Web Usability, Information Architecture, Prototyping and page redesign for www.inoarprofessional.com

1. Assessment and problem evaluation.

1.1 Company needs.

INOAR hair care Inc. is a Brazilian manufacturer and distributor of hair care products that use natural and plants-based ingredients. INOAR has become a market leader in the natural beauty industry thanks to its research and development approach to beauty and cosmetic care biochemistry, delivering innovative high-end professional hair care products.

INOAR main products are classified within five categories as follows: hair revitalizers, conditioners, perms and relaxers, shampoo and styling agents. INOAR is ranked among the top brands in the Brazilian beauty industry and with the goal of expanding internationally and the company has decided to implement an e-commerce strategy in order to penetrate the European Union market.

To accomplish such goal, INOAR is undertaking a strategy to develop an e-commerce website which will take into account a research of customer psychographic profiles and website information architecture usability of other ecommerce platforms.

1.2 Quantitative Market Research.

According to the Market line's hair care industry research for the year 2015, In the European Union (EU), hair care products' market consumption volume increased by 1% between 2010 and 2014, to reach a total of 3,771.6 million units of products in 2014. The market's volume is expected to rise to 3,994.5 million units of products by the end of 2019, and will represent an increase of 1.2% in the 2014-2019 periods. (European Union hair care market, 2015).

The performance of the market is forecast to accelerate, with an anticipated growth of 2.2% for the five-year period 2014 - 2019, which is expected to drive the market to a value of \in \$18,398.7 million by the end of 2019. Comparatively, the German and UK markets will grow by 1% respectively, over the same period, to reach respective values of \in \$2,664.1m and \in \$2,094.1m in 2019.

1.3 Target Audience.

- Gender Group: Women
- Age Group: Between 18 and 60 years old.
- Location Groups: Women in the urban centers with a population of over 100.000 inhabitants in the European Union countries.
- Education Achieved Groups: People with minimum high school education level and proficiency in the use of internet as a communication tool.
- Household Income: People with an income of over € \$10.000.
- Life Style Groups: Generations X'ers and Millennials.

1.4 Website business market goal.

The main purpose of INOAR's ecommerce website is to become a useful tool that supports the market penetration of INOAR hair care products in the European Union market. To achieve such goal, the website should promote direct sales of INOAR products informing about the advantages and the attributes of the natural hair care products sold by the company. Likewise, the website should promote net sales of about \in \$100.000 in the year 2016, followed by a total net income of net sales of about \in \$220.000 in the year 2017 and \in \$340.000 in 2018. In pursuance of such financial goal the e-commerce platform must have a well-organized display of most products in the landing page, be user-friendly – easy to navigate, with an effective strategy of calls to action, increasing the conversion rate every year.

1.5 Website activities.

Following the strategy of opening new market opportunities in the European Unopn, INNOAR would like to encourage its potential customers to engage in the subsequent activities on the website. Items are listed in order of importance:

- Shop online
- Product review and comparison
- Subscribe to INOAR's newsletter.
- Subscribe to INOAR's blog
- Follow INOAR on social media channels like Facebook, Instagram and Twitter.

• Contribute to the blog and the website consumer forum.

1.6 Main communication goals and message tone.

The message to be communicated should have the following features:

Voice: The voice of the message should be an advice communication approach using rational arguments to tell women why using INOAR's hair care products will help to improve the beauty and health of their hair.

Tone: the emphasis of the communication message should be the expertise of INOAR in developing natural products that offer solutions to deal with damaged hair and to improve hair's health.

For instance, when a website user clicks on one product, the message to be read by the user should engage the user in an emotional experience asking questions such as "why not to improve the health of your hair" or "why looking grim and uneasy about the shape of your hair"

Style: The style to be used in order to promote INOAR hair care products should use techniques such as: stating questions about the needs of the website users, remarks about problems women have with their hair and warnings, recommendations and advices to prevent hair damage.

1.7 Natural Hair care products websites competence analysis.

The criteria chosen to analyze other e-commerce websites that commercialize hair care products and to see how INNOAR can accomplish its market goals in the European Union market place, is through the empirical evaluation of other e-commerce platforms that sell natural hair care products in the North American and the European Union markets.

To attain such purpose, I will take a sample from the ranking of companies that commercialize hair care products provided by Alexa Internet web traffic data and analytics. As stated in that ranking, such companies are:

- www.carolsdaughter.com/hair
- www.janecartersolution.com/
- www.lookfantastic.com
- www.folica.com
- www.curlfriends.com
- www.salonlogics.com.
- www.naturalhair.org
- www.dr.hauschka.com
- www.missjessies.com/.
- www.stephenknoll.com

| waleva.com/tonsites/catego | ry/Top/Shopping/Health/Beauty/Hair_Care/Shampoo_and_Conditioner |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| | |
| tual de la WS The W3C Markup Va | 🗙 Universitat Autòno 🗋 Real-time HTML Edi 🗋 NIE Espana 🚾 HTML Editors 🐧 Google Courses 🚺 Jesse James Garrett |
| | 1 Carolsdaughter.com/hair |
| Global | Headquarters. Manufactures and sells nature-based haircare products. Buy online or find retail sMore |
| By Country | 2 Janecartersolution.com |
| By Category | Products for hair care, hair loss and head lice. Also offers organic cleaners. |
| | 3 Curlfriends.com |
| | An all natural line of hair care products specifically designed for curly hair. |
| ~ ~ | 4 Jflazartigue.com |
| 10 | Organic hair and scalp treatment line. |
| Need an API? Get direct access to web | 5 Jrliggett.com |
| sites ranked globally and by country with Alexa's | Manufactures bar shampoo and body and facial wash products using only natural ingredients. InclMore |
| Top Sites service. | 6 Onestahaircare.com |
| Learn More | Featuring shampoo and conditioners, as well as styling aids. |
| | 7 Stephenknoll.com |
| | Local area salon offering its own line of hair products. Contact information is provided. |
| | 8 Salonlogics.com |
| | Beauty supply professional hair products and haircare include shampoo, conditioner, and stylingMore |
| | 9 Hairport.com |

(Figure 1. Top sites ranking of hair care products e-commerce websites. Source: http://www.alexa.com/topsites/category/Top/Shopping/Health/Beauty/Hair_Care).

1 Consumer profile research.

Objectives of the study: To identify consumption trends and the psychographic consumer profile of INNOAR hair care products in order to design INNOAR e-commerce website's information architecture.

Research Methodology: Interview to potential consumers

Data Collection: Through direct interview.

Scope: The Scope of this research is to find out hair care customers' patterns of consumption when buying hair care products on-line.

Limitations: The limitations of this study are the size of the sample and the restricted geographic area where the sample is taken.

Universe: The main emphasis of this study is the European Union. However, due to the limited time and budget the research sample will be taken just from Barcelona, Spain as a part of the focus market.

Sample Size: A sample size of 2 potential consumers was chosen, but due to incompletely filled questionnaires and unwillingness and carelessness on the part of some respondents.

Sampling technique: A random sampling technique of millennial women consumer profile due to two reasons:

- According to the market consulting group Marketline, the group of millennial women is the largest consumer group of organic hair care products and such sample provides accurate information about parts of the universe. (Haircare industry profile, 2015)
- It provides help in gaining precision through narrowing the sample to that group of target consumers.

(Refer to the appendix number one to see the interview sample and users' answers)

2.1 Key findings:

The strongest driver of trends in the hair care consumer markets in the European Union is the generation of young adult women, categorized within the millennial consumption group, who are more informed through the use of new technologies, social networks and the ecommerce websites.

This group of consumers is less loyal to historical hair care brands and is driven by the new sharing culture, which is being created through social media, putting lots of pressure on creating premium consumer shopping experiences.

According to the interview, hair care products consumers purchasing behavior is influenced by two main trends: alternative health care and the green/natural trend. These trends manifest themselves through the extension and segmentation of hair care routines and through greater interest in ingredient labelling. Moreover, they demand products featuring natural, plant-inspired and premium botanical ingredients.

INNOAR hair care products potential consumers', demand focus on "naturally derived" options from plant or animal sources with more eco-friendly profiles. Therefore, they tend to focus on mild products rather than chemical derived products, are easily influenced by what their friends and acquaintances tell them and when it comes to product consumption, they rely on the voice of an expert and trust in the information posted in internet consumers' forums and discussions boards and are able to pay a higher price for natural and premium products.

Crossing the interview analysis with the Market line's hair care industry research, we can conclude that there are possibilities of product and brand differentiation for INOAR within the European Union market in the years to come, considering hair type, ethnicity, age, cultural practices, climate, fashion trends and even economics. Some of the claims on hair care products mimic those found in the hair care market, including hydration and damage repair.

Focusing in the quality of the raw materials is highly important in terms of product differentiation and potential sales. Health scares and the possible dangers of synthetic chemicals used in beauty and personal care raise consumer demand for safer and healthier alternatives and increase their interest in product quality and safety issues. Finally, new entrants have the chance to enter niche segments of the market, i.e. by offering handmade specialty hair care products, products combating the signs of hair ageing and repairing badly damaged and over processed hair as ecofriendly products that have gained increased popularity recently in other market sectors. (Haircare industry profile, 2015)

2.2 Empathy map.

In accordance to the results of the interviews and the market data analysis, INOAR consumer profile can be laid out in an empathy map in the following way.

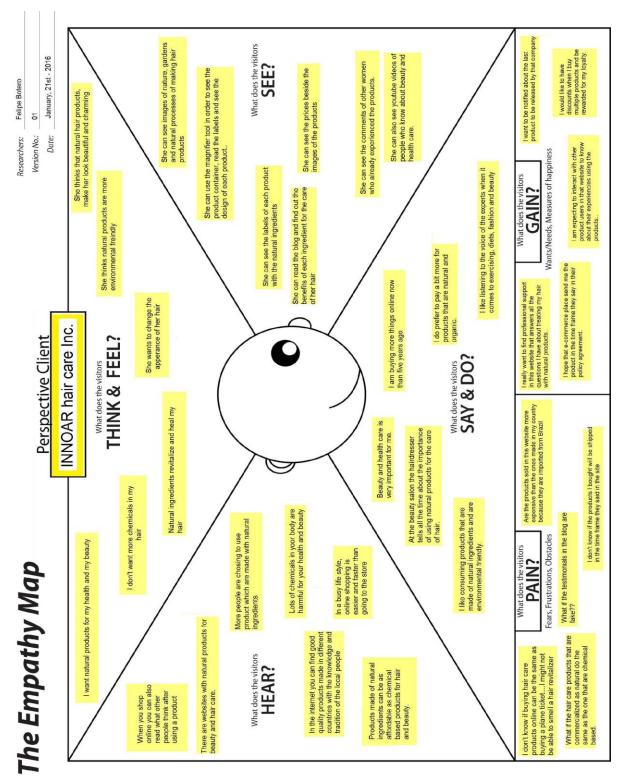


Figure 2. INOAR Hair care products empathy map.

2 Web usability design research.

To find INOAR's best possible Information Architecture (IA) design, a compare and contrast research approach to the world top two largest natural hair care products' e-commerce platforms in terms of visits and conversion rates was developed. To develop the research a suability heuristic evaluation grid was used.

According to Alexa's website information for January, 2016, www.janescartersolution.com and www.carolsdaughter.com are the two most visited natural hair care product websites in terms of traffic. (Alexa commercial web traffic data and analytics, 2016).

3.1. Natural hair care products websites assessment (Usability heuristic evaluation report).

| Heuristic | USER EXPERIENCE CONCEPTUAL APPROACH | |
|-----------|-------------------------------------|-----------------------------|
| | www.carolsdaughter.com/hair | www.janecartersolution.com/ |

• Appearance/Aesthetics analysis: User first impression, readiness to stay or leave the website.

| 1) | Primary goal/Purpose is clear. | User 1 Selling intention clearly denoted. | Some intention to sell but also other not |
|----|--------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| | , | | related, unnecessary information. |
| | | User 2 Obvious intention to sell hair care | |
| 2) | | products. Good design, well distributed, | information initially intended. Many things together. It looks cluttered |
| 2) | Clean, simple design. | spacious, easy to see the elements. | and messy. |
| | | Minimalistic, neat and even distribution | Not clean, saturated, scattered items, |
| | | of items. Products easy to find. | nor harmony neither beauty. |
| 3) | Pleasing color scheme. | Clean, enough to communicate the | Too many colors, poorly applied. |
| | 0 | purpose of the website. Good contrast of colors | |
| | | Uniformity in color. It follows a color | Color contrasts do not communicate |
| | | palette pattern. | anything. Reducing the intensity of colors will give the website rhythm and |
| 4) | Appropriate use of white | | Almost impossible to perceive the sense |
| ., | spaces. | communicates: spaciousness, purity | of spaciousness intended with the white |
| | · | and freshness | color. |
| | | White color is very salient. Gives the idea of spaciousness | Too many elements in the pages. Make the back ground "clear" color useless |
| | | | and meaningless. |
| 5) | Consistent Design. | Size of the images fit well the space | Excessive number of images. Some |
| | | distribution. In some large white spaces images look disconnected. | images have nothing to do with selling natural hair care products. Image |
| | | images look disconnected. | redundancy. |
| | | There is integrity and uniformity of the | No consistency in the size or the |
| | | elements. | distribution of the pictures. |
| | | Size and the distribution of the images is even and homogenous. | Disproportionality among pictures, titles and subtitles. |
| 6) | Consistent text and colors. | | Too many font family types'. Poor |
| 0) | consistent text and colors. | and font types. Overuse of font type | distribution of the block texts. |
| | | makes it looks dull and tiresome | |
| | | Adequate use of short statements and font types. Good use of the gray scale | Different font styles mixed with many blocks of text. Sensation of chaos. |
| | | for texts. Sensation of simplicity. | |
| 7) | Icons are universally | Obvious representation of icons. | Some icons repeated unnecessarily. |
| | understood. | | There is an unknown icon, there are design intrusive icons. There are icons |
| | | | that overlap other icons. |
| | | Clear intention. Easy to understand | Icons unnecessarily repeated. Icons |
| | | their significance. | disproportionately sized and poorly |
| | | It is like entering a physical rate!! -t | accommodated in the pages. |
| 8) | Images serve a commercial | | Images do not sell products. You have to go to other pages to understand they |
| | goal? | it. | are selling hair care products. |
| | | Images carry a strong meaning of | Not a commercial meaning. images |
| | | selling. Product price + image = commercial message | represent a collection of things or a |
| | | commercial message | catalogue with not commercial goal |

| Heuristic | USER EXPERIENCE CON | ICEPTUAL APPROACH |
|-----------|-----------------------------|-----------------------------|
| | www.carolsdaughter.com/hair | www.janecartersolution.com/ |
| | | |

• Content analysis: Easiness to find and use the content in the website.

| 9) Headings and tiles are short and easy to understand. | User 1 Not many titles. Titles and subtitles are short, understandable and salient. | Hard to determine what is a title or a subtitle. Some titles are long and meaningless. |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| | User 2 Texts are concise and intelligible. Text hierarchy is well managed. | Hard to figure out what is a title or a subtitle. There is no titling hierarchy. |
| 10) Content easy to scan | Very easy to scan. There is plenty of space between elements. | Difficult to scan. Too many elements scattered around. Hard to fix the eye in a certain point |
| | Easy to look through all the pages. Well organized items. Easy to find content without effort. | Difficult and complex browsing. |
| Information presented using a simple – easy to read discourse. | Information invites to buy products using an easy and clear rhetoric. | Very general discourse. Need to dig down through many steps to find meaningful content. |
| | Dissonance among topics. | Content lacks accuracy and simplicity. Poor grammar, punctuation and run on |
| 12) Clear terminology, no jargon | Easy to understand terminology. Short and straight forward statements. | Simple and clear terminology. |
| | Simple terminology. | Sometimes overuses some acronyms. |
| 13) Links are clear and follow conventions | Clear links and the click vector recognize the links when hovering over with the mouse. | Should use different colors or use a hover box to indicate that you are moving your mouse over a link. |
| | Links are easy to recognize and make the navigation easy. | Hard to anticipate when to find a link. |
| 14) Help is available on every page | It is difficult to find the link or field where support is offered. | Help and support hard to be found |
| | Just the FAQ link. | Just the FAQ link at the page bottom |
| 15) Important content is above the fold | Important content, well located above the fold. Easy to see as soon as you enter the website. | Commercial information is not found above the fold. |
| | The most Important information is placed above the fold. There is no need to scroll far down to see the main information. | The information located above the fold, is a mixture of disarranged topics, different from important commercial information. |
| 16) Search field is easy to identify and easy to use | It is easy to identify and facilitates the search process. | Static search field and no clue words about an anticipated search typing. |
| | It makes the buying process faster and easier. It gives slight suggestions about similar | Static search field that hinders the product search process. |

| USER EXPERIENCE CON | NCEPTUAL APPROACH |
|-----------------------------|-----------------------------|
| www.carolsdaughter.com/hair | www.janecartersolution.com/ |
| | |

• Navigation analysis: Simplicity to get around in the website without thinking through what to do next.

| 17) Consistent Navigation using tabs and buttons. | most websites. The design follows a standardized pattern. | Homogeneity in the way buttons and tabs are arranged. |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| | User 2 Tabs and buttons are laid in a uniform way. | Design is consistent, prominent and easy to identify. |
| 18) Easy to identify your location on the site (breadcrumbs, headers, | move from the top to the bottom. | Easy to get lost. Easily you go from a virtual store to a social networks without intention |
| colors) | hierarchy. Other breadcrumbs show the categorization | Breadcrumbs help to know your location. Invasive hover boxes make you feel lost. |
| 19) Consistent way to return Home | Link to the home page is big and prominent. | There is not a clear indication (image or link) that shows how to go back. |
| | navigate through the website and to return | Complicated to go back to the home page. Have to use the internet browser arrow to go back to the home page. |
| 20) Limited number of buttons & links | Not many buttons. Mostly links that make the website to look clean and spacious. | There are sufficient buttons. |
| | Just the necessary number of buttons. | Necessary number of buttons |
| 21) Organization of information makes sense | There is accordance between the purpose of the website and the information provided. There is coherence | There are unrelated topics put together. The information is not prioritized in the order it should have |
| | | Information is placed in a mixed way. It affects the credibility. |

| Heuristic | USER EXPERIENCE CONCEPTUAL APPROACH | |
|-----------|-------------------------------------|-----------------------------|
| | www.carolsdaughter.com/hair | www.janecartersolution.com/ |

• E-commerce efficiency/functionality: Coherence of the basic functioning rules that keep users frustration to a minimum while shopping efficiently in the websites.

| | 22) Appealing imagery and text for Products, special offers and promotions | explanatory texts. Links that | Website is a noisy collage of things different than selling. Images not related to the purpose of the website. |
|----|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | User 2 Pictures call users' attention at first sight. The concept of selling hair care products is conveyed clearly by the images | Multi-purpose, out of focus website. Images communicate different meanings. |
| | 23) Hover boxes to describe products features. | The website has the tool and fulfills its function of showing products pictures in detail. | Products are mostly described by words instead of images. Sometimes it looks like the are hidden. |
| | | The magnifier tool helps to see the package and the label in detail. | It does not have such tool. |
| | 24) Magnifier and 360 ° angle tools for product observation. | | Product picture' comes just in one size and you can't increase the size or turn it. |
| | | Product pictures are already at a good size and when hovering the mouse over it increases the size. | Product pictures are static and there is not interaction with the images. |
| | 25) Links and tabs to show products' features, ingredients and uses. | | You have to go from one page to another if you want to find relevant information. It looks like it is far from being reached. |
| | | detail. | You have to dig down the website through a series of links in order to find product relevant information. |
| | 26) Clear classification of products by category. | product is neat and well organized. | Product classification looks crammed and saturated. Easy to get lost and to choose the wrong product. |
| | | Categories are organized in a hierarchy way, facilitating the navigation process. | More product categories can be created and some products can be reclassified. |
| | 27) Shopping complementary links: "Best seller", "Featured | There is a link called "popular searches" that helps to promote sales. | This website has a complementary link called "Recommended for you" |
| | Products", "Recommended for you", "Trendy products". | There is a complementary link called "popular searches" and it endorses the website best sellers. | They have the "recommended for you link" |
| of | 28) Summary and description products in the cart. | | It does not show the product thumbnail image. It shows just the product name and the link to the page product plus the payment product innfo. |
| | | It shows a thumbnail image and beside it has the product quantity, the price and the order subtotal. | It has not thumbnail image. The cart page displays just the brief summary of the order. |
| | 29) Product stock availability feature. | Yes they use a hover box to indicate that they have run out of the chosen product when you move the mouse on it. | This website removes the product feature link when they are sold out. |
| | | A hover box informs that they have | The website deactivated the link of the |

| | certain product in stock. You can add the product to the wish list and be notified later via e-mail about the availability. | product when there I not availability. |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 30) Ability to edit or remove products or reconfigure the wish list. | At the moment of paying, they have a "remove product" link that let you take out of the summary list. | This website has a button that let you remove the items you decided not to buy at the moment of paying. |
| | | Wish list can be reconfigured after clicking in a check box and then on a button that let you remove the chosen product. |
| 31) Existence of the "check out" button in a prominent way. | It is the most notorious button in the" check out" page. | Beside the "check out" button. There is another button called "recalculate" that can make you have second thoughts about buying or not. |
| | Located in a strategic position. Easy to see while scanning the page. | Two analogic buttons competing for the user attention. This can discourage the customer's "call to action" step |
| 32) Help in the "check out" step in case of problems through a phone number or | Phone number is repeated twice at the bottom of the page with the office hours beside. | Yes there is a phone number in the "check- out" page. |
| chat line. | Yes there is a contact number in case of a problem in the shopping process. | They have the phone number hidden at the bottom of the "check-out" page. |
| 33) Option to fill a customer registration form in the check- | Yes you can do it in the "first time" customer box. | Two ways to register and fill out a form: As first time buyer or as a guess buyer. |
| out page. | You have the option of register if buying for first time or buy as a guest providing only your e-mail address. | You must register if you want to buy. Inflexible shopping experience. |
| 34) Payment options and credit cards icons and images large enough. | | It has the credit card icons in a normal size. However, other payment method icons are far and detached form the credit card icons. |
| | a geea e.ze. | Credit card icons and other electronic payment options like PayPal icons are located in different places in the payment page. |
| 35) Notification of free shipping or free gift-card at the moments of paying. | notifying you when you have the right. | In the check-out page there is a legend informing about the minimum amount of money to be spent in order to get free shipping. |
| | shipping when you buy US \$ 90 dollars in products | A label in the "check-out" page explains that to get free shipping you have to spend US \$ 90 dollars in products. |
| 36) Offers of more products | A small banner shows up offering other products at the moment of paying. | The system in the website don't promote cross or up sales. |
| while paying. | Cross and up sales are enticed by the | No banner or notifications to buy more products is shown in the check-out page. |
| 37) Payment security. | A digital safe certificate logo appears at the moment of paying. | The system shows a security payment logo at the end of the transaction. |
| | Safe payment certificate logo shows when paying. | Safe payment certificate logo shows at the moment of paying. |

| 38) Video feature. | Video feature displayed in the product age showing the products' main features. | They have the video tool here too. |
|-----------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Video tool here is used to show the atures and usages of the hair care products | Video tool here is used to show for a series of interviews to the business owner |
| 39) Testimonials and social network links. | 1, 2 | Social network icons are laid out without following any design order. |
| | they are very active in the product page forum. | Users participate actively in this website f forum s and social networks. Social network iiicons are poorly distributed, making the page Illayout look jammed and messy |

3.2 Usability Heuristic Report.

After contrasting and comparing the world two main websites given by Alexa.com application in terms of visits and sales of natural hair care products, these are some of the observations that can help to design a persuasive architecture information, usability and web design.

Appearance/Aesthetics:

- Every single page, starting by the landing page must communicate INOAR's commercial goal of selling natural hair care products.
- The items to be sold in the website must have the image of the product beside the price and close to it the "add to cart" button.
- The design should be simple, clean, and minimalistic that considers the use of the grey scale of colors in a balanced manner. Black and dark grey colors should be used for the titles, subtitles, blocks of text and legends.
- The distance and space among elements should be even and homogenous. There must be
 proportion in the size of the images, blocks of text, titles, subtitles, icons, links, hover boxes etc.
 Images should not be retouched with bright color effects and they should imply the meaning of
 the product per se.
- In case a different background image is needed it has to communicate purity and freshness.
- Icons have to be obvious representations of what they mean and social network icons can go at the bottom in the home and category pages.

Web content:

- As it is an e-commerce and buying decisions are made in seconds, products titles and subtitles have to be short, understandable and salient.
- An organized hierarchy of products titles and subtitles has to be outlined.
- There should be plenty of space between the different content elements in order to make the scanning process in each page easy.
- When drafting commercial texts, they should be drafted using a short, clear, coherent rhetoric avoiding complex, meaningless statements.
- Links should be clear, easy to identify with functional click vectors.
- A link that prompts people to help during the shopping process needs to be developed in each page of the website.
- The most important content such as product categories lists and product items lists should be displayed above the fold following and organize page downwards display.
- INOAR's search field should have a transactional search query that helps users to satisfy their products information needs and also suggests similar products slightly.

Navigation:

- Tabs and buttons should follow a standardized design pattern; there should be homogeneity in the way they are arranged.
- There shouldn't be invasive hover boxes that can hide the scroll bar.
- There must be breadcrumbs that show the website's hierarchy and the arrangement of the different categories of products.
- The link to the home page should be visible and prominent. Also the breadcrumbs should show the way to return to the home page.
- The website should have just the necessary amount of buttons that make the navigation easy.
- There should be coherence between the purpose of the website (an e-commerce that sells natural hair care products, and the information provided there. In case there are different categories of information, they should be prioritize according to the commercial purpose of the website and distributed in different pages or sections.

E-commerce efficiency/functionality:

 Products images and texts should be large within the page design proportion and selfexplanatory.

- Links that display information about promotions and offers must be salient and stick out of the crowd in terms of graphic design.
- Hover boxes should describe products features when users move the mouse over a product image.
- Three hundred and sixty degree magnifier tool should help to see the product package and label in detail.
- Information about product uses, features and ingredient should be underneath the product page under the main image in form of tabs to be open.
- Categories of products should be organized in a hierarchical way, facilitating the navigation process.
- In addition to the conventional links the category and product pages, should have "complementary links" such as: "Best seller" or "Featured products".
- The summary and description of products in the shopping cart should have a thumbnail image of the product and the product quantity, price and order subtotal legends.
- In case of out of stock products, a hovering box should appear indicating that the product will be in stock soon, giving at the same time the option of adding such product in the wish list.
- Users should be able to edit or remove products or reconfigure the wish list before paying a product order.
- The check-out button should be the most prominent element in the check-out page.
- In the check-out page, there should be a customer care visible telephone number or chat line tool.
- At the moment of paying, users should have the option of registering or leave the e-mail address to proceed with the payment.
- In the payment page, payment options and credit cards icons should be prominent and all the icons need to be together.
- At the moment of paying, users need to be notified about the amount of money they need to spend in order to get product free shipping or a gift-card at the moments of paying.
- Cross-selling and up-selling need to be promoted using a banner at the moment of paying.
- Users must be notified using a secure payment certificate icon about the safety of the transaction.
- Videos should be located in the product pages showing the products' main features, uses and recommendations.

• Users' forums and social network icons should be displayed in visible places without intervening with other important graphic elements in the page layout.

4. Information Architecture and Interaction design.

Following the Usability Heuristic Report in which two similar websites are assessed, the best possible Information architecture approach to achieve INOAR's natural hair care product market goals is to develop a silo architecture linking design. In that way, the website content can be segregated into different 'silos' so that people and search engines can easily find INOAR's products in the website. Also, this kind of architecture linking design can help to facilitate the Search Engine Optimization (SEO) tasks. To achieve this website structure these are the necessary steps:

- Proper Title and URL structure: By using specific shingles (groups of words) in titles and subtitles (with prominent keywords first) there will be solid SEO calls to search engines (as they attempt to determine INNOAR's page products).
- Proper headings and subheadings usage to mirror products' titles and the URL.
- Proper site structure: With a silo cascade tier of relevance structure, all the product pages will pass their link-flow back to the landing page and then it can be scaled to other product category pages for similar keywords.
- Theme relevant internal linking: This help to link one product page to other page with the appropriate anchor text.

Finally, the silo structure helps to create a gravity well for domain authority at the bottom level. As a result, there can be an increase in the number of clicks on product pages as the search landing page is nested in a menu structure on every page of INOAR's website (SEO website architecture, 2013).

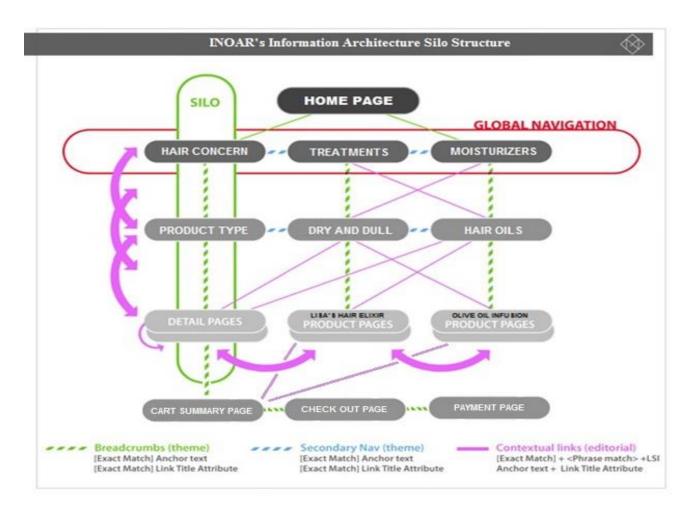


Figure 4. INOAR's Information Architecture Silo Structure

| Register | Quickreorder | Order status | Membership Stores and Salons | Email and sign-up |
|-----------------------------------------------------------------------|-----------------------------------|--------------------------------------|--------------------------------------------|--------------------------------------------|
| | | BANNE | R IMAGE | |
| | | This week 20% off | in purchases over € 100 | |
| Category Produ Produ Produ O Category Produc Produc | ct 1 ct 2 ct 3 2 ct 1 | aduct 1 abel co to seket | Product 2 Label | Product 3 Label ADD TO BASKET |
| Product Category Product Product Product | 3 Pr ct 1 ct 2 L | aduct abel | Product 5 Label | Product 6 Label ADD TO BASKET |
| | L | abel | Product 8 Label | Product 9 Label ADD TO BASKET |
| | L | abel | Product 11 Label ADD TO BASKET | Product 12 Label ADD TO BASKET |

Lorem (psum dolor sit amel, consectetur adiptiscing ell. Aeriean eudernob tilbentum (soreet. Proin gravida dolor sit amel (acus accumaso et Vienni (Jaco commoto: Prohi sobales pulvitar tempor. Cum social natorus penditous et magná da pendreter montes, mascelar ríoliculas mus. Nam termentum, male tuctus pherers vulvatas, feits tellus molis oci, sed (mocous sagelen mult cagel colo.)

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4.1 Home or landing page desing

This is the main page of the website. Customers should arrive first when typing the URL or seeking in a web search engine. The page main features are:

Header.

- INNOAR's logo
- Login fields
- Shopping Cart
- Search Field
- Picture banner.
- Weekly promotions banner

Body.

- Category lists
- Product list
- Products' pictures gallery
- Short product description
- Price.
- Customer rating icon.
- Add to basket button

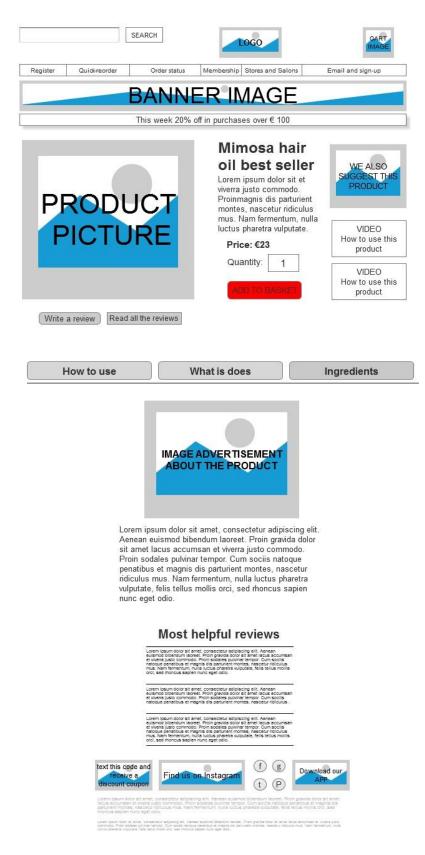
Footer

Social media icons

• About us: INOAR's Story, Mission, In The Press ,Career Opportunities, Stores & Events, Mirror Salon, Videos.

• Customer Service: FAQ's, Shipping Policy, International Shipping, Return Policy, Track Your Order, SMS, Membership.

- Contact Us:
- Popular Searches: List of eight products



4.2 Product page design.

Customers must arrive to this page after clicking in a category link or a product image on the landing page. Main features are:

Header.

- INNOAR's logo
- Login fields
- Shopping Cart
- Search Field
- Picture banner.
- Weekly promotions banner

Body.

- Large product image
- Product uses description
- Products' pictures gallery
- Customer rating icon.
- Price

• Video about how to use the products

- Picture suggesting
- complementary products.
- Write a review button
- Read all the reviews button
- How to use tab
- What it does tab
- Ingredients tab

• Product advertisement picture and content.

• Customers reviews.

Footer

Social media icons
 About us: INOAR's Story,
 Mission, In The Press ,Career
 Opportunities, Stores & Events,
 Mirror Salon, Videos.
 Customer Service: FAQ's,
 Shipping Policy, International
 Shipping, Return Policy, Track
 Your Order, SMS,
 Membership.

• Contact us.

Popular Searches: List of eight products

| | SEARCH | LOGO | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Register Quickreorder | Order status | Membership Stores and Sa | alons Email | and sign-up |
| | BANN | ERIMAG | E | |
| | This week 20% | off in purchases over € 10 | 10 | |
| Congra | itulations! You will re | eceive complementary gro | und shipping | |
| 6 | YOURS | SHOPPING BAG | | |
| <u>11</u> | | Quantity: | Price Tota | |
| | Product 1 Loren psure des al erret, consettative departs eff. eff. Horen justa conversal. | 1 | \$12 \$12 | |
| | Product 2 Lown bound dor at arms, connectivity adjusting all, at interest juits common | 1 | \$ 16 \$ 16 | |
| | Product 3 Lawn guar bor at ane, conscielur eigeang ell, e vivera judo convrato. | 1 | \$ 32 \$ 32 | 6 |
| | Product 4 Loren (plum door at arrel, consectaur edgeang et. e www.plats.commode. | 1 | \$21 \$21 | 7.5 |
| | Do you promo | | PLY | ORDER SUBTOTAL: \$ 81 Ground -\$6.95 Shipping Discount FREE Shipping for Members Only! \$0.00 Total Shipping \$0.00 Taxes \$81.00 Order Total |
| CONT | TINUE SHOPPING | PROCEED TO | CHECK OUT | |
| MORE T | O LOVE | | | |
| | Product 1 Label | Product 2 Label | | Label |
| text this code and receive a discour coupon Loren course of a real demension rota code of a real demension rota code of a | Eind us on J | Instagram t exerce obstant form protects t s of monos spectrum form the s of monos spectrum | Download our | |

4.3 Cart summary page

Customers must arrive to this page after selecting their desired products to see a summary of item and prices:

Header.

- INNOAR's logo
- Login fields
- Shopping Cart
- Search Field
- Picture banner.
- Weekly promotions
 banner

Body.

- Shopping list title
- Selected products' list
- Products' quantity, price and total subtitle.
- Promo code field
- Apply button.

• Continue shopping button

- Proceed to check out button summary legend
- Customer rating icon.
- Add to basket button
- Short product catalogue

Footer

Social media icons
About us: INOAR's story, Mission, In The Press, Career
Opportunities, Stores & Events, Mirror Salon, Videos.
Customer Service: FAQ's, Shipping Policy, International Shipping, Return Policy, Track your

Order, SMS.

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SIGN UP NOW

| ALREADY REGISTERED | NOT REGISTERED Create an account |
|--------------------|---------------------------------------------------|
| Password: | E-mail address: Password: Confirm Password: |
| | Profile name: |

4.4 Check out page design

Customers must arrive to this page after selecting their desired products to see a summary of item and prices:

Header.

- INNOAR's logo
- Login fields
- Shopping Cart
- Search Field
- Picture banner.
- Weekly promotions banner

Body.

- Already registered form
- Not registered form
- Check out as a guest field

Footer

· Social media icons

• About us: INOAR's Story, Mission, In The Press ,Career opportunities, Stores & Events, Mirror Salon, Videos. Customer Service: FAQ's, Shipping Policy, International Shipping, Return Policy, Track your Order, SMS, Membership.



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5. Visual design guidelines

5.1 Mood board and web graphic design concept.

INOAR's e-commerce website becomes an extension of the concepts of nature, organic and health that the company products reflect. The features of the images in the banners in each page should combine all these concepts, showing illustrations of natural landscapes, herbs, fruits and flowers. The image background should be white or a similar color that represent peace, calmness, balance and harmony. Pictures of products women's should show healthy, young women, images that convey the idea of health, composure and coolness.

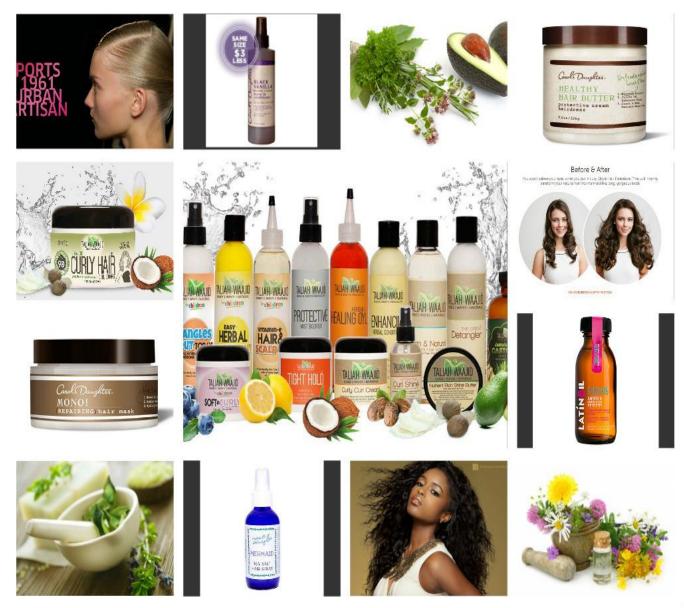


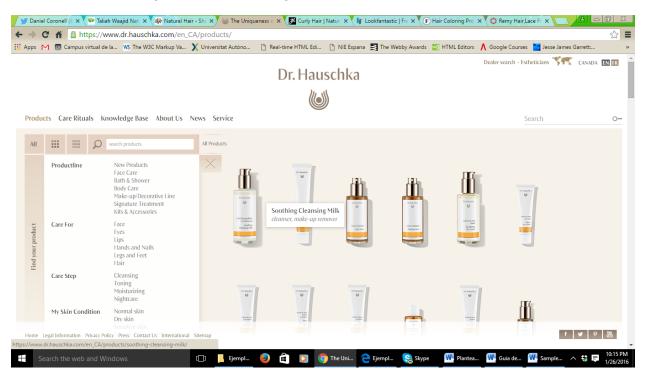
Figure 6. Conceptual imagery of INOAR's website.

5.2 Design principles benchmarks.

5.2.2 Landing or home page

Benchmark website: https://www.dr.hauschka.com/en_CA/products/

Feature: Product categorization and arrangement.



At first glance, dr.haushka landing page, display its e-commerce business intention showing its products list in a catalog way. Items are displayed neatly, making it easy to click on each picture, helping users to know the category section they are located in, facilitating the shopping process. Also, exhibiting items in a systematic list manner communicated the commercial purpose of the website.

Similarly, dr.haushka website general design lay out, makes an efficient management of white color background and pictures contrasts, brightness and shadows. In general, the concept of crispy clean site reinforces the idea of health and hygiene.

Finally, the grid in dr.haushka website uses between 3 and 2 columns, with generous room to breathe, conveying the physical perception of a luxuriously sparse shelf space in a high-end pharmacy or apothecary.

5.2.3 Product page

Benchmark website: https://www.dr.hauschka.com/en_CA/products/

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|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| ← - | C 🕺 www.carolsdaughter.com/hair/mimosa-hair-honey?BCID=93465B8EC4DE | ☆ 〓 |
| Н Арр | M 🔞 Campus virtual de la 😗 The W3C Markup Va 🗙 Universitat Autono 🕒 Real-time HTML Edi 🕒 NIE Espana 🚍 The Webby Awards 📰 HTML Editors 🔥 Google Courses 📓 Jesse James Garrett | >> |
| | OUR WINTER SALE IS HERE - Up to 40% OFFI SHOP NOW / FREE Monoi Dry Shampoo with \$30 Order! Carol's Daughter / Hair / Best Seler! Minosa Hair Honey | |
| | COM Same | |
| | Based on 57 ratings Write A Review Read All Reviews I Like 4 V Twe Park Gr Share 3 How To Use What It Does Ingredients *This kem is excluded from today's sale | • |
| | | 04 PM 6/2016 |

Feature: Product categorization and display.

Carolsdaughter.com product page uses a tabbed-navigation approach to limit visible text, and to make the product salient. It also helps customers to find product's relevant information promptly.

In this website, products' shots are fully displayed in the center page area with oversized images showing the tiniest leather detailing. Similarly, product name and price are shown in prominent font sizes with the occasional sticker-style label informing user that an item is specific to a certain category. Moreover, Carolsdaughter.com product page have a clear and visible way to add products to cart making the "call to action" process simple and easy to walk through.

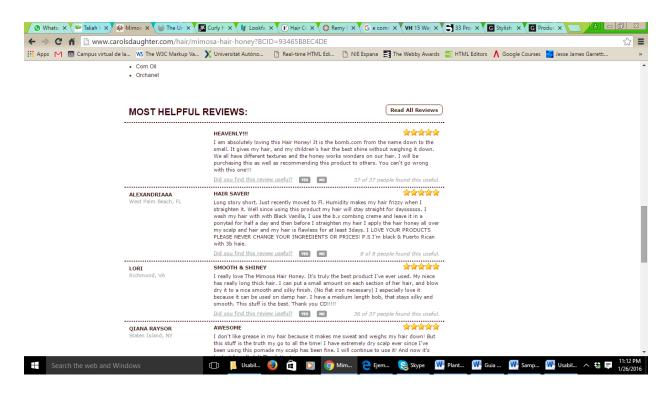
Carolsdaughter.com product page follows a hierarchy of information structured in an intuitive pattern aligned to how users wish to view content during their buying journey. Finally, the content displayed delivers the right message (in the form of, images, copy, video, confidence building tactics, and action points) to satisfy customer's "what's in it for me" question.

5.2.4 Product page customer review:

Benchmark website: https:// www.carolsdaughter.com/hair/mimosa-hair-

honey?BCID=93465B8EC4DE

Feature: Product prominent reviews.



The customer reviews section is displayed at the bottom of each product page, with ample, clear white spaces on the sides, in a font size that makes the text easy to scan ad read and far from other page elements that can interfere. Also, this section is outlined in the product page design grid, giving potential customers a less bias take by providing previous buyers with the testimonials' rating tool.

The reviews section location is easy to reach, properly divided and endowed with buttons that help to continue the communication with participants. Customers reviews are displayed in hierarchical way, helping to create brand trust and credibility as they eliminate out of date testimonials.

5.2.5 Shopping cart summary page:

Benchmark website: https:// http://missjessies.com/mjs/mj2/cart.ssp?sc=3

Feature: Shopping cart page clarity.

| ● (1) × Shc × W Nat × W The × M Shc × | 🕼 Abc 🗙 🕝 eco 🗴 🤤 12 e 🗙 🍞 Loa | ⊨ × 😼 10 1 × 🗿 30 E × 🚺 Dec × | G bas × | 🗙 🔞 Basi 🗙 👩 She 🗙 💽 🗳 | |
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| ← → C f L https://www.carolsdaughter.com | ı/shop/shoppingcart | | | | ☆ 〓 |
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| | | | | | * |
| YOUR SH | IOPPING BAG | QTY. | PRICE TOT | TAL | |
| | | | | | |
| 1000 | Mimosa Hair Honey Item #: 22623 | 6 | \$12.00 \$72.0 | 00 | |
| | REMOVE FROM BASKET | | | | |
| | | | | - | |
| | Monoi Repairing Hair Mask Item #. 20082 | 1 | \$24.00 \$32.00 \$32.00 | 00 | |
| | REMOVE FROM BASKET | | 402.00 | | |
| | | | | | |
| Internal Control of Co | Healthy Hair Butter | 1 | \$12.75 \$17.00 \$12.7 | 75 | |
| - | REMOVE FROM BASKET | | | | |
| | Monoi Travel-Size Dry Shampoo *** | | | | |
| | Item #: 23461 REMOVE FROM BASKET Promo Item | 1 | 0.00 0.0 | 00 | |
| | | | | | |
| UPDAT | E QUANTITIES | DO YOU HAVE A PROMO CODE? | Order subtotal | \$108.75 | |
| | | Apply | Ground | \$6.95 | |
| Check here if you' | d like to become a member and | Enter your promotion code above and click "Apply". | | -\$6.95 | |
| SAVE 10% and get FREE SHIPPING on your purchase today! Learn More | | | Free Ground Shipping | \$0.00 | |
| · · · · · · · · · · · · · · · · · · · | | | Taxes | \$0.00 | |
| | | | Order Total | \$108.75 | |
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At the moment of reviewing the shopping list, missjessies.com exhibits a detailed product list and image. The shopping cart includes large product images that show lots of details, allowing users to differentiate each selected item from other similar items that they may be considering. It also includes the product name and other attributes, such as the package and container design, along with the price helping customers to remember and compare products.

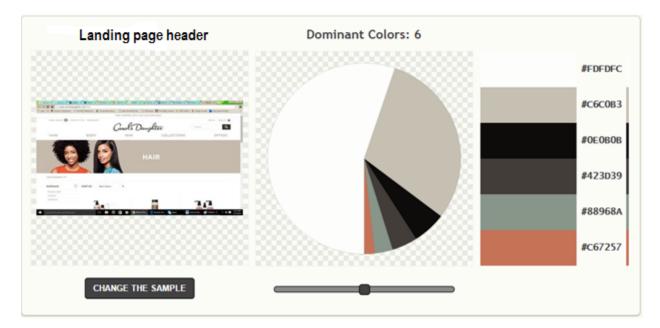
Also, missjessies.com shopping summery cart page provides users with a quick access from the cart to the product detail page. Linking both the product name and image help users quickly and easily access additional product information. Finally, a noticeable "remove item" button helps users to easily edit the shopping cart and also allows them to do so when needed.

5.3 Design guide style.

5.3.1 Color Palette:

Defined by web design color standards under hexadecimal notation (#) for CSS style sheet web programing language. In order to choose this color palette, we follow the pattern used by some of the most successful ecommerce websites that sell natural hair care products according to Alexa Inc.

5.3.1.1 Landing page header.



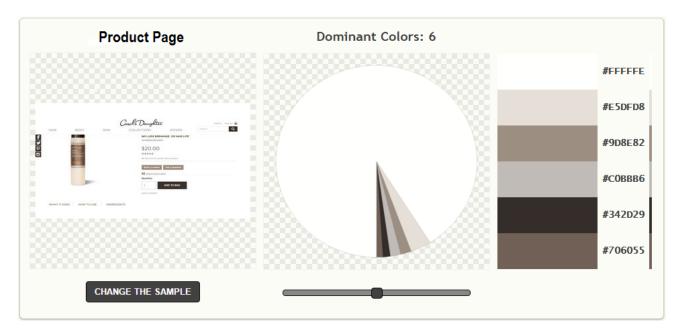
Background: #FDFDFC Banner Backgroud: #423D39 Product contrast background:#889668A / #C67257 Titles sibtitles and texts: # 0E0B0B

5.3.1.2 Product category page.



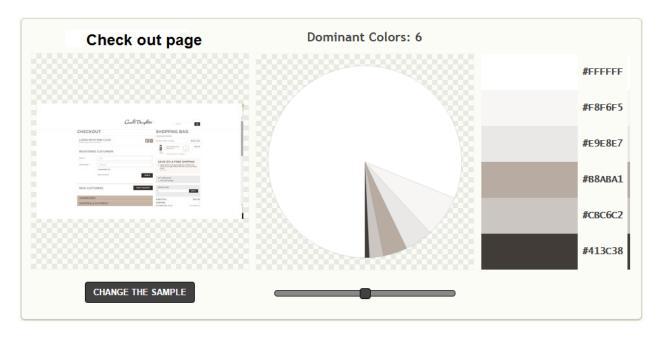
Backgroud: #FFFFF Subtitles: #746560 Add to cart button: # 312A27 Magnifier tool icon: # 312A27 Product legend: #746560 Product shadow color: # AE9990

5.3.1.3 Product page.



Backgroud: #FFFFF Subtitles: #746560 Add to cart button: # 312A27 Social Network icons: # 342D29 Product information tabs legends: #C0BBB6 Product shadow color: # AE9990 Write a review, Ask a question and YouTube icon: # 706055

5.3.1.4 Check out page.



Background: #FFFFF Subtitles: #746560 Sign in, Guess check out and Apply buttons plus the magnifier tool: #413C38 Address, shipping and payment and Confirm order buttons: #B8ABA1 Promo information box: #E9E8E7 Secondary information box: #F8F6F5

5.4 Titles, subtitles and body text typography

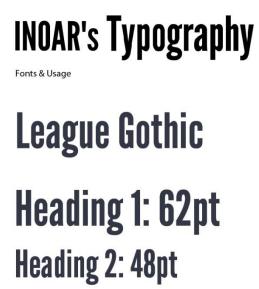
The typography chosen to design INOAR's website are:

Titles and Subtitles: League Gothic.

Reason: League Gothic is a font type that helps to lay out a scannable hierarchy of titles and subtitles, it also helps the user to identify and read while browsing quickly for categories, products, menus, link buttons and icons.

Body text: Myriad Pro Regular

Myriad Pro Regular is a font that helps to lay out a clean design with plenty of room between individual lines of text. Also, it allows a less crowded line height, line spacing and line length making blocks of text more readable.



Heading 3: 36pt

Heading 4: 24pt Heading 5: 21pt Heading 6: 18pt Body

Myriad Pro Regular 12pt

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo.

Bold: Myriad Pro Regular

Italic: Myriad Pro Italic

Tight Spaces/Flexibility: Myriad Pro Condensed



League Gothic & Myriad Pro - 28pt Leading from Headline

5.5 Web grid template

The grid application use to design INOAR's ecommerce website, is taken from the YAML grid generator a tool that helps to design e-commerce web sites generating at the same time CSS semantic grid system.

Also, this framework pattern, allows display content in proportions, balancing between all of the different elements of the design. Also it helps to give a sense of uniformity and familiarity among the website different pages.

| HEADER | | | Login Contact Imprint |
|---------------------------------|---------------|------|---------------------------|
| | | | <u></u> |
| Button / Button 2 Button 3 Butt | on 4 Button 5 | | |
| TEASER | | | <u>3</u> |
| 11 O 51 | | a (p | 61 |
| 40 | | | |
| N | | | |
| | Z | | |
| 2 | | | |
| 0 | | 5 | |
| 0 | 0 | 6 | |
| | 9 | | |
| FOOTER | | | 6 |
| Layout based on YAML | | | |

6. Final Design and value proposal:

Landing Page.

