How to Turbo Charge your testing with Crowdsourcing
About me

- Worked in Testing for 14 years
- Security, Financial, Manufacturing, Telco

Get it out the door, quickly, to quality focussed on business needs.
It’s getting more complex
The Problem

- Device Coverage
- Rapid delivery
- In-effective exploratory testing
- Resource coordination
- Expensive
I wanted a turbo charger
The Problem

- Device Coverage - QUALITY
- Rapid delivery - TIME
- In-effective exploratory testing - QUALITY
- Resource coordination - COST
- Expensive - COST
Legitimisation
For testing?

- A group is required
- Huge Matrix
- Experts in each area
- Agile and speed
- App based develop
Why Crowd-it

- Other forms crowdsourcing are legitimate
- Same for testing
  - Enterprise standard
  - Test case execution
  - Exploratory testing
  - Accessibility testing etc
  - Full end-to-end service
How can I be sure?
Cost

How much do my bugs cost?
Cost

- The risk is crowdsourcing is too expensive.
This is not:

Quiz

- How many bugs can a grade A tester raise on average each month?
How much a bug can cost

100 million Euros
What would you pay?

Meg Whitman
What would you pay?

- Functional > GUI
- Non-functional > Functional
- GUI = cheapest
What would you pay?

View purchased item

Standard Delivery: Free
Royal Mail 1st Class Recorded
Estimated delivery: Dezember 9 - Dezember 12

£19.99

G DAYS. THANKS

Subtotal: £19.99
Postage & packaging: Free

LOL
Range

- Between £2 and £4000
How to calculate

- Some Values are known.

- Actual cost = Cost of Tester / Number of bugs tester finds

- Ignore impact for the minute.
The Cost of a Tester

- £26000 – junior tester 1>2 years
- £35000 – senior tester – 4>5 years
- Contractor – £350 per day
- Offshore – £200 per day (to include all costs)
How many bugs can a tester find?
The Testing World

- $100 > $150 billion spent - 2014
- Approximate number of testers in the world: 179,000+
- Approximate working days: 4.7 million.
- Since 2000: 56.4 million days.

- So what’s the average?

* Total: April 2012

© BugFinders Ltd 2013 – All rights reserved
Cem Kaner

- Top 100% utilised tester – 150 actual bugs per month.
Cem Kaner

- Top 100% utilised tester – 150 actual bugs per month.
- Average over a year
- Test Scripts
- Environment downtime
- Holiday/Training
- Let me know your figure.
So what is the cost per bug in £’s.

<table>
<thead>
<tr>
<th>Salary</th>
<th>Cost per bug (150)</th>
<th>Cost per bug (85)</th>
<th>Cost per bug (50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perm £26k</td>
<td>40</td>
<td>71</td>
<td>120</td>
</tr>
<tr>
<td>Perm £35k</td>
<td>51</td>
<td>90</td>
<td>153</td>
</tr>
<tr>
<td>Contractor £350</td>
<td>57</td>
<td>100</td>
<td>171</td>
</tr>
<tr>
<td>Offshore £200</td>
<td>29</td>
<td>51</td>
<td>88</td>
</tr>
</tbody>
</table>
Crowdsourcing

Average Project £16.22
Cost effective

- Testers don’t use this as their first source of income
- Global smoothing
- No desks or equipment
- Top testers earn the most money
Complimentary

- Internal Team
- Internal Team + Crowdsourcing
- Just Crowdsourcing
CQT

Cost  Time  Quality

© BugFinders Ltd 2013 – All rights reserved
Quality
The Matrix

- Android
- IOS
- 12 countries
The Matrix

- 126 platforms

- 32 countries (inc 12)
Like a Travel reporter

- Most apparent issues are seen first – GUI bugs.

- A tester says “I will raise this bug later in case I find a bigger one.”

- A team situation.

- Testers enjoy raising bugs – that is the key output.
Like a Travel reporter

Most apparent issues are seen first – GUI bugs.

A tester says “I will raise this bug later in case I find a bigger one.”

A team situation.

Testers enjoy raising bugs – that is the key output.
Hay Fever Application

Android and IOS
- 151 testers
- 169 handsets
- 32 countries
- 2 days
Mobile Payment Solution

Virtual Test Team
- 60 testers
- 1260 test cases executed
- 17640 test steps
- 56 handsets
- 12 countries
- 3 days sprints
Childrens Web/Tablet Game

- Android and IOS
- 290 testers
- 128 browsers and tablets
- 43 countries
- 3 x 3 days
Time
1 hour
7 to 11
CQT

Time

Cost

Quality

© BugFinders Ltd 2013 – All rights reserved
What’s negative?
Negatives

- Great for Web and Mobile
- Not for backend
- Elite team confidentiality
- Onsite support
How do I interact?
Cost Models

- Self-service
- Account Managed
Cost Models – Self-service

- Pay-per-bug
  - Raw
  - Verified
- Unlimited
Cost Models – Account Man.

- Typically between around 10% of development budget compared with Ecommerce < 4 or 5%

- Full management
  - Test exit reports
  - Test Plan
  - Daily updates
  - Triage session
  - Onsite support
What you get

Every bug is retested and reviewed to ensure quality

- Integration with in-house systems
- Clearly labelled screenshots/videos
- Device raised upon
What you get – Part 2

- Compliment your team
- Virtualised full team if required
- Reduced time
- Real-life scenarios
Benefits
Questions