

GOOGLE ANALYTICS WORKSHOP



**Carnegie
Mellon
University**

Agenda

- What to measure & why, how to identify your conversion metrics and setting up goals
- Overview of standard reports in Google Analytics, including how you can customize them to meet the needs of your site & metrics
- Custom reports & dashboards, Using Regular Expressions to get more specific information, & Advanced Reporting tips & tricks
- Working in Excel using key formulas & pivot tables to garner insights that Google Analytics can't do alone

BEHAVIORAL PERSONAS

What do these two have in common?



John

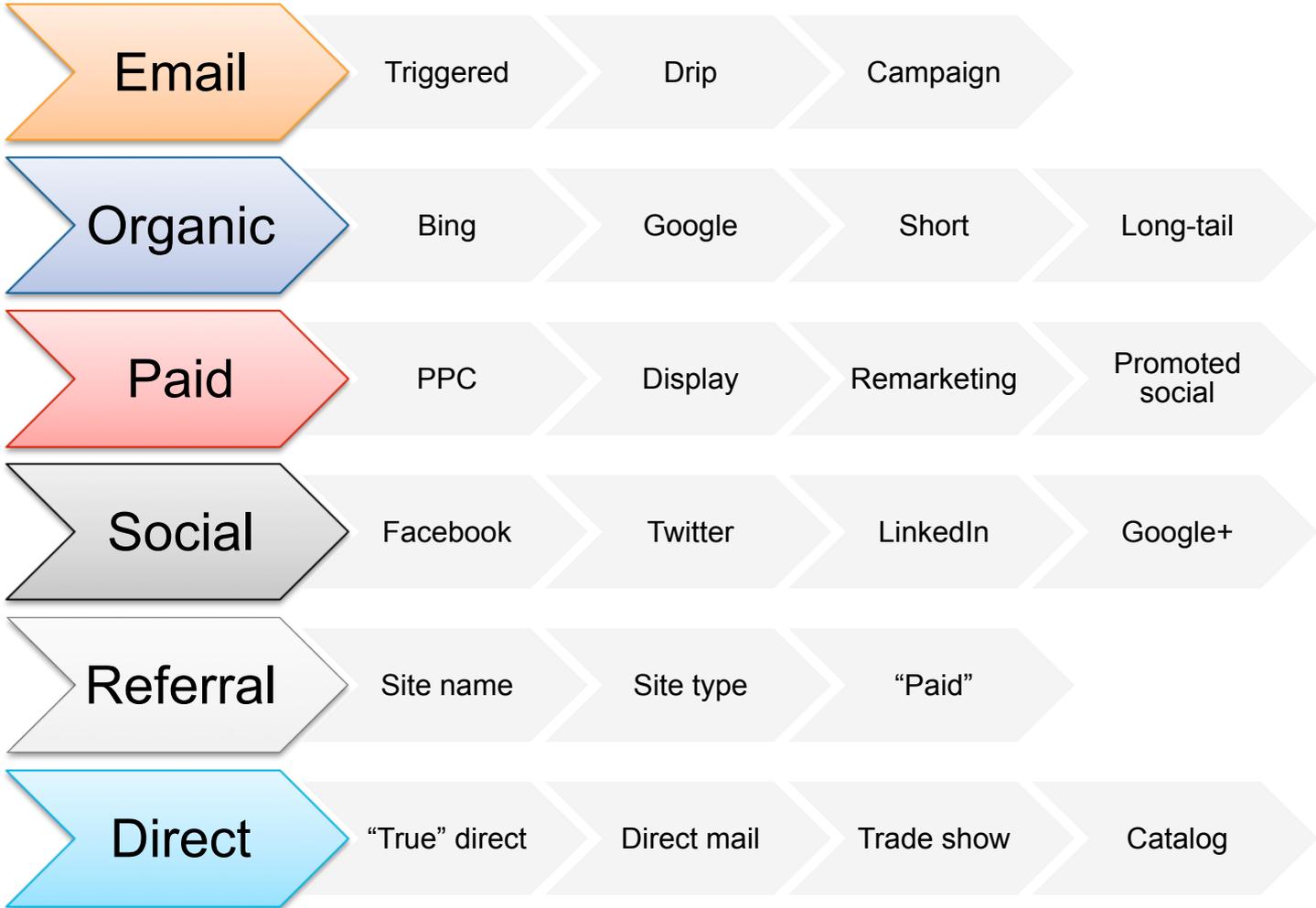
Age:	22
Occupation:	Student
Annual Income:	\$15,000
Gender:	Male
Location:	Chicago



Linda

Age:	52
Occupation:	Purchasing Manager
Annual Income:	\$75,000
Gender:	Female
Location:	Kansas City

Creating a Behavioral Persona



Creating a Behavioral Persona

How'd they
get here?

What did
they do?



Search



Navigation



Click banners



Watch videos



Read articles



Buy products



Fill out forms

Creating a Behavioral Persona

How'd they get here?

What did they do?

**How/
When?**



Device/OS



Browser



Time



Day/Date

Creating a Behavioral Persona

How'd they get here?

What did they do?

How/When?

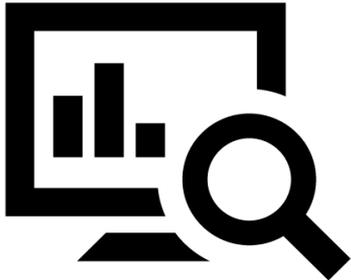
Why did they leave?



Completed a Purchase



Found a Location



Did Research



Filled out a form



Got a phone number



Gave Up!

WHAT IS CONVERSION?

1

ADVANCED SEGMENTS

Google Analytics Provides Some Detail



Not the full story

Getting closer...but still one-dimensional

Yes! But I need to see this across metrics...

For the full view, Google Analytics offers Advanced Segments

The Standards

Segment Name Created

- ☆ Mobile and Tablet Traffic
- ☆ Mobile Traffic

Mobile

Segment Name

Demographics

Technology

Behavior

Date of First Session

Traffic Sources

Language ?

Affinity Category (reach) ?

In-Market Segment ?

Other Category ?

Location ?

Continent ?

Sub Continent Region ?

Country / Territory ?

Region ?

City ?

Display as alphabetical list

Continent contains

Local

Social Media Visibility

Demographics

Technology

Behavior

Date of First Session

Traffic Sources

Ecommerce

Advanced

Conditions **1**

Sequences

Conditions

Segment your users and/or their sessions according to single or multi-session

Filter Sessions ▾ Include ▾

Default Channel Grouping ▾ contains ▾ Social

+ Add Filter

Social

Make Your Own “Cart Complete”

Why? Well...

Audience Overview

Apr 1, 2014 - Jun 29, 2014

Email Export Add to Dashboard Shortcut

One of your segments contains user data. Your date range is automatically limited to 90 days from your start date.

Made a Purchase

Might use sampling but should still provide solid data

Checkout Completion Visibility <

Demographics

Technology

Behavior

Date of First Session

Conditions
Segment your users and/or their sessions according to single or multi-session conditions.

Filter Sessions Include

Page contains /checkout/orderConfirmation/ - OR AND

SEO + Behavior

Abandoned Carts, Source:Google organic Visibility

Demographics

Technology

Behavior

Date of First Session

Traffic Sources

Ecommerce

Advanced

Conditions 1

Sequences

Filter Sessions ▾ Include ▾ ✕

Page ▾ contains ▾ /cart - OR AND

AND

Transactions ▾ per session ▾ ≤ ▾ 0 - OR AND

AND

Source ▾ contains ▾ google - OR AND

AND

Medium ▾ contains ▾ organic - OR AND

Other Common Uses with Organic Traffic

- Completed carts
- Engaged customers
- Big spenders
- Frequent purchasers
- Bounces
- First Time users or buyers
- Repeat users or buyers
- Site search users

Keyword Group Performance using RegEx

Mfg Part Numbers Visibility <

Demographics

Technology

Behavior

Date of First Session

Traffic Sources

Ecommerce

Conditions

Segment your users and/or their sessions according to single or multi-session conditions.

Filter Sessions Include

Keyword matches regex [0-9]{8} - OR AND

AND

Medium exactly matches organic - OR AND

SEO: 4 Word Organic Keywords Visibility <

Demographics

Technology

Behavior

Date of First Session

Traffic Sources

Ecommerce

Conditions

Segment your users and/or their sessions according to single or multi-session conditions.

Filter Sessions Include

Keyword matches regex `^\s*[\s]+(\s+[\s]+){3}\s*$` - OR AND

AND

Medium exactly matches organic - OR AND

2

**REGULAR EXPRESSIONS
(REGEX)**

Common RegEx Characters

→ abc...	Letters
123...	Digits
\d	any Digit
.	any Character
\.	Period
[abc]	Only a, b, or c
[^abc]	Not a, b, nor c
[a-z]	Characters a to z
[0-9]	Numbers 0 to 9
{m}	m Repetitions
{m,n}	m to n Repetitions
*	Zero or more repetitions
+	One or more repetitions
?	Optional
\s	any Whitespace
^...\$	Starts and ends
()	capture Group
(a(bc))	capture Sub group
(.*)	capture Variable content
(a b)	Matches a or b
\w	any Alphanumeric character
\W	any Non-alphanumeric character
\d	any Digit
\D	any Non-digit character
\s	any Whitespace
\S	any Non-whitespace character

For example:

To match a manufacturer part number with the format: **abcd-123456**

You could use : **(a-z){4}\-(0-9){6}**

What if that hyphen could also be a white space?

(a-z){4}(\-|\s)(0-9){6}

What if that first number can't be a zero?

(a-z){4}(\-|\s)(1-9)(0-9){5}

What if there the number of digits varies?

(a-z){4}(\-|\s)(1-9)(0-9)+

3

SITE NAVIGATION

Navigation After Landing Page

Google Analytics Reporting Customization Admin

mdepaul@wesco.com
CarltonBates.com - https://www.carltonbates.com

Jul 1, 2014 - Jul 31, 2014

Landing Pages

Email Export Add to Dashboard Shortcut

Organic Traffic 45.54% + Add Segment

Explorer **Entrance Paths**

Summary Site Usage Goal Set 1 Goal Set 2 Goal Set 3 Ecommerce

Sessions vs. Select a metric

Day Week Month

Sessions

Date	Sessions
Jul 1	800
Jul 2	800
Jul 3	700
Jul 4	300
Jul 5	200
Jul 6	200
Jul 7	800
Jul 8	850
Jul 9	850
Jul 10	800
Jul 11	650
Jul 12	200
Jul 13	200
Jul 14	800
Jul 15	900
Jul 16	800
Jul 17	850
Jul 18	700
Jul 19	200
Jul 20	200
Jul 21	850
Jul 22	900
Jul 23	850
Jul 24	850
Jul 25	800
Jul 26	200
Jul 27	200
Jul 28	850
Jul 29	850
Jul 30	900
Jul 31	200

Navigation After Landing Page

User started at this landing page: / ▾

then viewed these pages:

Second Page	Sessions	% Sessions
[Redacted]	146	8.53%
[Redacted]	108	6.31%
[Redacted]	85	4.97%
[Redacted]	62	3.62%
[Redacted]	50	2.92%
[Redacted]	26	1.52%
[Redacted]	21	1.23%
[Redacted]	19	1.11%
[Redacted]	19	1.11%
[Redacted]	18	1.05%

and exited from these pages:

Exit Page	Sessions	% Sessions
[Redacted]	6	31.58%
[Redacted]	4	21.05%
[Redacted]	2	10.53%
[Redacted]	1	5.26%

Search:

Low Value Pages

Filter page views to show only those w/view above a reasonable value

Page ?	Pageviews ?	Unique Pageviews ?	Avg. Time on Page ?	Entrances ?	Bounce Rate ?	% Exit ?	Page Value ?
	57,155 % of Total: 11.28% (506,743)	42,662 % of Total: 10.29% (414,563)	00:00:58 Site Avg: 00:01:13 (-21.31%)	23,727 % of Total: 11.65% (203,637)	41.82% Site Avg: 68.96% (-39.36%)	31.95% Site Avg: 40.19% (-20.50%)	\$2.90 % of Total: 50.72% (\$5.71)
1.	15 (0.03%)	13 (0.03%)	00:00:42	9 (0.04%)	11.11%	26.67%	\$0.00 (0.00%)
2.	596 (1.04%)	490 (1.15%)	00:01:28	174 (0.73%)	68.97%	61.07%	\$0.00 (0.00%)
3.	41 (0.07%)	32 (0.08%)	00:01:06	29 (0.12%)	75.86%	70.73%	\$0.00 (0.00%)
4.	133 (0.23%)	101 (0.24%)	00:00:44	0 (0.00%)	0.00%	23.31%	\$0.00 (0.00%)
5.	166 (0.29%)	130 (0.30%)	00:00:46	16 (0.07%)	43.75%	21.08%	\$0.00 (0.00%)
6.	72 (0.13%)	54 (0.13%)	00:00:43	2 (0.01%)	50.00%	20.83%	\$0.00 (0.00%)

Sort ascending on page value OR
Sort descending on Bounce

4

SITE SEARCH

Search Start Pages

Start Page ?	Total Unique Searches ? ↓	Results Pageviews / Search ?	% Search Exits ?	% Search Refinements ?	Time after Search ?
	4,465 % of Total: 30.94% (14,430)	1.65 Site Avg: 1.59 (4.29%)	30.88% Site Avg: 33.29% (-7.23%)	33.49% Site Avg: 34.64% (-3.33%)	00:02:18 Site Avg: 00:02:20 (-1.67%)
1.	730 (16.35%)	1.02	25.21%	42.28%	00:01:14
2.	420 (9.41%)	1.00	63.57%	14.05%	00:01:26
3.	284 (6.36%)	1.02	20.07%	42.41%	00:00:57
4.	69 (1.55%)	1.12	15.94%	16.88%	00:01:36
5.	47 (1.05%)	1.15	12.77%	35.19%	00:04:24
6.	45 (1.01%)	1.11	6.67%	24.00%	00:01:04
7.	23 (0.52%)	1.17	13.04%	40.74%	00:03:45
8.	18 (0.40%)	1.11	11.11%	40.00%	00:01:12
9.	16 (0.36%)	1.12	37.50%	33.33%	00:01:04
10.	14 (0.31%)	1.07	14.29%	53.33%	00:00:33

Searches & Exits

Include **Total Unique Searches** Greater than 10

and

+ Add a dimension or metric

Apply cancel

Search Term ?	Total Unique Searches ?	Results Pageviews / Search ?	% Search Exits ? ↓	% Search Refinements ?	Time after Search ?
	4,465 % of Total: 30.94% (14,430)	1.65 Site Avg: 1.59 (4.29%)	30.88% Site Avg: 33.29% (-7.23%)	14.90% Site Avg: 34.64% (-56.98%)	00:02:18 Site Avg: 00:02:20 (-1.67%)
1.	20 (11.36%)	1.00	100.00%	0.00%	00:00:00
2.	25 (14.20%)	1.60	92.00%	5.00%	00:03:09
3.	12 (6.82%)	2.67	66.67%	15.62%	00:02:20
4.	23 (13.07%)	1.70	34.78%	15.38%	00:02:25
5.	12 (6.82%)	2.00	33.33%	20.83%	00:01:51
6.	39 (22.16%)	1.92	23.08%	9.33%	00:01:43
7.	17 (9.66%)	1.94	11.76%	21.21%	00:01:43
8.	13 (7.39%)	1.31	7.69%	47.06%	00:02:21
9.	15 (8.52%)	1.47	6.67%	22.73%	00:01:38

Converting Searches

Search Term [?]	Total Unique Searches [?]	Results Pageviews / Search [?]	% Search Exits [?] ↓	% Search Refinements [?]	Time after Search [?]
Checkout Completion	204 % of Total: 0.30% (69,069)	1.57 Site Avg: 1.69 (-7.34%)	1.96% Site Avg: 31.51% (-93.78%)	43.29% Site Avg: 32.17% (34.57%)	00:07:06 Site Avg: 00:02:26 (191.12%)
1. [REDACTED]	1 (0.54%)	2.00	100.00%	0.00%	00:00:07
2. [REDACTED]	1 (0.54%)	1.00	100.00%	0.00%	00:00:00
3. [REDACTED]	1 (0.54%)	1.00	100.00%	0.00%	00:00:00
4. [REDACTED]	1 (0.54%)	1.00	100.00%	0.00%	00:00:00
5. [REDACTED]	1 (0.54%)	2.00	0.00%	100.00%	00:00:15
6. [REDACTED]	1 (0.54%)	1.00	0.00%	0.00%	00:09:55
7. [REDACTED]	1 (0.54%)	1.00	0.00%	100.00%	00:00:17
8. [REDACTED]	1 (0.54%)	3.00	0.00%	66.67%	00:01:45
9. [REDACTED]	1 (0.54%)	2.00	0.00%	50.00%	00:00:39
10. [REDACTED]	1 (0.54%)	2.00	0.00%	50.00%	00:08:31

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**ANALYZING REFERRAL
SOURCES**

Best Performing Referral Sites

Find reports & more

Plot Rows Secondary dimension Sort Type: Default

advanced

Find reports & more

- Custom
- Users Flow
- Acquisition
 - Overview
 - Channels
 - All Traffic
 - All Referrals**
 - Campaigns
 - Keywords
 - Cost Analysis BETA
 - AdWords
 - Social
 - Search Engine Optimization
- Behavior

Source ?	Acquisition			Behavior			Conversions
	Sessions ?	% New Sessions ?	New Users ?	Bounce Rate ?	Pages / Session ?	Avg. Session Duration ?	Transactions ?
Checkout Completion	242 % of Total: 0.09% (266,176)	50.41% Site Avg: 67.62% (-25.44%)	122 % of Total: 0.07% (179,979)	0.00% Site Avg: 69.96% (-100.00%)	12.67 Site Avg: 2.48 (411.42%)	00:14:46 Site Avg: 00:01:46 (739.74%)	248 % of Total: 12.43% (1,995)
1. [Redacted]	66 (27.27%)	68.18%	45 (36.89%)	0.00%	10.68	00:10:38	66 (26.61%)
2. [Redacted]	19 (7.85%)	47.37%	9 (7.38%)	0.00%	19.58	00:23:49	19 (7.66%)
3. [Redacted]	19 (7.85%)	57.89%	11 (9.02%)	0.00%	10.68	00:13:46	19 (7.66%)
4. [Redacted]	17 (7.02%)	0.00%	0 (0.00%)	0.00%	12.24	00:16:08	17 (6.85%)
5. [Redacted]	14 (5.79%)	85.71%	12 (9.84%)	0.00%	13.50	00:16:17	19 (7.66%)
6. [Redacted]	12 (4.96%)	16.67%	2 (1.64%)	0.00%	10.00	00:17:17	13 (5.24%)
7. [Redacted]	11 (4.55%)	54.55%	6 (4.92%)	0.00%	9.36	00:14:06	11 (4.44%)
8. [Redacted]	8 (3.31%)	75.00%	6 (4.92%)	0.00%	10.00	00:08:19	8 (3.23%)
9. [Redacted]	8 (3.31%)	0.00%	0 (0.00%)	0.00%	5.12	00:09:07	8 (3.23%)

So...are you paying for this placement? Is it hitting a high enough ROI?

Top Performing Referral Landing Pages

Landing Page ?		Medium ? x	Acquisition			Behavior	
			Sessions ? ↓	% New Sessions ?	New Users ?	Bounce Rate ?	Pages / Session ?
Checkout Completion			232 % of Total: 0.09% (266,208)	49.57% Site Avg: 67.62% (-26.69%)	115 % of Total: 0.06% (179,999)	0.00% Site Avg: 69.96% (-100.00%)	13.25 Site Avg: 2.48 (434.80%)
<input type="checkbox"/>	1.	[Redacted]	55 (23.71%)	43.64%	24 (20.87%)	0.00%	12.98
<input type="checkbox"/>	2.	[Redacted]	11 (4.74%)	0.00%	0 (0.00%)	0.00%	13.36
<input type="checkbox"/>	3.	[Redacted]	7 (3.02%)	0.00%	0 (0.00%)	0.00%	14.29
<input type="checkbox"/>	4.	[Redacted]	4 (1.72%)	0.00%	0 (0.00%)	0.00%	1.50
<input type="checkbox"/>	5.	[Redacted]	4 (1.72%)	0.00%	0 (0.00%)	0.00%	15.25
<input type="checkbox"/>	6.	[Redacted]	3 (1.29%)	0.00%	0 (0.00%)	0.00%	23.33
<input type="checkbox"/>	7.	[Redacted]	2 (0.86%)	0.00%	0 (0.00%)	0.00%	13.50
<input type="checkbox"/>	8.	[Redacted]	2 (0.86%)	0.00%	0 (0.00%)	0.00%	6.00
<input type="checkbox"/>	9.	[Redacted]	2 (0.86%)	50.00%	1 (0.87%)	0.00%	15.50

- Two things here:
1. Is that the right page for that referrer?
 2. Is this an organic or paid placement?

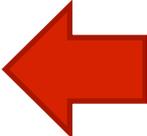
“Stitching” Information Together with Excel

PageList.csv

Landing Page	Medium	Referrer	Sessions	% New Se	New User
Page1	referral		25	36.00%	9
Page2	referral		7	0.00%	0
Page3	referral		4	0.00%	0
Page4	referral		3	33.33%	1
Page5	referral		3	0.00%	0
Page6	referral		2	0.00%	0
Page7	referral		2	0.00%	0
Page8	referral		2	0.00%	0
Page9	referral		2	0.00%	0
Page10	referral		2	0.00%	0

ReferralNames.csv

Landing Page	Full Referrer	Sessions	% New Se
Page1	sitenameA	40	65.00%
Page2	sitenameB	28	28.57%
Page3	sitenameC	15	60.00%
Page4	sitenameD	8	62.50%
Page5	sitenameE	6	0.00%
Page6	sitenameF	3	33.33%
Page7	sitenameG	2	0.00%
Page8	sitenameH	2	100.00%
Page9	sitenameI	2	0.00%
Page10	sitenameJ	2	50.00%



Column 1 Column 2

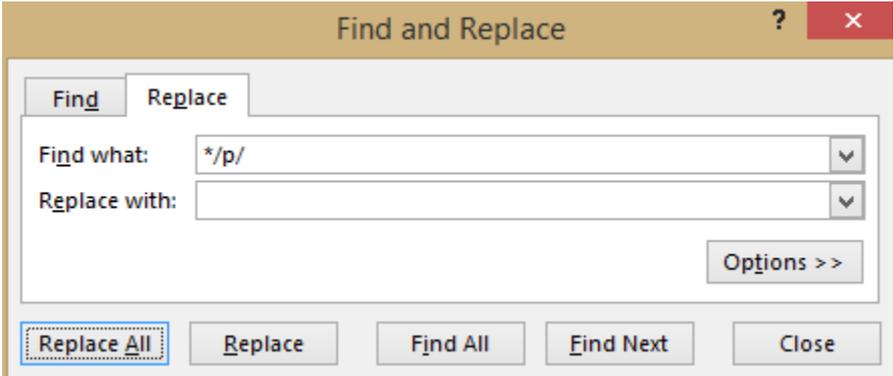
```
VLOOKUP(A2, ReferralNames.csv!$A:$B, 2, 0)
```

6

EXCEL

My Favorite Excel Formulas

- Find/Replace
- VLOOKUP
- IF
- COUNTIF
- TRIM
- ISNA



- LEFT [/Panel-PC-Board-Enclosure-Fittings/HEYCO-PRODUCTS/Hole-Plug-Dome-Style-Nylon-Push-In/2723/p/78311392041-1](#)
- Text [/Terminal-Clips/MUELLER/General-Purpose-Alligator-Spring-Clip-Steel/BU-65-0/p/01012399238-1](#)
- Text [/Terminal-Blocks/PHOENIX-CONTACT/Terminal-Block-Center-Jumper-20-Pole-FBS-Series/3030365/p/78037396168-1](#)

• Remove Duplicates

• PivotTables

78311392041-1
01012399238-1
78037396168-1

Fun with Recursion

Page	SKU as #	Co
/categoryURL/p/78071647517	78071647517	
/categoryURL/p/78667982586	78667982586	
/categoryURL/p/78071698806	78071698806	
/categoryURL/p/78040001720	78040001720	
/categoryURL/p/78040001720?mkwid=sxhN1ZiV8&pcrid=25542058	78040001720	
/categoryURL/p/66248826835	66248826835	100.0% 2
/categoryURL/p/66248826835?mkwid=DeCvXIKH&pcrid=&pkw=ba	66248826835	66.7% 2
/categoryURL/p/78311392041	78311392041	66.7% 3
/categoryURL/p/01012399238	1012399238	66.7% 3
/categoryURL/p/78037396168	78037396168	66.7% 3
/categoryURL/p/78071698861	78071698861	66.7% 3

Find/Replace
Text to Columns
Multiply by 1
Sort Ascending

SUM : =IF(\$B2=\$B1,AVERAGE(C2,E1),C2)

	A	B	C	D	E	F
	Page	SKU as #	Conv Rate	Unique Pageviews	Conv Rate	Unique Pageviews
2	/categoryURL/p/78071647517	78071647517	100.0%	2	=IF(\$B2=\$B1,AVERAGE(C2,E1),C2)	
3	/categoryURL/p/78667982586	78667982586	100.0%	2	100%	2
4	/categoryURL/p/78071698806	78071698806	100.0%	3	100%	3
5	/categoryURL/p/78040001720	78040001720	100.0%	2	100%	2
6	/categoryURL/p/78040001720?mkwid=sxhN1ZiV8&pcrid=25542058	78040001720	83.0%	2	92%	4
7	/categoryURL/p/66248826835	66248826835	100.0%	2	100%	2
8	/categoryURL/p/66248826835?mkwid=DeCvXIKH&pcrid=&pkw=ba	66248826835	66.7%	2	83%	4
9	/categoryURL/p/78311392041	78311392041	66.7%	3	67%	3
10	/categoryURL/p/01012399238	1012399238	66.7%	3	67%	3

Fun with Recursion cont.

SUM : =IF(\$B2=\$B1,SUM(D2,F1),D2)

	A	B	C	D	E	F	G
1	Page	SKU as #	Conv Rate	Unique Pageviews	Conv Rate	Unique Pageviews	
2	/categoryURL/p/78071647517	78071647517	100.0%	2	100%	=IF(\$B2=\$B1,SUM(D2,F1),D2)	
3	/categoryURL/p/78667982586	78667982586	100.0%	2	100%	2	
4	/categoryURL/p/78071698806	78071698806	100.0%	3	100%	3	
5	/categoryURL/p/78040001720	78040001720	100.0%	2	100%	2	
6	/categoryURL/p/78040001720?mkwid=sxhN1ZiV8&pccid=25542058	78040001720	83.0%	2	92%	4	
7	/categoryURL/p/66248826835	66248826835	100.0%	2	100%	2	
8	/categoryURL/p/66248826835?mkwid=DeCvXIKH&pccid=&pkw=ba	66248826835	66.7%	2	83%	4	
9	/categoryURL/p/78311392041	78311392041	66.7%	3	67%	3	
10	/categoryURL/p/01012399238	1012399238	66.7%	3	67%	3	

SUM : =IF(B2=B3,"No","Yes")

	A	B	C	D	E	F	G	H
1	Page	SKU as #	Conv Rate	Unique Pageviews	Conv Rate	Unique Pageviews		
2	/categoryURL/p/78071647517	78071647517	100.0%	2	100%	2	=IF(B2=B3,"No","Yes")	
3	/categoryURL/p/78667982586	78667982586	100.0%	2	100%	2	Yes	
4	/categoryURL/p/78071698806	78071698806	100.0%	3	100%	3	Yes	
5	/categoryURL/p/78040001720	78040001720	100.0%	2	100%	2	No	
6	/categoryURL/p/78040001720?mkwid=sxhN1ZiV8&pccid=25542058	78040001720	83.0%	2	92%	4	Yes	
7	/categoryURL/p/66248826835	66248826835	100.0%	2	100%	2	No	
8	/categoryURL/p/66248826835?mkwid=DeCvXIKH&pccid=&pkw=ba	66248826835	66.7%	2	83%	4	Yes	
9	/categoryURL/p/78311392041	78311392041	66.7%	3	67%	3	Yes	