

DIGITAL ID PHOTO SENDING SERVICE



Photo-Me

THE OPEN IDENTITY EXCHANGE | INNOVATE IDENTITY

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Executive Summary

The UK is ranked number 9 in the top 10 of Internet users worldwide¹, and 84% of the population are now classed as “online”². This continued digital shift comes with extra convenience and significant cost savings for both organisations and consumers.

Many organisations have identified that by moving their traditional paper-based processes online they can take advantage of cost savings through increased operational efficiency, reduced overheads, and in most cases it allows organisations to deliver quicker more efficient services with a better user experience. For consumers, the move online away from paper processes, makes life simpler and more convenient.

As more processes do move online, the requirement for identity assurance becomes more complex. In the UK the government has stated that digital identity is a core enabler of their digital transformation by creating trusted transactions to allow people to move online safely and securely.

The Digital ID Photo Sending Service (“DIPSS”) project focuses on one of the critical components of identity; a photograph.

This component supports the identity ecosystem by providing an additional element, delivered in a digital way to enable the individual to assert their identity.

The photograph is a key identity element and forms an important part of numerous identity processes, and user access globally. For example, the Driver and Vehicle Licensing Agency (DVLA) in the UK alone processes more than 3.5 million photographs per annum for new driving licence applications and renewals.

This project demonstrated that users preferred the process of using a digital photograph in an online process to the existing paper based one. Choice was important to users, as was the convenience around the location and the privacy of the environment it was taken in.

Users stated they would like to use digital photographs across multiple applications and stated they trusted government when they thought their photograph resided with them.

¹ <http://www.internetworldstats.com/top20.htm>

² <http://media.ofcom.org.uk/facts/>

Clear, concise instruction on how users move into an online journey were critical in terms of user understanding and to the perception of an online service overall. Additional cost savings and areas for further investigation were identified as part of the project.

The overall findings were that enabling photographs to be shared electronically with user consent in a trusted framework will mean that customer journeys can be streamlined, interactions improved and processes can be simplified, which could result in both savings for organisations and users themselves.

This small-scale project also indicated that the demographic within the test had some challenges with the creation of a digital identity, although user feedback was not taken around this specifically.

However it was found that if they had a digital identity they would be inclined to increase the amount of services they accessed which could result in huge cost savings.

Full details of the project method, outcomes and recommendations can be found in this document.

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1. Background and the Market

Currently many services that rely on photographs as part of identity processes still do so through manual processes. The cost of a first class stamp is £0.63 and to send a letter confirmed delivery is £1.73.

For users this means they need to have a photograph taken and then print and send the physical copy with an application form, for example the renewal of a driving licence that is then sent through the post. These types of application processes can involve completing many forms and having to send multiple physical letters. Sometimes this information has to be duplicated for access to different services.

This is a cost for the consumer both in time and repetition of process, and often can require access to I.T. hardware, such as a printer. There is also the risk of forms and photographs containing sensitive personal information going missing in the post.

Organisations have to process forms using employees who are required to manually review the document; sometimes these documents pass through multiple departments. The current cost for the DVLA to process a driving licence application is £10.33. Therefore anything that can be identified to bring these costs down is beneficial for UK PLC and its taxpayers.

Central and local government have stated that moving a service from face to face to online delivery is estimated to drop the cost of the transaction from as much as £15 to £0.17

The table below is by no means an exhaustive list but denotes the major identity photograph transaction requirements. This gives us an indication of the potential market size for identity photographs in the UK. There are other uses of identity photographs, such as the employment market including civil servants, security clearance, NUS cards, credit cards with photo ID images and PASS cards for proof of age.

Document	Information From	Number
Passport	Directly from HMPO	6, 300,000
Driving Licence (new photographs)	Directly from DVLA	3,500,000
Blue Badge Applications	Information taken from WCC project	400,000
Biometric Residency Permits		400,000*
TOTAL		10,600,000

* this number is set to rise to 700,000 in 2016 with the introduction of new “Right to Work” checking

For a photograph to be valid and therefore able to be used within one of the use cases above there are requirements about how the photograph is taken. The table below shows the requirements for a passport photograph in the UK.

Passport Photographs

Your photos must be professionally printed and 45 millimetres (mm) high by 35mm wide - the standard size used in photo booths in the UK. Standard sizes in photo booths outside the UK can be different - make sure you get the right size

The photos

Your photos must be:

- in colour on plain white photographic paper
- taken against a plain cream or light grey background

- identical
- taken within the last month
- clear and in focus
- without any tears or creases
- unmarked on both sides (unless a photo needs to be countersigned)
- unaltered by computer software

The image of you

Your photos must show a close-up of your full head and shoulders. It must be only of you with no other objects or people.

The image of you - from the crown of your head to your chin - must be between 29mm and 34mm high (see example below).

Your photos may be rejected unless they show you:

- facing forward and looking straight at the camera
- with a neutral expression and your mouth closed
- without anything covering the face
- in clear contrast to the background
- without a head covering (unless it's worn for religious or medical reasons)
- with eyes open, visible and free from reflection or glare from glasses
- with your eyes not covered by sunglasses, tinted glasses, glasses frames or hair
- without any 'red eye'
- without any shadows in the picture

The quality, style and appearance of passport photographs have to meet the standard set by the International Civil Aviation Organisation (ICAO). For other transactions such as the DVLA and other photograph requirements, the standards can and do differ.

The market for supply of International Civil Aviation Organisation (ICAO)³ compliant photos as a service provision is available to the general public, and overall there are estimated to be over 23,000 outlets of accredited photographers than can take ICAO compliant photos. These are comprised of:

- Independent photographers – circa 1,500 independent photographers

³ ICAO Doc 9303 and the Portrait Quality Technical Report 0.04. Also refer to the International Organization for Standardization document ISO/IEC 19794-5:2011.

- Retail service providers and chemists – circa 5,000 outlets in chemists and retail service providers such as Boots Pharmacy, Lloyds Pharmacy, Snappy Snaps, Timpson, Kodak Express and Max Spielmann who provide this service
- Post Offices – Local and Crown (who also provide a check & send service) – circa 11,000 local and Crown Post Offices
- Photo Booths – circa 6000 automated booths e.g. Photo-Me

The photo service providers above allow users to have ICAO compliant photographs to be taken and then give the user the physical copy. These photographs have to be sent to the organisations requesting them e.g. DVLA through the post.

Whilst it is not a prerequisite to have a photograph taken by an accredited photographer, the service providers above often ensure that the photograph will be compliant with the relevant standards. This reduces the potential for the photograph to be rejected by the organisation who requires the photograph as part of the application process, e.g. DVLA and HMPO.

Why move the process online?

With somewhere in the region of 9,800,000 photographs having to be processed by just the DVLA and Passport Office alone, combined with the cost to the user of postage and length of time it takes for the user to send their document through the process, there is a substantial cost across the ecosystem maintaining the current manual processes.

It is clear there is a potential desire from user and organisation perspectives to both cut cost and reduce time. The market size and potential is huge, and there are many multiples of places digital photographs can be taken so elements of the infrastructure to make this a reality are already in place.

This project allowed us to draw up some principles by which photographs could and should be shared digitally, with user consent at the heart of the design.

This project addresses how identity document (driving licence and passport) compliant photographs taken offline could be made available through online processes in a streamlined user journey. It tests user attitudes to the journey from a convenience, cost and security standpoint.

Considerations

When moving services online there are a number of elements that have to be considered:

- User Needs – what do users want to do, what do they like or do not like about processes?
- Privacy – can users' privacy be protected and maintained?
- Security – how secure are the potential new processes? How could they be made more secure?
- Commercial – what are the commercial drivers to make this a reality?
- Blockers – what are the potential blockers to making this a reality?

Whilst this project has been predominantly focused on user feedback and needs, other elements noted above have been considered, discussed and this white paper provides feedback.

2. Scope - Aims

There were two main aims for this project:

1. To explore user journeys for a digital photo and a digital photo sending service, identify the strengths and weaknesses of different approaches from the perspective of users and iterate towards a usable and acceptable user journey
2. To identify potential user concerns or misunderstanding of a digital photo sending service and its use by a third party (DVLA)

In Scope

- Based on the following use case –
 - Renewal of 10-year driving licence
- Two user journeys of the use case, both involving self-service digital photo capture and assisted-service digital photo capture
- Development of two sets of clickable wireframes to conduct user testing
- User testing of “happy” journeys

Project Participants

DVLA

HMPO

GDS

PMA

Timpson

Photo-Me

Innovate Identity

Jude Rattle – User Researcher

James Boardwell - Rattle Central

3. Overall Project Method

This discovery project ran over 2 months, from mid-April 2015 to mid-June 2015.

The high level project ran with multiple workshops and phases of user testing as described below:

1. Development of prototype wireframes and user journeys
2. Development of DVLA driving licence renewal letter to include photo shop and photo booth information
3. User selection
4. User testing – Phase 1
5. Iteration – Amends to letter and wireframes
6. User testing – Phase 2
7. Iteration – significant changes to letter and minor changes to wireframes
8. User testing – Phase 3 (final)

Participant Selection

There were three rounds of four participants per iteration (twelve participants in total), for ninety minute 1-1 interviews.

Age range

50% to be in age range 27-35 years

50% to be in age range 55-69 years

Participant criteria

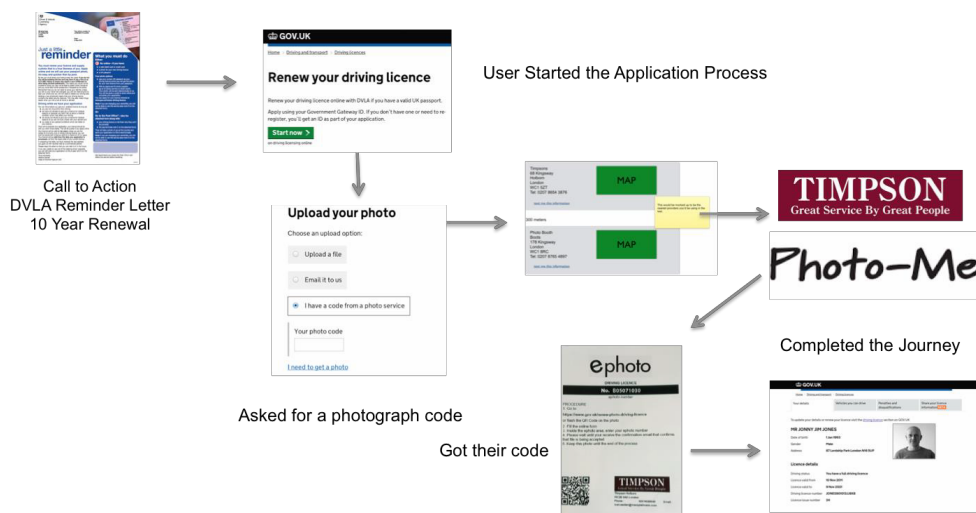
- Holds a valid UK driving licence and UK passport
- Must be willing and able to walk to a nearby location (approx. 5 minutes walk) during the research session
- Must not be rejecters of photo booths or having their photo taken in a photo shop
- Even split of male/female
- Half of users were classed as representative of the general population of online users. The other half were of low levels of online ability.

Qualitative feedback

Qualitative feedback is used as part of this process because it provides more precise explanations for areas that need improvement or those that should not be changed. Such feedback is often useful because it allows those giving the feedback to be more specific about what they do or do not like and what they believe could be improved. This is essential for clear iterations during the process.

Initial State	Letter from the DVLA stating they needed to renew their driving licence
Process Stages	Completed identity verification through GOV.UK Verify Gained a photograph with a code from a photo booth (Photo-Me) or photo shop (Timpson)
End State	Completed application for a driving licence online renewal with the DVLA

Below is a diagram of the user journey that participants took. Half of the participants were asked to complete the journey through a photo booth (Photo-Me) and half through a photo shop (Timpson).





Example of First Letter

4. Findings

First Round of User Testing

Each participant was given a DVLA letter. This letter is identical to the letter that is used in the real world today apart from one exception. The only change offered users the additional option to have their new photograph, which is required as part of the renewal process, taken in a photo booth or photo shop. This letter was the start of the user journey and the call to action for users.

At first users struggled to grasp the concept in the first phase and they said it wasn't clear to them where to start or what to do next.

Users had to decide where to start the journey; a few participants visited the website first, rather than going to get their photo taken.

Two participants wanted to start by having their photograph done so looked for the nearest photo supplier to them. These users tried Google to search for where they would have their picture taken and looked at the start page. In this first round of research, the 'find your nearest' was only available from within the service, once users had logged in.

Therefore when the participants started the process online first, they took a user journey that sent them into a process of using their existing passport photograph. Some users stated they did not like their passport photograph so would have preferred to have a new one taken, therefore this journey was not satisfactory from their perspective.

Respondent's comments regarding the letter:

"It would be easy if there was an OR between the 2 options" Steve 58

"An approved id photo supplier- what is one of these? It's pretty unclear. Your photo will be sent electronically to us - what does that mean? The process is quite laboured and not terribly clear. You need to read what was going on." Jane 57

"It was quick and easy, other than having to log out and go up the road and come back. If the information (about where to get photo taken) was there already I could have gone out before I logged in and it would be very quick and easy. Give me all the relevant info at the beginning so I can use it straight away. Convenience is key. It was simple, once it was explained" Robert, 33

"I won't let my boyfriend see my passport photo" Jane, 57

Overall Review of First Round of User Testing

Overall users gave positive feedback, however it was felt that improvements could be made to the initial letter to improve the user understanding at the start of the journey. It was anticipated that by making the process clearer at the start, through iteration of the letter from the DVLA, would improve the overall user experience.

5. Second Session

The DVLA Letter

After the first session of user testing, changes were made to the DVLA letter with the intent of giving each participant two alternative versions to explain the service. Users were also presented with two options for getting a photo into their application, using either the existing passport photo or new a digital photo. There was also a statement added which said the photograph had to be a "true likeness".

This iteration of the letter still didn't make it clear enough for participants.

New Wireframes

Changes were also made to the wireframes to include a link to find out more about how to get a new photo taken and obtain a photo code. Users were required to scroll down the page to find the details about where to get a new photograph taken.

Respondent's comments to photobooth:

"The bit in the booth started to annoy me, I thought I was in the wrong place." Michael, 55

"I like the booth more that it tells you if the photo is right or wrong and you don't have to fiddle with the chair. But it doesn't give you as much direction as to what to expect. I only checked on the outside, as I didn't know where the code was. It doesn't say anywhere you'll get a photo (printed).I'd like clearer instructions in the booth where to find your code" Sabah, 37

Respondent's comments to true likeness:

"Coming from the business I'm in I'd prefer to have an up to date photo, and for everyone to have an up to date photo. Examiners look to check because they are going to try to stop people taking tests for other people." Michael 55

"The thing that is important is that it's an up to date image of you." Michael, 55

Overall feedback

"A new photo system and it can transfer it directly without you bothering sending something off and without postage. It's a more convenient way of doing it electronically. It's a direct link to the GOV.UK site" Michael, 55

"It saves the hassle and the time of having to send forms and take the pictures and send the form." Jonathon, 26

"I really like the whole process to be honest, but it's about getting me to do it in the first place." Sabah, 34

Photo booth

In this round of testing there was some confusion about the photo booth process and where to pick up the code. The code was produced at the front of the booth but some users stayed inside the booth at the end of the process as they thought the code would be produced inside the booth.

True Likeness

Many services which require a photograph as part of the process e.g. DVLA and concessionary travel passes have to ensure that is it a current photograph. This is interpreted to users as needing to be a "true likeness of you".

One of the participants was a driving instructor and he was very particular about the photo being a recent, accurate photo of the person carrying the driving licence.

Overall Feedback after Second User Testing

Despite some of the confusion about the process, the feedback and understanding of the overall journey was positive. However there were still some reservations about starting the process due to parts of the journey not being clear enough.

6. Third Session

In the third round of user testing there were radical changes made to the design of the DVLA letter, this included changes to both the content and design.

The letter focused on the importance of renewing the driving licence, the date to renew and included both online and offline options for the renewal.

Financial comparisons of renewing online versus offline were also highlighted i.e. £14 vs £17. A box was added on the letter to indicate where users could find an approved location to have their photograph taken and a web address to allow them to “find my nearest”. A logo from the PMA was also added in at this point to allow users to identify an approved location.



Example of the Final Letter

Changes were made to the wireframes and a link to “find my nearest” was added above the “start” button and also a link to explain more about the service underneath the “start” button. There were also some changes made to the photo booth to make it clearer for users where to expect the code to be produced.

In the final round there was also an additional security measure introduced, asking users to enter their date of birth and first 2 letters of their surname in the booth or the shop. The reason was to decrease the likelihood of someone retrieving the wrong photo by accident.

Users felt this made the transaction more secure and understood the concept as to why it had been put in place. This process did not negatively impact the user feedback.

Making the overall changes made a significant difference to user feedback and all participants understood the concept straight away.

Those who wanted to find their nearest location, used the website address in the letter and found out where to go. This avoided a disjointed on/offline service experience.

7. Other Feedback

Respondent's comments about privacy and location:

"I would go and get a photo taken. I'd use the booth in Boots, I don't like the station as there is always a queue, and I don't like the idea of being out on a windy platform, I'd rather just nip into Boots. It's so much easier" Jane 57

"They talk to you and help you in Snappy Snaps. They show you and check if you like it." Sabah, 34

"As long as it's not miles away" Sabah, 34

Respondent's comments about retrieving the code:

"Needs to be clearer where the code comes from. Not everyone carries phones or pens. I might have walked off without the code." Sabah, 34

"I'd be reassured if I had an email or a text message." Kevin, 54

During the process there was some other more general feedback about the service and user preferences.

Photo Shop or Photo Booth

There was not a marked difference between the percentages of users who wanted to use the photo shop or photo booth across the sample of participants. Generally if users did have a preference for one method or the other, this was based on familiarity, location and perceived privacy of one over the other. Users tended to have a predefined preference to visit their local photo shop or booth, and that this would likely be one they had visited before.

Offering information about the location and privacy rating of the shop or booth in the search results may be useful to assist users in making the choice that they would feel most comfortable with.

Retrieving the code

Some participants liked the idea of a text or an email sent with their code, rather than just the print out. However, others thought it was more secure to print it, as it was less likely to get lost or intercepted. Users were not tested entering their phone number or email in the booth or at the shop.

Existing Photograph or New?

Users were presented with the option to use their photograph from their passport or have a photograph taken at a photo booth or photo shop.

Respondent's comments about existing or new photos:

"I've taken the kids photos for Oyster, I want to be able to take one" Emma, 35

"Wouldn't it be easier to just take a photo with the webcam?...Why can't my wife just take my photo with the digital camera" Steve, 58

"I guess it will be a waste of people's time, people will send in wacky photos of themselves and they'd need to do it again" Steve, 58

"He said it would pass and he knows what he is doing" Chris, 32

"I know people who have sent their application in and it's been rejected (because of the photograph), so it costs more money to have to re-send it" Robert, 33

"It's difficult as you're not supposed to smile, no expression on the face, it looks a bit unreal as usually it's an occasion and I ended up picking the best of a bad bunch and it's a pretty dreadful photo but it's a passport photo. I look pretty silly" Steve, 58

"I'm not happy with the current picture (on my ID), I'd want something different, I look a bit young in the photo and it looks like I'm really young so maybe fraudulent." Jonathon, 26

Respondent's comments about privacy:

"I don't like getting photos taken in that kind of environment (photo shop), I made a joke of it but I didn't like it. I'd rather take it at home. And take a 100 photos." Emma, 35

Respondent's comments about trust:

"Special system that wired your photo direct to the DVLA' and that saved the angst of cutting it and sending it to the DVLA'." Jane, 57

"What calms me down is it's a government website, I shouldn't feel I should be victimised because of this. I don't have anything to hide so I'm not cautious or paranoid." Jonathon, 26

"<The photo is>... with the DVLA in the process of being turned into my new driving licence. I have no privacy concerns as it's the DVLA website." Asima, 27

There was a mix of reactions from users about where they wanted to have their photograph taken and the reasons why.

Some users asked why there wasn't an option to take a photograph themselves, whilst others stated they would have concerns about being able to take a compliant photograph. Some were happy to use their existing passport photograph, while others didn't like their passport photograph and wanted a new one.

This indicates a wide range of user preferences when it comes to having photographs taken, and shows that user choice would aid the user journey.

Privacy and Security

Privacy and security were important and some users stated they would like to see improvements in this area. Some users stated they felt the shop experience wasn't private enough for them and would have preferred a curtain they could have their picture taken behind.

Trust

Some participants stated they thought this process (as opposed to a manual paper based one) would be a secure way of transferring the information to government to prove who they were; it was thought this would prevent fraud.

With the exception of one participant, all users were comfortable with the thought that the photograph rested with "the government" or "DVLA".

The fact the photograph turned up in the DVLA application was very powerful, users were pleased that it has arrived at the correct destination. Some users made reference to having confidence in the PMA logo or "kitemark". It was not tested whether this was because it appeared to be linked to a government transaction or because it was presented as a quasi-'kitemark'. The presence of a logo to look out for might help.

Respondent's comments about perceived value:

"Make it something that people with less money can go through this rigmarole to save themselves money" Jackie, 58

"You have to get 4 photos and you end up losing the other photos" Emma, 35

"I'd put them away and keep them for a rainy day" Robert, 33

"I've got about 4 lots that are tucked in an envelope. It's a question of hoarding them for use for other identities." Jane, 57

"You're still going to have to pay the same amount of money, you may as well have the photos" Jackie, 58

Respondent's comments about re-use:

"I want to renew my freedom pass, can I use that code to access and transfer it? I'd think I can use it for my ADI badge, that's government" Michael, 55

"Make it accessible for more than one thing/ across the board, accessible for passports as well as driving licence. If I can use it for both I'd be prepared to pay for that." Emma, 35

"It doesn't have to be a one off you can use it for the next how many years unless a big change in your visual appearance. Makes the trip (to get your photo taken) multi-purpose, you aren't just doing it for the driving licence you can use it for the next so many years" Kevin, 54

Respondent's comments about one stop shop:

"Can't the photo booth or the photo shop do it all?" Sabah, 34

"If you're going to put it in a shop you need to walk out of the shop and it's a one stop shop" Jackie, 58

Perceived Value

During the process it became apparent to some users that the physical photographs might not be required. This led them to question the price of the photographs. In the users' minds it is not the process of the photograph being taken which is the value but the end product, which they felt now may no longer be required.

In addition to this, the requirements of a compliant photograph i.e. not being able to smile meant a lower value was placed on the photographs because users wouldn't necessarily share them with others.

A smaller number of users still felt there might be some value in having the photographs if they were going to pay the same amount of money for them.

Re-Use

Some users had an expectation about reuse of the photograph after finishing the driving licence application. Other applications mentioned included passport, advanced driving instructor badge, Freedom Bus Passes, Oyster Card and Visa applications.

"One Stop Shop"

Some participants mentioned their preference to do the whole transaction in one go and have the photograph taken and driving licence issued. Whilst the security implications of this would be insurmountable and therefore the idea is not practical, it does confirm strong user preferences for convenience and "hassle free" transactions.

8. Input from Organisation Participants

One of the points raised during this project was by HMPO and DVLA. Currently both organisations complete additional security checks on photographs as they come in through the post with an application form. These security checks include validating manually that the photograph being presented for a renewal is the same person as the previous application or identity document issuance. This process is time consuming and expensive, but necessary for the additional level of security.

One of the other areas explored, as part of this project, was the differing length of time of validity a photograph has across multiple applications.

For example:

Application	Photograph Validity
Passport	31 Days
Driving Licence	None specified
Blue Badge	None specified
Concessionary Bus Pass	None specified

This means that if users were to have a way to re-use a digital photograph it would not necessarily be clear to them how long it would be valid for and for what applications. This could cause confusion to the user and dissatisfaction when a photograph was acceptable for one application and not another.

9. Principles from Findings

The findings from the project allowed us to put together a set of guiding principles by which we have drawn the conclusions.

1. The process must be secure. User validation of the photograph means the correct photograph is attached to the application.
2. The user's identity should be assured. For government services, GOV.UK Verify is the identity assurance service
3. The process should be consistent across digital services
4. User should always be in control
5. User should give permission for the service provider to obtain their digital photo from the photographic service
6. Process should always be transparent to the user who should fully understand what is happening
7. Digital photo should be used only once – however, some users expressed a view that photos should be kept and be reusable
8. A market for digital photo providers should be supported
9. There will need to be an on-boarding process for digital photo providers and service providers before they can provide or consume the photo service

Conclusion

The following conclusions could be drawn from the project. Whilst the sample size of test participants was relatively small this gives directional feedback on user preferences.

Users Found the Process Easier and More Convenient

Overall the reaction from users was very positive and the aims of the project were met. Users found the new DIPSS process simpler and more convenient compared to paper processes.

In this test the majority of users expressed a preference to use this process over paper-based processes. This response to DIPSS indicates that this could accelerate the move to online applications. This is encouraging feedback for possible organisations that would like to set up and provide a digital photo sending service.

How Users Start the Journey is Critical

When users move from an offline process into an online process the way in which users understand the process at the start reflects how, if and when they finish the online journey.

The project shows that relatively small changes in design of letter and subsequent online screens can make huge changes to a user understanding of a journey, and their experience. There is a direct correlation between how the initial call to action (in this case a letter) is understood and how positive the user feels about the journey at the end.

Choice is Important to Users

Users expressed a need for choice in a number of areas. Through preference of where they would like to get their photograph taken (photo shop or booth, passport photo or taking the photograph himself or herself) and options on how to get the code; email or text, or immediate print out.

Some users expressed a desire to use their own 'selfie' photos, but some recognised the security/compliance implications associated with selfies, e.g. tampering, manipulation, fraud, recency/age doubts.

Providing users with multiple ways to perform a task will likely result in an increase in uptake because users can pick the option that suits them best.

Users Wanted to Reuse the Photograph

Users identified that having the image available to be used multiple times in both digital and paper format would be beneficial for them.

If there were a digital way in which users could reuse a photograph there are some considerations in relation to the commercials of that reuse, at the moment users only pay once. There would also need to be discussion around how to communicate the different standards for photographs to users so they would know how, when and where they could reuse their digital photograph.

Users Perception of Value

Examples of industries that have had similar challenges are the music industry with the advent of iTunes and music streaming vs people buying CD's.

Users appeared to think that the value of the image was in the physical photograph rather than the process used. As the photo industry sets up a service delivery of this kind, consideration would need to be given to the perceived value for users in a digital context. To transition in this direction users may need to receive the physical copy of the photographs.

Users perceived value in the assurance that their photograph submitted through this service would be compliant and that they wouldn't have to return to have another photograph taken.

Users "Trust" Government

The service used in this trial was provided by private sector companies. However the photographs were sent directly to government, in this case DVLA. Users took comfort that their photograph resided with government, stating they trusted government with their information.