DEVELOPER-CENTRIC DESIGN FOR BETTER EXPERIENCE

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HELLO!

I am Tomomi Imura

Cloud Dev Advocate at Microsoft Advisor at Code Chrysalis



DESIGNING DEVELOPER EXPERIENCE

- 1. Definitions
- 2. My experiences & stories, focused on dev content

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"User-Experience (UX) focuses on having a deep understanding of users, what they need, what they value, their abilities, and also their limitations."

- Source: usability.gov

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66

"Developer-Experience (DX) focuses on having a deep understanding of developers, what they need, what they value, their abilities, and also their limitations."

- Source: usability.gov







押し間違えても、 一切保証出きません

No guarantee for your misoperations You are obligated to pay



ittps://twitter.com/ryo_sasaki/status/560229808362102784

BAD UX: USER REACTIONS

When a person tries to [pour a cup of coffee at 7-Eleven]:

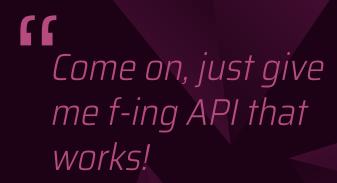
- Confused
- ► Trial & Error approach
- Frustrated
- Repeat
- ▶ Totally upset



BAD DX: DEVELOPER REACTIONS

When a dev tries to use [API with poorly written docs / No code samples]:

- Confused
- ► Trial & Error approach
- Frustrated
- Repeat
- ▶ Totally upset



POOR DX: EXAMPLES - DEV PLATFORM / API

- No Documentation (Ugh!) / Poor Docs
- No changelog / versions
- API (services, platform, tools, etc) is just too complex
- No tools or SDK
- Inconsistent method names (naming conventions, API patterns, etc)
- Non-verbose error messages or explanations
- Operational problems unstable service

POOR DX: EXAMPLES - DOCS

- Bad IA hard to browse/navigate
- No changelog
- Outdated content
- ▶ Too complex
- ▶ No code samples / templates
- No diagrams, screenshots, illustrations
- No design guidelines / HIG

"

Approximately 65 percent of the population are visual learners

Visual learners learn through seeing. They may think in pictures and learn best from visual displays

(Mind Tools, 1999)

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IMPROVING MICROSOFT TEAMS DOCS

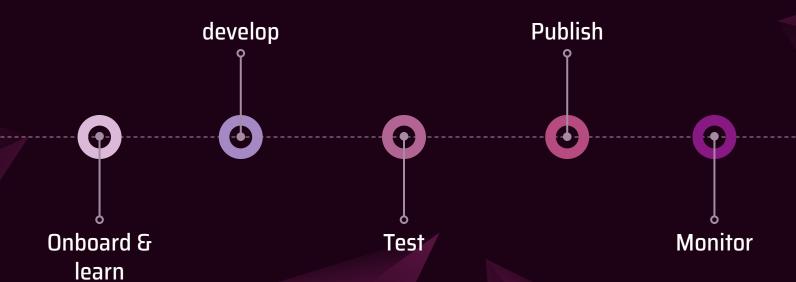
Goal:

To reduce the learning curve for new developers and create a happy path for them



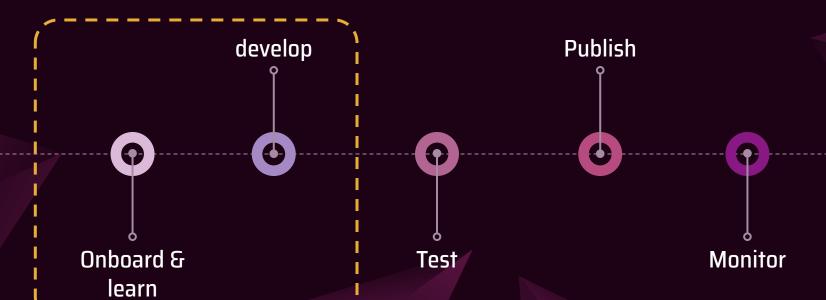
PHASES OF DEV LIFE CYCLE

OF TEAMS APP DEVELOPMENT

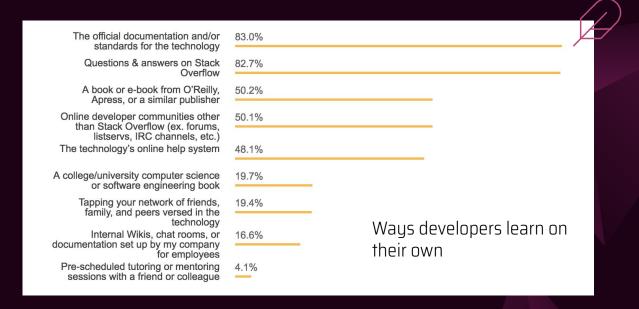


PHASES OF DEV LIFE CYCLE

OF TEAMS APP DEVELOPMENT



DEV JOURNEY: ONBOARDING EXPERIENCE



Docs - where the journey begins!

DEV JOURNEY: ONBOARDING EXPERIENCE

Engineer Tomomi says:

"OMG, I feel really stupid 😭"



DevRel Tomomi says:

"Hmm, this process must be giving her a bad developer experience. We need to fix this."

KNOW YOUR DEVELOPERS

Developer-centric design

= Empathy-driven design



COLLECTING USE-CASES & PERSONA

No such thing as "average developers"

Find out who your developers are what they try to achieve

- Types of business
- Demogeographic
- ▶ Goals & challenges
- ▶ Product knowledge & experience



COLLECTING USE-CASES & PERSONA

For example:

What they try to achieve

- Publishing App: Survey app
- Custom automations: Git / CI notifications
- ▶ Custom tool: Helpdesk tool ...

Who they are: Experience levels

- Microsoft-all-the-things pro developers
- ▶ Unfamiliar with MS tech stacks but experienced with similar products
- Web developers
- Non-Engineers No/Low-code

INTERVIEWING DEVELOPERS



Figuring out their pain points

		Who they are & what they do
	Company A	SI (Microsoft Partner) , building internal tools for Teams
	Company B	SaaS startup (No prior experiences with MS platforms), porting their product into Teams
	Company C	EdTech (Front-end / Content), creating educational content to be viewed in Teams
	Company D	Healthcare (Low code solutions), creating automation flows

UNDERSTANDING THEIR PAINS

Be honest to them so they tell you honest stories too. Hear them rant!

- Don't get offended
- Admit your mistakes
- ▶ Find where confusions come from

IMMEDIATE ACTIONS

- ▶ Bug report & fix
- Feedback to appropriate teams
- ▶ Follow-ups
- Brainstorming
 - Prioritizing content
 - What to be changed.
 - What to be added
 - And how to present



IMPROVING DOCS

- ▶ More concise overview & getting started page
- Beginner-friendlier Table of Contents
- ▶ Prioritize & de-prioritize content & rearrange
- More visual elements
- ▶ Diagrams & charts
- Use-cases
- ▶ Terminology & better descriptions
- ► Inclusive supports no-code / low-code
- ▶ Design guidelines & Figma assets

Before

After



What are Microsoft Teams apps? ----

Microsoft Teams is a collaboration workspace in Office (60) that integrates with appeared services people use to get work storm. together. The Microsoft Teams dischipper platform makes it may far its religions to integrate their over upon and services to Improve productivity, make discission factor, provide focus thy testic ing content contributing, and create collaboration proceed according and problems. Appy built on the Microsoft Teems platform are bridges between the Teams client and you'r services and workflows. bringing them directly into the content of your collaboration platform.

What can Teams apps do?

Age, built on the Microsoft Trans platfore primarily focus on increasing collaboration and improving productivity. Your ago can be something simple, like positing notifications from other systems, or complex multi-factored applications, just large in mind that Teams, is a social collaboration platform, the best ages focus on helping people regress themselves and work better together.

- Collaborate on items in natural systems. One of the over comprise to a nature force, ago is to being information or items. Into Seans from come other place, and Nase a communities properly. You can push information into Seans, enable your users. to search for and pull it on demand, or make it populate in an embedded web view.
- . Trigger workflows from conversations, Ofen conversations result in the result to lick off some worldlow or complete some action; take a note about that, review my pull request, convert that to a sale; lead, etc. Visar States ago can put access to that
- . Northy your team of important events. Sci of areal conflictions? Send worth above to fourm instead. Send conflictions cline by to yors, to a channel, to the Artivity Fasti, or to anyone who subscribes to them.
- Exhabit functionality from other alter/services. Sometimes you just must be make your app name to discount. Embed your existing simple page ago, so build something from scratch for flows.

How do Teams apps work?

The first through to know about outsim apps for Microsoft Tourn cother than how amoning they can be, is that Tourn, is not a houting service. Four app package contains metadate about your app Inama, icons, etc.), and pointers to the web services you had that power year ago, Microsoff Tearin providing the storifolding machanism, U/UK constructs for you to take advantage of, and APIn you can use to sugment the information and actions analistic to your ago.

A Trains ago consists of these major precise.

- . The Microsoft Teams client (seeb, desirage or mobile) where some self-interest with your ago.
- . Year Teams app package that creates the app installed by your users, and contains your apply metallate and polinters to your
- . Your service, workflow or website which perform the recognity look, data etemps and ATI calls to power your ago.

It is important to keep in mind that any Kunclemality you expose in a Microsoft Teams ago is publicly available over the internet. union you take additional views to server it. If you are providing access to confidential or protected information you'd work make sure your services are at a minimum authoriticating the endpoint connecting to your app. or authoritizating your servi-

How can you share your Teams app?

When you're many to share your Microsoft Teams apps, you have three options depending on who your target audience is,

- . Upload your pap directly if your pap only ments to be shared to your train, or a few individuals in your experipation, you can share your app package and upload it sires/ly.
- . Publish to your organizational app catalog You can other your appointly your entire organization formuly your appointing
- Publish to the public app store if your ago is for everyone you can publish it to our public app store. Depending on your. grate, you might be eligible for marketing and sales assistance.

Get started



Building for Microsoft Teams --

What are Teams apps?

be bloomed now assumedly borrow on an in- in this black is nothing the resource on

Messaging extensions





Ante

Webbooks





Microsoft Graph for Teams

setting flavour steep. The transport should staff are the flavour



Get started

SUCCESS METRICS

- ► Massive increase in the docs KPI Score
- Increase in click-thru rate
- Increase in dwell rate
- Decrease in bounce rate
- Decrease in exit rate



SPECIAL THANKS

My awesome teammates at Microsoft:

- Dev Advocacy team
- Product team
- Design team
- Leaderships for support

INTERNATIONALIZING SLACK DOCS & TUTORIALS

Goal:

To not let the growing community left behind, support technical content in Japanese



KNOW YOUR DEVELOPERS

Again, It is all about Empathy



ASKING DEVELOPERS

- Conference attendees
- Customers & partners
- Online Survey
- ► Feedback (tweets & email)

LISTENING TO DEVELOPERS

Majority of developer in Japan wanted the docs available in Japanese

- Language barrier is thicker than anybody (in the US) imagines
- Docs in friendly-tone is nice but don't get translated by machine correctly
- ▶ The 3rd party tutorials in Japanese are outdated

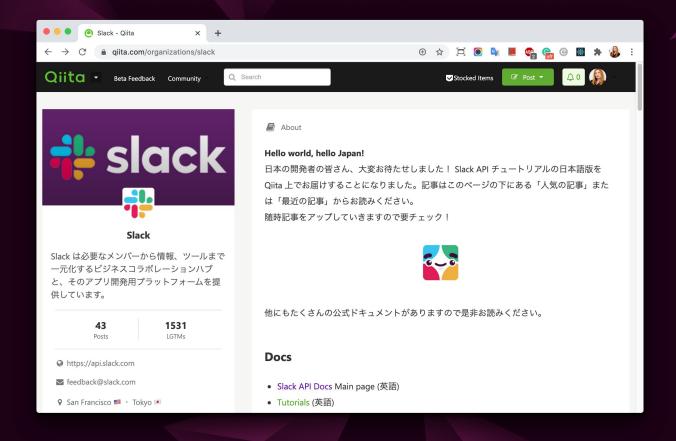
CONVINCING THE IMPORTANCE

Internationalization = often lower priority

- Budget
- Unknown business impact
- Not enough head-count / bandwidth
- Arrogance & lack of empathy "Oh, people should learn English"
- Lack of knowledge how to market right

JUST <mark>do it</mark>

- ▶ Volunteer & ask friends/coworkers for help
- Show stats & feedback
- Send execs to Japan (= have them talk to customers!)
- ▶ Prioritize which content must be translated (No time & budget for the entire docs)
- ▶ Research the market!



SUCCESS METRICS

- The announcement tweet got the record largest # of retweets
- Increase API calls from ja-jp region
- Increase # of apps built in ja-jp region
- Become the fastest growing dev community
- ▶ Increase community-driven content

As of March 2020





日本の開発者の皆さん、大変お待たせしました! Slack API チュートリアルの日本語版を @Qiita 上でお届けすることになりました。随時記事をアップしていきますので要チェック!

Translate Tweet



Slack - Qiita

Slack は必要なメンバーから情報、ツールまで一元化するビジネスコラボレーションハブと、そのアプリ開発用プラットフォームを… \mathcal{S} giita.com

5:52 PM · Apr 1, 2019 · Twitter Web Client

559 Retweets **14** Quote Tweets **1.1K** Likes

SPECIAL THANKS

My awesome former teammates at Slack:

- ▶ Internationalization team
- ► All teams in Japan & Japanese-speaking employees in the US, Canada, and Australia
- Execs for sponsoring

More DevRel talks on technical content & developer education (and JavaScript) by me are available at:



slideshare.net/tomomi

THANKS!

Any questions?

@girlie_mac

Credit:

Presentation template by <u>SlidesCarnival</u>