

# Designing better public services

GDS and GOV.UK

Caroline Jarrett  
@cjforms #gdsteam





# Cabinet Office

**Caroline Jarrett**

Forms specialist

Government Digital Service

# A short review of 10 years

# In 2006, the UK had a government portal for citizens




www.direct.gov.uk

Cymraeg Accessibility Help Site index Contacts

Search this site  **Go**

Home | Directories | Guide to Govt | Do it online | Newsroom


Tuesday, 10 October 2006




**Profile of health and well-being for England published**



**Connect to your council**  
Wide range of online services



**Get safe online**  
Stop viruses, hackers and more



**Greener schools**  
Do your bit for the environment

**Straight to...**

**Education and learning**  
Early learning, Schools, 14 to 19, University and higher education, EMA, Student loans, Adult learning...

**Home and community**  
Home buying and selling, Planning, Environment, Recycling, Water conservation...

**Money, tax and benefits**  
Benefits and tax credits, Pensions, Taxes, Debt, National Insurance, Managing money, Council Tax...

**Travel and transport**  
Journey planner, Passports, Bus


**Motoring**  
Driver licensing, Learners and driving tests, Buy or sell a vehicle, Taxing and MOT, Online services...

**Employment**  
Looking for work, Employees, Working hours and time off, Redundancy, Jobseekers...


**Health and well-being**  
Medical records, Health services, Smoking, NHS Direct, Strokes, First aid, Emergencies, Seasonal flu...

**Leisure and recreation**  
Green spaces, Museums and

**People**

**Parents**  
 Having a baby, Childcare, Your money, Bullying, Maternity leave...

**Disabled people**  
 Disability Living Allowance, Rights, Home, Work, Money...

**Over 50s**  
 Working, Learning, Retirement and pensions, Health...

**Britons living abroad**  
 Working abroad, Return to UK, Health

**Services from your local council**

[Renew your library books](#)

[Disposal of household waste](#)

[Paying and appealing parking fines](#)

**Top choices**

[Apply for EMA](#)

[Find a job](#)

[Council Tax](#)

# In 2006, every government agency had its own website



## Driver and Vehicle Licensing Agency

### Welcome

This is the official website  
of the DVLA

#### [English Version](#)

The Driver and Vehicle Licensing Agency is an Executive Agency of the Department for Transport (DfT).

The Agency is accountable to the Secretary of State and Ministers and, through them, to Parliament and the public, for efficient and effective management of the Agency and its responsibilities.

Our primary aims are to facilitate road safety and general law enforcement by maintaining registers of drivers and vehicles, and to collect vehicle excise duty (car tax).

[Crown Copyright](#)



### Croeso

Hon yw gwefan swyddogol  
y DVLA

#### [Fersiwn Cymraeg](#)

Mae'r Asiantaeth Trwyddedu Gyrwyr a Cherbydau yn Asiantaeth Weithredol i'r Adran am Ddrafnidiaeth.

Mae'r Asiantaeth yn atebol i'r Ysgrifennydd Gwladol a Gweinidogion a thrwyddynt hwy, i'r Senedd a'r cyhoedd, am reoli'r Asiantaeth a'i chyfrifoldebau'n effeithlon ac effeithiol.

Ein prif amcanion yw cynorthwyo i orfodi deddfwriaeth gyffredinol drwy gynnal cofrestrau o yrrwyr a cherbydau, casglu trethi a chynorthwyo nodau diogelwch y ffyrdd yr Adran.

[Hawlfraint y Goron](#)

An executive agency of the  
Department for  
**Transport**



In 2010,  
we had a change of  
government

# Martha Lane Fox did a review of digital government

14<sup>th</sup> October 2010

Dear Francis Maude,

## **DIRECTGOV 2010 AND BEYOND: REVOLUTION NOT EVOLUTION**

You asked me to oversee a strategic review of Directgov and to report to you by the end of September. I have undertaken this review in the context of my wider remit as UK Digital Champion which includes offering advice on “how efficiencies can best be realised through the online delivery of public services.” This means that I have not reviewed Directgov in isolation but as part of how the government can use the Internet both to communicate and interact better

Government Digital Service  
started in 2011



# GOV.UK started in 2012

Welcome to GOV.UK, the best way to  
get to government services  
and information

Try bank holidays, clock change, student finance, car tax

## BROWSE

Crime and justice Driving  
Education Family Housing  
Life in the UK Money and tax  
Neighbourhoods Travel

## POPULAR

 [Get a tax disc](#)  
 [UK bank holidays](#)  
 [Student finance calculator](#)  
 [Housing Benefit](#)

GOV.UK is one website  
for over 330 government  
departments and agencies

# GOV.UK in 2016



## Welcome to GOV.UK

The best place to find government services and information  
**Simpler, clearer, faster**



Popular on GOV.UK

[Universal Jobmatch job search](#)

[Renew vehicle tax](#)

[Log in to student finance](#)

[Book your theory test](#)

[Employment and Support Allowance](#)

### [Benefits](#)

Includes tax credits, eligibility and appeals

### [Births, deaths, marriages and care](#)

Parenting, civil partnerships, divorce and Lasting Power of Attorney

### [Business and self-employed](#)

### [Disabled people](#)

Includes carers, your rights, benefits and the Equality Act

### [Driving and transport](#)

Includes vehicle tax, MOT and driving licences

### [Education and learning](#)

Includes student loans, admissions

### [Money and tax](#)

Includes debt and Self Assessment

### [Passports, travel and living abroad](#)

Includes renewing passports and travel advice by country

### [Visas and immigration](#)

# The DVLA website is part of GOV.UK



Search



[Departments](#) [Worldwide](#) [How government works](#) [Get involved](#)  
[Policies](#) [Publications](#) [Consultations](#) [Statistics](#) [Announcements](#)



Driver & Vehicle  
Licensing  
Agency

[Tax your vehicle](#)

[Make a SORN](#)

[Driving licences](#)

[Change of address](#)

[MOTs](#)

[View or share your driving licence](#)

[Log books \(V5C\) and number plates](#)

[Sold or bought a vehicle](#)

[Theory tests and driving tests](#)

[Health and medical conditions](#)





# ‘Tax your vehicle’ is part of GOV.UK

## Tax your vehicle

Tax your car, motorcycle or other vehicle using your reminder letter (V11).

If you don't have a reminder letter, you can use:

- a V5C registration certificate (log book) that's in your name - [get a replacement](#) if you don't have one
- your new keeper supplement (V5C/2) if you've just bought the vehicle
- your 'last chance' warning letter

**Start now** >

**Other ways to apply**

### Vehicle tax and SORN

[Check if a vehicle is taxed](#)

[Paying for vehicle tax by Direct Debit](#)

[Register your vehicle as off the road \(SORN\)](#)

[Calculate vehicle tax rates](#)

[Cancel your vehicle tax and get a refund](#)

[Tell DVLA you've changed address](#)

[More](#)

### Driving and transport

[Getting an MOT](#)

[More](#)

Over 330 government  
departments and agencies  
contribute to GOV.UK

# Government Digital Service

provides

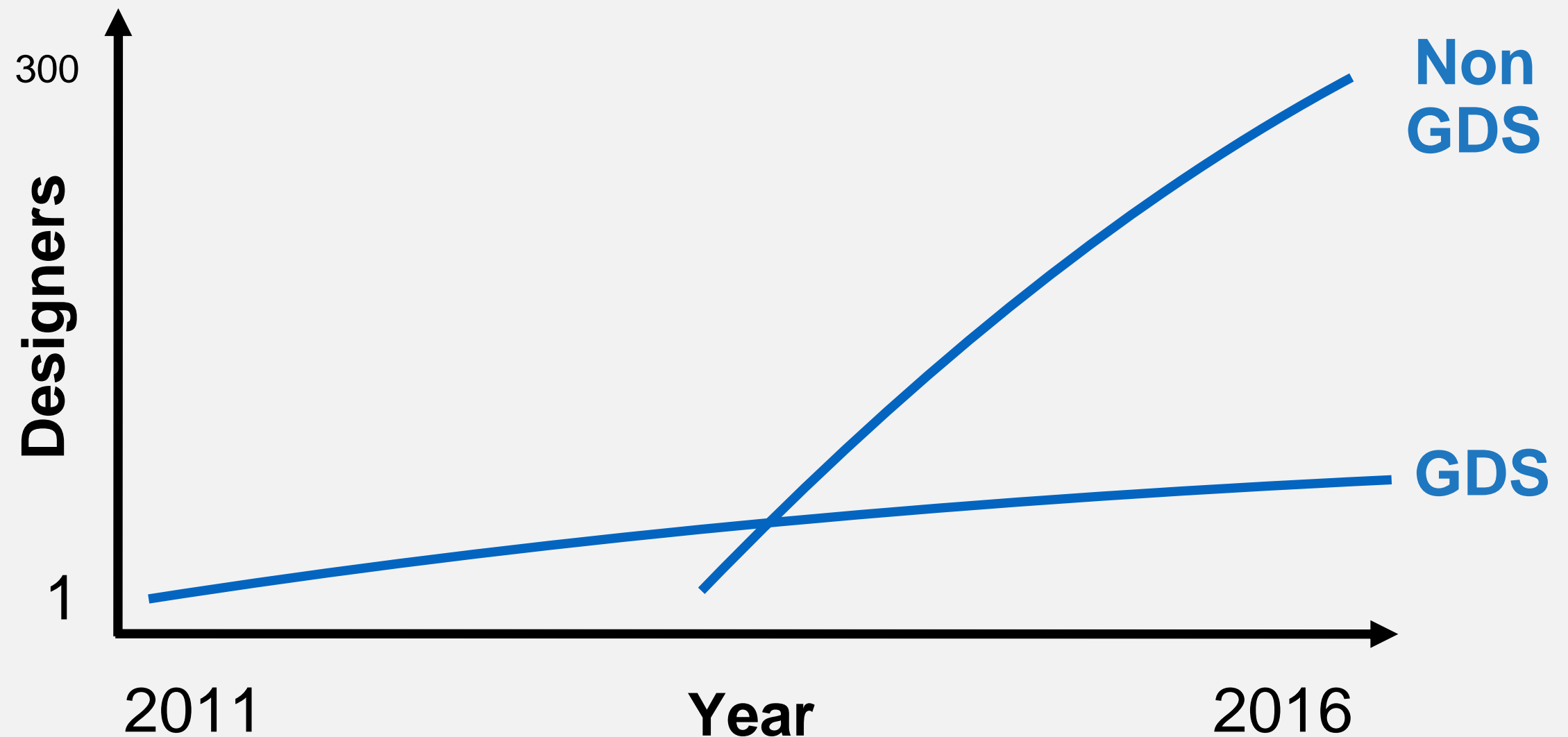
- infrastructure
- tools
- guidance

# Government Digital Service provides

- infrastructure
- tools
- guidance



# Our design community grows



Government Digital Service

# Design Principles

- 1 **Start with user needs**
- 2 **Do less**
- 3 **Design with data**
- 4 **Do the hard work to make it simple**
- 5 **Iterate. Then iterate again.**
- 6 **Build for inclusion**
- 7 **Understand context**
- 8 **Build digital services, not websites**
- 9 **Be consistent, not uniform**
- 10 **Make things open: it makes things better**

1. Start with user needs
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# GDS closed TransportDirect.info

 The National Archives

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Connecting  
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[Door-to-door journey planner](#)  
[Find a train](#)  
[Find cheaper rail fares](#)  
[Find a flight](#)  
[Find a car route](#)  
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[Compare city-to-city journeys](#)  
[Day trip planner](#)  
[Plan to park and ride](#)  
[Find a bus](#)  
[Drive to a car park](#)

**Find a place**  
[Find a map](#)  
[Find nearest station/airport](#)  
[Find nearest car park](#)  
[Network maps](#)  
[Traffic levels](#)

**Live travel**  
[Live Travel News](#)  
[Departure boards](#)

**Tips and tools**  
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[Toolbar download](#)  
[Mobile/PDA \(opens new window\)](#)  
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[Provide feedback](#)  
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**Plan a door-to-door journey** [More...](#)  
**From**   
Address/postcode  
**To**   
Address/postcode  
**Leave** 30 ▼ Dec 2008 ▼ 14 ▼ 35 ▼  
**Show** ☒ Public transport ☒ Car route  
[Advanced](#) [Go](#)

**Find a place** [More...](#)  
**Place**   
Address/postcode  
**Show** -- Choose your preferred option --  
[Go](#)

**Live travel news** [More...](#)  
**Disruption to train services to and from Glasgow Central due to signalling problem**  
**M8 : Congestion Westbound at J18**  
B1381 : Road closed at Earith  
A118 : Road closed at Forest Gate  
A1151 : Road closed at Sprowston  
A52 : Road closed at Stoke-On-Trent  
A404 : Road closed at Northwood  
A315 : Road closed at Kensington  
M11 : Accident Northbound at J7  
Disruption at Inverness Airport  
A381 : Road closed at Newton Abbot  
**Status at:** Tue 30 Dec 2008 14:19

**Tips and tools** [More...](#)  
 [Check CO2 emissions](#)  
 [Add Transport Direct to your website for free](#)  
 [Speed up your travel searches with our free toolbar](#)

**Latest...**  
 [Click here for details on concessionary bus pass schemes.](#)  
 [Please click here for the latest information on changes to public transport services over the Christmas and New Year holiday period.](#)

**January Sales?**  
 [Locate Park and ride schemes near your shopping destination or find a car park to make things a little easier.](#)

**Travel at your fingertips**  
 [Did you know that you can send your favourite journeys to you mobile? With a click on your mobile you can get live rail departures, bus schedules and travel news for car and public transport while you're on the move. Visit our \[mobile page\]\(#\).](#)

1. Start with user needs
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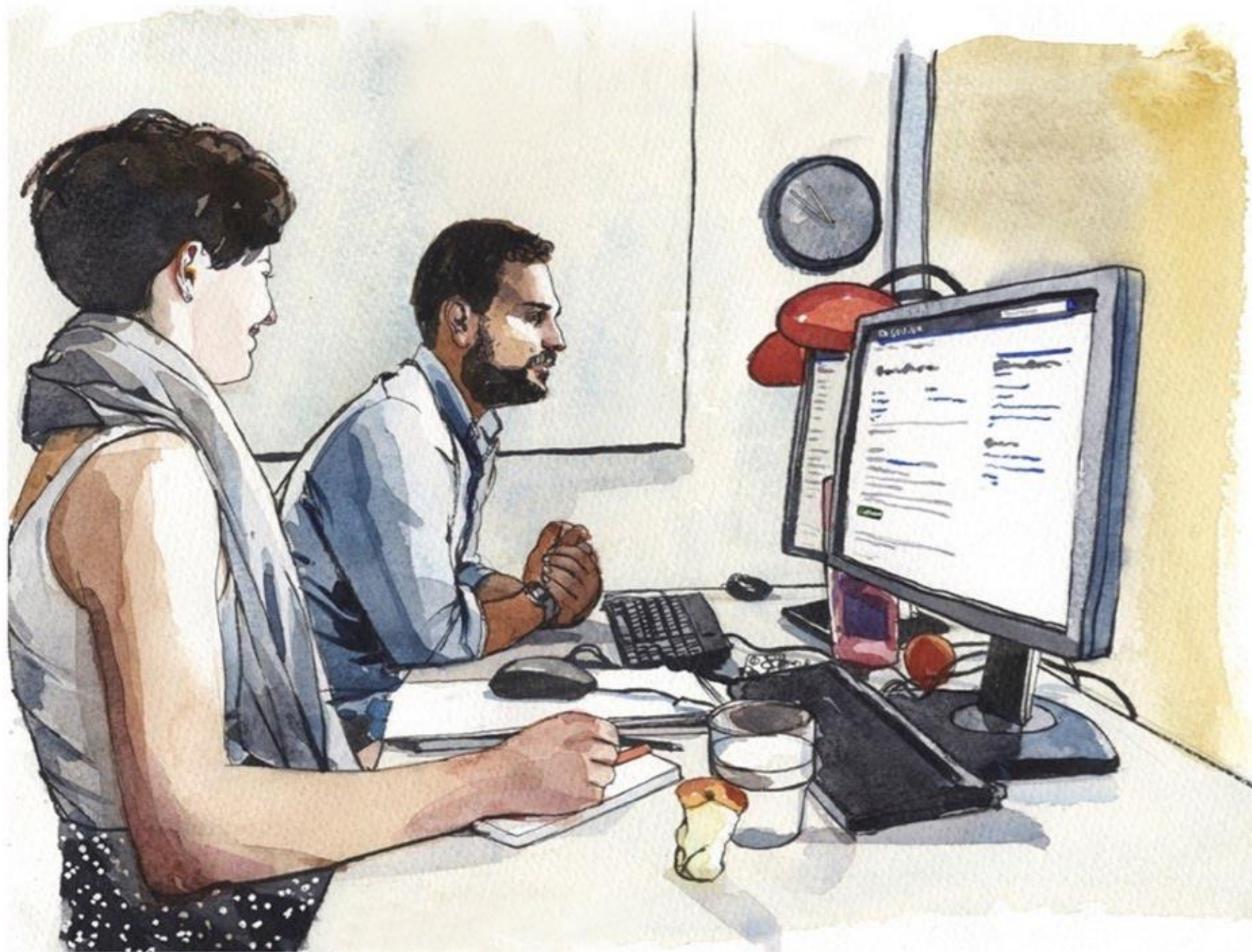
# Research continually

To [work in an agile way](#), service teams must be able to quickly:

- update their understanding of users and their needs, including users who lack the ability or access to use digital services on their own
- test new design ideas, content and features to see if they work well for all users
- understand problems users are having and how they might be resolved

This means doing user research in every iteration of every phase - starting in discovery and continuing throughout live. You can't only do it at the beginning or end of development.



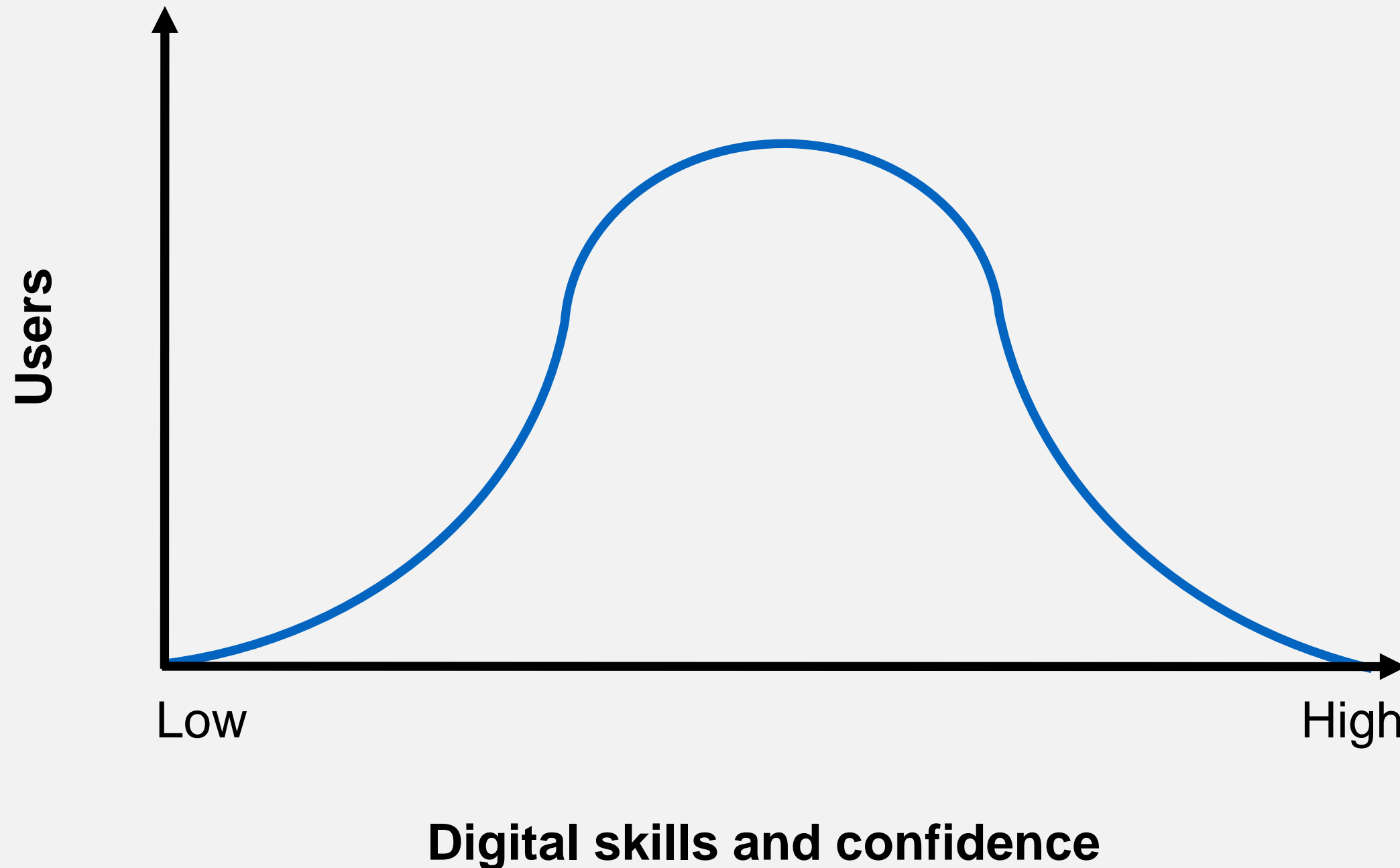


**find  
what  
works  
not  
what's  
popular**

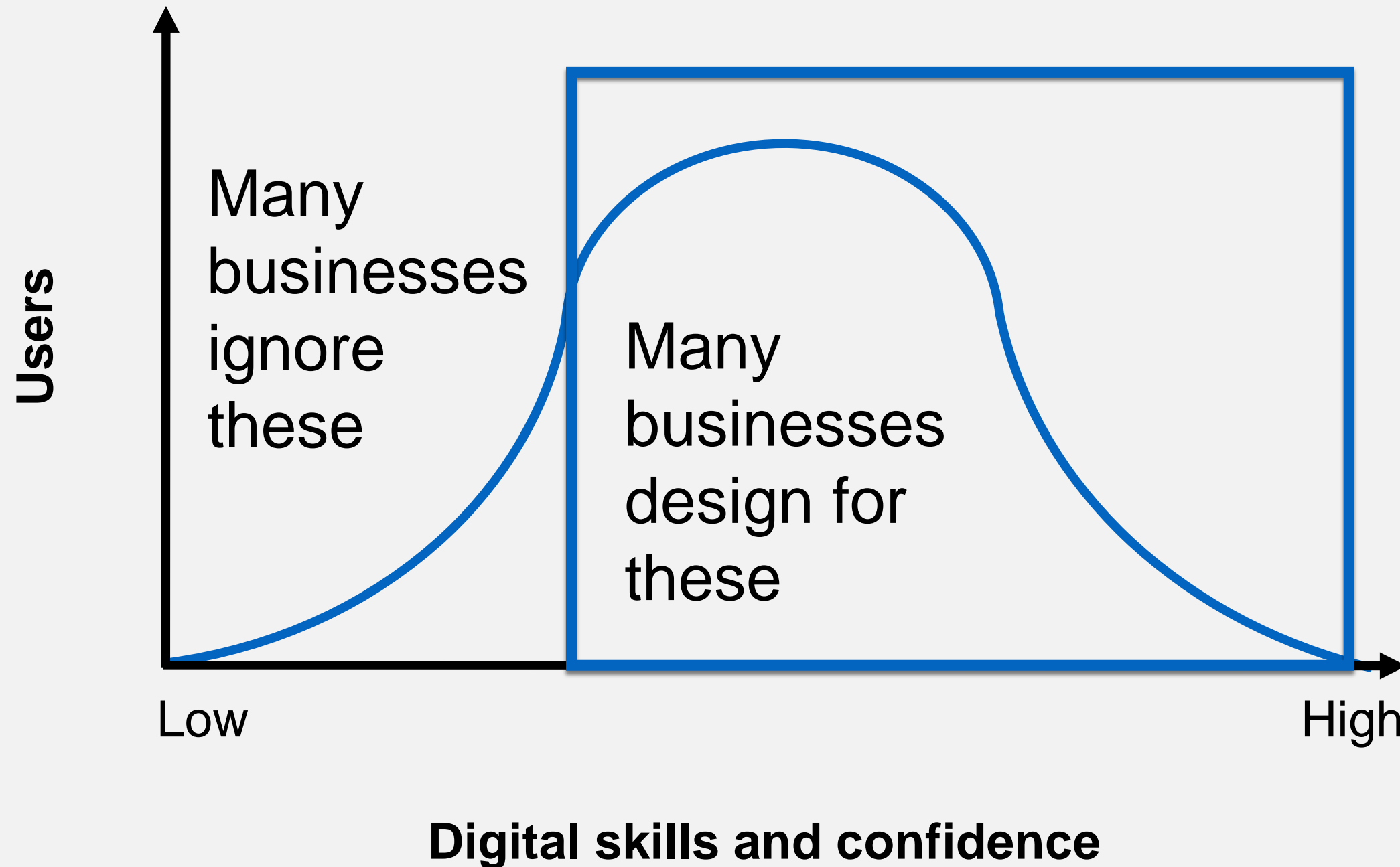


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# Most people have OK digital skills and confidence



# Many businesses ignore people with low digital skills

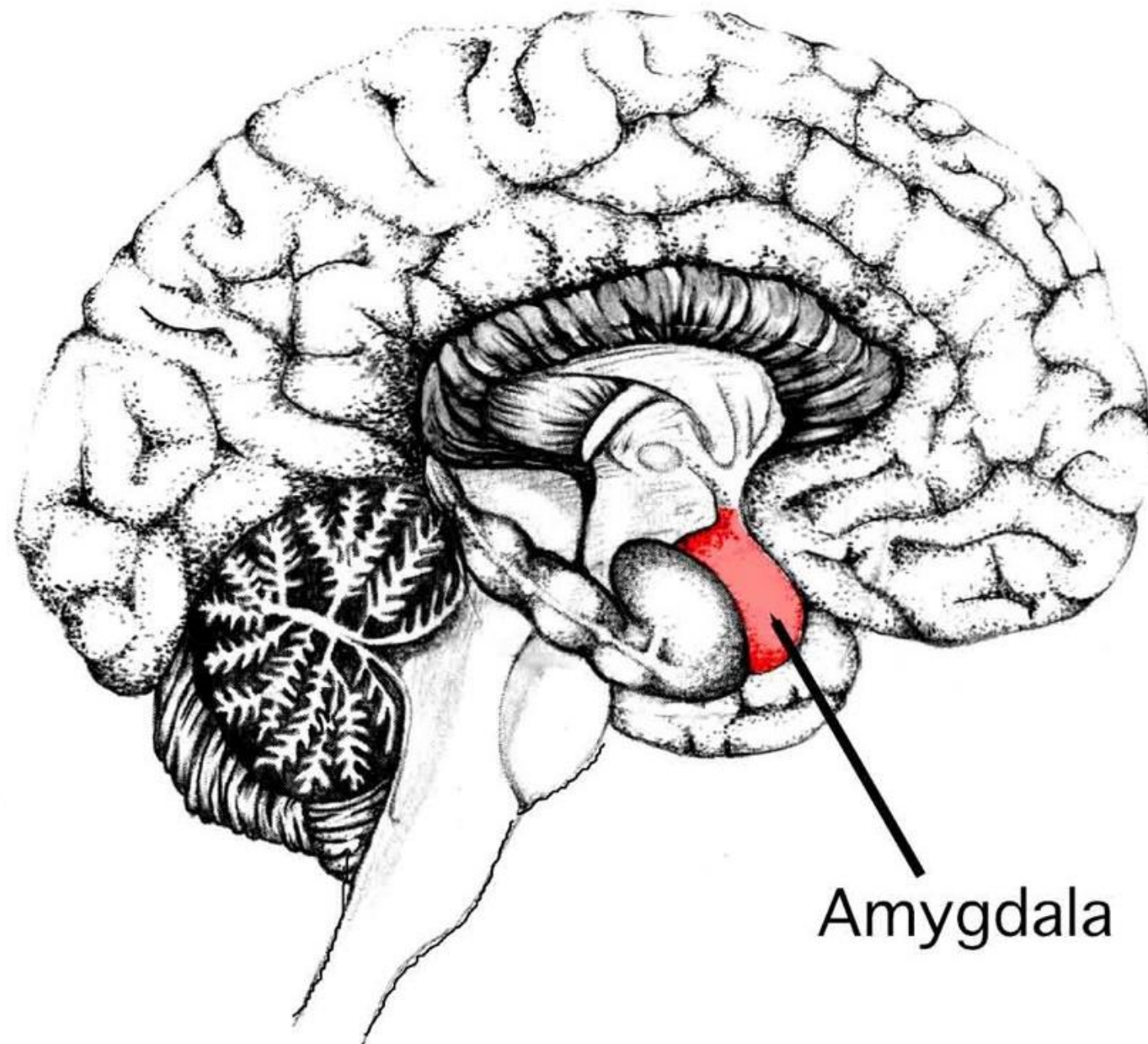


# Some skilled people have low digital skills



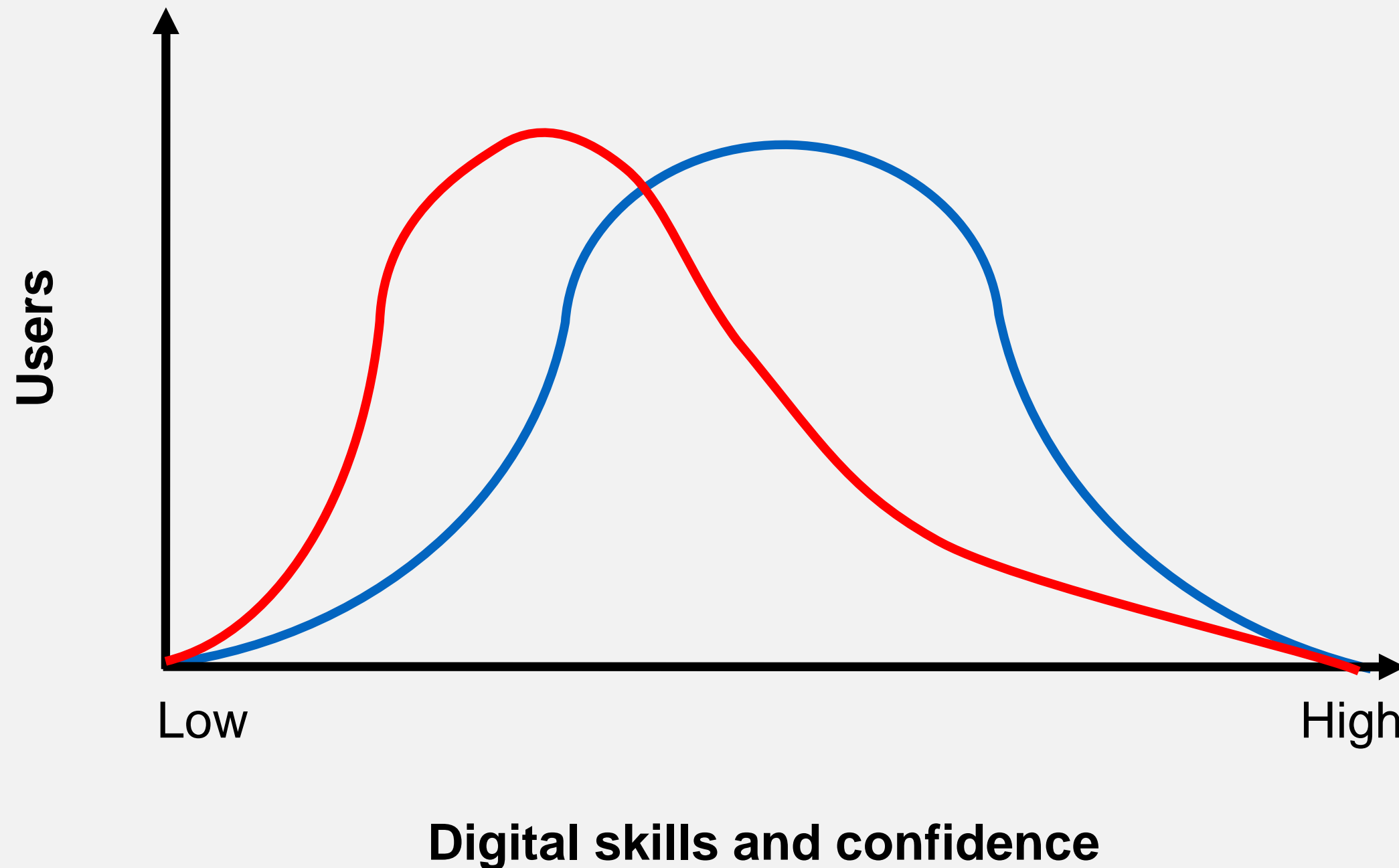
It's easy to assume that skilled people will all be IT literate, but what we found was that some skilled visa applicants (for example chefs, oil rig workers, small business retailers and church workers) lacked the skills, confidence or ability to get online.

# We must design for people who are stressed

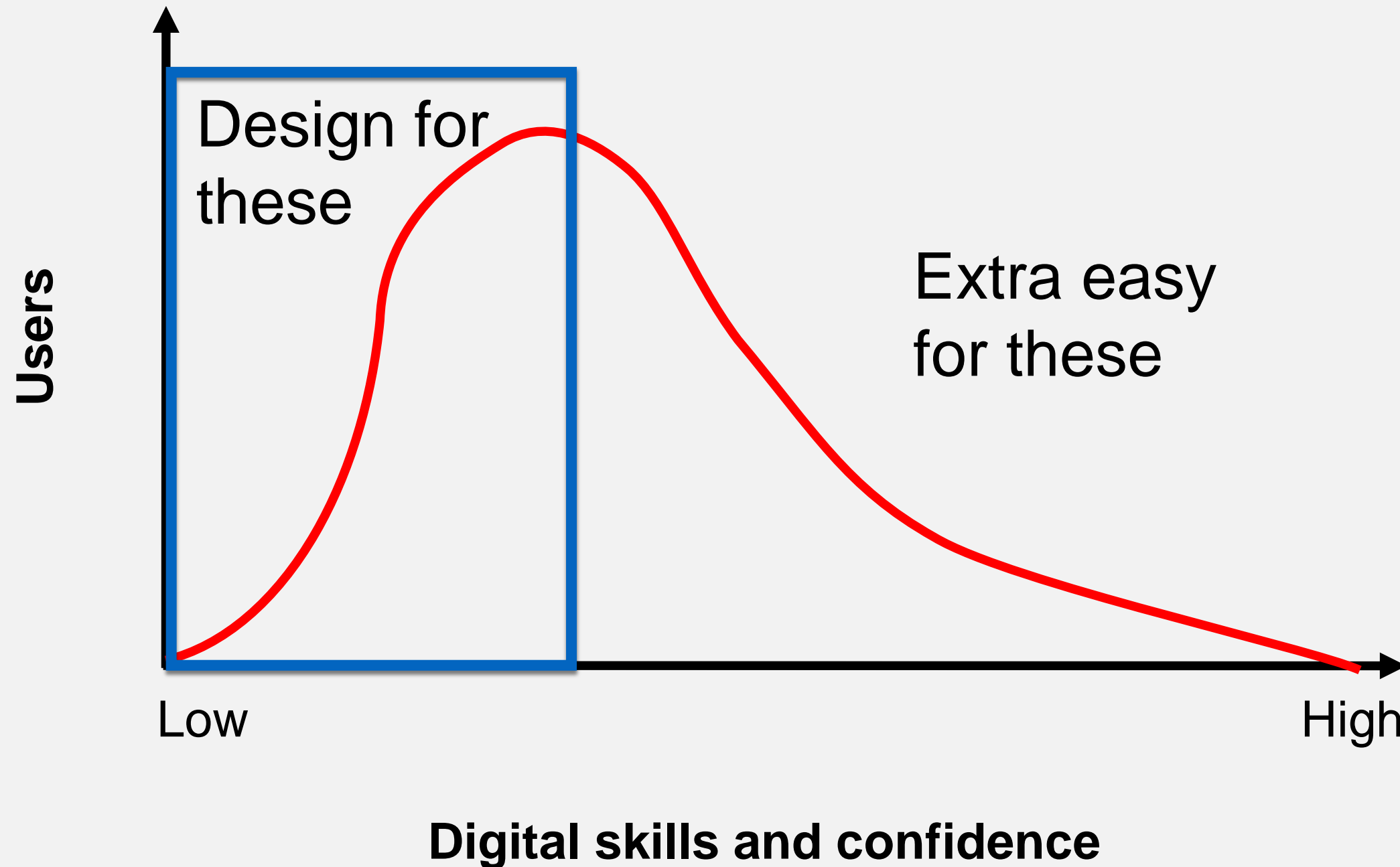




# People who need government services have lower digital skills



# When we design for people with low digital skills, everyone wins



# Example

# Dropdown lists / Select boxes



# Which country do you live in?

Enter a country

## ✓ Select Country

Afghanistan  
Åland Islands  
Albania  
Algeria  
American Samoa  
Andorra  
Angola  
Anguilla  
Antarctica  
Antigua And Barbuda  
Argentina  
Armenia  
Aruba

# There was a video

A woman in her 30s struggles to complete a date-of-birth dropdown. She gets help from her boyfriend, who is the person who usually helps her.

A dropdown needs several interactions:

- See the box where the answer will appear
- Click on the down arrow next to the box
- Scroll to the answer you want (may be out of sight)
- Click on the answer you want (away from the box)
- The answer appears in the box

The boyfriend keeps telling her to 'click', and she keeps trying to click on box.

# Many people struggle with dropdowns/select boxes

People with disabilities, such as low vision

People who are in a hurry

People who find it tiring or boring to look through a long list

People who have not yet become expert on computers – or who have no desire to do so.

# Avoid dropdowns. Bin your select tags.

Try these instead:

- Radio buttons
- Free text

(and we are experimenting with  
autocomplete and other formats)

# We use three boxes for date of birth

## Date of birth

For example, 20 3 1976

Day      Month      Year

<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------

# People can ignore hints

- 7 3 1976
- 3 7 1976 (US format)
- 7 Mar 1976
- 7 March 76

Our developers write  
extra code to parse all the  
things people type

# We use 'check your answers' pages

**GOV.UK**

**Service name goes here**

## Check your answers before sending your application

### These are your answers

---

Date of birth

7th March 1976

[Change](#)

---

Your full name

Mrs. Example Person

[Change](#)



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# Two departments contribute to one service

## Check your State Pension

Use this service to find out how much State Pension you could get when you reach State Pension age.

The amount is based on an estimate of what your National Insurance record could be when you reach State Pension age.

You'll also get information about how to increase your State Pension, if you can.

You can only use this service if you're under State Pension age.

**Start now** >

**Other ways to apply**

### State Pension

[The basic State Pension](#)

[Check your State Pension age](#)

[The new State Pension](#)

[Claim your State Pension online](#)

[Early retirement, your pension and benefits](#)

[More](#)

# Government Digital Service provides

- infrastructure
- tools
- guidance

We test our guidance  
with our colleagues

# In 2015, we explained how to show errors

## 8. Errors and validation

Summarise validation errors in a box at the top of your page. Use jump links in the summary box to reach the errors in the form.

Ensure error messages make sense when read by screen readers.

### Form validation

- use a red border on the box to visually connect the errors and messages in the form

# Designers and developers like examples

**Message to alert the user to a problem goes here**

Optional description of the error(s) and how to correct them

[Descriptive link to the question with an error](#)

## Check your personal details

Look at your name, signature and other details.

**Are your personal details correct and up-to-date?**

**Error message about personal details goes here**

☐ Yes, my personal details are correct

☐ No, some details are wrong or have changed

Continue

Our colleagues  
contribute  
to our guidance

Example

Fixing pale boxes  
(the “Apple Effect”)



# Before...

## These box borders are too pale

First name

Last name

# Simon Hurst (DWP) and James Francis (Companies House) reported results from user research

99+


4

Digital Service Designers >

Colour contrast on borders



31 posts by 15 authors

G+1



Simon Hurst

05/10/2015



★

Hi All


I'm one of the user researchers on Claim Personal Independence Payment. I recently tested the service with people with visual impairments and uncovered an issue with people not being able to see the borders on edit fields due to the low contrast of the grey used. This also actually caused issues on the background shading of radio buttons.

I've raised a story to change this for our service but was wondering if this is an issue for other services? If so should the elements toolkit not be suggesting a different colour?

Thanks



Simon

Click here to [Reply](#)



jfrancis

05/10/2015



★

Hi Simon,

@cjforms

#gdsteam

# Colleagues tested darker borders

**GitHub**

This repository Search

Explore Features Enterprise Pricing

Sign up

Sign in

alphagov / govuk\_elements

Watch 83

Star 79

Fork 40

Code

Issues 10

Pull requests 5

Pulse

Graphs

## Increase the width of the border and make the border color darker for form controls #104

**Merged** tombye merged 1 commit into master from increase-border-width-and-darken-border-colour-for-form-controls on Oct 26, 2015

Conversation 3

Commits 1

Files changed 1

+1 -1



gemmaleigh commented on Oct 6, 2015

Increase this to 2px and change the colour from a light grey (\$border-colour) to a darker grey (\$grey-1).

The current border style:

First name

Labels

None yet

Milestone

No milestone

Assignee

[https://github.com/alphagov/govuk\\_elements](https://github.com/alphagov/govuk_elements)

# Before...

## These box borders are too pale

First name

Last name

# After...

## These box borders are dark enough

First name

Last name

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# GOV.UK has a lot of users

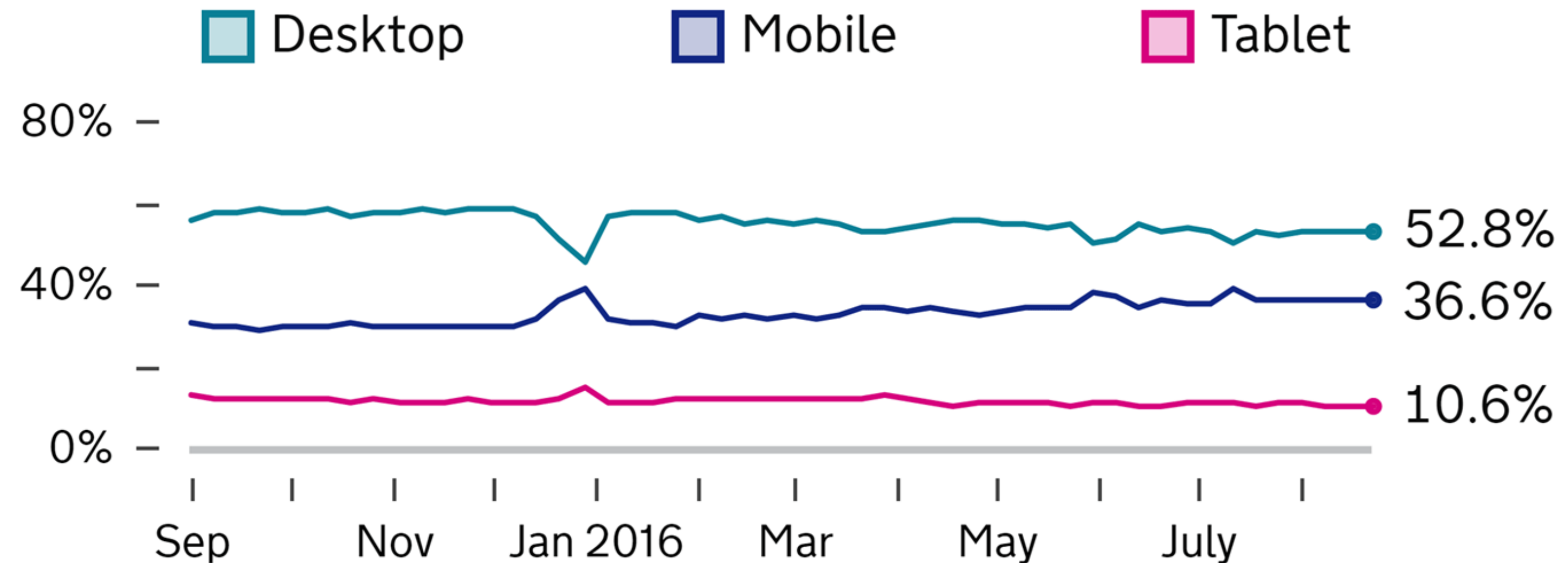


**Visitors last month**

**45,430,026**

**Powered by [www.gov.uk/performance](http://www.gov.uk/performance)**

# People use GOV.UK on mobiles





# ‘Tax your vehicle’ on a mobile

[Home](#) > [Driving and transport](#) >  
[Vehicle tax and SORN](#)

## Tax your vehicle

Tax your car, motorcycle or other vehicle using your reminder letter (V11).

If you don't have a reminder letter, you can use:

- a V5C registration certificate (log book) that's in your name - [get a replacement](#) if you don't have one
- your new keeper supplement (V5C/2) if you've just bought the vehicle
- your 'last chance' warning letter

**Start now** 

### Other ways to apply

#### By phone

Telephone: 0300 123 4321

# Farmers use GOV.UK



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# We have many GDS blogs

# Follow the code

```
create an account
</h1>

<!-- Full name -->
<div class="form-group">
  <label class="form-label" for="full-name">Full name <input type="text" class="form-control" id="full-name">
</div>

<!-- Email -->
<div class="form-group">
  <label class="form-label" for="email">
    Email
    <span class="form-hint">
      Must be from a government organisation.
    </span>
  </label>
  <input type="text" class="form-control" id="email">
</div>

<!-- Mobile Number -->
<div class="form-group">
  <label class="form-label" for="mobile-number">
    Mobile number
    <span class="form-hint">
      We'll send you a verification code by text message.
    </span>
  </label>
```

The GDS Service manual

<https://www.gov.uk/service-manual>

Follow GDS design notes:

<https://designnotes.blog.gov.uk/>

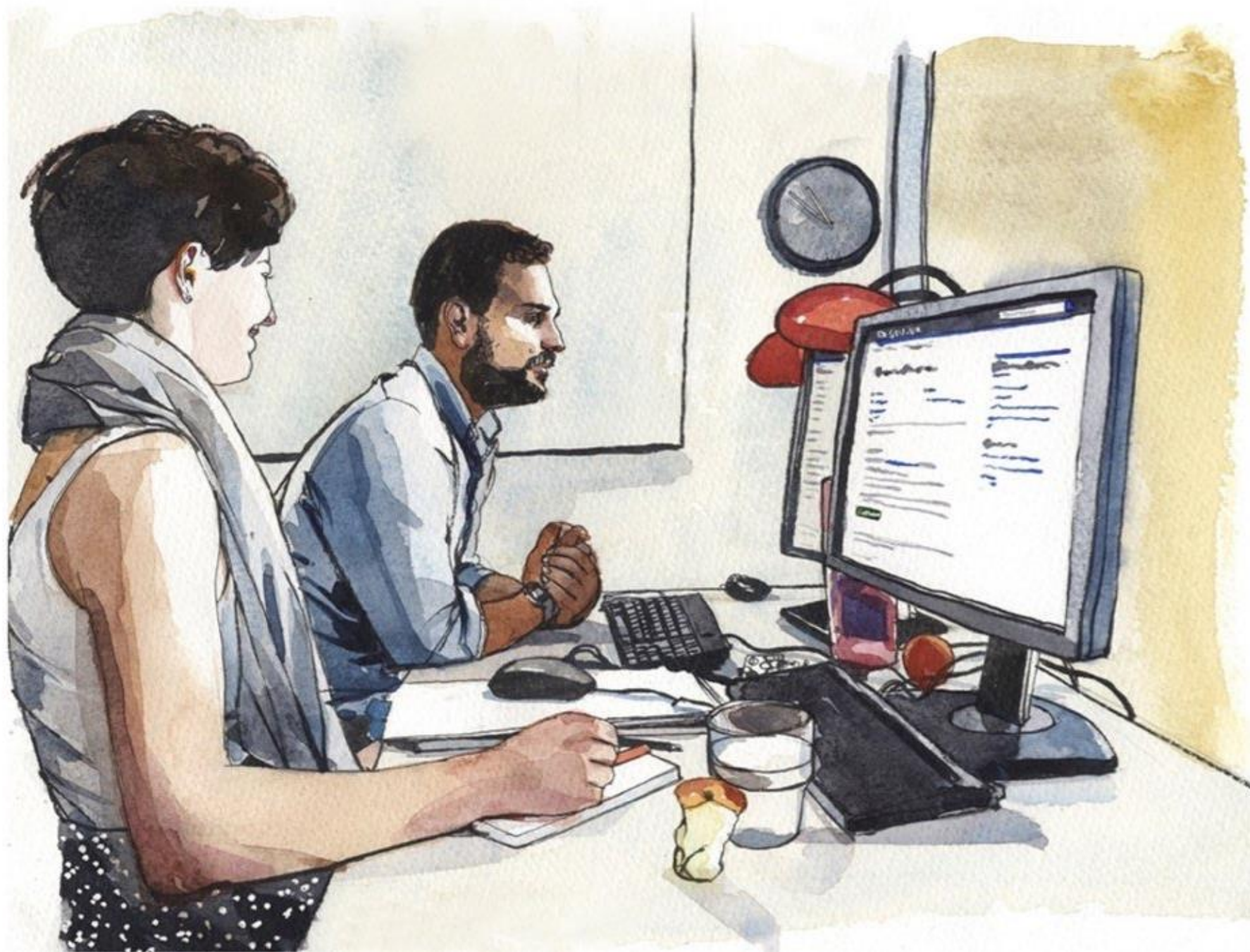
Follow GDS user research:

<https://userresearch.blog.gov.uk/>

Join in our discussion of patterns:

<http://bit.ly/designpatts>





**find  
what  
works  
not  
what's  
popular**