

New and Revised Personas

Note this has been merged into the main git and is not comment only

The new document is at [Persona Review 19 December](#)

Disclaimer -example change, often occur in more persona, or can not occur

Tom is a traumatic brain injury survivor

Tom was involved in a very serious car crash that left him with some physical, sensory and cognitive disabilities having sustained a brain injury. He has returned to work but often finds communications strained due to difficulties due to memory recollection and visual understanding.

Tom had to learn how to walk, talk, and basically live life all over again. Medical experts informed him that his greatest chances for recovery take place within the first 2 years after his injury. After that he may continue to recover, but at a much slower, and incremental rate. His friends and family were amazed by how quickly he regained his ability to speak, and perform his daily life functions. They were perplexed, however, by all of the cognitive difficulties he expressed having, despite his clear ability to articulate, and communicate. For example, he often can not recognise images and faces. He gets disorientated in physical spaces and often gets lost in rooms, as well as buildings, and larger places.

He has now returned to his old company as a researcher and is back using applications and the internet throughout his working day.

9.1 Challenge 1: Using speech recognition to navigate the web

As Tom has dexterity difficulties he sometimes uses speech recognition to work through web pages as he finds this method the least tiring of all the possible input options. Although his speech is slow, he is able to control his computer using speech commands and dictation. It is quite easy to use simple commands to control websites, although there are times when he forgets some of the commands and has to use his cheat sheet. Tom likes the scroll commands that allow him to read slowly down a page without using any other input device and he can often retrace his steps as he has to reread items. However, there can be problems if the forms on the website are not labelled correctly or buttons do not have clear names. There are aspects of form filling that Tom has had help to personalize, but if an element is inaccessible via the keyboard, he has to use the mouse grid to interact with that part of the site. This is a slow process and can be frustrating as Tom finds he loses concentration.

9.3 Challenge 2 (was challenge 3): Finding the right words to use for searching

Tom finds there are times when he spells words incorrectly and he appreciates support with error corrections or a system that accepts mistakes. He also has word finding problems when he is tired and search suggestions are welcomed, as are ideas that might be related to his search. However, too many results can cause concern and Tom admits he really cannot work his way through very long lists that have not been broken up with headings and categories.

Challenge 3: (David) Being confident that he understands the content

Tom has difficulty understanding content when it is not explicitly clear, and without any ambiguity whatsoever. He takes a notably longer amount of time to read and process information in order to be certain that he is interpreting it correctly. His interpretation of information is almost always correct, but even the slightest bit of ambiguity, or open interpretation creates sticking points that he must read over and over again, and question every which way until he can assure himself with the confidence that he understands it correctly. Examples and clear step by step instructions can help him have the confidence to complete his task.

Challenge 4: (David and John) Understanding where information is in a hierarchical structure

Tom is trying to understand the outline of the page and site, so that he does not get lost in the content. Sometimes he dives into the content but then he does not know where he is in the content or task. and a clear site structure lets him orientate himself in the site.

He values simple, clear graphics that relate to the content and break it up. These help him orient as well as understand and remember the content. This includes: Symbols that emphasise the structure and role of the content or an image that accompany the main text and makes it memorable.

Challenge 5 Cognitive Overload

Complex presentations of information (images, diagrams, content heavy web pages, etc) overload Tom's cognitive functioning. This shuts his brain down and prevents him from progressing through processes, navigating, systems, and environments, and understanding the

information presented, at both the micro and macro level.

Liberal use of white space can decrease cognitive load of high volume of page content.

Maria who has memory loss

Maria is 50 years old, married, and lives with her family in Madrid, Spain. Maria has macular degeneration, a disease that mainly affects central vision by causing “blind spots” directly ahead. She is also beginning to lose her memory but still works part-time for a local company.

3.1 Challenge 1: dynamic website elements make key website information difficult to locate

Maria needs to gather the information online: she needs to run through reports about the company and use the company’s website. She is only able to easily read the headlines of web pages. The company’s website looks fancy, has a modern user interface and a lot of dynamic elements that change when you hover the mouse over them. For Maria this site is a total nightmare! She finally finds the link to the data she needs as it appears when she happens to hover over a certain menu item with her mouse. The link is positioned in such a bad place that she did not notice it at first. She has found that it really helps if important interactive items are placed in the usual menu areas on a screen and the icons are clearly defined and easily recognisable.

Removed Challenge 2

3.3 Challenge 3 : Access to information entered during previous step in process

Maria has difficulty remembering information that she enters into previous screens, and that she is provided by those screens, while proceeding through steps in a process. Additionally, the prolonged mental stress that she experiences while navigating processes inhibits her brain from producing the cells necessary to form new memories. Web pages, and processes that require her to remember information from one step to another need to provide her access to any previously provided information that is required to proceed, at the exact point of use that is required, otherwise you won’t be able to proceed.

3.4

Anne

Add to intro:

Anne has a weak working memory for numbers and digits. She also has a weak visual memory , poor auditory discrimination and bad eye hand coordination.

Challenge 4: Finding important information

Anne is a very slow reader and often sounds out words. As she has low auditory processing skills , she can not speed up her screen reader. Therefore, to manage her busy life she has to try and skip through the massive amounts of content, emails and newsletter she sees and reads out the most important parts. Sometimes however, she can not find important content because it is buried inside lots of other content, or the headers and visual layout of the content does not guide her to where she needs to be.

Anne is always worried that she is missing something important and sometimes she is. For example, her daughters elementary school published a weekly newsletter with interesting stories about activities and important announcements. It contained information that her daughters school was ending early on day, but it was buried under lots of less important information about the school activities. Because it takes her so long to read each word she did not manage to read the whole newsletter and did not know that her daughter was coming home earlier then usual. As a result she was not home in time and her daughter was left waiting outside for over an hour.

Challenge 5: Pressing the correct button

Anne also has bad eye hand coordination, so precise movements are hard and she often touches the wrong button on her small phone screen. This means she often presses the wrong button or digit when typing on her small phone screen. With her low letter recognition this makes typing in codes or text very unreliable. She confuses left and right so she is often pressing the off button in place of the volume. In most interactions on her phone she makes some form of mistake, such as loading a new video when she intended to expand the screen of the window she was watching. To use an application successfully it needs to have a consistent back function.

. Frank – a retired lawyer with dementia

Frank retired from his law firm in his early 60s when he found he was forgetting important items that needed to be discussed in his complex case load. He found that he was forgetting material that he had just read, losing and misplacing objects and having trouble planning or organizing events.

ADD: Frank is a very intelligent man and that has not changed. You will often find him reading an article about the law. However, he finds he can not learn new things that rely on remembering new information. This can include new words or symbols.

Challenge 4: Making a doctors appointment

Frank can be independent, but often unsuitable designs make him require help. For example, he was trying to make a doctors appointment. He went to the doctors website and clicked on “make an appointment”. Then a popup opened asking him for the date. He became distracted by the phone, and when he returned to the screen he was not sure what it was for. So he did not make the appointment. If the popup had had a clear heading he would have been reminded of what he was doing, but without these landmarks he was just confused.

Frank as tried the help menu systems as well. Unfortunately they are often automated and ask him questions like “press 2 to make an appointment” Frank typically can not remember the digit - especially while he is processing the options. He usually gets lost in these systems or types the wrong digit. Frank is reluctant to ask for help and as a result he is not getting the health care he needs.

Challenge 5: Using the heating

Frank has recently moved to a smaller apartment that is easier to take care of. However this means he is not used to the ICT interfaces for heating and television system. He has tried to turn on the heat, but the menu item for selecting heat or air conditioning is labeled "mode" and he can not remember or learn new terms. Frank can not user cannot use the whole unit because of this one term. This has caused emergencies such as hypothermia. Frank keeps the heating on at the same temperature and will only change it when his helper comes.

The TV also has an ICT interface with a lot of symbols that Frank does not know. His helper put an “on/off” sticker next to the button that he can use, but he can not change the channel or change the volume.

When his microwave broke he bought a new one with controls that were similar to his old one. Because the controls were familiar Frank can use microwave unaided, although he needs help with the TV and heating.

Suggestion to remove maria

Alison

Add to the description “ **Learning new things, like new designs patterns and applications, takes longer than it used to.**”

4.1 Challenge 1: Learning how to use new technologies and interfaces.

Alison took an evening course to learn how to use Windows and MS Word ten years ago and used to feel very comfortable with the interface. Then she had to renew her computer and all the updates meant that most applications looked very different.

New: **She knows that links and buttons now look different and often she does not know what to press. Sometimes she will press a picture or stylised heading that is not a control and she is not sure if the internet is down or the site is broken or if she has made a mistake. Sometimes she touches something accidentally and the focus moves to a different page or application. For example, she tried to enlarge some small text and activated a link instead of enlarging it! She misses the days when all links were in blue and underlined.**

Now she feels that she has lost her self-confidence and when things go wrong such selecting an incorrect button and an error occurring that she does not understand. **She know to try and press the back button to go back a step, but it does not always work as she thinks it will.**

She tends to think she cannot cope, so gives up but with support to adapt the interface to suit her needs she could learn to use the new interface.

Challenge 4: Giving feedback

Alison would like to give feedback and tell her back what they could change to make the site more usable for her and other mature customers. She struggled to find the feedback form and then found she had to type in a lot of information to send feedback. She typed in her phone number without the area code so an error was identified. She tried to fix the error and send the suggestion but the send button was disabled so she probably needed to correct something else

as well. At this point Anne feels they do not want her feedback and gives up. She now uses the site much less often.

Carolyn is a Yoga Teacher who has ADHD

Carolyn found concentrating at school difficult and when she got into college to take a course in business studies life became even more stressful. She knew she could cope with the studies but never seemed to get her work completed on time, found it hard to start a report and even to create a plan for a project. When working with others she always had good ideas but somehow they were never taken up and she became frustrated often failing to keep her feelings in check. Luckily, a tutor suggested she sought help and when a psychologist, mentioned Attention Deficit Hyperactive Disorder (ADHD) Carolyn was so relieved to have a reason for some of the planning and organisational difficulties she was having. She learnt that if she could make use of her constantly active brain and body as well as manage her time better, she could turn her hobby into a very successful Yoga business.

Challenge 1: Gathering key points from a heavy text based document or web page.

Carolyn could not really explain her apparent forgetfulness and not being able to focus or complete tasks, but she knew that if she came across a long document or web page with dense text she had to find the key points. If the web page failed to have a clear structure with a content list, well-spaced and highlighted headings she would be lost and lose concentration. Carolyn also said that if she was using her mobile she found advertisements appearing between chunks of text completely upset her focus and she had to stop reading. However, when there was good use of white space, recognisable icons linking to simple bold text clarifying the important points, Carolyn could target these areas and find out what she needed. A clear summary also provided clarity of understanding and Carolyn could remember much of what she had read.

Challenge 2: The power to stop scrolling carousels and banners

When setting up a new website for her business, Carolyn found an attractive template with several different ways of being able to show images of her exercises. However, she could not make the carousel of photographs pause, or a banner with her latest news stop scrolling. This really annoyed her as she found both items stopped her concentrating on the real content on

the rest of the site. She thought that if it was upsetting her, what about her intended audience! She had to find a friend to add some code that not only added controls, but also stopped the automatic movement giving her website a calmness that she hoped her yoga teaching achieved.

Challenge 3: Losing focus when completing tasks

Carolyn enjoyed her Yoga teaching, but found that if she was developing some instructional materials for her website, online tools often failed to provide sufficient guidance. Unless there was a clear pathway and a way to return to the place where she was working, she often deleted items by accident or could not make corrections. Saving endless previews with yet more tabs being open in her browser caused anxiety levels to rise. It was not until she found a web app that made each task clear with a submit button, that saved her work in stages, that she was able to cope. Carolyn was able to see sections of her work in the correct order and could then manage the bite size chunks of instruction, rather than have to deal with it all at once. This made it so much easier for her to complete the exercise sheets and she became confident in her use of the application to the extent she was willing to purchase the pro version.

Challenge 4: Learning information from a video

Theoretically, Carolyn likes instructional videos but in practice she can only concentrate well enough to learn for a few minutes at a time. Then she loses her concentration. She will usually lose focus earlier if there is more than a minute of content that she already knows. When this happens, she misses the information that she needs! Carolyn tries hard but she still cannot focus for more than a few minutes on content that she already knows. Sometimes she watches them at high speed so that they are less boring for her but she still loses focus within a few minutes. When a video is broken down into segments with clear headings, she can jump to the information she needs to learn, and jump forward over segments that she already knows. When she misses information that she needs she can easily jump to the correct location and focus.

Sam was a librarian who had a stroke and Aphasia

Sam loved his work as a librarian. He had spent his entire life surrounded by books in peaceful places where he could research his love for history. In recent years, he had enjoyed using the web to explore how other people around the world saw the history of his own country and the changing views on famous people from the past. Now he was becoming depressed and very

frustrated due to a recent stroke. The right side of his body was paralysed and he had difficulty having conversations with friends and family due to aphasia. To him this meant that some of his words were muddled, his understanding was not always as clear as it had been and worst of all; he could not read as fluently as he had in the past. One handed typing was slow and he found his word finding abilities often failed him.

Challenge 1: Having well-spaced text with words that are easy to pick out.

Despite all the difficulties, that Sam had with his beloved reading he was determined to improve and found that if a website had no clutter or background imagery he could read the headings. He also found that if there was adequate spacing and the text was not too complex, he could pick words out and with the help of text to speech understand the meaning. He did not like the sound of the synthesised speech, because he found it distracting having always read silently. However, over time, he learnt to enlarge the fonts and if the page had left justified text with uneven edges, he could find his way about by the different shapes of each paragraph. As he became more confident, he began to use some browser tools and was able to increase the line spacing and change the font style on some of his old favourite online historical documents.

Challenge 2: Using edit boxes where the instructions disappear

Sam had not expected to have to fill in so many online forms in order to receive some benefits due to his disability. They caused immense frustration and feelings of self-doubt due to their lack of clarity. Every time he had to fill in an edit box, if the instructions disappeared the minute he began to type, he could not remember what was required. He often had to refresh the page and start again to see the label in the box. Sam spent so long on the task that the page could time out or he had to print it out and get help. This was really upsetting as he wanted to be independent and it often reduced him to tears. This was very unlike him, but as the doctor explained, this was linked to his stroke. He also found it very frustrating when a particular way of providing information was required with no example as to how to complete the action. Worse still was when the error made was not clearly explained so correction was even harder. Dates, postal codes and phone numbers were a particular nightmare.

Challenge 3: Trying to activate elements that have been mis-recognised

The effects of aphasia with acquired dyslexia can be exhausting and confusing but most worrying for Sam was the sense of getting lost on a web page that he thought he knew. He admitted to being nervous when he could not pick out elements in a page that required an interaction. Sometimes he said he did not dare click on a button in case he did something wrong

or was sent to somewhere without warning. Sam found this aspect of his web surfing very alarming, as in the past he had been able to navigate with ease. He discovered that the edges of shapes did not appear as clear as they should have been when people use pale greys and he missed links unless expressly highlighted. If a pop-up window suddenly appeared, there were times when he could not close it to return to the page. Small crosses became a nightmare and Sam stressed that the more things happened on a page, the more confused he became. He mentioned the fact that some sites were easier on his tablet as then it all seemed to flow one way and he could just scroll up and down until he felt happy with a decision.