Crowds, Gigs, and Super Sellers: A Measurement Study of a Supply-Driven Crowdsourcing Marketplace

Hancheng Ge, James Caverlee
Department of Computer Science and Engineering
Texas A&M University, USA

Kyumin Lee
Department of Computer Science
Utah State University, USA
Demand-Driven Crowdsourcing Marketplaces

Requesters (post tasks) looking for Workers (do tasks)
Supply-Driven
Crowdsourcing Marketplaces

Requesters
(buy services)

looking for

Workers
(post skills/services)
# Demand vs. Supply Driven Crowdsourcing Marketplaces

<table>
<thead>
<tr>
<th>Demand-Driven</th>
<th>Supply-Driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Requesters create tasks based on their own demands.</td>
<td>- Workers advertise their skills and special talents differentiating from others.</td>
</tr>
<tr>
<td>- Workers are essentially inter-changeable commodities.</td>
<td>- Workers provide specialized services.</td>
</tr>
<tr>
<td>- Requesters are the main drivers of the types of tasks.</td>
<td>- Workers are the main drivers of the types of tasks.</td>
</tr>
</tbody>
</table>
Supply-Driven Crowdsourcing Marketplaces

Requesters (buy services) looking for Workers (post skills/services)

fiverr Anything For $5
Why Fiverr?

• Launched in 2010
• The most popular supply-driven crowdsourcing marketplace
• Top 100 site in the USA
• Offering services (called gigs)
• $5 for each of gigs
• NO hourly rate

I will create an amazing Website or Wordpress Header Image for $5!

I will help you plan a trip to Oxford, UK, I know all the best places to see and be seen for $5
Welcome to Fiverr
The world's largest marketplace for services, starting at $5

GET STARTED NOW
How does it work?
supergirlrockit

I specialize in promoting business via email campaigns, solo ads, article writing, video promotions, Internet Marketing, and voice-overs. My level of English is excellent. I also have an academic background and in ICT. Check out my feedback and I'm sure you'll be happy working with me. :)

Speaks: English

supergirlrockit's Gigs

- **Genuinely Review Your Product, Business, Website or Service** from $5
  - 4 days
  - 238 ratings

- **Give you 20 pre written email follow up series in the Internet** from $5
  - 1 day
  - 43 ratings

- **Do a Fabulous British Voiceover or Voice Testimonial** from $5
  - 3 days
  - 26 ratings

- **Create an amazing Website or Wordpress Header Image** from $5
  - 2 days
  - 4 ratings

99% POSITIVE RATING

Over 1 Year SINCE JOINING FIVERR

2 Hrs. RESPONSIVENESS

WORLD DOMINATION: 26%
I will create an amazing Website or Wordpress Header Image for $5

CREATED 6 MONTHS AGO, IN GRAPHICS & DESIGN / BANNERS & HEADERS

I will create:

An attractive header image for either your Wordpress, Website, ebook cover for only $5

I have a great eye for detail with Header and banner creation When you order you'll get a static one in PNG or JPEG format and one minor revision to go with that What I need from you is:

*the URL to your site *dimensions in pixels *your text that you want added *or any images like logo, product images, head shot, illustration that you'd want (good quality images make a great difference).

See my gig extras for other related designs for banners, flyers or posters.

The sale would be non-refundable as for $3.92 I earn after Fiverr Commissions ;)
I strive for the best for my clients, I have great feedback on all of my orders. Please see the samples below ***
Why Fiverr?

- Launched in 2010
- The most popular supply-driven crowdsourcing marketplace
- Top 100 site in the USA
- Offering services (called gigs)
- $5 for each of gigs
- NO hourly rate

I will create an amazing Website or Wordpress Header Image for $5!

I will help you plan a trip to Oxford, UK, I know all the best places to see and be seen for $5
I will write your message on my big belly and dancing my jungle dance for $5
in Extremely Bizarre
I will be your girlfriend on facebook for a week for $5

47 Reviews

29 Days On Average
Our Goal: Conduct a Comprehensive Scientific Measurement on Fiverr
Our Focus: A Measurement of Fiverr

- **Sellers:** Who are they? What strategies do they adopt? Who are good at selling gigs? How active are they? How many gigs do they manage?

- **Gigs:** How are gigs rated? What kinds of gigs are popular? What’s customers’ feedback on gigs?

- **Ratings:** How to estimate the quality of gigs? How popular are gigs? Which factors might contribute to the popularity of gigs? Can we predict the popularity of gigs?
Our Focus: A Measurement on Fiverr

- Sellers:
  - Who are good at selling gigs?
## Sellers: who are good at selling?

### Top 5 Sellers on Fiverr

<table>
<thead>
<tr>
<th>User Name</th>
<th>Num of Gigs</th>
<th>Sales</th>
<th>Earned (min.)</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>crorkservice</td>
<td>30</td>
<td>131,338</td>
<td>656,690</td>
<td>Moldova</td>
</tr>
<tr>
<td>dina_stark</td>
<td>3</td>
<td>61,048</td>
<td>305,240</td>
<td>United</td>
</tr>
<tr>
<td>alanletsho</td>
<td>29</td>
<td>36,728</td>
<td>183,640</td>
<td>United</td>
</tr>
<tr>
<td>bestoftwitter</td>
<td>7</td>
<td>26,525</td>
<td>132,625</td>
<td>United</td>
</tr>
<tr>
<td>amitbt</td>
<td>9</td>
<td>18,574</td>
<td>92,870</td>
<td>Iceland</td>
</tr>
</tbody>
</table>

- Close to **60%** of active sellers earn more than **$100** from their gigs.
- Top **2%** of active sellers earn more than **$10,000** from their gigs.
- Most top sellers are in the category of **Online Marketing**.
Super Sellers

- We identify top sellers as super sellers.

**Q:** How do these super sellers differ from the others?

**Important** to understand why some sellers are successful and explore their intrinsic characteristics.
Finding: super sellers typically employ longer descriptions of their gigs in order to make buyers better understand what they are buying and what their options are.
Super Sellers

Finding: Super sellers perform more actively with a much higher ratio of leaving feedback.
**Finding:** It is not strongly indicative of super sellers. The gig quality could be presumably a more important factor.
Super Sellers: prediction

Our Goal: distinguish *super sellers* at the early stage

Features: 9 profile features + 3 snapshot features

Model: Logistic Regression

![Graph showing precision and recall over days with 70.1% accuracy with profile information and 3 snapshot features in 100 days.]

ONLY profile information of sellers and gigs

70.1% with profile information and 3 snapshot features in 100 days
Follow Up Questions

• Which factors would contribute the success of sellers on Fiverr?

• Can we predict the gig quality using machine learning models?

• How easy is it to discover a seller’s gig?

• What’s the relationship between the number of customers and the number of reviews on gigs?

... 

All these interesting questions can be answered in Our Paper!
Thank you!
Questions?

Hancheng Ge
hge@cse.tamu.edu
@HanchengGe
Crowds, Gigs, and Super Sellers: A Measurement Study of a Supply-Driven Crowdsourcing Marketplace

Hancheng Ge, James Caverlee
Department of Computer Science and Engineering
Texas A&M University, USA

Kyumin Lee
Department of Computer Science
Utah State University, USA