

# 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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2. My experiences & stories

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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](https://www.usability.gov)

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“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](https://usability.gov)



Commonwealth of Massachusetts  
 Town of Fitchburg  
 Department of Revenue and Treasury

**Edward P. Johnson**  
 State Representative

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011												
2012												
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												
2022												

If you have a question or request a replacement question or if this device did not start in area call: 978-640-4430  
 Do not address credit inquiries to this list.

**Please  
 pay  
 cashier  
 before  
 pumping  
 gas**

**NEW PRICE**  
 When using  
 "Pay at the Pump"  
 there is a \$20.00  
 authorization limit per  
 use your credit card  
 until the next charge  
 has been processed

receipt

OZ 1	ABC 2	DEF 3	STOP STOP	END OUTSIDE
GHS 4	JKL 5	MNO 6	YES YES	NO NO
PQS 7	TUV 8	WXY 9	NO NO	YES YES
CLEAR	0	ENTER	HELP	CANCEL

Insert Card Fully

OR

Withdraw Card Quickly

**HEAVY**  
 Clean Air  
 Nozzles

- 1 Push nozzle into fill pipe to make good seal.
- 2 After pumping, wait 5 seconds to allow residue to drain. For fill-up, do not "top-off" tanks!
- 3 Remove nozzle from fillpipe.
- 4 To report problems experienced with this system, call 617-596-1035

Purchase \$ **40.00**

Gallons **10.755**

**SUPER** **PLUS** **UNLEADED**

**39.19** **38.19** **37.19**

**HELP** (yellow arrow pointing left)

**PUSH TO START** (yellow button)

Press Payment Key  
 CREDIT HERE

**OR A RECEIPT**  
 Press YES on Key PAD  
 ← **LEFT** of  
 card reader **AFTER** fueling

**SUPER UNLEADED**

**UNLEADED PLUS**



“


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*



# 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 

“

*Come on, just give me f-ing coffee!*

# 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 

“

*Come on, just give me f-ing API that works!*

# 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)

# DESIGNING DEVELOPER EXPERIENCE

1. Definitions
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# IMPROVING MICROSOFT TEAMS DOCS

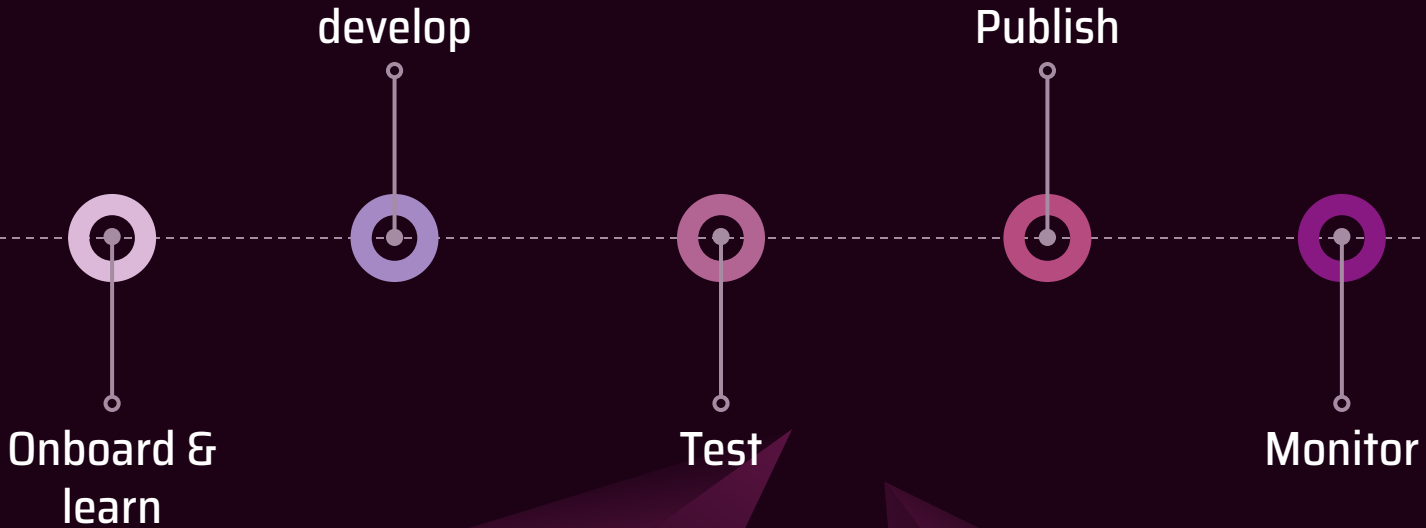
Goal:

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



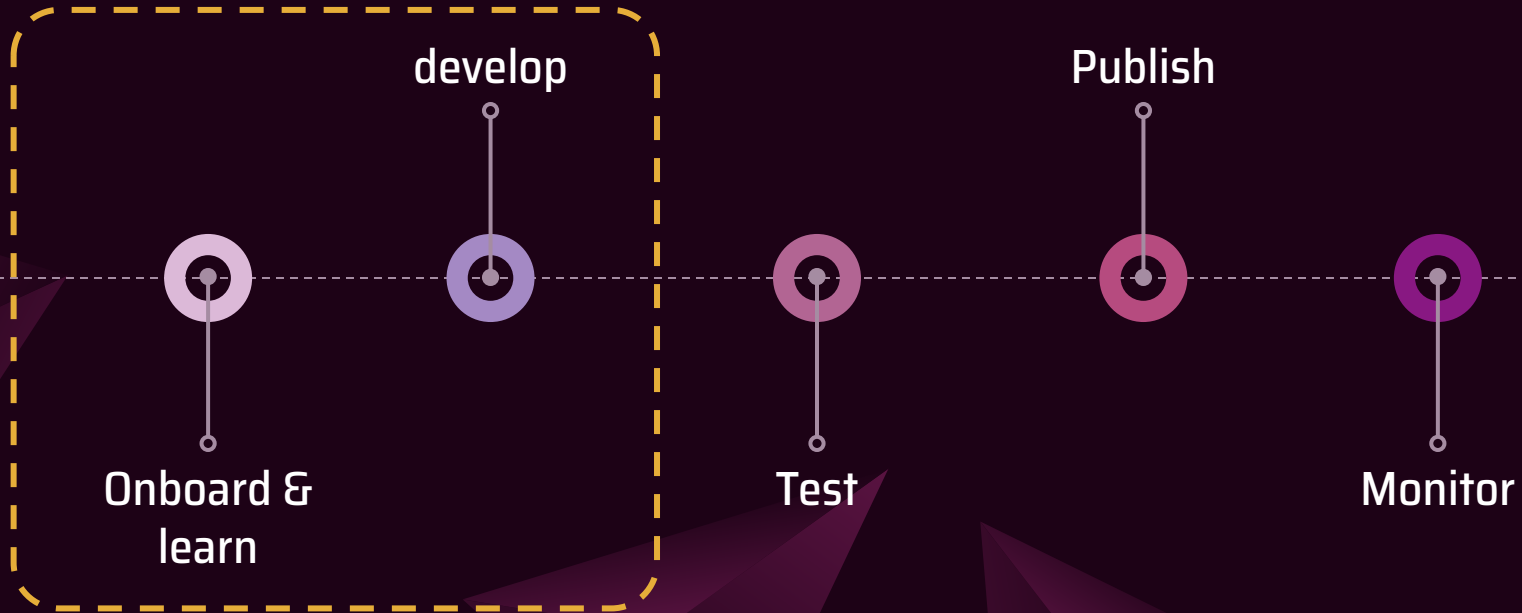
# PHASES OF DEV LIFE CYCLE

## OF TEAMS APP DEVELOPMENT

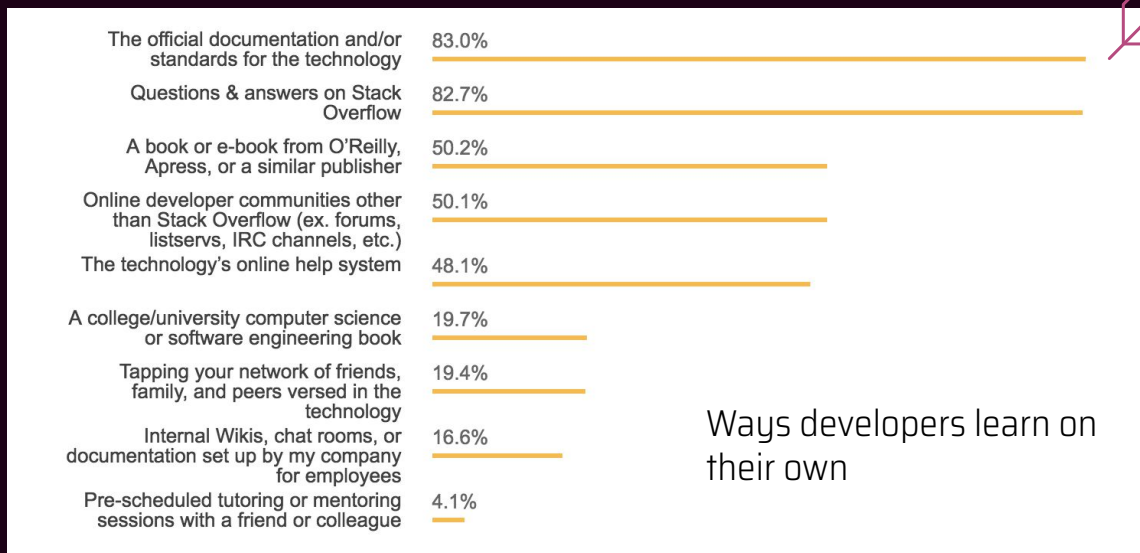


# PHASES OF DEV LIFE CYCLE

## 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



# 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 DO IT


- ▶ 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!

Slack - Qiita

qiita.com/organizations/slack

Qiita Beta Feedback Community Search

Stocked Items Post 0



**Slack**

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提供しています。

43 Posts | 1531 LGTMs

https://api.slack.com

feedback@slack.com


San Francisco Tokyo

About

**Hello world, hello Japan!**

日本の開発者の皆さん、大変お待たせしました！ Slack API チュートリアル日本語版を Qiita 上でお届けすることになりました。記事はこのページの下にある「人気の記事」または「最近の記事」からお読みください。

随時記事をアップしていきますので要チェック！



他にもたくさんの公式ドキュメントがありますので是非お読みください。

**Docs**

- Slack API Docs Main page (英語)
- Tutorials (英語)

# 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





Slack Platform

@SlackAPI



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

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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...

[qiita.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](https://slideshare.net/tomomi)

# THANKS!

Any questions?



@girlie\_mac

Credit:

▶ Presentation template by [SlidesCarnival](#)