$

Where PI represents purchase intention, INF represents informativeness, PER represents personalization, CRE represents credibility, IRR represents irritation, and ATT represents consumer attitude toward SMS marketing. The coefficient  $\beta_0$  denotes the intercept, while  $\beta_1$ – $\beta_5$  represent the regression coefficients that measure the impact of each independent variable on purchase intention. The term  $\varepsilon$  represents the error component of the model.

#### ***Research Hypotheses***

H<sub>1</sub>1: Informativeness has a significant positive impact on consumer attitude toward SMS marketing.

H<sub>1</sub>2: Personalization has a significant positive impact on consumer attitude toward SMS marketing.

H<sub>1</sub>3: Credibility has a significant positive impact on consumer attitude toward SMS marketing.

H<sub>1</sub>4: Irritation has a significant negative impact on consumer attitude toward SMS marketing.

H<sub>1</sub>5: Consumer attitude has a significant positive impact on purchase intention towards SMS marketing.

#### 4. Data Analysis

The 500 questionnaires were distributed and among those 494 found correct and eligible for analysis. Reliability of 18 item shows Cronbach's Alpha of 0.829, indicates good internal consistency of the measurement scale.

**Table 1: Demographic analysis**

| Variable   | Category      | Freq | Per % |
|------------|---------------|------|-------|
| Gender     | Male          | 282  | 57.1  |
|            | Female        | 212  | 42.9  |
| Age        | 18- 20 yrs    | 64   | 13.0  |
|            | 21-30 yrs     | 228  | 46.2  |
|            | 31-40 yrs     | 122  | 24.7  |
|            | 41-50 yrs     | 52   | 10.5  |
|            | Above 50 yrs  | 28   | 5.6   |
| Education  | Undergraduate | 300  | 60.7  |
|            | Postgraduate  | 184  | 37.2  |
|            | PhD           | 10   | 2.0   |
| Occupation | Student       | 80   | 16.2  |
|            | Employee      | 282  | 57.1  |
|            | Business      | 92   | 18.6  |
|            | Others        | 40   | 8.1   |

Source (computed data)

Table 1 shows majority of respondents are male (57.1%), while 42.9% are female. In terms of age distribution, most respondents belong to the 21-30 yrs, (46.2%) and 31-40 yrs, (24.7%). Regarding educational qualifications, 60.7% of respondents hold undergraduate degrees, while 37.2% have postgraduate qualifications, and a small proportion (2.0%) hold PhD degrees. In terms of occupation, 57.1% of respondents are employed, followed by students (16.2%), business professionals (18.6%), and others (8.1%).

**Table 2: Descriptive analysis**

| Var                | N   | Mean | SD   | Min | Max |
|--------------------|-----|------|------|-----|-----|
| Informativeness    | 494 | 3.64 | 0.82 | 1   | 5   |
| Personalization    | 494 | 3.55 | 0.80 | 1   | 5   |
| Credibility        | 494 | 3.69 | 0.83 | 1   | 5   |
| Irritation         | 494 | 3.21 | 0.88 | 1   | 5   |
| Attitude           | 494 | 3.79 | 0.81 | 1   | 5   |
| Purchase Intention | 494 | 3.84 | 0.77 | 1   | 5   |

Source (computed data)

The descriptive statistics indicate that respondent is typically view SMS marketing messages as both informative and credible. The average score for purchase intention ( $M = 3.84$ ) indicates that consumers exhibit a moderate willingness to buy products advertised via SMS marketing

**Table 3: Construct Validity and Reliability**

| Construct          | Items | C- Alpha | (CR) | (AVE) |
|--------------------|-------|----------|------|-------|
| Informativeness    | 3     | 0.823    | 0.88 | 0.71  |
| Personalization    | 3     | 0.812    | 0.87 | 0.69  |
| Credibility        | 3     | 0.845    | 0.89 | 0.73  |
| Irritation         | 3     | 0.741    | 0.83 | 0.63  |
| Attitude           | 3     | 0.871    | 0.91 | 0.76  |
| Purchase Intention | 3     | 0.884    | 0.92 | 0.78  |

Source (computed data)

In the above table no. 3 shows Cronbach's Alpha values range from 0.741 to 0.884, exceeding of 0.70, indicating acceptable internal consistency. Similarly, the Composite Reliability (CR) values range from 0.83 to 0.92. Furthermore, the

Average Variance Extracted (AVE) values range from 0.63 to 0.78, and indicating adequate convergent validity.

**Table 4: Correlation Matrix**

| Var | INF     | PER     | CRE     | IRR     | ATT    | PI |
|-----|---------|---------|---------|---------|--------|----|
| INF | 1       |         |         |         |        |    |
| PER | 0.52**  | 1       |         |         |        |    |
| CRE | 0.58**  | 0.49**  | 1       |         |        |    |
| IRR | -0.31** | -0.28** | -0.25** | 1       |        |    |
| ATT | 0.63**  | 0.59**  | 0.66**  | -0.41** | 1      |    |
| PI  | 0.54**  | 0.51**  | 0.57**  | -0.36** | 0.72** | 1  |

Source (computed data)  $p < 0.01$

The table 4 correlation analysis shows significant positive relationships between informativeness, personalization, credibility, and attitude toward SMS marketing. whereas Irritation shows negative relationship with attitude as well as purchase intention. where Attitude toward SMS marketing has strongest and shows positive correlation between purchase intention ( $r = .72$ ).

**Table 5: Regression Model Summary**

| Model | R     | R <sup>2</sup> | Ad R <sup>2</sup> | Std. Error |
|-------|-------|----------------|-------------------|------------|
| 1     | 0.781 | 0.610          | 0.606             | 0.482      |

Source (computed data)

Table 5 show the model explains (61%) of the variance in consumer purchase intention,

**Table 6: ANOVA**

| Model      | S. Squares | df  | M. Square | F      | Sig   |
|------------|------------|-----|-----------|--------|-------|
| Regression | 154.82     | 5   | 30.96     | 130.42 | 0.000 |
| Residual   | 115.91     | 488 | 0.24      |        |       |
| Total      | 270.73     | 493 |           |        |       |

Source (computed data)

In Table no 6 the regression model shows statistically significant ( $F(5, 488) = 130.42, p < .001$ ). indicating that the independent variables significantly predict purchase intention.

**Table 7: Multiple Regression Analysis**

| Vari            | B      | Std. Error | Beta | t     | Sig  |
|-----------------|--------|------------|------|-------|------|
| Const           | 0.842  | 0.205      |      | 4.10  | .000 |
| Informativeness | 0.214  | 0.038      | .26  | 5.63  | .000 |
| Personalization | 0.183  | 0.037      | .22  | 4.95  | .000 |
| Credibility     | 0.241  | 0.041      | .29  | 5.88  | .000 |
| Irritation      | -0.146 | 0.036      | -.18 | -4.06 | .000 |
| Attitude        | 0.352  | 0.045      | .41  | 7.82  | .000 |

Source (computed data)

The results of table no.7 indicate that Informativeness ( $\beta = .26$ ), personalization ( $\beta = .22$ ), and credibility ( $\beta = .29$ ) show significant positive effects on purchase intention, whereas irritation shows a significant negative effect ( $\beta = -.18$ ). Attitude toward SMS marketing demonstrates the strongest positive influence on purchase intention ( $\beta = .41$ ), and  $p < .001$  all are significant.

#### 5. Findings and Conclusion

**Hypothesis Testing**

| Hypothesis | Relationship                    | Result   |
|------------|---------------------------------|----------|
| H1         | Informativeness and Attitude    | Accepted |
| H2         | Personalization and Attitude    | Accepted |
| H3         | Credibility and Attitude        | Accepted |
| H4         | Irritation and Attitude         | Accepted |
| H5         | Attitude and Purchase Intention | Accepted |

**5.1 Conclusion**

This research explored the Impact of SMS Marketing Attributes on Purchase Intention and the Mediating Role of Consumer Attitude in Hyderabad. The study concentrated on four primary attributes of SMS marketing, specifically informativeness, personalization, credibility, irritation and analyzed their impact on consumer attitudes and purchase intentions.

The findings indicate that informative messages provide valuable product information that assists consumers in making purchase decisions, while personalized messages increase the relevance of marketing communication. Credible advertising messages enhance consumer trust and strengthen positive perceptions of SMS marketing.

On the other hand, irritation was found to negatively influence consumer attitudes toward SMS marketing. Frequent or irrelevant promotional messages may create negative perceptions among consumers and reduce the effectiveness of marketing campaigns. Therefore, marketers should carefully manage the frequency and content of SMS messages to avoid irritating consumers.

The research further validates that consumer perceptions of SMS marketing significantly impact their intention to make purchases. Favorable attitudes towards SMS marketing motivate consumers to contemplate buying products that are advertised via SMS.

Overall, the importance of designing consumer-oriented SMS marketing strategies that focus on delivering relevant, trustworthy, and informative messages. By adopting such strategies, businesses can enhance consumer engagement, improve customer relationships, and effective mobile marketing campaigns.

**References**

- [1] Bauer, H. H., Barnes, S. J., Reichardt, T., & Neumann, M. M. (2005). Driving consumer acceptance of mobile marketing: A theoretical framework and empirical study. *Journal of Electronic Commerce Research*, 6(3), 181–192.
- [2] Barwise, P., & Strong, C. (2002). Permission-based mobile advertising. *Journal of Interactive Marketing*, 16(1), 14–24.
- [3] Brackett, L. K., & Carr, B. N. (2001). Cyberspace advertising vs. other media: Consumer perceptions of informativeness, entertainment, and irritation. *Journal of Advertising Research*, 41(5), 23–32.
- [4] Choi, Y. K., Hwang, J. S., & McMillan, S. J. (2008). Gearing up for mobile advertising: A cross-cultural examination of key factors influencing mobile message home page advertising. *International Journal of Advertising*, 27(4), 605–627.
- [5] Ducoffe, R. H. (1996). Advertising value and advertising on the web. *Journal of Advertising Research*, 36(5), 21–35.
- [6] Gao, T., Sultan, F., & Rohm, A. (2010). Factors influencing Chinese youth consumers' acceptance of mobile marketing. *Journal of Consumer Marketing*, 27(7), 574–583.
- [7] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- [8] Haghirian, P., & Madlberger, M. (2005). Consumer attitude toward advertising via mobile devices—An empirical investigation among Austrian users. *International Journal of Mobile Communications*, 3(2), 1–15.
- [9] Haghirian, P., Madlberger, M., & Tanuskova, A. (2005). Increasing advertising value of mobile marketing: An empirical study of antecedents. *Proceedings of the 38th Hawaii International Conference on System Sciences*.
- [10] Kaplan, A. M. (2012). If you love something, let it go mobile: Mobile marketing and mobile social media. *Business Horizons*, 55(2), 129–139.
- [11] Kavassalis, P., Spyropoulou, N., Drossos, D., Mitrokostas, E., Gikas, G., & Hatzistamatiou, A. (2003). Mobile permission marketing: Framing the market inquiry. *International Journal of Electronic Commerce*, 8(1), 55–79.
- [12] Kim, G. S., Park, S. B., & Oh, J. (2008). An examination of factors influencing consumer adoption of short message service (SMS). *Psychology & Marketing*, 25(8), 769–786.
- [13] Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- [14] K, Robert V& M, Daryle W, (1970). Determining sample size for research activities, *Educational and Psychological Measurement*, 30, 607-610. <https://doi.org/abs/10.1177/001316447003000308>
- [15] Leppäniemi, M., & Karjaluto, H. (2005). Factors influencing consumers' willingness to accept mobile advertising. *International Journal of Mobile Communications*, 3(3), 197–213.
- [16] Leppäniemi, M., Karjaluto, H., & Salo, J. (2004). The success factors of mobile advertising value chain. *Business Review*.
- [17] Liu, C. L., Sinkovics, R. R., Pezderka, N., & Haghirian, P. (2012). Determinants of consumer perceptions toward mobile advertising. *Journal of Interactive Marketing*, 26(1), 21–32.
- [18] Madhavaram, S., & Laverie, D. A. (2004). Exploring impulse purchasing on the internet. *Advances in Consumer Research*, 31, 59–66.
- [19] Merisavo, M., Kajalo, S., Karjaluto, H., Virtanen, V., Salmenkivi, S., Raulas, M., & Leppäniemi, M. (2007). An empirical study of the drivers of consumer acceptance of mobile advertising. *Journal of Interactive Advertising*, 7(2), 41–50.
- [20] Muk, A. (2007). Consumers' intentions to opt in to SMS advertising. *International Journal of Advertising*, 26(2), 177–198.

- [21] Okazaki, S. (2004). How do Japanese consumers perceive wireless ads? A multivariate analysis. *International Journal of Advertising*, 23(4), 429–454.
- [22] Okazaki, S., & Taylor, C. R. (2008). What is SMS advertising and why do multinationals adopt it? *Journal of Business Research*, 61(1), 4–12.
- [23] Rettie, R., Grandcolas, U., & Deakins, B. (2005). Text message advertising: Response rates and branding effects. *Journal of Targeting, Measurement and Analysis for Marketing*, 13(4), 304–312.
- [24] Shankar, V., & Balasubramanian, S. (2009). Mobile marketing: A synthesis and prognosis. *Journal of Interactive Marketing*, 23(2), 118–129.
- [25] Sultan, F., Rohm, A., & Gao, T. (2009). Factors influencing consumer acceptance of mobile marketing. *Journal of Interactive Marketing*, 23(4), 308–320.
- [26] Tsang, M. M., Ho, S., & Liang, T. (2004). Consumer attitudes toward mobile advertising: An empirical study. *International Journal of Electronic Commerce*, 8(3), 65–78.
- [27] Ünal, S., Erciş, A., & Keser, E. (2011). Attitudes towards mobile advertising: A research to determine the differences between the attitudes of youth and adults. *Procedia Social and Behavioral Sciences*, 24, 361–377.
- [28] Varnali, K., Yilmaz, C., & Toker, A. (2012). Mobile marketing research: The state-of-the-art. *International Journal of Information Management*, 32(2), 144–151.
- [29] Watson, C., McCarthy, J., & Rowley, J. (2013). Consumer attitudes towards mobile marketing in the smart phone era. *International Journal of Information Management*, 33(5), 840–849.
- [30] Zhang, J., & Mao, E. (2008). Understanding the acceptance of mobile SMS advertising among young Chinese consumers. *Psychology & Marketing*, 25(8), 787–805.
- [31] Drossos, D., Giaglis, G., Vlachos, P., Zamani, E., & Lekakos, G. (2013). Consumer responses to SMS advertising: Antecedents and consequences. *International Journal of Electronic Commerce*, 18(1), 105–136.
- [32] Karjaluoto, H., Lehto, H., Leppäniemi, M., & Jayawardhena, C. (2008). Exploring gender influence on customer's intention to engage in mobile marketing. *Electronic Markets*, 18(3), 242–259.