



Boost Your Team's Bus Factor: Creating Docs That Work

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Before we get started



- No need to write down or take pics of slide deck content
- Presentation link:
<https://shorturl.at/cuNLn>
- Please stop me at any time to ask questions

Agenda

- Introduction
- Bus Factor
- Why do we need this
- Story Time
- What makes documentation effective (and not)
- What needs to be covered
- Who writes and maintains this
- How do you write it
- Questions

Thank you!

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Gold



Silver



Coffee Break



Introduction

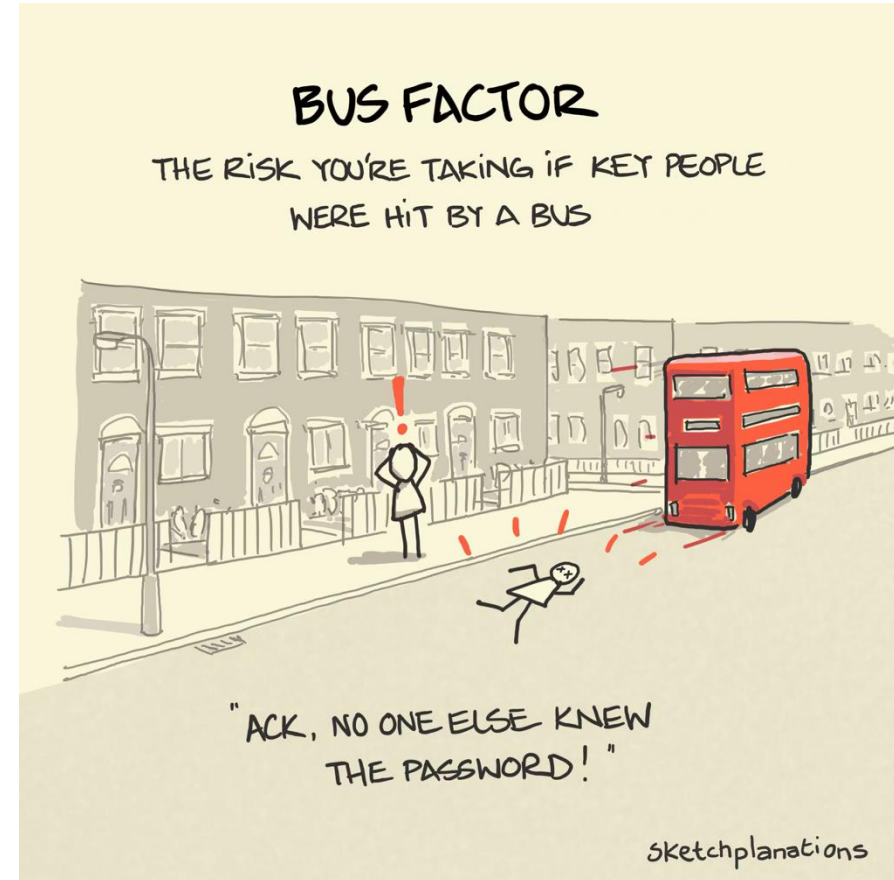
- 36+ year career (I'm getting old)
- Several development projects for multiple companies
 - IBM, Lexmark, Diebold, Limited Brands, Sterling Commerce, IBM (again), Leading EDJE, Crown Equipment Corp, Wendy's, Improving, Ohio State, Abercrombie & Fitch, Root Insurance, Sherwin-Williams, AWS, Lark Health
- Worked with several teams with very effective documentation 😊
- Worked with several teams where there was little to no documentation (and wrote docs for them) 😞
- Who are you?

About Improving

- Modern digital services company and trusted AI expert for Fortune 500 and Global 1000 enterprises
- Software consulting, development, near sourcing, training
- Dedicated to building and advancing a great work culture that fosters trust and exemplifies teamwork, excellence, and fun
- Core values
 - Excellence
 - Involvement
 - Dedication
- Offices across the country including Ohio. Also in Mexico, in Argentina and in India

Bus Factor

- Measures how many team members could become unexpectedly unavailable (e.g., hit by a bus) before a project is critically impacted
- A **high bus factor** means knowledge and responsibilities are well-distributed across the team
- A **low bus factor** signals dependency on a few individuals, increasing project risk




Why do we need this?

2024 Stack Overflow Developer Survey

- Knowledge silos where one individual or team has information that's not shared or distributed with other individuals or teams is a frequent problem
- 53% agree or strongly agree that waiting on answers disrupts their workflow
- 61% of all respondents spend more than 30 minutes a day searching for information

Docs that work WILL save significant time! 🕒

Story Time

- Onboarding with a new organization
- I did something useful, and I need to do it again, but I don't remember how 
- Key contributor with siloed knowhow goes on vacation

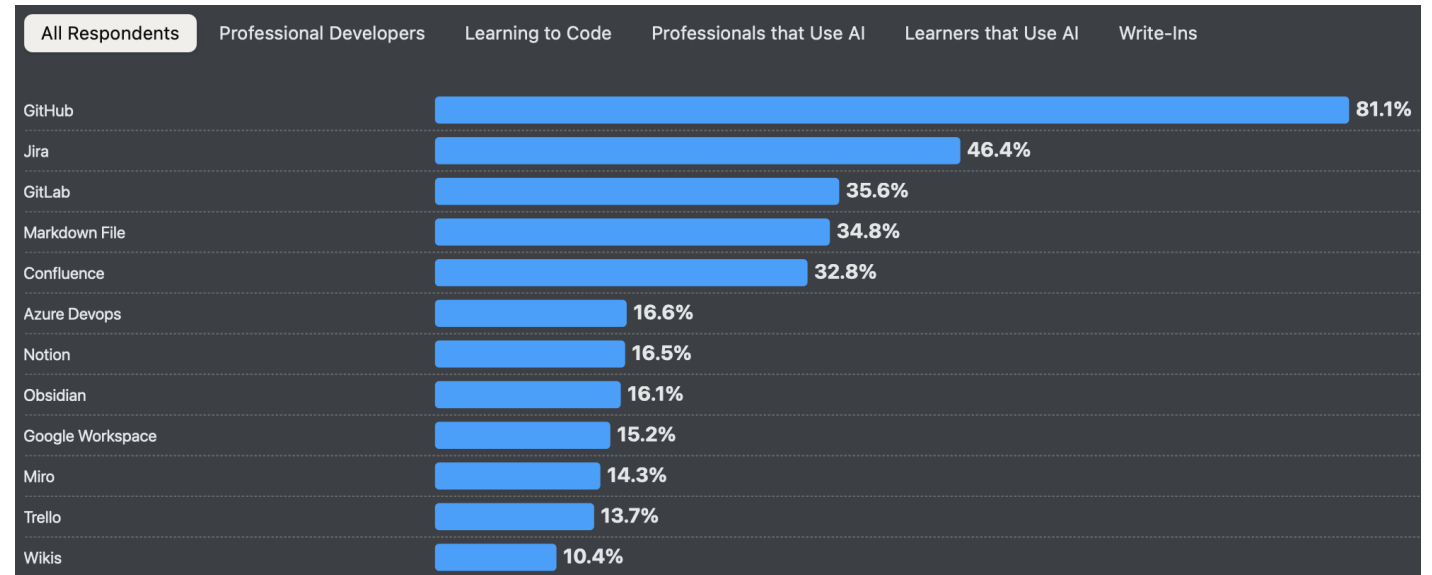
What makes documentation effective (and not)

- Accuracy
- Be specific and eliminate repetition (be DRY)
 - Ambiguity is **BAD** 🙅
 - Repetition can be **worse** (no “single source of truth”) 😬
- Meaningful titles with prefixes
- Correct grammar and spelling
- Clear and concise easily readable verbiage (AI can help)
- Search that works
- Templates for common document formats
 - Makes starting a new document much easier by setting content expectations
 - Especially useful for technical design documents

What makes documentation effective (and not)

Choose the right tool

- Collaboration & Accessibility
- Integration with Development Tools
- Integration with AI
- Content Types & Formatting
- Hosting & Security
- Versioning & History
- Usability & Adoption
- Cost & Licensing




What needs to be covered

- Onboarding(!!)
 - Extremely important, especially in hybrid/remote work environments
 - Aim for self service
 - Contact info and responsibilities for all team members
 - Include project owner/sponsor, PMs, Scrum Masters, BAs, Developers, QA, IT support
 - Include email, phone numbers, work locations
 - Getting access to systems and data
 - Install and set up local development environment
 - Required training

What needs to be covered

- HOWTO's
- Project requirements
- Architecture and design docs
- Company handbook
- Engineering position levels with expectations for each
- Hiring and interviews

What needs to be covered

- Standards and processes
 - How is the project pulled from source control, built, tested, installed/deployed and executed?
 - **RED ALERT** : If this is not relatively straightforward, there may be something amiss in the project
 - What standards and/or guidelines are followed when developing, testing, reviewing, merging and deploying changes?

Who writes and maintains this

- Everyone! Entire team owns it
- SMEs (subject matter experts) usually write initial versions
- Enlist help from others to write it and to review it
- **Do not put this off until later!!**
- **Do not ignore it once it's written!!**
- TEST IT!

How do you write it

- Document things for yourself
- Start with great tools and templates
- Know and target your audience
- KISS - Keep it simple and straightforward
- DRY – Don't repeat yourself
- Pictures are worth a 1000 words
- Organize into categories
- Use AI to refine (*)
- Delete anything that is obsolete or is no longer relevant
- Create stories or tasks in each sprint to write and update docs
- Treat it as a project deliverable

Questions

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- This presentation: <https://shorturl.at/cuNLn>