How teams passed cross-government service assessments (and why some did not)

Insights extracted from 196 service assessment reports using the GOV.UK Content API and a Large Language Model

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What is this document?

This document is:

1. an experimental reference to learn more about cross-government service assessments, or to help prepare for assessment, as a complement to the Service Manual
2. a proof of concept exploring how we can combine content design techniques and Large Language Models (LLMs) to extract more value from document libraries

You can read about how this document was created in this blog post: Combining AI and content design to extract insights from service assessment reports.

Please refer to the Cabinet Office's Guidance to civil servants on use of generative AI, to which this document adheres (in particular, Example 2: Summarising Information).

The following text was partly generated by a Large Language Model (OpenAI's GPT-4).

All the LLM output was manually reviewed and edited (by Alex Robertson, the author of this doc), but it's advised to exercise your own judgement before acting on any of this information. Read every sentence as if prefixed: "It seems that…".

1. Understand users and their needs

Successful teams

Teams conducted extensive, inclusive user research, encompassing a wide range of participants and employing a variety of research methods to inform all aspects of the service's design and iteration.

Success example

The 'Appeal an asylum decision' team impressed the panel with their professional structuring of research, including clear evidence of hypotheses shaping their approach and effort to find and prioritise the knottiest problems in the user journey. They integrated multiple perspectives into their service design by engaging a broad cross-section of different user types, reaching hard-to-recruit groups through strategic collaborations with the charity sector.

Extensive and inclusive user research

1. All teams included a diverse range of participants in user research, such as people with disabilities, those with low IT literacy, and users from different geographical locations.

2. Most teams employed a variety of research methods, such as interviews, surveys, diary studies and usability testing, to gather detailed insights about users' needs, preferences and behaviours.
3. Many teams focused on inclusivity in design, especially for users with assisted digital and accessibility needs, and made efforts to understand these users' unique requirements and challenges.
4. Some teams conducted user research in users' normal environments, like drop-in centres or via remote methods, to gain deeper insights into their real-world contexts and experiences.

Iterative design

1. All teams showed a strong commitment to iterative design, demonstrating a thorough understanding of users' pain points and making changes based on user feedback and ongoing research findings.
2. Most teams used user personas and journey maps to guide design decisions, ensuring that their services were tailored to meet the specific needs and preferences of different user groups.
3. Many teams showed effective use of data analytics and feedback mechanisms, such as call logs and complaint data, to inform their research and design strategies.
4. Some teams demonstrated innovative approaches in their design process, such as employing co-design workshops and engaging with users in prototype development.

Working together and team involvement

1. All teams emphasised the importance of collaboration, with team members from various disciplines actively participating in user research and design processes.
2. Most teams used insights from a range of stakeholders, including policy colleagues, to ensure that services were user-centred whilst aligning with broader organisational goals.
3. Many teams shared their insights and findings across departments and with relevant teams, promoting a culture of shared knowledge and continuous learning.
4. Some teams worked closely with external organisations, such as charities or interest groups, to reach a wider range of users and gather diverse perspectives.

Continuous improvement and future planning

1. All teams demonstrated a commitment to continuous improvement, with plans in place for further research and development in subsequent phases of their projects.
2. Most teams recognised the need for ongoing engagement with users to stay attuned to evolving needs and preferences, especially in dynamic or complex service areas.
3. Many teams had clear roadmaps for future development, with an emphasis on addressing unmet needs and expanding their understanding of different user segments.
4. Some teams were proactive in identifying and planning for potential challenges and risks in future stages of their services, showing foresight and strategic planning.

Common recommendations for next steps

- Refine user personas to better reflect the diversity and complexity of your user base.
- Explore non-standard research methods, like participatory design workshops and real-world testing.
- Ensure active participation and support from key decision-makers across your organisation.
- Establish stronger connections with internal stakeholders, like policy designers and customer service operatives.
- Use a wider variety of channels for user recruitment to include a wider range of perspectives.
- Expand testing to cover edge cases and less common user scenarios.

Unsuccessful teams

1. Most teams failed to conduct thorough research with a diverse range of end users, leading to a limited understanding of varied user needs.
2. Many teams lacked deep engagement with users who have accessibility or assisted digital needs, resulting in services that are not fully inclusive.

3. Many teams failed to articulate clear user needs that were adequately validated with evidence, focused on solutions rather than the underlying problems, or didn’t represent the actual user base.
4. Some teams conducted insufficient testing with real users, particularly those from underrepresented groups, affecting the service's effectiveness and inclusivity.
5. Some teams did not incorporate continuous research and iteration based on user feedback, leading to stagnant or irrelevant designs.
6. Some teams overlooked the importance of recruiting a specialist user researcher, resulting in less effective research methodologies and outcomes.

2. Solve a whole problem for users

Successful teams

Teams clearly explained how their transaction integrates with other elements to create a journey that solves the entire problem for users.

Success example

The 'Apply for your first provisional driving licence' team joined up their service as part of the ‘Learn to drive a car: step-by-step’, and worked hard to ensure users understood eligibility criteria before starting their application.

Comprehensive service design

1. All teams considered the full end-to-end user journey and ensured their services integrate well with related services.
2. Most teams actively sought to understand and address the real-world problems and pain points of their users, adapting to changing user needs and service landscapes.
3. Many teams worked on reducing user burden by avoiding duplication and simplifying processes, such as by reducing redundant data entry.
4. Many teams adapted their services in response to external factors, like the COVID-19 pandemic, to meet evolving user requirements.

5. Some teams excelled in identifying and addressing constraints that might impact their services, such as policy limitations or technical challenges, and anticipated future changes and challenges.

Collaborative efforts and cross-departmental engagement

1. All teams showed a commitment to collaboration, working closely with other departments, external stakeholders, and policy teams to ensure a unified and comprehensive service experience.
2. Most teams used insights from a variety of sources, including other government departments and third-party organisations, to enhance their service design and delivery.
3. Most teams shared insights and knowledge across departments, promoting efficiency and coherence in government services.
4. Many teams developed partnerships with related service providers to address broader user needs and solve complex service problems.
5. Some teams worked closely with policy and legal professionals to navigate constraints and improve service outcomes.

Using technology and data to enhance services

1. All teams effectively used technology and data to improve service delivery, streamline processes, and enhance user experiences.
2. Most teams demonstrated a keen understanding of the importance of data security and privacy, incorporating these considerations into their service designs.
3. Many teams considered future technological developments in their service design, anticipating changes in user needs and expectations.
4. Some teams explored new methodologies, such as data minimisation practices, to address privacy concerns and improve user trust.

Common recommendations for next steps

- Collaborate more closely with other departments, teams, and external partners to align service development with broader policy objectives.
- Critically evaluate and continuously refine the scope of the service to ensure the evolving needs of all user groups are met.
- Explore different design ideas and prototypes to address unmet needs and enhance user experience.

Unsuccessful teams

1. Many teams failed to fully map the end-to-end user journey, including elements outside their immediate scope, leading to incomplete service designs.
2. Some teams focused too narrowly on specific user groups or problems, neglecting broader service landscapes and user contexts.
3. Some teams began their projects with preconceived solutions, limiting their exploration of alternative approaches that might better address user needs.
4. Some teams failed to demonstrate how their proposed solutions would effectively solve the identified user problems, often due to inadequate user research.
5. Some teams overlooked the importance of integrating their services with related systems and services, resulting in disjointed user experiences.
6. Some teams were constrained by existing technological systems and did not sufficiently challenge or critically engage with the strategy or brief they were given, limiting innovation.
7. Some teams did not consider the wider impact of their services, such as unintended consequences or alignment with broader strategic principles.

3. Provide a joined up experience across all channels

Successful teams

Teams ensured a comprehensive understanding and integration of both digital and non-digital user journeys, considering all aspects of the service from end-to-end.

Success example

The 'Apply for a postal vote & Apply for a proxy vote' team impressed the panel with how they worked across organisations and boundaries. They considered a wide range of routes into services, such as social media, community groups and non-digital. Offline processes and user support were designed and tested with local authorities.

Digital and non-digital integration

1. Most teams demonstrated awareness of the importance of non-digital routes for application and support, recognising the diversity of user preferences, limitations and accessibility needs.
2. Most teams made use of existing government services (such as GOV.UK Pay and Notify), using proven technology across government departments.
3. Most teams ensured that their digital services were well-integrated with non-digital alternatives, offering a cohesive experience across all channels.
4. Most teams established alternative contact mechanisms to ease the load on traditional channels.
5. Many teams had plans in place for updating and refining both digital and non-digital components of their services.
6. Some teams actively involved front-line staff in their decision-making process, incorporating their insights into service development.
7. Some teams developed specific strategies to guide users seamlessly between digital and non-digital channels, enhancing overall accessibility and user convenience.

Engaging users

1. Many teams developed clear plans for outreach and promoting their services through various channels, including social media, community groups, and direct campaigns.
2. Many teams employed a champions network or similar strategies to improve digital uptake and promote their services effectively.

Engaging third-party service providers

1. Many teams actively engaged relevant third-party service providers like charities and local authorities to understand and expand their service offerings.
2. Many teams involved these providers in developing offline service routes for users lacking digital capabilities or identity documentation.
3. Some teams ensured that offline routes adhered to the same standards and guidelines as digital journeys, aligning with best practices.

Common recommendations for next steps

- Standardise content and language use, especially in areas like error messages, for clarity and consistency.

- Manage user expectations transparently, communicating timelines and data usage clearly.
- Integrate digital services within the broader service ecosystem for a unified experience.
- Address non-digital user needs, ensuring offline channels are aligned with digital offerings.

Unsuccessful teams

1. Many teams failed to map and iterate the end-to-end service journey, particularly for priority users and use cases, leading to unclear and fragmented user experiences.
2. Several teams did not adequately test service designs and implementations across the channels and devices users typically access, resulting in a lack of real-world applicability.
3. Some teams overlooked the needs of users who are unwilling or unable to use digital services, disadvantaging these user groups.
4. Some teams struggled with integrating online and offline service elements effectively, causing inconsistencies in the user journey.
5. Some teams did not consider how users navigate between different services or channels, leading to a disjointed and confusing experience.

4. Make the service simple to use

Successful teams

Teams focused on user-centred design and iterative improvements based on continuous user feedback to ensure their service is simple, intuitive and meets user needs effectively.

Success example

The 'Apply for Pension Credit' team effectively used a variety of data sources, such as Google Analytics, application logs, phone interviews, and survey comments, to identify and rectify errors and improve service design. This included implementing a timeout countdown in response to user feedback, which addressed a significant issue of sessions ending abruptly without warning.

User-centred design and language simplification

1. All teams engaged in comprehensive user research, involving various methods to thoroughly understand user needs and pain points, particularly focusing on challenges like language comprehension, cognitive load and digital literacy.
2. All teams demonstrated a strong focus on content design, ensuring clarity and simplicity to address user needs effectively.
3. Most teams specifically worked on simplifying complex processes and terminology to better support users with varying levels of understanding.
4. Most teams identified specific user groups needing extra support and tailored their services accordingly.
5. Many teams conducted in-depth research into specific user pain points, such as difficulty in understanding eligibility criteria, and tailored their services accordingly.
6. Many teams incorporated feedback from communities of practice and other departments, integrating collective knowledge into their service design.
7. Some teams developed specific content strategies, like creating style guides to maintain consistency and comprehensibility throughout the service.

Enhancing service accessibility and entry points

1. Most teams designed their services with multiple entry points, including direct web access and support services, to accommodate a range of users.
2. Most teams minimised manual identity verification and data re-entry, using automatic verification where possible.
3. Some teams prioritised minimising stress for users by iterating content to be as intuitive as possible.
4. Some teams extended their focus to include offline user interactions, ensuring comprehensive service design across all channels.

Integrating with existing government systems

1. All teams effectively used existing government systems and design patterns, like the GOV.UK Design System, to ensure service legitimacy and ease of use.
2. Most teams conducted usability testing and surveys to identify and rectify service pain points.
3. Some teams focused on ensuring service accessibility across a range of devices, using tools like VoiceOver and manual accessibility checks.

Common recommendations for next steps

- Focus on simplifying user journeys, reducing unnecessary steps and cognitive load.
- Refine content design to ensure clear, jargon-free language in service content for better comprehension.
- Regularly conduct design critiques and reviews to maintain quality in ongoing service updates.
- Consider service naming based on user needs and best practices for clarity and relevance.
- Investigate the use of mobile devices to identify potential improvements.
- Use analytics and user data to define and improve service simplicity.
- Evaluate and possibly modify feature labels to ensure they accurately represent their function.
- Ensure interface functionality, like sort and filter options, effectively meets user needs.
- Develop a content strategy to prevent duplication and maintain clarity across services.
- Explore and refine save and return functionalities to improve convenience.

Unsuccessful teams

- Most teams did not adequately test and improve the interaction of various service components, resulting in a lack of coherence and usability.
- Some teams overlooked the importance of consistent and clear content design, which led to unclear instructions and user errors.
- Some teams neglected to conduct thorough usability testing, particularly in real-world user environments, hindering practical applicability.

- Some teams failed to align their services with established design systems and guidelines, causing inconsistency and non-compliance issues.
- Some teams lacked a comprehensive approach to testing both online and offline components of their services, missing critical user interaction points.
- Some teams did not effectively use user feedback to iterate and improve their services, leading to stagnation in service quality.

5. Make sure everyone can use the service

Successful teams

Teams ensured their service meets accessibility standards.

Success example

The ‘Statutory Debt Repayment Plan’ team impressed the panel with their efforts to identify and address pain points for specific groups of users, testing their prototype with users experiencing a range of access needs. They made service iterations like allowing users to enter a correspondence address if they lacked a permanent one, supporting the needs of homeless people. And they enabled users to reuse their details from the ‘Breathing Space’ service, reducing the frequency of data input.

Designing for accessibility

1. All teams demonstrated a commitment to designing accessible digital services, focusing on WCAG compliance and conducting accessibility audits.
2. Most teams were working towards or had achieved compliance with WCAG 2.1 AA.
3. Most teams included users with cognitive impairments and neurodiversity in their research to ensure the service is inclusive and easy to navigate.
4. Most teams engaged with accessibility and user research experts, like the Digital Accessibility Centre, to validate and improve their service designs.
5. Some teams focused on including users who face unique challenges, such as those without permanent addresses or with specific cultural considerations.

6. Some teams specifically designed services to be functional without reliance on advanced technologies like JavaScript, employing progressive enhancement strategies.

Extensive and inclusive user research

1. All teams engaged in extensive user research, involving users with various access needs, including those with disabilities and limited digital literacy.
2. Many teams conducted user testing across a range of devices and environments to ensure broad accessibility and usability.
3. Most teams iterated service designs based on feedback from a diverse user group, including those using assistive technologies.
4. Some teams employed creative recruitment strategies for user research, ensuring a representative sample of users with accessibility needs.

Assisted digital and alternative channels

1. All teams considered alternative channels for users with limited digital skills, such as telephone support, offline methods, or physical help points.
2. Many teams integrated signposting to offline support within their digital services, ensuring accessibility for all users.
3. Most teams ensured that their services accommodated users who prefer or require non-digital means of access, such as through post or in-person assistance.

Collaborative efforts and knowledge sharing

1. All teams demonstrated collaboration with other departments, external agencies, and user groups to enhance the accessibility and usability of their services.
2. Many teams shared their findings and best practices with other service teams to promote a culture of accessibility and inclusivity across services.
3. Some teams extended their collaborative efforts to include partnerships with community organisations and stakeholders to better understand and address user needs.

Common recommendations for next steps

- Perform comprehensive usability and accessibility testing on high-fidelity prototypes or production-ready builds.
- Fix accessibility non-compliance issues and update service accessibility statements.
- Identify and address user dropout points in the service.
- Ensure effective communication and contact options for users with various accessibility needs.
- Offer user support, considering in-house or outsourced options, and integrate insights into service design.
- Test service usability on multiple devices, focusing on mobile and tablet.
- Address content issues, ensuring adherence to standards and consistency across all service materials.
- Monitor and adjust non-digital processes and their impact on the service.
- Include non-native English speakers and diverse user groups in research and testing.

Unsuccessful teams

1. Many teams failed to adequately include users with accessibility and assistive technology needs in their research, leading to services that are not fully accessible or inclusive.
2. Many teams did not conduct sufficient research with users lacking the necessary identity documents or with low digital literacy, impacting the service's usability for these groups.
3. Some teams overlooked the importance of including "back office users" in their research, resulting in a service design that does not fully account for the entire user journey.
4. Some teams neglected to test and iterate the content and design for cognitive and other accessibility barriers, thus failing to meet universal access standards.
5. Some teams did not assess the digital inclusion of their user base, leading to unvalidated assumptions about users' digital competency and willingness to use mobile apps or online services.
6. Some teams failed to conduct comprehensive accessibility audits and address the findings, resulting in services that do not meet WCAG standards.

6. Have a multidisciplinary team

Successful teams

Teams formed and maintained a well-structured multidisciplinary team that works together effectively.

Success example

The ‘NHS 111 online’ team was well-resourced with NHS Digital staff across all expected delivery roles, with a low reliance on contractors. All staff were expected and encouraged to take part in user research activities. The service team worked closely with the implementation team, using this relationship as an important feedback mechanism, and the inclusion of clinicians on the team increased their expertise and internal credibility.

Multidisciplinary team composition and skills

1. All teams recognised the importance of diversity in team composition, maintaining a mix of roles, skills and perspectives.
2. All teams identified and filled key roles as outlined in the Service Manual, such as user researchers, designers, and technical architects.
3. Some teams specifically targeted early-career opportunities and apprenticeship schemes, nurturing new talent and building long-term capability within their organisations.
4. Some teams specifically focused on reducing reliance on contractors, building stronger in-house capabilities.

Specialised role integration and wider expertise

1. All teams included a range of specialised roles, such as performance analysts and content designers, to address specific aspects of service delivery.
2. All teams developed close involvement with policy and operational staff, integrating their insights into the service development process.
3. Most teams benefitted from the inclusion of subject matter experts, adding valuable insights and credibility to their services.
4. Most teams established strong working relationships with external stakeholders, including senior support and buy-in for the service.

5. Some teams went beyond standard practices, involving all staff in user research activities to ensure a deeper understanding of user needs.
6. Some teams demonstrated innovative approaches, such as integrating clinicians or legal experts, to improve their services with specialised knowledge.

Governance and knowledge transfer

1. All teams adhered to robust governance structures, aligning their work with broader organisational goals and frameworks.
2. Most teams implemented effective knowledge transfer processes, such as agile ceremonies and collaborative tools, to retain critical information.
3. Some teams placed special emphasis on maintaining detailed documentation and clear communication channels to ensure continuity and efficiency.

Agile methodology and resource management

1. All teams embraced agile methodologies, allowing for flexible and responsive service development and iteration.
2. Most teams were able to adapt their team size and composition according to project phases and requirements.
3. Some teams demonstrated exceptional resource management, securing necessary funding and support for ongoing development and iteration.

Common recommendations for next steps

- Clarify roles and responsibilities within the team.
- Prioritise the transition from reliance on contractors to employing permanent civil servants for long-term sustainability.
- Implement robust mechanisms for knowledge transfer, with comprehensive documentation of work processes and user research to avoid knowledge loss.
- Provide professional training and mentoring to team members for skill development and role effectiveness.
- Plan for scaling resources and capabilities to respond to changing user needs and service scope, ensuring adaptability in team size and skills.

Unsuccessful teams

1. Most teams lacked a full multidisciplinary approach, missing key roles like user researchers, content designers, and technical leads.
2. Many teams failed to plan for long-term sustainability, including knowledge transfer and role continuity in case of supplier changes.
3. Several teams did not adequately involve stakeholders and business area representatives in the development process.
4. Some teams overlooked the importance of having a dedicated technical owner to ensure product support and development.
5. Some teams struggled with defining clear roles and responsibilities, impacting decision-making and prioritisation.
6. Some teams lacked a clear strategy for continuous improvement, especially in user research and content design.

7. Use agile ways of working

Successful teams

Teams implemented agile methods effectively, focusing on iterative, user-centred processes, and employing appropriate agile ceremonies and tools.

Success example

The ‘Integrated data service’ team had effective agile governance in place to protect delivery from unnecessary delays, and had a good rhythm of design, test and adapt. They demonstrated good ways of working together, and dealt well with conflicts in the team, resolving them through co-design sessions. Their ceremonies also included a “scrum of scrums” to manage priorities across multiple teams.

Agile practices and iterative development

1. All teams adopted agile methodologies, with a focus on iterative development and user-centred design, using tools like Jira, Confluence, and Trello to enable collaboration and project management.
2. Most teams implemented regular sprint cycles, engaging in ceremonies such as daily stand-ups, sprint planning and retrospectives, ensuring continuous improvement and adaptability.
3. Some teams went beyond standard agile practices, incorporating unique methods like "scrumban" and experimenting with different sprint lengths and team structures to optimise their workflow.

Stakeholder engagement and collaborative decision-making

1. All teams demonstrated active stakeholder engagement, regularly conducting Show & Tell sessions and sharing updates with stakeholders to increase awareness and gather feedback.
2. Most teams established clear service and product ownership, empowering team members to make timely, evidence-based decisions without excessive reliance on higher-level committees.
3. Most teams showed a strong understanding of balancing agile practices with policy commitments and legal considerations, ensuring that their services adhered to necessary regulations and standards.
4. Some teams effectively devolved decision-making to the service team level, balancing leadership input with the autonomy needed for rapid and responsive service development.

Remote collaboration and tools

1. All teams effectively used a combination of collaboration tools to support remote working and maintain team cohesion, such as Slack and Microsoft Teams.
2. Most teams adapted their agile practices to overcome the challenges of remote working, maintaining productivity and team dynamics through the use of digital communication and management tools.
3. Some teams, particularly during COVID-19 lockdowns, demonstrated exceptional adaptability in transitioning to fully remote operations while continuing to deliver services effectively.

Common recommendations for next steps

- Review and adapt working methods during team expansion and transitions, ensuring new members are trained in agile practices.
- Encourage broad participation in agile ceremonies and maintain visibility of product roadmaps and backlogs.
- Manage internal and external stakeholder pressures to sustain agile delivery methods.
- Use data as a decision-making tool and ensure senior-level engagement throughout the development lifecycle.
- Prepare for future transitions by planning and documenting internal processes and decisions.
- Reevaluate governance approaches to enable quality service creation and remove operational blockers.
- Iterate team processes during public beta phases and scale teams according to project demands.
- Implement technology changes to strengthen working methods and preserve service decision insights.

Unsuccessful teams

1. Many teams struggled with agile ways of working, particularly in adapting to changing requirements and priorities in a timely manner.
2. Many teams lacked clear, iterative development processes, often presenting shallow iterations that didn't adequately meet user needs or incorporate user feedback.
3. Most teams had issues with decision-making processes, either lacking clarity on how user research informed decisions or not demonstrating sufficient empowerment to make critical decisions.
4. Some teams failed to develop a minimum viable product (MVP) that addressed a clear end-to-end user journey, often neglecting the needs of different user personas.

8. Iterate and improve frequently

Successful teams

Teams prioritised continuous iteration and improvement of their service based on user research and feedback.

Success example

The 'Get Help Buying For Schools' team shared multiple examples of incremental improvements made to both internal and external digital tools. They adeptly responded to external challenges like rising energy costs by iterating their service to provide guidance to users and adding energy bill upload functionality.

Iterative design and development

1. All teams actively engaged in user research to gather insights and feedback for incremental improvements, identifying and addressing user pain points and ensuring that services evolved to meet changing user needs or policies.
2. Most teams underwent multiple iterations of content and design patterns, and streamlined user journeys by removing redundant steps and simplifying processes.
3. Some teams extended their focus beyond digital interfaces, iterating on entire service processes and user interactions, based on comprehensive user research.

Efficiency in service development and delivery

1. All teams demonstrated efficiency in their service development, often making rapid improvements to meet urgent user needs.
2. All teams adopted agile working practices, to ensure continuous improvement and responsiveness to evolving user insights.
3. Most teams maintained a regular release cadence while minimising disruption to users, enabling numerous service enhancements since their launch.
4. Some teams excelled in developing services under high-pressure conditions, quickly adapting to mandatory requirements and tight deadlines.

Future planning and sustainability

1. All teams displayed a forward-thinking approach, planning for future iterations and long-term sustainability of their services.
2. Most teams had clear roadmaps outlining future enhancements and iterations, reflecting a commitment to continuous improvement.
3. Many teams considered the scalability and adaptability of their services, ensuring they remain relevant and effective in the long term.
4. Some teams went above and beyond in planning, considering the broader impact of their services on users and other stakeholders.

Common recommendations for next steps

- Do not consider the design 'done' - instead, continuously seek improvements.
- Encourage team members to experiment with new ideas and approaches, creating a safe environment for testing and learning from failures.
- Use performance analytics to ensure iterative design decisions are informed by real-world user interactions, and that impact is measured to guide ongoing development and demonstrate value to stakeholders.
- Include both the 'happy paths' and less common scenarios when testing and iterating user journeys.
- Clearly communicate service changes and updates to users, and manage expectations by being transparent about the scope and limitations of your services.
- Regularly test the technical aspects of your service and ensure that solutions are driven by user needs, not just technological capabilities.
- Use different research methods like participatory design workshops, real-world testing, and usability studies.

Unsuccessful teams

1. Most teams did not allocate sufficient time for testing and iteration, rushing through service development stages without making substantial revisions based on user feedback.
2. Many teams failed due to inadequate user research, often using too small a sample size or focusing on a narrow user cohort, limiting the service's applicability and intuitiveness.

3. Some teams lacked a clear plan for iterative development, not effectively using user insights to inform service improvements or to address specific user needs and journeys.
4. Some teams were unable to demonstrate how user feedback influenced service design changes, lacking transparent mapping of iterative processes and evidence of responding to user input.

9. Create a service that protects users' privacy

Successful teams

Teams focused on ensuring robust security measures for protecting user data, with consistently thorough and proactive security strategies.

Success example

The 'Apply for your first provisional driving licence' team impressed the panel with their attention to data storage and retention, especially their careful handling of photo and signature data. They effectively separated image and meta information to ensure no Personally Identifiable Information (PII) was stored with images. The team also demonstrated a strong commitment to user privacy, considering cookie consent at an early stage and implementing a consistent approach across the agency.

Emphasising privacy in service design

1. All teams prioritised privacy throughout their service design, implementing 'Privacy by Design' principles.
2. Most teams engaged closely with data protection and compliance teams to ensure adherence to privacy standards.
3. Many teams integrated secure access and authentication models, such as those provided by GOV.UK platforms, to enhance user privacy.
4. Some teams planned to implement controls specifically to limit the exploitation of their services for unauthorised data extraction.

Regular reviews and proactive security measures

1. All teams conducted regular reviews of their Data Protection Impact Assessments (DPIA) and security protocols.
2. Most teams had Web Application Firewall (WAF) protection in place, actively monitored for potential threats.
3. Many teams conducted regular penetration tests and IT health checks to maintain high security standards.
4. Some teams implemented code scanning and checks before publishing, ensuring a high level of security in their software releases.

Addressing cybersecurity and user safety

1. All teams demonstrated a strong commitment to cybersecurity, with dedicated internal functions for continuous security checks.
2. Most teams regularly updated their security measures in response to CHECK penetration testing, adapting to identified vulnerabilities.
3. Many teams employed a range of vulnerability scanning tools, including static code analysis and OWASP compliance testing.
4. Some teams established clear escalation policies for dealing with security incidents, showing preparedness for potential breaches.

Integrating security in collaborative efforts

1. All teams worked collaboratively, integrating security measures into their shared development processes.
2. Most teams engaged with external cybersecurity experts and national security centres to enhance their security frameworks.
3. Many teams took proactive steps to consider risks in each user interaction within their services.
4. Some teams made conscious decisions to store sensitive security keys offline, separating them from cloud services to enhance security.

Continuous improvement and adaptation

1. All teams showed adaptability in their security measures, continuously improving based on new insights and changing requirements.
2. Most teams had strategies in place for periodic reassessment of their security posture, adapting to major architectural changes.
3. Many teams proactively planned for future security enhancements, demonstrating forward-thinking in cybersecurity.
4. Some teams showed innovation in security practices, employing techniques like automatic detection of vulnerabilities in third-party libraries.

Common recommendations for next steps

- Conduct regular Data Protection Impact Assessments and establish clear data retention policies.
- Implement multi-factor authentication and ensure application-level security checks.
- Develop robust processes for cyber attack recovery and data breach responses.
- Align security practices with GDPR and conduct regular security risk assessments.
- Engage with stakeholders for risk management and update security measures in response to evolving threats.
- Incorporate feedback from beta testing and penetration testing into security enhancements.
- Collaborate with cybersecurity experts and authorities for guidance and maintain up-to-date knowledge on security best practices.

Unsuccessful teams

1. Most teams lacked sufficient knowledge of threat sources and actors, which impacted their product development and operational processes.
2. Many teams failed to adequately address privacy concerns, such as the handling of session data and implementation of privacy policies.
3. Some teams neglected the necessary security measures, including regular IT health checks, robust user authentication mechanisms, and fraud prevention strategies.
4. Some teams showed a lack of understanding of GDPR requirements and the processing of special status data, particularly in services dealing with sensitive information.
5. Some teams did not effectively integrate security considerations into their service design, often overlooking the necessity of threat modelling and risk assessments.

10. Define what success looks like and publish performance data

Successful teams

Teams developed a comprehensive performance framework that covered the end-to-end service, including offline stages, and directly linked to outcomes and user needs for the service.

Success example

The 'Digital Trade Finance Service' team had an embedded performance analyst, who worked closely with service colleagues to create a full performance framework mapping user needs to benefits, hypotheses and KPIs. In addition to reporting mandatory KPIs (using Power BI and Qlik), the team aggregated metrics to create an overall 'User Satisfaction Index Score' that's been included in the business plan and will be a key indicator for the organisation.

Comprehensive performance frameworks

1. Most teams identified and used a range of KPIs tailored to their specific services.
2. Most teams developed detailed performance frameworks aligned with service outcomes and user needs, incorporating both online and offline stages.
3. Many teams demonstrated using their KPIs to identify service pain points and opportunities for improvement.
4. Many teams identified and measured key metrics beyond the mandatory indicators, often using innovative tools and technologies.

Data collection and analysis

1. All teams showed a strong commitment to integrating data analysis into the service development process.
2. All teams employed a variety of tools and methods for data collection and monitoring, including Google Analytics, Google Data Studio (now Looker Studio) and service management information data.

3. Many teams had performance analysts embedded within their service teams, ensuring close collaboration and real-time data use.
4. Many teams collected performance data throughout the service lifecycle, enabling analysis of historic trends and informing future improvements.
5. Most teams planned to enhance data accessibility and analysis through automation and self-service dashboards.
6. Some teams focused on segmenting data to evaluate performance for different user groups or service aspects.
7. Some teams planned to publish their data on platforms like data.gov.uk for transparency and wider stakeholder engagement.
8. Some teams focused on ensuring data privacy and security, particularly in the collection and use of Personal Identifiable Information (PII).

Future plans and innovations

1. All teams had clear plans for future data collection and analysis improvements, reflecting an ongoing commitment to service optimisation.
2. Many teams explored innovative ways to enhance data collection and analysis, such as implementing new technologies or methodologies.
3. Most teams recognised the importance of continuous improvement based on data insights and planned regular reviews of their performance frameworks.
4. Some teams demonstrated foresight in planning for potential changes in data collection regulations and user behaviour trends.

Common recommendations for next steps

- Establish baselines for KPIs.
- Regularly refine performance metrics focusing on value and quality.
- Engage with analysts to select relevant KPIs and address data representation issues to ensure accuracy.
- Use customer feedback and error data for service improvement.
- Publish mandatory KPIs on appropriate platforms.
- Benchmark new services against existing ones for effectiveness.
- Develop internal data quality standards for reliable decision-making.

Unsuccessful teams

1. Most teams lacked a clear definition of success metrics and failed to align them with user needs.
2. Many teams did not adequately track or use analytics to understand user behaviour and service performance.
3. Some teams struggled with integrating data from both online and offline sources to gain a comprehensive understanding of service efficiency and user satisfaction.
4. Some teams had not implemented mechanisms for ongoing user feedback to inform service improvements.
5. Some teams were challenged by the need to recruit performance analysts or to enhance performance analytics skills within their team.

11. Choose the right tools and technology

Successful teams

Teams prioritised the adoption and implementation of modern, cloud-based technologies and architectures for a forward-thinking, scalable and efficient approach to service delivery.

Success example

The ‘Energy Performance of Buildings Register’ team developed a cloud-native service that used a modern tech stack with open-source dependencies. The team strategically outsourced all commodity requirements to Software as a Service (SaaS), allowing them to concentrate on unique business needs.

Adoption of cloud technologies

1. Most teams adopted cloud-first approaches, using platforms like AWS, Azure and GOV.UK PaaS (prior to decommission).

2. Many teams focused on containerisation and serverless technologies for scalability and performance.
3. Some teams adopted infrastructure as code (IaC) and automation for reliable, fast deployment and recovery.
4. Some teams made use of cloud-native functions and tools for future-proof development and support.

Integration and use of modern tools

1. Many teams effectively integrated with existing government components like GOV.UK Pay and GOV.UK Notify.
2. Many teams adopted modern, widely-supported technology stacks for frontend and backend development.
3. Some teams emphasised the importance of using standard, well-known tools for monitoring and logging.
4. Some teams implemented microservices architecture for better scalability and component isolation.

Emphasis on security and data management

1. Most teams gave priority to security, adopting approaches like zero-trust principles and regular penetration testing.
2. Many teams ensured data isolation between processes and stakeholders for enhanced security.
3. Some teams focused on adopting technologies that support GDPR compliance and data protection.
4. Some teams used modern authentication methods and off-the-shelf security components.

Continuous improvement and adaptability

1. Many teams demonstrated a willingness to adapt technology choices based on user feedback and evolving requirements.
2. Some teams showed a proactive approach in updating and upgrading their technology stack.
3. Some teams planned for future technological shifts, ensuring their architecture was flexible and modular.
4. Some teams emphasised WCAG compliance and accessibility in their technological decisions.

Effective use of resources and cost management

1. Most teams emphasised using technologies that provide good value for money and support cost-effective service delivery.
2. Some teams focused on leveraging existing departmental or government-wide resources to avoid unnecessary expenses.
3. Some teams implemented cost-benefit analyses for technology choices, ensuring financial efficiency.
4. Some teams highlighted the use of commercial tools only when necessary, preferring open-source or government-provided solutions otherwise.

Common recommendations for next steps

- Focus on reducing and streamlining manual processes in existing services, re-evaluating the necessity of using multiple programming languages for services of low complexity.
- Explore replacing existing authentication solutions with more efficient alternatives, like GOV.UK One Login.
- Prioritise open technology and progressive enhancement approaches for accessibility and resilience, and consider the impacts of frontend technology choices on service accessibility.
- Avoid over-reliance on specific technologies, ensuring flexibility for potential future platform migrations.
- Consider adopting higher-level components, products and services for site functionality, balancing custom software development with the burden of support and maintenance.
- Be mindful of technology choices aligning with organisational standards, while staying open to recommending organisational changes for optimal solutions.
- Address challenges related to technology choices, like the uncommon use of certain technologies in the open-source community, and maintain flexibility in technology plans as user needs and requirements evolve.
- Continuously adapt working methods, especially during public beta phases, and ensure code allows easy updates to integrate with evolving tools like the GOV.UK Design System.
- Address non-functional requirements comprehensively, including service resilience, data integrity and performance monitoring.

Unsuccessful teams

1. Some teams required excessive manual intervention in software release pipelines, slowing down service iteration and delivery of value to users.
2. Some teams failed to ensure basic functionality without reliance on Javascript, hindering accessibility for users unable to run Javascript.
3. Some teams did not adequately test technical assumptions and designs, leading to complex and unproven solutions.
4. Some teams did not thoroughly test their integration with existing systems, resulting in uncertainty about system compatibility and cost-effectiveness.

12. Make new source code open

Successful teams

Teams embraced open-source practices and published code on platforms like GitHub, ensuring transparency, collaboration and reusability.

Success example

The ‘Claim Child Benefits’ team was commended for making their web interface’s front-end source code available under the Apache v2 license, a particularly notable decision given the service's handling of sensitive or protected data. They implemented an integration framework that securely encapsulated any sensitive or confidential information within the MDTP (Multi-channel Digital Tax Platform, HMRC’s PaaS based on AWS) protected area, thereby isolating it from public-facing interfaces.

Open source development practices

1. Most teams worked actively in the open, publishing code on platforms like GitHub, with exceptions only for sensitive components like fraud prevention algorithms.
2. Many teams used open-source software and frameworks for frontend and backend development, ensuring transparency and community engagement.

3. Many teams had a clear roadmap and policies for open-sourcing, planning the release of code in advance.
4. Some teams established clear criteria for responsible open-sourcing of new repositories, particularly in sensitive areas like national infrastructure.

Collaboration and community engagement

1. Many teams demonstrated enthusiasm for contributing to existing open source projects, furthering technology discussions through blog posts and community interactions.
2. Some teams made efforts to design systems that allow other organisations to easily replicate their solutions, enhancing cross-departmental collaboration.
3. Some teams emphasised sharing code for common components, fostering a culture of reuse and collaboration across government departments.
4. Some teams integrated their open source strategy with their contractual arrangements, ensuring provisions for open sourcing are included.
5. Some teams were working with security teams to shift organisational attitudes towards open-sourcing, benefiting wider service standards and practices.

Security and privacy considerations

1. Most teams were mindful of security concerns, making rational decisions about what code to open-source, particularly around internal application workings.
2. Many teams addressed secrets management effectively, ensuring sensitive information like credentials was not exposed in public repositories.
3. Some teams had strategies for coding in the open while maintaining privacy for backend services and sensitive data.
4. Some teams had developed processes to ensure that open source repositories do not contain sensitive information, using automated testing and review protocols.

Infrastructure and tools for open source

1. Many teams used platforms like GitHub and GitLab for hosting and managing their open source code, taking advantage of these platforms' collaborative features.
2. Some teams used infrastructure as code (IaC) principles and GitHub for repository management, facilitating transparency and efficiency.
3. Some teams took advantage of additional tools and workflows provided by platforms like GitLab, enhancing their DevOps practices.
4. Some teams embraced open source libraries and components in their infrastructure, like the use of Laravel in service implementation.

Common recommendations for next steps

- Ensure public code meets government quality standards.
- Use modern development tools like Git/GitHub.
- Contribute valuable code to the open-source community.
- Package reusable code for broader service use.
- Describe repositories for transparency.
- Review and update open-source policies regularly.
- Implement security measures in the development pipeline, like vulnerability scanning.
- Consider publishing remaining closed-source code.
- Balance code security with open-source development benefits.

Unsuccessful teams

1. All teams faced challenges with open sourcing their code, often due to delays in establishing repositories or unclear policies.
2. Many teams struggled with ensuring proper licensing and copyright notices for open-sourced code, reflecting a lack of understanding of open source requirements.
3. Most teams lacked sufficient documentation for their open-sourced code, making it impractical for others to use.
4. Some teams failed to separate sensitive configuration data from functional source code, risking security breaches.
5. Some teams did not adhere to government standards for open sourcing, demonstrating a gap in compliance with established protocols.

13. Use and contribute to open standards, common components and patterns

Successful teams

Teams implemented common platforms and shared components, especially those from GOV.UK like Notify and the Design System.

Success example

The ‘Close a company’ team built their service on well-supported technologies in the tech community, adhering to best practices in web app development such as RESTful architecture, the OpenAPI standard and ISO8601 date format. They used established government components and technologies like the GOV.UK Design System and GOV.UK Pay.

Common use of government platforms

1. Most teams extensively used components like GOV.UK Notify, Pay, and the Design System, enabling standardisation and seamless integration.
2. Many teams actively engaged with digital identity programmes, using shared platforms for authentication and identity assurance.
3. Some teams used platform-provided features for essential functionalities, such as login and client certificate issuance.
4. Some teams enhanced user experiences through their architecture, like quicker front-end journeys due to service decoupling.

Open standards and shared components

1. Many teams committed to open standards like OpenID Connect and OAuth 2.0 for authentication, ensuring interoperability and security.
2. Some teams contributed to the wider development community, sharing experiences and code, such as contributions to the Ruby community.
3. Some teams worked closely with other organisations to standardise and share code elements, fostering a culture of collaboration.

4. Some teams explored experimental design patterns and contributed bespoke solutions to the cross-government design community.

Continuous improvement and community engagement

1. Most teams showed a strong commitment to continuous improvement, involving themselves in government API groups and updating their services regularly.
2. Many teams shared their components and learnings with other teams and the wider community, including sharing APIs and feedback mechanisms.
3. Some teams established effective processes for publicising their contributions and sharing good practices with other organisations.
4. Some teams developed new technologies while adhering to GDS and other recognised standards, ensuring a consistent approach to technology development.

Integration and reuse of technologies

1. Most teams made use of common or shared components, both from within their organisations and external sources, maximising efficiency and avoiding duplication.
2. Many teams adopted a cloud-first approach, using resilient and widely supported configuration management tools like Terraform and Puppet.
3. Some teams chose widely used programming languages and frameworks for their codebases, such as Node.js and Java, aligning with government technology standards.
4. Some teams took proactive steps to integrate with and contribute to common platforms, ensuring their services are robust and maintainable.

Emphasis on security, privacy and accessibility

1. Most teams prioritised security and privacy in their development processes, choosing technologies that enhance these aspects and comply with government standards.
2. Many teams ensured accessibility in their services, using design systems and patterns that meet WCAG standards and prioritise user needs.
3. Some teams used standard hosting patterns on cloud providers, enhancing operational resilience and security.
4. Some teams developed robust authentication mechanisms and regularly performed security assessments to ensure the integrity of their services.

Common recommendations for next steps

- Advocate for organisational culture change around standards and platforms.
- Use the GOV.UK Design System and contribute back any findings.
- Explore replacing existing authentication solutions with efficient alternatives.
- Lessen reliance on existing components for service flexibility.
- Regularly update and contribute to open standards and common components.

Unsuccessful teams

1. Most teams showed a need for better integration or planning in the use of open standards and common components, affecting interoperability and future flexibility.
2. Most teams neglected to properly document and strategise long-term data management, including how data is stored, transformed, and integrated across systems.
3. Many teams overlooked the importance of contributing to and aligning with broader government initiatives, such as the Open Standards Board or GOV.UK platforms.
4. Some teams lacked a clear plan for the reuse of developed components and systems, missing opportunities for efficiency and collaboration with other teams.

14. Operate a reliable service

Successful teams

Teams focused on ensuring the reliability and stability of their service, including critical aspects like alerting and monitoring, protection against threats, and regular security testing.

Success example

The ‘Declare your business trade and cost information’ team used a wide range of tools to monitor their service, including Kibana to visualise data held in logs, PagerDuty to provide alerts on service incidents, Grafana and Pingdom. They aligned to Azure uptime commitments of 99.9% availability, and maintained a paper-based journey if the digital service is unavailable.

Planning and testing for reliability

1. Most teams effectively planned for service reliability, focusing on traffic estimation, performance, and stress testing.
2. Many teams implemented comprehensive disaster recovery and business continuity plans.
3. Some teams designed services with scalable cloud infrastructure and auto-scaling capabilities.
4. Some teams prioritised multichannel avenues to ensure users could complete their journey in case of extended downtime.
5. Some teams conducted extensive testing, including security, performance, and accessibility reviews, both internally and externally.

Innovative use of technology

1. Most teams used modern cloud technologies like AWS Lambda to handle variable traffic profiles efficiently.
2. Many teams adopted containerisation and microservices architecture to enhance service resilience.
3. Some teams made good use of managed public cloud services and high-availability hosting to ensure service robustness.
4. Some teams implemented innovative solutions like event-driven architecture and identity/payment broker systems for flexibility and redundancy.

Monitoring and support

1. Most teams established robust monitoring systems using tools like Kibana, Grafana, and PagerDuty.
2. Many teams had 24/7 support systems in place, with real-time monitoring to minimise system outages.

3. Many teams collaborated with other teams for out-of-hours security monitoring and shared resources for efficiency.
4. Some teams developed clear communication strategies and escalation processes for incident management.
5. Some teams integrated their services with reliable government-backed services and consulted with site reliability engineers.

Strategic resource management

1. Most teams identified and planned for additional roles and resources needed during different service phases.
2. Many teams made significant financial investments in their teams and services, ensuring long-term viability.
3. Some teams transitioned service delivery to specialised teams or departments for better focus and efficiency.
4. Some teams prioritised cost-effective strategies to balance service availability with budget constraints.

Continuous improvement and adaptation

1. Most teams adopted continuous integration/continuous deployment (CI/CD) pipelines for efficient service updates.
2. Some teams used automated testing and quality assurance practices to maintain high service standards.
3. Some teams engaged in proactive research and development to anticipate and adapt to future service requirements.

Common recommendations for next steps

- Evaluate traffic increases based on realistic hypothetical events, ensuring service resilience under peak loads or in case of incidents like denial of service attacks.
- Improve public beta service performance by addressing slow responses and error rates.
- Seek long-term server solutions and support arrangements for sustainable service operation.
- Integrate offline processes into the broader service resilience strategy.
- Maintain flexibility in technology choices to enable future platform migrations.
- Conduct regular light incident drills to establish robust incident management processes.

- Monitor and adapt services to manage demand peaks, especially during critical periods like elections.
- Ensure technology stack management is efficient and meets capacity requirements.
- Develop and maintain a comprehensive plan for monitoring, alerting, and support, including handling out-of-hours queries.
- Regularly conduct penetration and load testing to assess system security and capacity.
- Keep documentation accessible and updated as part of ongoing service development.

Unsuccessful teams

1. Most teams needed to ensure proper agreements and support structures were in place before services go live.
2. Many teams lacked clear disaster recovery plans and failed to consider potential service interruptions.
3. Some teams did not have adequate monitoring tools and KPIs to assess new features or architecture impacts.
4. Some teams lacked a clear team structure for delivering and supporting live service operations.
5. Some teams were overly reliant on new hires or external partners for service delivery, posing high risks.
6. Some teams lacked comprehensive plans for managing service transitions and scaling, leading to potential "big bang" release issues.

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