VSP Developer Experience Needs Finding

Discovery Sprint Observations: March 4, 2020

Introduction

Goal | Research

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Get direct feedback from VFS teams about their development experience with the VSP platform to inform product planning & prioritization for the FE Tools, BE Tools, and Ops teams.

Introduction | Research

- Qualitative needs finding interviews
 - o 6 VFS teams; 13 Engineers, PMs, Designers

• Target topics:

Review Instances, Test Accounts, Feature Toggles

Additional topics Discussed:

PR process, Documentation, Communication, Forms,
 Deployment, Backend Tools, SOCKS proxy

Findings

PRs | Review Instances | Features Toggles | Communication | Documentation | Test Accounts

Pull Request Process

Including automated checks, code reviews, and merging to Master.

"Backend merge process is so painful... It's cost me days [of productivity] so far."

 A race to keep up-to-date with Master when automated checks take so long.

"There's no set of expectations for the code review you're going to get, it depends entirely on the person...Some are cursory, some are very detailed."

- Causes re-reviews to conflict or ask for unexpected revisions.
- Reviews (especially BE) are taking too long through the normal process.
 - Exceptions handled in Slack are more likely to be promptly resolved.

56 Observations

Review Instances

Including overall development review process.

"I've heard a bit of chatter about review instances, but haven't invested the time"

- Broad uncertainty around capabilities & collaboration best practices.
- Confusion with Heroku instances
- Used infrequently due to limited access for non-engineers (SOCKS).
- Almost all testing & review happens on Staging today.
 - Contributing to code review frustration.
- Limited applicability to some work due to data pipeline.

39 Observations

Feature Toggles

Including production flags.

"To be honest, I don't want to use them because it's just code that you have to add in and then take away later"

- Widespread confusion around when, why, and how to set up, use, and remove feature toggles
- Avoided entirely by many teams
 - "[It takes] a whole 'nother level of effort to get a feature toggle pushed out"
- Feature toggles not compatible with some types of changes that should be staged
 - o e.g. Drupal
- Documentation confuses feature toggles & production flags.

34 Observations

Communication

& collaboration cycle across teams.

"We should be applying HCD to work we do for teams, not just our veteran audience"

- Slack can't do it all
 - Impossible to track conversations over time, or to revisit old topics.
 - Hard to get closure.
 - Important info is easily missed.
- No way to track the outcomes of requests & escalations
- Not knowing who's responsible for something makes clarification/escalation very difficult

40 Observations

Documentation

Docs, docs everywhere...

"As long as it's in a single location, I don't care what format the information comes in"

- Impossible to track a subject across repo & time
- Documentation feels unorganized & difficult to find
- Unclear what to do for troubleshooting help when the documentation doesn't resolve issue.
- "Really weird to me to have documentation maintained by a team that's separate from the engineers that are using the documentation"

24 Observations

Test Accounts

Staging & review.

- Finding the right test account(s)
 happens once at the start of a project.
 - for authenticated experiences with specific account data needs.
 - This is not a burden to most engineers.
 Many never use them at all.
 - Teams coordinate test account(s) used during development
 - Noted on issues, or shared in Slack
- Simple authenticated experiences are reviewed using (one of) a few stored credentials
- General lack of clarity on test account capabilities & creation process.

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Observations

Other Topics

These topics were discussed, but in fewer interviews, with fewer observations.

Click each topic to view details in Appendix.

- Forms
- <u>Deployment Process & Monitoring</u>
- Backend Tools
- SOCKS Proxy
- <u>Design System</u>

Appendix

Other Topics | Observation Data

Topic

Forms

JSON form builder.

- Works well for simple forms
- Not well suited to complex forms
- Documentation should be improved

6 Observations

Deployment Process & Monitoring

On Production

- Due to the complex tech stack, effectively deploying simple changes is more complicated than it needs to be.
 - Frustrations include: library updates, feature toggles, CMS

5 Observations

Topic

Backend Tools

Backend platform functionality

- Frustration with review instances not being able to contact desired APIs
- Too little visibility into real-time VSP backend metrics.
 - o Don't know when to flag problems.

3 Observations

Topic

SOCKS Proxy

Corresponding frustrations.

- Lack of access prevents
 non-engineers from using Review
 Instances to see changes before they
 go to Master and can be seen on
 Staging
- "Would be good to have non-technical instructions"
 - Some people have no idea how SOCKS access works, nor how to get it

2 Observations

Design System

Reusable JS components.

- The current stewardship process for updating the design system doesn't handle the full breadth of reused components and patterns.
 - Designed patterns have been independently replicated without the consistency or efficiency of reusable components.
 - Feeling that the burden & time to update the design system is too great & opaque.

3 Observations

Appendix | Observation Data

Selected observation data can be viewed in Airtable.

