



# Building a Business using Google's free APIs

---

Michael Thompson and Jerome Mouton



## Google API's

- free or low cost to use
- reliable high performance tools
- big advantage over competitors w/o them
- long-term best candidates to be "the cloud"

# Short List of Essential Tools

- App Engine
  - Base
  - Gadgets
  - Maps
  - Spreadsheets
- 
- AdSense/Affiliates
  - YouTube, Picasa
  - Google Friend Connect

# Monetization Methods

## Indirect

- AdSense
- Affiliate Programs

## Direct

- Hourly rate work - more common, less attractive
  - cons; more competition vs low-cost labor markets
  - pros; can be like paid training
- Fixed price bids - makes us much more competitive
  - cons: bigger risks if estimated incorrectly
  - pros: easier to buy from us

## Direct - Making Contact

- Demonstrate proficiency with API's to get noticed
- Provide solutions to problems
- Build alliances and make sure your allies win
  
- Provide service above and beyond the requirements

# Winning at Contract Work

- Manage client expectations properly
  - avoid unrealistic expectations, eg selling too hard can backfire
- Provide clearly written contracts + requirements
  - you can win work by writing clearly for non-technical people
- Get skillful at estimating costs  $\leq$  *practice!*
  - how much time? creating, debugging, testing, support
  - out of pocket costs? SDK licenses, usage fees, other workers
  - plan for reliability, uptime, scaling
- Watch for resource conflicts
  - launch dates vs other scheduled projects, vacations, etc

# Selling is about fulfillment, not pitching

- Be meticulously honest
- Communicate clearly
- Once you've agreed to do something, do it, no matter what it takes
- Learn what the market will bear and bid at or just below that
- Figure out what your customers will need next year and start preparing for it now.

# Which Projects to Tackle?

- Is the project in our niche?
- Is it in the neighborhood of our niche?
- Something we would really like to start doing?
- Is there anything frightening about it?



# Transitioning to a Business

## Programmer

- Making money accidentally or if someone insists, eg AdSense

## Developer

- Take paid gigs if they look like easy wins

## Professional

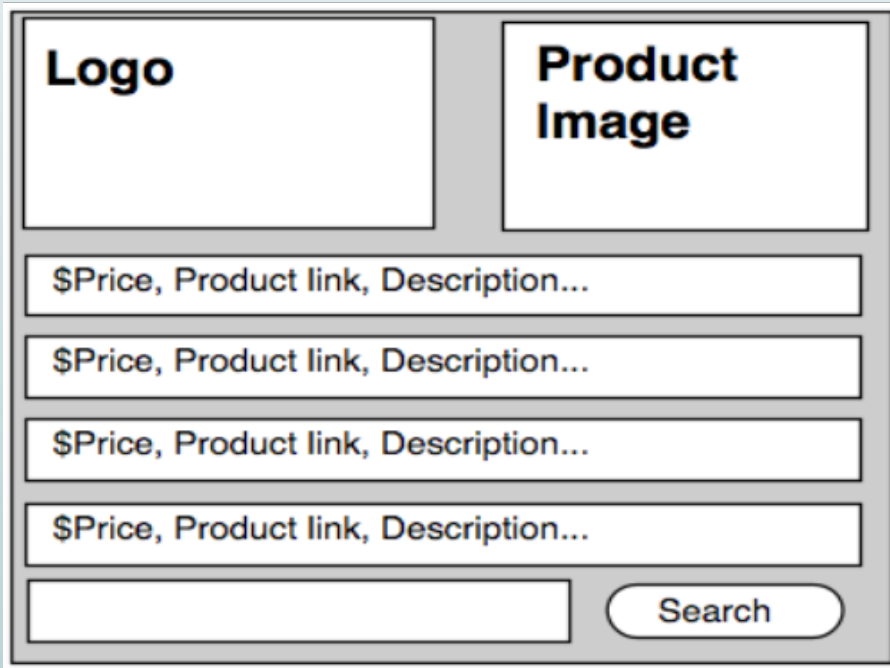
- Try to get repeat business, repeat clients

## Business

- Defend repeat business by adding services/features
- Carefully choose new offerings

# Lessons Learned

- Use software to automate repetitive tasks
- Look out for open ended statements in requirements
- There's no such thing as too much testing
- Quick estimating; multiply your best guess by two
- Wireframes are better for selling than rough drafts



# Typical Gadget Ad Features

- **Contextual**
  - served by the Google AdWords system with *rawquery* parameter containing keywords matching context
- **Geo-aware**
  - given parameters *city, region* and/or *latitude, longitude*
- **Query Google Base or a custom API**
  - query the API with the given parameters
- **Display items, image, location**

# Google Gadget Ads Examples

## Google Gadget Ads

- aka Rich Media Interactive ads

**Find the Best Fares**

From  To

**Search**

**Today's Top Deal:**  
**\$661** on US Airways  
From: San Francisco  
To: Paris

More Deals from San Francisco:  
\$79 to Los Angeles  
\$79 to San Diego  
\$99 to Santa Ana



**KAYAK**<sup>TM</sup>

About this ad

# Monetizing Your Products

Ad Networks - PPC

Affiliate Networks - PPA



Drive quality traffic to your site

Monetize on the Gadget

Tips:

- Find a niche and grow from it
- Start small, iterate and monetize
- Listen to your users, provide them with value

# Monetization - Gadgets - Examples

## AdSense in Gadget

Monetizing by topics

Ad pitfalls:

- Low CTR, low score
- Topic matching difficult
- Low inventory
- Policies

World Clocks

[Launch the Meeting Planner](#)

City	Day	Time
Zürich	Sunday	05:05
Israel	Sunday	06:05
Huntsville	Saturday	22:05
Hyderabad	Sunday	08:35
Berlin	Sunday	05:05
Mountain View	Saturday	20:05
Paris	Sunday	05:05
Boulder	Saturday	21:05
Japan	Sunday	12:05



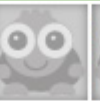


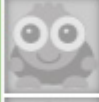



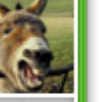

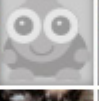
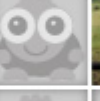
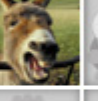


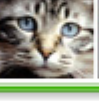



[Time Clock](#)  
Easy-to-use time dock systems for business. Over 30,000 customers.  
Ads by Google


# Monetization - Gadgets - Examples

## AdSense in Gadget Canvas View









Memory Game [Delete](#) [Share](#)

**STEPS: 9** NEW


				
				
				
				



**Themes:**



[Visit LabPixies.com](#) • [About this gadget](#) • [Support](#) • [Fun & Games](#) • [Tools](#) • [Entertainment](#)



**LABPIXIES**  
COOLEST GADGETS ON THE WEB.



# Monetization - Gadgets - Examples

## Affiliate links – Woot!

**Woot! Watcher**

**wwd:** \$359 New Kindle 2 Wireless 3G Reading Device



**Excalibur Phantom  
Force Chess  
I want one! \$69.99**

---

**condition:** New

**product(s):** Excalibur Phantom Force 7400 Chess Set - 740D

Amazon #1, CJ/LinkShare #2

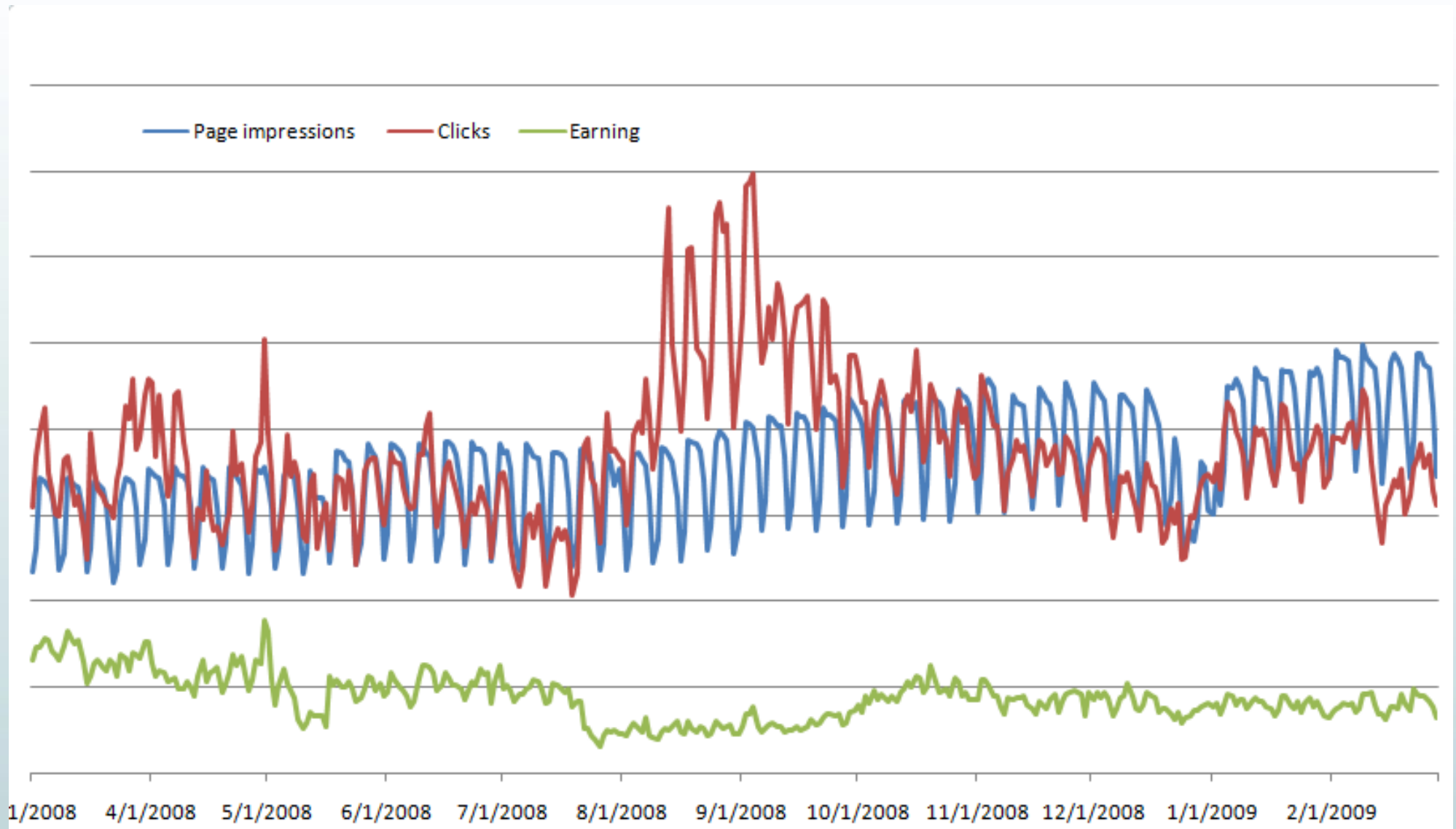
To experiment with: Zanox Web Services

## **Same as Google Gadget monetization**

App canvas ads or linking to monetized site

Tip: Check each social platform terms of use regarding monetization - usually restricted regarding ads and linking away from social site

# Monetization - Some Data



# Monetization - Map Ad Units

Map | Satellite | Hybrid | zip code search form | Terrain | Zips | ZIP Hybrid

1 mi  
1 km

94129  
94123  
94115  
94118  
94117  
94114  
94103  
94107  
94110  
94131

San Francisco

75 Hotels in Bruges  
Compare hotels and save up to 75% Save time, book at Booking.com  
[www.booking.com/Hotel](http://www.booking.com/Hotel)

Myrtle Beach Hotels  
Official Site: Myrtle Beach Hotels, Resorts, Villas, Condos, & Deals  
[www.ResortsandLodges](http://www.ResortsandLodges)

Map data ©2009 Tele Atlas, Zip Map: USNaviguide.com - [Terms of Use](#)

# Running a Start-up on the Cheap (free)

## Infrastructure, framework and APIs for free

- App Engine - scalable cloud computing
- YouTube - Video hosting
- GWT - AJAX Framework
- Maps - Mapping, geo coding, etc.
- AuthSub - User authentication
- etc.

*Kick-off your startup without seed capital*

## ...or how to get your expertise recognized

Google Groups for each Google API/Technology

- Some groups recognize their experts (i.e. API Gurus)
- Clients looking for freelancers often check related Groups

Communicate with Googlers - they might send you customers in the future

# Business Sustainability

Sustainable business; generates enough sales to cover the cost of doing business plus a living for you and employees, ie. break-even point

The real question;

Will the business provide enough value to keep customers paying as much or more as the break-even point from now on?

# Questions?



An unabridged version of this presentation can be found at:

<http://echo3.net/googleio>



# Overview of Money Making Work Areas

**Freelancing**

Monetization

Entrepreneurial project on the cheap

# Freelancing - Google Gadgets

iGoogle™

Gadgets

Themes

Sort by

[Hottest](#)

» **Most users**

[Newest](#)

Narrow by category

» **All categories**

[Editor's picks](#) New!

[News](#)

[Tools](#)

[Communication](#)

[Fun & Games](#)

[Finance](#)

[Sports](#)

[Lifestyle](#)

[Technology](#)

[Politics](#)

 [Add feed or gadget](#)



Add it now

## Date & Time

Add a clock to your page. Click edit to change it to the color of your choice.

<http://www.google.com/>

By **Google**

10,192,472 users

★★★★☆

1402 ratings



Add it now

## CNN.com

CNN.com delivers up-to-the-minute news and information on the latest top stories, weather, entertainment, politics and more.

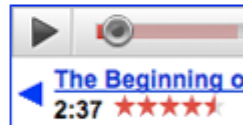
<http://rss.cnn.com/>

From [rss.cnn.com](http://rss.cnn.com/)

9,239,824 users

★★★★☆

36 ratings



Add it now

## Official YouTube Gadget

Browse, search and watch YouTube videos right inside iGoogle.

<http://www.google.com/>

By **Google**

7,440,686 users

★★★★☆

50 ratings



Add it now

## How to of the Day

Learn (and occasionally laugh) with wikiHow's, "How-to of the Day". Try a new skill every day after reading these articles with step by step images and videos. Learn new skills, solve everyday problems. From wikiHow, the wiki how-to manual.

<http://www.wikihow.com/>

From [wikihow.com](http://wikihow.com)

3,153,551 users

★★★★★

31 ratings

# Freelancing - Google Gadgets

**iGoogle™** [Gadgets](#) [Themes](#)

Sort by  
[Hottest](#)  
» **Most users**  
[Newest](#)

Narrow by category  
» **All categories**  
[Editor's picks](#) New!  
[News](#)  
[Tools](#)  
[Communication](#)  
[Fun & Games](#)  
[Finance](#)  
[Sports](#)  
[Lifestyle](#)  
[Technology](#)  
[Politics](#)

[Add feed or gadget](#)

**Date & Time**  
Add a clock to your page. Click edit to change it to the color of your choice.  
<http://www.google.com/>  
By **Google**  
10,192,472 users  
★★★★☆  
1402 ratings

**CNN.com**  
CNN.com delivers up-to-the-minute news and information on the latest top stories, weather, entertainment, politics and more.  
<http://rss.cnn.com/>  
From [rss.cnn.com](http://rss.cnn.com/)  
9,239,824 users  
★★★★☆  
36 ratings

**Official YouTube Gadget**  
Browse, search and watch YouTube videos right inside iGoogle.  
<http://www.google.com/>  
By **Google**  
7,440,686 users  
★★★★☆  
50 ratings

**How to of the Day**  
Learn (and occasionally laugh) with wikiHow's, "How-to of the Day". Try a new skill every day after reading these articles with step by step images and videos. Learn new skills, solve everyday problems. From wikiHow, the wiki how-to manual.  
<http://www.wikihow.com/>  
From [wikihow.com](http://www.wikihow.com/)  
3,453,551 users  
★★★★☆  
31 ratings

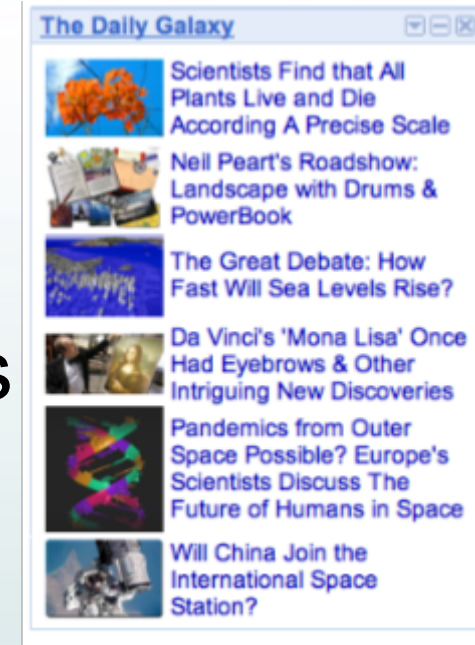
**Tens of Millions of Users**

## Content providers seeking for

- More visits from their existing users
- More users, which turns in more visits

## Selling points:

1. Syndicate existing iGoogle users
2. Drive quality traffic to client site
3. Acquire new users



## **Social extension to gadgets**

- For content providers
- Leverage the audience of friends



### Selling points:

1. Same as Gadgets
2. Larger reach (100Ms of users)
3. Viral spread – faster new users acquisition

Tips: Understand the client users' demographic to target the right social sites

## **Smaller niche for clients with geo content**

Skill sets same to Gadgets + Maps API

### Selling point:

1. Reach Google Maps users with geo data
2. Additional deliverable with little more work

# Freelancing - Mapplets

The image shows a screenshot of the Google Maps interface. At the top left is the Google Maps logo and a search bar. Below the search bar is a navigation sidebar with various options like 'Get Directions', 'My Maps', and 'The Weather Channel'. The main map area displays a satellite view of the San Francisco Bay Area. A large white weather overlay is centered over San Francisco, CA, showing a temperature of 51°F and 'Light Rain' conditions. The overlay includes details such as humidity (89%), wind (From the S at 14 mph), and UV Index (Low). The map also features various weather icons and temperature callouts for other cities in the region, such as Oakland (53°F), San Jose (61°F), and San Diego (79°F). The bottom of the map shows a scale bar (50 mi / 100 km) and copyright information for Google, TerraMetrics, and Tele Atlas.

**Google Maps**  
Find businesses, addresses and places of interest. [Learn more.](#) Search Maps [Show search options](#)

**Get Directions** **My Maps**

- Google Real Estate Search
- Hot Spots Guide
- Island Guide
- Videos from YouTube
- Photos from Picasa Web Albums
- Gas Prices from GasBuddy.com
- Distance Measurement Tool
- Places of Interest
- The Weather Channel**
- The Tap Mapplet

**The Weather Channel**  
weather.com

**Weather Overlays**

- US Clouds
- US Radar
- US Clouds and US Radar
- Global Clouds
- European Radar
- Turn Off Layers

**Points of Interest**

- Cities
- Airports
- US Golf Courses
- US Lakes
- US Parks
- US Schools
- US Shopping
- Ski Resorts
- US Stadiums

**Temperature Setting**

- \*F (English)
- \*C (Metric)

**Local Weather Search**

Enter City or US Zip  Search weather.com

**San Francisco, CA**  
weather.com

**Forecast**  
[Hour-by-Hour](#)  
[Tomorrow](#)  
[10-Day](#)  
[Forecast](#)

**51°F**  
**Light Rain**  
Humidity: 89%  
Wind: From the S at 14 mph  
UV Index: Low  
Powered By **HIRAD**

Other weather callouts on the map:  
Oakland: 53°F  
San Jose: 61°F  
San Diego: 79°F  
Los Angeles: 74°F  
Phoenix: 70°F  
Dallas: 69°F  
Chicago: 63°F  
New York: 59°F  
London: 57°F

Scale: 50 mi / 100 km  
©2009 Google - Imagery ©2009 TerraMetrics, Map data ©2009 Tele Atlas

# Freelancing - Google Gadget Ads

## Higher tier clients, marketing focused

Same skill sets as Gadgets + Base, Maps API, etc.

To leverage contextual data, geo, customer APIs



Find the Best Fares

From	To
SFO	PAR

**Search**

**Today's Top Deal:**  
\$661 on US Airways  
From: San Francisco  
To: Paris

More Deals from San Francisco:  
\$79 to Los Angeles  
\$79 to San Diego  
\$99 to Santa Ana

**KAYAK**  
About this ad

Tip: Google Qualified Gadget Ad Expert





# Freelancing - Google Friend Connect

## [PMB] Polling System

Which movie are you interested in seeing with the group next Wednesday, April 22nd? (0 votes)

poll closed Tue Apr 21 22:00:00 2009



Adventureland  
[R]

0 votes 0%

**Starring:**Kristen Stewart, Ryan Reynolds  
-), Bill Hader, Martin Starr, Kristen Wiig

**Synopsis:**It's the summer of 1987, and James Brennan, an uptight, recent college grad, can't wait to embark on his dream tour of Europe. But when his parents announce they can no longer subsidize his trip, James has little choice but to take a lowly job at a local amusement park. Forget about German beer, world-famous museums, and cute French girls-James's summer will now be populated by belligerent dads, stuffed pandas, and screaming kids high on cotton candy. Lucky for James, what should be his worst summer ever turns into quite an adventure when he discovers love in the most unlikely place.

[Official Website](#)



Fast & Furious -  
New Model.  
Original Parts.  
[PG-13]

0 votes 0%

**Starring:**Vin Diesel, Paul Walker, Michelle Rodriguez, Jordana Brewster, John Ortiz

gadgets by

ECHOS

# Monetization - my-recipe-box.com

Search MyRecipes Measures **CookingVideos** About

Shop for **Gourmet Food**  [Shop Now](#)  
Privacy Information

**You Tube**  
Broadcast Yourself™

baking cooking

**How To Bake Cookies, Butterscotch Style.**  
★★★★★



0:00 / 2:55

[Ads by Google](#) [Family Recipes](#) [Shrimp Recipe](#) [French Recipes](#) [Paris Cooking](#)

## High demand for Google API freelancers

- Google Maps – best in class mapping
- App Engine – web apps designed to scale
- GWT – demand in fast growth
- Android

# App Engine Example

## Fetch/Cache Real Estate Company listings

```
Make Google Base queries for 'Real Estate' listings
where 'Real Estate' is [customer id: 6218510]
```

### Recommended:

```
&zip=####
or
&city=[city name]&state=[state abbrev]
```

### Optional:

```
&bedrooms=[#]
&range=[## miles] default 30 mi, 10 min
&limit=[#] default 10, 250 max, 1 min
&start=[#] default 1
```

### Testing:

```
&cid=[customer id] default 6218510
&cache=[cache life in seconds] default 24 * 3600, 0 = nocache
```

# Overview of Money Making Work Areas

Freelancing

**Monetization**

Entrepreneurial project on the cheap

**Drive quality traffic to your monetized site**  
Additional content or services outside gadget

## **Monetize on the Gadget**

PPC Ad networks (AdSense)

Affiliate Marketing (CJ, Amazon, LinkShare, ZanoX)

Tips:

- Find a niche and grow from it
- Start small, iterate and monetize
- Listen to your users, provide them with value

# Monetization - Gadgets - Examples

## AdSense – World Clocks

Monetizing by topics

Ad pitfalls:

- Low CTR, low score
- Topic matching difficult
- Low inventory
- Policies

World Clocks

[Launch the Meeting Planner](#)

Zürich	Israel	Huntsville
Hyderabad	Berlin	Mountain View
Paris	Boulder	Japan



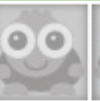


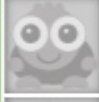



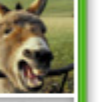

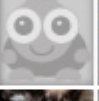
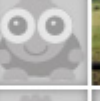
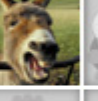


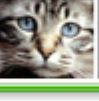



[Time Clock](#)  
Easy-to-use time clock systems for business. Over 30,000 customers.  
 Ads by Google


# Monetization - Gadgets - Examples

## AdSense – Using the Canvas view

Memory Game [Delete](#) [Share](#)









**STEPS: 9** NEW




www.youtube.com/googlechrome Ads by Goooooogle

**Themes:**



[Visit LabPixies.com](#) • [About this gadget](#) • [Support](#) • [Fun & Games](#) • [Tools](#) • [Entertainment](#)



**LABPIXIES**  
COOLEST GADGETS ON THE WEB.



# Monetization - Gadgets - Examples

## Affiliate links – Woot!

**Woot! Watcher**

**wwd:** \$359 New Kindle 2 Wireless 3G Reading Device



Excalibur Phantom  
Force Chess  
I want one! **\$69.99**

---

**condition:** New

**product(s):** Excalibur Phantom Force 7400 Chess Set - 740D

Amazon #1, CJ/LinkShare #2

To experiment with: Zanox Web Services

## **Same as Google Gadget monetization**

App canvas ads or linking to monetized site

Tip: Check each social platform terms of use regarding monetization - usually restricted regarding ads and linking away from social site

# Monetization - Google Friend Connect



Google Friend Connect  
Michael



Eric joined My Recipe Box - on My Recipe Box 5/17/09



77 Members »

amazon.com

Deal Of The Day

Lightning Deals



4:00 PM PDT Deal

Fatboy FOX Original, Blue

~~\$159.00~~ \$90.00

0% Sold

01:57:36 remaining

Buy now!

Discount applied at

[See more great deals](#)



Our Best Deals

Get Widget

Privacy

Ads by Google



[Drop 25 Pounds in 30 days](#)

Fastest Weight Loss -  
Guaranteed! As Seen on  
CBS News.

My-Stomach-Fat-Story.com

[recipe box](#)

Easily Organize Home or  
Office with a Quality

A loaf of bread, the Walrus said, Is what we chiefly need:Pepper and vinegar besides Are very good indeed--Now if you're ready, Oysters, dear, We can begin to feed! *Lewis Carroll*

QuickList

Search

MyRecipes

Measures

CookingVideos

About

News

Search

select a link below or search for a value, e.g. plum

- [Beef](#), [steak](#), [hamburger](#), [meatloaf](#), [meat](#), [sausage](#)
- [Chicken](#), [grilled](#), [baked](#), [fried](#), [hen](#), [Turkey](#), [pheasant](#), [ostrich](#)
- [Pork](#), [ham](#), [chops](#), [ribs](#), [bacon](#), [Sausage](#), [liver](#), [Lamb](#), [mutton](#), [veal](#)
- [Fish](#), [salmon](#), [tuna](#), [snapper](#), [flounder](#), [sole](#), [trout](#), [lobster](#), [shrimp](#), [oyster](#), [clam](#)
- [Potato](#), [Rice](#), [Corn](#), [Oatmeal](#), [Pasta](#), [noodle](#), [Egg](#), [quiche](#), [souffle](#), [omelet](#)
- [Soup](#), [stew](#), [gumbo](#), [broth](#), [Casserole](#), [Bread](#), [toast](#), [waffle](#), [brownies](#), [cookies](#), [pastry](#)
- [Salad](#), [artichoke](#), [asparagus](#), [Beans](#), [baked](#), [broccoli](#), [cabbage](#), [celery](#), [Squash](#), [spinach](#), [eggplant](#)
- [Sauce](#) [frosting](#) [syrup](#) [roux](#) [etouffee](#) [creme](#) [mousse](#)
- [Fruit](#), [Apple](#), [apricot](#), [banana](#), [berry](#), [cranberry](#), [peach](#), [pear](#), [lemon](#), [cherry](#), [Pumpkin](#),
- [Appetizers](#), [dip](#), [salsa](#), [cheese ball](#), [snack](#), [Nut](#), [almond](#), [coconut](#), [peanut](#), [walnut](#), [pecan](#)
- [Cake](#), [chocolate](#), [almond](#), [angel](#), [applesauce](#), [apple](#), [apricot](#), [banana](#), [cheesecake](#)
- [Pie](#), [pudding](#), [pastry](#), [cobbler](#), [baklava](#), [Chocolate](#), [candy](#), [desserts](#), [7-Up](#)
- [Pizza](#), [Barbecue](#), [more BBQ](#), [Stuffed](#), [stuffing](#), [Sandwich](#)
- [Mushroom](#), [Tofu](#), [Avocado](#), [Alligator](#), [crawfish](#), [venison](#), [jerky](#), [game](#)
- [Thai](#), [Asian](#), [German](#), [Aussie](#), [Italian](#), [Vietnamese](#), [Mexican](#), [Chinese](#), [Japanese](#)
- [Microwave](#), [Crockpot](#), [Minutes](#)

Comments (24)



-- add your comment here --

# Monetization - GFC my-recipe-box.com

Search MyRecipes Measures **CookingVideos** About

Shop for **Gourmet Food**  [Shop Now](#)  
Privacy Information

**You Tube**  
Broadcast Yourself™

**How To Bake Cookies, Butterscotch Style.**  
★★★★★



Ads by Google [Family Recipes](#) [Shrimp Recipe](#) [French Recipes](#) [Paris Cooking](#)

# Monetization - Map Ad Units

Map | Satellite | Hybrid | zip code search form | Terrain | Zips | ZIP Hybrid

1 mi  
1 km

94129  
94123  
94115  
94118  
94117  
94114  
94103  
94107  
94110  
94131

San Francisco

75 Hotels in Bruges  
Compare hotels and save up to 75% Save time, book at Booking.com  
[www.booking.com/Hotel](http://www.booking.com/Hotel)

Myrtle Beach Hotels  
Official Site: Myrtle Beach Hotels, Resorts, Villas, Condos, & Deals  
[www.ResortsandLodges](http://www.ResortsandLodges)

Map data ©2009 Tele Atlas, Zip Map: USNaviguide.com - [Terms of Use](#)

# Monetization - Maps API GoogleBar



Subscribe to this site

*ClassicalHebrew.com*  
**Learn Biblical Hebrew Online**  
With the Holy Land's best teachers

Sign up for a trial lesson

VIEW BY: LATEST LOCATION CATEGORY MAP

Show Category:

## The Faith Dome

The Crenshaw Christian Center's Faith Dome is a non-denominational megachurch located in the heart of South Los Angeles. With seating for over 10,000 attendants, it is one of the largest places of worship in the United States.

Brainchild of Ever Increasing pastor Frederick K. Price, construction was completed in 1989 on 32 acres of the former Pepperdine University campus. The geodesic church sanctuary is constructed almost entirely of aluminum and hosts Dr. Price's sermons which reach over 15 million families across the United States each week. By all reports a lively character, Dr. [...]

### The Blended Church

No Racism/ No Judging/ Bible Based/ A Place to Reconnect with God  
[www.theblendedchurch.com](http://www.theblendedchurch.com)

Ads by Google

[Read the Full Post](#)

[Comments \(5\)](#) [View in Google Earth](#)

Locations: California / Categories: Buildings, Large Type

# Running a Start-up on the Cheap (free)

## Infrastructure, framework and APIs for free

- App Engine - scalable cloud computing
- YouTube - Video hosting
- GWT - AJAX Framework
- Maps - Mapping, geo coding, etc.
- AuthSub - User authentication
- etc.

*Kick-off your startup without seed capital*