

# What is the problem we're solving\*

\*implementing user centred design approaches to de-risk digital and technology investment

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# UK celebrates 25 years of wasteful, 'underperforming' government IT projects

National Audit Office's scathing report blames fails on lack of experience

Tim Richardson

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Government IT projects are poorly thought out, often fail to achieve what they're designed to do, and are a waste of taxpayers' money.

Or so the UK's National Audit Office (NAO) has said in a report that lays bare frailties and failures that are so commonplace that few tech pros are likely to be surprised.

The report said the UK has little chance of turning things around because public sector failures are so widespread and deep-rooted, with too few senior government officials armed with the experience and skills to run such schemes.

"Despite 25 years of government strategies and countless attempts to deliver digital business change successfully, our reports show a consistent pattern of underperformance," wrote the NAO in its report "The challenges in implementing digital change" [\[PDF\]](#).



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POST OFFICE

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The 1920's

Advertisement for a service, possibly a newspaper or magazine, with a large white space.

OVERSEAS MAILS

Advertisement for overseas mail services, featuring a grid of text.

Advertisement for a service, possibly a newspaper or magazine, featuring a graphic of a globe.

POST  
IN THE  
PROPER SIZE  
...  
A MILLION  
...  
AVOID DELAY

TELEPHONING  
Advertisement for telephoning services, featuring a graphic of a telephone.

Advertisement for a service, possibly a newspaper or magazine, with a large white space.

POST  
...  
DELAY



A black and white photograph of a busy office from the 1960s. In the foreground, two women are seated at desks, focused on their work. The woman on the left is wearing a dark jacket and a large, ornate necklace, and is operating a typewriter. The woman on the right is also wearing a dark jacket and is looking down at a document. In the background, several other women are visible, some working at typewriters and others at desks. The office is filled with desks, typewriters, and papers, creating a sense of a busy, professional environment. The lighting is bright, and the overall atmosphere is one of productivity and industry.

# The 1960's



# The 1970's

A wide-angle photograph of a large computer laboratory in the 1970s. The room is filled with rows of computer terminals, each consisting of a large CRT monitor, a keyboard, and a control panel. In the foreground, three students are seated at their desks, working on their computers. The student on the left is wearing a yellow shirt, the middle student is wearing a red and white striped shirt, and the student on the right is wearing a black shirt. The room is brightly lit, and the overall atmosphere is one of a busy, early digital workspace. A dark grey banner with the text "The 1970's" is overlaid in the center of the image.



# The 1980's





Netsite:



### SECURE COURIER


Netscape announces [the first open, cross-platform "digital envelope" protocol](#), to be supported by Intuit, MasterCard, and others.

VERSIONS OF NAVIGATOR BETA

**Most services in government were not designed for the internet**



**Most services in government were not  
designed ~~for the internet~~**



**“I spend most of my day typing and inputting plans, filing, etc.. all admin tasks.”**

**User centred design is as much a mindset as it is a set of tools and processes**

**It is grounded in research. An understanding of what users need (not what they want)**



“Style never came into it.”



**“We were driving toward the absolute essence. We were reducing the appearance to make the maximum sense at the minimum cost.”**

Margaret Calvert and Jack Kinnear, 1961

- 1. Getting to the right problem**
- 2. Building the right thing**
- 3. Building the thing right**

A woman with dark hair and bangs, wearing a dark top, is shown from the chest up. She has a questioning or skeptical expression on her face, with her mouth slightly open and her hands raised in a questioning gesture. She is holding a drink with a straw in her right hand. The background is dark and out of focus, suggesting an indoor setting like a bar or restaurant. Overlaid on the left side of the image is large, white, bold text. At the bottom of the image, there is a smaller line of white text.

# Getting to the right problem

What is your problem?



**The better you define  
the problem, the better  
the solution**

# Some challenges

- Tech fixes for ill-defined problems
- Teams and budgets focussed on own problems
- Different solutions for same core issue
- No overview of work delivered... or if it's making anything better

# Problem or solution?

“Let’s scan documents to cut down on paperwork”

“We’ll let people self-serve”

“An online portal will modernise our process”

“We need a portal for applicants to submit their bank statements electronically”



Why now?  
Or else?

Why this?  
How else?

Why do  
users need  
to do this?

Who is “we”?

What are users  
really trying to  
do?

“We need a portal for  
applicants to submit  
their bank statements  
electronically”

What does  
this data  
tell us?

What does this  
allow us to do?

**Rewrite the brief and reframe the problem**

**“Study in the UK”**

***not***

**“Class 3 visa application”**

# Give “better” a shape

“Build a  
portal”

Describe  
outcomes

“Why study  
abroad?”

(Decide a solution)

(Question everything)

“Prevent  $x$   
Allow  $y$   
Faster  $n$   
Less  $z$ ”



# Building the right thing

# The problem

It's easy to come up with ideas and solutions...

...that bear no resemblance to anything you've actually learned or are really trying to achieve.

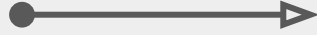


# What problems are we solving?

- Go back to first principles
- Ask the fundamental questions
- Go back to the original brief and ask why again
- Write down what actually needs to happen - not just what is happening now

**Words matter**

**Unclear  
activity**



**What actually needs  
to happen?**

Working a case

Check suitability

Check eligibility

Check entitlement

Make decision

Notify of a decision

Issue proof

## What actually needs to happen

Check eligibility

Check entitlement

Make decision

## Ways we could do these activities

Remove need for checks

Use what we know

Manual checks

Automate checks

Triage checks

Issue proof

**There's rarely one  
neat, single  
solution.**

# Building the thing right



It's easy to let the momentum of the project drive everything.

# Where things go wrong

- Are we working towards outcomes, or measuring how well we're delivering “the plan”?
- Are we focussed on user needs or are we talking about requirements and features?



# What is a user need?

- Things people need to do - functional needs
- Emotional needs - perhaps people feel stressed or anxious and they need reassurance

**Design is not a panacea but a helpful process to safely test and build towards the transformation of services.**

**User centred design is messy**

**Design teams need buy in**

**It's never the  
right time**

