Case Study: Websites for New Bitcoin Crypto-Currency Users

This post is a case study of my latest project. The resultant product is a pair of websites designed for new Bitcoin (a crypto-currency) users. I laid the groundwork of inbound marketing in September (3 months ago) along with market research and planning. It is not until recently I started the design and development in anticipation of a full rollout planned in the coming year 2014. The websites, bitcoin-tw[^1] and bitcoin-en[^2], are partially live and open to the public as of this writing.

Strategy

The strategy I use here is market-driven focus which hopefully leads to a product people want to use. This product is to be created based on a market need, not because I think it is a good idea. The strategy can be further broken down into:
Outside-In - The approach to match strategy to needs via an analytical approach based on data collected from real users. The user conversion funnel starts a person from being a visitor, to signing up as an email list subscriber, to posting questions in the forum, to providing answers to others in the forum. Along the way, all the Bitcoin questions and answers submitted in will be carefully examined to shape the website features. This outside-in approach will be in sync with BDD [3] which is also outside-in.

Off-the-Shelf - In terms of product development, I'd use off-the-shelf software solutions as much as possible for building the prototype site(s) to collect marketing data and to proof the concept. Advanced website customization won’t come into play until later.

Avoid Competition - With very limited resource at hand, it's better off avoid market potentially become very crowded. Although Bitcoin is worldwide acceptable, an overlooked and underserved market - Taiwan - has been chosen to be the primary targeting market.

User Perspectives/Feedbacks - A dual purpose forum will be acting as a "lead magnet" for email list signup, and will also be a great place to collect
feedbacks to support Outside-In approach. A screenshot of forum can be seen later on this post.

**Market Analysis**

This product caters to a population with a majority of people still not knowing what Bitcoin is. Bitcoin started gaining awareness in early 2013, and its acceptance is growing worldwide. Bitcoin has the potential of becoming an essential part of people's life (as indicated by charts below).

![Number of transactions](http://data.bitcoinity.org)

number of transaction using Bitcoin per week, source: http://data.bitcoinity.org

Recently, a Bitcoin exchange in China (BTCChina) topped trading volume[^4]. The news prompted me to separate the trend analysis of English speaking target audience (using keyword "bitcoin") from the trend analysis of Chinese speaking target audience (using keyword "比特幣"). The analysis turned out that the keyword "Bitcoin" is trending up. At the same time, though the keyword
"Bitcoin" in Chinese ("比特幣") it is also trending up with a little bit lag time of a few months:

**Trend of "Bitcoin" keyword on Google**

<table>
<thead>
<tr>
<th>Regional interest</th>
<th>(bitcoin)</th>
<th>Region</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td></td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>London</td>
<td></td>
<td>90</td>
<td></td>
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<tr>
<td>Melbourne</td>
<td></td>
<td>87</td>
<td></td>
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<tr>
<td>Los Angeles</td>
<td></td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Sydney</td>
<td></td>
<td>82</td>
<td></td>
</tr>
</tbody>
</table>

**Trend of "比特幣" keyword on Google**

<table>
<thead>
<tr>
<th>Regional interest</th>
<th>比特幣</th>
<th>Region</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taipei</td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

As indicated by the above market analysis, Bitcoin is increasingly researched upon online by both people in English and Chinese speaking regions worldwide. In order to better position with competitive advantages, I’d narrow down my product scope to put resources into a specific market that is potentially underserved and overlooked. As Bitcoin buzz grows among venture investors despite risks [5], Taiwan stands out (as seen in the chart above) as a market that is not English speaking region, not part of China, and has up-swing potential as
indicated by Google trend. During product development, though I’ll be delivering a pair of websites for both English and non-English (Chinese) speaking markets, extra attention toward the non-English speaking market in Taiwan will be stressed upon. Since a full fledged website for new Bitcoin users will not debut until next year, the execution strategy is to quickly put out a minimum viable product to start gathering market data.

A good inbound marketing is critical to kick off this project. About 3 months prior to doing market sensing, I spent great effort writing an article on the topic of Bitcoin and published the article online. To date, this inbound marketing article is already indexed by most major search engines. The article was syndicated to a news site which I had distribution agreement with. I’m pleased with the fact that the Chinese version of the article ranked #5 in Google for the keyword. I knew it would play a key role when it comes to marketing sensing.

Between 11/19 and 11/29, there were 439 unique visitors read the inbound marketing article I put out:

![Unique Article Pageviews: 439 (11/19 - 11/29)](image)

**Market Sensing**
In order to generate knowledge about customers, I designed communications and the conversion funnel that enables customers to give their suggestions:  
1. A landing page with some "lead magnet" for visitors to join our email list, and 
2. An online inquiry form for visitors, after joining our email list, to post Bitcoin questions, and 
3. A forum filled with questions submitted from the subscribers, and 
4. Answers to all the submitted questions, and lastly 
5. Email replies with answers to whom had asked Bitcoin questions.

To kick it off, I needed to pump traffic to the landing page in place and watch it converts. I edited the inbound marketing article I wrote by adding a link to the article. The link is highly relevant to the content and was designed to take readers to my experimental new site on which the above mentioned landing page is presented to visitors. I was looking forward to collecting enough data and act on the data gathered.

As a result, between 11/19 and 11/29, there were 267 unique visitors landed on the designed landing page. Because the landing page is so new, so it is reasonable to assume all visitors landed on the page came from the inbound marketing article.
267 unique visitor landed on the landing page between 11/19 and 11/29
Other matrix were collected too. In summary, for the period between 11/19 and 11/29:

- 439 unique visitors read the inbound marketing article.
- 267 unique visitors landed on the designed landing page.
- 117 unique visitors joined the email list and became subscribers to our Bitcoin site.
- 52 subscribers filled out the online form to ask at least one Bitcoin question.
- 33 subscribers who filled out the inquiry form expressed interests to help building out the site.

Because the conversion rate was strong in all conversion stages shown above, I’m confident to carry on the rest of product execution according to the PRD.

**User Experience**

The golden color is the primary color throughout the user experience. When an user lands on the site, the color theme will be consistent throughout the whole experience. On the landing page, users will see a large Bitcoin image so they know they are on a site about Bitcoin. Right under the bitcoin image, the main purpose of the landing page is to convert first-time visitors into subscribers to the email list. The landing page is clear with its single purpose of getting subscribers. To encourage such conversion, 3 main reasons why a person should join the email list is listed out clearly, in addition to a ticker of real-time exchange rate, and a link (or an image) to further explain what Bitcoin is all about.

If a user decided to sign up our email list, the confirmation page he/she saw is made more like part of the signup process in hoping the subscriber is more likely to fill it out. In fact, this confirmation page was actually a questionnaire page designed with 4 simple questions:

1. How much do you know about Bitcoin?
2. What is your question about Bitcoin?
3. Are you willing to help building out our site in any way?
4. Lastly, enter subscriber’s contact email one more time.
#1 through #3 are part of marketing sensing I'll cover later. #4 of asking subscriber's email address which I already collected on the landing page is no duplicate. It is mainly to make sure I have the most serious users filling out the questionnaires. It is the quality of data collected I value the most.

On submit (after #4), the user will be taken directly to the forum section where previously submitted common questions and answers are already available for visitors to browse through. Over time, forum administrator will post more legit questions collected from the online questionnaires to the forum, and their corresponding answers.

Every time an answer is posted, a notification is also sent to the person who asked the question in the first place. This is how I bring all elements together by closing the loop. Below is a list of main elements that I built into the experimental sites (Bitcoin-tw and Bitcoin-en).

**You can click on the image to see details:**

![Image](https://example.com/image.png) [6]

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![BTC/USD](https://example.com/btc-usd.png) [7]
Bitcoin-en.com is a site for bitcoin users...

> You are new to bitcoin. Do you want to know it better?
Join our mailing list to receive bitcoin information.

> You're already a bitcoin user. Are you interested in shaping this site?
We'd love to listen to your suggestions.

> You're a bitcoin evangelist. Do you want to be notified before we launch?
We'll notify you when Bitcoin-en.com is ready.

**Enter your E-mail, join Bitcoin-en mailing list now:**

Name *
First
Last
Email *

[Submit]

We hate spamming. You'll only be notified with bitcoin related information.

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[8]

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[9]
Product Requirement Document (PRD)

Objective

The purpose of this document is to provide understanding of the requirements and scope to build a website for new Bitcoin users.

Client Requirements

A brief list of high level requirements:

- content - tutorials for Bitcoin currency new users.
- exchange rate ticker - realtime exchange rate to keep visitors.
- weekly newsletter - a factor to drive loyal readers.
- forum - a Q&A section with pre-defined topics to facilitate knowledge sharing
- blog - fun/news content for the weekly newsletter drop

Analysis

Market analysis indicates a strong up-trend of people researching online using
the keyword of "bitcoin" and its Chinese translation ("比特幣").

**Target Users**

People who know nothing or little about Bitcoin crypto-currency, which is currently the majority of population worldwide potentially researching online using keyword "bitcoin" and/or "比特幣".

**Functional Requirements**

The specification in terms of user behavior in a behavior-driven development (BDD) approach[^11] are broken up into the following stories:

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**Story #1: Know Bitcoin**

In order to know what Bitcoin is about

As an online Bitcoin information resource center

I want to educate people with Bitcoin introduction information

Scenario 1: A person who had never heard of Bitcoin should be educated

Given a person who had never heard of Bitcoin before

And I currently have collected best Bitcoin introduction video (from Kahn Academy or Youtube) on site

When he/she comes to our website
Then I should lead him to watch the videos

Scenario 2: A person who is interested in Bitcoin can share knowledge with others

Given a person with Bitcoin knowledge of any level
When he/she comes to our website
Then I should offer a place for them to ask and/or answer and initiate Bitcoin related topics.

Story #2: Use Bitcoin

In order to know how to use Bitcoin
As an online Bitcoin information resource center
I want to educate a person through use cases of sending/receiving Bitcoin

Scenario 1: Person with minimum Bitcoin experience should be demonstrated with step-by-step tutorial to store Bitcoin

Given that a person who knows Bitcoin currency
And he/she has never own Bitcoin currency
And he/she would like to be hands-on using Bitcoin
When he/she comes to the site
Then I should present him/her with some screenshots
And step-by-step instructions of how to download and install a free Bitcoin wallet to his computer
And step-by-step instructions of how to create a Bitcoin address to send and/or receive Bitcoin currency.

Scenario 2: Person with minimum Bitcoin experience should be demonstrated with step-by-step tutorial to send Bitcoin

Given that a person who knows little about Bitcoin currency
And he/she has never sent Bitcoin currency
And he/she would like to be hands-on using Bitcoin
When he/she comes to the site
Then I should present him/her with screenshots
And step-by-step tutorial of how to send money from his/her Bitcoin address in his Bitcoin wallet to receiver’s Bitcoin address.

Scenario 3: Person with minimum Bitcoin experience should be demonstrated with step-by-step tutorial to receive Bitcoin
Given that a person who knows little about Bitcoin currency
And he/she has never received Bitcoin currency from others
And he/she would like to be hands-on using Bitcoin
When he/she comes to the site
Then I should present him/her with some screenshots
And step-by-step tutorial of how to receive money from others using his Bitcoin address.

Story #3: Trade Bitcoin

In order to trade Bitcoin
As an online Bitcoin information resource center
I want to provide Bitcoin owners a jump-off point to facilitate Bitcoin buy and sell.

Scenario 1: Current bid and ask price of Bitcoin should be made public
Given that a person who owns some Bitcoin currency
And he/she may consider exchange local currency for Bitcoin currency
When he/she comes to the site
Then I should present him with current bid and ask price of Bitcoin

Scenario 2: Bitcoin buyers should be able to buy-it-now in local currency
Given that a person who wants to own more Bitcoin currency
When he/she comes to the site
Then I should present him/her a mechanism to sell him Bitcoin in our inventory at a fixed price.

Scenario 3: Bitcoin buyers should be able to buy from other exchanges
Given that a person who wants to own more Bitcoin currency
When he/she comes to the site
Then I should present him a Bitcoin exchanges directory where he/she can buy Bitcoin near the market price.

Scenario 4: Bitcoin buyers should be able to sell on other exchanges
Given that a person who owns some Bitcorn and wants to lower its inventory
When he/she comes to the site
Then I should present him a Bitcoin exchanges directory where he/she can sell Bitcoin near the market price.

Story #4: Mine Bitcoin

In order to acquire Bitcoin through mining
As an online Bitcoin information resource center
I want to provide Bitcoin miners a jump-off point to participate in Bitcoin mining

Scenario 1: A person who has never mined Bitcoin before should be educated
Given that a person has never mined Bitcoin before
And I currently have collected best Bitcoin mining information on site
When he/her comes to our website
Then I should lead him to read the options of Bitcoin mining approaches
And point out the differences among the with benefits and pitfalls.

Scenario 2: A person can mine Bitcoin without owning hardware
Given that a person knows what Bitcoin mining involves
And he/she wants to participate in mining Bitcoin
And he/she wants to minimize the risk of owning the hardware required for the mining
When he/she comes to the site
And after learning what Bitcoin trading is about
Then I should refer him/her to commodity exchanges where you can trade mining facilities for a price set by the supply and demand.
Launch & Execution

To date, the followings are steps of launch sequence performed in a chronicle order:

1. Publish an inbound marketing article on the topic of Bitcoin on one my content sites.
2. Syndicate the Bitcoin article to a reliable content syndication partner of mine.
4. Launch an one-page site with only a simple coming soon message to be indexed by search engines.
5. Turn the one-page site with coming soon message only into a page with an email signup form.
6. Enhance the page with links to additional Bitcoin tutorial content and deploy a realtime exchange rate ticker.
7. Add an additional questionnaire page to the site as part of the email signup process.
8. Design and integrate an embedded forum onto the site.
9. Create and open 5 top level Bitcoin topics for the forum.
10. Post questions collected from subscribers onto the corresponding forums.
11. Find and post answers to all questions in the forum.
12. Notify subscribers to come back for the answers to the questions they asked.
13. Repeat #10 through #12 until critical mass is achieved to get the ball rolling on its own.

I’m excited to learn from the market while continuing to shape the products to fit the market. I’ll proceed to roll out better product according to the Product Requirement Documentation (PRD). Though these requirements are far from complete and are always subject to change according to the collected market data. For those of you who want to follow my progress of this project, feel free to visit bitcoin-tw [12] and bitcoin-en [13] and sign up, or leave your comments and suggestions below.