

An Investigation into the Factors Affecting the Consumer's Behavioral Intention towards Mobile Coupon Redemption

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Abstract—*The aim of this paper is to determine factors affecting consumer intentions to cash in the coupons which are sent to mobile phones by using the adoption models which exploit perceptive and social theories of decision making. Mobile coupons provide an exciting new opportunity to target consumers with highly customized offers. The paper is a descriptive study based on the data collected from 200 respondents. The data has been collected using an Online Survey Questionnaire technique. The paper uses the UTAUT (Unified Theory of Acceptance and Use of Technology) model and TAM (Technology Acceptance Model) to identify the factors responsible for consumer's behavioral intention towards mobile coupon redemption. The results of the study show that perceived usefulness, perceived ease of use, perceived credibility, compatibility, and social factor affects the behavior and intention of consumers in using m-coupons.*

Keywords: *Mobile coupons, technology acceptance model, discount coupons, mobile marketing*

1. INTRODUCTION

Mobile Marketing, which can be termed as the next generation of eMarketing, is eminently prevalent in today's society. The mobile marketing is evolving swiftly because it is contemplated as more cost effective, personalized, and results-driven. The emergence of mobile marketing has given rise to a new form of sales promotion. Now, advertisers are exhibiting digital coupons on mobile phones, planning to exploit the characteristic location and real time delivery competencies that make for a more convincing solution than traditional paper coupons. Across the globe, coupons have been acknowledged as the most important promotional tool which drive and engage customers to try the product [1, 2, 3]. Coupons are likely to have a positive impact on the customers as they aid in building awareness and customer retention and simultaneously generating sales in the short term by the call-to action request. Mobile coupons (more commonly called m-coupon and sometimes also known as moupon) are an extension of the traditional coupons which, as the name says, are coupons that customer can access on their mobile phone. According to the formal description by Mobile Marketing Association (2011), a mobile coupon is “a text or a picture

ticket solicited or delivered to a customer's mobile phone which can be stored and exchanged for a financial discount when purchasing a product or service”. It was first offered in Japan in 2006 when Japanese telecom company NTT DoCoMo made it available for public in association with Nippon Television.

Despite the fact not much is known about consumers' attitudes toward wireless marketing channels, many organizations today are making considerable investments to take benefit of the new business potentials offered by wireless technologies. Although there are extensive researches on coupons, but there are not many studies on mobile coupons. However, not much attention is given to rather new categories of coupons such as mobile coupons (m-coupons). This paper, hence, seeks to investigate whether the behavioral attitude and intention of consumers using m-coupons shows the identical result as that from traditional discount coupons or whether there is a difference in influential factors [4].

Earlier, the biggest barrier to entry of mobile coupons was technology. It seems that they are facing a new challenge now in the form of consumer adoption. There has not been much research devoted to explore the factors that affect the consumers' readiness to adopt mobile couponing.

This, this paper examines how a new pattern of coupon circulation, which digitalization has brought about, changed consumers' existing attitude and behavior toward m-coupon use. The primary objective of this research, therefore, is to determine the acceptance of m-coupons from consumers' perspectives and to explore the factors that can influence their intention to use mobile coupons in India.

2. LITERATURE REVIEW

A proper review of existing literature is essential and of high importance to have a proper bird's eye view of knowing the views and studies of the academics and researchers of the present times. It helps the researcher gain an insight into the dimensions of the possible research and the further contributions to be made. It also aids in ensuring that

something is new added to the field of research, instead of a mere repetition of existing research. It further presents as a way of improvising existing research.

This section discusses the definition and history of coupons (2.1), print coupon redemptive behavior (2.2), the technology acceptance model (2.3) and research model and hypotheses (2.4).

2.1. Definition and History of Coupons

A coupon is a credential that entitles the bearer to a certain price discount on a specified product and the retailer honors the discount [5]. In coupon advertisements, retailers sustain the original price of the product but it is the coupon holders who are entitled to a discount. Coupons give consumers opportunities to acquire promoted products at discounted prices. Individuals who acknowledge coupon offers are called "coupon prone" consumers. Coupons have been used as a promotional strategy since long. Couponing is one of the oldest, most effective and most extensively used tools to encourage sales [6]. Coupons are very useful for executing different marketing management functions like sales promotion, brand promotion, and inventory management. Past studies indicated that coupons offer organizations with several benefits, including the competency to attract new customers, brand switchers and deal-prone consumers [7].

2.1.1 E-Coupons

Electronic coupons (e-coupons) differ from customary paper coupons mainly because of their nature of circulation. E-coupons are generally distributed on Web pages and concerned customers can download and print them before redemption at a physical store [8]. A specialized Web site offers Internet coupons (also called print-at-home coupons), in the form of images or bar codes. E-coupons are the electronic form of the real-world coupons, comprising of a sequence of bytes, and can be redeemed at online stores during e-commerce transactions [9].

2.1.2. Mobile Coupons

A mobile coupon is an electronic voucher solicited and distributed through mobile phones that can be swapped for a financial discount or refund when buying a product or service [10]. Usually, coupons are dispensed by manufacturers or retailers to be used at retail stores as the part of their sales promotions. They can also be used to appeal customers for entertainment services. They are often distributed through Short Message Service (SMS), Multimedia Messaging Service (MMS) and other mobile means. The customer redeems the coupon at a store or online. In some cases, it can be forwarded by the retailer to a clearing house or directly to the issuer for redemption.

2.2. Print Coupon Redemption Behavior

There is an enduring debate about the elements of coupon use. Many investigators have sought to explain coupon deal

redemption in terms of the socioeconomic and demographic characteristics of consumers or to ascertain the psychological factors that persuade customers to use coupons [11]. Even though they have contributed a lot to our indulgent of coupon redemption behavior, there is no rational evidence for the effectiveness of coupons [12]. Many researchers have wanted to identify the characteristics of coupon-prone or deal prone consumers. There are five factors that could influence consumer reaction to coupons. They are: (a) coupon features, (b) mailer features, (c) brand features, (d) product features, and (e) consumer features [13]. Shimp and Kavas employed Ajzen and Fishbein's theory of reasoned action to intellectualize coupon use. They observed that both individual attitudes and personal norms played substantial roles in influencing intentions for the usage of coupons. Higher face value coupons are associated with higher redemption rates [14]. When brand loyalty and deal proneness is controlled, the coupon characteristics do not affect redeeming coupons [15]. Factor analysis was applied to characterize the essential factors that discourage customers from coupon redemption. It was also bring to light that consumers sense couponed products to be of low value and feel discomfited to use coupons while shopping [16].

2.3. Technology Acceptance Model (TAM)

The technology acceptance model (TAM) is a revision of the theory of reasoned action (TRA). It is explicitly proposed to describe computer use behavior. TAM has shaped the base of many researches in information systems. TAM suggested two quantifiable variables for technology acceptance; i.e., perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness explicates the user's perception to the point that the system will increase the user's performance; perceived ease of use describes the user's perception of the total effort required to use the system or the amount to which a user believes that using a particular system will be uncomplicated [17]. Davis et al. [1989] found that PU and PEOU interconnected considerably with both self-reported current use and self-predicted future use. According to TAM, behavioral intention (BI) is a major factor of use performance; and that behavior can be anticipated by assessing BI. BI is seen as being determined by how a person considers the perceived usefulness (PU) and ease of use (PEOU) of the systems studied. Since its introduction by Davis [1989] and Davis et al. [1989], TAM has been widely used by scholars to explicate user acceptance of technology. One of the major hypothetical restrictions of TAM is the elimination of the possibility of impact from social and personal control issues [18].

2.4. Research Model and Hypotheses

The research model tested in this paper is shown in below.

Proposed Research Model:

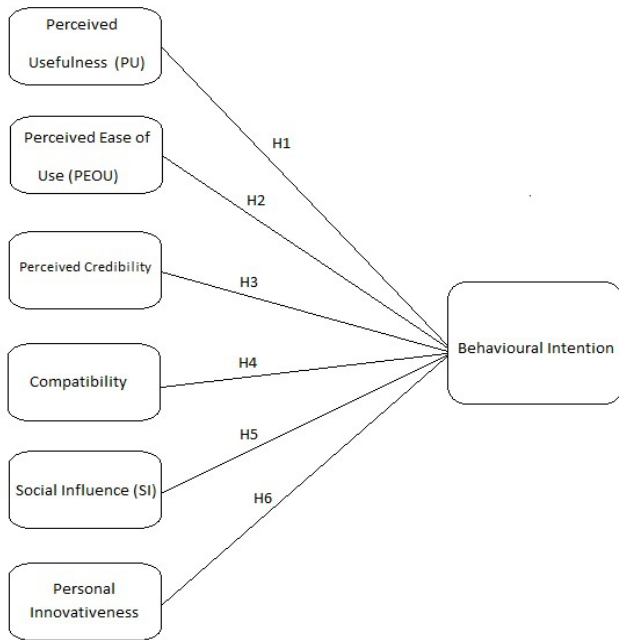


Fig. 1: A Model for M-Coupon Behavioral Intentions

TAM is adjusted by including additional vital variables that precisely relate to the mobile service framework. We inspected six key elements of technology acceptance, which include perceived usefulness (PU), perceived ease of use (PEOU), social influence (SI), compatibility (COMP), perceived credibility (PC), and personal innovativeness (PI). In the protracted model, like several other researches of TAM, the “attitudes” construct is detached in an effort to streamline the model [19]. Social influence, as shown in the unified theory of acceptance and use of technology (UTAUT) and other theories (such as the TRA, the TAM2, and the TPB), has reinforced its capability to explain technology acceptance behavior as the use of technology becomes obligatory.

Mobile communications are more vulnerable to hacker attacks and security exposures. Evidence shows that there is a substantial straight connection between perceived credibility and behavioral intention [20]. Perceived credibility was also found to have a major affirmative impact on the behavioral intentions to use online banking. Consequently, perceived credibility is used as a TAM construct to imitate the security and privacy apprehensions in the recognition of m-commerce. Personal variances affect adoption. Compatibility is demarcated as the point to which an innovation is perceived to be steady with current values of potential adopters [21]. According to diffusion theory, implementation of innovations is a function of self-innovativeness, or readiness to try the innovations [22]. Many studies used self-innovativeness as a prognosticator to explain the acceptance of innovations. Consequently, we examined six key determinants of technology and innovation acceptance in this paper. These determinants are: perceived usefulness (PU), perceived ease of

use (PEOU), social influence (SI), compatibility (COMP), perceived credibility, and personal innovativeness (PI). The following are the hypotheses were tested in this paper:

H1: The perceived usefulness by the consumer has a positive effect on the behavioral intention toward using m-coupons.

H2: The perceived ease of use by the consumer has a positive effect on his or her behavioral intention toward using m-coupons.

H3: The perceived reliability by the consumer has a positive effect on the behavioral intention toward using m-coupons.

H4: The congeniality of the customer in using mobile phone has a positive effect on his or her behavioral intention toward using m-coupons.

H5: Social influence has a encouraging effect on behavioral intention toward using m-coupons.

H6: The personal innovativeness of the consumer has a positive influence on his behavioral intention towards using m-coupons.

Data Collection and Sampling

A questionnaire was developed and a sample of 197 respondents was collected. A good mix of students as well as working professionals filled the questionnaire. The demographics of the respondents is as follows:

In the sample of 197 respondents, 47% (92) were females and the rest 53% were males. Also, 7.6% of the respondents were of the age group 17 or less, 77.15% were of the age group 18 – 25, 15.22% were of the age group 26-34 and 0% respondents were of the age group 35 or more.

3. RESEARCH DESIGN AND DATA ANALYSIS

The purpose of this research is to find the factors that elucidate the acceptance and use of mobile coupon by customers. In this paper, we carried out a survey with 197 mobile phone users in India to investigate their attitude and intention to use mobile coupons. Survey is a widely used data collection technique in behavioral science research. The data were gathered by means of a questionnaire. The conceptual framework that guided the hypotheses formulation and questionnaire design was depicted earlier in Fig. 1. The background consists of seven exploration concepts as specified earlier. Table 1 provides the key variables, items used to use the variables, and their corresponding sources. Items designated for the concepts were adopted mostly from prior researches to ensure content rationality. Objects for perceived ease of use and perceived usefulness were taken from the preceding validated catalogue and altered to fit the mobile technology. A pilot study was conducted to authenticate the tool. Some changes were made to the questionnaires as deemed rises.

Table 1

Constructs Independent	Items
Perceived Usefulness (PU)	<ul style="list-style-type: none"> Using m-coupons would make me a keen customer. Using m-coupons would make my shopping simpler. Using m-coupons would help my savings. Using m-coupons make shopping more pleasant. Overall, m-coupons are very expedient
Perceived Ease of Use (PEOU)	<ul style="list-style-type: none"> Downloading m-coupon thru mobile phone is very easy. Mental effort taken to download m-coupon via mobile phone is less. The task of sending text messages via mobile phone is very easy. The task of interacting with the m-coupon ads via mobile phone is effortless. Learning to operate the m-coupon is easy. Using the m-coupons takes too much time from my normal duties. Overall, the m-coupon is easy to use
Perceived Innovativeness (PI)	<ul style="list-style-type: none"> When I get to know about new mobile technology think of experimenting with it. I do not want to experiment with new mobile technology. I am usually the first to try new mobile technology.
Social Influence (SI)	<ul style="list-style-type: none"> Persons who are important to me think I should use m-coupons. My friends think I should use m-coupons. My family members think I should use m-coupons.
Perceived Credibility	<ul style="list-style-type: none"> I trust using m-coupon does safeguard my privacy. I am not concerned about security in using m-coupons. M-coupon usage may permit other individuals to gain access to my personal information. I am worried about mobile bugs in transaction over the mobile connection.
Compatibility	<ul style="list-style-type: none"> Using m-coupons matches my work style. Using m-coupons is attuned with all aspects of my work.

Table 2

Construct Dependent	Items
Behavioral Intention	<ul style="list-style-type: none"> I expect to get more specifics about m-coupons. I expect to download m-coupons. I expect to use m-coupons repeatedly in my personal life. I expect to use m-coupons in doing my shopping

Table 3

Hypothesis	Relationship	t-Value	Sig Value	Verification Results
H1	Perceived Usefulness → BI	9.872	.001	Established
H2	Perceived Ease of Use → BI	5.427	.001	Established
H3	Perceived Credibility → BI	4.483	.001	Established
H4	Compatibility → BI	3.002	.003	Established
H5	Social Influence → BI	5.916	.001	Established
H6	Personal Innovativeness → BI	1.439	.150	Not Significant

As expected, hypotheses H1, H2, H3, H4, and H5 were reinforced in that perceived usefulness, perceived ease of use, perceived credibility, compatibility, and social influence had positive effects attitudes toward m-coupons. In total, they account for 66.5% of the variance in behavioral intention. Perceived usefulness determine the behavior intention to use m-coupons.

4. CONCLUSION

The outcome of the study supports the appositeness of using the extended TAM model to comprehend the recognition of mobile coupons in India from customers' viewpoints. Our study ratifies that the behavior intention of mobile coupons is unswervingly prejudiced by perceived effectiveness, perceived ease of use, trustworthiness, perceived integrity, and social influence. There is no direct connection between personal innovativeness and behavioral intent, and this result is constant with the research findings of Hsu et al., [2006]. This model explicates 66.5% of variance, which is considered higher for TAM model.

Implications for Research

The current study contributes to current research on mobile coupons by proposing discernments into the reasons that could influence to consumer use. First, it has effectively protracted TAM with apparent sincerity and social effect. This extended

TAM model was employed to mobile coupons, and this methodology signifies a substantial departure from the contexts tested in preceding evaluations of mobile services. Consistent with previous studies, professed effectiveness and perceived ease of use were observed to be significant forerunners of the behavioral intention to use m-coupons. This study supports prior research, which found the substantial effect of perceived integrity on behavioral intention to use IT/IS in the perspective of mobile advertising.

Implications for Practice

The authorized model offers a useful outline for executives requiring to assess the probability of success for m-coupon inductions, and to pro-actively plan mobile coupon promotions. Results elucidate the prominence of apparent effectiveness related to the acceptance of mobile coupons facilities. Accumulating the observed usefulness of m-coupons by impending customers is very significant for mobile marketing practitioners. Social stimulus also plays a very imperative role in behavioral intention to redeem mobile coupons. The approach and behavior of consumers are still mainly influenced by the endorsement of family and friends. Marketing practitioners required to take this aspect into concern when endorsing mobile coupons.

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