

THESSALONIKI
digital analytics
MEETUP

CI/CD of online experiences using digital analytics

6 Jun 2019

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Christos Christou (Slides 19 - 40)

#DigitalAnalyticsGR

Speakers



digital analytics
KULTUR

**PANAGIOTIS
TZAMTZIS**

DIGITAL ANALYTICS
CONSULTANT

baresquare

A speaker card for Panagiotis Tzamtzis. It features a portrait of a man with a beard and short dark hair, wearing a dark suit jacket over a light blue shirt. The background is a colorful geometric pattern of triangles in shades of purple, pink, orange, and blue. In the top left corner, there is a logo with two stylized heads and a code symbol, with the text 'digital analytics KULTUR' below it. The name 'PANAGIOTIS TZAMTZIS' is written in large white capital letters across the middle. Below the name, 'DIGITAL ANALYTICS CONSULTANT' is written in smaller white capital letters. In the bottom left corner, the 'baresquare' logo is displayed.



digital analytics
KULTUR

**CHRISTOS
CHRISTOU**

DATA ANALYST

baresquare

A speaker card for Christos Christou. It features a portrait of a man with a beard and dark hair, wearing a dark red hoodie. He is resting his chin on his hand. The background is a colorful geometric pattern of triangles in shades of purple, pink, orange, and blue. In the top left corner, there is a logo with two stylized heads and a code symbol, with the text 'digital analytics KULTUR' below it. The name 'CHRISTOS CHRISTOU' is written in large white capital letters across the middle. Below the name, 'DATA ANALYST' is written in smaller white capital letters. In the bottom left corner, the 'baresquare' logo is displayed.

Why CI/CD?

CI/CD

Continuous Integration / Continuous Delivery

Let's rephrase for the scope of digital analytics

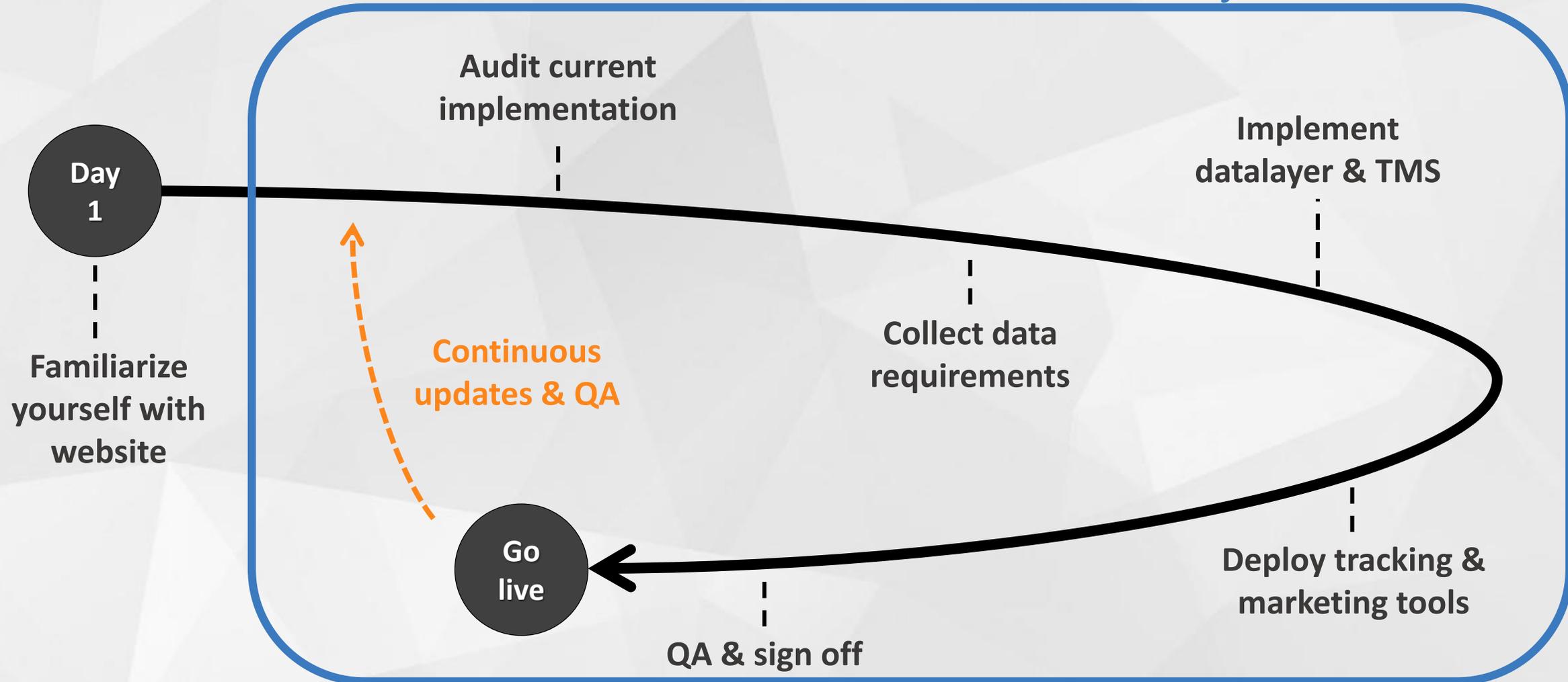
Continuous Improvement / Continuous Delivery

Kaizen = Continuous improvement

1. No assumptions ★
2. Be proactive about solving problems
3. Don't accept the status quo
4. Let go of perfectionism and take an attitude of iterative change ★
5. Look for solutions, as you find mistakes ★
6. Help everyone feel empowered to contribute
7. Don't accept the obvious issue; ask "why" 5 times to get to the root cause
8. Cull information and opinions from multiple people ★
9. Use creativity to find low-cost, small improvements ★
10. Never stop improving ★

Typical roadmap

Goes on until next major release



What is an experience?

Online experience (UX)

The quality index of a visitor's interaction, when browsing an online website

Factors affecting online experiences:

- Performance (Slow website, 404 errors)
- Architecture (Navigation menu, page setup)
- Content (Images, text, videos)
- Functionality (Internal search, SEO)
- UI design (Page setup, checkout process)

Sample questions

1. Which part of the website contributes most to sales?
2. Why do people get stuck at checkout?
3. What is causing a certain browser to underperform?
4. Does my average experience a smooth journey?
5. Are visitors able to find what they are looking for?
6. Is the website's UX causing campaign bounces?

How do you measure UX?

Website measurement ecosystem



>7,000 web marketing tools

list becomes 30% longer every 1 year

50% of websites use more than 20 tracking tools

Tracking tool category



Sample tools



Common use cases



Smart applications

Web analytics



Google analytics, Adobe analytics, Snowplow, Matomo



Data warehousing, Customizable data collection, Aggregate data, Content & tech stats, Reporting



- Attribute conversions to journey
- Combine with offline data
- Find common journey patterns

Session recording



Crazy egg, Hotjar, Foresee, Matomo



Track mouse movement, Granular analysis without customization, Visual reporting, Form tracking



- Integrate with analytics
- Data to segment recordings
- QA rare browsers

Heatmaps



Crazy egg, Hotjar, Foresee,
ClickTale



Scroll tracking, Visual reporting,
Data aggregation, Visual clicks



- Combine with A/B testing
- Evaluate page structure

Online Surveys (VoC – Voice of Customer)



Foresee, Pulse Insights, Maru-edr,
Hotjar



Qualitative & Quantitative data,
Free text collection, Experience
rating, Subjective data



- Use micro-surveys
- Display personalized messages
- Full-text analysis on free text

A/B/N Testing



Adobe Target, Optimizely, Crazy egg, Maxymiser, Google optimize



Content evaluation,
Personalization, QA, Statistical
analysis



- Website personalization
- QA implementation
- Evaluate using macro conversions

Pop quiz

1. Which part of the website contributes most to sales?
 2. Why do people get stuck at checkout?
 3. What is causing a certain browser to underperform?
 4. Does my average experience a smooth journey?
 5. Are visitors able to find what they are looking for?
 6. Is the website's UX causing campaign bounces?
- A. Web analytics
 - B. Session recording
 - C. Heatmaps
 - D. Online surveys
 - E. A/B testing

1-A, E
2-A, B, C, E
3-A, B
4-A, D
5-C, D
6-A, B, C, E

Let's get some action

Good UX ≠ Beautiful Web Design

User experience design is about enhancing user satisfaction while interacting with the product.

Aim to improve:

- Usability**
- Accessibility**
- Desirability**

Setting up analytics reporting for UX

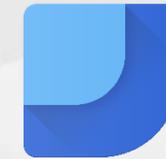
Identify important pages in user journey:

- Home
- Product category (e.g. TVs)
- Internal Search results
- Checkout
- Sign up

Setting up analytics reporting for UX

Set up custom reports:

- KPI Monitoring
- Funnel analysis
- Scroll map
- Heat map
- Survey
- Session recording
- A/B Testing



inspectlet



Regularly monitoring

Simple KPIs to monitor :

- Error pages
- Internal searches with no results
- Exit rate
- Fallout towards desired checkpoints

Why? Problem occurs all the time:

- Browser compatibility
- Video players compatibility
- Development releases

Use cases

Web Analytics

Use case - Error pages

Issue:

404 errors increased

Cause:

Broken link in paid campaign

Recommendations:

URL redirection, change landing URL



PAGE NOT FOUND

Use case – Internal Searches with 0 results

Issue:

Visits to product pages decreased

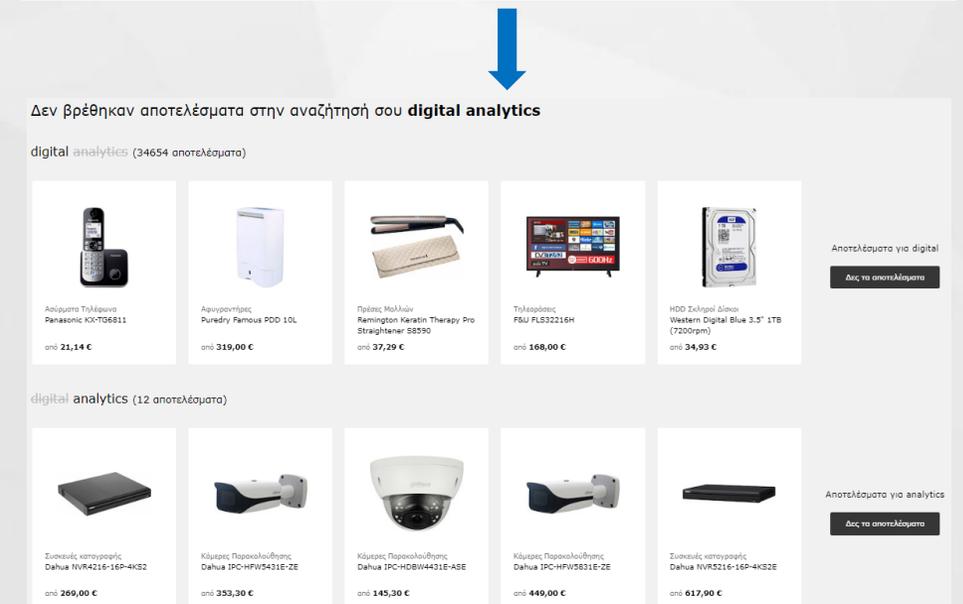
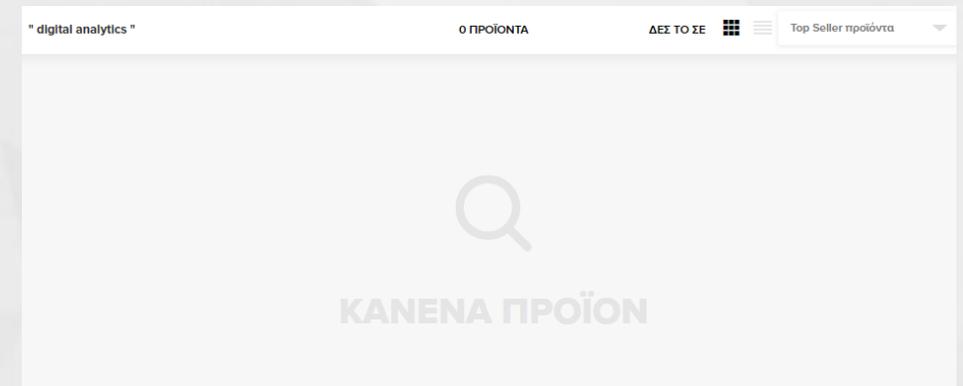
Cause:

searches with 0 results increased

Recommendations:

add search tips

provide links to similar products



Use case - Exit rates

Issue:

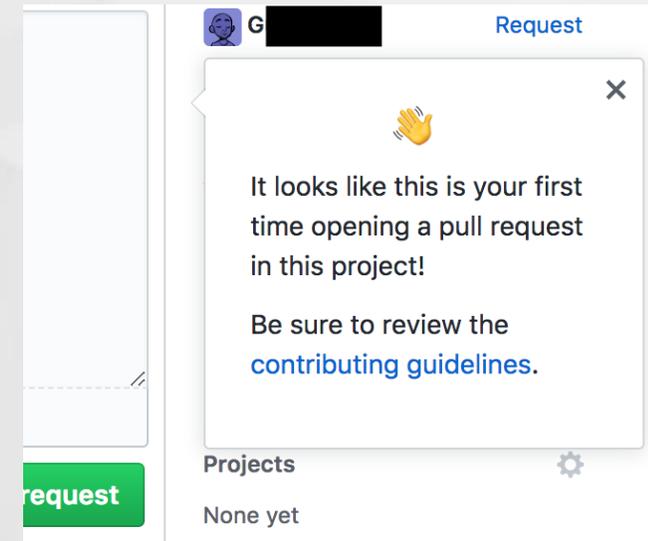
Exit rate is higher for new users (custom audience)

Cause:

User journey not clear

Recommendation:

Provide practical tooltips



Use case - Funnel Analysis

Issue:

Optimize purchase funnel

*setup goals to enable
funnel analysis

The screenshot shows the 'Goal setup' interface in Google Analytics. It is divided into three sections: 'Goal setup', 'Goal description', and 'Goal details'. The 'Goal setup' section shows a green checkmark and the goal type 'Custom'. The 'Goal description' section shows a green checkmark, the name 'Purchase Completed', and the goal type 'Destination'. The 'Goal details' section is currently selected and shows a blue circle with the number '3'. It includes a 'Destination' field with a dropdown menu set to 'Regular expression' and a text input field containing '/ordercompleted\.html'. There is a 'Case sensitive' checkbox which is unchecked. Below this is a 'Value' section with an 'optional' label and a toggle switch set to 'OFF', with the text 'Assign a monetary value to the conversion.' Below that is a 'Funnel' section with an 'optional' label and a toggle switch set to 'ON'. At the bottom, there is a table with four columns: 'Step', 'Name', 'Screen/Page', and 'Required?'. The table contains four rows of data representing the steps in the purchase funnel.

| Step | Name | Screen/Page | Required? |
|------|----------------------|--|-------------------------------------|
| 1 | Cart | /basket\.html | <input checked="" type="checkbox"/> |
| 2 | Billing and Shipping | /yourinfo\.html/guestregister\.html/ship | <input type="checkbox"/> |
| 3 | Payment | /payment\.html | <input type="checkbox"/> |
| 4 | Review | /revieworder\.html | <input type="checkbox"/> |

Use case - Funnel Analysis

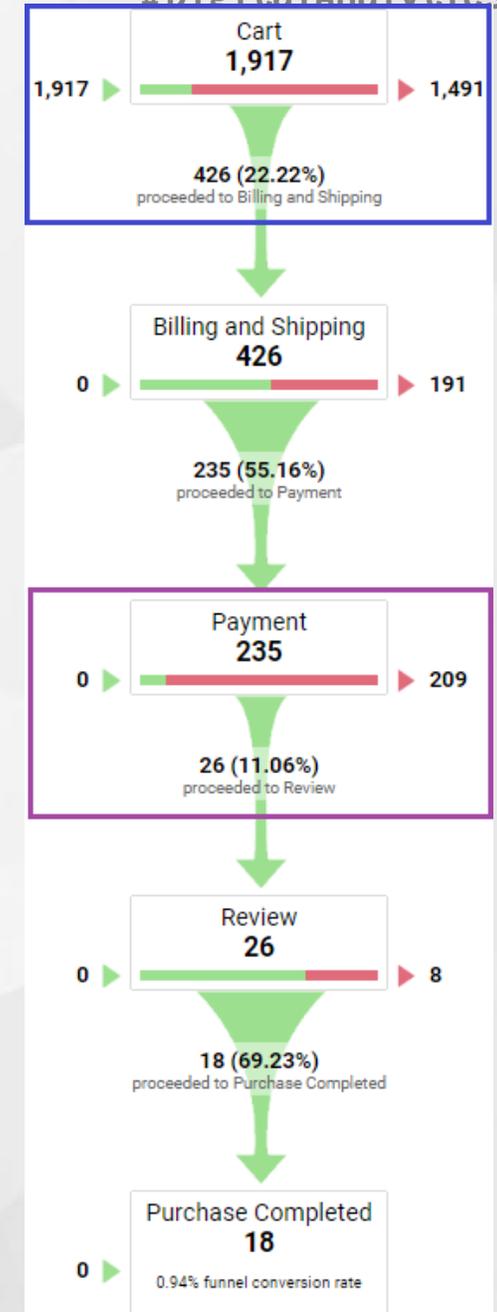
Recommended improvements:

Cart -> Billing and Shipping:

Offer coupons

Payment -> Review:

Add more payments methods,
Handle payment errors



Use case - Form tracking

Issue:

2/3 of users exit before submitting a form

Cause:

Why is password invalid?

Recommendation:

Add an error message

The screenshot shows a registration form with the following fields and values:

- Όνομα *: Test
- Επώνυμο *: Test
- Κινητό *: 6901234567
- Περιοχή *: Θεσσαλονίκη
- E-mail *: example@example.com
- Κωδικός *:
- Επαλήθευση *:

At the bottom right, there is a yellow button labeled ΠΑΡΕ ΠΡΟΣΦΟΡΕΣ. The form is annotated with three numbered circles: 1 (top left), 2 (top middle), and 3 (top right).

Use cases

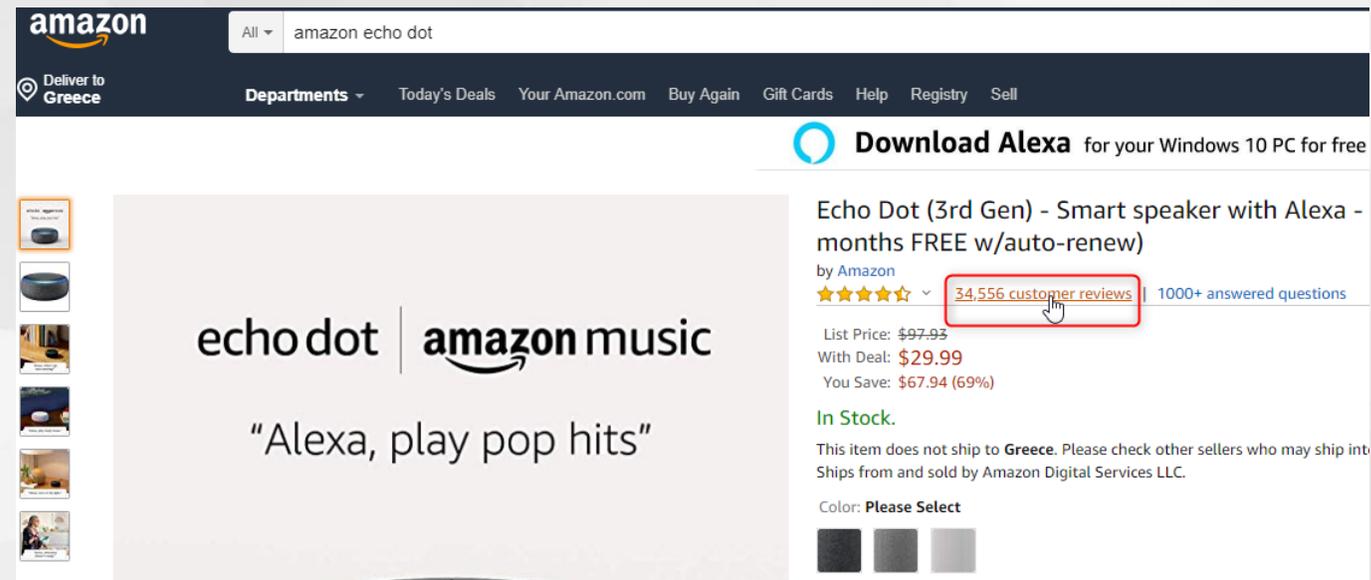
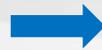
Other tracking tools

Use case - Scroll map # 1

Issue: Users scroll half a page, then stop to a specific module

Cause: Users came to read reviews

Recommendation: Add a sticky-nav link at the top



Use case - Scroll map # 2

Issue:

People call and ask for info that's already on the website

Cause:

User pass the paragraph that contains the content

Recommendation:

Remove module

Move the content elsewhere

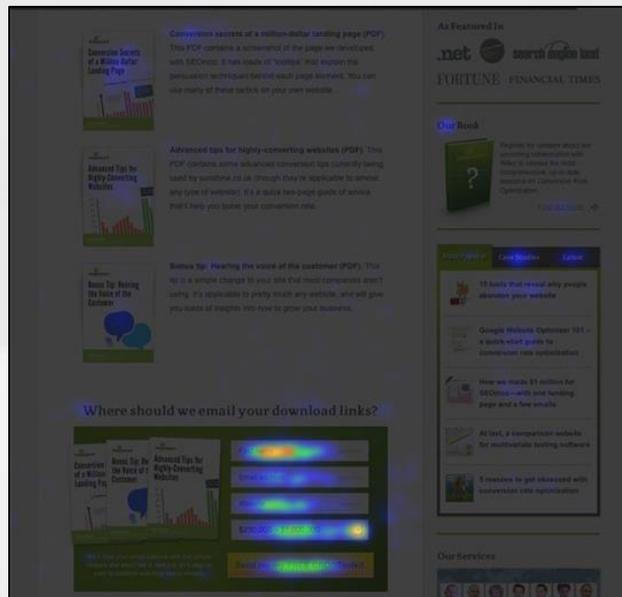


Use case - Heat map

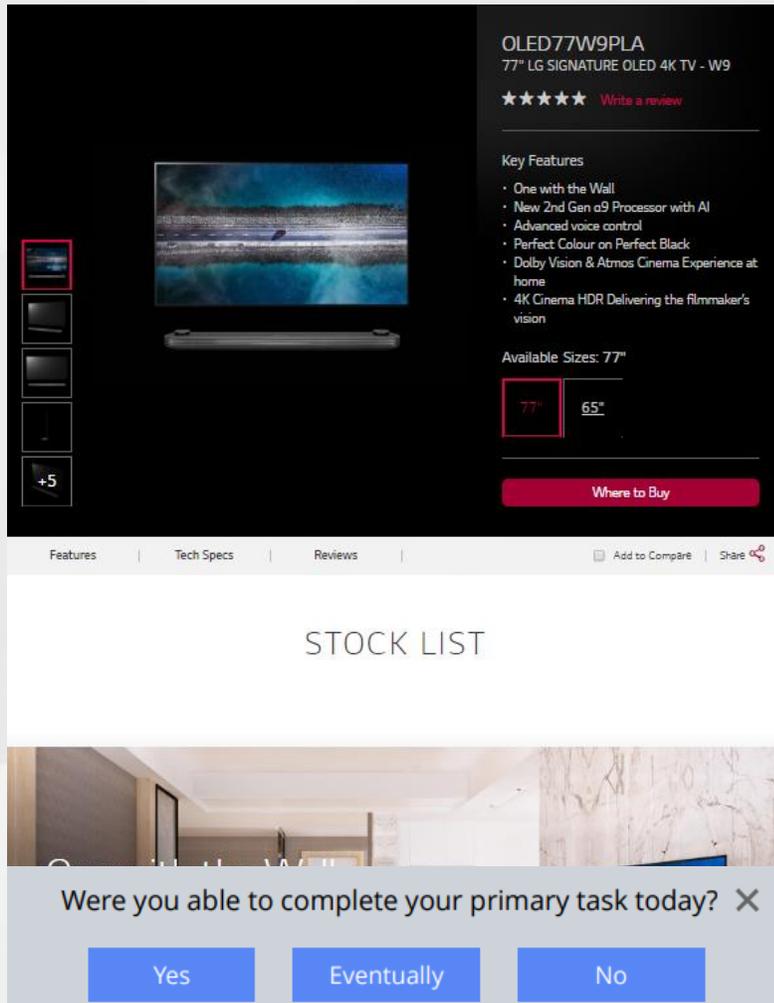
Issue: Many visits, few sign-ups

Cause: Some users were distracted by the sidebar

Solution: Design a page without the sidebar -> +25.9% signups



Use case - On-site survey



The screenshot shows a product page for the LG OLED77W9PLA TV. The page includes a product image, key features, and available sizes. A survey overlay is visible at the bottom of the page, asking "Were you able to complete your primary task today?" with options "Yes", "Eventually", and "No".

OLED77W9PLA
77" LG SIGNATURE OLED 4K TV - W9

★★★★★ [Write a review](#)

Key Features

- One with the Wall
- New 2nd Gen α9 Processor with AI
- Advanced voice control
- Perfect Colour on Perfect Black
- Dolby Vision & Atmos Cinema Experience at home
- 4K Cinema HDR Delivering the filmmaker's vision

Available Sizes: 77" 77" 65"

[Where to Buy](#)

Features | Tech Specs | Reviews | [Add to Compare](#) | [Share](#)

STOCK LIST

Were you able to complete your primary task today? ✕

[Yes](#) [Eventually](#) [No](#)

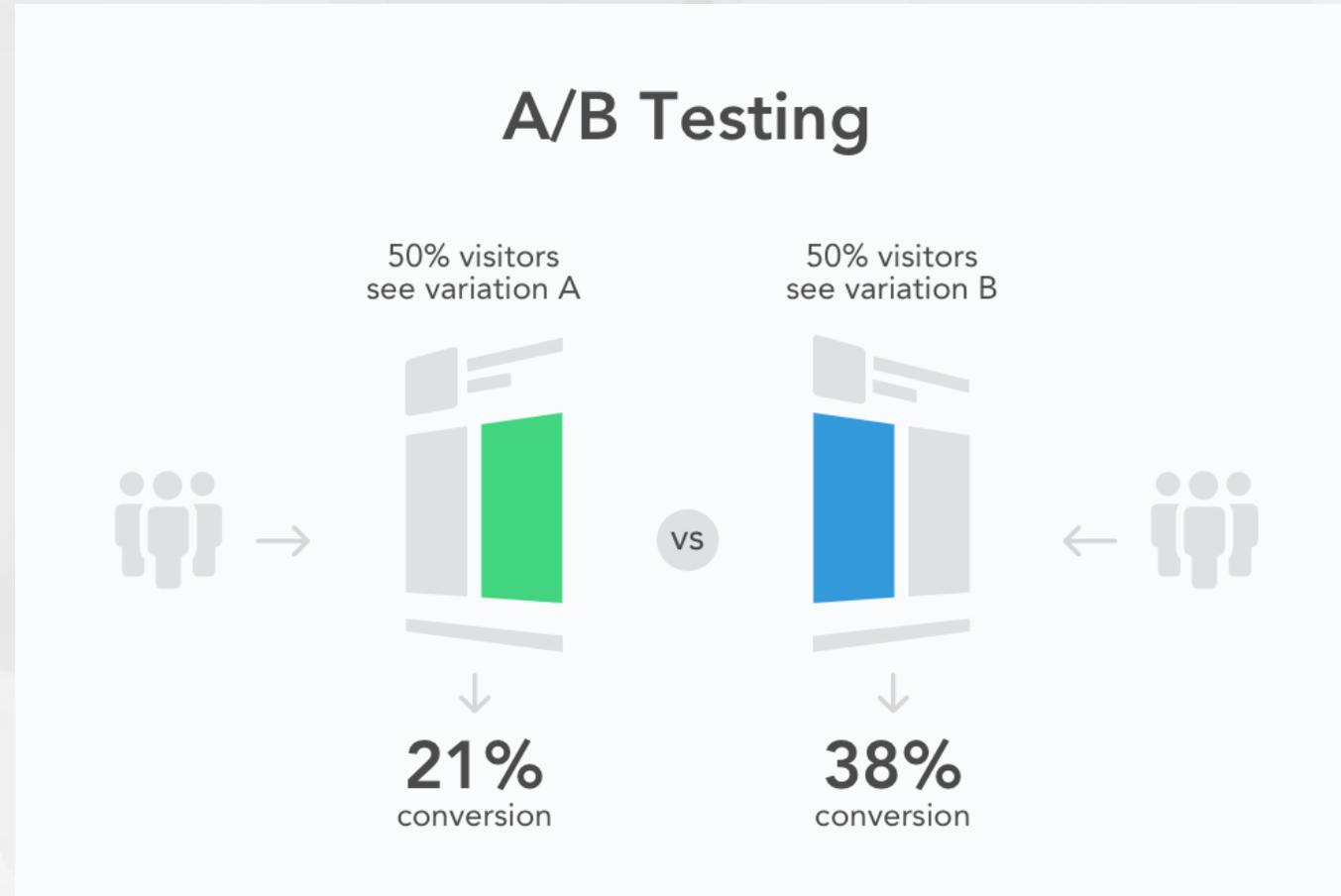
- Brand uses an embedded **micro-survey** to monitor the KPI "Task accomplishment ratio"
- The Insights team found that the Task accomplishment ratio **was low in marketing product pages**
- Combined analysis of survey results with web analytics – via visitor ID stitching – revealed that many users that responded "No", eventually **exited the website on a Support-related page**

QUESTIONS? LET US HELP

[Product Support](#)

- A new module with a link to Support was added in all marketing product pages, then the **Task accomplishment ratio increased**

Conversion Rate Optimization (CRO) with A/B testing



Case study - CRO with A/B testing

Issue: Boost conversions at checkout

Recommendation: Place important messages in the page

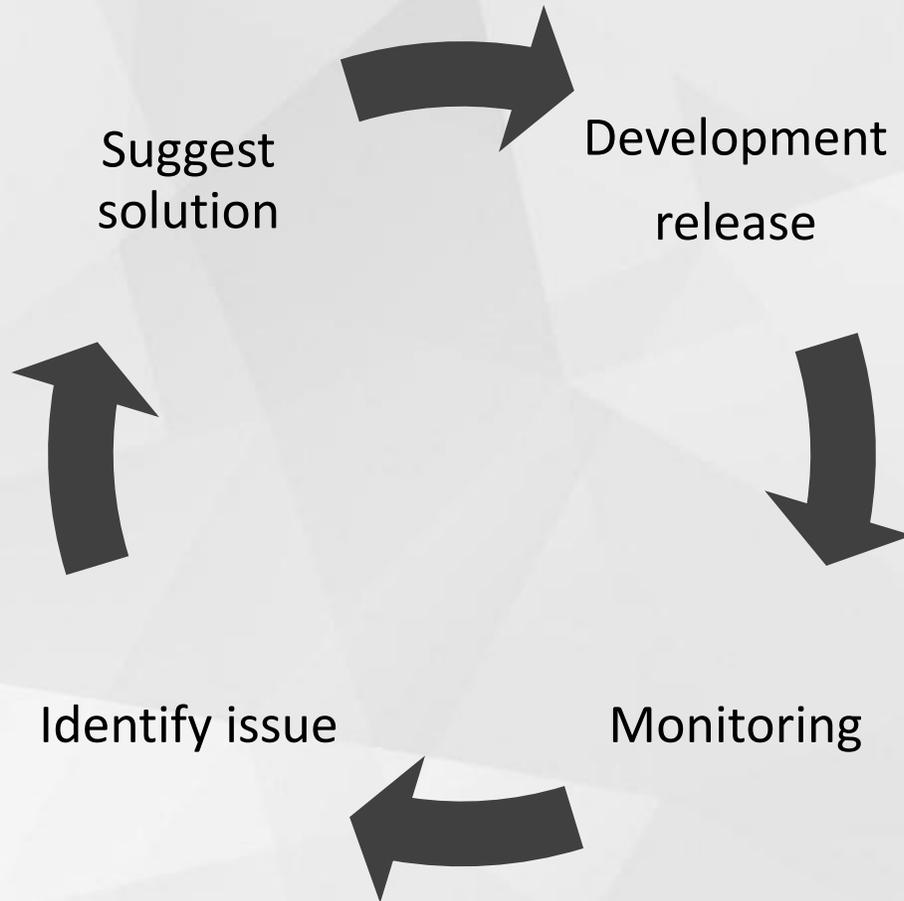
The screenshot shows a checkout page with the following elements:

- Top left: "SAVE CART | EMPTY CART (Cart items are saved for later on expiration)"
- Top right: "Subtotal before Shipping Charges \$342.60"
- Payment methods: VISA, Mastercard, PayPal, American Express, VISA Signature, Delta, and Discover.
- Shipping options: "US Standard (Up to 6 days) \$0.00" and "View international rates".
- Total Cost: \$342.60
- Buttons: "CONTINUE SHOPPING" (grey) and "PAY SECURELY NOW" (orange).
- Three promotional banners at the bottom, each with an orange arrow pointing to it from the "Total Cost" area:
 - "FREE STANDARD SHIPPING FULLY TRACKED 6 DAY SERVICE"
 - "FREE & EASY RETURNS FULLY TRACKED"
 - "UNLIMITED 2-DAY SHIPPING Only \$19 for a whole year!"

Source: <https://usabilitygeek.com/7-remarkably-simple-methods-boost-checkout-conversion-rates/>

Another Asos case study: <https://econsultancy.com/persuasive-checkout-best-practice-from-asos/>

Don't forget: it's a continuous cycle



Where exactly on the site the
subscription event has taken
place?

Which form has
triggered the
subscription?



How many users
have submitted the
pop-up subscription
form?

What was the impression time for
the pop-up?