

RM Smilers Designs

Usability and Accessibility Review
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About This Document

This document summarises the usability and accessibility concerns raised by the wireframes for the Smilers product selection process provided by The Agency. The designs can be seen on the preview site at *<redacted for NDA reasons>*. *The finished application can be seen at <http://www.royalmail.com/smilers>.*

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User Journey

Signposting

The signposting has been changed. It now divides the user journey into four steps:

1. Selecting a photo
2. Editing the photo
3. Selecting a stamp
4. Confirming the choices

The new signposting will make it easier for users to gauge the time and effort required to complete the process. The text has also been changed to improve the association of the steps with the corresponding pages. This further adds to the cohesiveness of the user experience.

Contrast

However, the colours chosen in the design for the previously visited steps do not have sufficient contrast to be accessible.



Figure 1. Insufficient contrast in previous step signpost

Recommendation: Adjust the colours to make the contrast between background and text in all signposts legible according to the [recommended colour analyser tool](#). For the colour difference the HP threshold of 400 is sufficient.

In the implementation the user will be able to click on previously visited steps of the sign posting and the application will retain all user-entered information.

Recommendation: Ensure that the implementation allows users to move backwards and forwards in the process according to established Royal Mail conventions.

Individual Pages

0 Landing Page

[Landing Page](#)

Feasibility

This page should be a CMS page so that copy and images can be edited easily, cheaply and quickly. Please discuss with the feasibility of the design with the CMS Architect. Some background colours and rounded corners may be hard to realise in the CMS.

Background Image

The new background image is an improvement. Perhaps the little boy could be bigger so that his face can be seen clearer?

Supporting the Purchasing Decision

It's good to see that the price has been emphasised. If it is a link, and it should be, it should be underlined like our other text links. What is missing now is the delivery information. This could be added to the page with pricing information.

Recommendation: Make sure text links are underlined as well as red.



Recommendation: Add delivery time and charges to the content page containing price information.

Recommendation: Change the text in the linked image accordingly.

On this page and throughout the whole process the images work hard to explain concepts and actions to the user. For this reason the text alternatives are vital in this application.

Recommendation: Include text alternatives for all images in the copy deck.

1a Choose Your Photo

As discussed, the contrast of the text "Preview area" in the preview pane is insufficient.

Recommendation: Improve the contrast so that it passes the colour contrast analyser test.

Preview Button

On this page the Preview button is not shown. It turns up when the user clicks on the Browse button. Is this technically possible? If yes, how are screen reader users who have JavaScript turned on alerted to the fact that a new button has appeared on the page? Does the page reload? Is the solution XHTML compliant?

Recommendation: Work out the accessibility implications of the reappearance of the Preview button before committing to this design.

Help: Background

There does not seem to be any really good solution to the problem of showing the user extra help without distracting them unnecessarily.

Pop-ups are not DDA compliant and lead to usability problems with managing multiple windows. The latter is all the more an issue when the user is already confused by a download window in addition to the regular Smilers web browser window. On the other hand, pop-ups allow the user to see the help pages at the same time as the main browser window, which improves user success rates. It also prevents users from being distracted and wandering off to other parts of the site.

The anchor tag alternative is less elegant but at least DDA compliant. If it is more usable is questionable because users cannot see the help text at the same time as the action they are trying to understand. Inexperienced users are going to think that they are on a separate page. This may confuse them, and so cause drop off.

Finally, the least confusing and most accessible solution is to take the user to a different page in the main browser window. This solution requires that all the information the user has entered is kept in a session variable so that when they click the Back button, they are taken back to the Smilers application in the exact state it was when they clicked the help link.

Help for Smilers

In the case of the Smilers application, the content of the help pages may get long and complex. Explaining how to upload a file (from at least two different operating systems) or how to edit a photo requires images and at least a few paragraphs of text each. This means that users are going to have a hard time getting an overview of the help material if it is presented in a small pop-up window.



The decision boils down to two choices:

1. Use pop-ups but make each link more specific, e.g. three separate help links for the Mac, Windows XP and NT so that each answer fits in a typical pop-up window without scrolling.
2. Use a separate page in the main browser window and keep the current links.

Recommendation: Use pop-ups with more specific links

Recommendation: If pop-ups are used, contact the CMS Architect to find out the details of the recent changes to the standard pop-up template so that they can be incorporated into the design.

Recommendation: If a separate page is used, consider the technical implications on the back end for how to maintain the application's state while the user browses content pages.

Assumption: That the sub headings are shown as grey in the design of the anchored help page is an oversight. Please confirm or deny.

1b Photo Loading

The Business Stakeholder and I agreed that the links and the button shouldn't be on the waiting page. There is a risk that the user clicks there instead of waiting.

Recommendation: Remove distracting elements from this page.

1c Photo Error

No issues on this page.

1d Your Selected Photo

This page has been removed to simplify the process.

2 Edit Your Photo

The main feature on this page is the ability to edit the chosen photo. This is new functionality and still not very common on the web. The challenge is to make the tool both powerful enough to accomplish the user's goal and simple enough to not get in the way.

Photo Tool Heading

The current heading gives the tool a name. It would be better if the space were used for a call to action. In the sketch below I have suggested, "Edit your photo here." No doubt a copywriter can formulate something snappier.

Recommendation: Consider changing the tool heading into calls-for-action here and on the next page.

Photo Tool Buttons: Size, Symbols and Spacing

The buttons in the photo-editing tool are still very small. I am particularly concerned about the "Flip" tool. The actual symbol is ingenious but that does not help if it is not big enough to be easily understood.

The Business Stakeholder also pointed out that the symbols used for rotation are unclear. Many users are going to assume that the rounded arrows rotate the image 90 degrees. When they then see that there are separate buttons to do just that, they may be confused.



In the current design all the buttons are the same size and each sub tool takes up the same amount of space. This looks neat when seen from afar but doesn't guide the user's attention and makes it hard to illustrate complex concepts.

The Start again functionality, for instance, could very well be narrower. For one thing Start again is not the action we want to guide the user toward and for another the concept to illustrate is not complex. On the other hand the multi-button tools to move and zoom the photo could benefit from more space.

Adjusting the space based on the complexity of the tool would also allow us to adjust the spacing between buttons, thereby making it easier to hit the right button. Users with fine motor impairments are going to be grateful for this change.

Recommendation: Allocate space to each tool based on complexity and importance.

Recommendation: Make the individual buttons easier to hit

Recommendation: Make at least the Flip tool larger so that the symbol can easily be understood. (Illustrated in the sketch below)

Recommendation: Change the Rotation tool symbols to clarify the difference between the two types of action – incremental adjustment suitable to adjust a crooked horizon or large adjustment to convert from landscape to portrait format and back.

Placement of the Default Button

When I first looked at this page what bothered me the most was the placement of the default button between the photo editing tool and the preview pane. It made it hard to associate the editing action with the result in the preview. We also have a strong convention on the Royal Mail site of always placing the button that moves the user forward in the process at the bottom right of the page.

When I looked closer at this and the next page, I realised that it had been designed like a dashboard.

Dashboard Design vs. Linear Design

A dashboard design assumes that the user may want to perform any of the available actions on the page at any time. The metaphor is that of a car dashboard, where the user may turn on the windshield wipers first and then the lights or vice versa and the outcome will be the same. The drawback is that the user isn't guided through the process and will often take a long time to figure out the page as a whole even if they only came to do one action.

A linear design assumes that there is an ideal, linear process that the user goes through on the page and tries to place the elements on the page in the order of that process. The metaphor here is of a person following a sign posted path through a landscape. If they follow the same path on two different days the features will always appear in the same order. The betting shop and the shoe shop are not going to trade places on the metaphorical High Street. The drawback of the linear model is most apparent when the designer does not have the same ideas about the ideal order of performing the actions as the user.

In the wild, pure dashboards and pure linear processes are very rare. Usually there are detours in the linear process (in the form of help links for instance) and there are small linear sub processes within the dashboard model. But the



concepts are still useful when trying to put into words how a design models the users' potential process.

Making the Photo Editing Page More Linear

If we assume that the ideal process on this page is that the user edits the photo and then moves to the next page, the default button would appear below the photo-editing tool. When I moved it there, I was also able to move the help links to below the photo-editing tool, thereby leaving the height of the page the same as before.

The sketch below shows a more linear version of the layout. The forward motion button, the backwards motion link and the help link have all been placed beneath the editing area. This strengthens the association of the editing tool with the preview pane. It also moves the more peripheral links to a less prominent place. Finally it makes it harder to click the default button out of habit without considering the editing opportunity first. Also see the sketch of the Stamp selection page on page 7.

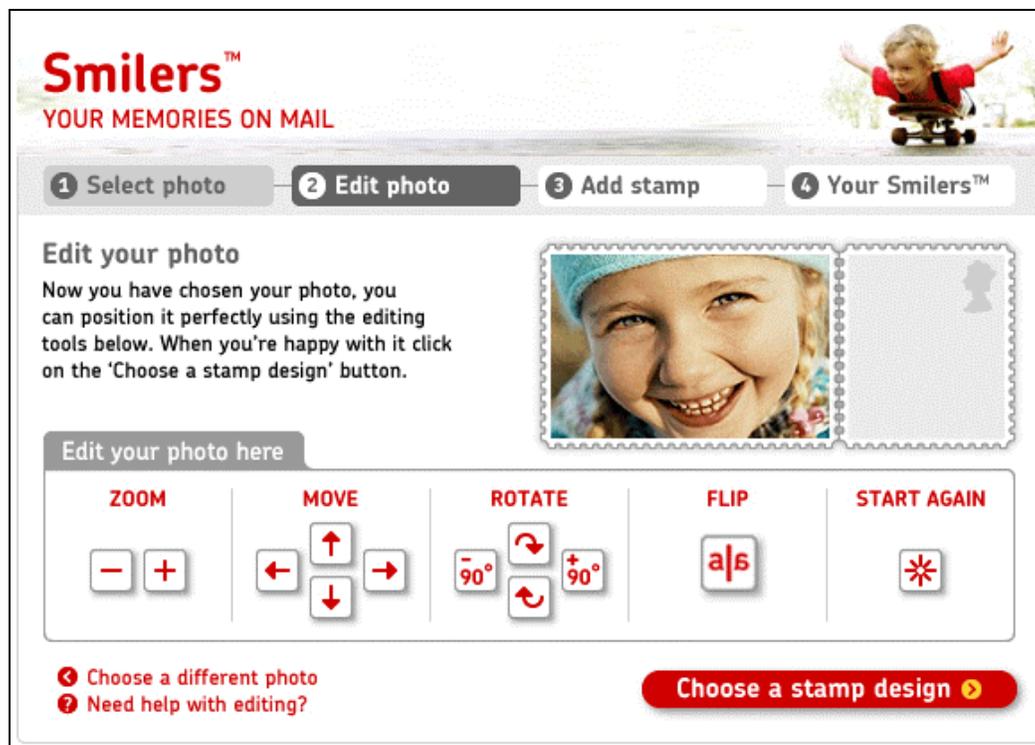


Figure 2. Sketch for more linear layout of editing page

Backwards Motion

To indicate that choosing a different photo moves the user backwards in the process, the arrow in the red dot could be turned toward the left.

Recommendation: Consider how a backwards arrow looks on this and other pages.

In the implementation, make sure that the state is saved when the user moves backwards in the process.

Recommendation: If the user clicks on "Choose a different photo" the browse dialogue should retain the value of the current photo when the user comes to that page. This principle applies throughout the process.



Tool Tips for Sighted Users

Tool Tips can be created in Flash. Requiring users to go to a separate page or managing multiple windows to get help will be too high a threshold for many users. Adding brief tool tips to each button would bridge the gap between those who want to read in depth about the tools and those who just want to get on with the job but hesitate for fear of feeling inadequate.

Recommendation: Use tool tips for the editing tools, with separate ones for each button.

Recommendation: Include the tool tips texts in the copy deck.

3 Select Stamp

This page has the same issues regarding dashboard vs. linear layout as the previous page. That is good because it shows that The Agency have designed the pages so that the user's learnings from one page can be applied to the other pages in the application.

The sketch below shows a more linear layout. Because there are three red text links on this page, they formed a more serious barrier between the stamp selector and the preview. The red button also stole the emphasis from the preview of the stamp design.



Figure 3. Sketch of a more linear layout of stamp selection page.

Stamp Design Selector

The current stamp design collector looks very designed and the proposed Flash functionality of a roulette wheel is very intriguing. However I think that if we consider the foundational Royal Mail assumption that users want to go to the site, complete their task and move on, rather than admire our technical prowess, there is room for improvement.

In the current design the user cannot see all stamps at the same time. This means that they cannot compare stamps that are opposite each other on the metaphorical roulette wheel. It also means that when they see the page they don't know how many stamps there are. There is a real risk that if a user clicks on a stamp and realises that there are more stamps they haven't seen, that they will spend considerable time and mental effort figuring out the number and designs of the stamps before choosing.

Simplifying the Stamp Selector

I would like to radically simplify the selector so that the user always sees all stamps on offer. According to the Business Stakeholder, there is never going to be more than 12 stamps. Allowing the user to see all of them at one time rather than having to remember the hidden stamps (if any) will make the selection process easier. It will also showcase the rich offering of stamps available. Because this is the main function of the page, we can justify that it takes up most of the page. Adding brief mnemonic words should make it even easier for users to choose a stamp. It should also make it easier to highlight the selected stamp.

The sketch below shows what a stamp selector that shows all stamps could look like. This stamp selector holds up to 12 stamps.

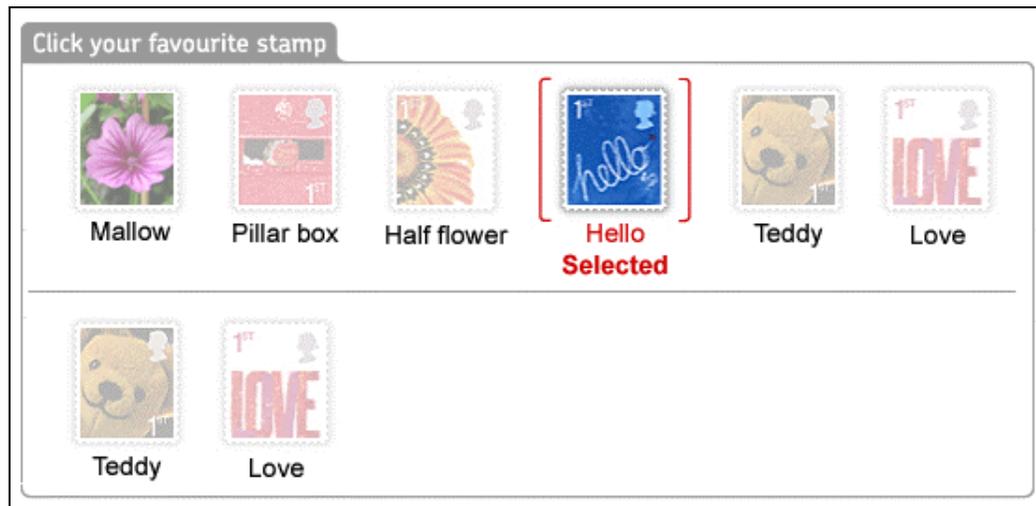


Figure 4. Sketch of simplified stamp selector with 8 stamps

Recommendation: Simplify the stamp selecting process for the user by making all stamps visible at the same time.

Recommendation: Find out if the button and link could move up to where the second row of stamps is if there are six stamps or fewer. (It is assumed that the page footer will always stay in the same position.)

Below is a sketch of how the whole page could look with the simplified stamp selector and the more linear layout. It doesn't look as "designed" but should make the user's experience much smoother.



Figure 5. Completely changed stamp selection page

4 Confirm Choices

In the designs on the preview site this page looks like Flash. But I cannot find a reason why the text on the left needs to be Flash. Rather the opposite; there is a lot of text that is going to be hard to read in the somewhat grainy Flash font and increasing the text size does not work in Flash.

Recommendation: Make at least the left side of the page into regular text.

The Business Stakeholder pointed out that the copy starting with "When you click..." is Royal-Mail-speak. Users are not going to understand it, nor do they need to know it.

Recommendation: Remove the paragraph starting with "When you click..."

On this page the user can choose a different photo and edit the photo further but not choose another stamp design.

Assumption: This was a simple oversight. Please deny or confirm.

The Business Stakeholder would prefer if the text about the delivery time were removed from the page. It could be replaced by a help link to the delivery information.

Recommendation: Replace the delivery information on this page with a link to more information about delivery, including that delivery is free for Smilers.

28/03/2008 (Updated writing sample)

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