Deliverable D1.3

Business case – final revision

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Description:

Deliverable D 1.3 provides a set of functional and non-functional requirements identified and prioritised by the end users, with the support of the technical partners.

This document includes also To Be Scenarios and formal definition of final requirements described also in deliverable D 1.4 (which is the updated version of D 1.1).

Deliverable D 1.2 shows the analysis of the business potential of Morpheos results, value proposition and growth potential for involved stakeholders. Deliverable D 1.3 shows all requirements in order to reach the expected impacts.
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Full project title
Morpheos — MORPHotype EcOSystem — design remote definition based on big data morphology and use ecosystem for creative industries

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1. Introduction

1.1. Objective of WP1
By analysing current gaps and limitations as well as barriers of existing approaches, Work Package 1 is responsible of the description of AS-IS processes on which Morpheos will have an impact. New processes and related opportunities, enabled by the solution, will be presented. Finally, detailed business and technical requirements to guide the development activities will be extracted and formalised.

1.2. Positioning and objective of D1.3
Deliverable D1.3 will provide a set of TO-BE scenarios, from which functional and non-functional requirements are extracted and prioritised by the end users, with the support of the technical partners.

Deliverable D1.2 shows the analysis of the business potential of Morpheos results, value proposition and growth potential for involved stakeholders. Deliverable D1.3 shows all requirements in order to reach the expected impacts.

This document will show how Morpheos could be flexible to different sectors, from fashion to design. This character will emerge through To Be Scenarios.

To Be Scenarios will be divided in two groups: one group with the three scenarios from fashion and one group with the four ones from design. For each scenario, there will be an explanation of the underlying story, involved systems and actors, processes, benefits, target parameters and requirements, both at functional and non-functional level. Requirements will show market’s needs and how Morpheos answers to them.

Morpheos is a right solution every time a customized research of a product is required. All contexts in which it’s possible to ask for customized projects and products are good contexts for Morpheos’ implementation.

1.3. Content of the document
The document has a principal section regarding To Be Scenarios and all requirements expected. Requirements have been analysed at functional and at technical level.

Each To Be Scenario belongs to fashion or design sector. Scenario will be a case that could be tested with end user using Morpheos platform. Not only storytelling, involved systems and actors, processes, expected benefits and target parameters will be considered and a schema of requirements is defined.

Requirements will be analysed at functional and non-functional level in order to understand what it’s needed in order to reach the expected results and impacts. Technical requirements have to be considered valid for Interior Design as well as for Fashion.
2. To Be Scenarios

To Be Scenarios will be divided in two groups by sector of belonging.

The first industry is Interior Design and the second is Fashion.

Each Scenario will be explained through “Story Telling”, “Involved Systems and Actors” and “Process”. At the end of Design and Fashion section a list of functional and non-functional requirements will be defined.

This choice comes from an analysis done on each To Be Scenarios, it emerged that requirements are shared by the sector, and there are no many differences through requirements needed by each scenario.

2.1. Interior Design To Be Scenarios

2.1.1. Interior design Use Case #A1: Support the selection of the most suitable product/s.

2.1.1.1. Story Telling

Jose is interested in changing his bedroom since all its furniture was inherited from his family and besides being rather old, it is unsuitable for his size. He needs a bedroom according to his dimensions, place for residence characteristics and personal preferences. He has recently completed his full profile in Morpheos, a process that took some time, but he is sure that it will be worthy. He accesses www.abcdef.com, a furniture specialized e-commerce site that implements the Morpheos ID capability. He performs a query, looking for bedroom products, and then he clicks on the Morpheos icon that will authenticate him and load his complete profile. Thanks to a complex and customized algorithm, the site adapts and shows only the products that reflect his morphotype, personal preferences, and lifestyle. All products being shown reflects exactly his idea of his bedroom. He is truly sure that everything he sees and buys will result in an immediate hit, and that he will be able to enjoy for a long time. He selects all the desired products to complete his bedroom and makes payment. Then he just needs to wait for the goods to arrive home.

2.1.1.2. Involved Systems and Actors

End users (households)

They represent final consumers. The platform target audience are people with a taste for the decoration and interior design of their homes. There are the two main reasons for which users will want to connect to, and participate in the platform. Once connected through their universal ID, each user can have access to valuable information from furniture manufacturers and designers (product catalogues, classic pieces, new products being launched, etc.). The platform becomes an obligatory reference point when renewing or furnishing their homes. The running of the platform is based on customizing the suggestions and product query searches that each user does.

E-commerce furniture platform

Once users make login with their Morpheos ID’s, their contents are immediately oriented to the type of furniture products asked from the users. Information gathered
will be classified in order to be processed and made use of. Platform management must allow analysing the information (data, text, comments, images, etc.). With all the information obtained, the system will be able to provide just the solution that fits their preferences.

**Product designers for home furnishings, accessories, and interior decoration designers**

The product designers working for furniture manufacturing companies are key to provide products to the platform, so users can find them. Designers will participate uploading projects and catalogues that will respond to ends users taste and lifestyle, addressing their searches from products, or customized project decorations that will satisfy end users request, and searching for their clients profiles in order to offer them the best possible solutions according to their Morpheos ID.

**How to interpret the diagrams:**

AS-IS and TO-BE processed occupy the same space, that is, the AS-IS falls below the TO-BE with the following characteristics:

- Blue lines mean common flow that doesn’t change between the two scenarios.
- Red flow is the AS-IS only flow, meaning it won’t be used in the TO-BE scenario.
- Green flow is the TO-BE flow, meaning this is the final process flow now.
- Red crossed-out processes are AS-IS processes where the TO-BE flow steps over. They are always preceded by a red flow, and correspond to grey text explained right below.
- Below each diagram there is some greyed-out text (red crosses above). This corresponds to the AS-IS processes that are no longer present, and therefore, have been deleted from the final (TO-BE) flow. They are left for clarification purposes.

The idea is to show in one diagram the process improvements of the TO-BE scenarios over its AS-IS counterparts.
2.1.1.3. Processes

DETAILED PROCESS DESCRIPTION:

- A1.1 Customer visits and accesses the e-commerce website and browses through the available categories.
- A1.2 Customer enters query to look for bedrooms
- A1.3 After an initial selection, customer filters by entering the unique Morpheos ID and browses query results.
- A1.4 A filtering of bedroom products is performed, based on unique morphotype and decotype (preferences of customer).
- A1.4b Customer selects different search results to access their detail in order to try to find one that adapts.
- A1.5 Customer peruses through filtered search picking up a desired configuration and starts adding it up to the shopping cart.
- A1.5b Customer decides no configurations are of his/her like.
- A1.6 Customer finished the shopping cart and accesses the desired payment method.
- A1.6b Customer decides to go to a physical store where he can look and feel find what he wants.
- A1.7 Customer finishes the online transaction and simply waits for the product to arrive at its destination.
- A1.7b Customer ends up buying the bedroom at the store.
2.1.2. **Interior design Use Case #A2: Support a new project decoration design.**

2.1.2.1. **Story Telling**

Jose is interested in changing his bedroom since all of its furniture was inherited from his family and besides being rather old, it is unsuitable for his size. He needs a bedroom according to his dimensions, characteristics of his place of residence, and personal preferences. He finds [www.abcdef.com](http://www.abcdef.com), a furniture specialized e-commerce site which supports the Morpheos ID. In order to propose his idea of how he wants his bedroom to be, he logs in with the unique ID under the section “we make your project tab”. Then, he just needs to click on the submit button and the web responds with a message that says “Thank you for your message. We’ll soon be contacting you”.

After some specific amount of time, he receives a set of fully customized decoration proposals of bedroom projects that adapt to his original idea of how he wanted the project to be. After careful perusal, he makes a decision and chooses one of the proposals. Then he just needs to pay for it and schedule the work that will make his idea of a bedroom come true.

2.1.2.2. **Involved Systems and Actors**

**End users (households)**

They represent final consumers. The target audience are people with a taste for the decoration and interior design of their homes. Users log in via their unique Morpheos ID to get fully customized project decoration concepts.

**E-commerce furniture platform**

The online e-commerce sites where products are sorted into categories. The site implements the Morpheos ID making the full morphotype and lifestyle preference available to the designers to propose creative project decoration proposals. This will have their customers very satisfied when buying furniture online.

**Product designers for home furnishings, accessories, and interior decoration designers**

The product designers working for furniture manufacturing companies are an important part since they are the ones to propose their interior decoration projects based on users’ requests.

Designers’ use of the platform consists in receiving the request from users and based on the unique Morpheos ID, elaborate and propose their interior decoration projects to be accepted by the user. Under this business model, designers are fully aware of the full customer morphotype, and lifestyle preferences.
2.1.2.3. Processes

Figure 2: #A2 To Be Processes

DETAILED PROCESS DESCRIPTION

- A2.1 Customer visits the e-commerce website that implements the Morpheos ID.
- A2.1b Customer visits the e-commerce website to find a full creative project decoration proposal for his bedroom.
- A2.2a Customer enters his unique Morpheos ID.
- A2.3 Customer selects the tab “we make your project”.
- A2.3b Customer enters personal basic information and uploads a picture of the bedroom.
- A2.4 Customer simply needs to hit the button “Send”.
- A2.5 Customer waits for proposals to arrive.
- A2.6 Customer receives customized proposals and examines them carefully.
- A2.7 Customer selects one proposal.
- A2.7b After careful consideration, customer doesn’t find any proposal that meets his expectations.
- A2.8 Customer makes payment by selecting the desired payment method, and selects scheduling of work.
- A2.8b Customer decides to go to a physical store where he can look and feel find what he wants.
- A2.9 Happy customer means no returns, and possible return back to the site for more purchases.
2.1.3. Interior design Use Case #A3: Support a new product design

2.1.3.1. Story Telling
Jose is interested in purchasing a special office chair that can support his non-stop long daily hours of working at the computer. The chair he uses now, gives him a lot of back pain due to the long hours without getting up, plus its material is not suitable for his outdoor office which is located in the countryside. He is looking for a very specific design with a durable material for outdoor use, yet extremely comfortable and that can massage his lower back while he works.

He finds www.abcdef.com, a furniture specialized e-commerce site which supports the Morpheos ID. In order to propose his idea of how he wants his chair to be, he logs in with the unique ID under the section “design your product tab”. Then, he just needs to click on the submit button and the web responds with a message that says “Thank you for your message. We’ll soon be contacting you”.

After a while, he receives a set of fully customized product proposals that adapt to his original idea of how he wanted the chair to be. After careful perusal, he makes a decision and chooses one of them. Then he just needs to pay for it and schedule delivery to start enjoying his new chair. Long working hours will never be the same.

2.1.3.2. Involved Systems and Actors

End users (households).
They represent final consumers. The target audience are people with a taste for the decoration and interior design of their homes. Users log in via their unique Morpheos ID to get fully customized product concepts.

E-commerce furniture platform.
The online e-commerce sites where products are sorted into categories. The site implements the Morpheos ID making the full morphotype and lifestyle preference available to the designers to propose creative product decoration proposals. This will have their customers very satisfied when buying furniture online.

Product designers for home furnishings.
The product designers working for furniture manufacturing companies are an important part since they are the ones to propose their projects based on users’ requests.

Designers’ use of the platform here consists in receiving the request from users and based on the unique Morpheos ID, elaborate and proposed their product projects to be accepted by the user. Under this business model, designers are fully aware of the full customer morphotype, and lifestyle preferences.

2.1.3.3. Processes
**DETAILED PROCESS DESCRIPTION:**

- **A3.1** Customer visits and accesses the e-commerce website that implements the Morpheos ID.
- **A3.2** Customer enters his unique ID.
- **A3.3a** Customer enters personal basic information and uploads a picture of his home office.
- **A3.3b** Customer selects the tab “we make your project”.
- **A3.4** Customer simply needs to hit the button “Send”.
- **A3.5** Customer waits for proposals to arrive.
- **A3.6** Customer receives customized product proposals and studies them carefully.
- **A3.7** Out of the several product chair proposals received, customer selects the best fit proposal.
- **A3.7b** After careful consideration, customer doesn’t find any proposal that meets his expectations.
- **A3.8** Customer makes payment by selecting the desired payment method and selects scheduling for home delivery of his custom-made chair.
- **A3.8b** Customer decides to go to a physical store where he can look and feel find what he wants, and is able to talk to product designers to express his needs.
- **A3.9** Happy customer means no returns, and possible return back to the site for more purchases.
2.1.4. Interior Design requirements

2.1.4.1. Functional Level

In order to reach the expected benefits and the target parameters, it is necessary to define a list of requirements at functional and non-functional level.

FUNCTIONAL REQUIREMENTS

- Possibility for product designers to upload projects and catalogues to the platform
- Platform management must allow information’s analysis, consequently system will have to provide solutions that fit customers’ preferences
- Allow targetting contents to the type of furniture products asked from the users
- Classify information gathered so it can be later managed
- Allow definition of customized projects for users, having a simply usability of the site, being able to search through customers’ profiles
- Allow making suggestions of product query searches based on user history
- Allow selection of different choices according to lifestyle and preferences
- Allow to search providers or retailer for purchasing the selected product
- Allow inclusion of lifestyle and subjective preferences on top of morphological values, so customers always know that returned products are well matched
- Allow suggestion of nearby providers according to consumer location
- Allows suggestion of providers ordered by expected delivery period

NON-FUNCTIONAL REQUIREMENTS

- Easy access: access to valuable information from furniture manufacturers and designers
- Easy to use
- Customizable
- Efficient when purchasing, i.e. less searching time, easy comparisons, secure payment
- Safety and reliability
- Reduction of products’ return, thanks to suggestions that satisfy customers’ needs
- Provides added value to the CMS that implements the Morpheos ID

2.1.4.2. Technical Level

Technical requirements for Interior Design will be the same of Fashion. Fashion technical requirements will be applied also in Interior Design development. Please see paragraph “2.2.5.2. Technical Level”.
2.2. Fashion To Be Scenarios

2.2.1. Fashion Use Case #P1: support the size suggestion during the e-commerce purchase

2.2.1.1. Story Telling
Clothing size suggestion module\(^1\) will be designed to be certified for purchase by Prestashop (and in the future by major CMSs) marketplace: to obtain this certification it will be plug & play. Fully integrated and stable. The certification process is carried out by Prestashop inspectors and it’s mandatory of public availability of the module.

The module is divided into 3 processes: user profiling collecting user data and his measures (by direct input or by the mobile app), product profiling back end to collect clothing measures and, finally, matching platform supported by its dedicated algorithm.

When the module will be installed in Piacenza website, each customer, having completed the process of profiling and provided (or collected by mobile app) his measures, will be able to login in with his ISizeYou username. If he will use, or will have opened, Facebook or Amazon Payment or Paypal or by the module username (Morpheos for test or iSizeYou in the public commercial version) itself in the same session, he will be automatically recognized in Piacenza website by the cookies, whose application is described in deliverable D 8.1 regarding privacy protection. He will be also recognised by all other websites using ISizeYou module.

This process is very user friendly, since it is very likely that especially Facebook or Amazon have been opened in the same session or recently.

When recognised, the consumer will receive his specific size suggestion per each model, with a fully personalised interaction with the sales website. He will be also not required to input credentials, since e-commerce website will recognize him by ISizeYou login or by Facebook or Amazon credentials. No passage of information is carried out from the module Morpheos/ISizeYou to ecommerce, since this last one recognizes the user name of the consumer by Facebook or Amazon cookies. If the customer uses this last one he will not be required to input also payment data, which is provided by his Amazon Payment profile.

The process has 3 variants: ISizeYou username login, Facebook (or other social network) login, Amazon Payment (or Paypal or other payment platform) login.

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Mrs Caterina Calefato, has worked for more than 10 years as head of the financial office of a well know Japanese merchant bank Italian branch. Unfortunately 2 years ago Caterina has decided to move to Japan where her husband, a Japanese manager known during her career in the merchant bank, has been called back to his homeland. Caterina wants to buy a nice dress of Piacenza cashmere which is not available in Japan and can represent a nice novelty and surprise. But unfortunately she does not know the right size and she is afraid to make a mistake, therefore she is tempted to abandon her project. Visiting the website of Piacenza she notes a new function supporting the product choice, named ISizeYou. After a negative experience of an on-line purchase of a jacket, which she returned because too narrow for her body, Caterina

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\(^1\) commercially identified as ISizeYou
has decided to avoid on-line sales, but the possibility to be supported in the sales choice by a dedicated service has risen her curiosity. After being asked to register with her Social network id she downloads ISizeYou app on her mobile by her camera, she just take 2 pictures, with a support of her husband (back and right side) of her body following the tutorial and provides height and weight. She is happy and positively surprised to verify that the process is simple, no picture is transmitted and that her measures seems to corresponds to her own. Magic of new technology, it took 2 minutes! Even if still skeptical, her confidence has increased and she decides to use ISizeYou suggestion to buy on-line a Piacenza Cashmere pullover. After 2 days she receives the pullover that fits perfectly her body, even if the size suggested has been different form the one she expected (one size more, since the design is very slim).

2.2.1.2. Involved Systems and Actors
- Consumer/customer: the final customer
- ISizeYou platform: the module installed in Prestahsop ecommerce platform of Piacenza and the mobile app to collect body measures
- Facebook (or other social network): most common social network platform like Facebook, Google+, etc...
- Amazon Payments (or other social payment platform): Payment method which transfer customer name, address and payment to the ecommerce of the vendor
- Back office: the office of the vendor which takes care of all the activities to carry out the order management
- Logistics: the office of the vendor which takes care of all the activities to carry out the order delivery to the customer
2.2.1.3. Processes

Figure 4: #P1 To Be Processes

- A1.1: Consumer visits Piacenza website and selects the clothing item which he prefers from the available product.
- A1.2: Consumer selects the size of the product, if available, and it puts in the shopping cart. Consumer is required to login at the module link and it receives automatic size suggestion, shown in green. If he clicks “add to cart” button the correct size is directly poured into his shopping cart.
- A1.4: Consumer chooses payment method (credit card, Amazon Payment, Paypal, debit card, bank transfer, etc...) and authorizes the payment.
- A1.5: Back office validates the order, contextually when payment is immediately approved by a third party (credit card, Amazon Payment, Paypal, debit card) or when the price is cashed in case of bank transfer.
- A1.6: Logistics prepares the order, its related documents of transport and ships it by forwarder.
- A1.7: The customer receives the order, tries it on and decides if the size fits or not.
- A1.8A: When the size OK, the clothing pieces is retained for use.
2.2.2. Fashion Use Case #P2: new clothing collection design and production support

2.2.2.1. Story Telling

Morpheos is expected to satisfy the following needs of clothing design offices, actually not finding a proper answer:

A. to measure the matching between clothing fitting and consumer body shapes (at aggregated level or per single consumer)
B. to provide precise indications regarding future collection measure definition in relation with the real morphology of customers
C. to simulate the level of matching of new products and new markets

The information collected by Morpheos (ISizeYou in its public commercial version) are required to address these specific needs of clothing market and to lead to the increase of the rate of success between new design fitting and its target market or group of consumers or, eventually, even single user for fully tailored production.

Mrs Chiara Deva is the responsible of new design development at Piacenza Cashmere knitwear division. She has in mind a new line of knit, with quite audacious fitting, but she is also very reluctant to involve the company in the risk, due to a previous unsuccessful test with a small “capsule” collection, which was mainly returned by Piacenza shops due to their fitting, not matching Piacenza target customer morphology. Piacenza style needs a renovation but Chiara does not know how to handle the problem of the fitting. She decides to ask for support to the consultants of ISizeYou service, which provide the size suggestion service to Piacenza Cashmere website. On the basis of their feedback about the morphology of Piacenza consumers, collected by ISizeYou app, they are able to provide a simulation of the level of matching of the measures of the new design which Chiara has defined with the customers of Piacenza. She is provided of some specific suggestion, especially on larger sizes which are too narrow for the consumers of Piacenza of larger sizes. On the basis of this information she defines a size development, i.e. the measures of the designs in each size, which can satisfy beyond 855 of Piacenza target customers. The production is launched following also the specific measure statistical distribution of Piacenza customers, collected by ISizeYou app. The final result has been a significant success of the collection and a very low rate of returns and unsold stock, mainly due to wrong color choice.

2.2.2.2. Involved Systems and Actors

- Clothing Stylist: the person in charge to define the style and the fitting of new clothing models
- Marketing and sales team: the team in charge to support the sales process
- Modellist: the operator in charge of the fine tuning of the size development, i.e of the measure of the models in each size
- Retail (traditional and ecommerce) buyer: the operator who decides how many pieces, in each combination of design/color/size, to put into production and/or to purchase
- Production: all the operators in charge to carry out the process of physical production of the goods
- Sales and retail manager: the managers in charge to maximise the sale performance of the brand and of the retail channel (tradition and ecommerce ones)
2.2.2.3. Processes

- A2.1: Clothing stylist analyses the previous season performances to select the design which are to be represented and the ones which must be substituted by new proposals.
- A2.2: Marketing provides the target price limits in line with brand target consumer/market/image/distribution positioning.
- A2.3: The structure of new season collection is defined in terms of number of items, new or represented designs, materials, colours.
- A2.4: Clothing stylist proceeds to design the new collection and launches the production of 1 piece per design item, in 1 size and colour. The process is repeated until (up to 3 or 4 times) until the prototype reflects the expected style.
- A2.5: Approved designs are selected or discarded for the new collection by stylist and marketing (very often also by general management and retail), including material and colours.
- A2.6: Clothing modellist defines the size development in the local sizing system (IT, FR, UK, US, etc...) and the specific measures per each item and size. The measures of different items may obviously vary in relation with each item style as well as with its expected fitting (slim, over, regular).
- A2.7: Retail chooses design, color and sizes from the ones offered by the collection.
- A2.8: Production manufactures in series clothing on the basis of the orders of retail.
- A2.9: Sales to consumer take place and unsold goods are cleared off at the end of the season.
- A2.10: Sales performance are analyzed and feedback provided to design.
- A2.11: i-Deal provide feedback about fitting, measure definition per size and consumer specific needs.
- A2.10B: i-Deal collects aggregated data from other websites and the web.
• A2.10: Retail management and administration analyses the performances of the sale season and provide feedbacks for the incoming ones as regards items/materials/colours most successful (to be represented). They also provide retail buyer with most the sales per each size to support next season order placement.

• A2.10B: By Morpheos platform, aggregated data, collected by the web and by other websites exploiting the platform\(^2\), i-Deal is able to provide morphology indications regarding new targeted customers and related customer needs.

• A2.11: Fitting needs, on the basis of actual (A2.10) and new (A2.11) targeted customer morphology are defined and provided to interested subjects: stylist (A2.1-A2.5), modellists (A2.6), buyers (A2.7), sale assistants (A2.9) and managers.

2.2.3. **Fashion use Case #P3: increased conversion rate of selling campaigns**

2.2.3.1. **Story Telling**

The information collected by Morpheos not only will suggest the size matching with consumer morphology but it will also support the correct matching between communication messages and targeted consumer morphology. No more useless ads will be sent as regards clothing not fitting for the user body or frustrating sensation when opening websites where the right size is not available. The information collected by Morpheos will support the address communication messages only to those consumers who effectively be interested in products, since they are available in their size. It will also support and extremely personalised content definition on the basis of each consumer morphology.

Mr Humberto Maurerira is the ecommerce Manager of Piacenza Cashmere. He is in charge of the allocation of resources to advertising, to be distribute to google adwords, social networks and direct mailing to consumers. The advertising budget constraints by the general managing direction need the best optimization of its allocation. Humberto knows that direct mailing has the best rate of success, but he asks himself how to improve the conversion rate without spending more. He ask a support to iSizeYou service, which is ale to provide a specific targeting of e-mails on the basis of Piacenza consumer measures. On this basis Humberto sends alerts of availability of goods on sale or discounted in the specific size matching customer morphology, avoiding the very annoying generic communication action of discounted goods, never fitting to consumers. With a limited efforts and a small budget he is able to optimize advertising conversion rate on one side, and consumer satisfaction on the other, who receive a real service and not an annoying useless mailing.

2.2.3.2. **Involved Systems and Actors**

- Marketing and communication manager: the subject in charge to optimise sales performance. In SMEs this role is very often carried out by ecommerce manager.
- Adverting agency for content definition (if not internal). Consulting agencies supporting companies to optimize ecommerce sales, especially SMEs
- Consumers: the final customers
- E-commerce manager: the operator in charge of ecommerce.

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\(^2\) Morpheos and iSizeYou in the public commercial version
2.2.3.3. Processes

- A3.1: Advertising campaign is scheduled on the basis of the plan and the dedicated budget.
- A3.2: The mailing list is defined from the available list of consumers of who have accepted to receive advertising. The selection of receivers is carried out on the basis of basic information like gender, age, residence. Additional selection parameters regarding consumer preferences and requirements are used if explicitly communicated by consumers and if the campaign is targeted on their basis.
- A3.3: Measures and related sizes of the list of targeted consumer is checked.
- A3.4: Target consumers and available inventory are compared and matched.
- A3.5: Consumers, whose morphology is not satisfied by available sizes, are excluded from the mailing list.
- A3.6: Dedicated messages and contents (for ex. pictures and colours) are defined per each available size.
- A3.7: The mailing campaign is launched. A dedicated message, regarding the product matching his size, is sent to each consumer.
- A3.8A: Interested consumers click and read the advertising e-mail.
- A3.8B: Not interested consumers cancel the advertising e-mail.
- A3.9: Interested consumers visit the website and eventually purchase the goods.
2.2.4. **Fashion Use Case #P4: enhanced and fully personalized user experience, both on desktop and mobile**

2.2.4.1. **Story Telling**

If he will use, or will have opened, Facebook or Amazon Payment or Paypal or the platform itself in the same session, he will be automatically recognized in Piacenza website by the cookies, whose application is described in D8.1 regarding privacy protection. He will be also recognised by all other websites using ISizeYou module.

This process is very user friendly, since it is very likely that especially Facebook or Amazon have been opened in the same session or recently.

When recognised, the consumer will receive his specific size suggestion per each model, with a fully personalised interaction with the sales website. He will be also not required to input credentials, since e-commerce website will recognize him by ISizeYou login or by Facebook or Amazon credentials. No passage of information is carried out from the platform to ecommerce, since this last one recognizes the user name of the consumer by Facebook or Amazon cookies. If the customer uses this last one he will not be required to input also payment data, which is provided by his Amazon Payment profile.

The process has 2 variants: social network login or payment platform login.

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**Mrs Caterina Calefato, after her previous successful experience, decides to purchase a second piece from Piacenza Cashmere website, in a different model. With great surprise, after providing Piacenza website the authorization to use ISizeYou service, she automatically receives the suggestion of the correct size of this model fitting for her body. Since it is a very slim fitting model the size suggestion is higher than expected, but she now knows that she can trust in ISizeYou service. Being not so convinced of the color she shifts to another design and, again, she receives the automatic indication of the size. This process appears very rapid even if she uses her mobile and she decides to proceed with the purchase (usually she stops the process and pass to desktop to input the data). On the basis of her Amazon Payment credentials she is only required to authorize the purchase by Piacenza Cashmere website, with no manual input. In fact her address and payment data are provided by Amazon Payment platform to Piacenza website after her clock on purchase authorization button, reaching a real “2 click” fully personalized purchase process.**

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2.2.4.2. **Involved Systems and Actors**

- Consumer/customer: the final customer
- The platform (Morpheos – ISizeYou in the commercial version): the ecommerce CMS (in case of Piacenza is a Prestashop one)
- Facebook (or other social network): the social network platform
- Amazon Payments (or other social payment platform). The platform, providing the vendor with consumer name, address and payment after consumer authorisation.
- Back office: the customer service of the vendor taking care of order fulfillment
- Logistics: the service in charge of order delivery
2.2.4.3. Processes (1st variant)

- A4.1: Consumer visits Piacenza website and selects the clothing item which he prefers from the available product.
- A4.2: Consumer selects the size of the product, if available, and puts in the shopping cart. If the consumer has its social network username to login into Morpheos/iSizeYou and the social network has been opened in the same session (or recently), he is automatically recognised without login and receives automatic size suggestion, shown in green. No login is required any more for all websites using iSizeYou in the same session. If the consumer clicks “add to cart” button the correct size is directly poured into his shopping cart.
- A4.4: Consumer chooses payment method (credit card, Amazon Payment, Paypal, debit card, bank transfer, etc...) and authorizes the payment.
- A4.5: Back office validates the order, contextually when payment is immediately approved by a third party (credit card, Amazon Payment, Paypal, debit card) or when the price is cashed in case of bank transfer.

Figure 7: #P4 To Be Processes – Social Network
2.2.4.4. Processes (2nd variant)

Figure 8: #P4 To Be Processes – Payment

- A4.1: Consumer visits Piacenza website and selects the clothing item which he prefers from the available product.
- A4.2: Consumer selects the size of the product, if available, and puts it in the shopping cart. If the consumer has its payment platform (for ex. Amazon Payment or PayPal) username to login into Morpheos/iSizeYou and the payment platform has been opened in the same session (or recently, and cookies have not been cancelled) he is automatically recognised without login and receives automatic size suggestion, shown in green. No login is required any more for all websites using ISizeYou in the same session. If the consumer clicks “add to cart” button the correct size is directly poured into his shopping cart.
- A4.4: Consumer clicks on payment method.
- A4.5: Back office validates the order and send payment confirmation.
2.2.5. Fashion requirements

2.2.5.1. Functional Level

In order to reach the expected benefits and the target parameters, it’s necessary to define a list of requirements at functional and non-functional level.

Here below a list of functional requirements:

- Decrease return rate
- Correct size matching
- Increase conversion rate of new design proposal at size selection
- Increase level of matching between size measures and consumer morphology
- Decrease number of abandoned purchase process
- Decrease level of unsold inventory at the end of the sale season
- Increase percentage of advertising mail messages opened by consumers
- Increase conversion rate of communication and advertising mailings
- Decrease percentage of cart lost at registration from desktop
- Decrease percentage of cart lost at registration from mobile
- Decrease percentage of cart lost at payment from desktop
- Decrease percentage of cart lost at payment from mobile
- Ecommerce site has to show only items where consumer size is available
- Receive automatic size suggestion during the all navigation
- Put automatically the correct size in the shopping cart at the item choice
- Receive precise indications about consumer morphology, fitting needs
- Simulate the matching of new style proposals and target consumers
- New design items consider fitting requirements of present and new targeted consumers
- Receive precise indications of size information, based on consumer morphology, fitting needs and matching between new design proposals and targeted consumers
- Provide buyers specific measures of styles in relation of present consumers and of new target markets
- Provide correct indications to consumers, define a precise matching of collection measures and consumers’ ones
- Increase the level of matching between product fitting and consumer morphology
- Evaluate performance feedback regarding fitting and regarding style, colour and material
- More accurate targeting through advertising e-mailings
- Increase conversion rate of clothing advertising e-mailings
- Select interested consumers, on the basis of the sizes which are effectively matching their morphology
- Reduce and focus number of advertising emails
- Avoid useless reminders
- Personalize mailing content per each consumer morphology, fitting and size
- Consumer receives size suggestion and personalises user experience only if well-matched with his morphology
- Hide, after consumer recognition, on e-commerce site, items where fitting is not available
- Social Network user credential will be used also to be recognized by ecommerce website where Morpheos/ISize you have been implemented
- Insert payment data only first time, consumer will not have to input their payment data anymore thanks to saving data through Morpheos’ platform

2.2.5.2. Technical Level

Here below a list of technical requirements:

- Clothing Size suggestion module has to be plug & play. This characteristic will make the platform a certified one to purchase by Prestashop.
- Clothing Size suggestion module has to be fully integrated and stable.
- Module has to be divided into 3 processes: user profiling collecting user data and his measures (by direct input or by the mobile app), product profiling back end to collect clothing measures and matching platform supported by its dedicated algorithm.
- Ecommerce platform will make the consumer able to login with his ISizeYou username.
- Ecommerce platform cookies will recognize the user, if he will use, or will have opened, Facebook or Amazon Payment or Paypal.
- User will be recognized also by all the websites that use ISizeYou module.
- Ecommerce platform will suggest to user specific size suggestion per each module.
- A fully personalised interaction will be inserted in the sales website.
- No flow of information is carried out from the module Morpheos/ISizeYou to ecommerce, since this last one recognizes the user name of the consumer by Facebook or Amazon cookies.
- Customer will not be required to enter any payment information, which will be provided by his/her Amazon Payment profile.
- Ecommerce platform will have 3 variants: ISizeYou username login, Facebook (or other social network) login, Amazon Payment (or Paypal or other payment platform) login.
- Morpheos will measure the matching between clothing fitting and consumer body shapes (at aggregated level or per single consumer).
- Morpheos will provide precise indications regarding future collection measure definition in relation with the real morphology of customers.
- Morpheos will simulate the level of matching of new products and new markets.
- Morpheos will support the correct matching between communication messages and targeted consumer morphology.

**TECHNICAL REQUIREMENTS (INterior DEsign related)**

- Morpheos decotype gathering will use a sequence of pull-down menus with the corresponding variables in order to prevent users from entering free text.
- Morpheos will determine the correct matching between furniture characteristics (colors, materials, style, type) and consumer decotype per single consumer.
- Morpheos will merge customer’s morphology and decotype together to provide a correct matching
3. Conclusion & Future Activities

3.1. Conclusion
The goal of this deliverable is the definition of functional and non-functional requirements expected from each To Be Scenarios.

Scenarios have been divided in two section, first one related to Interior Design and the second one related to Fashion.

At the end of each section a list of requirements has been defined, it is the result of an analysis of expectations, definition of target parameters and technical needs.

For each To Be Scenario a definition of requirements for actors involved and systems has been defined.

3.2. Future Activities
Based on these requirements, linked also to expectations from each scenario, during next periods, the team will check and evaluate the technologies to be developed to reach the goals.

The outcomes explained in this document are being used specially in the development of WP2; its main goals are:

- Harmonization of the data sources available for the creation of morphotypes for every ethnic group,
- Standardization raw data of international morphotype DBs and to integrate them into the Morpheos system,
- Implementation of the architecture of consumer data and preferences (including wardrobe) DBs,
- Implementation of the architecture of clothing product DB,
- Secure data access mechanism set up,
- Development of the integration function with producer legacy systems for the acquisition of product