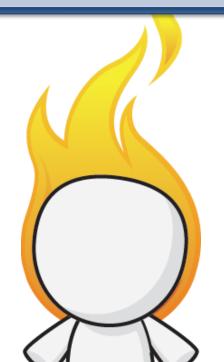
Participation Engines

Driving User Behavior with Game Dynamics and Behavioral Economics





About Me: Rajat Paharia

Founder, Chief Product Officer **Bunchball**

Software Experience Design IDEO

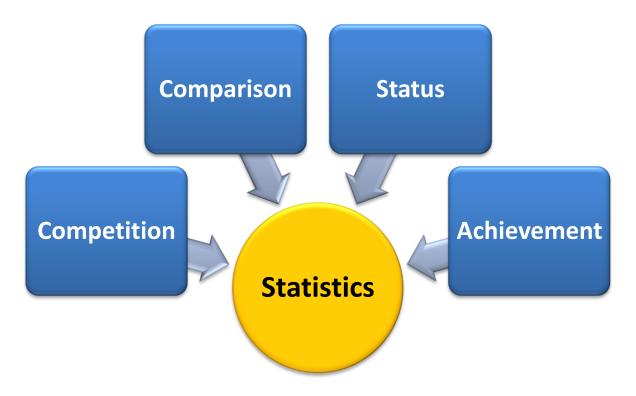
Software Engineer IBM Research, Avaya, etc.

MS CS with a focus on HCI **Stanford**

BA CS
UC Berkeley



Drive Participation with Metagames



Football, Baseball, etc. are all Metagames. Metagames are as American as apple pie.



Measure & Drive User Behavior

Inviting friends

Watching a video

Completing a course

Participating in discussions

Uploading photos or videos

Trying new features

Spending more time in training

Coming back to train more often

Your Action Here



Leverage Human Desires.

	Reward	Status	Achievement	Self Expression	Competition	Altruism
Points						
Levels						
Challenges						
Virtual Goods						
Leaderboards						
Gifting & Charity						



SECTION 1

GAME MECHANICS



NBC

DUNDER MIFFLIN INFINITY



Home Page

Home | Employee Profile | My Branch | Tasks | Company Directory | Employee Manual | Corporate | Search



UNITED WAY CHARITY FUNDRAISER TASK

We're proud to announce the DMI Summer Fundraising Initiative where each branch is tasked with raising funds for the charity of their choice. Each branch has now chosen their charity and the fundraising campaigns can begin!

Click here to start.



Apply Now!

If you're a myNBC or NBC.com Message Board member, login above to apply.

If not, click here: APPLY

What is Dunder Mifflin Infinity?

Dunder Mifflin Infinity (DMI) is the new online division of Dunder Mifflin, Inc. Paper Company. DMI was designed to reinvent the business of selling paper.

Winners



BRANCH OF THE YEAR:

Congratulations to Rochester, NY and Regional Manager shakymon who is DMI 1.0's Branch of the Year!



EMPLOYEE OF THE YEAR:

Congratulations to kenoz of the Racine branch who is the DMI Employee of the Year 2007-2008! Click here to visit his profile.



PARTY PROPOSAL WINNER:

Congratulations to the Hialeah branch. They came up with the best Going Away Party Proposal. Click here.



GOLF TOURNAMENT FINALISTS

Final voting is now over for the Golf Tournament. Play our fifth course, designed by vamilatzo from the Cheyenne Branch, debuts this week. Play now.

PERFORMANCE REVIEW RESULTS

You many now view the final results of the Manager Performance Review. Returning Managers will be notified once the DMI 2.0 branches are announced.

Top 10 Movers & Shakers Biggest Gain this Week

- 1. hoockeydog42 (1,485)
- Dwigtscarn (1,440)
- 3. rafaeltoribio (1,395)
- hamcka (1,330)
- 5. wheelz37 (1,300)
- jmacsquirrel (1,215)
- 7. JimMichaels (1,190)
- 8. cwakes (1,160)
- Pwegis (1,140)
 Messmer (1,135)

Top 10 Employees Overall SchruteBuck Leaders

- 1. kenoz (12,310)
- 2. issjim (11,940)
- 3. dundermifflininfinity (11,550)
- 4. creedlicious (11,390)
- 5. uncabuc (11,180)
- 6. incalcucable (11,145)
- 7. vandyke (10,960)
- 8. moosedrool (10,900)
- 9. SithHappens (10,850)
- GandalfDwight (10,775)

Top 10 Branches

Top 10 Branches



SchruteBucks = Points

SCHRUTEBUCKS

What are SchruteBucks?

SchruteBucks are the official currency of DMI.

Employees will be paid SchruteBucks by doing simple tasks like uploading a photo or video, changing your favorites, rating an item, posting on a discussion board or adding a comment. They may also be deducted SchruteBucks for getting flagged or getting fired. These small SchruteBuck amounts are capped at Sb \$100 per week.

The real SchruteBuck gains will come in the weekly tasks, however. By participating in weekly tasks, and winning the votes of your peers and Corporate, you will accrue substantial SchruteBucks, which will allow you to climb the corporate ladder.

What can I do with SchruteBucks?

You can buy items for your Desk, or buy items to send to your co-workers as gifts.

As your SchruteBucks balance increases, so do your opportunities for promotion.

How many SchruteBucks should I have?

New employees (they are all "Temps") start off with a Sb \$1000 signing bonus.

EMPLOYEE PROFILE

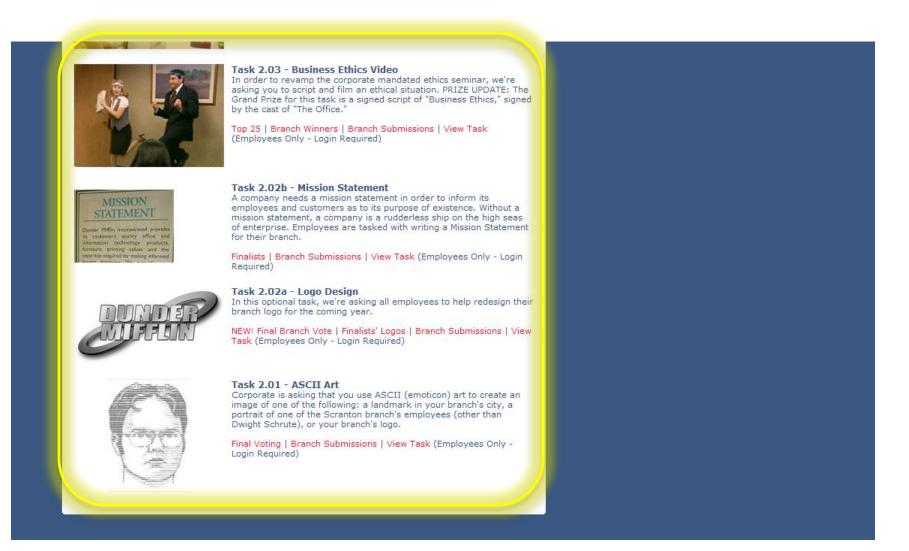
What's in my Employee Profile?

NEW IN DMI 2.0

Your Employee Profile shows who you are, what rank of employee you are, what branch you're in, when you last logged in, your SchruteBucks total, how many Sb you've earned/spent, your Office Faves, your Favorite Co-Workers (whether they're in your branch or not), your Videos,



User-Generated Content Tasks





Profile Page: Levels, Points





Virtual Desk & Sponsored Goods





Virtual Desk Store





Leaderboards

Home | Employee Profile | My Branch | Tasks | Company Directory | Employee Manual | Corporate | Search



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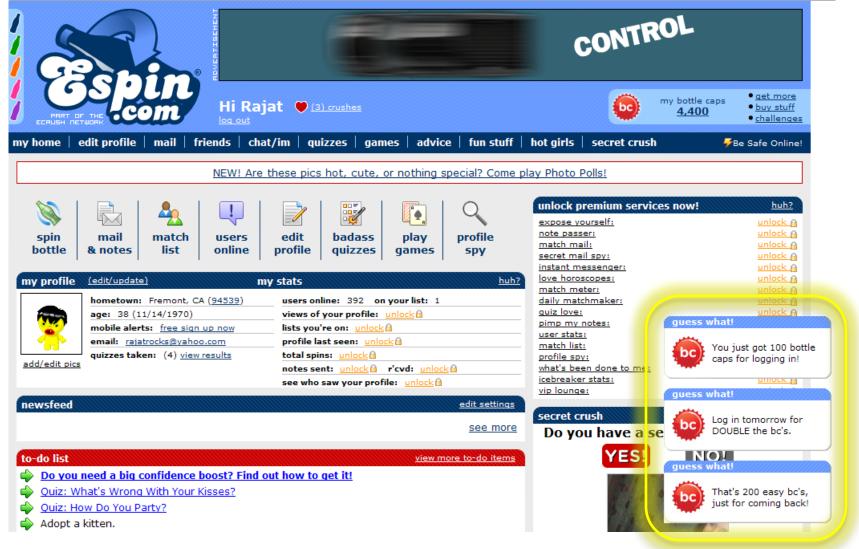


HEARST TEEN NETWORK

ESPIN.COM



Real Time Feedback



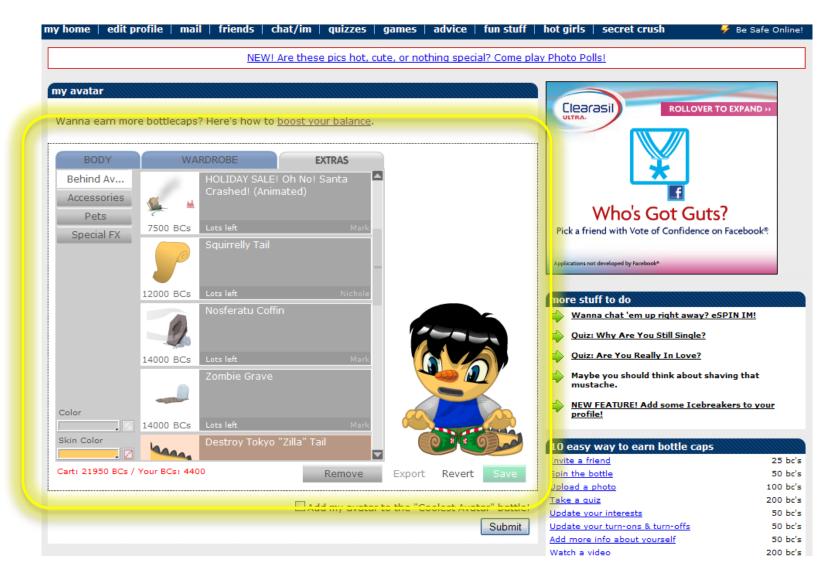


Earning Bottle Caps



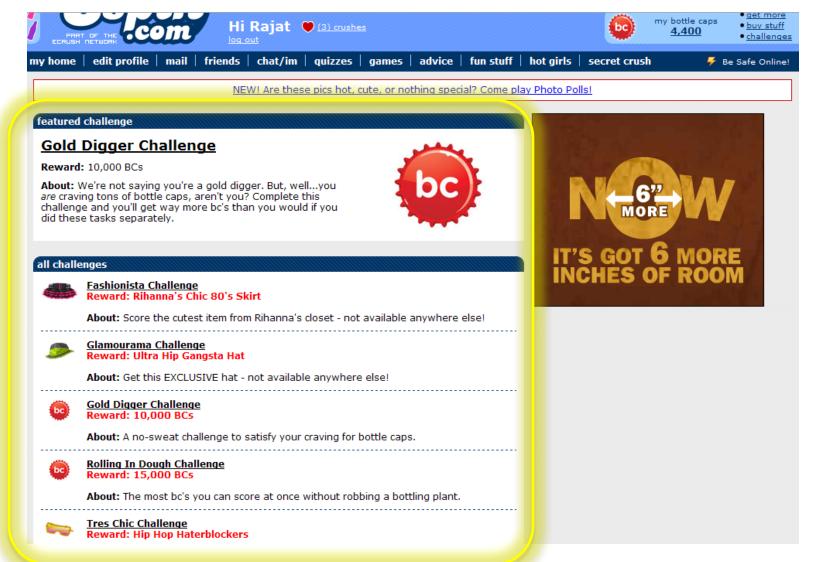


Avatar Creator



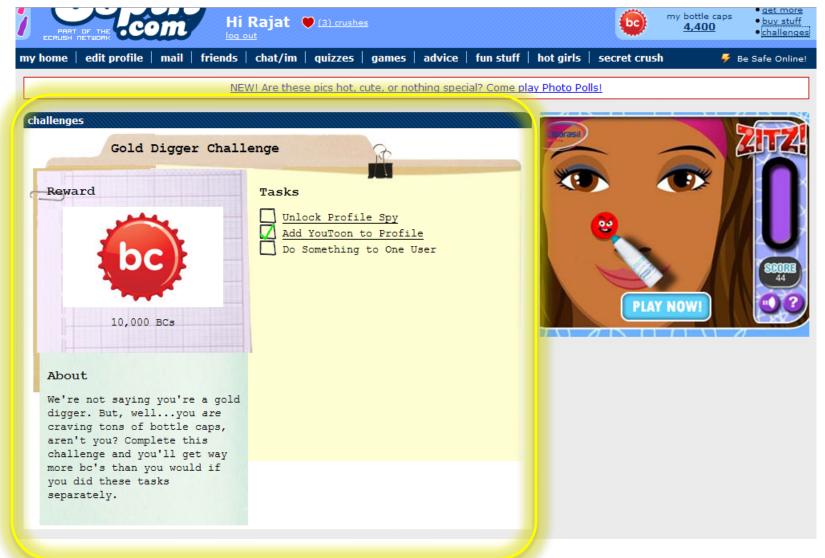


Challenges



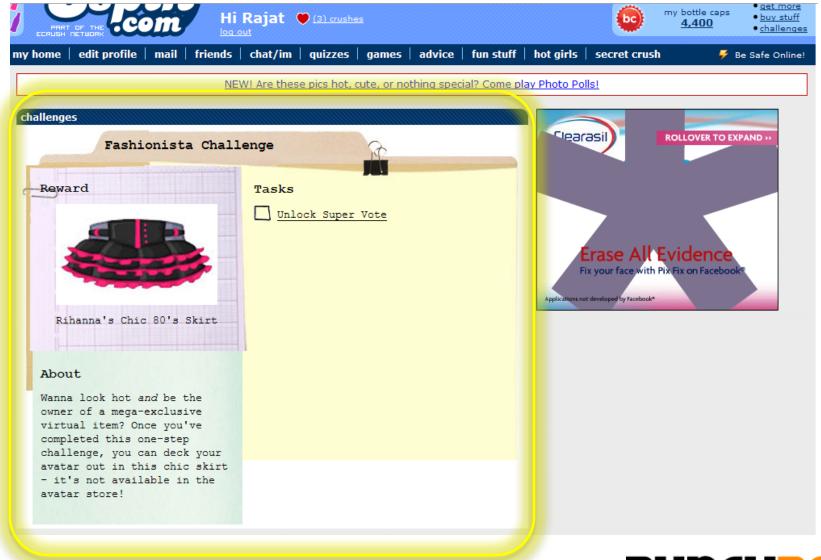


Multiple Tasks





Virtual Rewards



MICROSOFT

BETA1



The Beta1 Game

Test Windows Vista

Earn a b for installing beta, e for voting on a version, t for running it overnight, etc.

Your status visible to everyone

Quadrupled participation

"People were talking smack in the halls and bragging about their status on the leaderboards. VPs would run into my office and yell, 'Where's my e? I earned it last night!'"



MICROSOFT OFFICE LABS

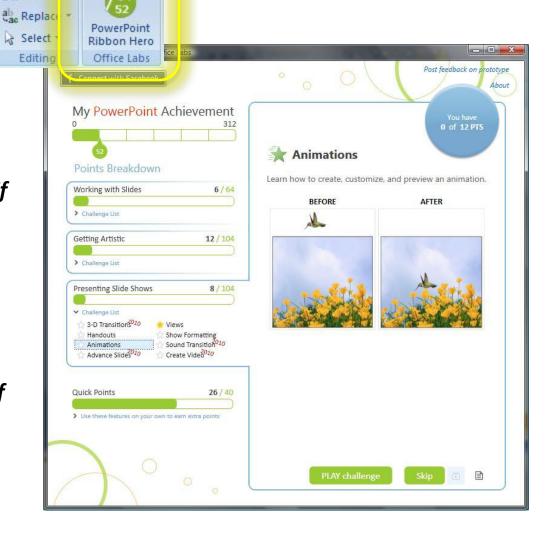
RIBBON HERO



Learning MS Office w/ Game Mechanics

Shape Fill → Shape Outline → Arrange Quick Styles → Shape Effects → Selection

"Games for learning is an increasingly popular field that's quickly gaining ground. When we started this project, we wondered if there was a place for games in Office. We set out to understand whether elements of game play (things like scoring points, competing with friends, and earning achievements) could motivate people to explore more of the app, learn new features, and ultimately become more productive"



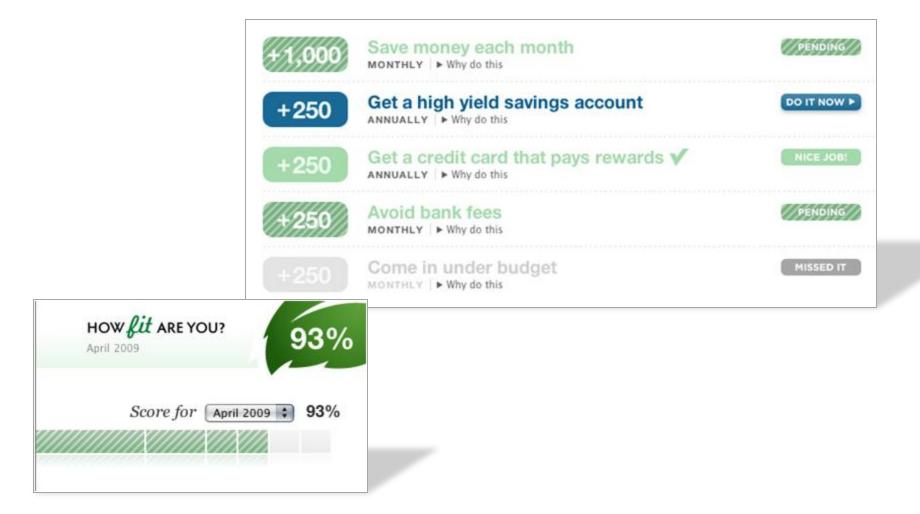


PERSONAL STATISTICS

MINT.COM NIKE+



Mint.com – Personal Finance





Nike+ - Personal Fitness



HOPELAB

GDITTY



gDitty – Physical Activity Meter

HOW IT WORKS...







get movin'

upload your data

get rewards!

gDitty makes moving around a fun, rewarding experience for kids. The gDitty product combines an activity meter with an online rewards program that motivates kids to move more. The gDitty device is worn on the belt or in a pocket. Activity data recorded by the gDitty is then uploaded to a kids' personal profile on the gDitty website, where activity is calculated into points. These points can be redeemed for virtual goods and real-world rewards, including customizable avatars, gift cards, even the opportunity to make a donation to a cause.



SOME OTHER IDEAS

ETC...



Teams / Times

Peer Pressure is Powerful

Team vs. team

Head-to-Head matchups

The Clock is Powerful

This week only...

Finish in this amount of time...



Who Buys Virtual Goods?





Social vs. Commercial

Thanksgiving Dinner

Lawyers



SECTION 2

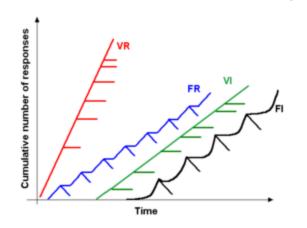
FREQUENCY



Use Reinforcement Schedules

It's been shown that animals and humans work to maximize a reward's frequency, not its magnitude.

Put simply, "how often" is usually more important than "how much." A mouse interacts more frequently with a reward schedule that rewards it more frequently.

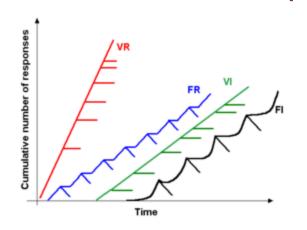




Fixed interval (FI) schedules deliver reinforcement for the first response after a fixed length of time since the last reinforcement, while premature responses are not reinforced.

User gets points for logging in to the site once per day.

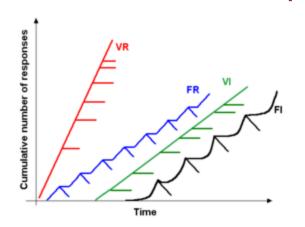
User gets points for watching one video an hour.





Variable interval (VI) schedules deliver reinforcement for the first response after a random average length of time passes since the last reinforcement.

User is rewarded with points for the first game played after an average of 10 minutes from the last game.

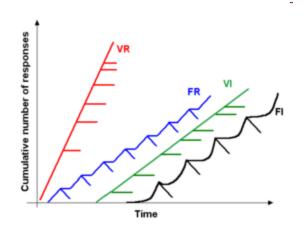




Fixed Ratio (FR) schedules deliver reinforcement after every nth response.

User gets a trophy after winning 50 games.

User gets a reward after every 5th video they watch.





Continuous ratio (CRF) schedules are a special form of a fixed ratio. In a continuous ratio schedule, reinforcement follows each and every response.

Cumulative number of responses

Every time a user posts to the forums they earn points.



Variable ratio (VR) schedules deliver reinforcement after a random number of responses (based upon a predetermined average)

Time

On average,
every 3
games a
user will win
some points.

Slot machines.

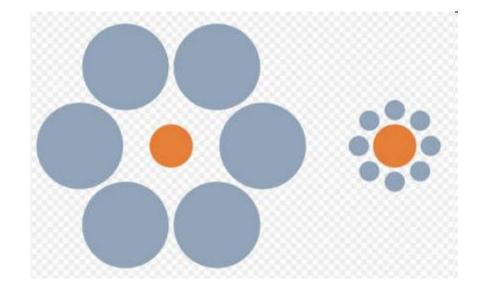


SECTION 3

BEHAVIORAL ECONOMICS



Relativity and Contrast





Decoy Effect

16

Economist.com subscription - \$59.00

1 year subscription to Economist.com

0

Print subscription - \$125

• 1 year subscription to the print edition of *The Economist*

84

Print & web subscription - \$125

1 year subscription to the print edition of *The Economist* &
 1 year subscription to Economist.com



Decoy Effect

68

Economist.com subscription - \$59.00

+52

1 year subscription to Economist.com

32

Print & web subscription - \$125

-52

- 1 year subscription to the print edition of *The Economist* &
 - 1 year subscription to Economist.com



Decoy Effect

All expenses paid vacation to Italy

All expenses paid vacation to Italy

except you have to pay for your own coffee

All expenses paid vacation to Spain

A -A E



Anchoring

Is the percentage of African American nations which are members of the United Nations more or less than 45%?

Is the percentage of African American nations which are members of the United Nations more or less than 65%?



Anchoring

Can anchor on anything.

Social security #s and wine.

Upper 20% placed bids 216%-346% higher than the lowest 20%.



FREE!

73

Lindt Truffle = 15 cents

27

Hershey's Kiss = 1 cent



FREE!

31

Lindt Truffle = 14 cents

-42

69

Hershey's Kiss = Free!

+42



FREE!

Most transactions When something is Free, we forget the have an upside and a downside downside Humans are afraid There is no risk of loss. There is no of having made visible possibility of the wrong loss when you decision. choose a Free item.



Loss Aversion

50% chance of losing \$200

VS.

100% chance of losing \$100

50% chance of winning \$200

VS.

100% chance of winning \$100



Reciprocity

Requires that one person try to repay what another person has provided.

Future obligation benefits society, so everyone is trained to obey this rule or face serious social disapproval.



Reciprocity (2)

Applies even to uninvited first favors, which reduces our ability to decide whom we wish to owe.

Can spur unequal exchanges.

Can also take the form of initial concession that stimulates a return concession. Rejection then retreat.



Commitment & Consistency

After making a commitment, taking a stand, or position, people are more willing to agree to requests that are consistent with their prior commitment.

- "I'll watch your stuff"
- "I'll get you that toy for Christmas"
- "I support the environment"
- "I'll bet on that horse"
- "I'll buy that car"



Social Proof

People often view a behavior as more correct in a given situation to the degree that we see others performing it.

- Tip jar
- Ringers in the audience
- Man on the street
- Over 99 Billion Served
- What to do if you need help
- Social Norms



Scarcity

People assign more value to opportunities when they are less available.

- Things difficult to attain are typically more valuable. The availability of an item or experience can serve as a shortcut clue to its quality.
- When something becomes less accessible, the freedom to have it may be lost. People HATE to lose choices.



Scarcity (2)

Two optimizing conditions for scarcity:

- Scarce items are heightened in value when they are newly scarce. Things have higher value when they have become recently restricted – more than those things that were restricted all along.
- People are more attracted to scarce resources when they compete with others for them.



Recommended Reading

*Influence*Robert Cialdini

Predictably Irrational

Dan Ariely

Freakonomics

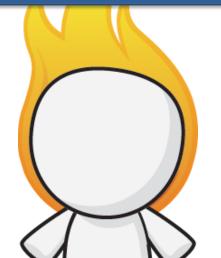
Steven D. Levitt, Stephen J. Dubner

"Cognitive Biases" on Wikipedia

Total Engagement

Byron Reeves Leighton Read Changing the Game

David Edery Ethan Mollick



rajat@bunchball.com

Twitter: @bunchball

We're hiring!

