# **Papers**

# Text message advertising: Response rates and branding effects

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**Abstract** The development of internet-based mobile electronic commerce (mcommerce) has been slow, but commercial applications for text messages have developed rapidly. This paper explores the role of SMS or text message advertising. Although SMS advertising is strictly a form of telemarketing, it shares features with e-mail marketing and mcommerce.

An analysis of 26 text marketing campaigns (5,401 respondents) demonstrates the surprising effectiveness of this new form of telemarketing. SMS advertising is effective, both as a branding vehicle and in stimulating response; this was demonstrated by significant improvements in brand attitude and purchase intentions.

### INTRODUCTION

The development of internet-based mcommerce has been slow in Europe and the USA. SMS (Short Message Service) text messages, however, have continued their explosive growth. SMS is proving to be an effective new tool in marketing communications, used either on its own, or integrated interactively with television, print and poster advertising.

The objective of this research was to examine consumer response to SMS

advertising, including branding and purchase intention effects. The paper is based on the analysis of the market research findings of 26 commercial SMS campaigns, which were conducted in the UK by Enpocket UK, a provider of permission-based mobile marketing services in the UK.

# CONCEPTUAL FRAMEWORK

Mobile electronic commerce, or mcommerce, has been defined as the use

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internet-enabled devices to communicate and conduct transactions through public and private networks.<sup>1,2</sup> Some definitions of mcommerce include mobile marketing which refers to marketing activities that deliver advertisements to mobile devices;<sup>3</sup> this includes both SMS advertising pushed to mobile phones and advertising pulled down from mobile internet sites. Worldwide mobile marketing revenue (mainly SMS advertising) is expected to be in the range of US\$16–23bn by the end of 2005.<sup>4</sup>

The development of mcommerce has been comparatively slow:<sup>5</sup> research suggests that it is seen as expensive, with poor service and usability.6-8 There are, however, indications of growth in consumer interest in mcommerce services. For example, Strategy Analytics<sup>9</sup> research in West Europe found that consumer interest in mobile payments and services had increased from 23 per cent in 2001 to 39 per cent in 2003. In the UK added value services grew by 29 per cent to  $\pounds$ ,1.4bn, which was 4.3 per cent of total mobile revenue.<sup>10</sup> Global research by ATKearney<sup>11</sup> found that consumers claiming to have made payments by mobile phone rose from 3 per cent in 2003 to 10 per cent in 2004. This was predominantly payments for ring tones, logos and games.

The effectiveness of mobile marketing has been related to timing;<sup>12–14</sup> localisation,<sup>15</sup> relevance;<sup>16</sup> consumer value and entertainment;<sup>17</sup> and personalisation.<sup>18,19</sup> It is suggested that mobile marketing is useful for relationship building, particularly when used with permission.<sup>20–22</sup> Japanese research<sup>23</sup> suggests that click through mobile internet advertising is seen as neither entertaining nor informative.

SMS or text messages were first introduced in 1992. They are usually

sent by mobile phones, but can also be computer-generated. Recipients can generally store a limited number of messages; unlike e-mail, messages usually do not have a subject line that can be read without opening the message.

SMS has grown rapidly. In the UK penetration reached 78 per cent in 2003, when 20bn text messages were sent, more than either letters or e-mails together.<sup>24</sup> Direct marketing includes direct mail, direct response advertising, telemarketing and digital (e-mail) marketing; it is often seen as intrusive. Intrusive advertising can negatively affect consumer attitudes and brand perceptions.<sup>25</sup>

SMS shares features with both telemarketing and e-mail marketing. Leiderman<sup>26</sup> defines telemarketing as 'any measurable activity, using the telephone to help find, get, keep and develop a customer'. Telemarketing has the advantages of impact, persuasiveness and interactivity; its major disadvantages are high cost and intrusiveness, which reduce consumer acceptance.27,28 Research<sup>29</sup> suggests that the initial acceptance level for proactive telemarketing may be as low as 13 per cent. Although SMS advertising is delivered to the phone, computer mediation reduces costs and intrusiveness, giving it some of the advantages of e-mail marketing.

The advantages of e-mail marketing include low costs and digital processing.<sup>30,31</sup> Its major disadvantage is the proliferation of spam, which taints the reputation of e-mail marketing and affects response rates.<sup>32</sup> Mobile phone spam is relatively undeveloped, but already spam text messages that trick recipients into phoning premium rate messages have caused consumer concern.<sup>33</sup>

In addition to the impact of telemarketing and the automation of

e-mail, SMS advertising enjoys advantages specific to mcommerce. Rask and Dholakia<sup>34</sup> describe it as 'your best salesman in the pocket of your best customer'; the consumer is accessible at any time, at any place. Like other direct marketing, SMS can be personalised and customised, in addition, targeting can be based on time and location, so that advertisements reach consumers at point of action.<sup>35</sup> SMS advertising includes a viral element as recipients can forward messages to their friends. The main disadvantage is its 160 character text-only format, but MMS messages can incorporate pictures or video clips.

SMS advertising pioneers initially used it as a form of passive advertising and were surprised by consumer responses. Advertising varies from simple branded slogans at the end of sponsored subsidised messages (eg alerts when football goals are scored), to special offers and promotions. Research suggests that there is a branding effect<sup>36</sup> but, like other direct marketing, SMS advertising is thought to be most effective when it invites a response and includes an incentive.

Barwise and Strong<sup>37</sup> report a trial of incentive-based text message advertising in the UK. Respondents, who were paid a  $\pounds 5$  fee on recruitment, and  $\pounds 0.05p$ per message, received over 100 messages during the six-week trial period. Almost all respondents were satisfied or very satisfied. Most (81 per cent) read all messages, 63 per cent responded or took action and 17 per cent forwarded at least one message.

Industry studies suggest that in SMS advertising relevance and added value (discounts or special offers) reduce perceived intrusiveness and increase acceptance.<sup>38</sup> Intrusiveness in advertising has long been recognised as a cause of annoyance that can negatively affect consumer attitudes and brand

perceptions.<sup>39–41</sup> Li and Hairong<sup>42</sup> speculate that intrusiveness may be related to the utility and expectedness of the interruption; this suggests that incentives, targeting and permission may mitigate intrusiveness. The concept of intrusiveness is related to permission. If consumers have given their permission, they are less likely to construe marketing as intrusive, as it will be anticipated.<sup>43</sup> Factors that influence consumer attitudes to permission marketing include message relevance and monetary benefit.<sup>44</sup>

# **METHODOLOGY**

The research amalgamated data from separate research surveys that were originally undertaken to evaluate the effectiveness of 26 different SMS advertising campaigns. For each of the 26 sets of research, approximately 200 people were randomly selected from those who had received the campaigns. The campaigns and research took place between October 2001 and January 2002. The interviews were conducted by phone and were conducted two days after the consumer received the last text message of the campaign. The campaigns had a 'strike' or response rate of over 25 per cent; this is more than twice the industry average of 12 per cent, probably because Enpocket used mobile phone numbers.

The 26 questionnaires shared a common thread of questions, with modifications relevant to the specific brand advertised. The population for this study was held on Enpocket's database; all respondents had given permission to receive third-party marketing. Responses from all the campaigns were merged into a single database of 5,401 post-campaign interviews. The objective was to assess the relationships between response, brand attitude and purchase intention.

	Acceptability (High or fair)	Interest (Very or fair)	Relevance (High or fair)
Highest figure	60.5%	29.8%	27.3%
Lowest figure	16.1%	4.2%	6.5%
Average	42.3%	15.5%	16.2%
Valid responses	5,360	2,485	2,013

Table 1:	Range of acceptability,	, interest and relevance
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#### Table 2: Response to advertising messages

Response	Any action %	Text back %	Watch television %	Website %	Purchase %	Visit place %
Highest	67.7	51.6	38.5	25.0	21.6	19.7
Average*	31.3	15.7	10.6	11.3	5.2	4.8
Lowest	3.1	1.2	2.3	1.5	1.0	0.8
S.D.	17.3	15.4	9.8	8.3	6.5	6.0

\*Averaged for those campaigns where this response was relevant. 5,401 respondents.

# RESULTS

#### Acceptability, interest and relevance

Overall, 44 per cent of respondents found receiving campaigns on their mobile phones very or fairly acceptable, with only 21 per cent finding it fairly or very unacceptable. Acceptability was inversely related to respondents' age (younger people have more favourable views; Chi-square, p < 0.01), but not related to gender. Acceptability was also significantly correlated with campaign interest, campaign relevance and monetary incentives. Campaign interest and campaign relevance are strongly correlated (Spearman's Rho correlation: 0.679). Interest and relevance are both significantly correlated with each form of action. Table 1 indicates the wide variation in acceptability, interest and relevance by campaign.

### Response

Most messages were read (89 per cent), and 5 per cent were forwarded to friends. All campaigns included a specific call to action (eg visit a website, reply by text, visit an outlet). Response rates were high (31 per cent on average, see Table 2) and

wide ranging. Responsive actions ranged from text back, which had the highest response rate, to place visits, with nearly 5 per cent claiming to have made the relevant visit. For most of the campaigns (20 out of 26), respondents followed the specified call to action, with the most frequent response following the message directions. These included calls to action involving physical travel (eg visit McDonald's or the Carphone Warehouse). There was a relationship between level of relevance and action taken. Where people found the campaigns relevant they were significantly more likely to take action. Those who took no action were more likely to say the campaigns were not relevant at all.

#### **Branding effect**

Overall, spontaneous recall of brand advertised was 16 per cent. Prompted brand recall was 43 per cent on average; significantly higher rates were found for campaigns including monetary incentives (Chi square, p < 0.01). Spontaneous brand recall was significantly correlated with all forms of response: (Chi square, p < 0.05, for each response type).

Respondents were also asked: 'Did this

More positive al the brand %		No change %	Less positive about brand %
Highest	35.4	93.3	8.5
Lowest	6.7	60.0	1.1
Average	18.4	77.9	3.8

Table 3:	Range of	brand	attitude	change
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2,651 valid responses.

#### Table 4: Range of purchase intention

	More likely to buy %	No change %	Less likely to buy %
Highest	70.6	78.3	17.2
Lowest	15.6	25.9	2.0
Average	36.1	56.3	6.9

2,557 valid responses.

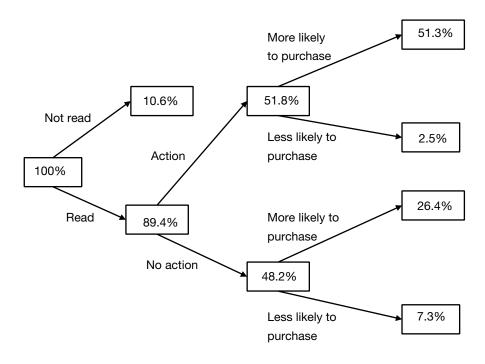
campaign make you feel more or less positive about xxxxx (eg Expedia.co.uk.) or did it not change your impression at all?'. Unsurprisingly, for most respondents there was no change in brand image (78 per cent average over all the campaigns), but there were also considerable improvements, for example, 35 per cent felt more positive about the brand in one campaign. Table 3 indicates the wide variation in brand attitude change, by campaign. Positive change of brand attitude was related to spontaneous recall (Chi-square, p < 0.01) and occurred for campaigns that did not necessarily produce high response in terms of action.

#### **Purchase intention**

Respondents were asked about purchase intentions: 'Did this campaign make you more or less likely to consider buying from xxxxx (eg Expedia.co.uk) in the future?'. Increased likelihood to purchase was significantly correlated with improved brand image; generally the positive effect on purchase intention was approximately twice that of the positive effect on brand attitude. 85.7 per cent of those who felt more positively towards the brand claimed they were more likely to make a purchase. Table 4 indicates the wide variation in purchase intention, by campaign.

Positive brand effect and purchase intention are significantly related to all actions, ie visiting the company's website, visiting a shop, calling a number, replying to a number, supplying an e-mail address, watching television, buying the product, visiting a WAP site, buying a newspaper, requesting a brochure and visiting a restaurant (Chi-square, p < 0.000). Figure 1 illustrates the response pattern overall, demonstrating that those who act on a text message are much more likely to purchase.

Ordinal regression was used to model the dependence of change in purchase intention (an ordinal measure) on a number of predictors. Ordinal logistic regression was used because the dependent variable, purchase intention, was measured with a three-item scale. The final model includes age (recoded into four categories), positive brand attitude change and message relevance, as factors. The resulting goodness of fit was significant at 99 per cent with an appropriate predicting power (Cox and Snell's pseudo-R squared 0.26), see Table 5. The estimated coefficients in an ordinal regression cannot be directly



Note: Neutral values omitted

#### Figure 1 Relationship between response and purchase intention

interpreted. Rather, the impact of a change in a particular variable can be determined by examining the change in the predicted probability (holding other variables at their means). To do this Long and Cheng<sup>45</sup> xpost spreadsheet was employed. This showed that increased purchase intention was related to positive brand attitude change and relevance. The youngest age range, 16–24, was also significant.

#### **Creative execution**

The campaigns' diversity made analysis difficult, but it was felt that promotions that were more explicit, with greater added value, or more involving, had a stronger effect. For example, the two campaigns beginning 'want to win £1,000' did well, as did an offer of £20 for opening a bank account, and riddles or jokes. The research included three campaigns for Expedia. Responses for these three campaigns varied from one of the best to one of the worst campaigns, reflecting the importance of the text message creativity and contents. The campaign rated highest included a much better promotional offer. The other two were similar, and, in fact, had a similar response in terms of action, ie visits to the website, but they had very different branding and purchase effects. These effects may be the results of the website experience and unrelated to the text content.

## **RESEARCH LIMITATIONS**

This research is based on claimed response and attitude change. It is likely that respondents are exaggerating their receptiveness and response to this new medium. In addition, as the campaigns took place over three months, some respondents will have received several advertising messages and responsiveness

		Parameter estin Estimate	nates Std. error	Wald	df	Sig.
Threshold	[PURCHASE = More likely]	-2.908	0.413	49.509	1	0.000
	[PURCHASE = No change]	1.162	0.403	8.306	1	0.004
Location	[POSITIVE = More]	-5.269	0.316	277.867	1	0.000
	[POSITIVE = No change]	-2.806	0.275	104.152	1	0.000
	[POSITIVE = Less]	0 <sup>a</sup>			0	
	$[AGE_NEW = 16-24]$	-0.412	0.182	5.138	1	0.023
	$[AGE_NEW = 25-34]$	-4.53E-02	0.184	0.060	1	0.806
	$[AGE_NEW = 35-44]$	0.123	0.202	0.370	1	0.543
	[AGE_NEW = 45+]	0 <sup>a</sup>			0	
	[RELEVANT = Not]	1.789	0.276	42.061	1	0.000
	[RELEVANT = 2.00]	0.838	0.284	8.724	1	0.003
	[RELEVANT = 3.00]	0.334	0.281	1.416	1	0.234
	[RELEVANT = 4.00]	0.115	0.304	0.143	1	0.706
	[RELEVANT = Very]	0 <sup>a</sup>			0	

Table 5: Ordinal regression model

Link function: Logit. <sup>a</sup>This parameter is set to zero because it is redundant.

may decline over time. The authors were unable to determine, from these data, whether response declines with repeated exposure, or how creative content affects response.

## DISCUSSION

SMS advertising is an effective interactive medium that combines the impact of telemarketing, the digitalisation of e-mail, and the localisation of mcommerce. Its precise targeting makes SMS advertising particularly suitable for time and place sensitive advertising.

The overall acceptability of SMS advertising was 44 per cent, significantly higher than the acceptability of telemarketing.<sup>46</sup> This more positive attitude could either be the result of the novelty of the medium or an intrinsic aspect of SMS advertising. The authors suggest that it is the latter; the medium is less intrusive than traditional telemarketing, because respondents can choose when and if they read a message, unlike the telephone which produces a summons which evokes a conditioned response.47 Moreover, unlike traditional direct mail, text messages on mobile phones are available in otherwise 'dead time',48 eg while travelling, when

recipients may be looking for entertainment. The mobile phone, however, is also perceived as extremely personal,<sup>49</sup> so that SMS may be an invasion of privacy. There is scope for further qualitative research on this area, which is pertinent to the timing and creative style of SMS advertising.

These 26 campaigns demonstrate the effectiveness of text message advertising. Response rates varied from 68 per cent to 3 per cent, with an average of 31 per cent. This compares very favourably both with direct mail, with reported response rates between 1 per cent and 5 per cent,50,51 and permission-based e-mail marketing, with reported response rates from 1 per cent to 8 per cent.<sup>52–54</sup> The average response rate of 31 per cent compares reasonably well with the 63 per cent found by Barwise and Strong,55 for an incentivised scheme where respondents were paid both to take part and per message received. The correlation found between acceptability, relevance and interest supports Godin's<sup>56</sup> argument for permission marketing; moreover, these three dimensions are also related to response.

SMS advertising has three different effects: response, branding effect and

effect on purchase. Respondents reported considerable effects in all three categories. The branding effect found does not imply that SMS advertising could be used for its branding effect alone. All these campaigns included some call to action; the authors found a significant correlation between action and brand recall. The nature and direction of the causality is unclear however; it may be that better known brands have a better response, it may be that text messages improve brand recall or it may be that taking action, following a text, reinforces the brand recall. A message used just to support a brand, without a call to action, might not be effective.

The regression analysis suggests that perceived relevance is related to change in purchase intention, as predicted by permission marketing theory.<sup>57</sup> Age is also related to change in purchase intention; this may be because younger people have been the early adopters of text messaging. Text messaging is becoming increasingly popular with older age groups, whose adoption is encouraged by their need to stay in touch with younger relatives and by interactive television programmes. As older people become more used to SMS they too may become more responsive to this advertising medium.

This research supports the role of text creative;<sup>58</sup> there was a wide variation in attitudes and responses between the different campaigns. The recommendation that effective communication should provide clear, targeted and high-value content messages is self evident.

The reported increased likelihood to purchase is the most important finding of this research; on average this was 35 per cent, but it was as high as 71 per cent for one campaign. These claims may be exaggerated, but they reflect an enthusiastic attitude. To some extent these response rates may be due to novelty: the proliferation of text message advertising and spam are likely to reduce the effectiveness of the medium over time. There is a need for future research of this medium which measures actual as opposed to reported behaviour — to facilitate this Enpocket is developing bar-coded SMS coupons that enable the tracking of actual responses.

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