Hacking the Social Graph

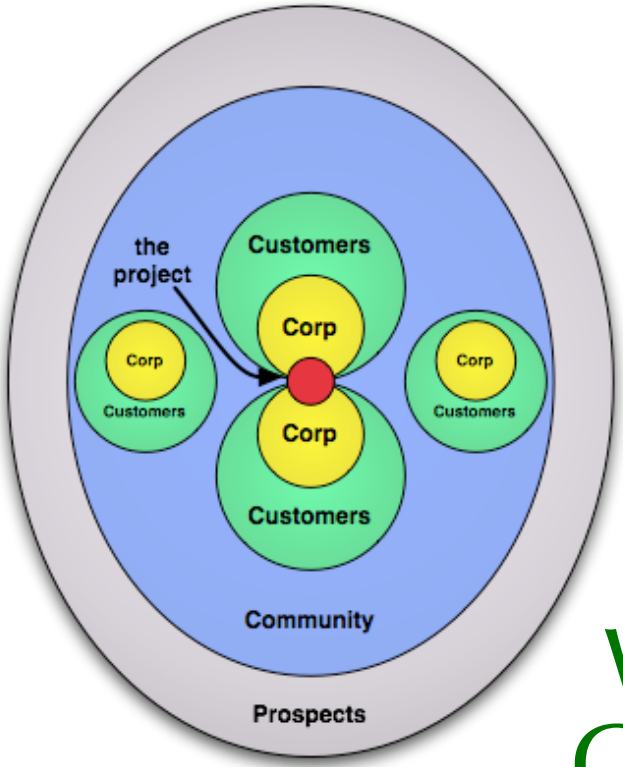
(This talk has: lots of ideas,
many starting points,
quite a few opinions,
not much code.)

- Brian McCallister

The 'Please Touch' Internet

~~User Generated Content~~

Collaboration
Content
Community



Web Mediated
Communication

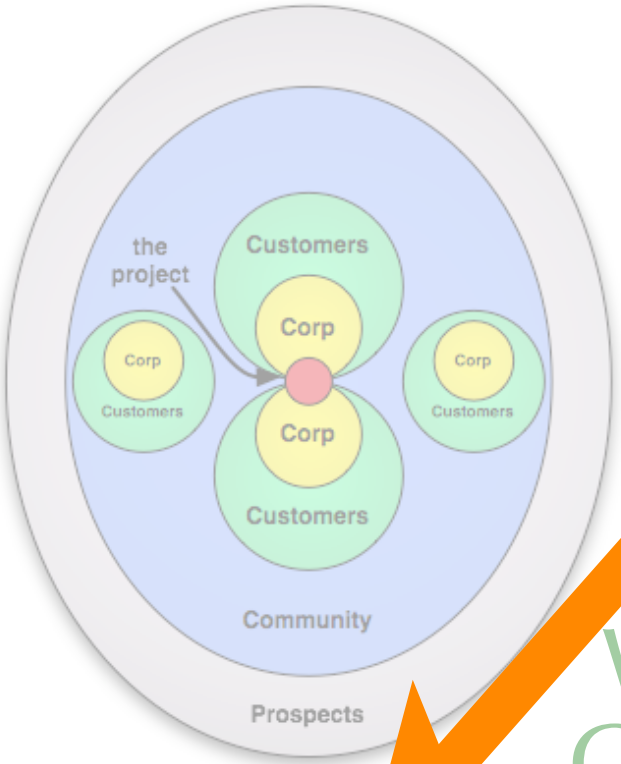
Community and Connections First

The 'Please Touch' Internet

BETA

~~User Generated Content~~

Collaboration
Content
Community



Web Mediated
Communication

Community and Connections First

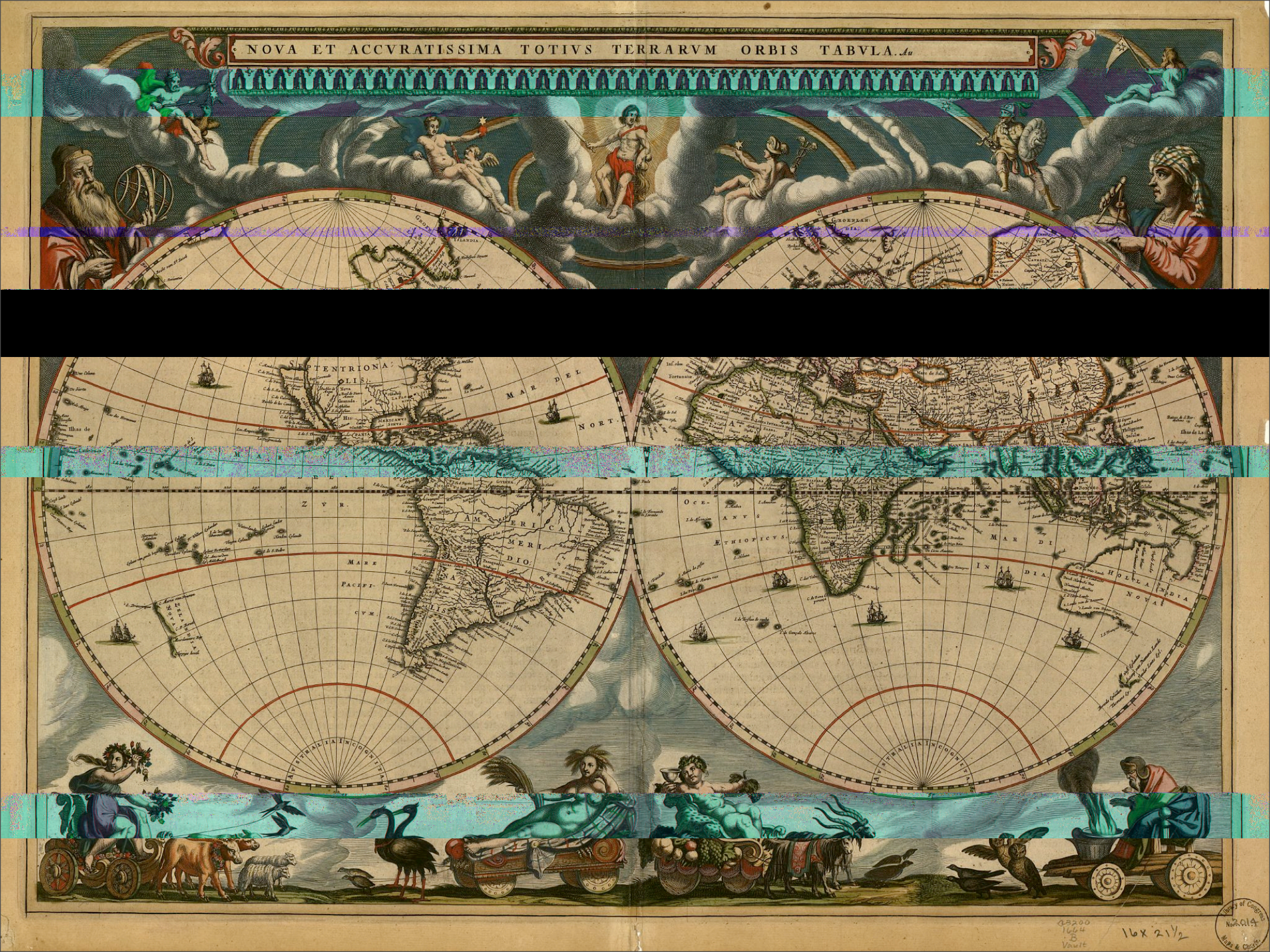
Friends & Relationships

Application Platforms

Activity Streams

Glue

© http://flickr.com/photos/d_a_v_i_d_m_/244368383/



G3200
1664
.B
Vault
16 x 21½
Library of Congress
Nov 2014
Maps & Charts

Enter Email Addresses

Send To

fred@example.com

Separate multiple addresses with commas

Your Message (Optional)

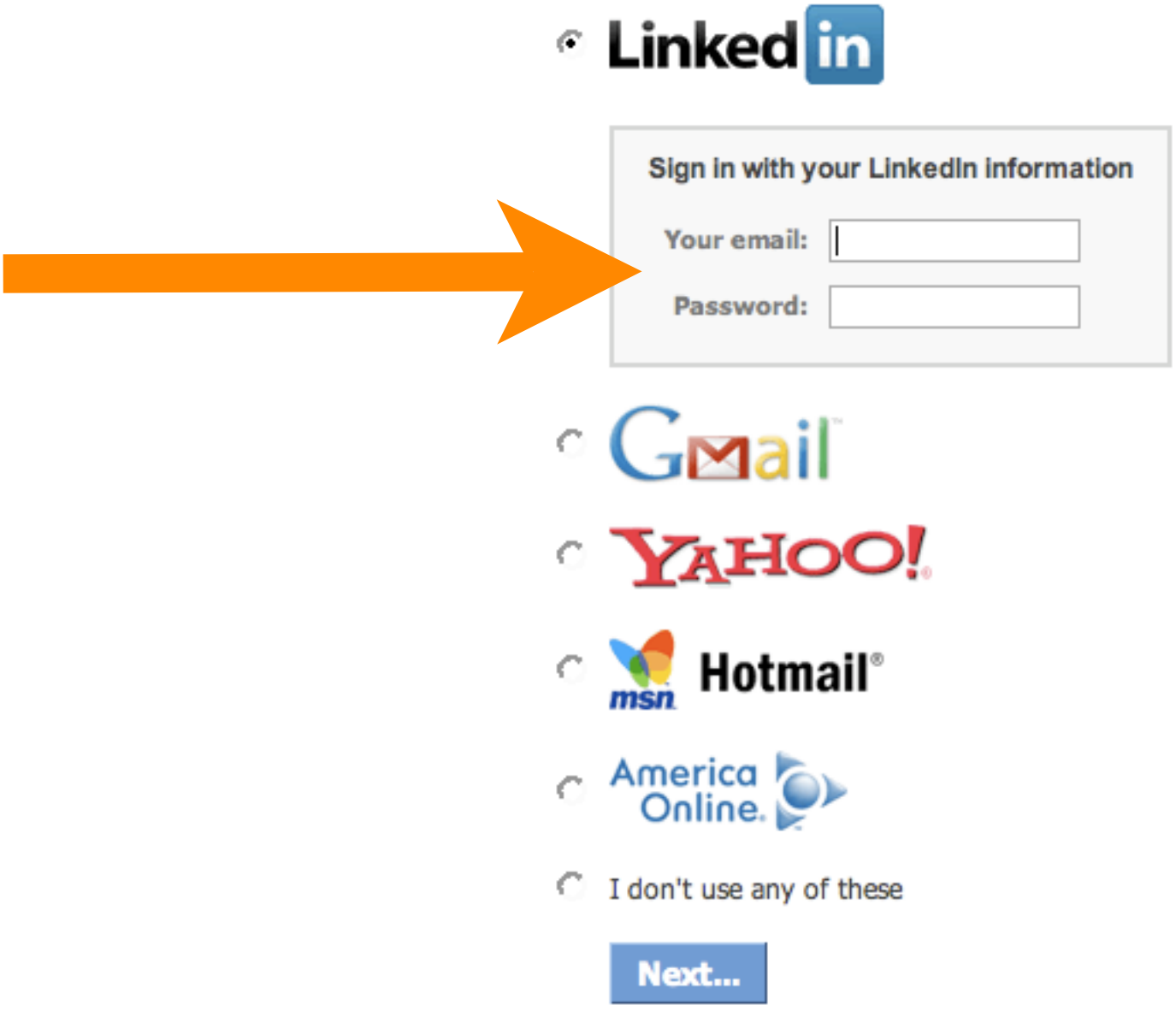
Come join me!

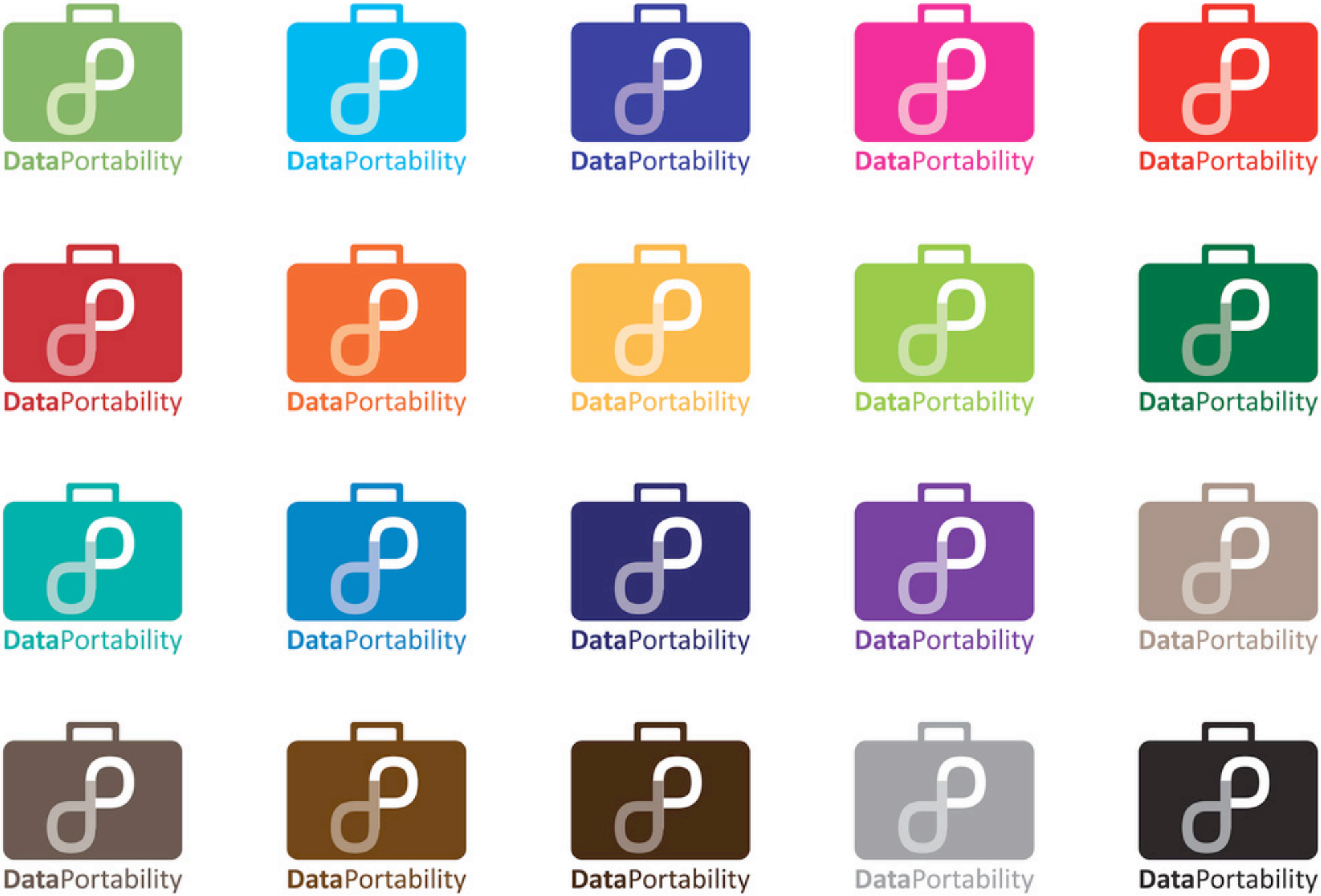
Send Invitations

tips on getting m

Posted by Syd Woodward on Ma

Send Message Add as friend


LinkedIn
Sign in with your LinkedIn information
Your email:
Password:
Gmail
YAHOO!
msn
Hotmail®
America Online
I don't use any of these
Next...


DataPortability
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DataPortability

```
<link rel="me"
      href="http://twitter.com/brianm" />
<link rel="me"
      href="http://www.linkedin.com/in/brianmccallister"/>
-----
<ul>
  <li>
    <a href="http://vafer.org/blog/" rel="friend">
      Torsten
    </a>
  </li>
  <li>
    <a href="http://crazybob.org/" rel="acquaintance">
      Bob
    </a>
  </li>
</ul>
```

http://www.flickr.com/photos/grange85/370932624/

There is a lot of data.

There is a lot of data.
It changes, rapidly.

hadoop

© http://flickr.com/photos/digitalslurp/208730605/

hi5

LinkedIn

bebo

facebook

Ning

orkut

myspace.com
a place for friends

plaxo
beta

Use their data.

http://api.ning.com/rest/1.0/profile:brianm/contact

http://code.google.com/apis/contacts/

http://www.plaxo.com/api

http://socialgraph.apis.google.com/lookup?q=skife.org&edo=true

facebook

Profile edit | Friends | Networks | Inbox (6) | home account privacy logout

Search

Applications edit

- Photos
- Developer
- Events
- Twitter
- Ian Pics

more

Baby Photo Contest

Upload a cute photo of a baby you know for free and you could win $2500 in the great American photo contest.

More Ads | Advertise

scrabulous™

New Game | Host Table | Join Table | My Buddies | Help Section

Hola, Brian! all games my stats global stats settings archives

Start A New Game

Whom do you wish to play with? (enter the names of up to 3 friends)

D

- **D**anny Angus — Glasgow
- **D**avanum Srinivas — Boston, MA
- **D**avid Blevins — Los Angeles, CA
- **D**avid Sklar — Ning
- **D**ennis Rakhamimov — Columbia
- **D**h Upayavira — London
- **D**iego **D**oval — Ning
- **D**ion Almaer — Google

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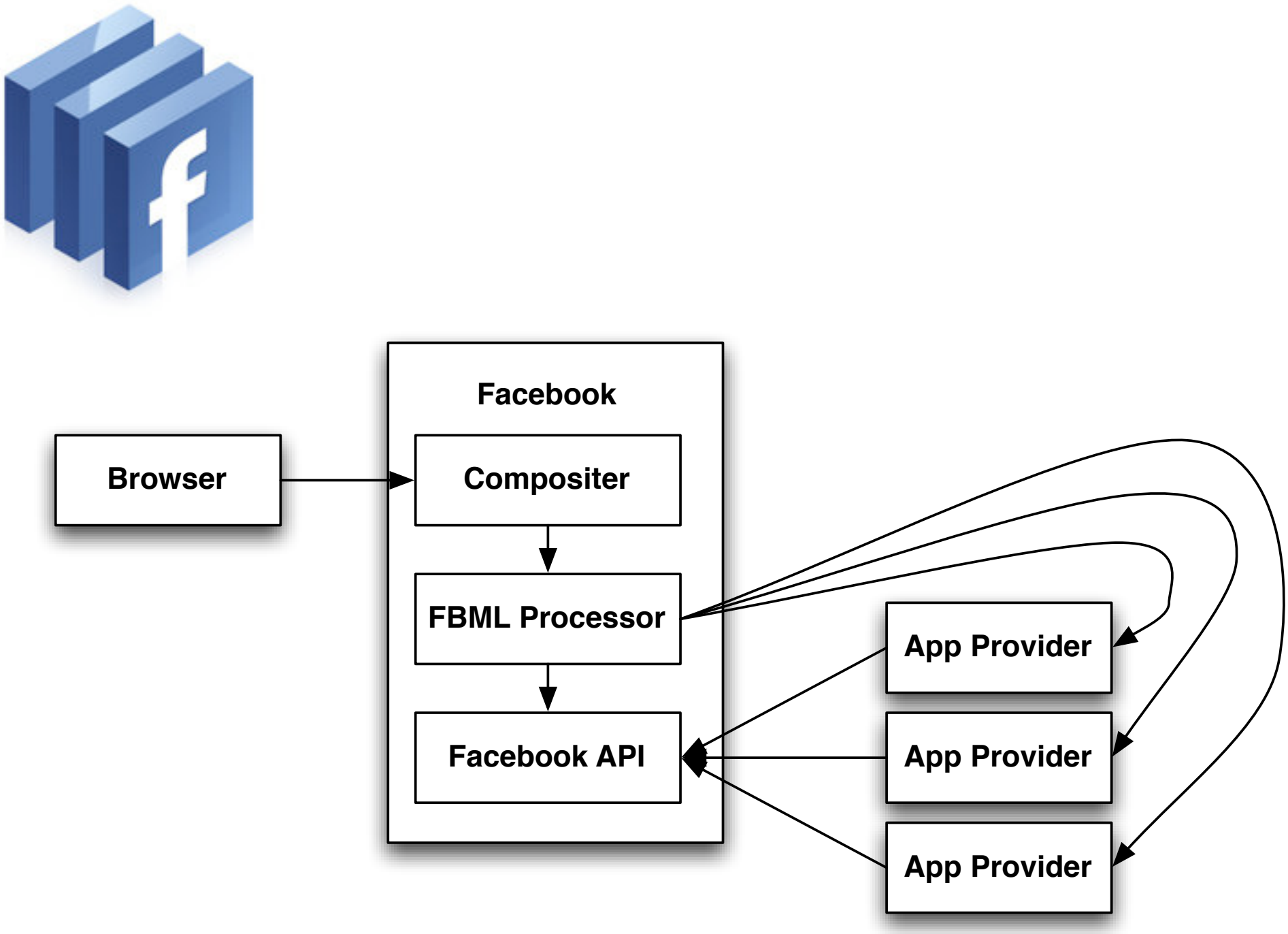
Facebook
Browser
Compositer
FBML Processor
Facebook API
App Provider
App Provider
App Provider

```
<fb:if-can-see uid="12345" what="profile">
    You're allowed to see 12345's profile, chum!
    <fb:else>
        No profile for you!
    </fb:else>
</fb:if-can-see>
```

```
try {
  if (!$facebook->api_client->users_isAppAdded()) {
    $facebook->redirect($facebook->get_add_url());
  }
} catch (Exception $ex) {
  $facebook->set_user(null, null);
  $facebook->redirect($appcallbackurl);
}
```

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<fb:if-can-see uid="12345" what="profile">
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}
```

Container Provider

Compositor

Gadget Server

Opensocial API

Browser

OpenSocial Container

OpenSocial Container

OpenSocial Container

App Provider

App Provider

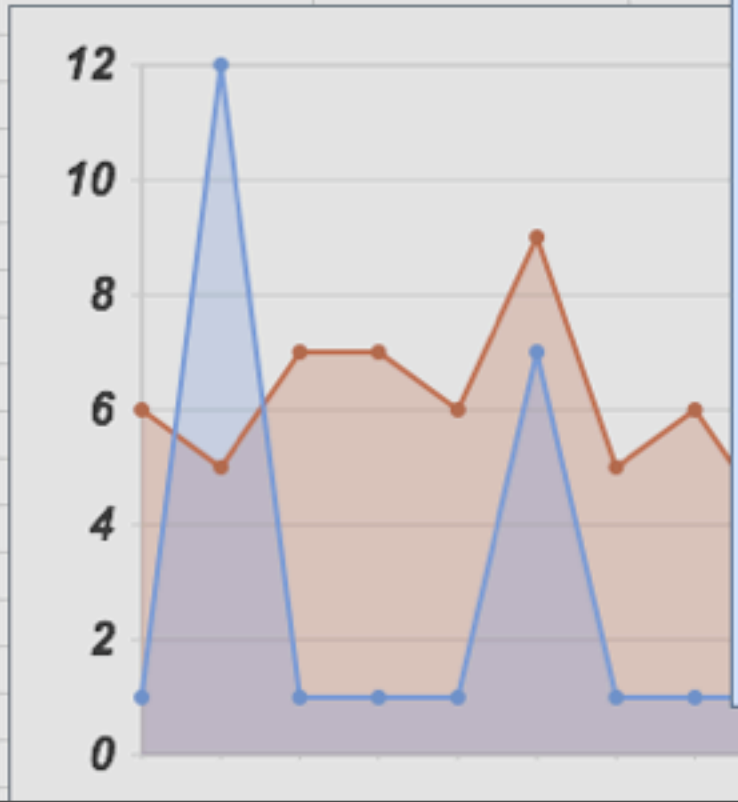
App Provider

```
<?xml version="1.0" encoding="UTF-8"?>
<Module>
  <ModulePrefs title="Gifts part 1 - Friends">
    <Require feature="opensocial-0.7"/>
  </ModulePrefs>
  <Content type="html">
    <![CDATA[
      <script>
        function loadFriends() {
          var req = opensocial.newDataRequest();
          req.add(req.newFetchPersonRequest('VIEWER'), 'viewer');
          req.add(req.newFetchPeopleRequest('VIEWER_FRIENDS'),
                                            'viewerFriends');
          req.send(onLoadFriends);
        }
      ...
      </script>
      <div id='main'>
        Your friends:
        <div id='friends'></div>
      </div>
```

File Edit Sort Formulas Revisions Set No

Format B I U Abc

	A	B
1		
2	1	6
3	12	5
4	1	7
5	1	7
6	1	6
7	7	9
8	1	5
9	1	6
10	1	4
11	1	3



Add a Gadget

- Featured
- All
- **Charts**
- Tables
- Maps
- Web
- Diagrams
- Finance
- Custom...

Have a better idea?

Write your own gadget with built in javascript libraries that make it easy to fetch data from Google Spreadsheets and display it in cool new ways.

Interactive Time Series Ch
Google

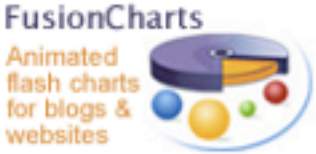
An interactive time series li
the one used in Google Fina
column contains dates and
column contains values.

Add to spreadsheet

Motion Chart
Google

A dynamic flash based cha
several indicators over time
columns: bubble name, time
columns of numeric values.
columns: Numeric values o

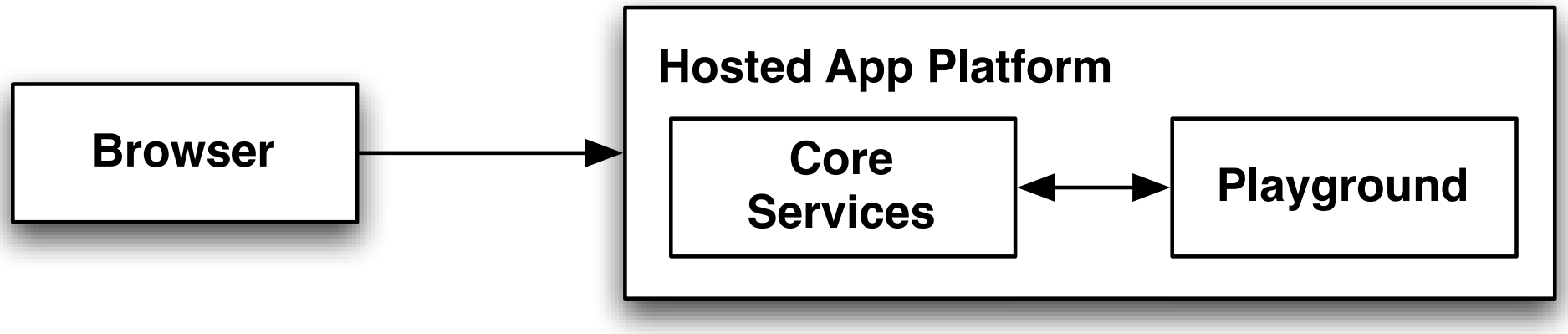
Add to spreadsheet



FusionCharts Funnel Wid
InfoSoft Global (P) Ltd.

Animated funnel charts for
spreadsheets. Visually cont

Ning



Latest Activity

Joy McCallister added 2 videos. View Videos
Mar 15

Granpa Gamble commented on the photo IMG 0603
Mar 13

Granpa Gamble added 15 photos. View Photos
Mar 8

jai castorena joined Ian's Place on the Web. Leave a Comment for jai castorena.
Mar 8

Kathy joined Ian's Place on the Web. Leave a Comment for Kathy.
Mar 2

Jonathan Aquino joined Ian's Place on the Web. Leave a Comment for Jonathan Aquino.
Feb 28

Abby Larson joined Ian's Place on the Web. Leave a Comment for Abby Larson.
Feb 28

Tait Larson joined Ian's Place on the Web. Leave a Comment for Tait Larson.
Feb 28

flamefew Drinking with Greg the night before, and yet in the keynote. What's the world getting to? 4 minutes ago from web

codeslinger @obie are you coming to the party tonight? 14 minutes ago from web in reply to obie

pburleson @panache Sounds like some bad hardware. Maybe memory needs to be reseated? 16 minutes ago from web in reply to panache

News Feed

Preferences

Rachel Masters is attending the event Maker Faire Bay Area.
Hosted by: MAKE Magazine

Converse® One Star® Sponsored

The legendary brand shines with a whole new line of vintage-inspired footwear and clothing, exclusively at Target.

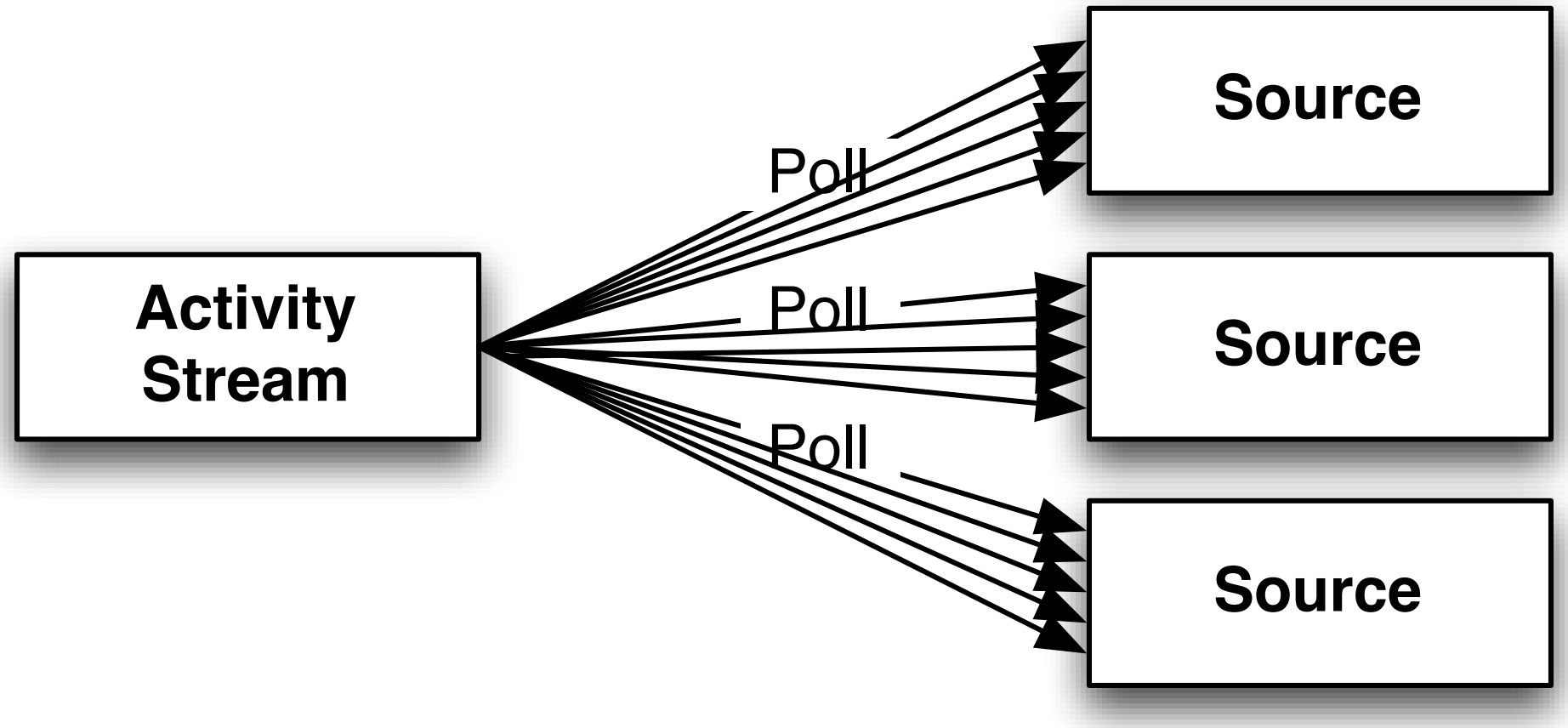
Dion Almaer wrote a new blog post.
"JavaScript Has Fashion and Luck to Thank?"

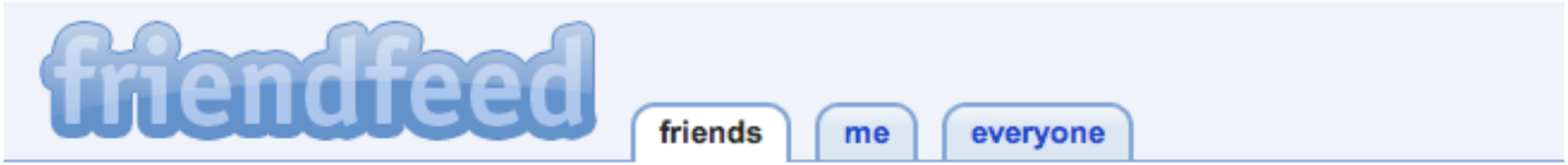
Greg Stein and Andrew Kippen are now friends.

Laura Gluhanich can't even handle RT. She smells a race tomorrow.

Atom/RSS
XMPP/SMS
Internal Activity

Atom/RSS





Share something

Dion Almaer bookmarked a page on del.icio.us

MediaWiki Offline
7 minutes ago - Comment - Like - More

I would love to see MediaWiki and Wikipedia itself go offline. Think of the OLPC! - Dion Almaer

John Wilson had a new status message on Gmail/Google Talk

"Test FriendFeed"
45 minutes ago - Comment - Like - More

Ted Leung posted a message on Twitter

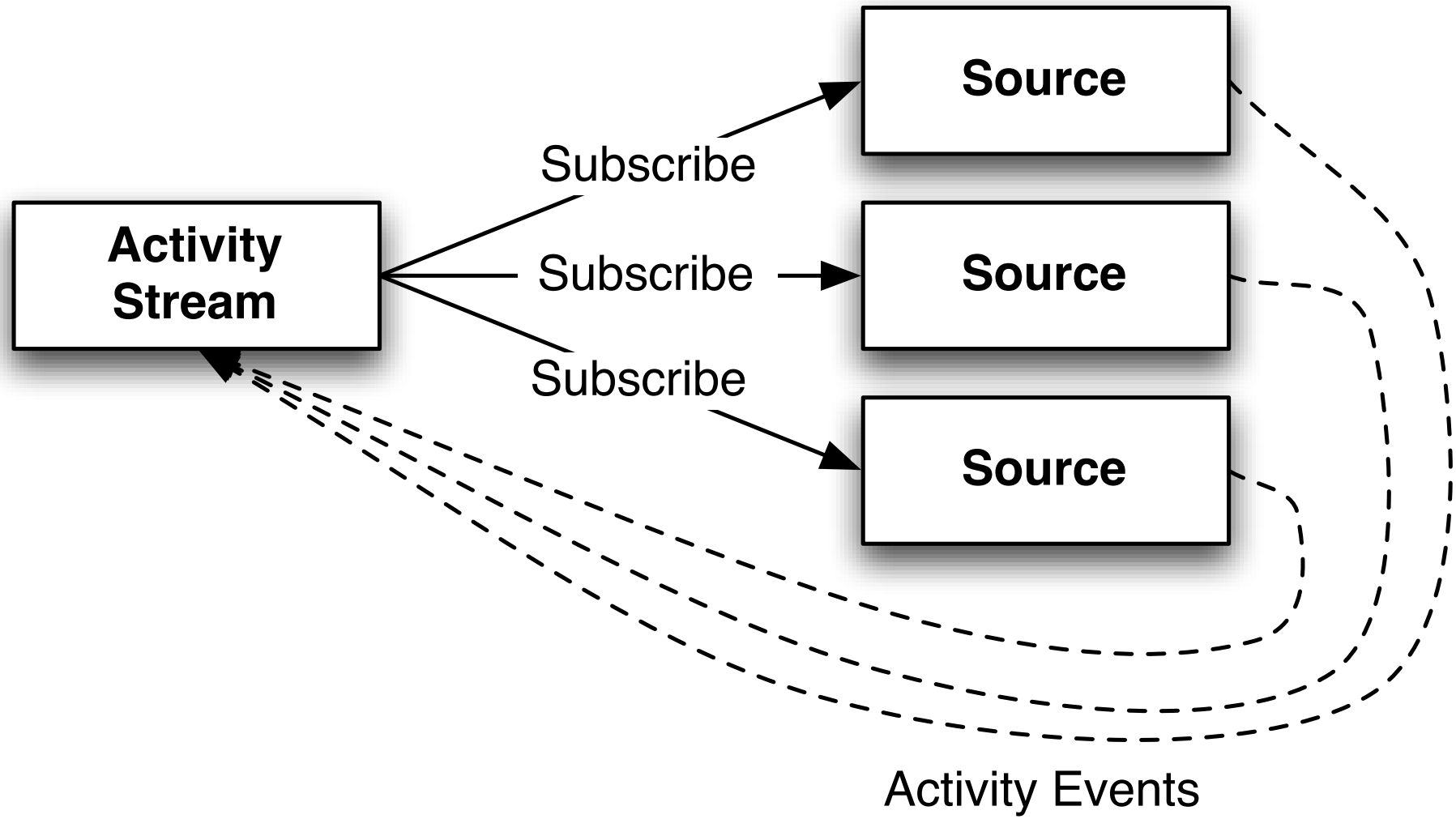
"nice sunlight today - bright enough to be washing out the displays in my office"
2 hours ago - Comment - Like - More

Dion Almaer posted a blog post on techno.blog("Dion")

How FriendFeed could dwarf Facebook and Twitter
2 hours ago - Comment - Like - More

atul and Dimitri Glazkov liked this

XMPP/SMS


Source
Subscribe
Activity Stream
Subscribe
Source
Subscribe
Source
Activity Events

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Internal Activity

?

Internal Activity

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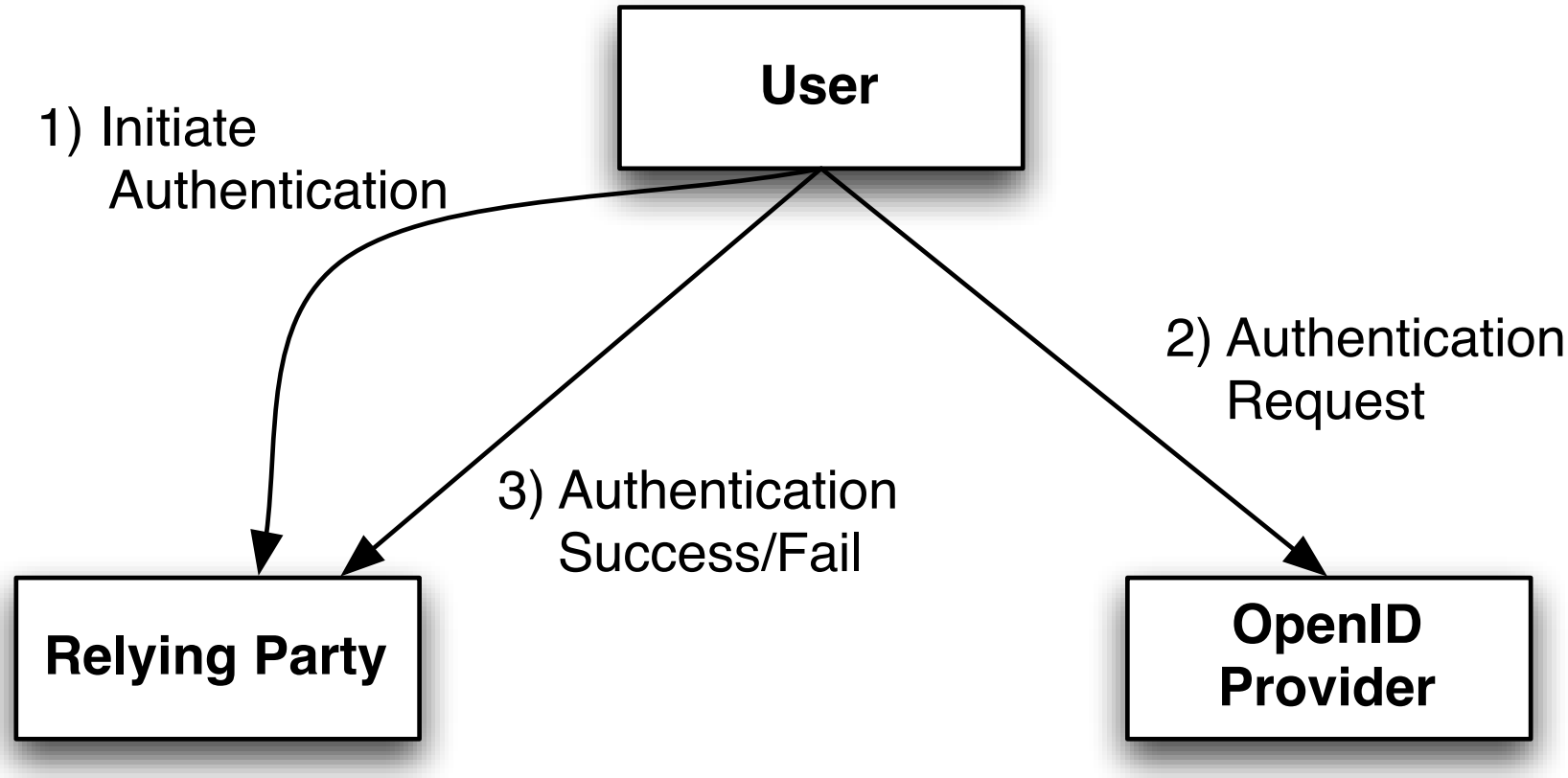
© Will Fuller 2007

http://flickr.com/photos/willfuller/1311323179/

Federated Identity

OpenID


User
1) Initiate
Authentication
2) Authentication
Request
3) Authentication
Success/Fail
Relying Party
OpenID
Provider

http://brianm.skife.org/

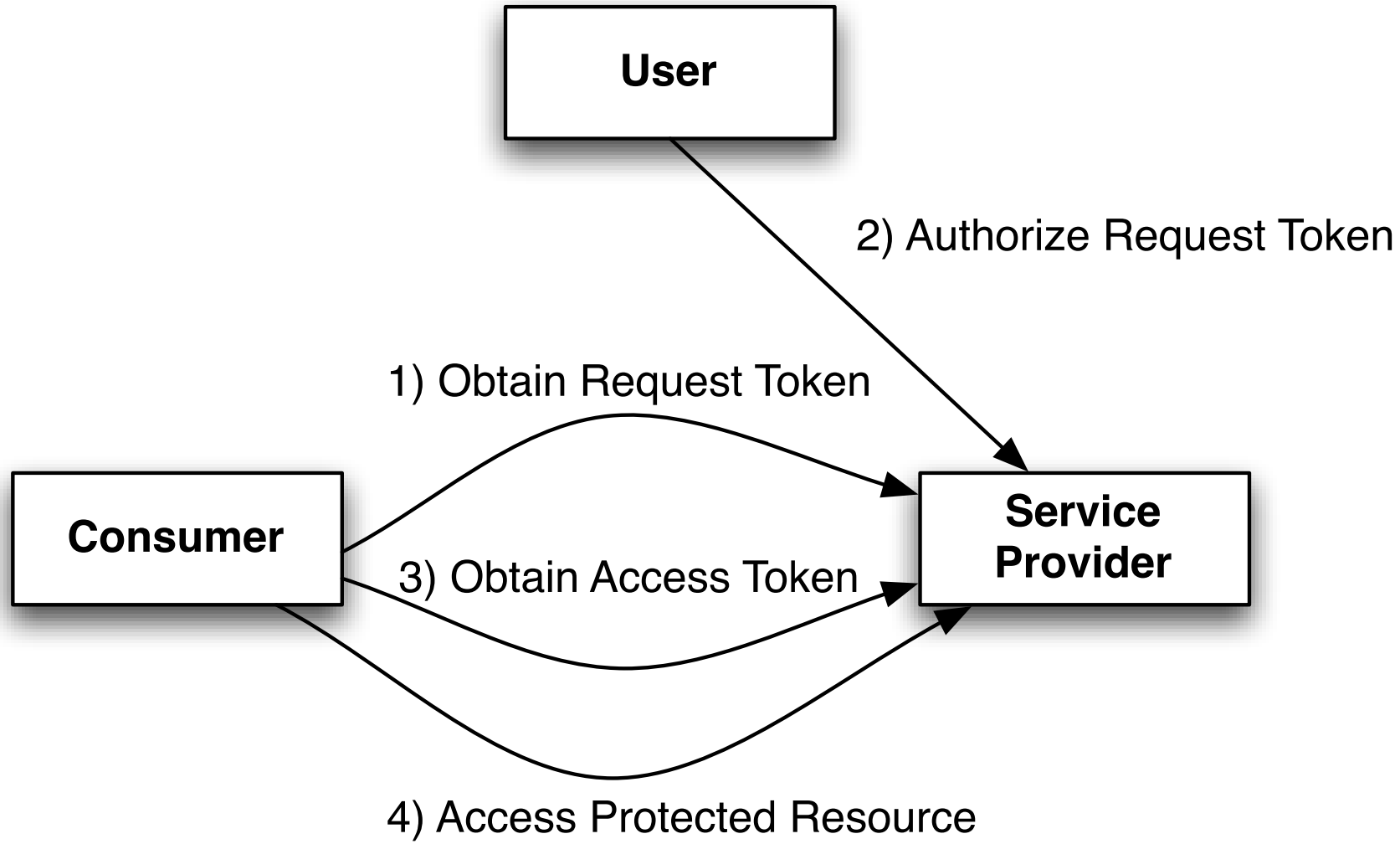
brianm.skife.org

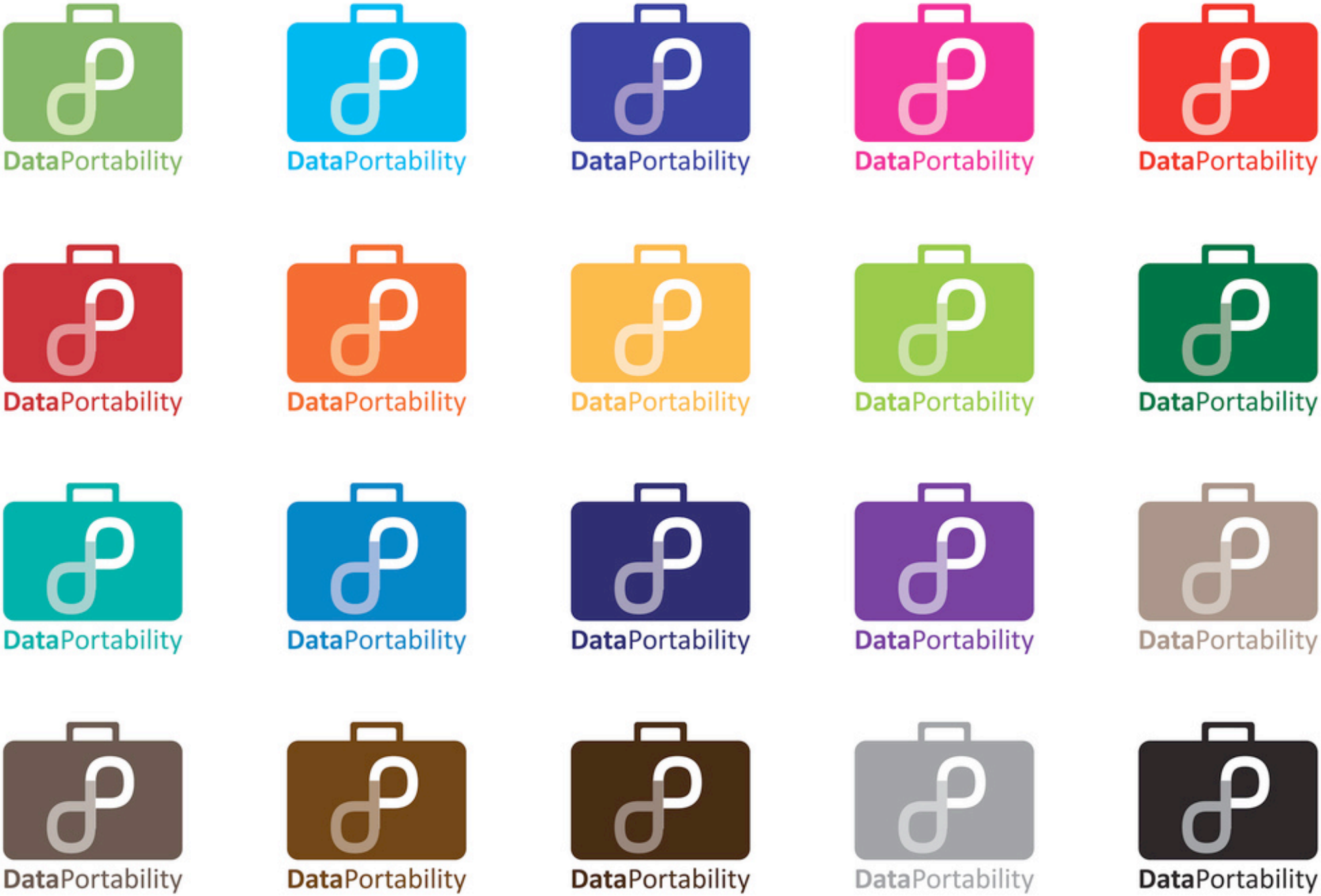
brianm@skife.org

API Authentication/Authorization

OAuth

OAuth


User
2) Authorize Request Token
1) Obtain Request Token
Consumer
Service Provider
3) Obtain Access Token
4) Access Protected Resource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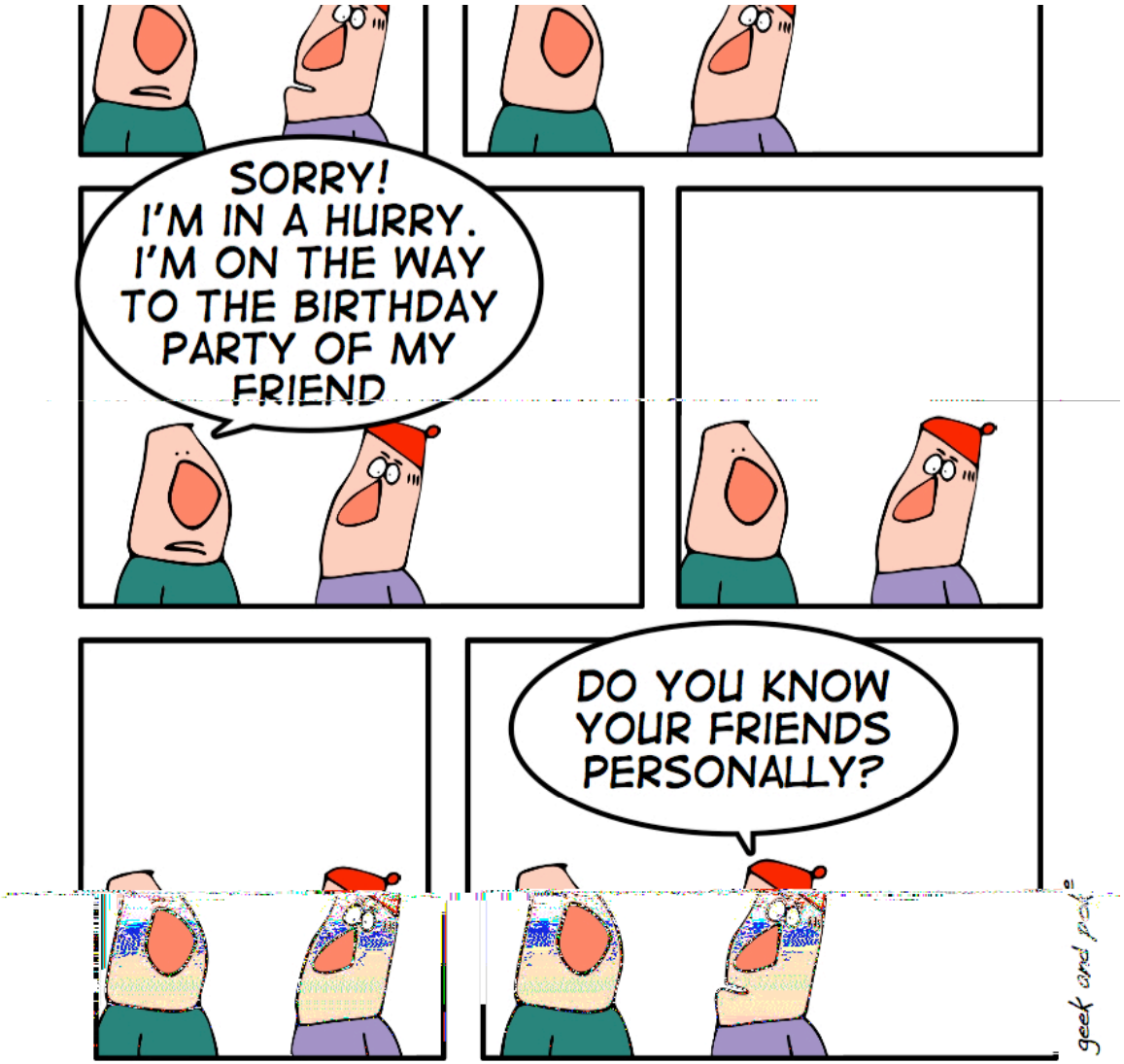
Hacking the Social Graph

Emerging Technologies for the Enterprise '08

Brian McCallister
brianm@ning.com
http://www.ning.com/



PART1: THE SOCIAL GRAPH

http://www.flickr.com/photos/geekandpoke/2128961501/