

A First Principles Look at Location-aware Mobile Marketing With Treasure Hunt Case Study

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Beyond merely media that's distributed over a mobile network, what kind of content exploits the unique characteristics of the mobile channel? Mobile marketers are exhorted to "tailor the content to the medium"...but how to accomplish this? What specifically does "mobile" bring to a marketing campaign? We suggest herein some metrics that provide quantitative campaign design recommendations and goals as well as mechanisms for evaluating campaign success. These metrics were derived from the results of a location-based mobile marketing program run by LOC-AID during the CTIA Wireless 2007 trade show in Orlando Florida.

Nearly-ubiquitous data & voice connectivity

Grown from networks whose initial value proposition was person-to-person voice calls, mobile content is becoming a genre of its own (SMS interactivity and games, SMS-novels¹, mobile-blogging, made-for-mobile films downloaded via SMS link², etc³). As it has become an intimate and nearly-ubiquitous path to potential consumers, content providers seek to maximize the impact of their respective messages, to determine how best to reach their audience through this medium.

What is the currency and value of this channel? The Internet "CPM" metric for evaluating content value and, more recently, Google's pay-per-action marketing metrics focus online content to deliver "eyeballs" or "clicks" or "action"; these are the evolving currencies of the fixed internet. What then, is the enabling metric for the mobile channel? We begin by considering the underlying value of the channel itself.

Defining characteristics

While it shares some aspects of other media channels (i.e., the Internet, broadcast media, landlines), there are two characteristics that—taken together—define how mobile networks deliver value:

- Interactive connectivity: enables two-way communication
- Mobility: the ability to do the above while moving, in particular as an "on person" channel
 - Always on connectivity: available virtually anytime, anywhere

¹ http://www.usatoday.com/news/offbeat/2007-01-24-textmessagenovel_x.htm, <http://cellphone9.com/virgin-mobile-launches-sms-novel/> Note that this one has the added twist of interactivity; readers can influence how the story ends. Another example from China is being made into a movie: http://www.chinadaily.com.cn/english/doc/2004-09/20/content_376042.htm

² <http://sundance.gsm.org/>

³ Made-for-mobile TV deal between MTV & Amp'd: <http://www.engadgetmobile.com/2007/01/10/mtv-partners-with-ampd-to-create-exclusive-made-for-mobile-cont/>

- Convenience is a key value (especially when combined with ubiquity of access) in achieving unprecedented intimacy

A recent European study⁴ indicates that ad-supported mobile services would do well to heed this observation: “It shouldn't come as a great surprise that mobile propositions with location or communication at their core resonate the strongest with consumers.” Voice and SMS, the two fundamental “killer apps”, give evidence that users will forgive a litany of technological “shortcomings” (e.g., noise, dropped calls, incomplete coverage, cumbersome data entry) to realize the benefits of mobile interactive connectivity. These then, are the compelling aspects of the mobile channel.

Keeping the mobile network value proposition firmly in mind suggests two fundamental characteristics for uniquely mobile campaign content:

- Interactive: engaging content that our target audience can “make their own” and control
- Dynamic: Content that accompanies our target audience, as opposed to being confined or limited to a narrow physical zone
 - Stickiness: The brand-consumer “dialog” can be sustained over a series of interactions as the target moves through a range of environments
 - We can take this notion one step further by not merely reacting to location, but by driving our target audience to a specific location

We see these two elements at play in successful SMS campaigns that engage participants through voting or text-to-screen contests that target an audience defined by the locale/venue (e.g., SMS-based polls and games offered at concerts and sporting events).

A recent article⁵ calls for metrics by which the industry can evaluate mobile content value:

“Meanwhile, carriers aren't giving content companies the data they need to develop the right programs and prove their value to advertisers, according to both [Salil Dalvi, vice president of wireless platforms at NBC Universal] and Bill Sanders, vice president of mobile entertainment programming for Sony Pictures International Television. “We get virtually no data from our distribution partners,” Dalvi said. There needs to be something like the AC Nielsen TV ratings for mobile video, preferably coming from an independent third party, they said.”

From the carriers’ perspective, any metrics should represent their channel’s core value proposition, not merely mimicking those of competitive channels. For example, Mobile TV may not yet have the reach of the traditional TV channels, but its immediacy makes it unique, and this should be represented by any relevant metric. A recent RCR article noted

⁴ Canalys' new consumer mobility survey
http://www.theregister.co.uk/2007/05/17/gps_over_mobile_tv/print.html

⁵ Digit article (cited by FierceMoCo on 4/27/07 citing the need for metrics for the mobile channel:
<http://www.digitmag.co.uk/news/index.cfm?NewsID=7801>

“Wireless carriers can offer value on many fronts including offering up detailed information about subscribers including their location.”⁶

Guided by the observations above, we have derived two metrics (based on the fundamental values delivered by the mobile channel) for evaluating mobile campaigns:

- Engagement rate: measures the effectiveness of the campaign in stimulating a response from the target audience
 - Analogous to response rates, action rates and conversion rates
- @-rate: measures the effectiveness of the campaign in driving the target audience to the physical venue

“Static” media campaign metrics such as #impressions and participation rate are also applicable to the “third screen”, but these alone do not adequately capture the value and scope of this unique channel.

Treasure hunts⁷, point to point/ multi-point chases may be particularly amenable to a mobile campaign because they weave interactive content together with participants’ physical proximity to a venue. The format, prize and scope of these events can be tailored to maximize impact of the delivered messages; the mobile channel offers the content platform as well as the ability to “accompany” players as they pursue the final prize.

To illustrate, let’s explore how a mobile-oriented location-aware campaign can be constructed and evaluated. We constructed a mobile campaign to showcase the feasibility of 1) engaging our target audience with entertaining content and 2) driving our target audience to specific physical venues. In practice, ours was TWO campaigns; so in addition to describing them, we will compare and contrast their performance.

Example Campaign Construction

The campaign consisted of two sequential games, both held during exhibit hours of the CTIA Wireless 2007 Show at the Orange County Convention Center in Orlando, Florida. First was the “qualifying event”, an SMS-based quiz game (powered by iLoop Mobile’s mFinity™ Platform) showcasing sponsor venues and messages that any show attendee could play. The second game was the “Grand Prize event” where 10 participants (chosen from winners of the qualifying SMS quiz game) followed clues in an Amazing Race-type treasure hunt for the final prize of \$10,000 (Powered by LOC-AID Technologies’ Application Creation Engine, ACE).

Program Overview: Two-stage location-enabled treasure hunt

- Venue: CTIA 2007 Orlando
- Sponsors: LG, Qualcomm, NAVTEQ, Intrado
 - i. SMS-based qualifying quiz contest
 - Audience: CTIA attendees

⁶ <http://www.rcrnews.com/apps/pbcs.dll/article?AID=200770518014>

⁷ Volvo 2006 Treasure Hunt generates 100K worldwide participants...52K of those in the US
http://joannapenabickley.typepad.com/on/2007/04/onvolvo_the_hun.html

- Recruitment to play via direct word of mouth (promoted at Loc-aid booth)
- Objective: Drive participants (foot traffic) to sponsor booths
- Prize: selection to second stage
- ii. Outdoor, handset-based treasure hunt (as in "Amazing Race")
 - Audience: Winners of the SMS-based game
 - Recruitment: via SMS notification & direct contact (phone call)
 - Objective: Participant interaction with the game venues
 - Prize: \$10,000

Example Campaign Evaluation

The campaign data analysis revealed a few intriguing nuances while it confirmed some marketing truisms.

- Participants interacted with the destination venues
 - SMS quiz contest: generated traffic to the sponsor booths, engagement with sponsor messages
 - Outdoor treasure hunt: maximized participant enthusiasm and engagement
- Reinforced traditional marketing truisms
 - The higher the stakes and lower the odds, the greater the participation and engagement

Campaign data analysis demonstrated the viability of driving participants to physical venues, a key marketing feature of the mobile channel.

SMS quiz contest

The goal of this “qualifying event” was to set a benchmark for the number of impressions and participation from our conference attendee audience. Because we expected a high volume of media “noise” at the show, our approach was to maximize the attractiveness of our venue and staff with a pirate-themed booth. Our call-to-action was delivered by booth staff who distributed badges/flyers and verbal instructions for opt-in to the SMS quiz contest. Of the roughly 35,000 attendees to the CTIA 2007 conference, our one-to-one outreach campaign connected with 2000 participants.

The quiz contest itself consisted of players selecting one of our four sponsors, followed by a quiz question that contained company/product messaging related to the chosen sponsor. Players were instructed to visit the sponsor booth before being presented with the question, in that they would need to consult sponsor booth personnel to receive the information necessary to answer the question. In a location-enabled network, the player’s location could be verified⁸ (as we did for the second phase of our campaign).

Sample game structure (all standard rate messages)

MO: Player texts JOIN to a short code to opt-in

MT: Sponsor choice offer: INTRADO, LG, NAVTEQ, QUALCOMM

⁸ There are several mechanisms for verifying the player’s location, ranging from the ultra-precise onboard A-GPS function of the handset to basic cell-ID (all of which may be triggered by an SMS response). The simplest method—requires NO network infrastructure—is to create a question whose correct answer requires the player to be at the specified venue.

MO: Player selects quiz topic by texting LG to shortcode
MT: “Please go to LG booth #xxxx. When you arrive, text ATL”

MO: Player arrives at sponsor venue and texts ATL to shortcode
MT: LG’s quiz question is presented in multiple-choice format

MO: Player indicates their choice to answer the question (A,B,C or D)
MT: Answer receipt acknowledged, offer to play again via JOIN

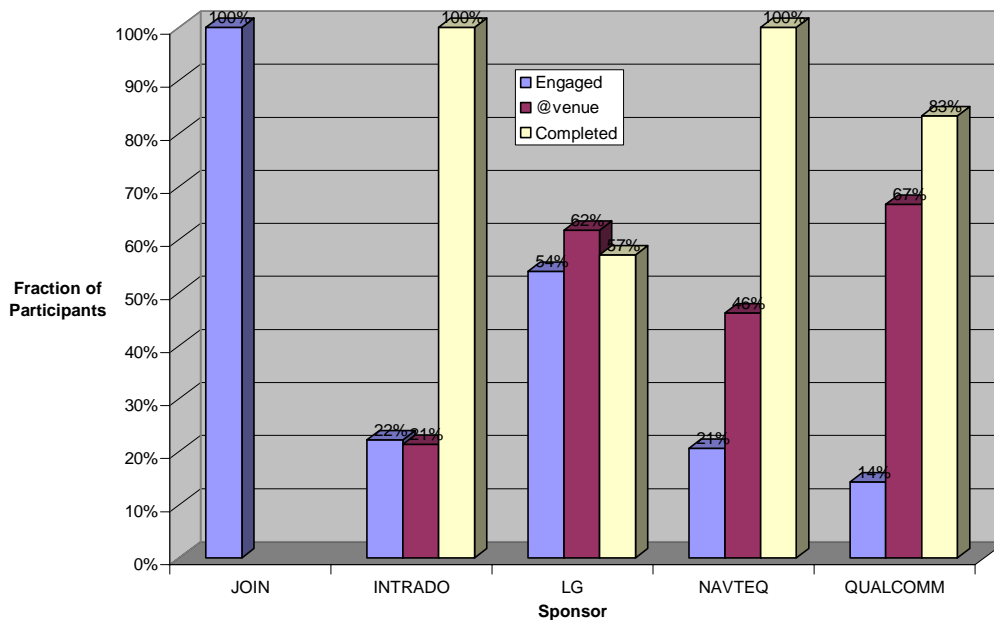
We observed a large variation in player response to each sponsor; we attribute some part to general “brand awareness” variations, but game format was a contributor. Specifically, LG’s overwhelmingly high engagement rate (54% of players who opted-in selected LG as their quiz topic) appears to have been influenced by several factors:

- Name/brand recognition: LG is a consumer brand with more “sexy” products
 - Other 3 sponsors are less well-known among the general public
- LG’s two-letter response offered the “path of least resistance” for participants
- LG’s venue was large and prominent within the exhibit floor

Our best analysis leads us to believe engagement rates were influenced by the length of the selection keyword, with “LG” receiving the strongest response compared to “INTRADO”, “NAVTEQ” and “QUALCOMM” selection response. We believe Qualcomm—with an 8-character selection response--suffered the worst of this effect and may have contributed to only 14% choosing to play their quiz question. These data may point to how game format can bias campaign response (and how the engagement metric can identify these biases); future campaigns will be constructed to minimize bias to offered choices. However, other factors such a previous brand affinity or recognition at the event may be more telling.

Given the previous, Qualcomm’s rate of attracting players to their venue, “@-rate”, was surprisingly robust at 67%. Although fewer players engaged to Qualcomm’s quiz question (14%), those that did seemed to be the most committed participants, visiting the Qualcomm booth at a much higher rate than the others. Where both LG and Qualcomm’s players faltered is in task completion; the rate at which players submitted answers to their trivia questions was lowest for these two at 67% and 83%, respectively. Although these are still fairly high, it suggests that both Qualcomm and LG may not have supported the participants in completing the task while in their venue.

SMS Statistics



Amongst the non-consumer brands, NAVTEQ’s 46% @-rate seemingly belies their middle-of-the-road opt-in engagement rate (21%). That NAVTEQ was able to draw nearly half their engaged audience to their venue was due in part to additional collateral marketing. NAVTEQ promoted the quiz game (and their message) during their Global LBS Challenge awards ceremony, which maximized the effect of the “driving” effect.

Interestingly, the smaller booths (Intrado and NAVTEQ’s) may have resulted in more player engagement to the messages. Despite their lower participant volumes, both these sponsors generated a completion rate of 100%; players who were at the venue overwhelmingly submitted an answer to the quiz question. The lack of player abandonment at this stage indicates that both NAVTEQ and Intrado were very successful (more so than the larger brands) at engaging players to complete the answer to the quiz question.

The observations above underscore the fact that mobile initiatives do not stand alone; that the elements supported by mobile technology are interdependent to, and complementary of other marketing components such as traditional marketing channel promotion, brand support, in-venue support, convenience—all factors familiar to traditional marketers.

Outdoor treasure hunt

The goal of the “final event” of the campaign was to demonstrate feasibility of driving participants to specific venues. To enable this event, LG mobile phones were preloaded with a custom media rich mobile software program that provided the instructions, pictures, maps etc. used by the contestants for the treasure hunt. These participants were



briefed and each provided one of these specially-equipped phones to use during an “Amazing Race”-style outdoor treasure hunt within a 5-mile radius of the Orange County Convention Center. Participants were picked from those that correctly answered the SMS-based quiz game described above.

Although we notified qualifying players via SMS, as in the “preliminary event”, we relied on personal outreach to convert impressions into action. Besides the SMS, a phone call to the qualifying MSISDN (a direct voice call to selected quiz winners’ mobile number) was our primary call-to-action to recruit the final event players for this stage of the campaign. This recruitment effort was important because the final event was conducted on the final day of the CTIA trade show (1-2 days’ time from the winner notification) and yielded approximately 40% participation (i.e., commitment to play).

Once final event participants were recruited, this phase of the campaign differed markedly from the previous; participation and engagement were very high, 100% of participants recruited from the quiz game actually played. Further, all players visited all five of the outdoor treasure hunt venues, reporting 100% @-rate and 100% completion. We believe the most likely explanation for this successful rate may be a combination of a valued prize with the ease of use provided by the mobile interface to play the treasure hunt. The mobility of a cell phone seemed a perfect fit for the location based treasure hunt. Post-event feedback from the players indicated that the Treasure client application and game format was exciting and compelling, the players overwhelmingly indicated enjoyment of this stage of the campaign.

Without a doubt the value of the prize (\$10,000) also goes a long way to explain the 100% complete participation rate. While seemingly obvious, basic human nature and basic marketing dictate that value of prize can have fundamental impact on the initiative and participation rates. This is a primary example of the campaign specifications providing the key element for success: value to consumer/participant. Value need not be as transparent as cash, valuable prizes etc.; value can be derived from social causes, personal identity, brand affinity and other psychological factors.

The game itself featured location-enabled network and rich media-enabled handsets (LG VX-9900s provided by one of our sponsors). These handsets were able to transcend the “plain text SMS Q&A” format of the earlier campaign because they were enabled with a preloaded client application that presented the hunt on their phones via pictures and interactive clues⁹. Players were presented the clues when the application verified their correct location.

Observations of game play indicate that player enthusiasm remained very high. One indicator was the game time-to-complete ranged from ~45 minutes to 1.5 hours (75% of players completed the game in this time period), despite high temperatures and humidity. Additionally, audience/bystander participation was stronger than expected, bystanders

⁹ The client application features image-enhanced Q&A and a unique “follow the icon” clue where players navigate to the endpoint. The final clue was a multi-stage Q&A “riddle” with custom images featuring sponsors’ logos.

contributed key information to players to complete the final “riddle” question and complete the final task.

Summary

Overall, this campaign demonstrated an important concept for mobile marketers—the goal of aligning consumer and brand goals to producing a win/win relationship. In exchange for the chance to win money, and given a convenient interface to do so (via mobile phone), consumers willingly made themselves available to what would otherwise be perceived as uninteresting brand communications. With its emphasis on fun and player experience, this campaign avoided non-valued or unsolicited messaging, and nothing was forced on participants as unwanted or non-relevant “advertising”. All brand information was relevant to their need—to win the money. This provides further evidence that the mobile channel offers a rich environment to convey brand messaging almost everywhere while consumers engage in entertaining or compelling interactive brand initiatives.

Our successful campaign showed that mobile campaigns can effectively deliver attentive audiences to sponsor venues. Additionally, the two campaigns yielded intriguing insights into how future campaigns might be constructed to maximize participation, engagement, player @-rate and completion.

Areas of future research/investigation include

- Optimizing the mix of traditional and mobile channels
- Demographic drivers to response rates
- Participant interest level due to sponsor/prize appeal
- Physical venue selection by demographic
- Participant relation to collateral material and camping promotion
- Structure of game based on audience and venues