

PART II - BUILDING AN INTERACTIVE DIGITAL OUT OF HOME EXPERIENCE

Basic Considerations for Mobile & Social Interactivity on Digital Out of Home Networks

Stephen Randall, August 2009



Introduction

Simple text-to-screen and photo-to-screen applications are commonplace at pop concerts. Twitter feeds are springing up in conferences. It can't be too hard to add an engaging mobile and social interactive applications to digital out of home ("DOOH") networks, right? Wrong.

This is part 2 in a series of 4 white papers focused on helping brands, advertisers, digital out of home ("DOOH") network operators and event planners understand the strategic impact of mobile and social interactive media beyond the web and to navigate some of the tactical issues of bringing it to screens in public spaces.

NOTE: The 4 white papers are:

- *PART I - The Different Capabilities of Interactive Mobile & Social Media on Digital Out Of Home Systems. Not All Systems Are Created Equal.*
- *PART II - Building an Interactive Digital Out of Home Experience. Basic Considerations for Mobile & Social Interactivity on Digital Out of Home Networks.*
- *PART III - Overcoming Ghost Town. Leveraging the Network Effect to Enhance the Interactive Experience on Digital Out-of-Home Networks.*
- *PART IV - Dealing With F**K and Other User Generated Content Challenges for Digital Out-of-Home Networks.*

Two earlier white papers also cover some general issues for mobile and social applications on Digital Out-of-Home networks:

- *Making The Most of Mobile Marketing: Leveraging Mobile and Social Networks to Amplify Response Rates From the "Connected Class."*

- *The Disruptive Effect of the Internet and Mobile Phones on Out-of-Home Digital Media - Bill Collins and Stephen Randall, 2007*

Contact loca_info@LocaModa.com for a copy of any of the White papers.

First Principles

A capable interactive DOOH network supports *real-time* user engagement. Engagement might come from a user at the location or via the web (e.g. via a social network connected to the location through the affinity of a brand). Engagement might be sporadic or frequent, but whenever it happens, it creates an enhanced user experience as well as a measurable "mobile click." The resulting "pulse" for the location can then be used to help the location or advertiser improve services and/or messaging.

To be clear, the expectation for interactivity is often unrealistic and will be highly dependant on location, audience, call to action and other factors such as user experience. As discussed in *Part III - Overcoming Ghost Town. Leveraging the Network Effect to Enhance the Interactive Experience on Digital Out-of-Home Networks*, the experience and data for interactivity at a pop concert will yield very different results than those seen on a digital billboard in Times Square.

Really Real-Time

A user interacting with a DOOH system needs to get real-time feedback, ideally on screen *and* on his mobile phone. Users need confirmation that their interaction has had some result. This immediacy delivers a payoff in the user experience, creating the engagement metrics that brands desire. Examples could be the DOOH screen displaying a message, incrementing a poll or advancing in a game.

The latency of sending a text message to a screen should ideally be no greater than between 5-10 seconds. If moderation is required, an effective moderation system should not add more than 30 seconds to that latency.



Example of real-time DOOH mobile and social interactive messaging. LocaModa-enabled screens at Disney/AT&T sponsored Demi Lovato US Tour Summer 2009. Messages tagged “@Demi” were displayed on specific location screens. A digital memento was also provided for fans to be able to retrieve a movie clip of their messages at a specific concert. All content was filtered & moderated in real time.

There may be several use cases where this is not possible. If lots of users are messaging to a specific screen, there could be delays imposed by the user interface (not the system), simply because messages should be displayed for around 5-7 seconds to be readable and the system has to queue up messages. For instance, if a screen can display 10 readable messages (they should be clearly readable from around 20 ft), then there will be a delay of over a minute if there are more than 10 live messages waiting in the message queue. The system can be more intelligent about prioritizing messages – for example, people messaging directly to the screen as opposed to via the web, are more likely to be physically present in the

location, and should be prioritized. People with richer content such as photos or profile pictures, could also be prioritized.

Ideally, the DOOH system could either display a message on screen showing x number of messages waiting and/or send an acknowledgment to the user’s phone.

In situations where the interaction cannot be displayed on screen immediately (e.g. the DOOH loop might have ended, there might be too many messages ahead of the user, the user’s message might have been blocked by the moderator), the user should at least receive a message back to their phone acknowledging their interaction.

While some text-to-screen applications respond in this way, most do not. DOOH operators, event planners and brands rarely specify their requirements at this level, but they should do so to ensure they understand at a detailed level, the implications of the supported user experience.

The Social Web can be Unsocial in Locations

DOOH network operators should also be mindful of using web-based social networks for DOOH messaging. They were built with a different purpose in mind and do not support key features necessary for DOOH applications. Popular sites such as Facebook and Flickr require users to register online before being able to message via mobile devices. Twitter has a simple mobile login process, but some of the richer features that can benefit a location experience cannot be setup via phone if the user is not already a member. Even with so-called dedicated location-based mobile social networking websites such as Dodgeball, non-members will be the majority of users in most locations and are unable to message to the system without first registering via the web.

(NOTE: Dodgeball was acquired by Google in May 2005 and shut down in early 2009. The founders then launched Foursquare in March 2009, a service focused on turning nightlife into a location-based game.)

Such web-based systems almost certainly require that users sign up as members *before* being able to engage with the system. This is not a practical solution for DOOH systems.

Further to the points above, it is a fundamental requirement for interactive DOOH applications to support the “fly-by texter” i.e. a user wanting to interact without needing to sign up or login. Audiences in locations that want to engage with interactive media, want to do so *now*. Supporting fly-by texters is essential. For example, if a DOOH system is capable of displaying Twitter messages but does not support fly-by-texters, then users who are not on Twitter will be unable to participate.

Furthermore, there are many basic text-to-screen products that do not support other social feeds, and will therefore be prone to the “Ghost Town” problem of having poor or inconsistent audience engagement. (See *Part III - Overcoming Ghost Town. Leveraging the Network Effect to Enhance the Interactive Experience on Digital Out-of-Home Networks.*)

So let’s assume that any user wishing to engage with place-based interactive media should be able to do so, subject to the Terms of Service (which is covered in *Part V - Dealing With F**K and Other User Generated Content Challenges for Digital Out-of-Home Networks.*) To do this, a user must be able to send a message to the system without requiring a membership or cumbersome login process.

Once a user has engaged with a place-based system, they *might* be motivated to visit a website and register, especially if it results in an obvious benefit to them, such as coupons, being entered for a prize draw, or personalization features such as profile pictures being displayed alongside their messages in future.

Enabling/Displaying User Identities

Ideally, place-based messaging systems should not identify unknown users as “Anonymous” or “Anon,” as the screen will

end up with lots of similarly marked Anon posts, which is not a great user experience.

A better option is to have no name, or have a system that allocates pseudonyms and awards users for optionally connecting social networking profile data to claim their real names.

To support pseudonyms, once a user has sent in a message, DOOH mobile interactive and social applications such as LocaModa’s Jumbli or Wiffiti, allocate a name such as a color/animal (e.g. GreyShark) and send a message back to the user confirming their pseudonym.



LocaModa’s word game Jumbli (seen above in Facebook), can be played via DOOH networks and from the web. Players can participate under their Facebook name or a pseudonym.

Some systems display the last few digits of users’ phone numbers. While this helps senders identify their messages on screen, it is an inelegant solution for all other viewers who cannot easily identify message owners and see what looks like random numbers after every message.

Advanced placed-based social media systems can connect to available social profiles on existing social networks such as Twitter and Facebook, subject to permission from the user. For example, with LocaModa’s Wiffiti, messages from Facebook or Twitter are displayed alongside their profile pictures. If a user chooses, they can also associate their mobile phone number with their social

network profile info and then have their Facebook or Twitter profile displayed when they send a text message to the system at a location.

Messaging Schemas for Different Loop Requirements

A capable social media DOOH system should have enough data about a location, audience, time of day, context, etc to prioritize specific local messages. When this information is available to the DOOH system, messages can be displayed in an optimized manner.

For example, let's assume Joe's Bar in Boston has an interactive DOOH system, capable of receiving text messages and photos via mobile phones and/or email and tagged messages from the web. Let's also assume that the system has been set up to subscribe to messages tagged "RedSox."

The system should prioritize the local messages first - i.e. those messages sent via mobile or web to @JoesBar. Then it should display the tagged messages in date order.

The nature of the display algorithm is a key consideration for the public display of UGC. Should a message received on the system linger until the system receives a new message(s) or should it loop all messages received over a predetermined period in order to keep the audience interest up? Should the messages be displayed linearly like a chat board or randomly like graffiti?

For a large, engaged, passionate audience such as at a pop concert, the offer of displaying a user photos and text messages is compelling and typically results in a high response rate. The data from over a thousand LocaModa deployments/events, shows that the number of unique messages sent an event can be as high as 55% of the audience. The results are highly dependant on the type of location and/or event (e.g. pop concert, sports event, political rally, conference, bar, café, etc). The average number of messages each respondent sends

ranges from 1-5 again, depending on the type of event and application (e.g. social messaging, poll, game). For an application that supports both text and photo messaging, the percentage of messages sent as photos can be as high as 25%.

The Call to Action

Apart from leveraging the network effect to display other messages (thus prompting reaction and interaction) as described earlier, the call to action is critical in getting user engagement and should clearly and succinctly frame the invitation to interact.



BarCast (an interactive DOOH bar network in Boston, Chicago and Miami) uses very effective animated instructions and enticing calls to action, explaining how to interact using text messaging or emailing photos.

The texting demographic is accustomed to concatenated or abbreviated instructions, so ironically, the call to action for mobile and social applications is less about the clarity of the language and more about clarity of the key words (screen ID, short code, tags, etc) to send.

The call to action can be helped by displaying specific mobile commands in a different color, e.g:

txt @joesbar + message to 87884

User generated content is often best when framed around a topic, e.g:

What's your best pickup line?

txt @joesbar + message to 87884

Sometimes an “either or” question is good to encourage interaction, e.g:

Star Trek or Star Wars?

txt @joesbar + message to 87884

If a CTA is trying too hard to be “cool” but promotes a product that is anything but cool, don't be surprised if the results are poor. “Hey txt your favorite insurance company” is unlikely to get great results! Just because mobile and social technology is growing rampantly in popularity, does not mean it can be used effectively for all products or occasions.

Conclusion

Anyone approaching interactive social media for DOOH must be very mindful about the user experience and ensure the systems they are deploying support real-time interactivity, rich personalization features, flexible messaging and display configuration. In addition, their applications must have a clear, compelling call to action.

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