

# [Client] Mobile Strategy

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## Part I - The Present

### Executive summary

[Client] is a non-profit dedicated to improving the health of the world's populations. To accomplish this, [Client] collects and distributing objective evidence to all interested parties at no cost. [Client] collects rigorous measurement of health status and the global burden of disease, culminating in peer-reviewed publications, policy reports, data visualizations, and the Global Health Data Exchange (GHDx) database.

[Client] is currently focused on a key research initiative called the Global Burden of Disease 2010 (GBD). This project is a collection of data, reports, policies, and data visualizations, which they plan to release in summer of 2012. The GBD aims to put global health estimates in the hands of those working to reduce disease, improve health conditions, and address deep inequalities in health between populations. [Client] also hopes to refine the tools they have developed so the GBD can be used more effectively by a wider range of researchers.

[Client] has a newly crafted digital communications plan, which includes social media initiatives, digital content distribution (including videos), conversation monitoring, and robust leverage of their website.

### Objectives

From [Client]'s current company objectives, we have synthesized two goals that provide the framework for mobile integration into the existing communication strategy:

- **Increase access to [Client]'s published global health content**
- **Engage and expand existing community of advocates, experts, humanitarians, and change agents**

Based on analysis of the existing environment, [Client] should pursue two simultaneous strategies to accomplish the goals of global access and building an engaged community: to build global access to [Client]'s estimates and reports, [Client] should build a mobile optimized website; and to engage their community [Client] should produce mobile optimized versions of existing and future content. Both are currently feasible by [Client] with minimal investment or organizational change.

### Environment & Data

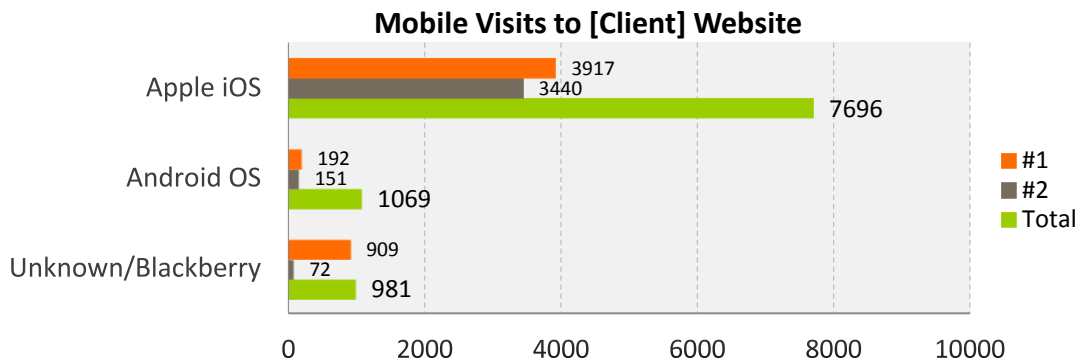
[Client] has a robust website and social media presence on Facebook, Twitter, & Vimeo. All of these social services are available on mobile devices and have mobile optimized processes. A wealth of global health data is available on the website under the publications section and via Issuu. Together, these channels allow users to obtain updates and documents socially, digitally, and via mobile.

Despite not having a mobile-specific strategy, [Client] has been actively pursuing the topic. In addition to sponsoring the development of this report, [Client] recently hosted a talk by Dr. Michael Link of The Nielsen Company regarding mobile survey and data collection best practices.<sup>1</sup> Dr. Link's presentation attracted a full house. [Client]'s website is built on a solid, mobile-friendly foundation that reveals a technology team with foresight and flexibility. [Client] has very recently pursued a new social media strategy, digital media strategy, and has brought on a digital media communication specialist. These changes indicate a receptive attitude towards innovation. The business culture and infrastructure of [Client] are prepared to embrace a mobile strategy and deploy solutions.

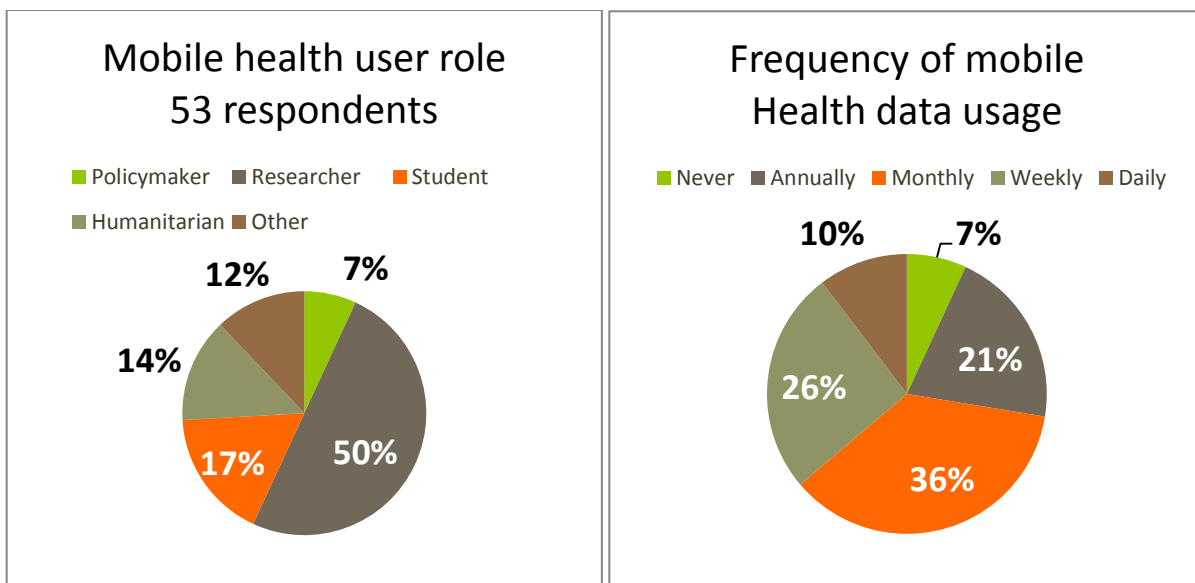
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<sup>1</sup> See the Supplemental Research Packet, Section I

From April 2011 to April 2012, [Client] experienced an average of 13.606 unique monthly visitors to their website. The most popular pages were the home page (88K views), GHDx (26K views), and Post-Bachelor Fellowship (21K views). The two life expectancy data visualization pages ranked 6th and 7th. These two also ranked second and third as unique landing pages (visitors followed links directly to these pages, bypassing the home page). The top source was organic search on Google. Average pages viewed per visit were 3.24. Despite [Client] emphasis on global interaction, they only received visits from 28 countries, and the US visitors were nearly 17 times more numerous than the runner up. Of the other countries represented, Europe and other English speaking countries had an overpowering presence. [Client] did see a number of visits on mobile devices (less than 5% total): 7596 visits via Apple OS (iPhone, iPad, and iPod touch) followed distantly by Android at 1069 visits.



We conducted a short survey of [Client] stakeholders in May 2012.<sup>2</sup> Survey responses indicated that only 11% of potential mobile users typically require global health data urgently (within hours or minutes). This makes it essential that mobile solutions allow for publications and data to be easily exported or saved for later consumption; users are unlikely to need to read the whole thing right now. Respondents selected the mobile website as the mobile solution they were most likely to use (57% likely or very likely), and “a specific fact or statistic” as the type of estimate they would most likely be searching for (21% very likely).



<sup>2</sup> See IHME Stakeholder Survey Results MAY 2012.xlsx for full survey results data and charts.

## Part II – Next Steps

### Integration Plan

#### Global Access through a Mobile Website

Building a mobile site should be [Client]’s first priority for mobile integration. [Client] already has active social media channels, publishes content on Issuu, and is pursuing other digital media channels like You Tube; all of these services are mobile optimized, allowing users access to some content on mobile devices. Building a mobile website will complete this ecosystem, provide a consistent mobile experience, and give access to content not available through these other channels. Mobile websites have fewer access restrictions than other mobile solutions, and can be reached by anyone with a web capable phone. Development time and cost for mobile web are minimal, especially considering the great foundation [Client] has in their current website technology. Mobile websites are also quick and easy to update, and so become a long lasting asset.

There are several potential user personas for the mobile website.<sup>3</sup> However, all personas share a core use case: prompted by external stimuli, the user arrives at the mobile site, finds desired content via search or navigation, consumes it, saves or shares it, and ends the session. This process applies to large documents, like GBD policy reports, or simple data like the office phone number.

The mobile site will offer the same core content on the full site but without some features or content that is unsuitable for mobile. Mobile site content should include:

- Current website content: About [Client], Contact info, News & Events, current Project information, etc.
- Publications and digital content (more on these in the next section)
- GBD Content and Materials (featured prominently)

Mobile website functionality will center on finding, reading, saving, and sharing [Client]’s publications. Therefore the site must have a prominent search feature, and each document page must have options to save the document for later (could be done via device download or bookmarks in a user account); sharing the document via email, social media, or text message; and links to consume full content on optimized reading services like Issuu, Apple Newsstand, or e-reader.

Conceptual wireframes are included in Section III of the Supplemental Research packet and in the [Client] Conceptual Wireframe Photoshop document.<sup>4</sup>

A mobile website is easily achievable given [Client]’s current capabilities and existing website structure.

#### Content Engagement through Mobile Optimized Content

[Client] is already using digital content distribution tools, such as social media and Issuu, which are mobile optimized platforms. However, while the access channel may be mobile optimized, some the content itself may not be optimized for mobile consumption.

Optimized content creates a complete and seamless mobile experience: not only can content be found on mobile (as it is already) but it can be consumed there as well. More importantly, when content is fully optimized, it becomes easily—even addictively—interactive. Mobile content is easily shared between users, and allows multiple parties to interact with and collaborate over a content piece regardless of platform. Optimizing content for mobile consumption can be done with just a few adjustments to [Client]’s current production and distribution practices.

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<sup>3</sup> See the Supplemental Research Packet, Section II for full user stories and personas.

<sup>4</sup> These comps use toolbar kits and iPhone templates that are individually licensed. Please see details in the Supplemental Research packet and License Information layer of the PSD file.

The use case for mobile content begins, like the website, with external stimuli: very likely a social media post with a link to some of [Client]’s content. The user follows the link to the content page. If the content is not optimized for mobile interaction the user will most likely abandon the session and might come back later. However if the content is optimized, the user consumes some or all of the content; shares the content; and saves it for later reference before quitting the session.

As mentioned, this plan can be accomplished using tools that already exist. Mobile optimized content is the next evolution in [Client]’s existing communications and digital media plan and can be executed immediately.

## **Implementation Plan – How to get there?**

An IT questionnaire was submitted to assess [Client]’s mobile development capabilities.<sup>5</sup> The responses indicate a ready software platform and technical staff capable of executing this implementation plan.

### **GBD Mobile Website**

[Client]’s current website is built on an extensible foundation of open source software technologies such as Drupal, jQuery, MySQL, and Google Analytics. The following mobile tools and approaches build on this foundation.<sup>6</sup>

#### **Mobile web framework**

jQuery Mobile is a touch-optimized web development framework that is compatible with a wide variety of smartphones and tablet computers. jQuery Mobile has the following benefits:

- Compatible with all major mobile platforms as well as all major desktop browsers, including iOS, Android, Blackberry, Palm, Symbian, Windows Phone 7, and more.
- Built on top of jQuery core so it has a minimal learning curve.
- Limited dependencies and lightweight to optimize speed of web page delivery on mobile.
- The same underlying codebase will automatically scale to any screen size.

Specific actions:

- Download the latest stable version of jQuery Mobile.
- Engage the broad community of online support, documentation, and code samples to learn quickly how to build the GBD mobile website.
- Implement an app icon that mobile users can save on their phones to have the experience of a GBD app.

#### **Mobile search**

The website analytics and mobile survey data indicated that most [Client] content consumers are “users with intent” who are looking for specific information. Last year’s [Client] web usage indicated over 115,000 Google organic searches. Mobile search is a top priority.

Specific actions:

- Create GBD mobile web search pages that combine existing web content, social sharing tools, and links to featured mobile optimized videos, reports, and presentations.
- Employ mobile search engine optimization to make the new GBD mobile website easily discoverable.

#### **GDHx data queries**

To enable mobile queries of the GDHx database for specific data results, [Client] must customize the web query function IT is building, using the mobile web framework.

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<sup>5</sup> For more details on this assessment see the Supplemental Research packet, Section IV

<sup>6</sup> For additional resources on these topics see the Supplemental Research packet, Section V.i.

Specific action:

- Use jQuery Mobile and PHP scripts to query the MySQL database.

## **Analytics & Measurement**

[Client] should expect to see a growing percentage of visits from mobile devices with the launch of the mobile website. This number may grow slowly at first, then spike and ultimately level out. Web visits should be monitored and analyzed granularly to identify areas for improvement to the mobile website. [Client] can modify their existing Google Analytics implementation to provide more granularity about GBD mobile web usage.

Specific actions:

- Implement the complete out-of-the-box set of Google mobile analytics
- Add custom analytics to measure these key usage indicators:
  - Mobile web visits
  - Views per page
  - Views per featured content item
  - Number of GHDx data queries
  - Number of searches with ranked results
  - Number of shares by channel (email, Facebook, Twitter, etc.)

## **GBD Mobile Optimized Content<sup>7</sup>**

The web content outlets [Client] uses today provide mobile-optimized experiences. Apply these key considerations to developing targeted GBD mobile content for distribution using the same 3<sup>rd</sup> party outlets you use today:

- File size impacts speed of download; use compression to keep file sizes as small as possible. Check with 3<sup>rd</sup> party content outlets for size limitations.
- Brevity is important; provide mobile content that can be consumed in 5 minutes or less. Break up longer files.
- Mobile devices have varying screen sizes and aspect ratios. Use the simplest content design possible to convey the desired message.
- Not all file formats work on all devices. Verify the content you are designing will display as expected on iPhone, Android, and HTML5 mobile browsers before you distribute it.
- Make content easy to share: short, catchy headlines, thumbnail graphics, and common sharing features.
- Test your complete content releases on actual Apple and Android mobile devices before public distribution.

## **Video**

YouTube automatically provides the best possible experience the mobile device can support, and it is integrated with Apple, Facebook, and Google apps; you do not need to develop separate video content for online and mobile. YouTube is preferable to Vimeo as Vimeo requires a separate app download and does not provide the same ubiquitous app integration, quality of service, or analytics integration.

Specific actions:

- Launch a GBD 2010 YouTube channel and playlists to facilitate easy discovery of [Client] videos.
- Publish short YouTube videos that feature the most popular GHDx data visualizations.

## **Reports and PDF documents**

[Client] should continue publishing reports to Issuu and providing variable sized PDFs for desktop or tablet users. To optimize GBD reports for smartphones, and expand the reach to e-book readers, publish the reports in the ePub format.

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<sup>7</sup> Reference material for the following guidelines is provided in the Supplemental Research packet, Section V.ii.

ePub allows for free flow text that is easy to read on handheld devices. It's also supported by Apple iBooks and Google Play apps. eBooks can be easily created using Adobe InDesign or freeware tools.

Specific actions:

- Use ePub for mobile optimized documents when text is the most important part of the document.
- Use PDF when layout is the most important part of your document; avoid for mobile phones.

### **Presentations**

SlideShare.com provides auto-detection of mobile devices and a mobile web experience. Specific actions:

- Post highly compressed, mobile optimized versions of GBD decks on SlideShare.
- Provide a direct link to the mobile version of the deck on the GBD mobile website.

### **Measurement**

Effectively designed content and an engaged community should cause an increase in views, downloads, and sharing. Monitoring these activities via web analytics and social listening will identify successes and areas for improvement.

## **Mobile Champion**

To succeed in executing a long-term mobile strategy, [Client] must identify a mobile champion. This should be a senior business representative with a passion for mobile, understanding of the mobile landscape, and a commitment to staying current with mobile trends. [Client] must provide this individual with the authority and resources to succeed.

Responsibilities include:

1. Overseeing the GBD mobile website and mobile optimized content launch
2. Reviewing the analytics data and establishing an “experiment – measure – adjust” process to continually fine-tune the GBD mobile content offerings and improve viewership and sharing
3. Forming a board or steering group represented by business functions and IT leadership
4. Developing a mobile roadmap for [Client] that considers:
  - a. Improvements and advanced features for the GBD mobile website and content
  - b. Developing a mobile presence for <http://globalburden.org>
  - c. Global SMS-based solutions (see Future section)
5. Leading the mobile community of practice activities (see Future section)

## **Part III – Future**

### **Vision of Future [Client] Data collection**

HP recently announced the results of the first year of their mobile disease reporting pilot program in Botswana. The initiative used mobile phones to report malaria outbreaks to local governments and mobilize public health response. In just the first year, the program reduced the response time from three or four weeks to three minutes, and improved reporting compliance from 20% to 93%.

SMS is the most accessible mobile technology worldwide and in a few years, SMS will be essential to [Client]’s vision of free global distribution of accurate global health data. When that happens, [Client] will be positioned to employ SMS for live, worldwide, continuous data collection; immediate reporting and distribution through SMS database query; and empowering real change—real improvement in global health—instantly.

SMS systems are surprisingly complex and are subject to many country specific regulations. As such, a full SMS mobile system should be explored cautiously. After a great deal of research, we determined that this goal is not immediately achievable and would require further research into [Client]’s specific capabilities and the capabilities of any partner institutions. However, this vision is not unattainable with a few years of preparation.

## Mobile First & emphasis on Agility

As mobile technologies rapidly reshape the nature of business, the ‘mobile first’ notion for well-designed and scalable websites are business and organization *imperatives*. This represents a significant opportunity for organizations such as [Client] to develop new interaction models and use mobile solutions. In order to match up to this business need we need to accommodate whatever screen or device a user wants to view content and these accommodations are especially advised when trying to reach desperate populations around the world.

This shift to mobile first thinking is an important paradigm change as organizations turn to agile methodologies in order to rapidly respond to the interaction and integration changes that are transient and often redefined or replaced within a year or two. As the ever-increasing number of devices on the market force attention to the developing for mobile platforms, it’s essential to remain agile in approach and be prepared to remain flexible from iteration to iteration and be able to scale design to be adaptable.

These shifts in [Client]’s approach to content production and platform leveraging will be essential in pursuing SMS deployments in the futures.

## Build a Mobile Community of Practice

One of the mobile champion’s key responsibilities should be to develop partnerships and increase [Client]’s body of knowledge through a mobile community of practice. The scope of this community should encompass technical as well as business interests.

Specific actions:

- Continue to host mobile best practices seminars and workshops—such as Dr. Michael Link’s presentation on April 25th—at [Client] and online, and distribute short video summaries and reports for mobile consumption.
- Get involved in MobileActive.org, Jana, the new global Mobile Marketing Research Association (MMRA), and other organizations that are doing work in mobile survey, data collection, and user behavior research.
- Identify an IT representative to participate in technical communities such as Drupal, jQuery Mobile, and RapidSMS to contribute findings and build [Client]’s body of knowledge.
- Follow relevant mobile thought leaders from the above organizations and the blogs recommended by Justin Bailey, Research Methods COI Manager at The Nielsen Company.<sup>8</sup>
- Develop an [Client] branded toolkit of best practices for mobile survey and data collection that [Client] partners and supporters can use to create and deploy effective mobile surveys on global application platforms. For an example, review the Mobile Media Toolkit on MobileActive.org.
- Reach out to other UW groups such as Change and the Open Data Kit to identify potential synergies and collaboration opportunities on [Client] mobile applications.
- Look for corporate partnership opportunities such as the HP real-time malaria application.
- Also look for opportunities to use the [Client] mobile survey toolkit to piggyback on existing global mobile application platforms to collect [Client] global burden of disease data.

When asked if he thought [Client] should lead or participate in a mobile community of practice, Dr. Link responded, “Definitely lead -- my view always is, if you’ve done your homework and there’s a vacuum -- fill it! I think you’ll find a great deal of interest out there and others in your field who are just waiting for someone to take the lead.”

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<sup>8</sup> See the Supplemental Research packet, Section VI.