



UNIVERSITY OF SCIENCE
HO CHI MINH CITY

CTT534 – Thiết Kế Giao Diện
HK II 2015 – 2016

Google Analytics and UI Evaluation Tools

Outline

- Google Analytics
- Other UI evaluation tools

Google Analytics










- How do you know
 - ❑ Who are visiting your site?
 - ❑ How many?
 - ❑ Where do they go?
 - ❑ How much time they spend on your site?
 - ❑ Where are they from?
 - ❑ etc.
- Google Analytics can help answer these questions



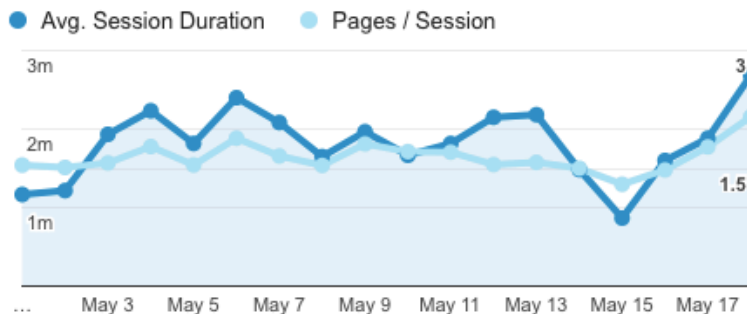
Google
Analytics

Google Analytics helps collect data

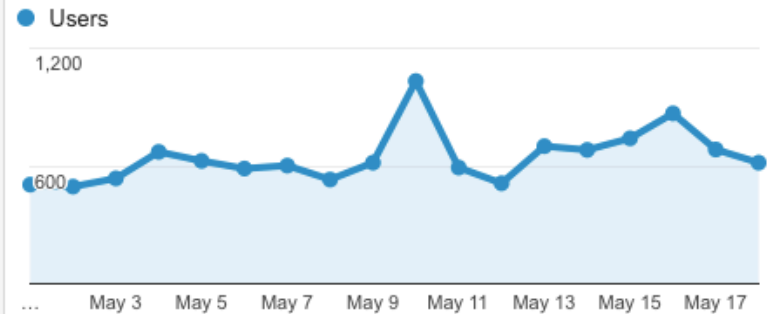
Sessions by Country

Country	Sessions
 Vietnam	12,179
 United States	538
 Russia	218
 United Arab Emirates	84
 Sudan	70
 Singapore	68
(not set)	56
 Japan	46
 Netherlands	46
 France	44

Avg. Session Duration and Pages / Session



Users



Sessions by Browser

Browser	Sessions
Chrome	6,718
Safari	2,279
Coc Coc	2,219
Firefox	913
UC Browser	369
Android Browser	328

Bounce Rate



Purpose of using Google Analytics

- Understand users
- Evaluate user interface design and experience (UI/UX)
- Improve UI/UX
- Validate business objectives and goals
- Improve business objectives and goals
- Increase conversion rate and revenue

- Support marketing and sales

How to use Google Analytics

- Simple steps
 - Create a property ID
 - Add JavaScript snippet to a webpage
 - Use only two API functions
 - `ga('create',...)`
 - `ga('send',...)`

How to use Google Analytics – 2

```
<!-- Google Analytics -->
<script>
(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
(i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
})(window,document,'script','https://www.google-analytics.com/analytics.js','ga');

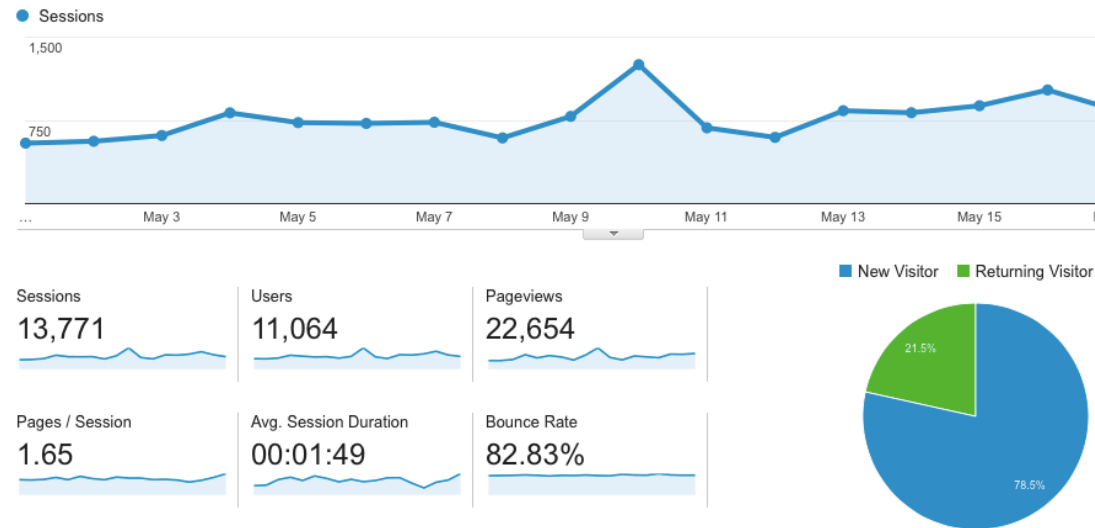
ga('create', 'UA-XXXXX-Y', 'auto');
ga('send', 'pageview');
</script>
<!-- End Google Analytics -->
```

How to use Google Analytics – 3

- Use the functions for
 - Sending page views
 - Everytime users view a page
 - Sending events
 - Any event a website needs to record
 - E.g., click on a link, click on a button, play video, etc.

Key metrics

- Bounce rate
- Number of users
- Number of sessions
- Session duration
- New visitors
- Returning visitors
- Number of pageviews
- Conversion rate



Who visits the site (audience)

- Demographics
- Interests
- Geography
- Behavior
- Technology
- Mobile

Technology

Primary Dimension: **Browser** [Operating System](#) [Screen Resolution](#) [Screen Colors](#) [Flash Version](#) [Other](#) ▾

Plot Rows

Secondary dimension ▾

Sort Type: Default ▾

🔍

advanced

📊

🕒

☰

🔗

⋮

Browser ?	Acquisition			Behavior			Conversions	
	Sessions ?	% New Sessions ?	New Users ?	Bounce Rate ?	Pages / Session ?	Avg. Session Duration ?	Goal Conversion Rate ?	Goal Completions ?
	732 % of Total: 100.00% (732)	77.05% Avg for View: 77.05% (0.00%)	564 % of Total: 100.00% (564)	82.92% Avg for View: 82.92% (0.00%)	2.16 Avg for View: 2.16 (0.00%)	00:02:41 Avg for View: 00:02:41 (0.00%)	0.00% Avg for View: 0.00% (0.00%)	0 % of Total: 0.00% (0)
1. Chrome	345 (47.13%)	82.61%	285 (50.53%)	85.80%	1.39	00:01:17	0.00%	0 (0.00%)
2. Coc Coc	138 (18.85%)	50.00%	69 (12.23%)	76.09%	5.64	00:09:46	0.00%	0 (0.00%)
3. Safari	110 (15.03%)	84.55%	93 (16.49%)	86.36%	1.28	00:00:34	0.00%	0 (0.00%)
4. Firefox	43 (5.87%)	86.05%	37 (6.56%)	79.07%	1.28	00:00:39	0.00%	0 (0.00%)
5. Safari (in-app)	26 (3.55%)	73.08%	19 (3.37%)	88.46%	1.19	00:00:23	0.00%	0 (0.00%)
6. UC Browser	18 (2.46%)	83.33%	15 (2.66%)	83.33%	1.28	00:01:19	0.00%	0 (0.00%)
7. Android Browser	17 (2.32%)	82.35%	14 (2.48%)	70.59%	1.29	00:02:04	0.00%	0 (0.00%)
8. Internet Explorer	15 (2.05%)	86.67%	13 (2.30%)	80.00%	1.40	00:00:24	0.00%	0 (0.00%)
9. Opera	7 (0.96%)	85.71%	6 (1.06%)	71.43%	1.29	00:01:48	0.00%	0 (0.00%)

Where are they from (acquisition)

- Channels
- Treemaps
- Source/Medium
- Referrals
- Social
- Campaigns

Channels











<input type="checkbox"/>	Default Channel Grouping	Acquisition			Behavior			Conversions
		Sessions ?	% New Sessions ?	New Users ?	Bounce Rate ?	Pages / Session ?	Avg. Session Duration ?	Goal Conversion Rate ?
		732 % of Total: 100.00% (732)	77.05% Avg for View: 77.05% (0.00%)	564 % of Total: 100.00% (564)	82.92% Avg for View: 82.92% (0.00%)	2.16 Avg for View: 2.16 (0.00%)	00:02:41 Avg for View: 00:02:41 (0.00%)	0.00% Avg for View: 0.00% (0.00%)
<input type="checkbox"/>	1. Organic Search	510 (69.67%)	83.92%	428 (75.89%)	87.25%	1.24	00:01:03	0.00%
<input type="checkbox"/>	2. Social	111 (15.16%)	48.65%	54 (9.57%)	79.28%	3.55	00:04:50	0.00%
<input type="checkbox"/>	3. Direct	73 (9.97%)	63.01%	46 (8.16%)	54.79%	6.84	00:11:57	0.00%
<input type="checkbox"/>	4. Referral	38 (5.19%)	94.74%	36 (6.38%)	89.47%	1.34	00:00:30	0.00%

What do users do (behavior)?

- Content visited
- Landing pages
- Site speed
- Events

Top pages

Primary Dimension: **Page** [Page Title](#) [Other](#) ▾

<div> <div>Plot Rows</div> <div>Secondary dimension ▾</div> <div>Sort Type: Default ▾</div> <div></div> <div>advanced</div> </div>							
<input type="checkbox"/>	Page ?	Pageviews ?	Unique Pageviews ?	Avg. Time on Page ?	Entrances ?	Bounce Rate ?	%
		1,578 % of Total: 100.00% (1,578)	1,064 % of Total: 100.00% (1,064)	00:02:19 Avg for View: 00:02:19 (0.00%)	732 % of Total: 100.00% (732)	82.92% Avg for View: 82.92% (0.00%)	4
<input type="checkbox"/>	1. / 	211 (13.37%)	75 (7.05%)	00:02:54	61 (8.33%)	65.57%	
<input type="checkbox"/>	2. /chu-de/tin-noi-bat 	80 (5.07%)	23 (2.16%)	00:01:45	4 (0.55%)	33.33%	
<input type="checkbox"/>	3. /chu-de/viet-nam 	69 (4.37%)	21 (1.97%)	00:00:59	5 (0.68%)	60.00%	
<input type="checkbox"/>	4. /chu-de/viet-nam/14-tan-ca-chet-sau-con-mua-dau-mua-o-tphcm-724434.html 	45 (2.85%)	42 (3.95%)	00:01:35	42 (5.74%)	88.10%	
<input type="checkbox"/>	5. /chu-de/viet-nam/cong-bo-nguyen-nhan-14-tan-ca-chet-tren-kenh-nhieu-loc-thi-nghe-725265.html 	38 (2.41%)	28 (2.63%)	00:06:12	16 (2.19%)	75.00%	
<input type="checkbox"/>	6. /chu-de/y-te 	36 (2.28%)	11 (1.03%)	00:02:00	2 (0.27%)	100.00%	
<input type="checkbox"/>	7. /chu-de/kinh-doanh/ngan-hang-nha-nuoc-chap-t-huan-cuu-bau-duc-722568.html 	31 (1.96%)	26 (2.44%)	00:02:11	25 (3.42%)	84.00%	
<input type="checkbox"/>	8. /chu-de/the-gioi 	29 (1.84%)	5 (0.47%)	00:01:41	0 (0.00%)	0.00%	
<input type="checkbox"/>	9. /chu-de/khoa-hoc-cong-nghe 	27 (1.71%)	7 (0.66%)	00:02:23	0 (0.00%)	0.00%	
<input type="checkbox"/>	10. /chu-de/viet-nam/chu-tich-tpda-nang-cung-hang-tram-can-bo-an-trua-voi-hai-san-696415.html 	26 (1.65%)	3 (0.28%)	00:00:24	0 (0.00%)	0.00%	

Other tools

- Optimizely
 - A/B Testing
- Inspectlet
 - Screen capture, heatmap, etc.
- Crazy Egg
 - Heatmap, points of interest
- Mixpanel
 - Individual actions on a per-user level to process usage patterns
- www.feng-gui.com