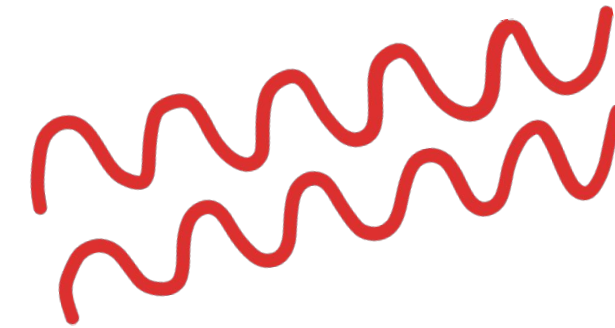


thoughtbot Service Definitions



Rapidly validate your idea

You can't seem to get that new product out of your head but before you move forward, you and your stakeholders need to understand whether there is a real market need. With rapid validation and prototyping, thoughtbot's early-stage product strategists will work with you to quickly prove whether or not to advance to the MVP stage, and get you started.

Advance your team and improve product performance

As you reach new levels of growth, your product hits new pain points. Bring on thoughtbot to embed with your team and ease transitions through scaling challenges while maintaining and accelerating momentum with test-driven development and user focused design. Your team, and your users, will thank you.

Build world-class products

Your company's growth depends on innovation that forges new and exciting business opportunities. thoughtbot has the most reliable cross-functional team of product experts. We help you take advantage of today's new technologies, agile best practices, and deliver enhanced user experiences. Our goal? To successfully launch your new offering, while guiding you into a future-forward business.

Safeguard your code and architecture

Making compromises comes with the job of being a technical leader, but it can lead to more tech debt and less DevOps coverage than you're comfortable with. thoughtbot offers DevOps, Site Reliability Engineering, Maintenance, and Code Audits to unblock your team and ensure your product's long-term health.

WE OFFER AND RECOMMEND SEVERAL SERVICES DURING PRODUCT DISCOVERY & VALIDATION AND MVP DEVELOPMENT

Product Design Sprint

Upon the start of the engagement, we will undergo a week-long, highly collaborative, ve-phase process to quickly de-risk, prioritise, and validate the MVP. We'll converge on a conceptual prototype to test with your target caregiver audience(s). The phases include:



PHASE 1

Understand

Develop a shared understanding of the working context, including the problem, the business, users and the user's journey, the value proposition, risks, assumptions, and the denition of success.



PHASE 2

Diverge

Develop and question functionality, problems, and solutions. This gives us a baseline of ideas and visuals with which to evaluate and identify the most viable solutions.



PHASE 3

Converge

The team converges on the best solutions exposed in phases 1 and 2, and comes up with a realistic prototyping storyboard. We hone an assumptions table to guide our prototyping and testing phases.



PHASE 4

Deployment

Build a prototype to test with potential users to learn about specific unknowns and assumptions. A clickable prototype built with Figma, Frammer, Marvel, InVision, and simple HTML/CSS is a common outcome.



PHASE 5

Test & Learn

Test our assumptions with potential users to validate or invalidate risky assumptions, uncover basic usability issues, and get a solid understanding of priority and direction to kick-off the next part of the project.

Design Sprint Outputs

At the end of a sprint, we will have:

- The knowledge and deliverables developed during the sprint, including research, sketches, and interviews, relating to an initial version of the product.
- A list of assumptions and risks.
- A clickable prototype with feedback from caregivers validating or invalidating assumptions.
- A roadmap for the development of a more robust product.
- A prioritised backlog of jobs-to-be-done.
- Refined, informed estimates for the development of the product.



Research-Based Cloud Solutions

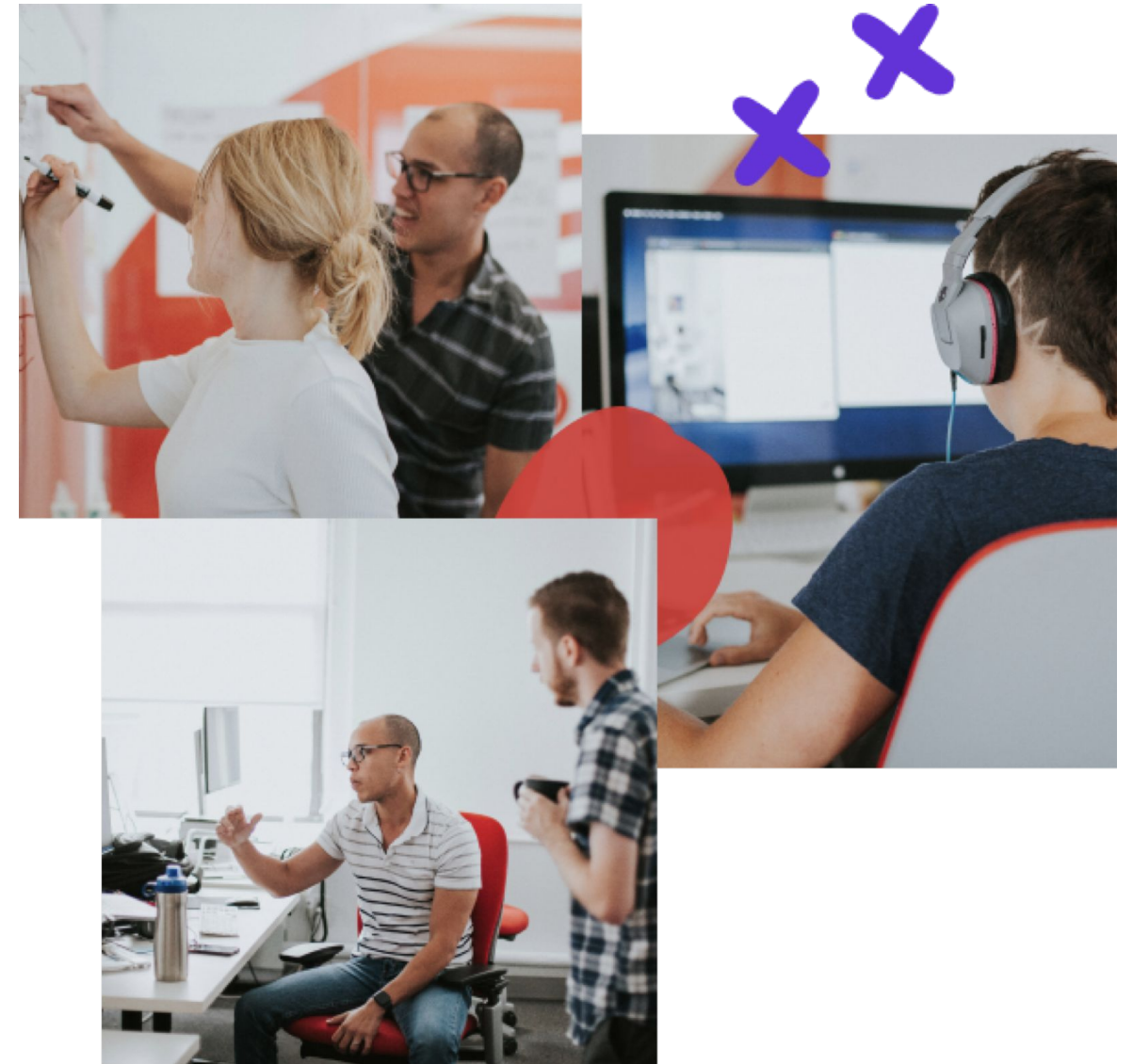
Generate market insights and understand users' problems

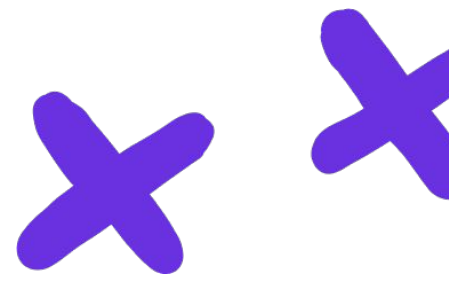
Before starting to build products, we conduct research to ensure that the product users' problems are worth solving and to fuel practical solutions. Research helps narrow down the number of assumptions that we're making while building.

Hearing the perspective of several users allows us to solve for a group rather than focusing in on one or two specific use cases. Above all, we'll be able to move to a successful solution faster.

Ongoing Support for Cloud Design & Development

If a client team is interested in thoughtbot moving forward with additional design and development efforts beyond an MVP launch, we would staff a dedicated team to work through the identified roadmap in highest priority order. We have the expertise to support product strategy, user research, design, and development. We are comfortable owning a product iteration in its entirety or embedding with a team directly.





The value of a cross-functional team

A cross-functional product team brings efficiency, structure, and a reliable action plan for your new product idea. Working collaboratively, our designers, developers, and product manager bring product strategy, user experience, and technical solutions together to solve an identified problem. The team is able to:

- Look at a problem from multiple perspectives
- Quickly determine the best course of action
- Pivot quickly when needed
- Reduce your greatest risk factors
- Launch a successful product

Begin with Discovery

We begin the project with foundational work that will provide the basis for strategy and implementation. The goal is to gain insights from user research, validate initial concepts of the product vision, provide an initial Minimal Viable Product (MVP) roadmap, and provide recommendations for design and technology considerations.

We draw from a variety of activities to organise a bespoke Discovery Sprint and what the client could expect to learn or gain from each. Following our first few days together, the project team will make a recommendation on which activities would be the most productive for the group. We generally follow this now:



Product Deliverables

- A clickable, static prototype of the critical path, tested with target users.
- Initial backlog of first version product roadmap
- A critical path for primary user workflows aligned with jobs-to-be-done
- Initial UI/UX of design workflows



Technology Deliverables

- Final presentation showcasing product strategy and recommendations for future implementation.
- A revised project plan
- A revised estimate on the next stage of product evolution



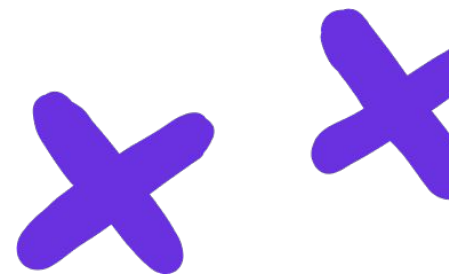
Business Deliverables

- Technology recommendation for foundational product (language / framework).
- Architecture mapping diagram

Week 1: Background research

Week 2: Product Design Sprint

Week 3-4: UI/UX Workflow, Architecture Mapping, Initial Backlog



Site Reliability Engineering (SRE)

For projects with serious reliability and operations needs, we can assign a full time SRE to your team. We assess each client opportunity to ensure alignment with our tech stack and scheduling constraints. Our goal is to establish the tenets of SRE within a product team, enabling the team to manage SLOs and error budgets on their own. We then move into the background, providing on-call and long term support.

SRE Baseline

Consultant will introduce core tenets of Site Reliability Engineering, including working with stakeholders to establish Service Level Indicators and Objectives and an Error Budget. Documentation and training to implement and follow capacity planning will be provided. Deliverables include:

- Create AWS managed instances of Grafana and Prometheus.
- Introduce metrics in the application and cluster for measuring Service Level Indicators.
- Create Prometheus alerts to page on-call support when Service Level Objectives are not being met.
- Create Grafana dashboards to visualize SLOs and Error Budgets.

Pricing structure: Based upon a per person, per hour rate



SRE Monthly DevOps & Maintenance Support

Following completion of an SRE Baseline engagement, thoughtbot can move into a monthly support structure, working through the most important updates in priority order and tackling any new items that are raised.

Pricing structure: Based upon a monthly rate to reserve an on-call Site Reliability Engineer who performs routine maintenance and planning.

Establishing new pipelines, adding new components, xing bugs, and other development tasks: Based upon an hourly or per day rate, depending upon the extent of the need.

| Ongoing Maintenance Tasks | Server infrastructure tasks | Service level maintenance and interventions |
|--|--|---|
| <ul style="list-style-type: none">• Monitor running instances and intervene when the application isn't responding.• Monitor error notifications and intervene when the application isn't working.• Provide ongoing support to the Client team for questions about the functionality and operating of the system.• Implement small bug fixes and feature requests.• Discuss, scope, and provide estimates for new features and improvements that exceed the bounds of this monthly maintenance agreement. | <ul style="list-style-type: none">• Perform regular capacity planning and warn developers when resources are nearing capacity.• Maintain CI/CD pipeline for staging and production environments.• Maintain Dockerles or other configuration for running services in a containerized environment.• Upgrade components in the cluster and workload platform as necessary.• Monitor running infrastructure and intervene when essential services aren't responding• Add new metrics and alarms as necessary.• Scale up services as required to handle application traffic | <ul style="list-style-type: none">• Intervene on service alerts, outages, bugs, and all other issues affecting the reliable operation of Client's systems within 12 hours.• For clients that meet our prerequisites, we can provide clients with 24x7 monitoring and support to make sure their applications are always available.• Intervention may include applying bug fixes, workarounds restarting or xing services• Due to the dependence of Client on 3rd party services and hosting infrastructure, we will provide our best-effort to deal with 3rd party issues or outages, but the ability to successfully intervene within a certain amount of time cannot be guaranteed for all issues. |

DevOps Services

DevOps is wide-ranging and includes the following subset services:



Expert Cloud Migrations

thoughtbot will migrate client servers to a flexible and dependable solution in the cloud with Amazon Web Services, or another appropriate provider such as Azure, and ensure that the client's infrastructure is configured appropriately.



Security and Compliance

We have the DevOps experience and partnerships to handle special considerations like HIPAA, FINRA, SOC 2, and PCI



Capacity Planning and Performance Monitoring

thoughtbot proactively protects clients against spend creep by continually monitoring server usage performance over time.



24x7 Support for Clients Who Meet Prerequisites

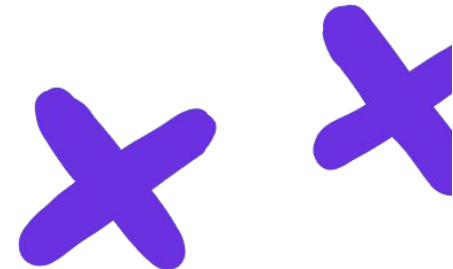
For clients that meet our prerequisites, we can provide clients with full around the clock monitoring and support for their applications to make sure they are always available.

When providing DevOps services, our goal is to integrate developers from the product team to avoid creating a silo of operational information.



Support and maintenance

We break down the process for Support & Maintenance into two phases. We begin with a code audit and recommendation in Phase I and move on to monthly maintenance and support in Phase II.



Phase I — Code Audit, Onboarding & Recommendation

thoughtbot begins by performing a code audit on your entire platform as the initial orientation. We take a deep dive to understand the code quality's current state, and opportunities for optimisation, and identify any remediation steps to resolve before maintenance can begin. We'll examine:

Code

- Quality at the source level
- Code organization and complexity
- Code churn
- Bug-fix triage needs, if any
- Existing test coverage and areas for improvement
- Use of best practices
- Vulnerabilities and external dependencies

Process (Optional)

- User Story quality
- Documentation needs
- Test-driven development processes
- Priorities
- Backlog

The output of this Phase I is a written and verbal recommendation on the project plan to strengthen your foundation, optimise the code structure, test suite, and architecture. The recommendation will include a plan to complete updates, provide a timeline, proposed stang, and overall investment. Any items that are deemed not critical will be prioritised in the support backlog. The execution of our project plan will likely fall in the 1 - 4 week range.

Ongoing Maintenance & Support

Following the upfront audit and onboarding, thoughtbot moves into a monthly support structure. We work through the most important updates in priority order and works to tackle any new items that are raised.



Prerequisite

thoughtbot has the following prerequisites for our clients on ongoing maintenance:

- Ruby and other dependencies upgraded to the latest versions.
- Test coverage is adequate for day-to-day maintenance and operation of the system and all tests are currently passing.
- Error notifications and performance monitoring are already in place.

If any of the above are not true, we would include them as a part of the recommendation.



Maintenance Task

- Regularly upgrade to the latest version of Ruby on Rails.
- Perform regular code audits and make improvements or recommendations.
- Automate security audits and update dependencies as necessary.
- Perform regular performance audits and recommend/make improvements.
- Monitor running instances and intervene when the application isn't responding.
- Monitor error notifications and intervene when the application isn't working.
- Provide ongoing support to your team for questions about the functionality and operation of the system.
- Implement small bug xes and feature requests and feature requests.
- Discuss, scope, and provide estimates for new features and improvements that exceed the bounds of this monthly maintenance agreement.

○



Infrastructure

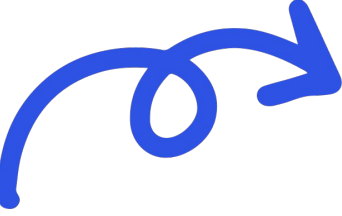
- Maintain server infrastructure.
- Maintain CI/CD pipeline for staging and production environments.
- Maintain Dockerles or other configurations for running services in a containerized environment.
- Monitor running infrastructure and intervene when essential services aren't responding.
- Add new metrics and alarms as necessary.
- Scale-up services as required to handle application traffic



Prototype

Depending on the agreement with the client, thoughtbot will intervene on service alerts, outages, bugs, and all other issues affecting the reliable operation within 12 hours. Intervention may include applying bug

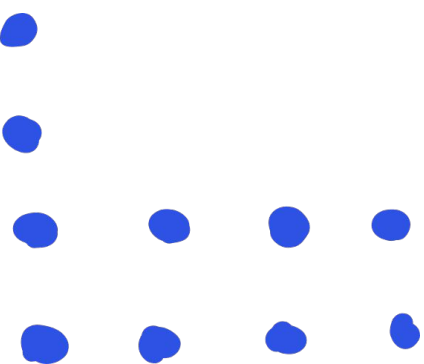
fixes, workarounds, restarting or fixing services. For clients that meet our prerequisites, we can provide 24x7 monitoring and support for their applications to make sure the applications are always available. For any third-party services and hosting infrastructure, thoughtbot will provide our best effort to deal with the third-party issues or outages; however, the ability to successfully intervene within a certain amount of time cannot be guaranteed for all issues.



Pricing Structure

| PHASE | INVESTMENT |
|--|--|
| <ul style="list-style-type: none">Phase I — Code Audit, Onboarding & Recommendation (1-4 weeks)Phase II — Ongoing Maintenance & Support | <ul style="list-style-type: none">Rate / hourRate / month |

We assess and scope each client's needs in order to align on tech stack, onboarding, and scheduling requirements.



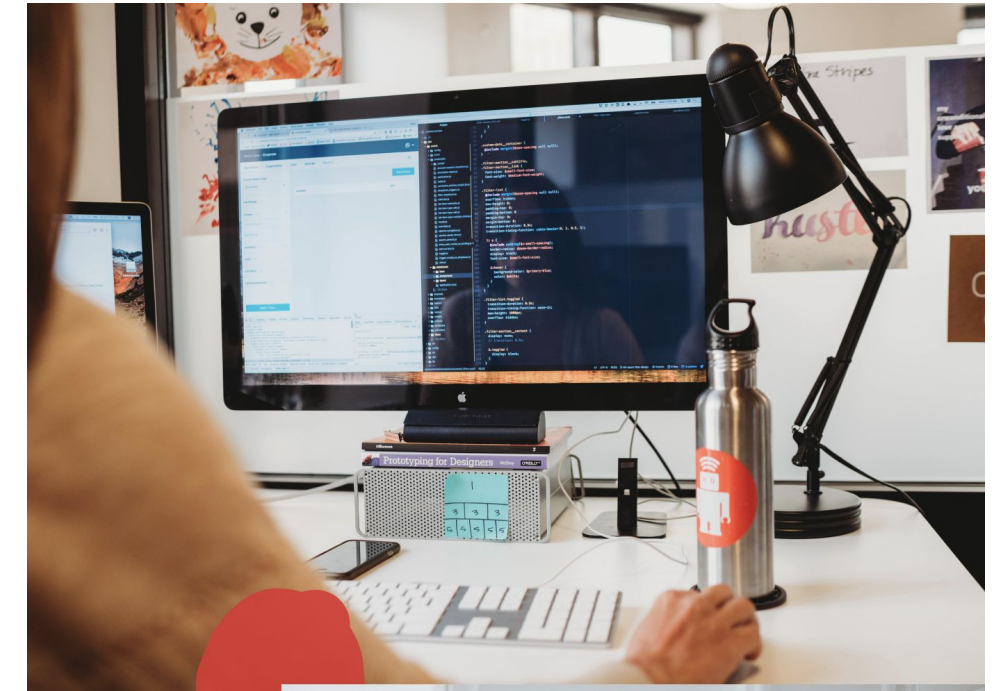
Project Onboarding

thoughtbot will spend the first week of an engagement getting a download of the current landscape and challenges and any progress made during the previous phases of the project. Our goal will be to frame the problem, opportunity, and proposed solutions and ask questions to get consensus on next steps. From there, we will document our understanding by capturing both technical and user needs.

We will map product features to a technical consideration and track our assumptions and any risks along the way. We conduct any necessary research to understand the technical feasibility and implications for the project, while constantly checking in and communicating with the client team about our findings and next steps.

We'll get to know your teams, dynamics, challenges, workows, and goals in conjunction with the product. This will help us understand how the product needs to interact with other business processes and technologies.

Clients can help our combined team be successful by communicating transparently, giving thoughtbot access to all project resources, and appointing a Product Owner who is available to answer any questions.



Software Development Process

Our team is equipped to introduce new development best practices within existing engineering teams by working with our clients' technical leaders to identify skill and process gaps, and then draft and execute on a plan. This most frequently includes introducing or improving processes around:

- TDD within an existing codebase
- CI/CD pipelines
- Code review culture
- Automations (Prettier, ESLint, StandardRB, Rubocop, AccessLint)
- Review branches for feature acceptance



Find out more about our services
thoughtbot.com/services

Technologies

Following completion of an SRE Baseline engagement, thoughtbot can move into a monthly support structure, working through the most important updates in priority order and tackling any new items that are raised.

| Front-End | Back-End | Cloud Services |
|---|---|--|
| <ul style="list-style-type: none">• React• Elm• Stimulus• Angular• Javascript• Scala | <ul style="list-style-type: none">• Ruby on Rails• Python / Django• Java• Elixir and Phoenix | <ul style="list-style-type: none">• AWS• Azure• Others upon consultation |

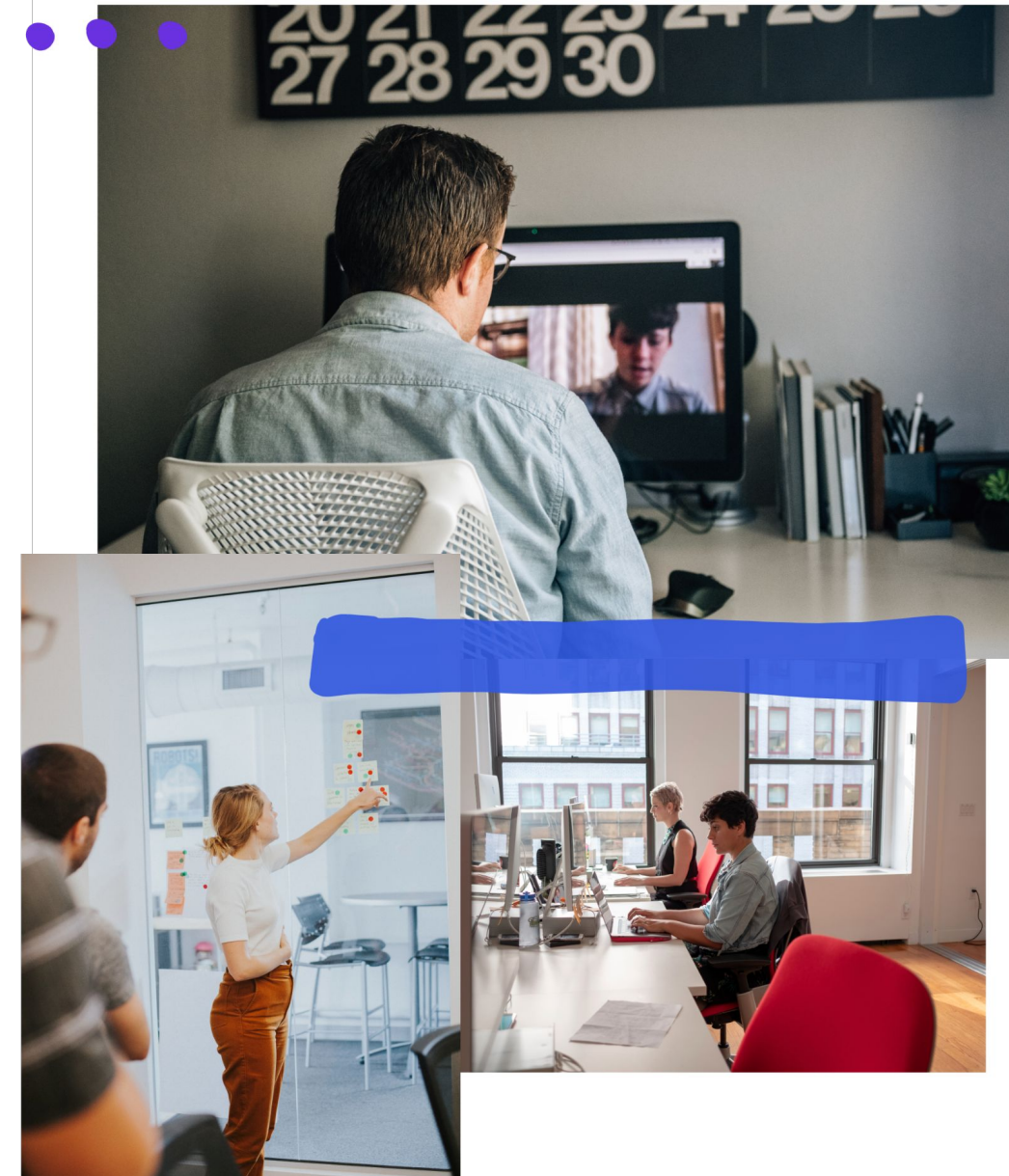
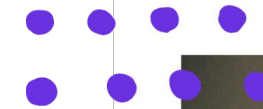
See our full Skills list on our SFIA Rate Card document.

Approach

We're happy to work within your development processes whenever possible. In the absence of a particular process, we follow our own best practices:

- We work in weekly iterations. This includes product design, application development, usability testing, pair programming with your team members, and other necessary tasks.
- We are strict about Test-Driven Development. When we touch legacy code, we often add test coverage or refactor.
- We code review in feature branches.
- We have a weekly retrospective / planning meetings.
- We have daily sync-ups in-person, over video conference, or in the project's group chat room.

Our approach is described in more detail in <https://thoughtbot.com/playbook> and <https://github.com/thoughtbot/guides>.



Working Well Together

Clients often want to know what is expected from them to make a partnership the most successful.

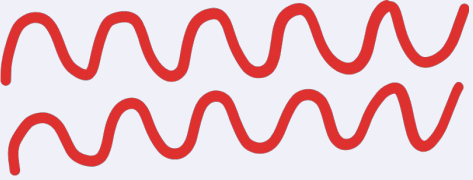
The answer can be summed up in a couple of words:

- **Available**—The client decision-maker or Product Owner is involved in all of the standing meetings. They ensure the feedback loop stays intact and roadblocks, updates, and changes in direction are quickly shared and acted upon.
- **Open**—As a consultancy, our deliverables are not only digital products, but processes and ways of working. When the client team is open to change and learning to work together, it builds trust which allows us to do our best work.
- **Communicative**—Clients who consistently participate in standing meetings experience greater success by giving and receiving information transparently and being fully bought-in to the team. This includes raising concerns, asking questions, and celebrating wins.

Additionally, thoughtbot seeks partners who are honest, kind, and aligned with [our values](#) including DEI.



About thoughtbot



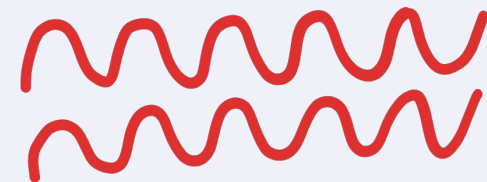
thoughtbot is known worldwide as a leading design, development, and product management consultancy providing end-to-end services along the complete product development life cycle. thoughtbot validates, builds, scales, maintains, and supports web and mobile products. As your ideal partner in launching a new product or improving an existing product and team, we use an agile, human-centered strategy for digital products in every stage from upfront research, through design and development.

One of the leading design and development companies in the world, since 2003 thoughtbot has produced high-quality products while improving team processes and have done so successfully for more than 1,000 clients. Former and current clients include: Blinkist, Etsy, MoMA (Museum of Modern Art), British Business Bank, Escape the City, Immersive Labs, Advocacy Institute, MIT (Massachusetts Institute of Technology), Groups Recover Together, DigitalOcean, Pittsburgh Cultural Trust, Harvard Business Review, Tile, EdX, Groupon, Steel Warriors, The Cleveland Orchestra, carwow, Massachusetts Bay Transportation Authority, Tulsa Public Schools, HouseParty and many more.

Our teammates are experience consultants who have contributed to public sector projects and are familiar with GDS standards and other public sector requirements and work flows.

We would welcome the opportunity to partner with your team next.

See [Clutch Reviews](#) for client ratings.





Questions or more information:

Visit thoughtbot.com

GOV.UK Digital Marketplace

principle contact:

Kirsten Hurley | kirsten@thoughtbot.com