



Meet the ATLANTIS Users

ATLANTIS Public Report Nr. 2	
Project:	ATLANTIS – AuThoring toolL for indoor Augmented and dimiNished realiTy experienceS
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Abstract:	This report describes the user groups that are intended to benefit from the results of ATLANTIS and presents personas from the user groups.



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ATLANTIS will demonstrate its AR authoring tool in the domain of *interior design* – that will truly benefit from pre-authored content creation as well as the reality removal possibilities offered by DR. For this domain the authored AR experiences are very beneficial as they effectively convey the designers’ concepts to their clients, as well as efficiently obtaining high-quality feedback from the clients, overall providing a more cost-effective and fruitful information exchange mechanism for this domain.

The project addresses two overall target user categories:

- 1. Professionals working with interior design**
- 2. Consumers improving their homes**

The two groups are discussed on the following pages together with example personas to illustrate/exemplify target users in each group. (Personas are representations of fictional characters that are based on the user research conducted with different groups of real users. These have been compiled to summarise and communicate key user characteristics in a manageable, memorable and easy to overview format. They will be used in the design process to help focus on real users and their usage of the product when thinking through design problems, making design decisions, and determining what aspects to concentrate on in user interface design work).

Professionals working with interior design

These are professionals working with selling home or office furnishings, those working with selling/renting private or commercial properties, and interior designers assisting either professional clients (e.g. architects, estate agents) or consumers (e.g. homeowners/renters).

User group / short description	Expected benefits
<p>1a. Salespersons and interior design assistants at furniture retailers.</p> <p>Primarily working with products for private homes, potentially also some commercial premises.</p>	<ul style="list-style-type: none"> ● Facilitate the sales of home furnishings (potentially also office furnishings). ● Provide their customers with a better (visual) understanding of how furniture will look in their room(s) and help them to choose suitable furniture. ● To help potential customers in making choices about the configuration of a product. ● To help sell additional products / product options. ● Better address customer needs and improve customer experience. Encourage repeat business. ● To provide a better customer service compared to competitors.
<p>1b – Salespersons and project/account managers at specialist equipment/furnishings suppliers</p>	<ul style="list-style-type: none"> ● Facilitate the sales of specialist furniture and equipment. ● Provide their customers a better understanding of how products/equipment will look in their room(s) and allow them to configure them to suit their specific needs. ● Reduce the need for extensive re-working of room plans though better capture of room information and customer

	needs, as well as better/more meaningful communication of room plans. <ul style="list-style-type: none"> • To help sell additional products / product options. • Better address customer needs and improve customer experience. Encourage repeat business.
1c - Interior designers - consulting consumers and those planning commercial spaces. They may work at small interior design consultancies (and have relationships with certain furniture suppliers) or in larger companies (e.g. high end furniture brands).	<ul style="list-style-type: none"> • Increase efficiency and effectiveness in: <ul style="list-style-type: none"> ○ Gathering necessary data (dimensions, current appearance) about the room to be re-designed. ○ Communicating/visualising their room design ideas (giving the customer a better feeling for them) and reaching a proposed solution that suits their customer. • Better address customer needs and improve customer experience. Encourage repeat business.

Example Persona 1: “Lucas Bauer” (user group 1a)



Lucas Bauer

Male, 54
Vienna, Austrian
Married, two children
Salesman at a home furnishing store chain

“What is the colour scheme of your living room? How do you sit there today? How much is the TV used?”

Relevant characteristics

- Service-minded, good social skills
- Extensive experience of furniture products (has worked many years as a salesperson).
- Not so familiar or comfortable with technology.

Usage context

- When meeting customers in-store.
- Desktop computer.

Scenarios

- A customer is interested in a specific sofa but wants an idea of how it would look in cream leather. Such a sofa isn't available to look at in the store.
- A customer has previously bought a sofa, armchair and coffee table. They now want to add another armchair. Unfortunately there is no longer an armchair available that has the same design and so they want suggestions as to which armchairs would be most suitable. They don't have a lot of space in their living room.
- A customer has come into the store and wants help in choosing new furniture for their living room. They have already used the 'Atlantis' app to scan in their existing living room and furniture...
- A customer has done a plan of their dining room in the 'Atlantis' app. They would like suggestions for wallpaper and to see what these would look like in their dining room.

Key needs

- Simplicity (user interface).
- Possibility to collaborate on plans with customers.
- Connection to store sales system (for pricing, product availability, taking a specification and turning it into an order).

Example Persona 2: “Annika Ström” (user group 1a)



Annika Ström

Female, 44
Stockholm, Sweden
Married, two children

Interior designer/Saleswoman for a home furnishing store chain

“Can you send me some photos of the room and an idea of what colours you like? I can put a few initial ideas together and we can discuss from there.”

Relevant characteristics

- Service-minded, good social skills
- Good at thinking from the perspective of others
- Keeps up-to-date on the latest trends
- Extensive experience of furniture products (has worked many years as a salesperson).

Usage context

- On location (at a customer’s house/flat/office), typically with a mobile or tablet – to gather data, present suggestions.
- At the office (back office to a furniture store) – to plan/design.
- When meeting customers in-store – to demo ideas.

Scenarios

- Annika is visiting a customer’s house. The customer is renovating all the downstairs rooms in their house (kitchen, dining room, living room, hallway) and wants ideas for wallpaper/paint colour and a complete set of living room and dining room furniture. They want to keep their existing coffee table, TV and piano (all are in the living room today).
- Annika is visiting a customer’s flat. The customer has two children who are currently sharing one large bedroom. They plan to split the bedroom into two smaller bedrooms and have given her a rough plan drawing. In each room they’ll need new wallpaper, new bed, new desk and wardrobe, plus other furnishings/decoration as appropriate. Annika needs to scan in measurements for the room and then visualize some alternatives for how the two rooms would look.
- A customer has come into the store and wants help in choosing new furniture for their living room. They have already used the ‘Atlantis’ app to scan in their existing living room and furniture...

Key needs

- Possibility to scan a whole property and have floorplans generated based on that.
- Possibility to empty rooms of all exiting furnishings/decorations except those that the customer wishes to keep.
- Possibility to add a partial/full room separator, wall section, or even split a room.
- Possibility to collaborate on plans with customers.
- Show wallpaper designs and store furniture in a customer’s room (VR/AR).
- Complete ‘shopping list’ for all room plans in a home.

Example Persona 3: “John McCann” (user group 1b)



John McCann

Male, 52
New York, USA
Married with 2 children

Salesman for medical cabinets and hospital furniture

“When possible I try to do a site visit to understand how staff and patients will move around before suggesting a solution”

Relevant characteristics

- Knowledgeable/experienced in medical furniture and different application areas
- Organised
- Methodical
- Customer-centred
- Meticulous (attention to detail)

Usage context

- On location at hospitals and medical centres
- Whilst travelling to/from customers
- At the office
- Collaborating online (e.g. in online meetings discussing layouts, equipment options, etc).

Scenarios

- A hospital is going to re-purpose a large meeting room as a rehabilitation gym for patients who have had spinal injuries, amputations and similar. The hospital wants a complete set of equipment in an appropriate layout for the space available. Consideration needs to be given to the needs of the different therapists that will work there and the flow of patients.
- A hospital ward needs a new set of storage cabinets for a small medical supplies room that is being refurbished. (Several of the cabinets will be of identical configuration in terms of height, colour scheme, etc).
- A healthcentre is interested in new modern treatment chairs to replace those that they have in all their treatment rooms. They are interested to see how different chair options and colours would look in their rooms. Some of the chair options are also bigger than existing chairs and they want to get an idea of how much space there will be for people to move around them.

Key needs

- To quickly provide customers with a realistic idea of how different solutions will look in their environment.
- Be able to easily capture relevant data about the room(s) to be furnished and support in ensuring nothing important is missed.
- A planning tool that can be used to facilitate collaboration with the customer and enabling different staff needs to be considered in the choice, configuration and layout of furniture.
- To be able to easily export / transfer / reuse plans as input to architects working with CAD programs (for formal plans) and to generate a complete parts/materials list for use in orders/specifications.

Consumers improving their homes

Those redecorating/renovating their homes and/or looking to buy new furniture.

User group / short description	Expected benefits
<p>2a - Someone looking to buy one or a few items of new furniture for a room in their home.</p>	<ul style="list-style-type: none"> • To get ideas for new furniture and/or decorations/accessories. • To judge how different furniture options would fit in their home (both physically and in terms of design / in relation to existing colour scheme, existing furnishings, etc.).
<p>2b - Someone wishing to wholly or partially reorganise and refurbish one or more rooms in their home.</p>	<ul style="list-style-type: none"> • To improve their home (to make it more suitable / attractive for their current needs). • To decide how to layout and furnish different rooms.

	<ul style="list-style-type: none"> To choose between different options for furniture and furniture configuration (e.g. material colours).
2c – A homeowner who is planning for a complete home renovation of all or several rooms at the same time.	<ul style="list-style-type: none"> To improve their home (to make it more suitable / attractive for their current needs). To explore and visualize possible designs and layouts for several rooms (possibly even considering the use of different rooms for different purposes). To explore colour schemes for both room decoration (e.g. wallpaper, paint) as well as furnishings.

Example Persona: “Sofie Svensson” (user group 2a)



Sofie Svensson

Female, 33
Gothenburg, Sweden
Married, no children

Lives in a 2-bedroom flat (owned)

“Which carpet would look best with my existing sofa / coffee table, and is still easy to clean dog hair off.”

Relevant characteristics

- Wants it to be “just right”.
- Has difficulty deciding when there are too many products to choose between.
- Exact colours / lighting is important.
- Wants to order directly when she has found the ‘right’ item.

Usage context

- At home on the sofa
- At furniture stores

Scenarios

- Some ‘accidents’ have occurred to the carpet/mat under her sofa/chairs/coffee table. She never liked the colour and now wants to buy a new one that better matches with her furniture and that is easy to clean. She wants to get an idea of how different carpet sizes/styles/colours would look in the room, in relation to other furniture. Ideally, she would like to see how it would look like with summer daylight from the window vs artificial light in the evenings.
- After finally choosing a new mat, she decides that maybe she should change the coffee table too and wants suggestions as to what would suit.
- Later in the year, as winter approaches, she would like some nice cosy cushions for her sofa that fit with the season.
- Sofie feels her living room is a little too dark in the evenings. She is wondering about adding a lamp – possibly a floor lamp, or a table lamp that she could put in or on top of a large bookcase she has against one wall. She would like to explore different options and how they might improving the lighting in the room.

Key needs

- A simple/direct way of seeing how an item of furniture will look in her room.
- Furniture/accessory suggestions based on her tastes and existing furnishings.
- Accurate representation of colours/textures of a new furniture item.
- Possibility to order directly (or at least see where it is available to be bought/ordered).

Example Persona “Sarah Jones” (user group 2b)



Sarah Jones

Female, 49
Berlin, Germany
Single

Lives in a 1-bedroom apartment (rental)

“I like to update and re-plan my living room depending on the season”

Relevant characteristics

- Very active
- Attention to detail
- Fussy about colours
- Likes change

Usage context

- In living room - has limited space (not much free floor space unless furniture is moved).
- iPad only (does not have a laptop/desktop).

Scenarios

- Spring is in the air and it is starting to get lighter outside. Sara wants to re-organise her living room so that the TV doesn’t get direct sunlight and that she can look directly outside from her sofa.
- Sarah wants to put some family pictures on the wall but isn’t sure where to place them / how they will look. She also wants to ensure they are at roughly the right height for people to view comfortably when standing in front of them.
- One of the legs of her coffee table is loose and Sara has decided to buy a new one. She would like one that is a similar style/size/material but with rounded corners instead of sharp ones, and more sturdy legs!
- In conjunction with the new coffee table Sara is thinking about buying an additional floor lamp and wants to explore lamps that might suit. Ideally she’d like to see how well they would light up the room with different strengths of lightbulbs.
- Sarah has a small spare room that today she uses mainly for storage. She wants to have a temporary bed solution for visitors and is wondering what it would look like to have a small sofa-bed or foldout cupboard-bed in the room.
- Sarah is considering moving an old armchair from her living room into the spare room – she is wondering what it would look like and whether there will be enough space.

Key needs

- Visualize many different alternative layouts to her living room without having to move furniture around.
- Re-use of a significant amount of existing furniture in her plans (possibly no or just the odd item of new furniture).
- To visualize how changes would look without any impact on the apartment itself until plans are final (e.g. to see how a set of pictures would look on her wall without having to create any holes in the wall until she knows she has the right arrangement).

Mike Williams (user group 2c)



Mike Williams

Male, 35
Birmingham, UK
Partner, no children

Lives in a 3-bedroom house

"Buy it, renovate it, get it rented out quick. I know what makes a desirable flat or house."

Relevant characteristics

- Handy / DIY-skills
- Decides over his own time
- Looking to maximise profit
- Familiar with (and interested in) technology

Usage context

- In the property to be renovated (can be poor lighting conditions).
- At home on the sofa.
- In discussion with workmen (can be online).

Scenarios

- Mike has just bought a house on a "buy to let" basis. Now that he has the keys, he wants to check out the 2-floor property, capture images of the whole house, and then get back home to start planning. He will re-decorate the whole place but before doing that he is thinking of knocking through a large section of wall between the living room at the front of the house and the kitchen at the back of the house – he is wondering what this would look like and how it could affect light in the rooms.
- In the two bedrooms he will wallpaper the walls and wants to get a feel for how some different carpets and wallpaper designs would look (he has some samples). Having chosen carpets and wallpaper, he will need to know how much to order.
- Having redecorated the house Mike now needs to furnish it (as it is to be rented out furnished). He's interested to get some standard layout and furniture suggestions for each room (entrance hall, living room, dining area, upstairs landing, two bedrooms).
- Mike has decided he will have large patio doors leading from the living room to a patio area and out into the garden. In his plan he wishes to include the layout of the patio directly outside the living room.
- For the dining area he has chosen a specific dining chair and now wants 6 the same arranged around the dining table.

Key needs

- Possibility to scan a whole property and have floorplans generated based on that.
- Possibility to see how removing a wall would affect a room.
- Possibility to collaborate on plans with his partner and to share plans with workmen.
- See wallpaper designs in AR.
- Estimate materials needed for redecoration (e.g. rolls of wallpaper required).
- Furnishing suggestions based on room type, size and layout.
- Complete 'shopping list' for all room plans in a house.

More information

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