Time Space Map, *What happened everywhere*

Time Space Map is an online atlas of history and happenings that anyone can edit. In the same way that Wikipedia aims to be an encyclopedia of everything, Time Space Map aims to tell you everything that has happened in any particular place. It is both a searchable map, and a massive, collaborative database of events. It gives you simple and elegant answers to hard questions like "What interesting things happened near where I am driving? Where was General Lee when Lincoln gave his Gettysburg address? What is happening near my town and surrounding areas? What was New York City like from 1858 to 1869?"

Problem

People care about the questions posed above. In fact, one quarter of Wikipedia users (50M/month) are interested in information relating to place and time, and yet it is still very difficult to find a reasonable answer. Search engines like Google provide some answers; mapping sites like Mapquest have other information; and collaboration sites like Wikipedia hold still more knowledge. Despite the fact that no one has made it easy to find out "what happened here," the technology, processes and social structures for solving this problem have all been worked out in the past few years. The time is right!

Solution

Users of Time Space Map start on a page with a search box and a map (see Appendix, Figure 1). They find information about a place by typing queries like "riots, New York City, 1860-1865." Instead of finding 200,000 barely relevant articles, with Time Space Map they find 42 highly specific events. They filter and view the events on a map just like they find coffee shops on an "in-the-now" web map. They re-enact battles and follow the paths of famous explorers. They use their iPhone or Razr and web-connected car navigation systems to connect with their surroundings in a new and deeper level. They share their explorations with others by making time-lapse replays, adding widgets, voting, tagging, favoriting and subscribing to RSS and GeoRSS feeds.

People add knowledge to Time Space Map for the same reason they contribute to Wikipedia, only Time Space Map allows them to co-create in a new and rich way. They use simple but efficient tools (like flickr's tools) to geo-time-tag events from web sources like Wikipedia, often in seconds (see Appendix, Figure 2). They can link events together in a chain of causality and embellish events with cartographic features.

One day the map will be so real that you will be able to get driving instructions for Paul Revere's famous ride, including where to water the horse, stop for a pint, and avoid British troops.

Opportunity

The Time Space Map can hold different types of knowledge "spaces"; encyclopedic history like the American Civil War; current events like news

stories; personal (social) history like my most recent vacation. The market for encyclopedic events, roughly 25% of Wikipedia's traffic, is 50M unique monthly visitors (UMV) today. The market for current events and personal events roughly corresponds a similar percentage of the market for today's social networking marketplaces; 68M UMV. The emergence of the mobile internet in the coming years will dramatically increase the value and reach of time space data. Overall, we expect to achieve 30M UMV in 3 to 5 years.

Market Plan
Initially, we will attract a core community of enthusiast contributors by launching with pre-built content for one or two popular time-space destinations such as New York City, 1800 through 2000. As the size of our database increases, traffic will be driven by high page ranking on Google's new geo-search engine, by viral sharing of our content through widgets and maplets and by word of mouth.

We will build the map in phases, the first of which is to geo-time-tag Wikipedia. There are an estimated 10 to 20 million text snippets in Wikipedia that are relevant to time and place. At first, we will focus on making it mindlessly easy to add those Wikipedia citations to the map. With our tools, contributors will be able to geo-time-tag a paragraph in seconds and a large article in minutes. They will cut and paste annotations right back into the Wikipedia articles so that the valuable geo-time-tags will be available to everyone.

Next, we will build the tools to recreate events such as battles, explorations or news events using political borders, road networks, historic maps and time-coded paths. Later, we will add other spaces including "personal history" (e.g. unverifiable events and viewpoints relating to genealogy, family stories, local legends), current events (e.g. news, blogs), and fictional history (e.g. events from books and movies).

We will offer web widgets, popup timelines, downloadable mobile applications for phones and in-car navigation, public APIs and ways to interact with the content in Google Maps, Google Earth, Microsoft Live and other "location browsers". Users will be able to create "time-lapse replays" to share their explorations with others.

Competitive Advantage
Conventional methods for finding knowledge on the web cannot satisfactorily answer the question of "what, when and where". Time Space Map combines mass collaboration, social interaction and mapping mashups to solve the problem. Time Space Map focuses on *events* where social mapping sites focus on the *present* and are centered on individual interest e.g. "*me - my maps*". Time Space Map relies on *mass collaboration* where textual search engines and content aggregators rely on *algorithms* (Google, MetaCarta). Time Space Map embraces the visual story telling power of *location* and *cartography* where Wikipedia is primarily *textual* and organized by *topic*.

The large mapping sites, Google Maps, Yahoo, MSN Live or Mapquest avoid wiki-like collaboration, instead focusing on offering users ways to add their own information to the map. For instance, when a user shares a location on Google Maps, other people aren't allowed to change it. In fact, Google's new geo-search engine (likely followed by offerings from others) is designed exactly for sites like Time Space Map.

Our greatest risk will come from other startups who attempt to duplicate our business proposition. We will counter this by focusing on execution, market share and speed to market of new innovations.

Revenue Model
Time Space Map will make money through context-specific advertising and distribution partnerships. Initially Ads will come from networks like Google AdSense and Tribal Fusion. As traffic increases, a dedicated sales force will achieve higher ad revenue of $1 to $3 average revenue per thousand (or RPM) and more targeted distribution. We believe pressure from our community of contributors will keep our RPM lower than other location based sites which currently achieve $6 to $8 average RPM.

Technology
Time Space Map requires no new technology innovations. All of the key concepts have already been demonstrated in disparate web applications. Instead of creating new technology, we combine existing technology in unique ways. As a point of reference, wiki technology wasn't new when Wikipedia started in 2002. Likewise, the first version of Mapquest was built with a team of six people in six months.

Founding Team
President/CTO: Frank San Miguel was one of the key people behind the creation of Mapquest. He has also held leadership positions at a number of internet startups in media and insurance (CondéNet, Channelpoint, Fusura), and has been a corporate officer for a $60M venture backed company. Besides his work on Time Space Map, Frank is currently active in a number of other roles, including the President/CTO of San Miguel Technology, LLC, an adjunct professor of Computer Science at the University of Delaware and a founding board member of a not for profit child care center. His blog is at http://www.tech4d.com/blog.

Advisors:

Bill Muenster; Business, Mapping. As Senior Vice President of Development and Production for Mapquest.com, William oversaw the company's engineering and production from its early growth through the initial public offering and sale to AOL for $1B.

Daniel Theobald; Business, Architecture. Daniel is the President/CTO of Vecna Technologies, (http://www.vecna.com) an Enterprise Architecture, Software Engineering and R&D firm. The inventor of the BEAR robot, Daniel is well versed in the engineering sciences with extensive experience in software architecture, artificial intelligence (AI), electromechanical engineering and mobile robotics. His interests and expertise include robot control and mobility systems, object-oriented design, enterprise system architecture, and system integration. His graduate work at the MIT AI Laboratory included developing web-based control algorithms for a robotic Mars explorer, a progenitor of Spirit and Opportunity. Graduating at the top of his class at MIT, Daniel is the recipient of the Henry Ford II Scholar Award and the Hertz Foundation Award, as well as a fellowship from the National Science Foundation. Daniel holds BS and MS degrees in Mechanical Engineering from MIT.

Alex DeJong; Architecture. Alex DeJong has played a major technical role at consulting and internet companies (IBM, ChannelPoint, TriZetto) and is an expert at creating both high traffic web applications and complex web based business systems. He is currently a software architect at Siemens Medical Systems in Wayne, PA.

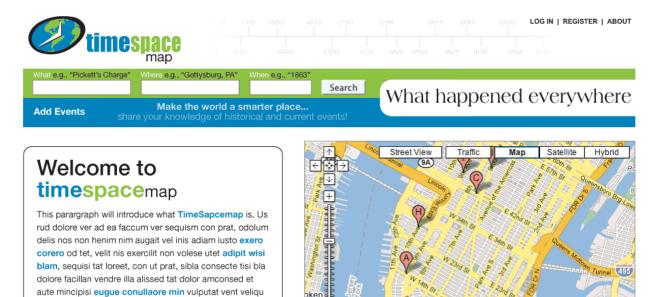## *Financial Projections*
P&L Yearly Condensed

Year	1	2	3	4	5
Income Assumptions					
Avg. Monthly Visitors	149,213	1,734,239	5,314,559	14,449,410	30,090,210
Max Monthly Visitors	566,226	2,993,689	7,418,144	20,984,144	38,380,544
Avg. RPM (Rev/thousand impressions)	$0.0	$1	$1	$2	$3
Max Pages/visitor	6	9	12	20	25
TOTAL Revenue (000)	$1.0	$150	$765	$5,614	$27,081
Expense Assumptions					
Avg Number of servers	1	8	21	58	120
Avg Employees	1	2	4	7	16
Avg Commissioned sales staff	0	0	3	3	10
TOTAL Expense (000)	$96.6	$248	$647	$1,477	$3,170

Current Status
Time Space Map has been in development since April 2007 with $140k of owner investment. We are currently in the pre-launch software development and beta testing stage. Some of the intellectual property may be patented in the future as a defensive measure. After launch, we may seek seed stage investment in order to speed our time to market and attract experienced and active board members.

Appendix – Screen Shots

Figure 1, Time Space Map Start Page

Figure 2, Time Space Map Geo Time Tagger