

FURNIT-SAVER

Smart Augmented and Virtual Reality Marketplace for Furniture Customisation

D2.3 Guidelines and procedures for personal data treatment

Grant Agreement Number	645067
Call identifier	ICT-18-2014
Project Acronym	FURNIT-SAVER
Project Title	Smart Augmented and Virtual Reality Marketplace for Furniture Customisation
Funding Scheme	Innovation Action
Project Starting date	1 st February 2015
Project Duration	14 months
Deliverable Number	D2.3
Deliverable Title	Guidelines and procedures for personal data treatment
Nature of Deliverable	R
Dissemination Level	PU
Due date of deliverable	M5
Actual Date of deliverable	7/08/2015
Produced by	ASCAMM – Jesús Pablo González
Validated by	ASCAMM – Jesús Pablo González



Document change record

Issue Date	Version	Author	Sections affected / Change
7/08/2015	V1.0	ASCAMM	Final draft and approval for submission

Table of Contents

Document change record	2
1 FurnIT-SAVER project introduction	4
2 Scope of the document	5
3 Data treatment principles	5
4 FurnIT-SAVER compliance with privacy principles	6
4.1 Informed consent	6
4.2 Data protection, anonymisation and privacy	7
4.3 Specific measures during validation phase for user data treatment	8

1 FurnIT-SAVER project introduction

The traditional nature of the furniture industry and the limited incorporation of ICT tools have reduced the ability of SMEs in the sector to innovate and respond to the competition coming from larger companies. These specialised furniture shops and small furniture manufacturers have been unable to compete with the economies of scale advantages that larger furniture retailers can offer.

On the other hand, smaller furniture companies can offer higher levels of personalization and quality of customized goods that truly meet customers' preferences and needs which represents a potential competitive advantage over larger furniture providers. Nevertheless, as it is impossible to envisage how the furniture will look and fit into the customers home, customised furniture also bears an expensive risk if the final piece of furniture does not meet the customer's needs or does not complement other furniture. Furthermore, these customised services are predominantly provided on a face-to-face basis in local and fragmented markets which prevents small manufacturers to benefit from ecommerce growth and limit their international reach.

The FURNIT-SAVER project makes use of innovative ICT solutions based on a combination of Virtual and Augmented Reality (VR/AR) technologies, recommendation engines and ecommerce solutions, to produce a smart marketplace for furniture customisation. Customers will be able to select among an extensive furniture catalogue and properties and virtually try the selected pieces in their rooms with three very simple steps: (1) Creating an accurate 3D virtual representation of their place, (2) Trying furniture of different manufacturers in this virtual scenario and get recommendations according to their preferences of a wide range of properties and pieces, and (3) Visualizing the fit of the chosen products in their place using augmented reality.

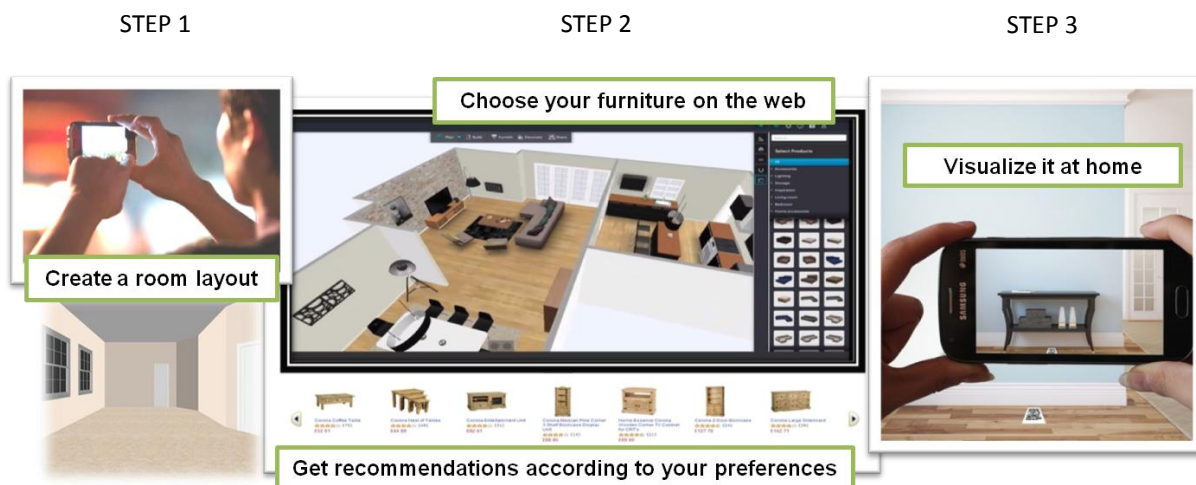


Figure 1 FurnIT-SAVER phases representation

2 Scope of the document

The project makes use of recommender systems to offer a personalized service based on the information gathered from the user. Additionally, several consultation campaigns are programmed with users and other stakeholders to check the product-market fit of the proposed functionalities and overall platform. These activities entail the collection of personal data such as age, gender, nationality and a set of likes and dislikes about design features and furniture products, as well as historical data about previous purchases or information about the current purchase action such as specific budget, type of room, etc.

These and any other collection of personal data resulting from user studies and profile-based recommendations will be treated with strict confidentiality, according to data protection Directive 95/46/CE (and the future European General Data Protection Regulation which is planned to supersede the Directive by 2016) and national data protection legislation (for instance, according to the provisions of the Spanish “Organic Law on Data Protection” (LOPD) 15/1999, 13 December).

This document addresses the data collection and sharing issue by reviewing all applicable aspects and providing a set of guidelines and procedures to collect, storage, protect, retain and destroy this information when possible.

3 Data treatment principles

Although these principles are not exclusive for FunrIT-SAVER project, they should be seen as the necessary aspects subject of treatment and analysis of user data. These principles will facilitate the discussion of the next section on how FurnIT-SAVER addresses those principles

- Data quality. The collected personal data should be adequate, not excessive and relevant to the purposes it will be processed.
- Prior consent. A user shall be preliminary informed about the collection of user data, the purposes for which the data is intended, the voluntary nature of providing the data, the entities to which the data may be communicated, etc.
- Users’ rights to access, rectification, cancellation and opposition of user data.
- Users privacy. Users’ rights to exercise privacy of user data. Users should be able at their will to limit the distribution of user data. A user should be able to access user data and information the system has collected about the user, and control what part of the user data can be used by the system or by other system users.
- Data protection and security measures. Personal and collected user data shall be kept, access controlled, and processed by using suitable security measures and techniques to ensure confidentiality, integrity and availability of information.

- Location data anonymisation. Location data related to users of public communication networks and public communication services may only be processed when the data is made anonymous, or when the prior consent of the users is obtained.

4 FurnIT-SAVER compliance with privacy principles

In the following, it is discussed how the project addresses the principles outlined in the previous section.

4.1 Informed consent

Several interviews, focus groups and beta-tests campaigns are planned and some have already been carried out within the project to improve the product-market fit of FurnIT-SAVER platform for the furniture sector.

Participants will be informed about the nature of the interview or experiment and the information that will be collected, processed and stored. The specific content of the participant will grant the consortium the right to collect, store and process data (when necessary) as defined in the informed consent limited to the specific purpose of the project under consideration and further research activities related to the purpose of the project.

The informed consent will be documented by an explicit agreement of the end-user either through an online system or a signed document. Before participants give their consent or take part in an experiment/test/pilot they will receive clear and unambiguous information in terms that are meaningful to them. The participants should understand:

- What the experiment/test/pilot is about and its duration
- Who is carrying out the experiment/test/pilot
- Who is funding it
- Any potential benefit to individuals or groups
- What they will have to do
- What the experiment/pilot/test findings will be used for
- Confidentiality agreements
- What personal information will be collected and stored (if any)
- Who they can contact with questions/problems after the study is completed
- What is the revocation process in case the participant wants to delete all the stored data referred to him/her at any time after the experiment/test/pilot has been completed.

Participants will be informed before they start the research that they can withdraw after consent, during the project and after data collection. This means that participants' name, data and consent forms will be stored on record in order to identify data for removal (names and consent agreement must be stored separately from the data).

4.2 Data protection, anonymisation and privacy

The main relevant European legal framework on protection of personal data is the the Directive 95/46/EC, that has been integrated by the e-privacy directive 2002/58/EC, as revised by 2009/136/EC dealing with the regulation of a number of important issues such as confidentiality of information, treatment of traffic data, etc. The main concepts in the data privacy regulation are the *Data Subject*, the *Personal Data*, the *Data Controller* and the *Data Processor*. Personal Data includes any information relating to an identified or identifiable natural person or Data Subject, whether it relates to her or his private, professional or public life. Depending on the identification process, there are several FurnIT-SAVER data that can reveal the data subject identity, such as a name, a photo or an email address, and eventually posts on social networks or its IP address. More generally, whatever information that can be used in any way to re-identify the subject of the data may be considered as Personal Data and is subject to the above EU regulations.

Data Controllers are those individuals or entities, which collect and process personal data (e.g., an Internet Service Provider is the controller of all the traffic collected in its own network). Data controllers determine “the purpose and the means of the processing of personal data” and must respect the privacy and data protection rights of those subjects whose personal data is entrusted to them.

FurnIT-SAVER research activities are aligned to these regulations and initially no partner aims at collecting Personal Identifiable Information (PII) since all usernames, user IDs or any other means to link the collected data to a physical person will be either eliminated or properly anonymised before being used. Therefore, the purpose of the project is to store data in a way that cannot be linked to a physical person, thus respecting during the whole project duration the privacy of FurnIT-SAVER users.

Nevertheless, if during the project implementation due to new research, exploitation, pilot requirements we have to process some PII we commit to comply with the following principles defined in the Data Protection Act:

1. PII will be fairly and lawfully processed for the specific, explicit and legitimate purpose of carrying out R&D activities within the FurnIT-SAVER project;
2. The collected PII will be adequate, relevant and not excessive in relation to the purposes of the project;
3. The collected PII will be accurate and up to date: necessary measures will be taken to ensure that data that are inaccurate or incomplete for furnIT-SAVER purposes, are erased or rectified.

4. All individual volunteers must consent the data collection in order to participate in the tests and evaluations. Individuals will have the right to access, rectify or erase PII related to them;
5. PII will not be kept for longer than it is necessary for the purposes for which the data were collected or for which they are further processed;
6. PII will be secured: appropriate technical and organizational measures will be taken to protect PII against accidental or unlawful destruction or accidental loss, alteration, unauthorized disclosure or access, in particular where the processing involves the transmission of data over a network, and against all other unlawful forms of processing. All sensitive data will be anonymised when processing results in a way that no subject is identifiable in any of the outputs resulting from trials and evaluations with volunteers (public, restricted and confidential reports deliverables, presentations, intra-consortium communications, etc.).
7. PII will not be shared between applications for different purposes;
8. PII will not be transferred to other countries without adequate protection;

Following these principles, all partners involved in the FurnIT-SAVER consortium guarantee that the technologies and applications that will be developed during the project will not harm the privacy and freedom rights of users in any way. Therefore, it will be strictly forbidden to perform any activities related to the tracking of a singled out individual.

In addition to that, the access to personal data (PII) will be provided following strict consent through authentication and authorization rules, and any activity of FurnIT-SAVER in this domain (from data acquisition and protection to data processing) will be in compliance of the existing regulations both at European and national levels.

4.3 Specific measures during validation phase for user data treatment

The validation phase aims at performing supervised use of the platform in which users can receive instructions and interact with FurnIT-SAVER team members. This validation will require the participation of adult users (healthy volunteers). FurnIT-SAVER consortium will neither involve children nor adults unable to give informed consent nor vulnerable individuals/groups in the pilots and testing of the developed solutions. In the unlikely case that an end-user belonging to any of those sensitive groups is detected in the experiments carried out during the project lifetime, he/she will be automatically eliminated from the experiment and any piece of data related to that end-user will be immediately erased.

The recruitment process for the controlled pilot ensures that no vulnerable or underage user is involved. The main principles of the recruiting process of beta-testers are:

- Participation is voluntary, and no participant shall be coerced into taking part in the experiments/test/pilots.
- Participants have the right to decline to take part in the experiment/test/pilot at any moment without giving any reason or explanation, even after giving their consent.
- Participants will be informed that dropping out the study at any time, for any reason, will not have any penalization or negative effects on them.
- Participants can withdraw from the research at any time without giving a reason.

The procedure for recruitment of users to test the developed solutions during the validation phase will be defined in D4.1 Validation protocols. Users will be informed of the benefits and obligations that come with being beta-tester.

With respect to the collection and usage of personal data, this information will be used to build user profiles and offer recommendation. This information will be used to obtain an id which will uniquely identify the session for a given user. As of this moment, only session id will be used to track the actions carried out during the session and call the available services such as creating layouts, searching furniture on the catalogue, offering furniture recommendations, save or modify accommodations or export furniture list to the augmented reality, among others. Therefore, any of the gathered Personal Identifiable Information (PII) will link the collected data to a physical person