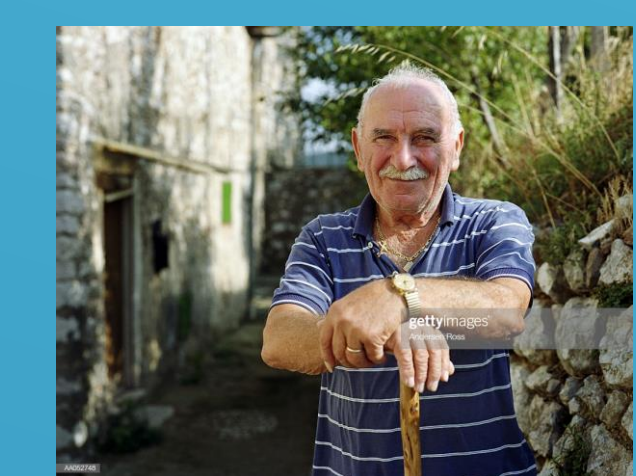


# ACCESSIBILITY MODE FOR WEBSITE BASED SCOTRAIL TRAVEL BOOKING

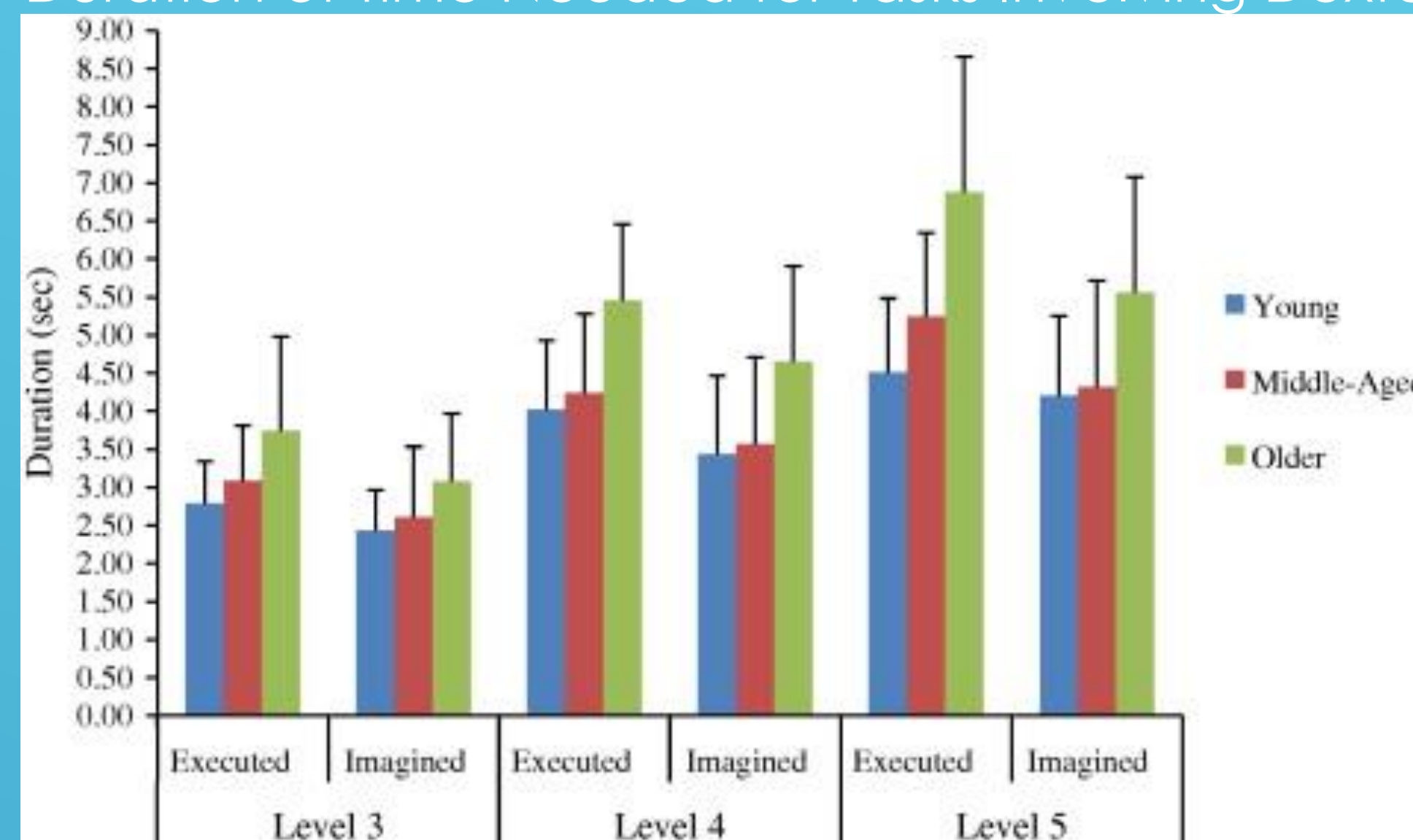
CREATED BY



Globally, people over 60 are the fastest increasing demographic<sup>5</sup> however their engagement with technology remains below other age groups.<sup>1</sup> In using technology the elderly face special challenges such as decreasing manual dexterity, sight and hearing issues, and cognitive overload. Designing an 'Accessibility Mode' which can be activated on Scotrail's web can aid usability for both elderly and disabled users, increasing satisfaction and continued interaction with Scotrail.



Ross, a persona created to assess areas of difficulty for elderly users, is a 77 year old man with hearing and chronic pain issues. This storyboard shows how he might find the Scotrail website at first glance.

Duration of Time Needed for Tasks Involving Dexterity <sup>4</sup>

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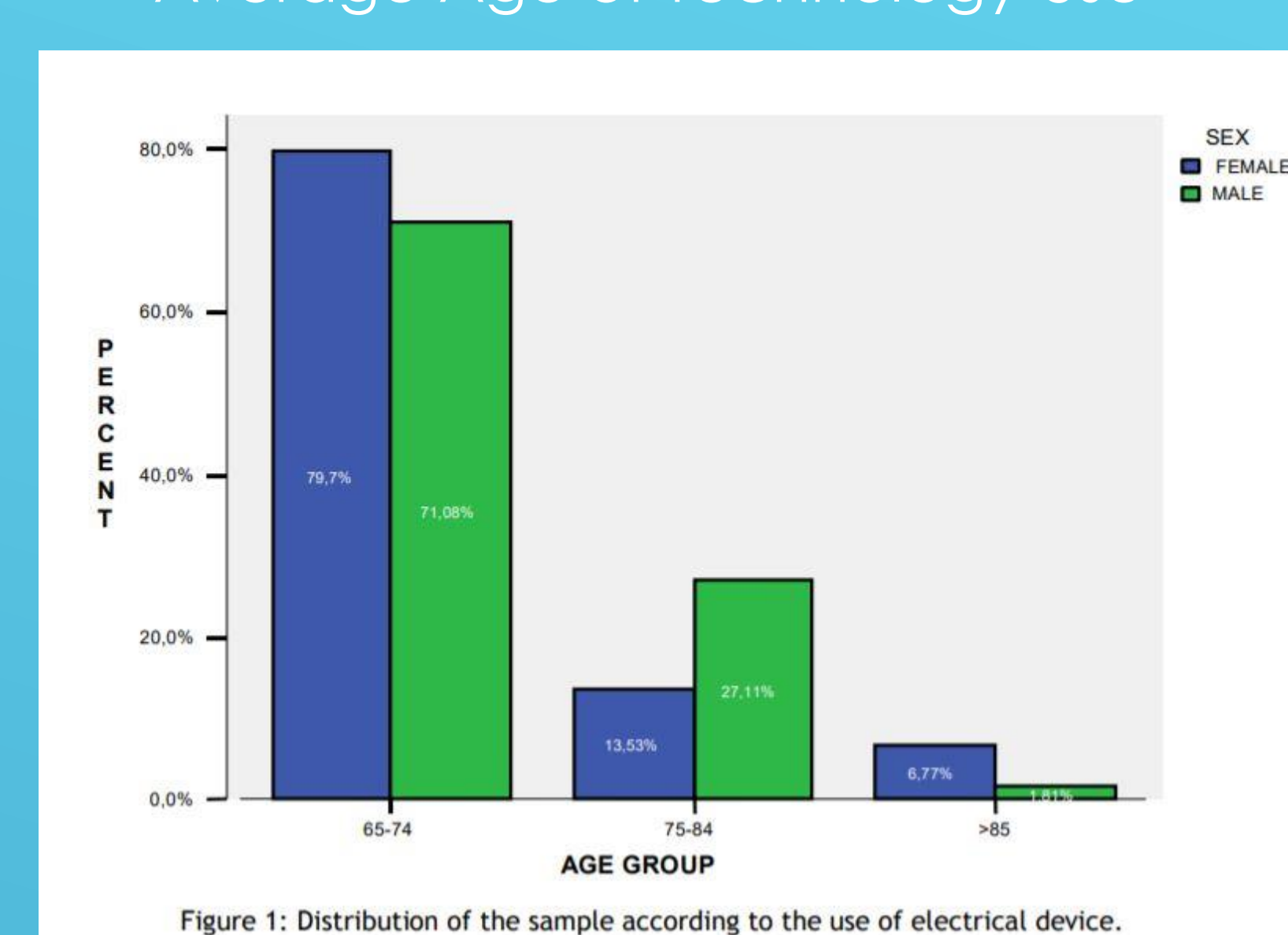
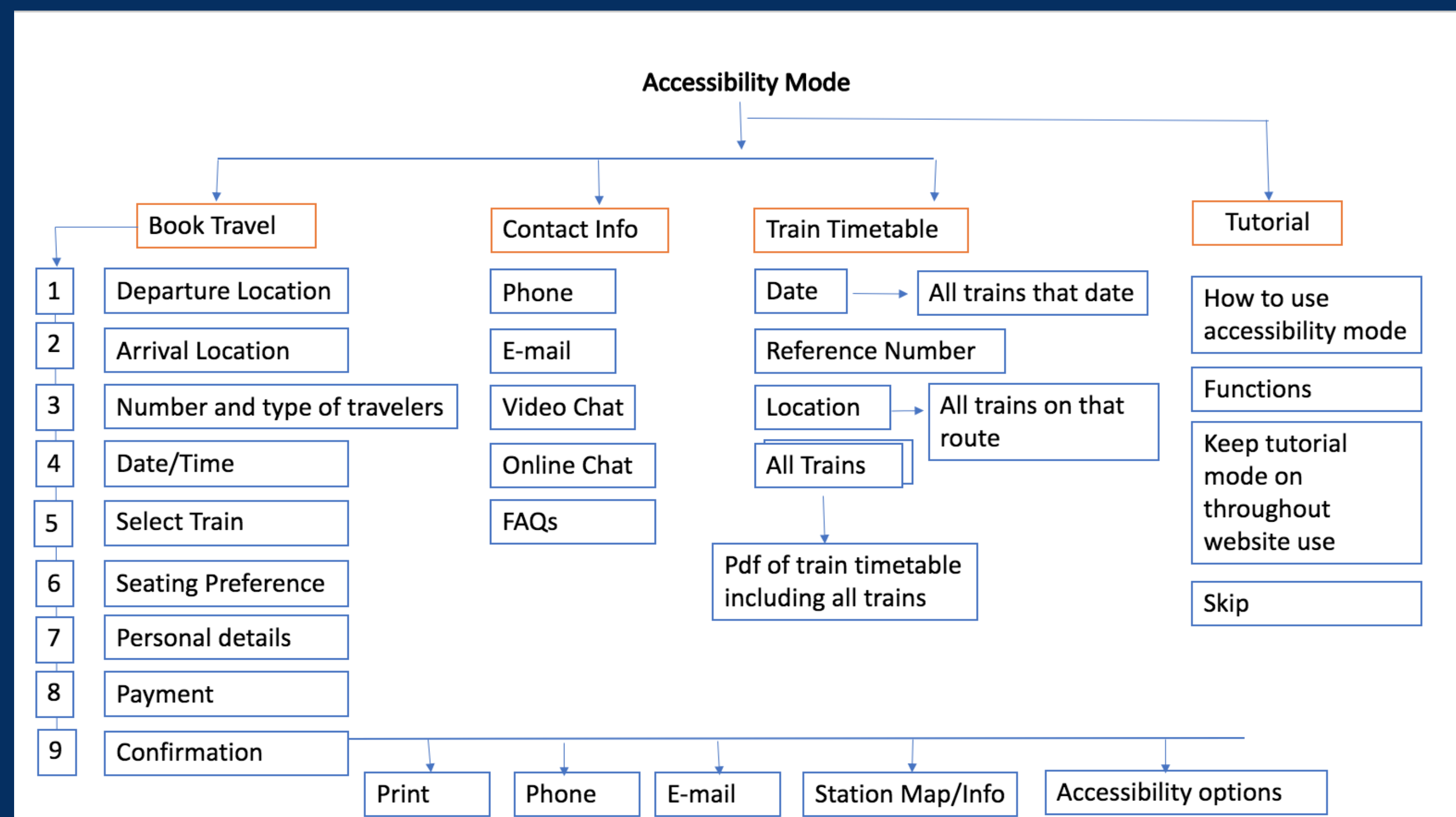
Average Age of Technology Use <sup>1</sup>

Figure 1: Distribution of the sample according to the use of electrical device.

In this storyboard, Ross has used a Google search to find the Scotrail website. The home screen is crowded with columns of text and banners in an array of colours. Ross can't find an intuitive area to start at, so he scrolls down the page. Instead of getting simpler, there are yet more areas of info. He tries to find a phone number to call but the contact page has nothing obvious. Frustrated and suffering from information overload, Ross turns to the phone book, where buses are listed ahead of rail services.

## Problems on the Current Website and Possible Solutions

Main Problems	Reasons	Solutions
Too cluttered and too much information on the same space	Older people have issues with cognitive overload, memory and concentration <sup>5</sup>	A more simplified design where the biggest space only contain the most important functions
Fonts and text buttons are too small	Older people often have eyesight problems <sup>5</sup>	Change font from 11px to 16 px, which is recommended for older people <sup>5</sup>
Unclear steps lead to difficult navigation	Older people take longer time to navigate complex websites <sup>4</sup>	A tutorial function and clear visualization of all steps



This Navigation Map shows how users will move through the website when the Accessibility Mode is switched on. When selecting Book Travel users can see all the steps involved in legible font at the top of the page as they go through them. They can access contact information, train timetables and even go through or skip a tutorial assisting users in how the website works, especially the Accessibility Mode.

## Visualising Accessibility Mode With Wireframes

No	Element	Type	Description
1	Logo	Image	Logo/Accessibility mode
2	Book travel	Button	Book travel
3	Departure City	Text box	Departure City
4	Arrival City	Text box	Arrival City
5	Departure Date	Text box	Departure Date
6	Return Date	Text box	Return Date
7	Help	Button	Help
8	Next	Button	Next
9	Deals	Text box	Deals
10	Smart card	Text box	Smart card

No	Element	Type	Description
1	Book travel	Button	Book travel
2	Train Timetable	Text box	Train Timetable
3	Contact Information	Text box	Contact Information
4	Select a train	Text box	Select a train
5	Select cabin type	Text box	Select cabin type
6	Graphic of open seats	Image	Graphic of open seats
7	Help	Button	Help
8	Next	Button	Next

No	Element	Type	Description
1	Navigation buttons	Buttons	Links to relevant information
2, 5	Select train	Drop down menu	Opens a page where user selects the train they want and dynamically updates information on cabin type and seat open
3	Select a cabin type	Drop down menu	Give user list of what train car is available
4	Interactive graphic where user can click on seat	Graphic	Users can click on a seat to choose what they want
6	Help Button	Drop down menu	If a customer needs help, they can click it and have options to call, talk in chat room, or send in ticket with email
7	Next button	button	Clicking button will guide users to next step to complete ticket buying experience

No	Element	Type	Description
1	Book travel	Button	Book travel
2	Train Timetable	Text box	Train Timetable
3	Contact Information	Text box	Contact Information
4	Personal Details	Text box	Personal Details
5	Name	Text box	Name
6	Address	Text box	Address
7	Phone	Text box	Phone
8	Email	Text box	Email
9	Payment options	Text box	Payment options
10	Help	Button	Help
11	Confirm	Button	Confirm

No	Element	Type	Description
1	Navigation buttons	Buttons	Links to relevant information
2	Enter in personal details for payment	Text box	Text box for gathering information about user to make payments
3	Payment options	Text box	Box that states the information a user needs to input to complete the payment process
4	Help Button	Drop down menu	If a customer needs help, they can click it and have options to call, talk in chat room, or send in ticket with email
5	Confirm button	button	Clicking button will confirm with user if the information that user entered in is correct as well as prompting them if they would like travel information printed out

This chart contains a brief description of the website and the principles which supported the decisions that were made.

Principle	Description
Affordance	As our project is focusing on helping elderly people, we have designed our website in such a way that the user will instantly know what each feature does.
Perceivability	Users should be able to perceive every action when or if it should be taken. This could be hard for elderly people as they are typically not as familiar with the modern technology. With our accessibility mode design, this obstacle will not be present for them.
Feedback	Feedback is very important. Not giving proper feedback might cause the user to think that something went wrong. Accessibility mode will make sure that the user knows if the action they performed went through or not by giving text messages after each action taken.
Consistency	Each element and feature on our website are consistently placed where they were the first time the user entered the website so they can instantly find anything they need.
Usability	The new website will be easy to learn for elderly people, and despite having fewer options it will be very efficient and effective.
Navigation	Accessibility mode will provide easier navigation. There will be fewer levels/subsites so the user will get to their destination faster.

## Prototype of Implemented Scotrail Accessibility Mode

