

Feature Vision Experiment

W241: Experiments and Causality

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Causal Question

eBags.com online bag store is asking the question;

"is there a better way to present product information to help customers find their perfect bags and accessories?"

- More specifically for this experiment;

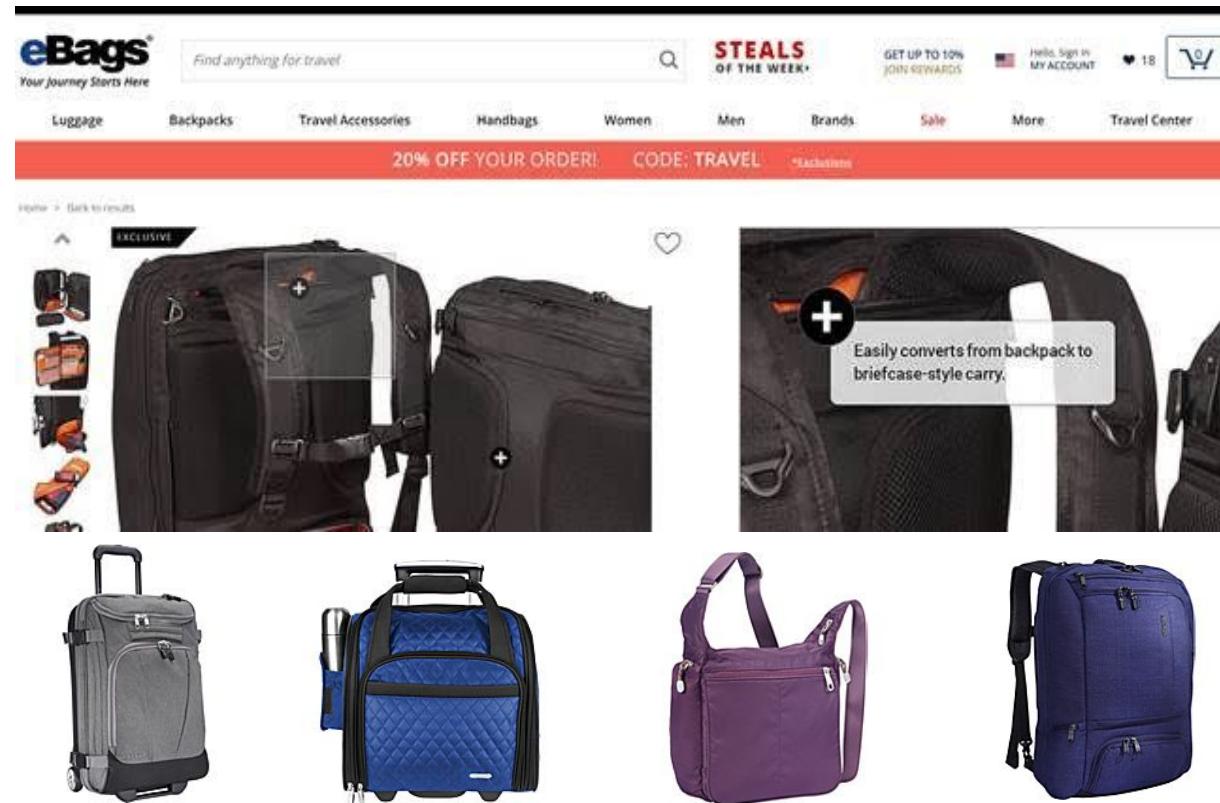
"Does integration of product features and benefits into product imagery, cause an increase in add-to-cart and ultimately sales of product?"

integrate
into product
images here:

The screenshot shows the eBags.com product page for the Professional Weekender backpack. At the top, there's a navigation bar with links like 'Luggage', 'Backpacks', 'Travel Accessories', 'Handbags', 'Women', 'Men', 'Brands', 'Sale', 'More', and 'Travel Center'. A search bar is at the top right with the text 'STEALS OF THE WEEK' and a 'GET UP TO 50% OFF RECOMMENDED' button. The main product image is a blue backpack with a red arrow pointing to it from the text above. To the left of the main image is a vertical stack of smaller images showing different angles of the backpack. To the right of the main image is a detailed product description box with sections for 'Product Features', 'Product Specifications', and 'Detailed Product Description'. The 'Product Features' section includes a bulleted list of features like 'User-organized performance travel backpack', 'Limited Lifetime Warranty', and 'Includes a 23" x 12" x 20" clothing compartment and front zippered overheads of regular size'. The 'Product Specifications' section lists dimensions (14" x 10.5" x 21"), weight (4.5 lbs), and material (Brushed nylon). The 'Detailed Product Description' section provides a full technical breakdown of the backpack's features and dimensions.

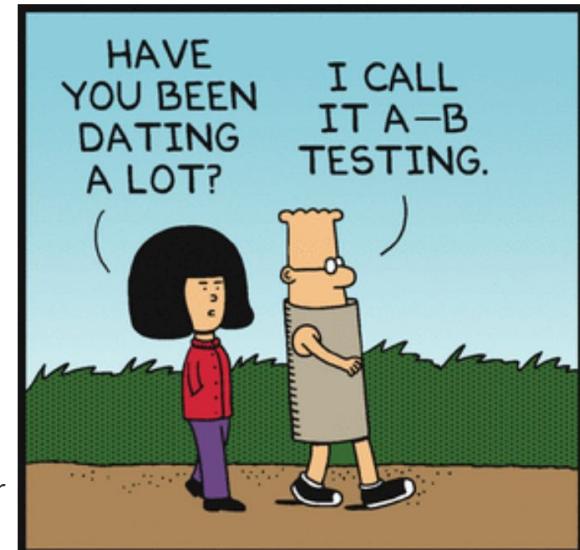
Treatment - Product Detail Page Changes

Four top bag models were curated with callouts in the product images that display feature and benefit text when zoomed into (mouseover or tap to zoom on mobile) vs. control with no changes.



A Few Notes on Web “A/B Testing”

- Assignment persists via cookie variable.
- Assignment not preserved across devices
 - Some spillover may occur.
- Understand client-side and server-side strengths and limitations
 - Client-side generally easier to implement but can cause “flicker” and slowness and not appropriate for complex functional tests (like on a shopping cart test).
 - Server-side generally better for performance and complex functional tests but harder to implement and requires a platform capability for server-side split-testing
- Kohavi, Ron, et. al., “Practical Guide to Controlled Experiments on the Web: Listen to Your Customers not to the HiPPO.”
<http://ai.stanford.edu/users/ronnyk/2009controlledExperimentsOnTheWebSurvey.pdf>



Hypothesis Testing and Outcomes Expected

Ho: Null Hypothesis: Add-to-Cart rate (ATC) is the same for both treatment and control for the 4 bag models in the test. Baseline ATC is ~16% for the 4.

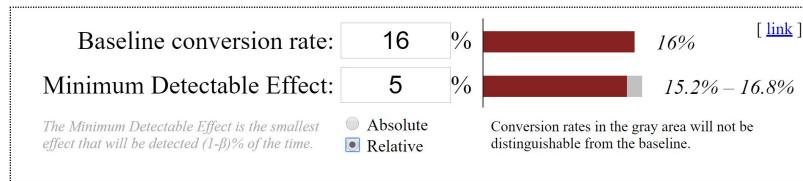
Ha: Alternate Hypothesis: ATC will be $\geq 5\%$ for treatment intervention of callouts and feature text within product detail images for the 4 bag models.

We are also interested in the outcome of order rates (conversion/CV) between treatment and control, along with important covariates of:

- Device type (PC, mobile, tablet)
- New vs. Repeat Visitor
- Major Marketing Channel (Paid Keywords, eMail, Social, Direct, SEO . . .)

Statistical Power

Question: How many subjects are needed for an A/B test?



Sample size:
33,163

per variation

Statistical power $1-\beta$:  80% Percent of the time the minimum effect size will be detected, assuming it exists

Significance level α :  5% Percent of the time a difference will be detected, assuming one does NOT exist

<http://www.evanmiller.org/ab-testing/sample-size.html>

- Calculated sample size based on:
 - Baseline rate
 - Minimum detectable effect
 - Statistical power
 - Significance level



<https://medium.com/airbnb-engineering/experiments-at-airbnb-e2db3abf39e7>

Randomization

“Server-side” split test experiment that utilizes a random number generator in the web server application to assign each visitor based on a 25 / 25 / 50 split (control A1 / control A2 / treatment B1).

Assignment in this experiment only occurs when a visitor visits the product detail page (PDP) for one of the 4 bag models. Control or Treatment is *randomly assigned* at that point based on a random number generator reflecting a 25/25/50 split.

| Covariate Balance Check | | | |
|-------------------------|-------------|-------------|----------------|
| Covariates | Control: A1 | Control: A2 | Treatment : B1 |
| Devices - Mobile | 25% (15.2k) | 25% (15.2k) | 50% (30.4k) |
| Devices - PC | 25% (7.3k) | 25% (7.3k) | 51% (14.8k) |
| Devices - Tablet | 25% (3.3k) | 25% (3.3k) | 50% (6.8k) |
| Marketing - Social | 25% (14.5k) | 25% (14.4k) | 50% (28.8k) |
| Marketing - Keyword | 24% (1.4k) | 25% (1.5k) | 51% (3.0k) |
| Marketing - Email | 25% (2.8k) | 25% (2.9k) | 50% (5.8k) |
| User - New | 25% (15.3k) | 25% (15.4k) | 50% (31.1k) |
| User - Repeat | 25% (10.5k) | 25% (10.4k) | 50% (21.0k) |
| Model - Wheeled | 25% (6.2k) | 25% (6.4k) | 50% (12.6k) |
| Model - TLS | 25% (9.9k) | 25% (9.8k) | 50% (19.9k) |
| Model - Professional | 24% (8.2k) | 25% (8.2k) | 51% (16.6k) |
| Model - Piazza | 25% (2.5k) | 25% (2.5k) | 50% (5.0k) |

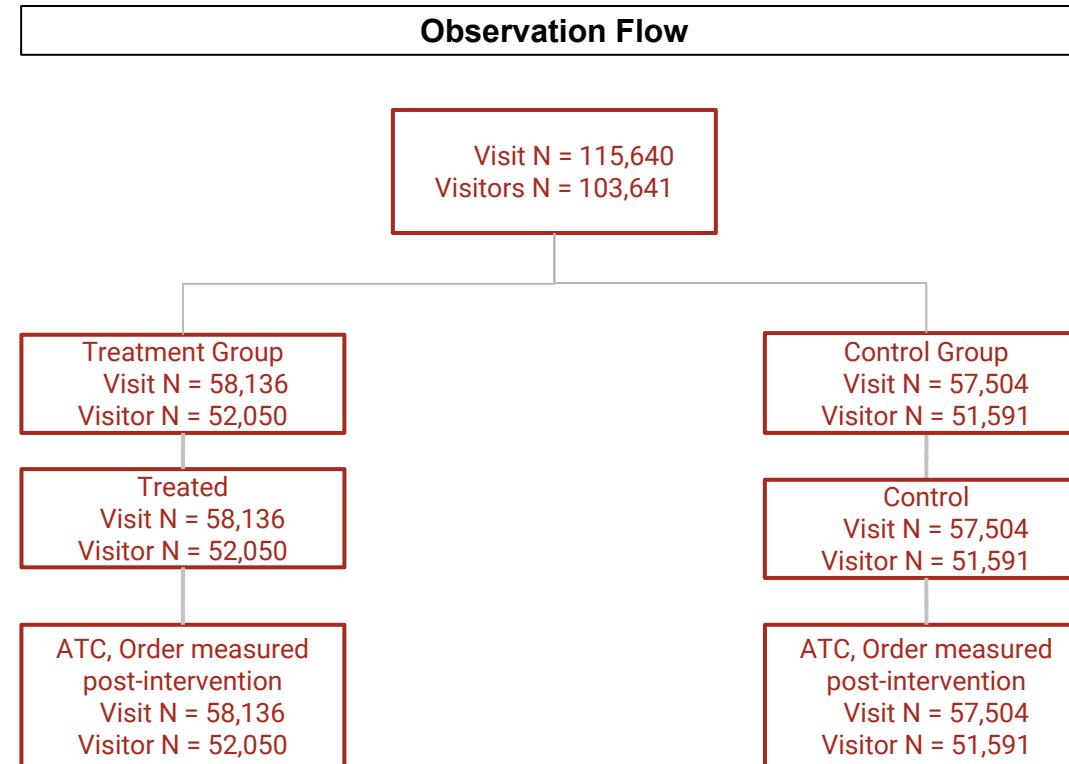
Randomization

“Server-side” split test experiment that utilizes a random number generator in the web server application to assign each visitor based on a 25 / 25 / 50 split (control A1 / control A2 / treatment B1).

Assignment in this experiment only occurs when a visitor visits the product detail page (PDP) for one of the 4 bag models. Control or Treatment is *randomly assigned* at that point based on a random number generator reflecting a 25/25/50 split.

| Covariates | Control: A1 | Control: A2 | Treatment : B1 |
|----------------------|-------------|-------------|----------------|
| Devices - Mobile | 25% | 25% | 50% |
| Devices - PC | 25% | 25% | 51% |
| Devices - Tablet | 24% | 25% | 51% |
| Marketing - Social | 24% | 25% | 51% |
| Marketing - Keyword | 24% | 26% | 51% |
| Marketing - Email | 25% | 25% | 50% |
| User - New | 25% | 25% | 50% |
| User - Repeat | 25% | 25% | 50% |
| Model - Wheeled | 25% | 25% | 50% |
| Model - TLS | 25% | 25% | 50% |
| Model - Professional | 24% | 25% | 51% |
| Model - Piazza | 25% | 25% | 50% |

Observation Flow Diagram and RXO



- Experiment type: Between subjects
- **RXO** Experiment Design (Post-test control group)
 - Treatment:
 - Randomize
 - Xperiment
 - Observe
 - Control:
 - Randomize
 - --
 - Observe

Data Analysis

April 6 -
April 16

N: 86,144
39 variables

Encoded
Dummy
Variables

N: 85,721
47 variables

~ Outcome Measures: (0s & 1s)

- Add-to-Cart (ATC)
- Orders

~ Randomization happens only after clicking
any of the 4 models to view product details.

| | 0 | 1 |
|--------|--------|--------|
| N | 57,504 | 58,136 |
| ATC | 2063 | 2126 |
| Orders | 1251 | 1389 |



6614 Ratings
★★★★★
eBags
TLS Mother Lode Weekender Convertible
\$200.00
\$129.99



2128 Ratings
★★★★★
eBags
TLS Mother Lode Weekender Convertible
Junior
\$119.99
\$109.99 - \$119.99



Figure 11: Adding products to cart from Home page

Visitor vs Visit

- Differentiating visit from visitor: A visitor could have many visits.
- For visitor level analysis: Aggregate by visitor_id



✓ Item Added To Cart
1 Item ready to Checkout - [View Cart](#)

eBags
TLS Mother Lode Weekender Convertible
\$129.99

[Checkout](#) [Continue Shopping](#)

SubTotal: \$129.99

Day 1: Visit = 1
Assigned = 1 (T) or 0 (C)

Day 2: ATC = 1
Still Assigned = 1

Checkout

1 Shipping Address

We cannot ship to P.O. Boxes or APO/DPO/FPO.

First Name

Last Name

Street Address 1 Enter a location

Street Address 2 (optional)

Day 3: Order = 1
Still Assigned = 1

Regression Analysis

Covariates of interest and their interaction terms:

1. Device: Mobile, PC, Tablet
2. Recent vs New Users
3. Marketing Channels: Keywords, Email, Social, SEOs, Untracked

Findings (All models data at visit level):

1. Covariate balance showed randomization worked. (Yay!)
2. No treatment effect of statistical significance for Add-to-Cart (ATCs)
3. Orders have treatment effect of 0.005 (Borderline significant).
4. CATE for mobile devices is lesser for orders compared with tablets and pc.

Regression Analysis

Linear Regression: Add-to-Cart (ATC), Orders Aggregate for all models at visit level

Covariate of Interest: Devices

Baseline Category: Device_PC

| Regression of PDP Visits, ATC, Orders aggregate on all data | | | | | | |
|---|-----------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | Dependent variable: | | | | | |
| | (1) | atc_aggregate (2) | (3) | (4) | ord_aggregate (5) | (6) |
| assigned | 0.001 (0.001) | 0.001 (0.001) | -0.0002 (0.003) | 0.002** (0.001) | 0.002** (0.001) | 0.004* (0.002) |
| device_mobile | | -0.044*** (0.002) | -0.044*** (0.002) | | -0.023*** (0.001) | -0.022*** (0.002) |
| device_tablet | | -0.035*** (0.002) | -0.037*** (0.003) | | -0.018*** (0.002) | -0.018*** (0.002) |
| assigned:device_mobile | | | 0.0004 (0.003) | | | -0.003 (0.003) |
| assigned:device_tablet | | | 0.004 (0.004) | | | -0.001 (0.003) |
| Constant | 0.029*** (0.001) | 0.060*** (0.002) | 0.061*** (0.002) | 0.018*** (0.001) | 0.034*** (0.001) | 0.033*** (0.002) |
| Observations | 85,721 | 85,721 | 85,721 | 85,721 | 85,721 | 85,721 |
| R2 | 0.00000 | 0.012 | 0.012 | 0.0001 | 0.005 | 0.005 |
| Adjusted R2 | -0.00001 | 0.012 | 0.012 | 0.0001 | 0.005 | 0.005 |
| Residual Std. Error | 0.171 (df = 85719) | 0.170 (df = 85717) | 0.170 (df = 85715) | 0.138 (df = 85719) | 0.138 (df = 85717) | 0.138 (df = 85715) |
| Note: | *p<0.1; **p<0.05; ***p<0.01 | | | | | |

Findings:

1. Covariate balance check
2. No treatment effect for ATCs.
3. Orders have treatment effect of 0.005 (Borderline significant).
4. CATE for mobile devices is lesser for orders compared with tablets and pc.

Next Steps

1. Covariate analysis with marketing channels
2. Analyze individual models data
3. Run experiment longer for orders statistical power
4. Visitor vs Visit level analysis
5. Overall site ATC and Order analysis irrespective of the model

One thing that puzzles us:

Spillover with Device Attribution! -
Potential for bias and underestimate coefficients?

Appendix - A - All Data

Devices - PC, Mobile and Tablet - Visit

All Data (not model specific) - Devices Scenario - Linear Regression:
ATC, Orders Aggregate for all models per Cookie ID per day
Baseline Category: Device_PC

| Regression of ATC, Orders aggregate on all data-devices covariates | | | | | | |
|--|-------------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | Dependent variable: | | | | | |
| | (1) | atc_aggregate | (2) | (3) | (4) | ord_aggregate |
| assigned | 0.001 (0.001) | 0.001 (0.001) | 0.0003 (0.003) | 0.002* (0.001) | 0.002* (0.001) | 0.005* (0.002) |
| device_mobile | | -0.053*** (0.002) | -0.053*** (0.002) | | -0.028*** (0.001) | -0.026*** (0.002) |
| device_tablet | | -0.038*** (0.002) | -0.038*** (0.003) | | -0.021*** (0.002) | -0.020*** (0.002) |
| assigned:device_mobile | | | 0.0004 (0.003) | | | -0.004 (0.002) |
| assigned:device_tablet | | | -0.00005 (0.004) | | | -0.003 (0.003) |
| Constant | 0.036*** (0.001) | 0.072*** (0.002) | 0.072*** (0.002) | 0.022*** (0.001) | 0.041*** (0.001) | 0.040*** (0.002) |
| Observations | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 |
| R2 | 0.00000 | 0.015 | 0.015 | 0.00005 | 0.007 | 0.007 |
| Adjusted R2 | -0.00001 | 0.015 | 0.015 | 0.00004 | 0.007 | 0.007 |
| Residual Std. Error | 0.189 (df = 115638) | 0.188 (df = 115636) | 0.188 (df = 115634) | 0.151 (df = 115638) | 0.150 (df = 115636) | 0.150 (df = 115634) |
| Note: | *p<0.05; **p<0.01; ***p<0.001 | | | | | |

Devices - PC, Mobile and Tablet - Visitor

All Data (not model specific) - Devices Scenario - Linear Regression:

ATC, Orders Aggregate for all models per Cookie ID per day

Baseline Category: Device_PC

Regression of ATC, Orders aggregate on all data-devices covariates

| | Dependent variable: | | | | | |
|------------------------|---------------------|----------------------|----------------------|----------------------|---------------------|----------------------|
| | (1) | atc_aggregate | (2) | (3) | (4) | ord_aggregate |
| | | | | | | (5) |
| assigned | 0.001 (0.001) | 0.001 (0.001) | | 0.0003 (0.004) | 0.003* (0.001) | 0.002* (0.001) |
| device_mobile | | -0.060*** (0.002) | | -0.060*** (0.003) | | -0.032*** (0.001) |
| device_tablet | | | -0.043*** (0.003) | -0.044*** (0.004) | | -0.024*** (0.002) |
| assigned:device_mobile | | | | 0.0005 (0.004) | | -0.005 (0.003) |
| assigned:device_tablet | | | | 0.0003 (0.005) | | -0.003 (0.004) |
| Constant | 0.040*** (0.001) | 0.081*** (0.002) | | 0.081*** (0.003) | 0.024*** (0.001) | 0.046*** (0.001) |
| Observations | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 |
| R2 | 0.00000 | 0.014 | 0.014 | 0.0001 | 0.008 | 0.008 |
| Adjusted R2 | -0.00001 | 0.014 | 0.014 | 0.0001 | 0.008 | 0.008 |
| Residual Std. Error | 0.221 (df = 103639) | 0.219 (df = 103637) | 0.219 (df = 103635) | 0.161 (df = 103639) | 0.161 (df = 103637) | 0.161 (df = 103635) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visit

All Data (not model specific) - New User Scenario - Linear Regression:
ATC, Orders Aggregate for all models per Cookie ID per day
Baseline Category: Recent users

Regression of ATC and Orders aggregate on all data-new user covariate

| Dependent variable: | | | | | | |
|---------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
| | (1) | atc_aggregate | (2) | (3) | (4) | ord_aggregate |
| assigned | 0.001 (0.001) | 0.001 (0.001) | 0.001 (0.002) | 0.002* (0.001) | 0.002* (0.001) | 0.004* (0.002) |
| new_user | | -0.025*** (0.001) | | -0.025*** (0.002) | | -0.021*** (0.001) |
| assigned:new_user | | | | -0.001 (0.002) | | -0.003 (0.002) |
| Constant | 0.036*** (0.001) | 0.050*** (0.001) | 0.049*** (0.001) | 0.022*** (0.001) | 0.033*** (0.001) | 0.032*** (0.001) |
| Observations | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 |
| R2 | 0.00000 | 0.004 | 0.004 | 0.00005 | 0.005 | 0.005 |
| Adjusted R2 | -0.00001 | 0.004 | 0.004 | 0.00004 | 0.005 | 0.005 |
| Residual Std. Error | 0.189 (df = 115638) | 0.189 (df = 115637) | 0.189 (df = 115636) | 0.151 (df = 115638) | 0.150 (df = 115637) | 0.150 (df = 115636) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visitor

All Data (not model specific) - New User Scenario - Linear Regression:
 ATC, Orders Aggregate for all models per Cookie ID per day
 Baseline Category: Recent users

Regression of ATC and Orders aggregate on all data-new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | atc_aggregate | | | | ord_aggregate | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | 0.001 (0.001) | 0.001 (0.001) | 0.003 (0.003) | 0.003* (0.001) | 0.003** (0.001) | 0.005** (0.002) |
| new_user | | -0.030*** (0.001) | -0.028*** (0.002) | | -0.022*** (0.001) | -0.019*** (0.002) |
| assigned:new_user | | | -0.003 (0.003) | | | -0.005* (0.002) |
| Constant | 0.040*** (0.001) | 0.058*** (0.001) | 0.057*** (0.002) | 0.024*** (0.001) | 0.037*** (0.001) | 0.036*** (0.001) |
| Observations | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 |
| R2 | 0.00000 | 0.004 | 0.004 | 0.0001 | 0.004 | 0.005 |
| Adjusted R2 | -0.00001 | 0.004 | 0.004 | 0.0001 | 0.004 | 0.005 |
| Residual Std. Error | 0.221 (df = 103639) | 0.220 (df = 103638) | 0.220 (df = 103637) | 0.161 (df = 103639) | 0.161 (df = 103638) | 0.161 (df = 103637) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Marketing Channels - Visit

All Data (not model specific) - Marketing Channels Scenario - Linear Regression:
 ATC, Orders Aggregate for all models per Cookie ID per day
 Baseline Category: Keywords

| | (1) | atc_aggregate | (2) | (3) | (4) | ord_aggregate | (5) | (6) |
|------------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----|
| assigned | 0.001 (0.001) | 0.0003 (0.001) | | 0.005 (0.007) | 0.002* (0.001) | 0.002* (0.001) | 0.010* (0.005) | |
| mkt_email | | 0.0001 (0.004) | | 0.004 (0.006) | | -0.007* (0.003) | -0.003 (0.004) | |
| mkt_seo | | | 0.014** (0.005) | 0.018* (0.007) | | 0.004 (0.004) | 0.008 (0.005) | |
| mkt_social | | | -0.067*** (0.003) | -0.065*** (0.005) | | -0.026*** (0.002) | -0.022*** (0.003) | |
| mkt_untracked | | | | 0.014** (0.004) | 0.015* (0.006) | 0.009** (0.003) | 0.012** (0.004) | |
| mkt_others | | | | -0.045*** (0.004) | -0.044*** (0.005) | -0.022*** (0.003) | -0.018*** (0.004) | |
| assigned:mkt_email | | | | | -0.009 (0.008) | | -0.008 (0.006) | |
| assigned:mkt_seo | | | | | -0.007 (0.010) | | -0.007 (0.007) | |
| assigned:mkt_social | | | | | -0.005 (0.007) | | -0.009 (0.005) | |
| assigned:mkt_untracked | | | | | -0.002 (0.008) | | -0.007 (0.006) | |
| assigned:mkt_others | | | | | -0.003 (0.007) | | -0.009 (0.005) | |
| Constant | 0.036*** (0.001) | 0.076*** (0.003) | | 0.074*** (0.005) | 0.022*** (0.001) | 0.039*** (0.002) | 0.035*** (0.003) | |
| Observations | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 | |
| R2 | 0.00000 | 0.032 | 0.032 | 0.00005 | 0.008 | 0.008 | 0.008 | |
| Adjusted R2 | -0.00001 | 0.032 | 0.032 | 0.00004 | 0.008 | 0.008 | 0.008 | |
| Residual Std. Error | 0.189 (df = 115638) | 0.186 (df = 115633) | 0.186 (df = 115628) | 0.151 (df = 115638) | 0.150 (df = 115633) | 0.150 (df = 115628) | 0.150 (df = 115628) | |

Marketing Channels - Visitor

All Data (not model specific) - New User Scenario - Instrumental Variables Regression:
 ATC, Orders Aggregate for all models per Cookie ID per day
 Baseline Category: Keywords

| | (1) | atc_aggregate | (2) | (3) | (4) | ord_aggregate | (5) | (6) |
|-------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-------|-----|
| assigned | 0.001 (0.001) | 0.0004 (0.001) | 0.009 (0.008) | 0.003* (0.001) | 0.002* (0.001) | 0.011* (0.005) | | |
| mkt_email | | 0.006 (0.005) | 0.013 (0.007) | | -0.006 (0.003) | -0.001 (0.004) | | |
| mkt_seo | | 0.020** (0.006) | 0.028** (0.009) | | 0.007 (0.004) | 0.011 (0.006) | | |
| mkt_social | | -0.073*** (0.004) | -0.069*** (0.005) | | -0.029*** (0.003) | -0.024*** (0.004) | | |
| mkt_untracked | | 0.019*** (0.005) | 0.022** (0.007) | | 0.013*** (0.004) | 0.017*** (0.005) | | |
| mkt_others | | -0.049*** (0.004) | -0.046*** (0.006) | | -0.026*** (0.003) | -0.020*** (0.004) | | |
| assigned:mkt_email | | | -0.014 (0.010) | | | -0.010 (0.006) | | |
| assigned:mkt_seo | | | -0.015 (0.012) | | | -0.008 (0.008) | | |
| assigned:mkt_social | | | -0.008 (0.008) | | | -0.010 (0.005) | | |
| assigned:mkt_untracked | | | -0.006 (0.010) | | | -0.007 (0.007) | | |
| assigned:mkt_others | | | -0.006 (0.009) | | | -0.011 (0.006) | | |
| Constant | 0.040*** (0.001) | 0.083*** (0.004) | 0.079*** (0.005) | 0.024*** (0.001) | 0.042*** (0.003) | 0.038*** (0.004) | | |
| Observations | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 | | |
| R ² | 0.00000 | | 0.031 | 0.031 | 0.0001 | 0.009 | 0.010 | |
| Adjusted R ² | -0.00001 | | 0.031 | 0.031 | 0.0001 | 0.009 | 0.009 | |
| Residual Std. Error | 0.221 (df = 103639) | 0.217 (df = 103634) | 0.217 (df = 103629) | 0.161 (df = 103639) | 0.161 (df = 103634) | 0.161 (df = 103629) | | |

All covariates- Visit

All Data (not model specific) - Marketing Channels Scenario - Linear Regression:
 ATC, Orders Aggregate for all models per Cookie ID per day
 Baseline Category: Recent Users, PC, Keywords

Regression of ATC and Orders aggregate-all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|-------------------|----------------------|----------------------|
| | (1) | atc_aggregate (2) | (3) | (4) | ord_aggregate (5) | (6) |
| assigned | 0.001 (0.001) | 0.0003 (0.001) | 0.006 (0.007) | 0.002* (0.001) | 0.002* (0.001) | 0.014** (0.005) |
| new_user | | -0.020*** (0.001) | -0.019*** (0.002) | | -0.021*** (0.001) | -0.020*** (0.001) |
| device_mobile | | -0.031*** (0.002) | -0.032*** (0.002) | | -0.021*** (0.001) | -0.020*** (0.002) |
| device_tablet | | -0.029*** (0.002) | -0.029*** (0.003) | | -0.020*** (0.002) | -0.018*** (0.002) |
| mkt_email | | -0.008* (0.004) | -0.003 (0.006) | | -0.015*** (0.003) | -0.010** (0.004) |
| mkt_seo | | 0.007 (0.005) | 0.011 (0.007) | | -0.001 (0.004) | 0.003 (0.005) |
| mkt_social | | -0.059*** (0.003) | -0.057*** (0.005) | | -0.021*** (0.002) | -0.017*** (0.003) |
| mkt_untracked | | 0.013** (0.004) | 0.014* (0.006) | | 0.009** (0.003) | 0.012** (0.004) |
| mkt_others | | -0.051*** (0.004) | -0.050*** (0.005) | | -0.029*** (0.003) | -0.024*** (0.004) |

All covariates- Visit - contd.

| | | | | | | |
|------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:new_user | -0.002 (0.002) | -0.003 (0.002) | | | | |
| assigned:device_mobile | 0.0004 (0.003) | -0.003 (0.002) | | | | |
| assigned:device_tablet | -0.0001 (0.004) | -0.003 (0.003) | | | | |
| assigned:mkt_email | -0.009 (0.008) | -0.009 (0.006) | | | | |
| assigned:mkt_seo | -0.008 (0.010) | -0.008 (0.007) | | | | |
| assigned:mkt_social | -0.005 (0.007) | -0.009 (0.005) | | | | |
| assigned:mkt_untracked | -0.002 (0.008) | -0.007 (0.006) | | | | |
| assigned:mkt_others | -0.003 (0.007) | -0.009 (0.005) | | | | |
| Constant | 0.036*** (0.001) | 0.107*** (0.004) | 0.104*** (0.005) | 0.022*** (0.001) | 0.064*** (0.003) | 0.058*** (0.004) |
| Observations | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 | 115,640 |
| R2 | 0.00000 | 0.039 | 0.040 | 0.00005 | 0.016 | 0.016 |
| Adjusted R2 | -0.00001 | 0.039 | 0.039 | 0.00004 | 0.016 | 0.016 |
| Residual Std. Error | 0.189 (df = 115638) | 0.186 (df = 115630) | 0.186 (df = 115622) | 0.151 (df = 115638) | 0.150 (df = 115630) | 0.150 (df = 115622) |
| Note: | ===== | | | | | |
| | *p<0.05; **p<0.01; ***p<0.001 | | | | | |

All covariates- Visitor - ATC and Order Aggregate

All Data (not model specific) - Marketing Channels Scenario - Linear Regression:
ATC, Orders Aggregate for all models per Cookie ID per day
Baseline Category: Recent Users, PC, Keywords

Regression of ATC and Orders aggregate on all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|-------------------|----------------------|----------------------|
| | (1) | atc_aggregate | (2) | (3) | (4) | ord_aggregate |
| | | | | | | (5) |
| assigned | 0.001 (0.001) | 0.0005 (0.001) | 0.011 (0.009) | 0.003* (0.001) | 0.002* (0.001) | 0.018** (0.006) |
| new_user | | -0.025*** (0.002) | -0.023*** (0.002) | | -0.023*** (0.001) | -0.020*** (0.002) |
| device_mobile | | -0.035*** (0.002) | -0.035*** (0.003) | | -0.024*** (0.001) | -0.022*** (0.002) |
| device_tablet | | -0.033*** (0.003) | -0.033*** (0.004) | | -0.022*** (0.002) | -0.021*** (0.003) |
| mkt_email | | -0.004 (0.005) | 0.004 (0.007) | | -0.014*** (0.003) | -0.008 (0.004) |
| mkt_seo | | 0.012 (0.006) | 0.020* (0.009) | | 0.001 (0.004) | 0.006 (0.006) |
| mkt_social | | -0.065*** (0.004) | -0.061*** (0.005) | | -0.023*** (0.003) | -0.019*** (0.004) |
| mkt_untracked | | 0.018*** (0.005) | 0.021** (0.007) | | 0.013*** (0.004) | 0.016*** (0.005) |
| mkt_others | | -0.057*** (0.004) | -0.054*** (0.006) | | -0.033*** (0.003) | -0.027*** (0.004) |

All covariates- Visitor - contd.

| | | | | | | |
|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| assigned:new_user | -0.004 (0.003) | | | -0.005* (0.002) | | |
| assigned:device_mobile | 0.0002 (0.004) | | | -0.004 (0.003) | | |
| assigned:device_tablet | -0.001 (0.005) | | | -0.003 (0.004) | | |
| assigned:mkt_email | -0.016 (0.010) | | | -0.012 (0.006) | | |
| assigned:mkt_seo | -0.016 (0.012) | | | -0.009 (0.008) | | |
| assigned:mkt_social | -0.009 (0.008) | | | -0.009 (0.005) | | |
| assigned:mkt_untracked | -0.006 (0.010) | | | -0.008 (0.007) | | |
| assigned:mkt_others | -0.007 (0.009) | | | -0.012* (0.006) | | |
| Constant | 0.040*** (0.001) | 0.121*** (0.004) | 0.116*** (0.006) | 0.024*** (0.001) | 0.072*** (0.003) | 0.064*** (0.004) |
| Observations | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 |
| R2 | 0.00000 | 0.039 | 0.039 | 0.0001 | 0.018 | 0.018 |
| Adjusted R2 | -0.00001 | 0.038 | 0.038 | 0.0001 | 0.018 | 0.018 |
| Residual Std. Error | 0.221 (df = 103639) | 0.216 (df = 103631) | 0.216 (df = 103623) | 0.161 (df = 103639) | 0.160 (df = 103631) | 0.160 (df = 103623) |
| Note: | ===== | | | | | *p<0.05; **p<0.01; ***p<0.001 |

All covariates- Visitor - Atc and Order Bit

All Data (not model specific) - Marketing Channels Scenario - Linear Regression:
ATC, Orders Aggregate for all models per Cookie ID per day
Baseline Category: Recent Users, PC, Keywords

Regression of ATC and Orders bit on all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|------------------|----------------------|-------------------|----------------------|
| | (1) | atc_model | (2) | (3) | (4) | ord_model |
| assigned | 0.001 (0.001) | 0.0005 (0.001) | 0.012 (0.008) | 0.003** (0.001) | 0.002* (0.001) | 0.017** (0.006) |
| new_user | | -0.021*** (0.001) | | -0.019*** (0.002) | | -0.022*** (0.001) |
| device_mobile | | -0.030*** (0.002) | | -0.029*** (0.002) | | -0.023*** (0.001) |
| device_tablet | | -0.027*** (0.002) | | -0.026*** (0.003) | | -0.021*** (0.003) |
| mkt_email | | -0.007 (0.004) | | 0.001 (0.006) | | -0.014*** (0.003) |
| mkt_seo | | 0.007 (0.005) | | 0.013 (0.007) | | 0.0005 (0.004) |
| mkt_social | | -0.062*** (0.004) | | -0.057*** (0.005) | | -0.023*** (0.003) |
| mkt_untracked | | 0.013** (0.004) | | 0.017** (0.006) | | 0.012*** (0.003) |
| mkt_others | | -0.054*** (0.004) | | -0.050*** (0.005) | | -0.033*** (0.003) |
| | | | | | | -0.027*** (0.004) |

All covariates- Visitor - contd.

| assigned:new_user | | -0.003 (0.003) | | | -0.005* (0.002) | |
|------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:device_mobile | | -0.001 (0.003) | | | -0.004 (0.003) | |
| assigned:device_tablet | | -0.001 (0.004) | | | -0.004 (0.004) | |
| assigned:mkt_email | | -0.016 (0.009) | | | -0.012 (0.006) | |
| assigned:mkt_seo | | -0.011 (0.011) | | | -0.008 (0.008) | |
| assigned:mkt_social | | -0.009 (0.007) | | | -0.009 (0.005) | |
| assigned:mkt_untracked | | -0.007 (0.009) | | | -0.007 (0.007) | |
| assigned:mkt_others | | -0.009 (0.008) | | | -0.011 (0.006) | |
| Constant | 0.036*** (0.001) | 0.110*** (0.004) | 0.104*** (0.005) | 0.024*** (0.001) | 0.071*** (0.003) | 0.063*** (0.004) |
| Observations | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 | 103,641 |
| R2 | 0.00000 | 0.041 | 0.041 | 0.0001 | 0.018 | 0.018 |
| Adjusted R2 | -0.00000 | 0.041 | 0.041 | 0.0001 | 0.018 | 0.018 |
| Residual Std. Error | 0.189 (df = 103639) | 0.185 (df = 103631) | 0.185 (df = 103623) | 0.156 (df = 103639) | 0.155 (df = 103631) | 0.155 (df = 103623) |
| Note: | *p<0.05; **p<0.01; ***p<0.001 | | | | | |

Appendix - B - Piazza

Devices - PC, Mobile and Tablet - Visit

Regression of ATC, Orders piazza-devices covariates

| | Dependent variable: | | | | | | |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----|
| | (1) | atc_piazza | (2) | (3) | (4) | ord_piazza | |
| | (1) | atc_piazza | (2) | (3) | (4) | (5) | (6) |
| assigned | 0.002 (0.005) | 0.002 (0.005) | 0.004 (0.009) | 0.008* (0.004) | 0.007* (0.004) | 0.016* (0.007) | |
| device_mobile | | -0.062*** (0.005) | -0.062*** (0.008) | | -0.035*** (0.004) | -0.030*** (0.006) | |
| device_tablet | | -0.052*** (0.006) | -0.046*** (0.009) | | -0.036*** (0.005) | -0.024*** (0.007) | |
| assigned:device_mobile | | | -0.0003 (0.011) | | | -0.009 (0.009) | |
| assigned:device_tablet | | | | -0.012 (0.013) | | -0.024* (0.010) | |
| Constant | 0.059*** (0.003) | 0.097*** (0.005) | 0.096*** (0.007) | 0.032*** (0.002) | 0.054*** (0.004) | 0.050*** (0.005) | |
| Observations | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 | |
| R2 | 0.00002 | 0.014 | 0.015 | 0.0004 | 0.009 | 0.009 | |
| Adjusted R2 | -0.0001 | 0.014 | 0.014 | 0.0003 | 0.009 | 0.009 | |
| Residual Std. Error | 0.238 (df = 10950) | 0.236 (df = 10948) | 0.236 (df = 10946) | 0.185 (df = 10950) | 0.184 (df = 10948) | 0.184 (df = 10946) | |

Note:

*p<0.05; **p<0.01; ***p<0.001

Devices - PC, Mobile and Tablet - Visitor

Regression of ATC, Orders piazza -devices covariates

| | Dependent variable: | | | | | |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | (1) | atc_piazza | (3) | (4) | ord_piazza | (6) |
| assigned | 0.003 (0.005) | 0.002 (0.005) | 0.004 (0.011) | 0.009* (0.004) | 0.008* (0.004) | 0.017* (0.008) |
| device_mobile | | -0.070*** (0.006) | -0.070*** (0.009) | | -0.039*** (0.005) | -0.034*** (0.006) |
| device_tablet | | -0.058*** (0.007) | -0.052*** (0.011) | | -0.041*** (0.005) | -0.028*** (0.007) |
| assigned:device_mobile | | | 0.0001 (0.013) | | | -0.010 (0.009) |
| assigned:device_tablet | | | -0.013 (0.015) | | | -0.025* (0.010) |
| Constant | 0.064*** (0.004) | 0.107*** (0.006) | 0.106*** (0.008) | 0.034*** (0.003) | 0.059*** (0.004) | 0.055*** (0.005) |
| Observations | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 |
| R2 | 0.00003 | 0.015 | 0.016 | 0.0005 | 0.010 | 0.011 |
| Adjusted R2 | -0.0001 | 0.015 | 0.015 | 0.0004 | 0.010 | 0.010 |
| Residual Std. Error | 0.260 (df = 10121) | 0.258 (df = 10119) | 0.258 (df = 10117) | 0.192 (df = 10121) | 0.191 (df = 10119) | 0.191 (df = 10117) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visit

Regression of ATC and Orders piazza-new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | (1) | atc_piazza (2) | (3) | (4) | ord_piazza (5) | (6) |
| assigned | 0.002 (0.005) | 0.002 (0.005) | 0.005 (0.007) | 0.008* (0.004) | 0.007* (0.004) | 0.012* (0.005) |
| new_user | | -0.031*** (0.004) | -0.028*** (0.006) | | -0.024*** (0.003) | -0.019*** (0.005) |
| assigned:new_user | | | -0.006 (0.009) | | | -0.010 (0.007) |
| Constant | 0.059*** (0.003) | 0.073*** (0.004) | 0.072*** (0.005) | 0.032*** (0.002) | 0.042*** (0.003) | 0.040*** (0.004) |
| Observations | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 |
| R2 | 0.00002 | 0.004 | 0.004 | 0.0004 | 0.005 | 0.005 |
| Adjusted R2 | -0.0001 | 0.004 | 0.004 | 0.0003 | 0.004 | 0.004 |
| Residual Std. Error | 0.238 (df = 10950) | 0.238 (df = 10949) | 0.238 (df = 10948) | 0.185 (df = 10950) | 0.184 (df = 10949) | 0.184 (df = 10948) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visitor

Regression of ATC and Orders piazza -new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|---------------------|
| | (1) | atc_piazza (2) | (3) | (4) | ord_piazza (5) | (6) |
| assigned | 0.003 (0.005) | 0.003 (0.005) | 0.009 (0.008) | 0.009* (0.004) | 0.008* (0.004) | 0.018** (0.006) |
| new_user | | -0.032*** (0.005) | -0.025*** (0.007) | | -0.023*** (0.004) | -0.013* (0.005) |
| assigned:new_user | | | -0.013 (0.010) | | | -0.019* (0.008) |
| Constant | 0.064*** (0.004) | 0.080*** (0.005) | 0.076*** (0.006) | 0.034*** (0.003) | 0.045*** (0.003) | 0.040*** (0.004) |
| Observations | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 |
| R2 | 0.00003 | 0.004 | 0.004 | 0.0005 | 0.004 | 0.005 |
| Adjusted R2 | -0.0001 | 0.004 | 0.004 | 0.0004 | 0.004 | 0.004 |
| Residual Std. Error | 0.260 (df = 10121) | 0.259 (df = 10120) | 0.259 (df = 10119) | 0.192 (df = 10121) | 0.191 (df = 10120) | 0.191 (df = 10119) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Marketing Channels - Visit

| | (1) | atc_piazza | (2) | (3) | (4) | ord_piazza | (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|---------------------|---------------------|-----|-----|
| assigned | 0.002 (0.005) | 0.001 (0.005) | -0.018 (0.019) | 0.008* (0.004) | 0.007* (0.004) | 0.006 (0.014) | | |
| mkt_email | | 0.018 (0.012) | 0.021 (0.018) | | 0.001 (0.009) | 0.003 (0.012) | | |
| mkt_seo | | 0.014 (0.015) | -0.009 (0.021) | | 0.010 (0.011) | 0.007 (0.015) | | |
| mkt_social | | -0.064*** (0.010) | -0.075*** (0.015) | | -0.020** (0.007) | -0.020* (0.010) | | |
| mkt_untracked | | 0.016 (0.013) | 0.009 (0.018) | | 0.009 (0.009) | 0.011 (0.013) | | |
| mkt_others | | 0.002 (0.015) | -0.032 (0.019) | | 0.011 (0.011) | -0.009 (0.013) | | |
| assigned:mkt_email | | | -0.005 (0.024) | | | -0.004 (0.017) | | |
| assigned:mkt_seo | | | 0.045 (0.029) | | | 0.007 (0.021) | | |
| assigned:mkt_social | | | 0.022 (0.020) | | | -0.001 (0.014) | | |
| assigned:mkt_untracked | | | 0.014 (0.025) | | | -0.005 (0.018) | | |
| assigned:mkt_others | | | 0.069* (0.029) | | | 0.042 (0.022) | | |
| Constant | 0.059*** (0.003) | 0.086*** (0.010) | 0.096*** (0.014) | 0.032*** (0.002) | 0.039*** (0.007) | 0.040*** (0.009) | | |
| Observations | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 | | |
| R2 | 0.00002 | 0.026 | 0.028 | 0.0004 | 0.006 | 0.007 | | |
| Adjusted R2 | -0.0001 | 0.026 | 0.027 | 0.0003 | 0.005 | 0.006 | | |
| Residual Std. Error | 0.238 (df = 10950) | 0.235 (df = 10945) | 0.235 (df = 10940) | 0.185 (df = 10950) | 0.184 (df = 10945) | 0.184 (df = 10940) | | |

Marketing Channels - Visitor

| | (1) | atc_piazza (2) | (3) | (4) | ord_piazza (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|---------------------|---------------------|
| assigned | 0.003 (0.005) | 0.002 (0.005) | -0.020 (0.021) | 0.009* (0.004) | 0.008* (0.004) | 0.007 (0.015) |
| mkt_email | | 0.024 (0.014) | 0.027 (0.020) | | 0.001 (0.009) | 0.004 (0.013) |
| mkt_seo | | 0.018 (0.017) | -0.012 (0.023) | | 0.013 (0.012) | 0.009 (0.016) |
| mkt_social | | -0.068*** (0.011) | -0.081*** (0.016) | | -0.024** (0.008) | -0.023* (0.011) |
| mkt_untracked | | 0.021 (0.014) | 0.016 (0.021) | | 0.011 (0.010) | 0.014 (0.014) |
| mkt_others | | 0.003 (0.016) | -0.038 (0.021) | | -0.002 (0.012) | -0.027* (0.013) |
| assigned:mkt_email | | | -0.006 (0.028) | | | -0.006 (0.019) |
| assigned:mkt_seo | | | 0.059 (0.033) | | | 0.009 (0.024) |
| assigned:mkt_social | | | 0.024 (0.021) | | | -0.002 (0.016) |
| assigned:mkt_untracked | | | 0.010 (0.028) | | | -0.006 (0.020) |
| assigned:mkt_others | | | 0.084* (0.033) | | | 0.053* (0.023) |
| Constant | 0.064*** (0.004) | 0.093*** (0.011) | 0.103*** (0.016) | 0.034*** (0.003) | 0.044*** (0.008) | 0.044*** (0.010) |
| Observations | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 |
| R2 | 0.00003 | 0.027 | 0.029 | 0.0005 | 0.007 | 0.008 |
| Adjusted R2 | -0.0001 | 0.026 | 0.028 | 0.0004 | 0.006 | 0.007 |
| Residual Std. Error | 0.260 (df = 10121) | 0.256 (df = 10116) | 0.256 (df = 10111) | 0.192 (df = 10121) | 0.191 (df = 10116) | 0.191 (df = 10111) |

All covariates- Visit

Regression of ATC and Orders piazza-all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|-------------------|----------------------|----------------------|
| | (1) | atc_piazza (2) | (3) | (4) | ord_piazza (5) | (6) |
| assigned | 0.002 (0.005) | 0.001 (0.004) | -0.012 (0.021) | 0.008* (0.004) | 0.007* (0.004) | 0.019 (0.016) |
| new_user | | -0.028*** (0.004) | -0.025*** (0.006) | | -0.024*** (0.003) | -0.019*** (0.005) |
| device_mobile | | -0.041*** (0.006) | -0.040*** (0.008) | | -0.027*** (0.004) | -0.024*** (0.006) |
| device_tablet | | -0.042*** (0.006) | -0.036*** (0.009) | | -0.033*** (0.005) | -0.022** (0.007) |
| mkt_email | | 0.007 (0.012) | 0.011 (0.018) | | -0.008 (0.009) | -0.004 (0.012) |
| mkt_seo | | 0.004 (0.015) | -0.017 (0.020) | | 0.003 (0.011) | 0.001 (0.014) |
| mkt_social | | -0.059*** (0.010) | -0.070*** (0.015) | | -0.018* (0.007) | -0.017 (0.010) |
| mkt_untracked | | 0.018 (0.012) | 0.011 (0.018) | | 0.010 (0.009) | 0.012 (0.013) |
| mkt_others | | -0.005 (0.015) | -0.038 (0.020) | | 0.005 (0.011) | -0.014 (0.013) |

All covariates- Visit - contd.

| | | | | | | |
|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| assigned:new_user | -0.006 (0.009) | -0.009 (0.007) | | | | |
| assigned:device_mobile | -0.0004 (0.011) | -0.007 (0.009) | | | | |
| assigned:device_tablet | -0.011 (0.013) | -0.024* (0.010) | | | | |
| assigned:mkt_email | -0.008 (0.024) | -0.007 (0.017) | | | | |
| assigned:mkt_seo | 0.042 (0.029) | 0.003 (0.021) | | | | |
| assigned:mkt_social | 0.021 (0.020) | -0.001 (0.014) | | | | |
| assigned:mkt_untracked | 0.013 (0.025) | -0.005 (0.018) | | | | |
| assigned:mkt_others | 0.067* (0.029) | 0.039 (0.022) | | | | |
| Constant | 0.059*** (0.003) | 0.125*** (0.011) | 0.132*** (0.016) | 0.032*** (0.002) | 0.069*** (0.008) | 0.064*** (0.011) |
| Observations | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 | 10,952 |
| R2 | 0.00002 | 0.036 | 0.038 | 0.0004 | 0.015 | 0.017 |
| Adjusted R2 | -0.0001 | 0.035 | 0.036 | 0.0003 | 0.015 | 0.015 |
| Residual Std. Error | 0.238 (df = 10950) | 0.234 (df = 10942) | 0.234 (df = 10934) | 0.185 (df = 10950) | 0.183 (df = 10942) | 0.183 (df = 10934) |
| Note: | ===== | | | | | *p<0.05; **p<0.01; ***p<0.001 |

All covariates- Visitor - ATC and Order Aggregate

Regression of ATC and Orders piazza on all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|-------------------|----------------------|----------------------|
| | (1) | atc_piazza (2) | (3) | (4) | ord_piazza (5) | (6) |
| assigned | 0.003 (0.005) | 0.001 (0.005) | -0.010 (0.024) | 0.009* (0.004) | 0.008* (0.004) | 0.026 (0.017) |
| new_user | | -0.030*** (0.005) | -0.023** (0.007) | | -0.024*** (0.004) | -0.014** (0.005) |
| device_mobile | | -0.047*** (0.006) | -0.047*** (0.009) | | -0.031*** (0.005) | -0.027*** (0.006) |
| device_tablet | | -0.048*** (0.007) | -0.042*** (0.010) | | -0.037*** (0.005) | -0.026*** (0.007) |
| mkt_email | | 0.011 (0.014) | 0.017 (0.020) | | -0.008 (0.009) | -0.002 (0.013) |
| mkt_seo | | 0.005 (0.017) | -0.022 (0.023) | | 0.005 (0.012) | 0.003 (0.016) |
| mkt_social | | -0.063*** (0.011) | -0.074*** (0.016) | | -0.021** (0.008) | -0.019 (0.011) |
| mkt_untracked | | 0.022 (0.014) | 0.018 (0.021) | | 0.012 (0.010) | 0.016 (0.014) |
| mkt_others | | -0.004 (0.017) | -0.043* (0.022) | | -0.007 (0.012) | -0.030* (0.013) |

All covariates- Visitor - contd.

| | | | | | | |
|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| assigned:new_user | -0.013 (0.010) | | -0.019* (0.008) | | | |
| assigned:device_mobile | 0.002 (0.013) | | -0.007 (0.010) | | | |
| assigned:device_tablet | -0.011 (0.015) | | -0.024* (0.011) | | | |
| assigned:mkt_email | -0.011 (0.028) | | -0.013 (0.019) | | | |
| assigned:mkt_seo | 0.055 (0.033) | | 0.004 (0.024) | | | |
| assigned:mkt_social | 0.022 (0.022) | | -0.003 (0.016) | | | |
| assigned:mkt_untracked | 0.008 (0.028) | | -0.008 (0.020) | | | |
| assigned:mkt_others | 0.080* (0.033) | | 0.048* (0.023) | | | |
| Constant | 0.064*** (0.004) | 0.138*** (0.012) | 0.143*** (0.018) | 0.034*** (0.003) | 0.078*** (0.009) | 0.068*** (0.012) |
| Observations | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 | 10,123 |
| R2 | 0.00003 | 0.037 | 0.039 | 0.0005 | 0.017 | 0.019 |
| Adjusted R2 | -0.0001 | 0.036 | 0.038 | 0.0004 | 0.016 | 0.018 |
| Residual Std. Error | 0.260 (df = 10121) | 0.255 (df = 10113) | 0.255 (df = 10105) | 0.192 (df = 10121) | 0.190 (df = 10113) | 0.190 (df = 10105) |
| Note: | | | | | | *p<0.05; **p<0.01; ***p<0.001 |

Appendix - C - Prof

Devices - PC, Mobile and Tablet - Visit

Regression of ATC, Orders prof-devices covariates

| | Dependent variable: | | | | | |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | atc_prof | | | | ord_prof | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | -0.00000 (0.002) | -0.0002 (0.002) | -0.0001 (0.004) | 0.001 (0.001) | 0.0005 (0.001) | 0.005 (0.003) |
| device_mobile | | -0.038*** (0.002) | -0.038*** (0.003) | | -0.023*** (0.002) | -0.019*** (0.003) |
| device_tablet | | -0.032*** (0.003) | -0.032*** (0.004) | | -0.017*** (0.003) | -0.012** (0.004) |
| assigned:device_mobile | | | -0.0003 (0.004) | | | -0.007 (0.004) |
| assigned:device_tablet | | | -0.0001 (0.006) | | | -0.009 (0.005) |
| Constant | 0.024*** (0.001) | 0.050*** (0.002) | 0.050*** (0.003) | 0.019*** (0.001) | 0.034*** (0.002) | 0.031*** (0.002) |
| Observations | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 |
| R2 | 0.000 | 0.013 | 0.013 | 0.00000 | 0.006 | 0.006 |
| Adjusted R2 | -0.00003 | 0.013 | 0.013 | -0.00002 | 0.006 | 0.006 |
| Residual Std. Error | 0.154 (df = 35746) | 0.153 (df = 35744) | 0.153 (df = 35742) | 0.137 (df = 35746) | 0.137 (df = 35744) | 0.137 (df = 35742) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Devices - PC, Mobile and Tablet - Visitor

Regression of ATC, Orders prof -devices covariates

| | Dependent variable: | | | | | | | |
|------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | atc_prof | (2) | (3) | (4) | ord_prof | (5) | (6) |
| assigned | 0.0001 (0.002) | -0.0001 (0.002) | 0.0003 (0.005) | 0.001 (0.002) | 0.001 (0.002) | 0.007 (0.004) | | |
| device_mobile | | -0.043*** (0.003) | | -0.043*** (0.004) | | -0.026*** (0.002) | -0.022*** (0.003) | |
| device_tablet | | | -0.036*** (0.003) | | -0.036*** (0.005) | | -0.020*** (0.003) | -0.015*** (0.004) |
| assigned:device_mobile | | | | -0.001 (0.005) | | | | -0.008* (0.004) |
| assigned:device_tablet | | | | | -0.0005 (0.007) | | | -0.010 (0.006) |
| Constant | 0.026*** (0.001) | 0.056*** (0.003) | 0.055*** (0.004) | 0.020*** (0.001) | 0.037*** (0.002) | 0.034*** (0.003) | | |
| Observations | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | | |
| R2 | 0.00000 | 0.012 | 0.012 | 0.00001 | 0.006 | 0.007 | | |
| Adjusted R2 | -0.00003 | 0.012 | 0.012 | -0.00002 | 0.006 | 0.006 | | |
| Residual Std. Error | 0.176 (df = 32945) | 0.175 (df = 32943) | 0.175 (df = 32941) | 0.144 (df = 32945) | 0.144 (df = 32943) | 0.144 (df = 32941) | | |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visit

Regression of ATC and Orders prof-new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | atc_prof | | | | ord_prof | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | -0.00000 (0.002) | 0.00002 (0.002) | 0.006 (0.003) | 0.001 (0.001) | 0.001 (0.001) | 0.006* (0.003) |
| new_user | | -0.019*** (0.002) | -0.014*** (0.003) | | -0.017*** (0.002) | -0.012*** (0.002) |
| assigned:new_user | | | -0.009** (0.004) | | | -0.009** (0.003) |
| Constant | 0.024*** (0.001) | 0.036*** (0.002) | 0.033*** (0.002) | 0.019*** (0.001) | 0.029*** (0.002) | 0.026*** (0.002) |
| Observations | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 |
| R2 | 0.000 | 0.003 | 0.004 | 0.00000 | 0.003 | 0.004 |
| Adjusted R2 | -0.00003 | 0.003 | 0.004 | -0.00002 | 0.003 | 0.004 |
| Residual Std. Error | 0.154 (df = 35746) | 0.154 (df = 35745) | 0.154 (df = 35744) | 0.137 (df = 35746) | 0.137 (df = 35745) | 0.137 (df = 35744) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visitor

Regression of ATC and Orders prof -new user covariate

| | Dependent variable: | | | | | | | |
|---------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|----------------------|-----|
| | (1) | atc_prof | (2) | (3) | (4) | ord_prof | (5) | (6) |
| assigned | 0.0001 (0.002) | 0.0001 (0.002) | 0.007 (0.004) | 0.001 (0.002) | 0.001 (0.002) | 0.006 (0.003) | | |
| new_user | | -0.021*** (0.002) | | -0.016*** (0.003) | | -0.015*** (0.002) | -0.011*** (0.003) | |
| assigned:new_user | | | | -0.010* (0.005) | | | -0.008* (0.004) | |
| Constant | 0.026*** (0.001) | 0.040*** (0.002) | 0.037*** (0.003) | 0.020*** (0.001) | 0.031*** (0.002) | 0.028*** (0.002) | | |
| Observations | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | |
| R2 | 0.00000 | 0.003 | 0.003 | 0.00001 | 0.003 | 0.003 | 0.003 | |
| Adjusted R2 | -0.00003 | 0.003 | 0.003 | -0.00002 | 0.003 | 0.003 | 0.003 | |
| Residual Std. Error | 0.176 (df = 32945) | 0.176 (df = 32944) | 0.176 (df = 32943) | 0.144 (df = 32945) | 0.144 (df = 32944) | 0.144 (df = 32943) | | |

Note:

*p<0.05; **p<0.01; ***p<0.001

Marketing Channels - Visit

| | (1) | atc_prof (2) | (3) | (4) | ord_prof (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| assigned | -0.00000 (0.002) | -0.0003 (0.002) | 0.001 (0.010) | 0.001 (0.001) | 0.0004 (0.001) | 0.004 (0.008) |
| mkt_email | | 0.006 (0.006) | -0.001 (0.009) | | -0.010* (0.005) | -0.010 (0.007) |
| mkt_seo | | 0.017* (0.007) | 0.022* (0.010) | | 0.001 (0.006) | 0.006 (0.008) |
| mkt_social | | -0.045*** (0.005) | -0.044*** (0.007) | | -0.024*** (0.004) | -0.022*** (0.006) |
| mkt_untracked | | 0.012 (0.006) | 0.011 (0.009) | | 0.002 (0.005) | 0.001 (0.007) |
| mkt_others | | -0.027*** (0.005) | -0.023** (0.008) | | -0.018*** (0.005) | -0.016* (0.006) |
| assigned:mkt_email | | | 0.014 (0.013) | | | 0.0002 (0.010) |
| assigned:mkt_seo | | | -0.011 (0.014) | | | -0.009 (0.011) |
| assigned:mkt_social | | | -0.001 (0.010) | | | -0.004 (0.008) |
| assigned:mkt_untracked | | | 0.002 (0.012) | | | 0.001 (0.010) |
| assigned:mkt_others | | | -0.008 (0.011) | | | -0.005 (0.009) |
| Constant | 0.024*** (0.001) | 0.050*** (0.005) | 0.049*** (0.007) | 0.019*** (0.001) | 0.035*** (0.004) | 0.034*** (0.006) |
| Observations | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 |
| R2 | 0.000 | 0.026 | 0.026 | 0.00000 | 0.006 | 0.006 |
| Adjusted R2 | -0.00003 | 0.026 | 0.026 | -0.00002 | 0.006 | 0.006 |
| Residual Std. Error | 0.154 (df = 35746) | 0.152 (df = 35741) | 0.152 (df = 35736) | 0.137 (df = 35746) | 0.137 (df = 35741) | 0.137 (df = 35736) |

Marketing Channels - Visitor

| | (1) | atc_prof (2) | (3) | (4) | ord_prof (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| assigned | 0.0001 (0.002) | -0.0004 (0.002) | 0.004 (0.011) | 0.001 (0.002) | 0.001 (0.002) | 0.002 (0.009) |
| mkt_email | | 0.005 (0.008) | 0.00004 (0.010) | | -0.011 (0.006) | -0.012 (0.008) |
| mkt_seo | | 0.023** (0.009) | 0.033* (0.013) | | 0.003 (0.006) | 0.007 (0.009) |
| mkt_social | | -0.049*** (0.006) | -0.047*** (0.008) | | -0.026*** (0.005) | -0.025*** (0.006) |
| mkt_untracked | | 0.013 (0.007) | 0.014 (0.010) | | 0.002 (0.005) | 0.0003 (0.008) |
| mkt_others | | -0.030*** (0.006) | -0.024** (0.009) | | -0.021*** (0.005) | -0.018** (0.007) |
| assigned:mkt_email | | | 0.010 (0.015) | | | 0.004 (0.011) |
| assigned:mkt_seo | | | -0.020 (0.017) | | | -0.007 (0.013) |
| assigned:mkt_social | | | -0.004 (0.011) | | | -0.002 (0.009) |
| assigned:mkt_untracked | | | -0.002 (0.014) | | | 0.003 (0.011) |
| assigned:mkt_others | | | -0.012 (0.013) | | | -0.005 (0.010) |
| Constant | 0.026*** (0.001) | 0.055*** (0.006) | 0.053*** (0.008) | 0.020*** (0.001) | 0.038*** (0.005) | 0.037*** (0.006) |
| Observations | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 |
| R2 | 0.00000 | 0.024 | 0.025 | 0.00001 | 0.006 | 0.007 |
| Adjusted R2 | -0.00003 | 0.024 | 0.024 | -0.00002 | 0.006 | 0.006 |
| Residual Std. Error | 0.176 (df = 32945) | 0.174 (df = 32940) | 0.174 (df = 32935) | 0.144 (df = 32945) | 0.144 (df = 32940) | 0.144 (df = 32935) |

All covariates- Visit

Regression of ATC and Orders prof-all covariates

| | Dependent variable: | | | | | | | |
|---------------|---------------------|----------------------|------------------|----------------------|-------------------|----------------------|----------------------|-----|
| | (1) | atc_prof | (2) | (3) | (4) | ord_prof | (5) | (6) |
| assigned | -0.00000 (0.002) | -0.0004 (0.002) | 0.005 (0.011) | 0.001 (0.001) | 0.0004 (0.001) | 0.014 (0.009) | | |
| new_user | | -0.015*** (0.002) | | -0.010*** (0.002) | | -0.016*** (0.002) | -0.011*** (0.002) | |
| device_mobile | | -0.024*** (0.002) | | -0.024*** (0.003) | | -0.018*** (0.002) | -0.014*** (0.003) | |
| device_tablet | | -0.025*** (0.003) | | -0.025*** (0.004) | | -0.016*** (0.003) | -0.010** (0.004) | |
| mkt_email | | -0.001 (0.006) | | -0.006 (0.009) | | -0.017*** (0.005) | -0.015* (0.007) | |
| mkt_seo | | 0.011 (0.007) | | 0.016 (0.010) | | -0.003 (0.006) | 0.002 (0.008) | |
| mkt_social | | -0.040*** (0.005) | | -0.040*** (0.007) | | -0.021*** (0.004) | -0.019*** (0.006) | |
| mkt_untracked | | 0.010 (0.006) | | 0.009 (0.009) | | 0.001 (0.005) | -0.0001 (0.007) | |
| mkt_others | | -0.024*** (0.005) | | -0.020** (0.008) | | -0.016*** (0.005) | -0.014* (0.006) | |

All covariates- Visit - contd.

| | | | | | | |
|------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:new_user | -0.009* | (0.004) | -0.009** | (0.003) | | |
| assigned:device_mobile | 0.001 | (0.004) | -0.007 | (0.004) | | |
| assigned:device_tablet | -0.0002 | (0.006) | -0.010 | (0.005) | | |
| assigned:mkt_email | 0.011 | (0.013) | -0.004 | (0.010) | | |
| assigned:mkt_seo | -0.010 | (0.014) | -0.011 | (0.011) | | |
| assigned:mkt_social | -0.001 | (0.010) | -0.002 | (0.008) | | |
| assigned:mkt_untracked | 0.002 | (0.012) | 0.001 | (0.010) | | |
| assigned:mkt_others | -0.007 | (0.011) | -0.004 | (0.009) | | |
| Constant | 0.024*** (0.001) | 0.074*** (0.005) | 0.071*** (0.008) | 0.019*** (0.001) | 0.055*** (0.005) | 0.049*** (0.006) |
| Observations | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 | 35,748 |
| R2 | 0.000 | 0.033 | 0.033 | 0.00000 | 0.012 | 0.013 |
| Adjusted R2 | -0.00003 | 0.032 | 0.033 | -0.00002 | 0.012 | 0.012 |
| Residual Std. Error | 0.154 (df = 35746) | 0.152 (df = 35738) | 0.152 (df = 35730) | 0.137 (df = 35746) | 0.136 (df = 35738) | 0.136 (df = 35730) |
| Note: | ===== | | | | | |
| | *p<0.05; **p<0.01; ***p<0.001 | | | | | |

All covariates- Visitor - ATC and Order Aggregate

Regression of ATC and Orders prof on all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|------------------|----------------------|----------------------|
| | (1) | atc_prof (2) | (3) | (4) | ord_prof (5) | (6) |
| assigned | 0.0001 (0.002) | -0.0004 (0.002) | 0.010 (0.013) | 0.001 (0.002) | 0.001 (0.002) | 0.013 (0.010) |
| new_user | | -0.018*** (0.002) | -0.013*** (0.003) | | -0.015*** (0.002) | -0.011*** (0.003) |
| device_mobile | | -0.027*** (0.003) | -0.027*** (0.004) | | -0.020*** (0.002) | -0.016*** (0.003) |
| device_tablet | | -0.028*** (0.003) | -0.028*** (0.005) | | -0.018*** (0.003) | -0.012** (0.004) |
| mkt_email | | -0.004 (0.008) | -0.007 (0.010) | | -0.018** (0.006) | -0.018* (0.008) |
| mkt_seo | | 0.016 (0.009) | 0.026* (0.013) | | -0.001 (0.006) | 0.003 (0.009) |
| mkt_social | | -0.044*** (0.006) | -0.043*** (0.008) | | -0.022*** (0.005) | -0.022*** (0.006) |
| mkt_untracked | | 0.011 (0.007) | 0.011 (0.010) | | 0.0004 (0.005) | -0.001 (0.008) |
| mkt_others | | -0.027*** (0.006) | -0.021* (0.009) | | -0.018*** (0.005) | -0.016* (0.007) |

All covariates- Visitor - contd.

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:new_user | | -0.009* (0.005) | | | -0.008* (0.004) | |
| assigned:device_mobile | | | -0.0003 (0.005) | | | -0.008* (0.004) |
| assigned:device_tablet | | | | -0.002 (0.007) | | -0.011 (0.006) |
| assigned:mkt_email | | | | 0.007 (0.015) | | 0.0001 (0.011) |
| assigned:mkt_seo | | | | -0.019 (0.017) | | -0.009 (0.013) |
| assigned:mkt_social | | | | -0.003 (0.011) | | 0.0002 (0.009) |
| assigned:mkt_untracked | | | | -0.001 (0.014) | | 0.003 (0.011) |
| assigned:mkt_others | | | | -0.010 (0.013) | | -0.003 (0.010) |
| Constant | 0.026*** (0.001) | 0.084*** (0.006) | 0.079*** (0.009) | 0.020*** (0.001) | 0.060*** (0.005) | 0.054*** (0.007) |
| <hr/> | | | | | | |
| Observations | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 | 32,947 |
| R2 | 0.00000 | 0.031 | 0.031 | 0.00001 | 0.012 | 0.013 |
| Adjusted R2 | -0.00003 | 0.031 | 0.031 | -0.00002 | 0.012 | 0.012 |
| Residual Std. Error | 0.176 (df = 32945) | 0.173 (df = 32937) | 0.173 (df = 32929) | 0.144 (df = 32945) | 0.143 (df = 32937) | 0.143 (df = 32929) |
| <hr/> | | | | | | |
| Note: | *p<0.05; **p<0.01; ***p<0.001 | | | | | |

Appendix - D - TLS

Devices - PC, Mobile and Tablet - Visit

Regression of ATC, Orders tls-devices covariates

| | Dependent variable: | | | | | |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | atc_tls | | | | ord_tls | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | 0.002 (0.002) | 0.002 (0.002) | 0.002 (0.005) | 0.003 (0.001) | 0.003 (0.001) | 0.003 (0.004) |
| device_mobile | | -0.063*** (0.003) | -0.063*** (0.004) | | -0.033*** (0.002) | -0.032*** (0.003) |
| device_tablet | | -0.043*** (0.004) | -0.043*** (0.005) | | -0.021*** (0.003) | -0.024*** (0.004) |
| assigned:device_mobile | | | 0.0001 (0.005) | | | -0.002 (0.004) |
| assigned:device_tablet | | | -0.0005 (0.007) | | | 0.005 (0.006) |
| Constant | 0.041*** (0.001) | 0.084*** (0.003) | 0.084*** (0.003) | 0.021*** (0.001) | 0.044*** (0.002) | 0.043*** (0.003) |
| Observations | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 |
| R2 | 0.00002 | 0.019 | 0.019 | 0.0001 | 0.009 | 0.010 |
| Adjusted R2 | 0.00000 | 0.019 | 0.019 | 0.00005 | 0.009 | 0.009 |
| Residual Std. Error | 0.201 (df = 44702) | 0.199 (df = 44700) | 0.199 (df = 44698) | 0.149 (df = 44702) | 0.148 (df = 44700) | 0.148 (df = 44698) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Devices - PC, Mobile and Tablet - Visitor

Regression of ATC, Orders tls -devices covariates

| | Dependent variable: | | | | | |
|------------------------|-------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | atc_tls | (2) | (3) | (4) | ord_tls |
| | (1) | atc_tls | (2) | (3) | (4) | ord_tls |
| assigned | 0.003 (0.002) | 0.002 (0.002) | 0.002 (0.007) | 0.003 (0.002) | 0.003 (0.002) | 0.004 (0.004) |
| device_mobile | | -0.072*** (0.003) | | -0.073*** (0.005) | | -0.038*** (0.002) |
| device_tablet | | | -0.050*** (0.005) | | -0.051*** (0.007) | -0.024*** (0.003) |
| assigned:device_mobile | | | | 0.001 (0.007) | | -0.003 (0.005) |
| assigned:device_tablet | | | | 0.001 (0.009) | | 0.006 (0.006) |
| Constant | 0.046*** (0.002) | 0.096*** (0.004) | 0.096*** (0.005) | 0.024*** (0.001) | 0.050*** (0.002) | 0.050*** (0.003) |
| Observations | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 |
| R2 | 0.00003 | 0.017 | 0.017 | 0.0001 | 0.011 | 0.011 |
| Adjusted R2 | 0.00000 | 0.017 | 0.017 | 0.0001 | 0.010 | 0.010 |
| Residual Std. Error | 0.240 (df = 39490) | 0.238 (df = 39488) | 0.238 (df = 39486) | 0.163 (df = 39490) | 0.162 (df = 39488) | 0.162 (df = 39486) |
| Note: | *p<0.05; **p<0.01; ***p<0.001 | | | | | |

New User vs Recent - Visit

Regression of ATC and Orders t1s-new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | (1) | atc_t1s (2) | (3) | (4) | ord_t1s (5) | (6) |
| assigned | 0.002 (0.002) | 0.002 (0.002) | 0.001 (0.003) | 0.003 (0.001) | 0.003 (0.001) | 0.002 (0.002) |
| new_user | | -0.020*** (0.002) | -0.021*** (0.003) | | -0.021*** (0.001) | -0.021*** (0.002) |
| assigned:new_user | | | 0.004 (0.004) | | | 0.0002 (0.003) |
| Constant | 0.041*** (0.001) | 0.049*** (0.002) | 0.050*** (0.002) | 0.021*** (0.001) | 0.030*** (0.001) | 0.030*** (0.002) |
| Observations | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 |
| R2 | 0.00002 | 0.002 | 0.002 | 0.0001 | 0.005 | 0.005 |
| Adjusted R2 | 0.00000 | 0.002 | 0.002 | 0.00005 | 0.005 | 0.005 |
| Residual Std. Error | 0.201 (df = 44702) | 0.200 (df = 44701) | 0.200 (df = 44700) | 0.149 (df = 44702) | 0.149 (df = 44701) | 0.149 (df = 44700) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visitor

Regression of ATC and Orders t1s -new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | atc_t1s | | | | ord_t1s | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | 0.003 (0.002) | 0.002 (0.002) | 0.001 (0.004) | 0.003 (0.002) | 0.003 (0.002) | 0.003 (0.003) |
| new_user | | -0.022*** (0.002) | -0.023*** (0.003) | | -0.021*** (0.002) | -0.020*** (0.002) |
| assigned:new_user | | | 0.002 (0.005) | | | -0.001 (0.003) |
| Constant | 0.046*** (0.002) | 0.057*** (0.002) | 0.057*** (0.003) | 0.024*** (0.001) | 0.034*** (0.002) | 0.034*** (0.002) |
| Observations | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 |
| R2 | 0.00003 | 0.002 | 0.002 | 0.0001 | 0.004 | 0.004 |
| Adjusted R2 | 0.00000 | 0.002 | 0.002 | 0.0001 | 0.004 | 0.004 |
| Residual Std. Error | 0.240 (df = 39490) | 0.240 (df = 39489) | 0.240 (df = 39488) | 0.163 (df = 39490) | 0.162 (df = 39489) | 0.162 (df = 39488) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Marketing Channels - Visit

| | (1) | atc_tls (2) | (3) | (4) | ord_tls (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| assigned | 0.002 (0.002) | 0.002 (0.002) | 0.015 (0.012) | 0.003 (0.001) | 0.002 (0.001) | 0.015 (0.009) |
| mkt_email | | -0.019** (0.007) | -0.010 (0.009) | | -0.013** (0.005) | -0.007 (0.006) |
| mkt_seo | | 0.017 (0.009) | 0.027* (0.013) | | 0.007 (0.006) | 0.007 (0.009) |
| mkt_social | | -0.084*** (0.006) | -0.077*** (0.008) | | -0.037*** (0.004) | -0.029*** (0.006) |
| mkt_untracked | | 0.007 (0.007) | 0.013 (0.010) | | 0.008 (0.005) | 0.015* (0.007) |
| mkt_others | | -0.067*** (0.006) | -0.062*** (0.009) | | -0.033*** (0.004) | -0.026*** (0.006) |
| assigned:mkt_email | | | -0.018 (0.013) | | | -0.011 (0.009) |
| assigned:mkt_seo | | | -0.019 (0.018) | | | -0.001 (0.013) |
| assigned:mkt_social | | | -0.014 (0.012) | | | -0.015 (0.009) |
| assigned:mkt_untracked | | | -0.011 (0.015) | | | -0.012 (0.011) |
| assigned:mkt_others | | | -0.010 (0.012) | | | -0.013 (0.009) |
| Constant | 0.041*** (0.001) | 0.091*** (0.006) | 0.084*** (0.008) | 0.021*** (0.001) | 0.044*** (0.004) | 0.038*** (0.006) |
| Observations | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 |
| R2 | 0.00002 | 0.035 | 0.035 | 0.0001 | 0.014 | 0.014 |
| Adjusted R2 | 0.00000 | 0.035 | 0.035 | 0.00005 | 0.014 | 0.014 |
| Residual Std. Error | 0.201 (df = 44702) | 0.197 (df = 44697) | 0.197 (df = 44692) | 0.149 (df = 44702) | 0.148 (df = 44697) | 0.148 (df = 44692) |

Marketing Channels - Visitor

| | (1) | atc_tls (2) | (3) | (4) | ord_tls (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| assigned | 0.003 (0.002) | 0.002 (0.002) | 0.026 (0.014) | 0.003 (0.002) | 0.003 (0.002) | 0.019 (0.010) |
| mkt_email | | -0.012 (0.008) | 0.004 (0.012) | | -0.012* (0.005) | -0.004 (0.007) |
| mkt_seo | | 0.025* (0.011) | 0.044** (0.016) | | 0.010 (0.007) | 0.013 (0.010) |
| mkt_social | | -0.090*** (0.007) | -0.078*** (0.010) | | -0.041*** (0.005) | -0.031*** (0.006) |
| mkt_untracked | | 0.014 (0.009) | 0.024 (0.012) | | 0.016* (0.006) | 0.023** (0.008) |
| mkt_others | | -0.073*** (0.007) | -0.062*** (0.010) | | -0.038*** (0.005) | -0.029*** (0.007) |
| assigned:mkt_email | | | -0.031 (0.017) | | | -0.015 (0.011) |
| assigned:mkt_seo | | | -0.037 (0.022) | | | -0.006 (0.015) |
| assigned:mkt_social | | | -0.024 (0.014) | | | -0.019 (0.010) |
| assigned:mkt_untracked | | | -0.019 (0.018) | | | -0.013 (0.012) |
| assigned:mkt_others | | | -0.022 (0.015) | | | -0.018 (0.010) |
| Constant | 0.046*** (0.002) | 0.099*** (0.007) | 0.087*** (0.010) | 0.024*** (0.001) | 0.048*** (0.005) | 0.040*** (0.006) |
| Observations | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 |
| R2 | 0.00003 | 0.034 | 0.034 | 0.0001 | 0.017 | 0.017 |
| Adjusted R2 | 0.00000 | 0.033 | 0.034 | 0.0001 | 0.017 | 0.017 |
| Residual Std. Error | 0.240 (df = 39490) | 0.236 (df = 39485) | 0.236 (df = 39480) | 0.163 (df = 39490) | 0.161 (df = 39485) | 0.161 (df = 39480) |

All covariates- Visit

Regression of ATC and Orders tls-all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|------------------|----------------------|----------------------|
| | atc_tls | | | | ord_tls | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | 0.002 (0.002) | 0.002 (0.002) | 0.011 (0.013) | 0.003 (0.001) | 0.002 (0.001) | 0.012 (0.010) |
| new_user | | -0.025*** (0.002) | -0.027*** (0.003) | | -0.027*** (0.002) | -0.027*** (0.002) |
| device_mobile | | -0.039*** (0.003) | -0.039*** (0.004) | | -0.024*** (0.002) | -0.025*** (0.003) |
| device_tablet | | -0.034*** (0.004) | -0.034*** (0.005) | | -0.019*** (0.003) | -0.022*** (0.004) |
| mkt_email | | -0.027*** (0.007) | -0.019* (0.009) | | -0.021*** (0.005) | -0.016* (0.006) |
| mkt_seo | | 0.009 (0.009) | 0.020 (0.013) | | 0.002 (0.006) | 0.003 (0.009) |
| mkt_social | | -0.071*** (0.006) | -0.064*** (0.008) | | -0.029*** (0.004) | -0.022*** (0.006) |
| mkt_untracked | | 0.007 (0.007) | 0.012 (0.010) | | 0.009 (0.005) | 0.015* (0.007) |
| mkt_others | | -0.079*** (0.006) | -0.075*** (0.009) | | -0.045*** (0.005) | -0.040*** (0.006) |

All covariates- Visit - contd.

| | | | | | |
|------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:new_user | | 0.005 (0.004) | | | 0.001 (0.003) |
| assigned:device_mobile | | 0.001 (0.006) | | | 0.001 (0.004) |
| assigned:device_tablet | | 0.0004 (0.008) | | | 0.007 (0.006) |
| assigned:mkt_email | | -0.017 (0.013) | | | -0.009 (0.010) |
| assigned:mkt_seo | | -0.021 (0.018) | | | -0.002 (0.013) |
| assigned:mkt_social | | -0.014 (0.012) | | | -0.015 (0.009) |
| assigned:mkt_untracked | | -0.011 (0.014) | | | -0.011 (0.011) |
| assigned:mkt_others | | -0.007 (0.013) | | | -0.011 (0.009) |
| Constant | 0.041*** (0.001) | 0.127*** (0.007) | 0.122*** (0.009) | 0.021*** (0.001) | 0.073*** (0.005) |
| Observations | 44,704 | 44,704 | 44,704 | 44,704 | 44,704 |
| R2 | 0.00002 | 0.045 | 0.045 | 0.0001 | 0.025 |
| Adjusted R2 | 0.00000 | 0.044 | 0.044 | 0.00005 | 0.025 |
| Residual Std. Error | 0.201 (df = 44702) | 0.196 (df = 44694) | 0.196 (df = 44686) | 0.149 (df = 44702) | 0.147 (df = 44694) |
| | | | | | 0.147 (df = 44686) |
| Note: | | | | | |
| | *p<0.05; **p<0.01; ***p<0.001 | | | | |

All covariates- Visitor - ATC and Order Aggregate

Regression of ATC and Orders tls on all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|------------------|----------------------|----------------------|
| | atc_tls | | | ord_tls | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | 0.003 (0.002) | 0.002 (0.002) | 0.024 (0.016) | 0.003 (0.002) | 0.003 (0.002) | 0.018 (0.011) |
| new_user | | -0.030*** (0.003) | -0.031*** (0.004) | | -0.029*** (0.002) | -0.028*** (0.003) |
| device_mobile | | -0.044*** (0.004) | -0.046*** (0.005) | | -0.027*** (0.002) | -0.028*** (0.003) |
| device_tablet | | -0.039*** (0.005) | -0.039*** (0.007) | | -0.022*** (0.003) | -0.025*** (0.005) |
| mkt_email | | -0.023** (0.008) | -0.007 (0.012) | | -0.021*** (0.005) | -0.013 (0.007) |
| mkt_seo | | 0.015 (0.011) | 0.035* (0.016) | | 0.005 (0.007) | 0.008 (0.010) |
| mkt_social | | -0.078*** (0.007) | -0.065*** (0.010) | | -0.033*** (0.005) | -0.023*** (0.006) |
| mkt_untracked | | 0.013 (0.009) | 0.023 (0.012) | | 0.016* (0.006) | 0.022** (0.008) |
| mkt_others | | -0.091*** (0.008) | -0.080*** (0.011) | | -0.053*** (0.005) | -0.044*** (0.007) |

All covariates- Visitor - contd.

| | | | | | | |
|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|
| assigned:new_user | 0.002 (0.005) | -0.002 (0.004) | | | | |
| assigned:device_mobile | 0.002 (0.008) | 0.001 (0.005) | | | | |
| assigned:device_tablet | -0.0002 (0.010) | 0.007 (0.007) | | | | |
| assigned:mkt_email | -0.031 (0.017) | -0.015 (0.011) | | | | |
| assigned:mkt_seo | -0.040 (0.022) | -0.007 (0.015) | | | | |
| assigned:mkt_social | -0.025 (0.014) | -0.019 (0.010) | | | | |
| assigned:mkt_untracked | -0.019 (0.018) | -0.013 (0.012) | | | | |
| assigned:mkt_others | -0.020 (0.016) | -0.017 (0.011) | | | | |
| Constant | 0.046*** (0.002) | 0.144*** (0.008) | 0.133*** (0.011) | 0.024*** (0.001) | 0.082*** (0.006) | 0.075*** (0.007) |
| Observations | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 | 39,492 |
| R2 | 0.00003 | 0.042 | 0.043 | 0.0001 | 0.029 | 0.029 |
| Adjusted R2 | 0.00000 | 0.042 | 0.042 | 0.0001 | 0.028 | 0.028 |
| Residual Std. Error | 0.240 (df = 39490) | 0.235 (df = 39482) | 0.235 (df = 39474) | 0.163 (df = 39490) | 0.160 (df = 39482) | 0.160 (df = 39474) |
| Note: | ===== | | | | | *p<0.05; **p<0.01; ***p<0.001 |

Appendix - E - Wheeled

Devices - PC, Mobile and Tablet - Visit

Regression of ATC, Orders wheeled-devices covariates

| | Dependent variable: | | | | | |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | atc_wheeled | | | | ord_wheeled | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | -0.001 (0.002) | -0.001 (0.002) | -0.003 (0.006) | 0.001 (0.002) | 0.001 (0.002) | -0.001 (0.005) |
| device_mobile | | -0.040*** (0.003) | -0.041*** (0.004) | | -0.018*** (0.002) | -0.020*** (0.004) |
| device_tablet | | -0.027*** (0.004) | -0.030*** (0.006) | | -0.016*** (0.003) | -0.019*** (0.004) |
| assigned:device_mobile | | | 0.002 (0.006) | | | 0.002 (0.005) |
| assigned:device_tablet | | | 0.007 (0.008) | | | 0.006 (0.007) |
| Constant | 0.031*** (0.002) | 0.060*** (0.003) | 0.061*** (0.004) | 0.021*** (0.001) | 0.034*** (0.002) | 0.036*** (0.003) |
| Observations | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 |
| R2 | 0.00001 | 0.009 | 0.009 | 0.00001 | 0.003 | 0.003 |
| Adjusted R2 | -0.00003 | 0.009 | 0.009 | -0.00002 | 0.003 | 0.003 |
| Residual Std. Error | 0.172 (df = 26555) | 0.171 (df = 26553) | 0.171 (df = 26551) | 0.145 (df = 26555) | 0.144 (df = 26553) | 0.144 (df = 26551) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Devices - PC, Mobile and Tablet - Visitor

Regression of ATC, Orders wheeled -devices covariates

| | Dependent variable: | | | | | |
|------------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | (1) | atc_wheeled (2) | (3) | (4) | ord_wheeled (5) | (6) |
| assigned | -0.001 (0.002) | -0.001 (0.002) | -0.004 (0.007) | 0.001 (0.002) | 0.001 (0.002) | -0.001 (0.005) |
| device_mobile | | -0.043*** (0.004) | -0.044*** (0.005) | | -0.020*** (0.003) | -0.021*** (0.004) |
| device_tablet | | -0.028*** (0.005) | -0.033*** (0.007) | | -0.017*** (0.004) | -0.020*** (0.005) |
| assigned:device_mobile | | | 0.002 (0.007) | | | 0.002 (0.005) |
| assigned:device_tablet | | | 0.008 (0.010) | | | 0.006 (0.007) |
| Constant | 0.033*** (0.002) | 0.064*** (0.004) | 0.065*** (0.005) | 0.022*** (0.001) | 0.037*** (0.003) | 0.038*** (0.004) |
| Observations | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 |
| R2 | 0.00001 | 0.009 | 0.009 | 0.00002 | 0.003 | 0.003 |
| Adjusted R2 | -0.00003 | 0.009 | 0.009 | -0.00002 | 0.003 | 0.003 |
| Residual Std. Error | 0.186 (df = 25183) | 0.185 (df = 25181) | 0.185 (df = 25179) | 0.149 (df = 25183) | 0.149 (df = 25181) | 0.149 (df = 25179) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visit

Regression of ATC and orders wheeled-new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| assigned | -0.001 (0.002) | -0.001 (0.002) | -0.005 (0.004) | 0.001 (0.002) | 0.001 (0.002) | -0.001 (0.004) |
| new_user | | -0.026*** (0.002) | -0.030*** (0.004) | | -0.022*** (0.002) | -0.023*** (0.003) |
| assigned:new_user | | | 0.006 (0.005) | | | 0.004 (0.004) |
| Constant | 0.031*** (0.002) | 0.048*** (0.002) | 0.050*** (0.003) | 0.021*** (0.001) | 0.035*** (0.002) | 0.036*** (0.003) |
| Observations | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 |
| R2 | 0.00001 | 0.005 | 0.005 | 0.00001 | 0.005 | 0.005 |
| Adjusted R2 | -0.00003 | 0.005 | 0.005 | -0.00002 | 0.005 | 0.005 |
| Residual Std. Error | 0.172 (df = 26555) | 0.172 (df = 26554) | 0.172 (df = 26553) | 0.145 (df = 26555) | 0.144 (df = 26554) | 0.144 (df = 26553) |

Note:

*p<0.05; **p<0.01; ***p<0.001

New User vs Recent - Visitor

Regression of ATC and Orders wheeled -new user covariate

| | Dependent variable: | | | | | |
|---------------------|---------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| | (1) | atc_wheeled (2) | (3) | (4) | ord_wheeled (5) | (6) |
| assigned | -0.001 (0.002) | -0.001 (0.002) | -0.006 (0.005) | 0.001 (0.002) | 0.001 (0.002) | -0.001 (0.004) |
| new_user | | -0.029*** (0.003) | -0.033*** (0.004) | | -0.022*** (0.002) | -0.024*** (0.003) |
| assigned:new_user | | | 0.008 (0.006) | | | 0.003 (0.005) |
| Constant | 0.033*** (0.002) | 0.053*** (0.003) | 0.055*** (0.004) | 0.022*** (0.001) | 0.037*** (0.002) | 0.038*** (0.003) |
| Observations | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 |
| R2 | 0.00001 | 0.005 | 0.005 | 0.00002 | 0.005 | 0.005 |
| Adjusted R2 | -0.00003 | 0.005 | 0.005 | -0.00002 | 0.005 | 0.005 |
| Residual Std. Error | 0.186 (df = 25183) | 0.185 (df = 25182) | 0.185 (df = 25181) | 0.149 (df = 25183) | 0.149 (df = 25182) | 0.149 (df = 25181) |

Note:

*p<0.05; **p<0.01; ***p<0.001

Marketing Channels - Visit

| | (1) | atc_wheeled | (2) | (3) | (4) | ord_wheeled | (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|---------------------|---------------------|-----|-----|
| assigned | -0.001 (0.002) | -0.001 (0.002) | 0.005 (0.013) | 0.001 (0.002) | 0.001 (0.002) | 0.012 (0.008) | | |
| mkt_email | | 0.013 (0.009) | 0.023 (0.013) | | -0.002 (0.006) | 0.008 (0.008) | | |
| mkt_seo | | 0.008 (0.011) | 0.013 (0.015) | | -0.001 (0.007) | 0.008 (0.010) | | |
| mkt_social | | -0.060*** (0.006) | -0.057*** (0.009) | | -0.012** (0.004) | -0.007 (0.005) | | |
| mkt_untracked | | 0.027** (0.009) | 0.025 (0.013) | | 0.016** (0.006) | 0.021* (0.008) | | |
| mkt_others | | -0.015 (0.009) | -0.011 (0.012) | | -0.002 (0.006) | 0.009 (0.008) | | |
| assigned:mkt_email | | | -0.021 (0.018) | | | -0.020 (0.011) | | |
| assigned:mkt_seo | | | -0.010 (0.022) | | | -0.018 (0.013) | | |
| assigned:mkt_social | | | -0.006 (0.013) | | | -0.009 (0.009) | | |
| assigned:mkt_untracked | | | 0.005 (0.019) | | | -0.008 (0.013) | | |
| assigned:mkt_others | | | -0.007 (0.017) | | | -0.022 (0.012) | | |
| Constant | 0.031*** (0.002) | 0.070*** (0.007) | 0.067*** (0.009) | 0.021*** (0.001) | 0.028*** (0.004) | 0.023*** (0.005) | | |
| Observations | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 | | |
| R2 | 0.00001 | 0.035 | 0.035 | 0.00001 | 0.003 | 0.003 | | |
| Adjusted R2 | -0.00003 | 0.034 | 0.034 | -0.00002 | 0.003 | 0.003 | | |
| Residual Std. Error | 0.172 (df = 26555) | 0.169 (df = 26550) | 0.169 (df = 26545) | 0.145 (df = 26555) | 0.144 (df = 26550) | 0.144 (df = 26545) | | |

Marketing Channels - Visitor

| | (1) | atc_wheeled (2) | (3) | (4) | ord_wheeled (5) | (6) |
|------------------------|---------------------|----------------------|----------------------|---------------------|---------------------|---------------------|
| assigned | -0.001 (0.002) | -0.002 (0.002) | 0.002 (0.014) | 0.001 (0.002) | 0.001 (0.002) | 0.012 (0.009) |
| mkt_email | | 0.015 (0.010) | 0.024 (0.015) | | -0.001 (0.006) | 0.012 (0.008) |
| mkt_seo | | 0.009 (0.012) | 0.014 (0.018) | | -0.002 (0.007) | 0.007 (0.010) |
| mkt_social | | -0.064*** (0.007) | -0.062*** (0.010) | | -0.012** (0.005) | -0.007 (0.006) |
| mkt_untracked | | 0.031** (0.010) | 0.029* (0.015) | | 0.020** (0.007) | 0.024** (0.009) |
| mkt_others | | -0.006 (0.011) | -0.003 (0.014) | | 0.003 (0.007) | 0.015 (0.009) |
| assigned:mkt_email | | | -0.018 (0.021) | | | -0.025* (0.012) |
| assigned:mkt_seo | | | -0.011 (0.024) | | | -0.019 (0.014) |
| assigned:mkt_social | | | -0.004 (0.014) | | | -0.010 (0.009) |
| assigned:mkt_untracked | | | 0.005 (0.021) | | | -0.009 (0.013) |
| assigned:mkt_others | | | -0.005 (0.021) | | | -0.024 (0.013) |
| Constant | 0.033*** (0.002) | 0.076*** (0.007) | 0.074*** (0.010) | 0.022*** (0.001) | 0.029*** (0.004) | 0.024*** (0.006) |
| Observations | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 |
| R2 | 0.00001 | 0.035 | 0.036 | 0.00002 | 0.004 | 0.004 |
| Adjusted R2 | -0.00003 | 0.035 | 0.035 | -0.00002 | 0.003 | 0.004 |
| Residual Std. Error | 0.186 (df = 25183) | 0.183 (df = 25178) | 0.183 (df = 25173) | 0.149 (df = 25183) | 0.149 (df = 25178) | 0.149 (df = 25173) |

All covariates- Visit

Regression of ATC and Orders wheeled-all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|------------------|----------------------|----------------------|
| | (1) | atc_wheeled (2) | (3) | (4) | ord_wheeled (5) | (6) |
| assigned | -0.001 (0.002) | -0.001 (0.002) | 0.003 (0.014) | 0.001 (0.002) | 0.001 (0.002) | 0.011 (0.010) |
| new_user | | -0.014*** (0.003) | -0.016*** (0.004) | | -0.021*** (0.002) | -0.022*** (0.003) |
| device_mobile | | -0.021*** (0.003) | -0.020*** (0.004) | | -0.015*** (0.003) | -0.015*** (0.004) |
| device_tablet | | -0.022*** (0.004) | -0.025*** (0.006) | | -0.017*** (0.003) | -0.019*** (0.005) |
| mkt_email | | 0.008 (0.009) | 0.017 (0.013) | | -0.009 (0.006) | 0.001 (0.008) |
| mkt_seo | | 0.003 (0.011) | 0.008 (0.015) | | -0.005 (0.007) | 0.004 (0.010) |
| mkt_social | | -0.055*** (0.006) | -0.051*** (0.009) | | -0.007 (0.004) | -0.002 (0.006) |
| mkt_untracked | | 0.028** (0.009) | 0.025 (0.013) | | 0.016** (0.006) | 0.021* (0.008) |
| mkt_others | | -0.020* (0.009) | -0.017 (0.012) | | -0.010 (0.006) | 0.001 (0.008) |

All covariates- Visit - contd.

| | | | | | | |
|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:new_user | 0.005 (0.005) | 0.001 (0.005) | | | | |
| assigned:device_mobile | -0.001 (0.006) | 0.0003 (0.005) | | | | |
| assigned:device_tablet | 0.004 (0.008) | 0.005 (0.007) | | | | |
| assigned:mkt_email | -0.019 (0.018) | -0.020 (0.011) | | | | |
| assigned:mkt_seo | -0.010 (0.021) | -0.018 (0.014) | | | | |
| assigned:mkt_social | -0.007 (0.013) | -0.010 (0.009) | | | | |
| assigned:mkt_untracked | 0.005 (0.019) | -0.009 (0.013) | | | | |
| assigned:mkt_others | -0.005 (0.018) | -0.021 (0.012) | | | | |
| Constant | 0.031*** (0.002) | 0.093*** (0.007) | 0.091*** (0.010) | 0.021*** (0.001) | 0.051*** (0.005) | 0.047*** (0.006) |
| Observations | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 | 26,557 |
| R2 | 0.00001 | 0.039 | 0.039 | 0.00001 | 0.009 | 0.010 |
| Adjusted R2 | -0.00003 | 0.038 | 0.038 | -0.00002 | 0.009 | 0.009 |
| Residual Std. Error | 0.172 (df = 26555) | 0.169 (df = 26547) | 0.169 (df = 26539) | 0.145 (df = 26555) | 0.144 (df = 26547) | 0.144 (df = 26539) |

Note:

*p<0.05; **p<0.01; ***p<0.001

All covariates- Visitor - ATC and Order Aggregate

Regression of ATC and Orders wheeled on all covariates

| | Dependent variable: | | | | | |
|---------------|---------------------|----------------------|----------------------|------------------|----------------------|----------------------|
| | (1) | atc_wheeled | (2) | (3) | (4) | ord_wheeled |
| | | | | | | (5) |
| assigned | -0.001 (0.002) | -0.001 (0.002) | -0.002 (0.016) | 0.001 (0.002) | 0.001 (0.002) | 0.012 (0.011) |
| new_user | | -0.015*** (0.003) | -0.019*** (0.004) | | -0.021*** (0.003) | -0.022*** (0.004) |
| device_mobile | | -0.023*** (0.004) | -0.022*** (0.005) | | -0.016*** (0.003) | -0.016*** (0.004) |
| device_tablet | | -0.023*** (0.005) | -0.026*** (0.007) | | -0.018*** (0.004) | -0.020*** (0.005) |
| mkt_email | | 0.009 (0.010) | 0.017 (0.015) | | -0.009 (0.006) | 0.004 (0.008) |
| mkt_seo | | 0.003 (0.012) | 0.009 (0.018) | | -0.006 (0.007) | 0.003 (0.010) |
| mkt_social | | -0.059*** (0.007) | -0.057*** (0.010) | | -0.008 (0.005) | -0.003 (0.006) |
| mkt_untracked | | 0.032** (0.010) | 0.029* (0.015) | | 0.020** (0.007) | 0.025** (0.009) |
| mkt_others | | -0.011 (0.011) | -0.011 (0.015) | | -0.005 (0.007) | 0.006 (0.010) |

All covariates- Visitor - contd.

| | | | | | | |
|------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| assigned:new_user | 0.006 (0.006) | 0.001 (0.005) | | | | |
| assigned:device_mobile | -0.001 (0.007) | -0.0003 (0.006) | | | | |
| assigned:device_tablet | 0.005 (0.010) | 0.005 (0.007) | | | | |
| assigned:mkt_email | -0.016 (0.021) | -0.025* (0.012) | | | | |
| assigned:mkt_seo | -0.011 (0.024) | -0.018 (0.014) | | | | |
| assigned:mkt_social | -0.004 (0.014) | -0.010 (0.009) | | | | |
| assigned:mkt_untracked | 0.004 (0.021) | -0.010 (0.013) | | | | |
| assigned:mkt_others | -0.001 (0.021) | -0.022 (0.014) | | | | |
| Constant | 0.033*** (0.002) | 0.100*** (0.008) | 0.100*** (0.011) | 0.022*** (0.001) | 0.054*** (0.005) | 0.049*** (0.007) |
| <hr/> | | | | | | |
| Observations | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 | 25,185 |
| R2 | 0.00001 | 0.039 | 0.040 | 0.00002 | 0.010 | 0.010 |
| Adjusted R2 | -0.00003 | 0.039 | 0.039 | -0.00002 | 0.009 | 0.009 |
| Residual Std. Error | 0.186 (df = 25183) | 0.182 (df = 25175) | 0.182 (df = 25167) | 0.149 (df = 25183) | 0.148 (df = 25175) | 0.148 (df = 25167) |
| <hr/> | | | | | | |
| Note: | *p<0.05; **p<0.01; ***p<0.001 | | | | | |