# User Experience, Web Design and CRO

## Session 9

## **Testing and Experimentation**


Contents:

1. Data driven Testing and Experimentation
2. Testing tools: A/B, MVT
3. User Monitoring Tools: Heatmaps & Scrollmaps
4. Key capabilities to implement CRO: Organizational Challenges
5. Demo case

# Session 9

## Testing and Experimentation

# Short readings

## Session 9 – Testing and Experimentation

Other complementary readings are reflected in each slide of the session.
PDFs and other materials are uploaded in the Campus

1. What is A/B Testing?. Optimizely.
   https://www.optimizely.com/optimization-glossary/ab-testing/
2. How Netflix perform A/B Testing. Invision.
   http://blog.invisionapp.com/how-netflix-does-ab-testing/
4. Don't A/B Test yourself Off a Cliff. Combine A/B Testing with UX Research qualitative methods
   https://www.nngroup.com/videos/dont-ab-test-yourself-cliff/
5. Example of a Heatmaps & User monitoring tool: Hotjar.
   https://www.hotjar.com/tour
6. Google Optimize. A/B and Personalization made easy.
   https://marketingplatform.google.com/about/optimize/

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# CRO – DATA DRIVEN Continuous improvement process components

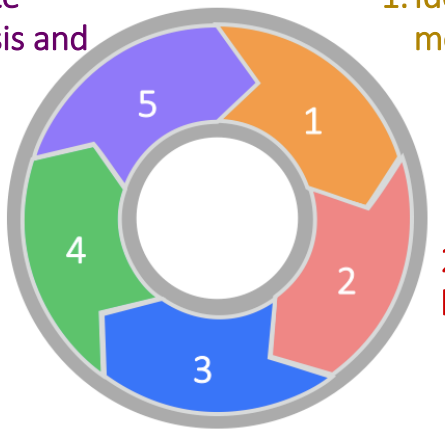
1- Site & Financial goals

2- Attract traffic strategy

Starting variables

5. Validate hypothesis and innovate

1. Identify and measure KPIs



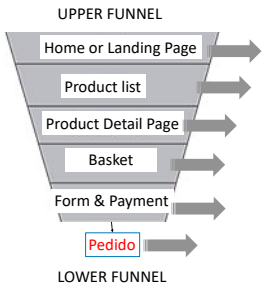

4. Results analysis

2. Define hypothesis

3. Develop experiments

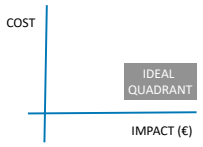
Continuous improvement process

1- Analize traffic leakages



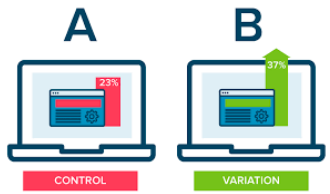

2- Identify mitigation actions

3- Prioritize actions




How to prioritize actions:
SALES (=Revenue) =
= TRAFFIC x CONVERSION x AVERAGE ORDER VALUE

A/B Testing & experimentation




Core Capabilities

- UX & Visual Design
- Digital Analytics & Optmization
- Technology Capabilities

# Data driven Testing and Experimentation

The CRO model requires DATA DRIVEN decisions under a culture of Testing and Experimentation

- Empowering teams to make decisions based on **data not opinions**
- Get **insights** from customers **faster to act quickly**
- **Sustain innovation** – under a continuous improvement cycle
- **Evolve Digital products** design with real insights from experimentation on a continuous basis
- Foster a learning and innovation culture based on experimentation **(fail & learn faster)**

Video: What should you Test?. Nielsen Norman
https://www.nngroup.com/videos/what-should-you-test/

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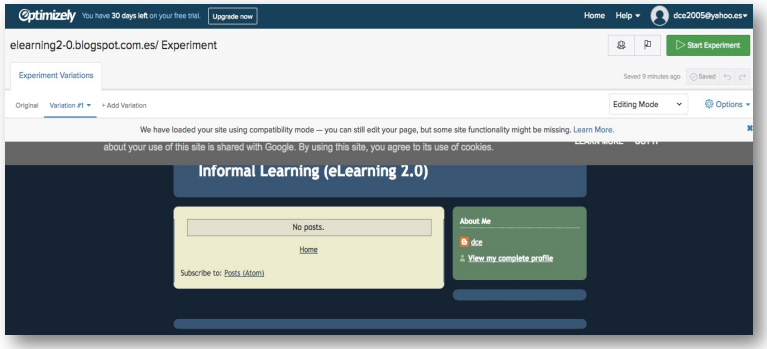
# 2- Testing Tools A/B testing and MVT

A/B Tests: To evaluate two experiences on a specific design or functionality.
The winner experience is chosen based on real user data

MVT: Multi Variate Testing allows to change dynamically several components to choose the winning combination

- A/B testing on look & feel: easy to implement
- A/B testing on a transactional process: requires IT support
- Identifying one cause-effect variable to increase a goal KPI
- Requires a diverse team working together: business, technology, analytics and content creation

Optimizely - https://www.optimizely.com




ABTasty - https://www.abtasty.com/es/

**Optimizely Visual Editor Demo:** https://www.youtube.com/watch?v=abhDsvo50Nc
**How Netflix perform A/B Testing:** http://blog.invisionapp.com/how-netflix-does-ab-testing/

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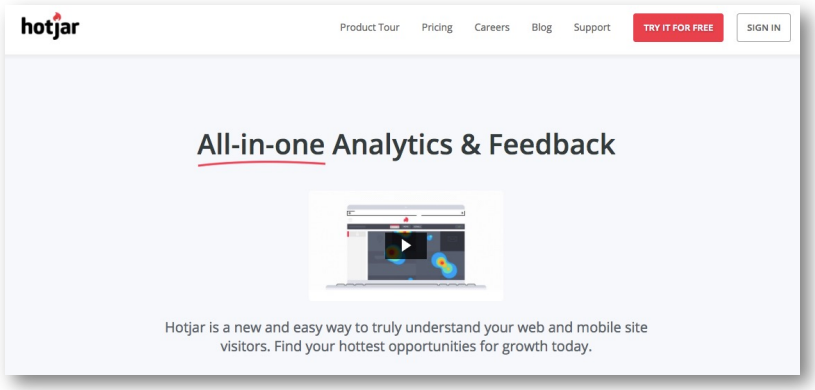
# 3- User Monitoring Tools: Heatmaps & Scroll-maps

Cloud based tools that allow to track and analyse the user behaviour in a web page and even record the user session anonymously

- Easy to implement and administer
- Cost-efficient solutions
- Complementary to user testing and Digital Analytics
- Some times include online surveys to complement the user recordings

Hotjar product tour and main functionalities
https://www.hotjar.com/tour




Other popular tools
CrazyEgg - https://www.crazyegg.com/

LuckyOrange - http://luckyorange.com/

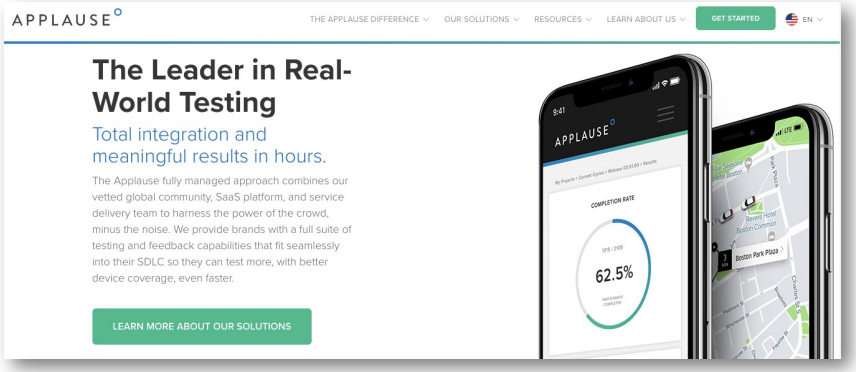
# 3- User Monitoring Tools: User Real-world testing

Crowd testing solutions to minimize technical bugs and identify functional issues to increase conversion

Allows to test in real conditions with real users (crowd testing) web/Apps in Beta version or in production

- Project based approach with a defined number of testers and pre-defined scope of testing
- Business model is bases on an initial fee + volume of “beta testers” + number of devices / Operative Systems to test + pay per “bug”

Applause – https://www.applause.com/



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# 4- Key capabilities to implement CRO: Organizational Challenges for an innovation culture…

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 1

Q: Why to Implement a learning and innovation culture based on experimentation to fail & learn faster?

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 1

Q: Why to Implement a learning and innovation culture based on experimentation to fail & learn faster?

A: The customer moves very fast. Companies need to fail & learn faster to continually reinvent their products and services

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 2

Q: What are the CSF for a implementation of a CRO/experimentation culture?

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 2

Q: What are the CSF for a implementation of a CRO/experimentation culture?

A: The implementation has to be Top-Down with high level-C involvement promoting a fail-risk faster culture

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 3

Q: To whom should report a CRO (experimentation) department?

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 3

Q: To whom should report a CRO (experimentation) department?

A: CRO should report to the Unit with the Financial Goal responsibility, in most cases it is Marketing and Sales but can also be Customer Operations depending on the goal, sales versus cost of customer operations…

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 4

Q: What profiles do you need in a CRO team?

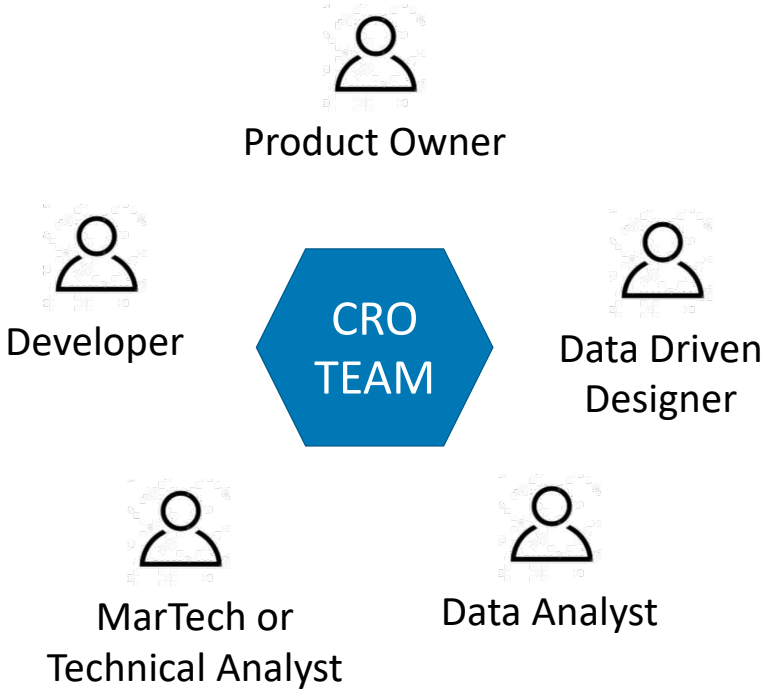
# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 4

Q: What profiles do you need in a CRO team?

A: You need a cross-functional team from Data, Marketing, Design, Content and Technology, etc… (see next slide)

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…



# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 5

Q: What should be the “ways of working” to coordinate the CRO team?

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 5

Q: What should be the “ways of working” to coordinate the CRO team?

A: Since they work under a continuous improvement culture is is recommended to work using Agile methodologies in the same location

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 6

Q: How do you manage the conflict between building a digital product and optimizing the digital product (same team or different teams)

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 6

Q: How do you manage the conflict between building a digital product and optimizing the digital product (same team or different teams)

A: Usually Product teams (new functionality) and Growth teams (up/cross sell) needs to have a strong communication. CRO is usually closed to Growth teams

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 7

Q: How do you inoculate the learnings from experimentation into other teams?

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 7

Q: How do you inoculate the learnings from experimentation into other teams?

A: Through communities of practice, culture of transparency, time to socialize with teams, hackathons and proactive communication to spread the learnings (pollination of innovation)

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 8

Q: Q: What is the process to implement a test?

# 4- Key capabilities to implement CRO: Organizational Challenges. 8 exploratory questions…

QUESTION 8

Q: What is the process to implement a test?

A: The process is usually as follows:

1. Create your hypothesis “if I change this → I will get this positive financial impact”
2. Prioritize the tests using a Cost / Impact matrix. The most desirable tests are the ones with higher financial impact in the short term and also easy to implement. Use financial impact equations like this “Revenue= Visits x CR x AoV”
3. Create the alternative Design.
4. Implement the test in an A/B test tool
5. Analyse the results
6. Implement the winning version in the Product

See A/B test template in the next slide for reference

# A/B – Test template

## A/B Test name

### Hypothesis
Explain your hypothesis
By changing the CTAs to a more prominent design we expect to increase +10% traffic

### Estimated economic value
Explain the impact in financials
Use Revenue= Visits x CR x AoV or similar calculations for cost savings

### Control and Alternative version Designs
Describe your Control version (A) and your Alternative version (B) including wireframes

### Target Audience
Describe the target audience or % of traffic affected by the test
(will you implement the test for all users?)
This is the overall description of the users /customers you want to target.
Customers, non - customers, first time visitors, retargeting visitors from Ad Campaign, etc…

### Segments: KPIs involved to filter/segment traffic for each experience
What KPIs would you use to filter the traffic and get to your target audience (i.e.: only SEO traffic, only users leaving an abandon cart, users logged in, users coming from a channel traffic (facebook, SEO, …) logged in users, etc…)

### Implementation requirements / effort
Explain briefly the implementation effort or steps of the Test
Who needs to be involved, etc…

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# Practice: Google Optimize

1. We will use a Test CRO site (Blogger site)
2. Prevous: Implement Google Optimize via Google Tag Manager
3. Create alternative experiences in Google Optimize Console
4. Google Optimize allows to run Personalization Use Cases as well
5. For how long an activity needs to run? → Statistical Significance

# Practice: Google Optimize

1. Original: https://crosite.blogspot.com/

# Practice: Hotjar – Heatmaps & recordings

1. What do you need to implement Hotjar?
2. We'll set up a heatmap in the homepage of our webpage.
3. Is it possible to run a heatmap per AB test version?

# Key Takeaways from Session 9

1. The CRO model is based on DATA DRIVEN decisions, therefore Testing and Experimentation are essential to the model
2. The most popular testing tools are A/B Testing to evaluate two experiences and Multi Variate Testing to change dynamically several components to choose the winning combination
3. User Monitoring Tools and Heatmaps allow to track the user behaviour in a web page and even record the user session anonymously
4. CRO implementation is complex since it requires the collaboration of diverse teams and a strong technical IT support
5. But even more complex is to implement an experimentation culture. It requires c-Level support and a fluid organisation (typically Agile)