The Experimentation Mindset

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Global Director of Engineering Culture
doc@groupon.com
@DocOnDev
A Simple Experiment
Gave Them a Test
Handed Back Tests
Fixed Mindset
Dreyfus Model of Skills Acquisition
Novice
Competent
Proficient
Where are You?
Most think they’re expert
Most never progress past proficient
From Implementation
Implementation
Mindset

Get it Right

A+
From **Implementation** to **Experimentation**
Experimentation Mindset
Explore Different Ways
From Implementation to Experimentation
Telephone Sales
Hi _____, this is _____ from ______. _____ is a _______ specializing in _____________.

Do you have a few moments to review our services?

Great!

______, are you the person responsible for software development?

Great! [INTRO]:

I would like to discuss a situation where ________ may be able to increase Technology spend. This situation can save you money and HR headaches in the future. Does that sound?

Great!

1) Part of our methodology is to offer lower margins than industry standard. ____________ operates on very low overhead.

What does this mean to you?
By eliminating vendor layers, we can extend across the board savings which translates to a lower cost on your IT spend.

Did you know that many of the Tier I vendors _________________ rely on our consultant availabilities and ‘mark-up’ the cost or rates when placed on YOUR projects?

That’s OK. You’re not alone – you’re very busy and don’t have time to review what goes on behind the scenes of a candidate search.

_________ has a pool of experienced ____________ resources ready to work on client projects within 48 hours.

2) Another part of our methodology is off-shoring some of your projects overseas. ___________ also specializes in executing offshore projects in __________ technology.

Where the average cost of a consultant could range from $_____/hr to over $_____/hr, our facility in India accommodates consultants with a cost range of between $_____/hr to $_____/hr – a SIGNIFICANT COST SAVINGS TO YOU.

How do you think that savings would be viewed at the next budget meeting?

PROBING:
1. What software development projects are you currently undertaking?
   * Can you tell me more about this project?
Weekly Sales Rankings

Ptolemy
Janet
Raphael
Susan
Kathy
Tommy
Doc
Chris P.
Hello (sir/madam), my name is [Name Redacted].
Experiment
Experiment
Experiment
Weekly Sales Rankings

Doc
Ptolemy
Janet
Kathy
Tommy
Raphael
Susan
Andy
I’d like to see you in my office.
Not the feedback I was expecting.
My last day
"Best" Practices

WE WILL BE ADOPTING THE BEST PRACTICES IN OUR INDUSTRY, JUST LIKE EVERYONE ELSE.

IF EVERYONE IS DOING IT, BEST PRACTICES IS THE SAME THING AS MEDIOCREE.

STOP MAKING MEDIOCRITY SOUND BAD!

SORRY.
Implementation
Mindset
Get it Right
A+
Single Loop Learning

Assumptions → Actions → Outcomes

Get it Right
The Dark Side
Double Loop Learning

Assumptions → Actions → Outcomes

Get it Right
Explore Different Ways
Experimentation Mindset
Explore Different Ways
WILL RESPOND TO CHANGE
#NoEstimates
Mob Programming
A Whole Team Approach

mobprogramming.org    Twitter: @WoodyZuill
“Best” Practices
“Leading” Practices
Dreyfus Model of Skills Acquisition
Experimentation
Features
# GetawaysShowSearchWidget

## Summary

<table>
<thead>
<tr>
<th>Name</th>
<th>GetawaysShowSearchWidget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Displays search widget on occasions getaways page</td>
</tr>
</tbody>
</table>

## Populations

<table>
<thead>
<tr>
<th>Population 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket start</td>
</tr>
<tr>
<td>Bucket end</td>
</tr>
<tr>
<td>Audience</td>
</tr>
<tr>
<td>Countries</td>
</tr>
</tbody>
</table>

## Owned By

- rdayanand

## Embed in Browser

- enabled

## Scheduled start

- no

## Scheduled stop

- no

## Guards

- no

## Environments

- occasions-itier

## Variants

- enable
- Control (control)
### GetawaysShowSearchWidget

**Population 1**

#### Experiment Profit/Loss

<table>
<thead>
<tr>
<th>Variant</th>
<th>Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>enable</td>
<td>38,836</td>
</tr>
<tr>
<td>Total</td>
<td>38,836</td>
</tr>
</tbody>
</table>

#### Days Running: 8

<table>
<thead>
<tr>
<th>US</th>
<th>Users</th>
<th>Min Users</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30564</td>
<td>180149</td>
<td></td>
</tr>
</tbody>
</table>

#### Orders

<table>
<thead>
<tr>
<th>Population</th>
<th>Orders per User</th>
<th>Lift over Control</th>
<th>Orders per 1000 Users (QPM)</th>
<th>% Lift</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.047</td>
<td>0.004</td>
<td>47.082</td>
<td>9.2142</td>
</tr>
<tr>
<td></td>
<td>0.043</td>
<td>0</td>
<td>43.109</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Billings

<table>
<thead>
<tr>
<th>Population</th>
<th>Billings per User ($)</th>
<th>Lift over Control</th>
<th>Billings per 1000 Users (BPM) ($)</th>
<th>% Lift</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.522</td>
<td>1.2706</td>
<td>6521.66</td>
<td>24.1978</td>
</tr>
<tr>
<td></td>
<td>5.251</td>
<td>0</td>
<td>5251.02</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Users Count by Variant

- **Enable**: 30,564
- **Control**: 18,014

#### % Difference in Users Count from Control

- **Enable**: -6.63%

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**Experiment Monitoring**
Team Process
Team Velocity
The only valid measurement of code quality: WTFs/minute.

Code Quality
**Code Quality**

![Code Quality Dashboard](image)

- **SOQLALE Rating**: B
- **Remediation Cost**: 69,102.9 days
- **Lines of Code**: 10,637K

**Issues**
- **Total Issues**: 524,089
- **Rules compliance**: 87.1%

**Projects**

<table>
<thead>
<tr>
<th>Name</th>
<th>LOCs</th>
<th>SQALE Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forges</td>
<td>8,114,396</td>
<td>B</td>
</tr>
<tr>
<td>Apache</td>
<td>4,149,049</td>
<td>A</td>
</tr>
<tr>
<td>Others</td>
<td>1,984,743</td>
<td>B</td>
</tr>
<tr>
<td>JBoss</td>
<td>560,876</td>
<td>B</td>
</tr>
<tr>
<td>OW2</td>
<td>535,057</td>
<td>B</td>
</tr>
<tr>
<td>Sourceforge</td>
<td>367,201</td>
<td>A</td>
</tr>
<tr>
<td>Codehaus</td>
<td>257,051</td>
<td>A</td>
</tr>
<tr>
<td>GoogleCode</td>
<td>137,790</td>
<td>A</td>
</tr>
<tr>
<td>OPS4J</td>
<td>71,501</td>
<td>A</td>
</tr>
<tr>
<td>SpringSource</td>
<td>51,128</td>
<td>A</td>
</tr>
</tbody>
</table>
**New Retro**

**Friday, October 17, 2014**

**Action items:**

1. SW - Fix the keg
2. SW/GPass wiki/training
3. LE - Email Girish about Ember training
4. All - don’t break out stories that should only be dev acceptance
5. All - Link to open PRs in stories
6. All - Finished = Open PR, Delivered = Merged and on UAT
7. All - Story descriptions need to be more specific
8. All - PR reviews from other city
9. SW - pair user for iMac with SSH, talk to Sharon Dur
Culture
Interest Leagues
Internal Hack Fest
GEMs Program
Engineering Ambassadors
2013-12-20 Engineering Check-In

This short form is meant to be a way for all of us to touchbase and set work, our work environment, and the people we're working with. Take your username (mnorton@groupon.com) will be recorded when you mnorton? Sign out

* Required

I know what's expected of me at work. *

- Strongly Agree
- Mostly Agree
- Slightly Agree
- Slightly Disagree
- Mostly Disagree
- Strongly Disagree

I have the materials and equipment I need to do my work right. *

- Strongly Agree
- Mostly Agree
- Slightly Agree
- Slightly Disagree
- Mostly Disagree
- Strongly Disagree

At Groupon, I have the opportunity to do what I do best every day.

- Strongly Agree
- Mostly Agree
- Slightly Agree
- Slightly Disagree
- Mostly Disagree
- Strongly Disagree

The mission/purpose of Groupon makes me feel my job is important.

At Groupon, my opinions seem to count.

Someone at Groupon encourages my development.

Someone seems to care about me as a person.

In the last 7 days, I received recognition or praise

I have the opportunity to do what I do best every day.

I have the materials and equipment I need.

In the last 6 months, someone has talked to me about my progress.

This last year, I've had opportunities to learn and grow.

The Check-In
“Managers are good at institutionalizing procedures” - Gabe Newell
“Managers [are] technical and career mentors” - Kevin Goldsmith
4 things
1. Know Your Purpose, Challenge Your Assumptions
“Failure is simply the opportunity to begin again, this time more intelligently.”

– Henry Ford
3. THINK BIG…  start small…
4. Be Intolerant of Mediocrity
Assumptions → Actions → Outcomes

Explore Different Ways

Get it Right

Keep Experimenting.
The Experimentation Mindset

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@DocOnDev
Images

• Mad Scientist - https://www.flickr.com/photos/dzingeek/4587871752/sizes/o/

• Redwood Bonsai - http://upload.wikimedia.org/wikipedia/commons/6/6e/Redwood_bonsai.JPG

• Redwood Canopy - https://c2.staticflickr.com/4/3548/3498180845_a2d653a323_b.jpg

• Child to Adult - http://1.bp.blogspot.com/-rBplVVYK1CQ/Uu-EDJPXSzI/AAAAAAAAAHs/ErtWY1kctiY/s1600/HiRes.jpg

• Elephant and Mother - http://upload.wikimedia.org/wikipedia/commons/7/75/Baby_asian_elephant_(with_his_mother)_born_in_the_Lao_Elephant_Conservation_Center_in_Sayaboury.jpg

• Phones -

• Phone Script - http://www.docstoc.com/docs/6629075/Sample-Sales-Script


More Images

- Woody Zuill - https://pbs.twimg.com/media/A8NKQ9ICQAAAdA7h.jpg
- Code Quality (sonarqube) - http://upload.wikimedia.org/wikipedia/commons/5/5c/Sonarqube-nemo-dashboard.png
- Hudson - http://upload.wikimedia.org/wikipedia/commons/0/07/Hudson_Screenshot.png
- Test Tube - http://fc09.deviantart.net/fs70/i/2010/018/2/1/Vector_Test_Tube_by_Algerianoo.jpg
- https://twitter.com/NoEstimates
- Tesla - https://c2.staticflickr.com/4/3006/2932363100_5bf7ff5820_b.jpg
- Smiley - https://blogs.dal.ca/csc/files/2012/07/MP900443129.jpg
- Manager's Office - https://www.flickr.com/photos/islespunkfan/8281372547/sizes/l
- Bad review - http://media.benefitspro.com/benefitspro/article/2014/02/06/negative%20reviews.jpg
- Vader in Suit - http://fc06.deviantart.net/fs71/f/2011/179/a/a/darth_vader_by_iamthedarthvader-d3k9n2h.jpg
Reference Material


- HBR: Collective Genius - http://hbr.org/2014/06/collective-genius/ar/1


- Argyris: Single-Loop and Double-Loop Learning in Research on Decision Making - https://093fb1c5e28761e25b79cfc10de03f5a188778a0.googledrive.com/host/0B_RO2C1D0V7AZHpWRS1mNUc2d1k/argyris.pdf

More Reference Material

- Lean Change - http://www.lean.org/LeanPost/Posting.cfm?LeanPostId=225
- Failing by Design - https://hbr.org/2011/04/failing-by-design/ar/1
- Kevin Goldsmith on Spotify - http://blog.kevingoldsmith.com/2014/03/14/thoughts-on-emulating-spotifys-matrix-organization-in-other-companies/