# **UX RE-DESIGN FOR BAUDOIN WASH SYSTEM'S WEBSITE.**

Judith Novia Tanta

 Desain Komunikasi Visual, Seni dan Desain, Universitas Kristen Petra, Surabaya, Indonesia
 Jl. Siwalankerto no. 121 – 131, Surabaya, Jawa Timur, 60236 E-mail : judithnoviatanta@gmail.com

#### Abstract

Title: UX Re-design for baudoin wash system's website.

The purpose of this paper is to understand the re-design process in the user experience especially in the interaction design on Baudoin current website in order to attract potential client for Baudoin washing system. The website itself cover more than usability problem, for example user interface problems. Moreover, finding the best approach for re-design Baudoin's website to be a web-shop also conducted throughout this report. Research question was formulated "How to re-design Baudoin's website to be a web shop that is focused on the interaction design as well as following the latest UI/UX standard so that Baudoin can attract more potential client?" was answered throughout this paper. The data was gathered by combining quantitative and qualitative approach to avoid bias result since the important conclusion was compiled by user testing and observing the user itself in qualitative way. It can be learned that understanding the elements that need to be re-designed combined with understanding the user needs was essential throughout the process to reach the real expectation of the user. Improving the usability of the website itself.

**Keywords:** re-designing, website, usability, Baudoin washing service re-design, understanding user, user experience, user interaction.

## Abstrak

#### Title : UX Re-desain untuk website Baudoin wash system.

Tujuan penulisan berikut adalah untuk memahami proses dalam me-redesain user experience terutama pada desain interaksi website milik Baudoin untuk menarik klien potensial dari Baudoin. Website yang sudah ada memiliki usability problem dan interface problem yang akhirnya menyebabkan kualitas website terus menurun. Oleh karena itu, pendekatan dan penyelesaian masalah terbaik dan sesuai dengan kondisi lapangan sebagai solusi Serta, perubahan bentuk website menjadi web-shop dilaporkan dalam penulisan ini. Pertanyaan riset yaitu "Bagaimana cara me-redesain website Baudoin menjadi web-shop yang berfokus pada desain interaksi dan mengikuti standard trend terbaru dari UX/UX dapat dilakukan supaya Baudoin dapat menarik pasar potensialnya?" di jawab dalam laporan ini. Mengembangkan usability dari website itu sendiri.

Kata kunci : re-desain, usability, website, memahami user, user experience, user interaction.

## Introduction

The main marketing strategy of Baudoin company to gain their potential costumer is mainly through personal approach. One of the common strategies to increase the number of sales is usually done through attending related business fair such as boat fairs and cleaning machine fairs. It is proven that the methods they've been doing was great since they won several awards regarding the matter. Usability problem in the current website is the main problem of Baudoin to attract more potential client. UI/UX design elements that was already there was misleading the user. Therefore, it leads to a high number of bounce rates (see figure 3). A Bounce Rate is the number of visitors who leave the website after visiting a single page. Main factor to contribute to the high number was user frustration while using the site for poor user experience (Little, 2019)

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Figure 1 : Baudoin.nl website's statistic March-May 2019

Also, Baudoin website is not responsive to mobile devices. Neil Patel (2019) describe that "Traffic from mobile devices is still increasing. That being the case, your website must be mobile-friendly and optimized for mobile usability. Recent studies from Google found that mobile visitors are more likely to revisit mobile-friendly sites" (Patel, 2019).

## **Main Question**

How to re-design Baudoin's website to be a web shop that is focused on the interaction design as well as following the latest UI/UX standard so that Baudoin can attract more potential client?

## **Scope and Limitation**

In this project programming the website front-end was out of the scope rather UI design and interaction design was provided until the stage of highly functional prototype to the web-shop. Also, the writer was limited to contribute up to the process of Baudoin prototype only in the website version of the site, excluding the mobile version. Building a website and re-designing is not a new task for the company writer's doing the internship with. However, there are no interaction designer before in the company. Therefore, writer role as an interaction designer in the company will contribute something new that the company had never had before.

# Methods

This graduation project was planned by dividing the progress into several steps. This approach techniques was based on the most commonly used workflow in UX or Interaction design process (Minhas, 2018) as can be seen in figure below.



**Figure 2: Retrieved from www.uxplanet.org** (*Minhas*, 2018)

Each of the step progress will answer the main question divided in detailed steps formulated beforehand.

## **Usability Inspection**

To Inspect the problem of the current website, usability inspection was conducted using heuristic evaluation and usability principle by Krug.

## Heuristic Evaluation by Jacob Nielsen

10 Heuristic evaluation principles by Nielsen (Nielsen, Nielsen Norman Group, 1994):

1) Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within a reasonable time.

## 2) Match between system and the real world

The system should speak the users' language, with words, phrases, and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

## 3) User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

## 4) Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

## 5) Error prevention

Even better than good error messages are a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

## 6) Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

## 7) Flexibility and efficiency of use

Accelerators — unseen by the novice user — may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

## 8) Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

9) Help users recognize, diagnose, and recover from errors

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

## 10) Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

#### Usability Principles by Krug

Based on Steve Krug's "Don't make me think!" (Krug, 2014), there are several important principles that the designer should take usability into account when making a website. Here are some of the principles that the writer can implement in the site for Baudoin:

### 1. Self-evident

Means that users should be able to understand the website purpose without expending any effort thinking about it.

- 2. Design pages for scanning, not reading
- Clear visual hierarchy
- Take advantages of conventions
- · Break pages up into clearly defined areas
- Make it obvious what's clickable
- Minimize noise.

#### 3. Site most basic navigation elements:

Site ID, Section, Utilities, Subsections, Page Name, Local navigation, and small text version.

From the list provided above, in designing the site, designer have to be persistent in navigation or global navigation. The navigation elements need to appear in the same place on every page with a consistent look to give the user instant confirmation that they're still on the same page.

4. Five must-have navigation elements:

Site ID : A way home (home button or anything that brings you back to home), A way to search, utilities and sections. But not in every page there is an exception: Homepage and Forms. Home is a crucial button at all times because we need them to take us back (like a little reset button for all our doings) and make sure that it is clickable and visible in every site ID.

Having consistency: on designing each of the pages are important. Top & lower pages must be handled equally rather than spending large amount of time for each section. Which will cause inconsistency on detailing, such as forgetting a button. Naming every page are necessary, to put the pages on the right places (visual hierarchy & framing). Prominent names are also needed to make clear the heading doesn't contrast when clicked. Synonym can also be used to match is as closely as possible. For instance, "Gap.com". In their page, there is a labelled button named "gift for him" but when clicked it rather shown "gifts for men" which is adequate and equivalent to the heading.

Navigation: used as the basic indication or marks where the user located at on the current moment, by highlighting the current section and subsection. Commonly found mistake for navigation are the indication "you are here" is too subtle in order to make sophisticated design.

Breadcrumbs: hold the same importance as the navigation indicator. It functions as guide to show the way back to home and the site's hierarchy. Importantly, Breadcrumbs are not best alone for navigation scheme. Breadcrumbs are perfectly suited when placed at the top of the pages (marginalized, to be camouflaged as an accessory or spice to the page such as numbers in books), use between > levels (the sign ">" is the best separator between levels (the sign ">" is the best separator between levels to visually suggest forward motion, other than colon ";" and slash "/") by using tiny type (emphasizing accessory purposes) for "you are here" word to make them self-explanatory. Such as, Boldface the last item and does not use them instead of page name. Important notes, do not use Breadcrumbs as the page identifier.

Tabs : mainly used by larger sites as a navigation system. They are self-evident, hard to miss, slick, they suggest good physical space, and also good at detecting the visual cue on where we at. By drawing our tabs correctly, using connections and contrast. Do not draw them as a tab function but as a button. Color coded tab are important to highlight their own identity.

#### **User Usability Testing**

#### Choosing who to test

According to Krug (2014), the way to determine the audience to be tested is to organize a usability testing and to choose who to test with, the designer can select three or four random people who are willing to join the test. This represents the efficiency and itinerant level of the test where the feedback can be fixed in the same day and an upcoming test can be plan afterwards.

However, in order to determine the real success, the real target audience from Baudoin was tested during the final test to the highly functional prototypes. Random user test based on Krug's theory mentioned above was conducted to get rid of usability problem during the first steps result of the projects.

#### Target audience

To determine the real user of the site, target audience analysis was done based on Philip Kotler theory (Kotler, 2002), which he divide 4 main influential variables to determine the market and audience on consumer which is demographic segmentation, behavioural , geographic and psychographic segmentation.

#### Task based scenario

The writer conducted a user usability testing and measured the user success rate using task-based scenario. The usability testing task scenario was chosen because understanding user interface is far more effective by observing real life, as the essence of usability testing. When participant attempts realistic activities, measures qualitative insight on future problems will be easier, as well as helps to determine the problem-solving solutions (McCloskey, 2014)

McCloskey (2014) defined task-based scenario for a successful usability testing must consist of these two steps:

1. Determine user goal

The designer should come up with a list of general user goals that the visitors to the site (or application) may have. The designer should ask themselves about what are the most important things that every user must be able to accomplish on the site?

2. Formulate task scenarios that are appropriate for usability testing.

Task scenarios need to provide context. In order to achieve that, the designer needs to take into account the three task-writing tips which will improve the outcome of the usability studies:

- a) Make the task realistic : Let the user defines their own task and the designer should not limit the actions.
- b) Make the task actionable : It is best to ask the users to do the action rather than asking them how they would do it.
- c) Avoid giving clues and describing the steps, instead of giving steps or clues to the user, it is better to give a short and clear task that the user needs to accomplish.

#### User success rate

It is important to keep in mind that the task scenarios which include terms being used in the interface are likely to create bias since we are observing the users in qualitative way (McCloskey, 2014). Therefore, to measure the task subjectively and provide the data in quantitative way, metrics of user success rate was chosen. User success rate is the percentage of tasks that the users complete correctly. In order to measure the rate accurately the writer used measurement based on Nielsen theory (Nielsen, 2001) that already proven is the best way to count the user success rate (McCloskey, 2014). The user success rate measurement states if failure reached half of the progress or goals that has been determined is valued as 1/2 points. Metric received with formulas as following: result of success times the result of half - failure attempts multiplied by 0.5 divided by the total attempts, served in percentage.

## Success + (HalfFail \* 0.5)

## Attempts Figure 3 : Formula of user success rate in percentage by Nielsen

If the value of the percentage exceeds 50% then it can be considered success.

## **Competitive Audit**

Conducting competitor SWOT analysis in websites require different approach. First, before determining

your website's competitor, it is required to determine your own website Internal attributes and external attributes of your website. (2019)

Internally, divide the finding in what consumer mentioned hard or difficult as a weakness. Externally, divide things that the website could do to help customers reach their objectives in the site, especially on things your competitors don't do or do badly. Pay special attention to customer "wishes" and want on clear feature comparisons (which none of your competitors offer) that categorized at opportunities. (2019) Identify if the site is B2c or B2B and transfer them into a quadrant. Next, to objectively determine the main competitor, distinguishing its company level within each market, such as a national, international, regional or local scope is required. Then, addressing the competitor criteria based on (Competitive positioning, 2018):

1.Direct competition: Its competitors offer similar products or services.

2.Indirect competition: Its competitors has different products or services but potentially can provide relief for the market

3.Future competition: Its competitors could easily expand their offerings to compete in the market

After the process of identifying the competitors based on the criteria above, formulating the final competitor list is valuable to shape the company's competitive positioning strategy.

## Result

## 1. Understand

## Target Audience

#### Ocean website

SES A, obviously since they have to have a boat or yacht. Age range from 25 to late 50s. Gender dominated by males. Personality: Luxurious, enjoying ocean, hobby with boats or yachts, love adventuring in the ocean, exploring world throughout the ocean. Status: CEO, owner of business. Living mostly not locally, most of them live out of the Netherlands, using the service while they are arrived in the port nearby Netherlands. Most of the user detected was from Turkey.

#### Industry website

SES A/B, Age ranged from 30 to late 50s. 50-50 male/female. Personality: love cleaning and innovation, efficiency, tidy and hygienic. Status: working as manager or director of a company. Living in local neighborhood from Waalwijk such as Den Bosch, Drunen, Tilburg, etc.

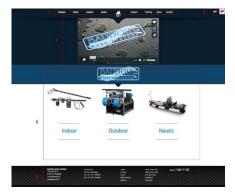
#### **Client Objectives**

The following is a list of summaries of the client inputs to be made in the new design of their website:

- The website serves as a web shop;
- Web shop needs a link to connect to social media;
- Web shop also serves as a product catalogue, so the web shop can provide information and selling their products through the website;
- Washing boat service needs a pricing system that could be used to estimate how much it costs to clean a boat; and
- The web shop should be independent for website maintenance, so the client can manage the website by themselves.

#### **Usability Problems**

Analysis conducted based on Krug's Usability principles (krug, 2014), Usability problem founded : Not all of the website elements function well especially the buttons. The product was mixed and too many explanation. The layout design is consistent, but the placement is questionable. Like the placement of the site id in the center of the site. According also to krug (krug, 2014), he discuss that user will most likely get lost if we put the site id in the center as can be seen below.



# Figure 4: current visual hierarchy of Baudoin website

Five must-have navigation element (krug,2014)

Site ID: was there but not presence, can not be clicked and can not be used as a "way home"

Searching: No search button, despite of the various amount of product they put in the site.

Having consistency : Each layout of the page was consistent. But the naming system on each page or the word used to describe the page was not coherent. For example, when we click on "Outdoor" section the page name or at least the largest title appeared was "Baudoin carbo cleaning system" which is not even adequate to the outdoor word itself.

Navigation: Highlighting current section and subsection was only done when we hover over it, other than that the only identifier we can find was the page name or at least the biggest title provided there.

Breadcrumbs : no usage of breadcrumbs could be detected in the site.

Usability Analysis based on Heuristic Principles (Nielsen, Ten usability principles, 1994): One out of the ten factors, Baudoin's website covers six usability problems from the evaluation.

1) Match between system and the real world

The website provides two languages features for their target audience, since the target audiences for ocean wash and industrial wash are different. However, there is still wrong language that appears in the selected features, for example, user choose English for dealer information but what appears in the page is still in Dutch.

#### 2) User control and freedom

It is not sufficient because the home button is not working when it is used to return to the home pages. Some buttons and pages do not work as it should be.

#### 3) Consistency and standards

The lack of consistency and standardization lead to a not user-friendly website, such as the home button is in the center which is likely for user to get lost. In addition, the mobile support insufficiency is hard to be updated.

4) Recognition rather than recall

There is an overused recognition principle for the introduction video. For instance, the video keeps playing in every page, even in unimportant one.

5) Flexibility and efficiency of use

It is not flexible because the language switch features did not work. There are error pages that were seen during usage of English features and no feedbacks were given.

6) Aesthetic and minimalist design

The design is old and has not been updated for eight years ago.

All the evaluation above aims for a clear overview of the current website condition.

## User Workflow

Each developing state of the workflow was delivered after receiving feedbacks from the clients and discussing it with the design team. Overview of the final user workflow can be seen in the figure below. Iteration progress can be accessed here



Figure 5 : Summary of both Industry and Ocean user workflow process.

## 2.Research

#### Competitive audit

Self- audit was conducted first through Baudoin site and brand to understand more of the current situation both internally and externally. <u>Result of Self-SWOT analysis</u> <u>can be accessed in this link</u>. Based on the result, it can be concluded that there are some elements that are still beneficial to the website of Baudoin, such as: provide information in bilingual , the usage of video as the alternative to define the company, the custom build website that Baudoin is using currently could act as the unique selling point of the company since none of the competitors are applying custom build website.

Furthermore, from the weaknesses and threats table, it can be concluded that Baudoin could improve the website in a way, for example :

- The website should elaborate clearly on distinguishing the two products that are existing currently and categorize the product information.
- Considering mobile website, which is currently unavailable.
- Fixing the broken link and improving the language features in all webpages.

Lists of competitor names and profile was collected using the theoretical foundation before and was also confirmed through the interview with the owner conducted in the early stage of the process. <u>Can be seen here</u>. Selected from the list, narrowed down to 4 most influential competitor ,their website was analyzed. The result was design inspiration that could be used to collaborate with the latest trend. Design inspiration was determined by the elements and features from the strengths of the competitors. As has been discussed internally between the writer and company supervisor, both agreed to pick these elements below:

- Website will be improved to be more mobile friendly
- Website will be easier to navigate by implementing Breadcrumbs on the pages
- Also, with the help of product organizing and keyword system or filtration system will surely do help the user on the right tracks.
- Featuring tips & trick will add the information and also increasing the chance of purchase.
- Not forgetting by linking to social media platform allow user to receive the latest promotion.

Also by it can be learn from weakness and threats of the competitor that :

- It is wise to not show the prices of the products online to minimize price leak to the competitor.
- Also, it will positively increase human interaction by doing direct contact with the costumer services. Which can be applied to

Baudoin since Baudoin strength according to swot analysis are human interaction.

From two analyses above, it could be summarized that the elements below could be implemented:

- Make the website mobile friendly
- Use breadcrumbs to navigate
- Organizing the products using keyword system or filtration system.
- Featuring tips and tricks on the site.
- Social media links
- Product request form as a solution to the problem of showing prices and increasing human interaction contact.

#### Design trends

Semi-professional Interviews was conducted resulting in advises and opinion of experts. Based on those result, sources are considered and design trends that is applicable were compiled , those web-shop trends (Charlton, 2019) and UI/UX trends (Studio, 2018) were summarize tin the result section below.

## 3.Sketch

#### Data appliance

From the result of usability evaluation in the first step, data of beneficial elements from Competitor SWOT analysis was applied. Compiled elements and features that bring benefits to Baudoin was implemented to the website by formulating a design checklist to ease the process.

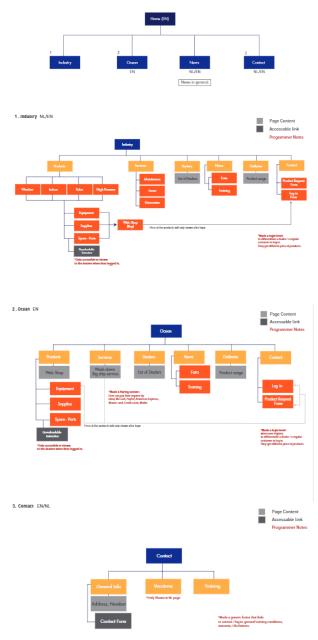
The check list provided as follow:

- Categorizing website as two main different group, as the ocean and industry section are based by their differences on the target audience, product & services.
- Product request form as a solution to the problem of showing prices and increasing human interaction contact.
- Omit the introduction video from unnecessary page or optioning to video from certain page for user to access.
- Replacing Baudoin design with the latest branding and design.
- Mobile friendly site.
- Link the website to social media.
- o Use breadcrumbs to navigate
- Organizing the products using keyword system or filtration system as a solution to organize the content.
- Fixing the visual hierarchy and site id functionality.
- Use relevant word for naming each page to maintain consistency and avoiding user to get lost.
- Featuring tips and tricks on the site.

Consistency of the designed websites 0 including languages and design principles must go hand-in-hand.

#### *Sitemaps*

Designing process of the sitemaps can be seen in this link.



**Figure 6: final result of the sitemaps** 

As can be seen above result of the sitemap sketch can be seen in the figure above. Due to the scope HTML or XML implementation was not provided in the report. Several notes was given from the client as a feedback but nothing major to made change on the sitemap design. Notes was given as a reminder to the programmer.

#### 4.Design **Prototype**

Method that been used for the prototype process was

wireframing. Iteration and detailed progress can be acessed in this link. Low fidelity prototype progress until highly functional prototype was made based on the input from both user, client and the supervisor. User testing was done in each step in order to improve the quality of the prototype.

#### Grid appliance

Using 12 columns grid in the project, generated automatically by XD so it is not limited only to design in screens. Use of the grid can also be seen in the shared file of the Adobe XD itself provided in this link

#### Low fidelity prototype

The concept was clean and minimalistic. Sketches of water on the landing page, seems like a cleaning work have done by Baudoin then proceded to digital wireframes to make communication and iteration process easier. Tool that being used in this progress was Adobe Illustrator and Adobe XD. Despite of the color and aesthetical value, user usability perspective was considered the most during the iteration process. Client feedback was also considered but balanced out by the design principles and elements from learned from gathered data. Challenge and problem faced in this progress was language barrier. During the process writer had to face difficulties keeping up with Dutch term or words. Seeking properword for naming each page was one of the problem. Along-side with that, overflowing product categories also contributing in slowing down the design process. Dramatic changes through the wireframe 1 to 3 was mostly to reduce the product category in the site. Using the latest result of high functionality prototype, final user testing was conducted to observe whether the workflow and the design work well to finalize the project

#### **Design Check-list**

Prototype was checked if they have met the principles that been collected all the data gathered.

Mobile First UX : Old website of Baudoin did not support mobile access from the website, so we design one.



Figure 7 : Mobile design for Baudoin landing page



Figure 8 mobile support insufficiency on the current website of Baudoin.

Simplified checkout : inspired by the comparison of the competitors website SWOT, the relevant checkout functionality, design layout and checkout system that was using the simplified checkout trend was applied.

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### Figure 9 Checkout page design using simplified check out trend implemented on industry (left) and ocean (right)



Figure 10 Example from competitor using long check out process (2019)

High Quality Photo Content: in the current website, Baudoin has been using small scale photo on all the galleries ,more on explanation or even broken links throughout the galleries. So, this trend will improve the aesthetic value of the site. In order to maintain the high quality photos itself, our designer team mainly took the picture for the new site by themselves



Figure 11 : Product picture taken by the designer team



Figure 12 :Result photo that is applied in the second prototype of Industry page.

Bold Fonts : this trend was relevant and applicable for Baudoin site because Baudoin use Helvetica as their typeface in the website. Besides of the thickness variation that is applicable for the trend, Helvetica is one of the most popular font throughout the time (Chapman, 2010) it is a very "safe" font and widely known known as a corporate typeface (Rohrer, 2007). Consistency of the design can also be maintained since Baudoin new logo was using Helvetica as their main font.

## Design check list – check

Categorizing website as two main different group, as the ocean and industry section are based by their differences on the target audience, product & services. As can be seen in the current website figure, product category was confusing.



Figure 13 : clear product category distinction

Product request form as a solution to the problem of showing prices and increasing human interaction contact.

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Figure 14 : product form from Ocean site

Omit the introduction video from unnecessary page or optioning to video from certain page for user to access.

Featuring tips and tricks on the site. Link the website to social media.



Figure 15 : social media link, and gallery page.

Use breadcrumbs to navigate. Organizing the products using keyword system or filtration system as a solution to organize the content. Use relevant word for naming each page to maintain consistency and avoiding user to get lost.



Figure 16 : breadcrumb usage in every sublevel page, filtration system to organize product and relevant naming

Fixing the visual hierarchy and site id functionality. Consistency of the designed websites including languages and design principles must go hand-in-hand.



*Figure 18 language features and clear visual hierarchy on product detail ocean page.* 

#### 5. Evaluate

User testing detailed result can be found in this link.

#### User testing

User are performed to do 3 most important task for each category from Industry and ocean also considering on usability problem analysis conducted in chapter before.

Formulated goals for the user on the website:

- 1. Learning the two main product distinction
- Able to buy some products from the web shop
   Able to request product request form for
- customized items
- 4. Understand that you can make an account in the site

However, goal number one is too obvious since the landing page immediately separate the category and the user were having no difficulties to differentiate. Therefore, the tasks that is instructed to the users that have been measured are :

No 1 - 3 was question for ocean and No 4 - 6 was for Industry

1. Let's imagine that you are a wealthy gentleman whom owns a private cruise ship, which sadly your private cruise ship was quite dirty through your world tour adventure. You want to use the service to clean your ship from this website.

2 You are trying clean your ship with cleaning tools, but you had to order it through the website

3. You are a wealthy heirs and soon will be throwing a huge party on my ship but sadly I don't know where to buy or where to follow the latest news related to ships. Seek the information through the website.

4. Planned to do house cleaning upon certain budget, the best option is to order indoor set from Baudoin industry.5. Make an account to order through website

6. You need a water tank which is able to be used by 2 workers and must be mobile

Each of the user testing session was observed by counting on how long they're able to accomplish one task and recorded, and being asked of their inputs and thought about the website. If the user does not want to be recorded, picture as proof of testing was taken.

#### Test Result

In result provided below S mean successful, P partial success and F represent fail, color coded green, orange and red respectively. Proof of testing provided here.

-	•				
F	S	Р	P	S	Ρ

# Figure 17: Random user testing tested to the first low fidelity prototype.

First User testing : resulting in 58% percentage of user success rate. Considered a success, user understand the workflows. Fail attempts were because of unclear instruction made by tester, since the prototype was not fully functional prototype. User was tested with the same question formulated in previous section with less complicated tasks descriptions such as ,"can you point at the log in button?" and "can you direct me how to order a brush?" Writer acts as a computer who give feedbacks verbally. Understanding what make them fails and improvement applied to the next prototype that was tested to second user testing. After the first user test, discussion with client side was made. Resulting in suggestion on the picture sliders, infographic ideas and lay outing improvements.

Second user testing : random user test resulting in 66% percentage of user success rate. Considered a success. User understand the workflow, fail attempts are mostly



because the user can't read Dutch. User also made feedbacks on how the infographic was too long to

#### Figure 20 : Second user test on functional low fidelity prototype , improved from the first user testing

scroll, improvement were implemented after observing why user fails this attempt and tested in final user test. After the second test, discussion with the client were made, adding next step button on the water system infographic on Industry page was suggested by the client side. Squared button shaped also recommended by designer supervisor.

	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6
User 1	S	S	S	S	F	Ρ
User 2	S	Ρ	S	S	S	S
User 3	S	S	S	S	S	S

# Figure 19: Final user testing on highly functional prototype on real user of Baudoin

Final user test : real user of Baudoin based on target audience data result resulting in 88% percentage of user success rate. Considered a success, user understand easily the workflow of the web-shop, feedbacks that made from the real user were the fonts was too small to read. Fail attempts and partly fails were because the user expecting the search button to work , so they can accomplish the task easily without exploring the site thoroughly.

In the end result client like the design and the next step would be implementing the final design after the final prototype design was made.

## Conclusion

Overall, attracting user to stay and using the website that is familiar and comfortable to use for them was the most important thing learned from this project. Target audience mostly are old people range from 25 to late 50s .Also, working in a workflow that the writer was not used to it, but it turns out to simplified the project approach and complexity. However, it answer the real problem that the real user are facing and the most important thing designer do are solving problem, make life easier through design not to complicate it.

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# References

- Babich, N. (2017, December 10). Articles of design and development. Retrieved from Smashing magazine: https://www.smashingmagazine.com/2017/12 /building-better-ui-designs-layout-grids/
  Bradley, S. (2013, june 3). Why you should design with
- Bradley, S. (2013, june 3). Why you should design with grids. Retrieved from Vanseo design: https://vanseodesign.com/web-design/whygrids/
- Carhil, C. (2019, January 21). *Ui design tool*. Retrieved from Creative Blog: https://www.creativebloq.com/how-to/20best-ui-design-tools
- Chapman, C. (2010). Retrieved from web designer depot: https://www.webdesignerdepot.com/2010/01/ the-simplicity-of-helvetica/

10

Chapman, C. (2010). Retrieved from https://www.smashingmagazine.com/2010/01 /color-theory-for-designers-part-1-themeaning-of-color/

chapman, c. (n.d.). *neil patel*. Retrieved from https://neilpatel.com/blog/build-a-sitemap/

- Charlton, G. (2019, January 15). Retrieved from Userzoom ux company: https://www.userzoom.com/blog/ecommerceux-trends-2019/
- Charlton, G. (2019, January 15). Retrieved from User Zoom: https://www.userzoom.com/blog/ecommerce-

ux-trends-2019/

- Cotler, E. (2004). . Web Redesign 2.0: Workflow that Works (2nd Edition). New Riders .
- Dietze, B. (2017, June 07). Understanding Sitemaps. Retrieved from Volusion: https://www.volusion.com/blog/the-easyguide-to-understanding-sitemaps-and-pageindexing/
- Elfalah, H. (2015). Utilizing ISO Guidelines to Improve Website Quality Gaps. 1.
- esposito, E. (2018, may 29). *Inside design blog*. Retrieved from Invision: https://www.invisionapp.com/insidedesign/low-fi-vs-hi-fi-prototyping/
- Kotler, P. (2002). Manajemen Pemasaran, Analisis, Perencanaan Dan Pengendalian, Edisi 5. Jakarta : Erlangga.
- krug, S. (2014). Don't make me Think. New Riders.
- Kucheriavy, A. (n.d.). Retrieved from Intechnic: https://www.intechnic.com/blog/how-toperform-a-swot-analysis-for-your-website/
- Little, J. (2019, January 25). *analytics*. Retrieved from crazyegg.com: https://www.crazyegg.com/blog/high-bouncerate/
- Marcus, J. (2017, January 31). Retrieved from Oberlo: https://www.oberlo.com/ecommercewiki/user-interface-ui
- McCloskey, M. (2014, january 12). Retrieved from Nielsen Norman Group: https://www.nngroup.com/articles/taskscenarios-usability-testing/
- Minhas, S. (2018, April 23). User Experience Design Process. Retrieved from UX Planet: https://uxplanet.org/user-experience-designprocess-d91df1a45916
- Morrison, M. (2016, 06 04). Retrieved from rapidbi: https://rapidbi.com/swotanalysis/
- Nielsen, J. (1994). *Ten usability principles*. Retrieved from Nielsen Norman Group: https://www.nngroup.com/articles/tenusability-heuristics/
- Nielsen, J. (1999). Do Interface Standards Stifle Design Creativity? Retrieved from Nielsen Norman Group: https://www.nngroup.com/articles/dointerface-standards-stifle-design-creativity/

- Nielsen, J. (2001, febuary 18). Retrieved from https://www.nngroup.com/articles/successrate-the-simplest-usability-metric/
- Pande, J. (2018, March 17). Blog of Prototypr . Retrieved from Prototypr.io: https://blog.prototypr.io/usability-on-budgetheuristic-evaluation-for-beginners-andexperts-3348df92529e
- Rohrer, F. (2007, may 19). Retrieved from bbc: http://news.bbc.co.uk/2/hi/uk\_news/magazine /6638423.stm

Sathik. (2019, Febuary 6). Developer on rent. Retrieved from Medium: https://medium.com/developeronrent/adobexd-vs-sketch-which-ux-tool-is-best-for-2019-848318471103

- Schwarz, D. (2018, November 29). Best UI Design tool. Retrieved from UX tricks design: https://uxtricks.design/blogs/ux-design/bestui-design-tools/
- Starovoytov, M. (2018). USER INTERFACE DESIGN . Bachelor's thesis.
- Studio, T. (2018, august 31). Retrieved from https://uxplanet.org/15-hot-trends-in-uidesign-for-web-and-mobile-in-2018eff86df6d868
- Tow, H. (2019, March 5). *Market segmentation*. Retrieved from G2 Learn: https://learn.g2.com/market-segmentation
- Uger, R., & Chandler, C. (2009). A Project Guide to UX Design. new riders.
- UX Design and UI Design. (2019, febuary 24). Retrieved from UX Planer: https://uxplanet.org/what-is-ui-vs-ux-designand-the-difference-d9113f6612de
- Williams, S. P. (2019, January 10). UX collective. Retrieved from Medium: https://uxdesign.cc/will-adobe-xd-kill-sketchand-invision-7fc4e562fc1a