

Evaluating User Experience of the Portuguese District Archives websites

Ana Margarida Dias da Silva⁽¹⁾, Leonor Calvão Borges⁽²⁾

⁽¹⁾Faculty of Arts and Humanities, University of Coimbra; CIC-Digital Porto / CITCEM, Portugal, anasilva@fl.uc.pt

⁽²⁾Faculty of Arts and Humanities, University of Coimbra; CIC-Digital Porto / CITCEM, Portugal, leonorcborges@gmail.com

Abstract: The aim of this study is to analyse the user experience (UX) that researchers have when accessing the websites of the Portuguese district archives. There are 20 Portuguese districts, 16 in the mainland, one in Madeira and three in the Azores islands. The Coimbra and Braga district archives are also university archives and are the only ones that aren't under the supervision of the National Archives Institute. In a year marked by the lockdown due to the COVID-19 pandemic and the gradual opening of public services, the use of websites to search for information has often become the only possibility of research, thus justifying the urgency of carrying out this study, unprecedented in Portugal.

Keywords: Finding Aids, Information retrieval, Archival descriptions, User Experience, Mediation, Portugal

Introduction

The transition from access to material finding aids to digital ones, accompanied by the increasing digitization and availability of collections on institutional websites has changed the way information is mediated between the archivist and its users.

Despite the fact, the question about the usability and user experience of public archives sites in Portugal has been absent from academic reflection, being almost non-existent. Thus, the aim of this study is to analyse the user experience (UX) that researchers have when accessing the websites of the Portuguese district archives, presenting itself as an exploratory study of the theme.



1. From user behaviour to UX in archives

The search for information in archives has moved from analogue finding aids according (or not) with archival international regulations to the digital world without a deep reflection on their understanding and, therefore, apprehension on the part of users.

Can archive users understand archival descriptions and thus get to the records they are looking for?

As stated by Yakel and Torres (2003), archive users must, in order to be successful in their research, have knowledge of the scientific area they intend to investigate, artefactual literacy and what they call archival intelligence, that is, knowledge of principles and practices of archives and institutions.

Users studies and user behaviour encompassing forms of research in archives have demonstrated both the difficulty that users experience when browsing archival information systems, as well as the lack of access points valued by them, namely dates, names, subjects, etc. (Alfieri and Feliciatiel, 2017, Daniels and Yakel, 2010, Darby and Clough, 2013, Duff and Johnson, 2003, Feliciatiel and Alfieri, 2014, Ree, 2015, Yakel, 2002).

This fact not only constitutes a real problem for users more communally linked to archives: historians and genealogists, but it becomes even more striking when we talk about users with no experience, looking for archival information.

Based on the principle that Finding Aids are mediation instruments, Feliciatiel & Alfieri also recognize their inadequacy, especially with regard to their publication on the internet, not being sufficient to guarantee the usability of online archives (2014). Arguing that archives are more interested in making massively large sets of documents available and less or nothing focused on their understanding and usability, they state that the descriptions are sometimes so technical that they often have to be explained in the reference services, in what the authors identify as “extended mediation”.

Not surprisingly, Bertram (2013) defends the need for the participation of reference archivists when it is projected to make collections available online, since they really know how users search for information.

From the usability studies of online finding aids and web pages of the archives (Abram et al, 2019, Daniels and Yakel, 2010, Kim, 2018, Walton, 2017), some factors have invariably been pointed out as critical factors, namely:

- use of archival terminology;
- lack of clarity in the description;
- lack of general research by subject on the websites;
- lack of visual aids;
- too many clicks to reach the desired information.

In an attempt to systematize an improved navigation model for online finding aids, Walton presents ten concrete points to take into account regarding the use of words and titles that make sense to users, providing context for end-users by maintaining collection hierarchy in the presentation of archival contents, giving users a way to visually explore and browse through collection contents without “losing their place.”, providing easy and quick access to individual items within

a collection by minimizing the number of clicks needed to view item-level content, implementing a navigation system that can present content at varying degrees of granularity to avoid information overload for users, allowing for keyword searching at the collection level as well as the global level, provide sufficient visual clues for special navigation features such as drop down menus, sorting buttons, clickable lists, etc, supply the user with collection specific visual content in the form of related images, icons, or graphics, keep the interface uncluttered and concise to support clarity and ease of use and, finally, don't add Web 2.0 features without cause or a consideration of user preferences (2017, p. 45).

2. Portuguese District Archives

Portugal has 18 districts in the mainland and two autonomous regions (Azores and Madeira) with regional archives. In the islands, the old district archives became regional in 1976, due to the granting of the autonomous region status at that time.

The district archives bring together the archival heritage of each district, and the legal documentation of the judicial, notary, parochial or civil registry type should be highlighted.

A reflexion on the access to information of the district archives must consider that Portuguese district archives are under the National Archives Institute supervision and have alike webpages and use alike web design. Still, it should be noted that the Portuguese district archives follow the same web design, except the University Archives / Coimbra District Archives and the University of Minho Archives / Braga District Archives, the only ones that are not dependent on DGLAB, therefore, with autonomy to choose another page setup. However, they are not that different (see Fig. 1 to 4).

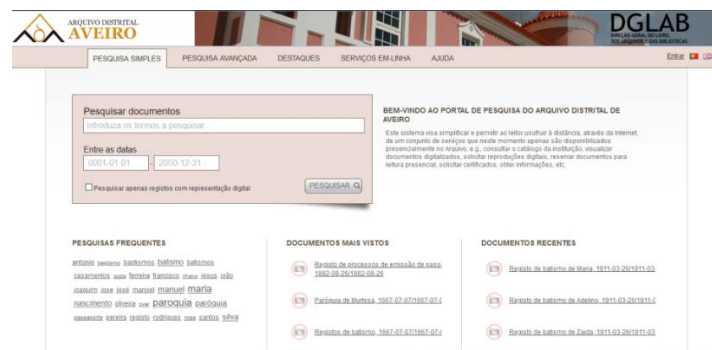


Fig. 1 – Website District Archive of Aveiro

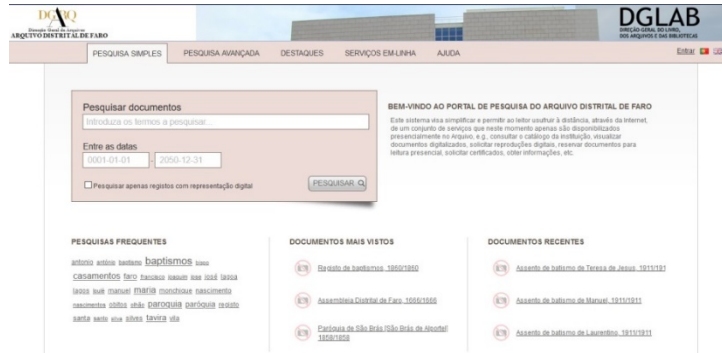


Fig. 2 – Website District Archive of Faro



Fig. 3 – Website District Archive of Coimbra



Fig. 4 – Website District Archive of Braga

3. Methods

It is a study of exploratory nature, with the following phases: a literature review on Finding Aids, User Studies in Archives, and usability of online finding aids. Seconded by a questionnaire using google forms, where it is possible to measure attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. An observation of the district archives websites was also conducted in order to recognize its similarities and/or differences.

The target audience of the questionnaire was chosen considering three categories for using the district archives: historians from different branches, genealogists and people who use the district archives to obtain administrative certificates.

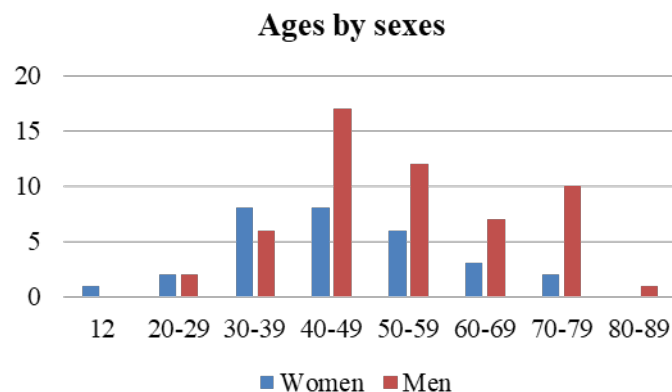
The questionnaire was organized in four blocks (Access to district archives, Access during COVID-19 pandemia; user experience and socio-professional data), with a total of 37 closed and opened questions.

The developed questionnaire model of question regarding user experience was based on the one proposed by Hinderks, Schrepp and Thomaschewski (2014), using 26 questions to measure both classical usability aspects (efficiency, perspicuity, dependability) and user experience aspects (originality, stimulation), consisting of pairs of opposites related to the properties that the site may have.

A pilot questionnaire was sent to a historian and an archivist, with no negative report, after which it was launched for a period of one and a half months - from 1 February to 15 March 2021, firstly by email invitation in a total of 50 sent. After 15 days, and with a low number of responses, the questionnaire was also sent to the mailing list of the Portuguese Association of Genealogists, whom the authors thank, as well as publicized in the Portuguese genealogist's groups on Facebook.

4. Results

The questionnaire was closed with 83 responses accepted, 65% male and 35% female (Graph. 1).



Graph. 1 – Gender and Age Distribution of the respondents

Regarding the profile of users, 84% attend or attended higher education, as can be seen in table 1.

Education Level	N.º	%
Bachelor	1	1
medium level course	1	1
Phd	20	26
Graduation	23	30
Master degree	19	24
Postgraduate studies	3	4
High School	10	13
No answer	1	1

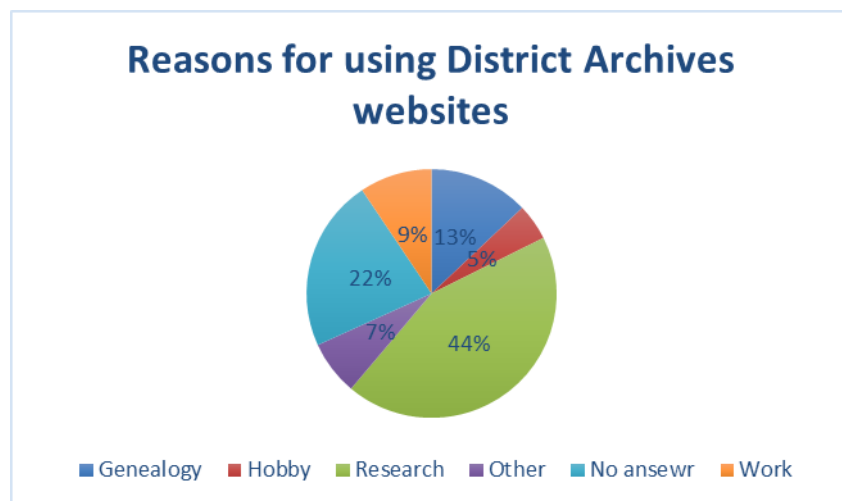
Table 2 – Education

Of the respondents, 21 are researchers and 17 are retired, and the rest are divided into different occupations.

The reasons for consultation are distributed according to graph 2.

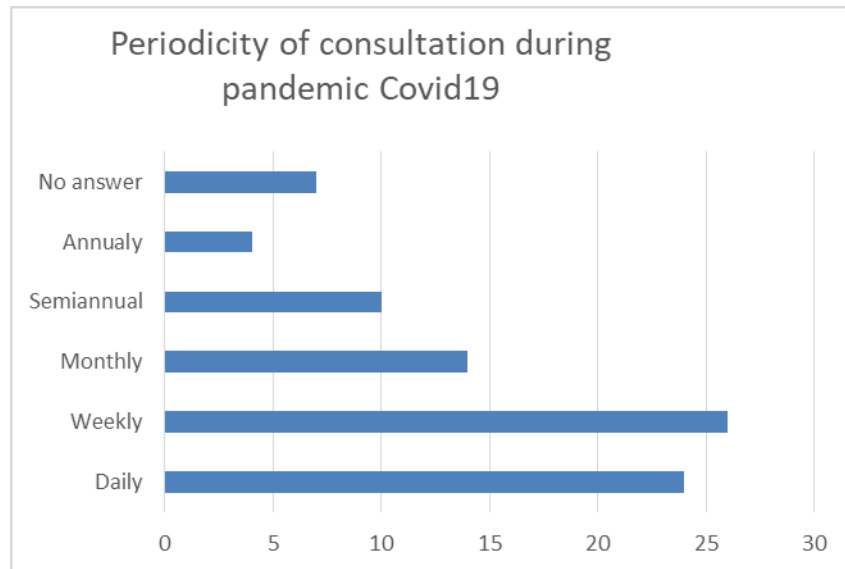
Research and genealogical research constitute more than half of the reasons for using district archives.

The country has seen the emergence of genealogy consultancy and historical research companies, so that the 9% of respondents who claim to use the district archives for work reasons, can be classified in this category, whether they do it individually or integrated into Small business.



The frequency of use of the sites during the period of the pandemic COVID19 in Portugal was 28% of daily consultations and 31% of monthly consultations,

which means that more than half of the respondents are regular users of the pages of the Portuguese district archives.



Graph. 2 – Periodicity of consultation

As for UX, the averages in table 1 reveal that users of Portuguese district archives consider the use of Internet pages (average 5.329) motivating, although they do not consider them very innovative (average 4.363). The existence of a standard page for Portuguese district archives dependent on DGLAB makes them familiar (average 5.036) and efficient (4.925 average).

	Mean	Standard deviation
Attractiveness	4,888	1,367
Dependability	5,107	1,291
Efficiency	4,925	1,355
Novelty	4,363	1,501
Perspicuity	5,036	1,348
Stimulation	5,329	1,345

Table 1 - Average and standard deviation of UX axes

Tables 2 to 7 summarize the averages for each question, in a positive overall result in relation to the overall assessment that users make of the pages of the Portuguese district archives. There is no category that stands out, with “Inferior

- Valuable” having the best average (5.658) and “Common - Vanguardist” the worst (4.056).

	Mean	Standard deviation
Annoying - Enjoyable (n=83)	5,024	1,185
Bad – Good (n=83)	5,024	1,342
Unattractive – Attractive (n=80)	4,632	1,495
Unfriendly – Friendly (n=80)	4,936	1,426
Unlikable – Pleasing (n=81)	4,925	1,260
Unpleasant – Pleasant (n=81)	4,787	1,495

Table 2 – Attractiveness

	Mean	Standard deviation
Does not meet expectations – Meet expectations (n=81)	4,712	1,433
Not secure – Secure (n=81)	5,587	1,176
Obstructive - Supportive (n=82)	4,802	1,317
Unpredictable - Predictable (n=83)	5,325	1,240

Table 3 – Dependability

	Mean	Standard deviation
Cluttered – Organized (n=81)	5,087	1,224
Impractical – Practical (n=81)	4,912	1,294
Inefficient – Efficient (n=81)	4,912	1,415
Slow – Fast (n=82)	4,79	1,489

Table 4 – Efficiency

	Mean	Standard deviation
Usual – Leading Edge (n=81)	4,056	1,629
Conservative – Innovative (n=79)	4,307	1,470
Conventional – Inventive (n=83)	4,341	1,424
Dull – Creative (n=83)	4,445	1,483

Table 5 – Novelty

	Mean	Standard deviation
Complicated – Easy (n=81)	4,963	1,400
Confusing – Clear (n=81)	4,887	1,396
Difficult to learn - Easy to learn (n=84)	5,072	1,394
Not understandable - Understandable (n=83)	5,228	1,202

Table 6 – Perspicuity

	Mean	Standard deviation
Boring – Exciting (n=83)	5,385	1,447
Demotivating – Motivating (n=80)	4,886	1,458
Inferior - Valuable (n=83)	5,658	1,091
Not interesting - Interesting	5,386	1,386

Table 7 - Stimulation

5. Discussion

As mediators between a physical world and a digital one, the Portuguese District Archives should regard UX as an improvement process, so that these relevant stakeholders may be heard. Without such studies, websites do not evolve or improve given the expectations of its users and potential users.

Users of the pages of the Portuguese district archives are mostly scholarly and with frequent use that familiarizes them with the forms of research and access to online documentation.

The exploratory study carried out shows a positive acceptance generalized in relation to the web pages of the Portuguese district archives, although none of the scales obtained a rating equal to or higher than 6.

The satisfaction of the Portuguese UX nevertheless means that the Portuguese district archives fulfil their mission of making content available online, in an Enjoyable, Leading edge, Understandable, and Valuable way.

The Predictable of the web pages makes the UX experience comfortable and safe and, as all the pages follow the same graphics and forms of research, access and availability, the UX do not experience significant changes in contact with the Portuguese district archives online.

Although the results are positive, it appears that they are without great enthusiasm: none of the six scales that group the 26 questions exceeds the 5.5 average, but neither does it fall below 4. An assessment below 3.5 was an indicator of need for change, in this case this is not the case.

It can be said that there is a certain comfort and convenience, without seeming to value the novelty and attractiveness, which does not prevent the use of the sites.

The perception of users is that the websites of the Portuguese district archives are normal, fulfil the objective, but do not see them as a product ... In view of these results, DGLAG does not need to change the information dissemination strategy online.

Conclusions

The empirical data gathered point to the understanding of the users' perception of the district archives' sites from their experience of use, identifying aspects that are interesting and therefore subject to improvement.

The purpose of applying the questionnaire was to understand the degree of users' satisfaction of the district archives with the website where they should do research.

With this study, it is possible to verify that, although the websites of the district archives have not been the subject of UX studies, (known or published) their use is seen as mostly pleasant.

In fact, the respondents - with significant experience in the use of this type of archives - expressed themselves positively in most of the points questioned.

If this analysis can be seen in the light of the fact that most archives use the same design and information architecture because they are under the responsibility of the same body, the remaining archives not belonging to that administrative hierarchy have the same level of appreciation.

The mediating role of archives lies in their ability to allow access to their collection through the organization and representation of the information contained in the documents.

Thus, UX Design emerges as a possible way to qualify the browsing experience on the websites of the district archives, which can serve to improve this communication.

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Annex 1 - questionnaire applied Survey on access to District Archives in times of confinement

Block 1 - Access to District Archives

1 - Do you usually use the documentation of district archives for your investigation? (I think we should only invite those who are sure

2 - Why do you use AD?

Academic research	
Historical research	
Genealogical research	
Personam of family research	
Legal affairs	
Other. What?	

3 - How often do you use the documentation from district archives for your investigation?

4 - Check the district file (s) you usually consult

. Arquivo Distrital de Aveiro	
. Arquivo Distrital de Beja	
. Arquivo Distrital de Braga	
. Arquivo Distrital de Bragança	
. Arquivo Distrital de Castelo Branco	
. Arquivo Distrital de Coimbra	
. Arquivo Distrital de Évora	
. Arquivo Distrital de Faro	
. Arquivo Distrital de Guarda	
. Arquivo Distrital de Leiria	
. Arquivo Distrital de Lisboa	
. Arquivo Distrital de Portalegre	
. Arquivo Distrital de Porto	
. Arquivo Distrital de Santarém	
. Arquivo Distrital de Setúbal	
. Arquivo Distrital de Viana do Castelo	
. Arquivo Distrital de Vila Real	
. Arquivo Distrital de Viseu	

5 - What collections do you usually search for?

Parish Records

Notary Records

Judicial Records

Orphanages Records

Others. Which are?

6 - How do you do the research: in person or remotely? Why?

7 - What finding aids do you use in your research?

8 - How do you characterize the documentation search process in AD?

Block 2 - ADs in times of pandemic COVID-19 (confinement, state of emergency)

1 - Tick the district file (s) you consulted since the COVID-19 pandemic

. Arquivo Distrital de Aveiro	
. Arquivo Distrital de Beja	
. Arquivo Distrital de Braga	
. Arquivo Distrital de Bragança	
. Arquivo Distrital de Castelo Branco	
. Arquivo Distrital de Coimbra	
. Arquivo Distrital de Évora	
. Arquivo Distrital de Faro	
. Arquivo Distrital de Guarda	
. Arquivo Distrital de Leiria	
. Arquivo Distrital de Lisboa	
. Arquivo Distrital de Portalegre	
. Arquivo Distrital de Porto	
. Arquivo Distrital de Santarém	
. Arquivo Distrital de Setúbal	
. Arquivo Distrital de Viana do Castelo	
. Arquivo Distrital de Vila Real	
. Arquivo Distrital de Viseu	

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2 - How often did you use the documentation from district archives for your investigation at this time?

3 - How did you do the research?

4 - How do you characterize the documentation search process in AD during the pandemic?

5 - Do you consider that the District Archives were able to adapt to the situation of confinement and limitations of access to the reading room? Justify your answer

Block 3 - Experience of using the site

	1	2	3	4	5	6	7		
annoying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	enjoyable	1
not understandable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	understandable	2
creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	dull	3
easy to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	difficult to learn	4
valuable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	inferior	5
boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	exciting	6
not interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	interesting	7
unpredictable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	predictable	8
fast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	slow	9
inventive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	conventional	10
obstructive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	supportive	11
good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	bad	12
complicated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	easy	13
unlikable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	pleasing	14
usual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	leading edge	15
unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	pleasant	16
secure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	not secure	17
motivating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	demotivating	18
meets expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	does not meet expectations	19
inefficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	efficient	20
clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	confusing	21
impractical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	practical	22
organized	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	cluttered	23
attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unattractive	24
friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unfriendly	25
conservative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	innovative	26

Block 4 - Social and professional data

1 - Sex

2 - Age

3 - Educational qualifications

4 - Professional and / or academic occupation