POLITECNICO
MILANO 1863

Inspection and Usability Test Document

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Inspected website:

movìri

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Overview

In this part of the document we're focusing on the evaluation of usability of *Moviri* through **inspection**. Inspection allow us to find usability issues and obstacles for the user when interacting with a web application. In particular, this is done thanks to **heuristics** which guide the expert to explore the website and check compliance with usability principles.

2.1   Goals

Before inspection, goals are defined in order to deeply inspect the website and to focus on the main aspect.

- Read experiences of other companies and changes adopted;
- Find the appropirate technology needed;
- Interact with Moviri due to become a new customer;

2.2   Inspection method

We decide to adopt **MiLE heuristics** in order to inspect the website. These are divided into different categories relevant to a particular aspect.

Navigation: It aims to evaluate the easiness with which an user navigates into each part of the website.

- **Interaction consistency**: do pages of the same type have the same links and interaction capability?
- **Group navigation**: is it easy to navigate from and among groups of "items"?

- **Structural Navigation**: is it easy to navigate among the semantic components of a Topic?

- **Semantic Navigation**: is it easy to navigate among group members and from a group introductory page to group members (and the other way around)?

- **Landmarks**: is it easy to navigate from a Topic to a related one?

Contents: It indicates how in the website information is well balanced in each page and section.

- **Information Overload**: is the information in a page too much or too little and does it fit the page layout?

Layout: It serves to estimate if the website is graphically expressive enough and readable.

- **Text Layout**: is the text readable? Is font size appropriate?

- **Interaction Placeholder-Semiotics**: are textual or visual labels of interactive elements "expressive"? i.e., do they reflect the meaning of the interaction and its effects? Are they consistent?

- **Interaction Placeholders-Consistency**: are textual or visual labels of interactive elements consistent in terms of wording, icon, position, etc.?

- **Spatial Allocation**: is the on-screen allocation of contents and visual appropriate for their relevance? Are "semantically related" elements close and "semantically distant" element far away?

- **Consistency of Page Structure**: do pages of the same type have the same lay out (same visual properties of each component and similar lay-out organization of the various elements?)

2.3   Scoring metric

Before the inspection, a metric is defined in order to evaluate each heuristic. The evaluation consist in the assigment of a score from 0 to 5. The following image gives an explanation of each score.

- **0**: The heuristics is not satisfied. Many severe violations are detected;;

- **1**: The heuristics is not satisfied. Few severe violations are detected;

- **2**: The heuristics is not satisfied because of relevant issues;

- **3**: The heuristic is partially satisfied with some issues detected;

- **4**: The heuristic is satisfied, but it can be improved;

- **5**: No issue are detected. The heuristic is fully satisfied;

foto + click che porta in alto

Chapter 3

Scores on each heuristics

3.1 Navigation

Heuristic	Score	Comment
Interaction Consistency	4.5	The website has a good interaction structure reflected in the pages of the same type. Elements as header, topbar and footer are present in every screen. There could be more consistency in links shape.
Group Navigation	4.5	Navigation from a list of items to its members is acceptably easy and intuitive, as well as between group members and from group member to the list.
Structural Navigation	4	It's acceptably intuitive between the components of a topic, well enough described and presented; it would have been more appropriate if it were equable between the sections.
Semantic Navigation	3.5	Even if there are almost always links to related contents, navigation between related topics is not always accessible in both directions.
Landmarks	3.5	Present in the various pages of the website but which do not always identify clear and easy-to-read references

3.1.1 Interaction Consistency

The website offers a significant experience due to interaction structure reflected in the pages of the same type. As a matter of fact, its structure is based on some elements available in each page:

- **Header** (figure 3.1): it links to different pages. In particular it allow users to navigate on:

- Company's **social network profiles** (*Facebook, Twitter, Instagram and Linkedin*);

- **News section** for incoming report regarding Moviri;

- **Contact section** due to interact with Moviri's employees;

- **Moviri Careers**. It's a secondary website of Moviri where there are informations regarding job oppurtunities (+ genaral description of lavorare con moviri);

- **Topbar** (figure 3.2): allows a user to surf in each section of the website. In addition provides a search function for any content;

- **Footer** (figure 3.3): provides the same links to different sections of topbar and header, but at the foot of each page;

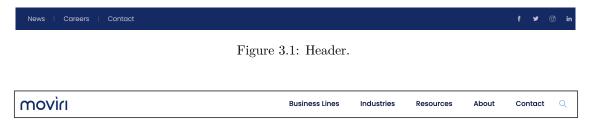At the end, there could be more consistency in links shape.

Figure 3.1: Header.

Figure 3.2: Topbar.

Figure 3.3: Footer.

3.1.2 Group Navigation

The navigation between the various components of a topic is intuitive, thanks to the good arrangement of the parts, that almost always have a title, an image and a short description. However, structural navigation slightly change between the various sections. For instance, in the *Business Lines* section each topic is represented by the combination of image and description side by side and unpaired with respect to the next one, while in the *Resource* section each item is placed in a grid with its title and a respective image.

3.1.3 Structural Navigation

Thanks to components such as topbar and footer, is possibile to navigate between each section through links. The fact that links are placed both high and low helps user's experience to be more intuitive, since it is not possible to go to the previous or next page. Anyway the Structural Navigation along each page is always easily feasible and understandable.

3.1.4 Semantic Navigation

Navigation between pages of different sections is easily allowed by topbar and footer. Nevertheless, there are situations in which this is not reversible. In particular this is not possibile in the *Resource* section after the click of an item; in fact, it redirects to pages of other websites leaving Moviri domain. It's sufficient to go back with the undo function of the browser, but could be quite uncomfortable.

3.1.5 Landmarks

Landmarks cover all major contents of the website and they can be found both top and buttom part of the website in each section; Anyway, they could be improved to be more clear, evident and easily readable. It's always possibile to be redirect to the homepage but the reference is not immediately understandable for a user visiting the website for the first time, considering that it is not identified with the well recognized term **"Home"**.

3.2 Content

Heuristic	Score	Comment
Information Overload	4.5	Informations clearly distributed and organized in a minimalist way almost in all pages.

3.2.1 Information Overload

Each information, both graphical and textual, is well balanced in each section of the website. This is one of the strength of website, even if in some sections the minimalism appears too grave and risks leading to a lack of information.

3.3   Layout

Heuristic	Score	Comment
Text Layout	4	The text is readable text and the font is appropriate in the various sections. Colour choice could be more improved.
Interaction Placeholder-Semiotics	4	Textual and visual labels are expressive and reflect a good interaction/effect aspect, excluded some cases in which there is an inappropriate response to that expected.
Interaction Placeholder-Consistency	4	Labels for interactive elements are well orgenized in term of position but the icon are not always consistent and can be slightly improved.
Spatial Allocation	4	Generally fine and appropriate allocation of contents in the various pages, amendable the organization of semantically-distant elements in some pages.
Consistency of Page Structure	3	Page structure of each topic is consistent among pages but refering to different groups we detected severe changes of structure.

3.3.1   Text Layout

Textual contents are easy-to-read. This is thanks to the font used in each point which is always proportional to the importance of the information. For instance, title or quotes has a larger font then simple description. About the choice for the colour of the font we note that, even if almost always it matches with the rest of the layout, in certain parts the choice of the colour in contrast with the background is not absolutely appropriate.

3.3.2   Interaction Placeholder-Semiotics

Textual and visual labels are expressive almost in every case. Only few situations link are not visible by underling or a hand-cursor. In addition we found relevant issues characterized by a strange behaviour in some case, for instance clicking on partners image in the Business Line section, as a result of which the page come back to the top of the page; moreover, this happens cliking on image TODO. After all, labels of interactive elements are consistent and reflect acceptably good the interaction and the effect.

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3.3.3   Interaction Placeholder-Consistency

Considering the website in its integrity, it doesn't show so many problems in terms of wording, icon and position, so, given its easy of use, we have not find relevant violaitons. Anyway we highlight 2 issues:

- The **Business Lines** doesn't always work as homepage;
- Even if the labels are well organized in term of position, the choice of the icon are not always consistent.

3.3.4   Spatial Allocation

Each type of content is allocated spatially, in an appropriate way respect to the relevance. Semantically related elements are close to each other but we would appreciate a better organization in the screen and spacing of semantically distant elements; in particular we refer, for example, to the "Industries" section: different items should be space out a little.

3.3.5   Consistency of Page Structure

Page structure of the topics is consistent among the pages, with few differences about contents allocation; but refering to different groups the structure often changes in a substantial way. Anyway, in the resource section users can be redirected to other websites which have a completely different structure and font too; so they are absolutely not consistent, contrary to the topics of same sections.

Chapter 4

Result and Discussion

This section aims to join every results obtained in the last chapter in order to give a unique score for each heuristic section. This is done by computing the arithmetic average of the scores of *Navigation*, *Contents* and *Layout* sections.

4.1 Scores

Navigation

The navigation score is given by the mean of the 5 aspects analyzed in the section 3.1.

The final result is: $(4.5 + 4.5 + 4 + 3.5 + 3.5)/5 = \mathbf{4}$

Therefore, content aspect in the Moviri website is handled well, even if could be improved again.

Contents

The score of this section is given simply by the score evaluated by the *Information Overload* heuristic which is **4.5**.

So basing only this heuristic, content of the website is almost fully satisfied. Improvements could be done, but fixes will be minimal.

Layout

The layout score is given by the mean of 5 aspects analyzed in the section 3.3.

The final result is: $(4 + 4 + 4 + 4 + 3)/5 = 3.8$
which can be approximated to **4**

Basing on the result, layout of the website it's pretty well designed, but with some critical issues that should be fixed in order to have the best experience.

4.2   Comments

Part II

Usability Test

Chapter 5

Overview

In this part of the document we evaluate usability of Moviri basing on **User Testing**. User testing is a technique based on user-experience used to evaluate a product by testing it on selected users. Instead of inspection, this is more focused on human–computer interaction in order to eveluate the easyness of a website.

5.1 Design of the study

5.1.1 User Profile

User profile definition is very relevant for user testing. In fact, this help us to understand who can be recruited for user testing. The user profile detected is the following:

- *Age*: between 25 and 45 years old;

- *Civil state*: irrelevant;

- *Technology capabilities*: General knowledge about Computer Science;

5.1.2 Scenarios

In this subsection are shown the goals of the user testing followed by the tasks needed to reach them:

Scenario 1: You need a job and you know that Moviri has a lots of open positions. You're applying for a job opportunity as a Software.

- Visit the website section for career service;

- Start the application procedure;

- Choose a job offer that is suitable for your background (such as Software Engineering);

- Select the position for which you want to run for;

- Insert your data in the form for the application;

Scenario 2: you're looking for a white paper related to a particular service/solution for your company.

- Visit the website section for consulting Moviri's resource;

- Find and select the white paper that you need;

- Fill out the form with your information in order to receive the white paper by e-mail;

Scenario 3: you're looking for a initiative called "Keep IT Up" and you want to keep current on it.

- Visit the website section relevant to news;

- Find the article about "Keep IT Up" initiative and select it;

- After you get some info from the article, in order to stay up fill out the form;

5.1.3 Variable Measure

In order to evaluate user testing on some metrics, usability variables are defined:

- **Time of execution**: it's measure in *seconds* and represents the time spent on a given task. It starts from the moment in which user begin focusing his attention on it;

- **Effectiveness**: it represents the task success rate. It's measured by a value **between 0 and 1**:
  - *1.0*: task completed with success;
  - *0.5*: task partially completed;
  - *0.0*: task is not completed;

- **Errors**: it's measured by an integer representing the number of errors made during the execution on a given task;

- **Perceived tasks difficulty**: it's expressed by an integer *between 0 and 5* given by an user after the completion of a given task;

- **Satisfaction**: it's given by an integer *between 0 and 5* provided by user immediately after the task execution;

5.1.4   Final Survey

After the execution of every tasks, a final survey is provided to users in order to have additional collected data. This provides extra feedbacks about aspects already highlighted during the inspection. The questions, provided through a survey made with Microsoft Forms, are the following:

Chapter 6

Execution of the study

In this section are attached the values sampled during the the execution of the user testing. In particular, 5 user was choosen for this user testing.

6.0.1   Hardware and Software settings

The study was executed using the Matteo's laptop individually by each user. There are no other type of hardaware components used to make this test. In stead, for the software side we adopt *Quick Time Player* to record the screen during the test execution. In this way, variable such as the time execution, errors and effectivenss are detected in a second moment by replaying the recording. So, users will be MORE SCIALLI. On the other hand, the evaluation of the other variables is done directly after the execution of each task.

Chapter 7

Result Usability test

Chapter 8

Conclusion