GROW Model (Sari, n.d.)

1. Goal
2. Current Reality
3. Options/Obstacles
4. Will/Way Forward

This model is useful for ascertaining the requirements for completion of a project or task, as it involves defining the goals, the current reality, then the options and actions. This would make this model ideal for solving simpler problems that have unclear solutions, as it involves goal setting and identification as a core component. This allows this process to be used for creating a written report or plan for a set of problems, as the clearly defined problems and solutions lead into being written down very easily.

OODA Loop (Mulder, n.d.)

1. Observe
2. Orient
3. Decide
4. Act

This problem-solving model, or loop depending on the scenario, is useful for quickly ascertaining the requirements and a choice of solution from a potential set of solutions. The simplicity and the speed at which this system can be applied means it can be very useful for multiple small problems that have many solutions. It also has a step for observing the problem and the reality, much like the GROW Model, if a slight bit more implicit. This step allows for information gathering and understanding of the issue, which fits very well in the context of fixing accessibility issues. Additionally, the OODA Loop can be used during the event should a new issue come up, as it's very easy to apply quickly.

PDCA Model (Mindtools.com, n.d.)

1. Plan
2. Do
3. Check
4. Act

PDCA is useful for testing a solution before rolling it out on a large scale. This model doesn't necessarily specify how to plan or solve a problem, and instead provides a method for making sure that a solution to a problem will work to some extent before the complete solution is implemented. This model could be useful to combine with another model for this use-case, however on it's own it likely isn't going to be useful.

Soft Systems Methodology (SSM) Model (Mulder, n.d.)

1. Recognising a problematic situation
2. Describing the problematic situation
3. Formulating basic definitions
4. Composing conceptual models
5. Comparing models and reality
6. Defining changes
7. Take action

This model is much more complex than the other models outlined here, instead focussing on how to identify potential issues before they come up in a given scenario. This makes this process useful for businesses that need to identify problems in advance, however for this application it's likely not very useful. Additionally, the complexity makes it harder to understand and apply.

Overall, I think I'm going to stick with the OODA loop, as it allows for the iterative process that provides a framework for fixing problems during the event itself. As well as this, it's very simple to apply, and allows for empathising with people who have accessibility problems in order to find out how to fix said problems. Overall I feel it fits this planning stage best.

USER GUIDE

Dyslexia

We've decided to use a style guide from the British Dyslexia Association to help with readability. We've also decided to keep written content simple to help with your understanding.

Dyspraxia

Nobody will be obliged to write or use their dexterity. Group tasks won't involve throwing or catching and writing will be kept to a minimum.

Colour-blindness

Every colour used in the presentation and the surrounding documents are picked from a set of safe colours. Any information that would normally rely on colour, such as a pie chart, will additionally involve patterns and clear borders.

Accessibility account

Using the OODA (Observe, Orient, Decide, Act) problem solving model, I've outlined some potential solutions for accessibility with regards to Dyslexia, Dyspraxia and Colour-blindness. This model is useful for this application as it's simplistic, requiring only 4 concise steps for completion, and, in this case, involves research of each condition and how it can be accounted for as a core component. (Mulder, n.d.)

Other methods are less practical for this implementation, a good example being the GROW model, which requires specifying the goal, the reality, and the obstacles, then working on the way forward (Mindtools.com, n.d.). For this example, defining those three characteristics provide no insight on solving the issue of accessibility.

Dyslexia

Observe

Dyslexia can have the following impacts on reading and understanding;

- Difficulty understanding the meaning and intent of written content
- Slow reading and writing
- Difficulty with the order of letters in words

These impact the way a presentation could be interpreted and understood, resulting in misunderstanding written content, difficulty reading quickly and difficulty with large blocks of text.

(nhs.uk, 2018)

Orient

There are multiple fonts (most notably Dyslexie and OpenDyslexic) that supposedly help with readability and the letter shifting that dyslexia usually causes, allowing for easier understanding and reading. This would help with the legibility of written text, however it provides no insight into how text should be displayed or whether it should be high contrast or split into smaller, concise sentences. (Dyslexiefont.com, 2017) (Opendyslexic.org, n.p.)

As well as this, there are guides for making information more accessible for dyslexia, providing information such as;

- *Use single colour backgrounds. Avoid background patterns or pictures and distracting surrounds.*
- *Use sufficient contrast levels between background and text.*

- *Font size should be 12-14 point or equivalent (e.g. 1-1.2em / 16-19 px).*
- *Larger line spacing improves readability and should be proportional to inter-word spacing; 1.5/150% is preferable.*
- *Use short, simple sentences in a direct style.*
- *Be concise; avoid using long, dense paragraphs.*
- *Left align text, without justification.*

Quoted from *Dyslexia friendly style guide*. (British Dyslexia Association, 2018)

Style guides such as these are important in showing correct procedures for dyslexia accessibility, as they provide information about how text can be made more readable, and how things can be written differently or rephrased to be more understandable.

Decide/act

Following a dyslexia style guide, like the one from the British Dyslexia Association, seems like the most significant thing that can be done to help with dyslexia accessibility, as it provides explicit instructions as to how information should be presented. A font such as Dyslexie or OpenDyslexic might be useful, however in this application it would likely not look professional or add much to the readability over the additions from a style guide, and as such is not worth implementing in this case.

Dyspraxia

Observe

Dyspraxia, or Developmental Co-ordination Disorder, affects co-ordination, balance, learning skills, and time management. Generally it's strongest in children, as it's a developmental disorder rather than a lifelong condition, however it sometimes has impacts later on into someone's life, such as difficulty writing, typing, drawing, and playing in sports. (nhs.uk, 2017)

Orient

This could potentially impact group activities, as well as understanding processes explained in the presentation. Group activities that rely on co-ordination, like throwing around a ball with writing on it for an example, likely wouldn't be possible. Additionally, complex procedures and lists may be difficult to interpret, understand, or remember, like with Dyslexia.

One of the biggest impacts that could affect the presentation regards writing. Group tasks that involve writing down ideas, for example, may be difficult or impossible, and expecting someone with dyspraxia to take part

in this type of activity isn't reasonable. However, this could be circumvented by assigning someone as a designated writer, who is known not to have difficulty writing.

Decide/act

The general issues that this condition present mostly involve group work activities, which means that consideration needs to be taken for each group task. A potential solution would be using tablets or laptops instead of pen and paper; however, this isn't incredibly accessible with Dyslexia. Another method could involve the presenter writing down information presented by groups instead.

As well as this, any group work involving physical dexterity should be avoided, a good example being the concept of passing a ball with written information on it around the group. Instead, a visual demonstration within the presentation or on an interactive board could be used instead.

Colour-blindness

Observe

There are many varieties of colour-blindness, all of which fit under the following terms; anomalous trichromacy, dichromacy, and monochromacy. The differences between these terms relate to the perception of colour that an individual has, however all of the varieties involve altered or diminished colour differentiation. (Colour Blind Awareness, n.d.)

The specific varieties of colour-blindness specify which colours of light someone can perceive properly, which applies in every case except for monochromacy. (nhs.uk, 2019)

Orient

Similar to Dyslexia, there's style guides that specify colour combinations that can be used for specific types of colour-blindness. As well as this, there's multiple guides that specify using colours with different contrast, as well as using monochromatic designs. Another solution to this is to not use colour as the sole method of communicating information, instead also utilising patterns or icons or textures. (Krzywinski, n.d.) (Cravit, 2019) (DesignMatic, n.d.)

Decide/act

This links with the decision and action in the dyslexia section of this account, in that the most obvious and simple method of accounting for colour-blindness is to use a set of guidelines and rules that provide safe colour combinations and alternatives to colour. Diagrams that rely on colour will also have a pattern or symbol to help differentiate, and background colours and text colours will be considered for legibility and contrast.

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