



DATADOG

# Datadog Growth Product Proposal

Outside-in Product Strategy Analysis and Proposal  
for Datadog's Growth Roadmap

Barry Eom, August 2021

# Agenda

# Hi.

## 1. Context

Purpose of this presentation and additional context

## 2. Strategy and Insights

Analyses of Datadog's current state, strategy, and insights

## 3. Objective

Definition and outline of goals for Datadog's Growth Strategy

## 4. Problems and Opportunities

Assessment and prioritization of problems and opportunities

## 5. Hypothesis and Solutions

Experiment hypothesis and solution proposal

## 6. Go Forward Strategy

Recommendation, roadmap, and ideal outcome

## 7. Appendix

Supporting material and additional insights

**Context**

## Purpose

The purpose of this slide deck is to provide—from an outside perspective—**high-level analysis, strategy, product (and experiment) proposal, and tactical execution plan** pertaining to Datadog's expansion and growth moving forward

Given the outside-in nature of this proposal, this presentation contains **key assumptions as appropriate, as well as parameters**, where high definition information or insight was unavailable

# Proposal Framework

This proposal is based on the **Thoughtful Execution Framework**

This experimentation and product development framework was developed by Spotify's Growth Opportunities Organization, whose goal is to grow Spotify's MAU (monthly active users) by focusing on new users, new markets, and new experiences

Using the Thoughtful Execution Framework, Spotify's Growth Opportunities teams have converted millions of users to Spotify

For more information regarding the Thoughtful Execution Framework, click on the Spotify logo on the right (or [here!](#))



# Key assumptions that serve as foundations for this proposal

1

### **Growth areas for user personas who use self-service**

Though Datadog has recently pushed for enterprise customers, this proposal assumes that there are significant opportunities for Datadog to further tap into the market for SMBs and midmarket customers

2

### **New Datadog users in bottoms-up organizations first start with the free trial, then convert to paid**

There are other assumptions and best guesses where appropriate scattered throughout the presentation (e.g. objectives on [slide 9](#), user persona on [slide 17](#), etc)

3

### **Dependencies and approval from potential roadblocks are abstracted from this proposal**

Given the lack of context, input, and data, external factors, such as potential bottlenecks, are not considered in this proposal

# Strategy and Insights



# Datadog's jaw-dropping growth numbers

**66%**

After year-over-year (YoY) growth of 83% in 2019, Datadog's 2020 YoY growth was 66%<sup>1</sup>

**\$100M**

DataDog added over \$100 million of ARR in a single quarter for the first time<sup>2</sup>

**130%**

Datadog's net retention rate continues to be over 130%<sup>2</sup>

# Strong growth across Datadog's offerings

Datadog's core offerings—APM, Infrastructure, and Log—showed **record amounts of ARR in Q4 2020**, with APM and Log together adding more ARR in Q4 2020 than the business as a whole did in 2019<sup>1</sup>

Less than a year after its launch, Network Performance Monitoring and Synthetic Monitoring have seen “eight figures of ARR and are **showing high growth**”<sup>1</sup>

Datadog is just getting started with security. Accentuated by SolarWind SUNBURST attack, there is a **rapidly growing demand for security solutions** that enable teams to understand what's running, its supply chain, and what the application is doing<sup>2</sup>

1. Q1 2021 Earning's Call  
2. Q4 2020 Earning's Call

# **Datadog's significant momentum and tailwind**

## **Strong NPS**

Customers tend to love Datadog. Datadog boasts a strong NPS of 34<sup>1</sup> across its core offerings. Moreover, the NPS of each of Datadog's offerings are likely considerably higher than 34<sup>2</sup>

**Assumption:** once users try and understand the value of Datadog, they'll naturally adopt and come to love it due to robust and seamless feature offerings (i.e. let the product speak for itself)

## **Takeaway**

The key to driving additional growth for Datadog is **effectively and efficiently highlighting the utility and value proposition of Datadog to its users**

1. Data from Comparably.com

2. On Comparably.com, MongoDB's NPS is reported to be 30; however, MongoDB's Atlas Cloud solution has a reported NPS of 74 according to MongoDB's Q3 2020 Earning's Call; as a result, this proposal inductively assumes that NPS of each of Datadog's offerings are higher than the reported company NPS on Comparably.com

## Top-Down Sales

As enterprises adopt cloud hosting with their next-gen products, Datadog has seen large wins in **adding new enterprise clients**<sup>1</sup>

Enterprise clients are acquired via **Datadog's enterprise sales team**, supported by Inside Sales and Partners Teams, selling specifically to C-suite (e.g. CIO, CTO, etc) personnel of potential clients

As Datadog matures, its offerings are able to address the demands of enterprises on hybrid cloud environments<sup>3</sup>, Microsoft's enterprise focused ecosystem, or sophisticated needs (e.g. compliance)

1. Q1 2021 Earning's Call

2. Ben Thompson's Stratechery Newsletter

3. Enterprises may prefer to always have an on-prem server; for example, enterprises in healthcare and fintech will always store some data on their own servers for security or compliance reasons

## Bottom-up Adoption

Datadog's strength lies in **meeting the demands of SMBs and mid-market companies** with modern architectures (e.g. leveraging microservices, public cloud, modern DevOps processes)

Datadog has a **strong self-serve customer acquisition model with multiple entry-points**<sup>2</sup>

**This product proposal focuses on bottom-up strategy**, as the recommendation relates to Datadog's free trial, self-serve platform

# Objectives

## Objectives – Datadog’s Goals and Key Metric for Free Trial Platform and Growth<sup>1</sup>

### Context

Datadog, despite its IPO and \$25B+ market cap, is largely still in the **growth stage**, focusing on **acquiring new customers** or cross-selling and upselling to existing customers

In addition—with **Datadog’s consistent, low churn<sup>1</sup> and strong financials**—its concerns for other key North Star metrics (e.g. user engagement, retention, revenue) are low

1. Q1 2021 Earning’s Call

### North Star Metric

For the purposes of this product proposal, **increasing net customer additions** is Datadog and its self-serve’s free trial solution’s North Star metric

Increasing Net Customer Additions is defined as the **number of newly converted, paying users on Datadog in a given timeframe** (month, quarter, year, etc) for any of Datadog’s offerings

# **Relevant Key Metrics**

Time and Percentage of users converting from free trial to paying customer

Number of newly registered users

Conversion rate at each step of funnel

Referral rates and viral coefficient

General engagement metrics related to activation and retention during the onboarding process—i.e., user session time, # of session per user, churn, interval between session

# Problems and Opportunities



# There are four main user personas served by the self-serve platform, who are not necessarily mutually exclusive

1

### High intent users

Users who sign-up knowing they want to use Datadog; users with general high Datadog “mindshare” and/or pre-existing customers

SMBs (startups) to mid-market customers

2

### Exploratory users

Developers who want to get a feel for Datadog and are part of an org that gives agency to lower level personnel to find the best solution. This may include potential customers looking to move on from competing platforms, e.g., New Relic, Elastic

3

### International users

Users who are based in markets outside of the US and Europe — e.g. markets in Asia, Latin America, etc

SMBs, Mid-market, and Enterprise

4

### Enterprise customers

Developers at large enterprises trying the self-serve solution to provide input to upper management

Enterprise

1. These user personas are assumptions based off of available data; these personas can further be segmented into specific groups (e.g., enterprise on hybrid cloud vs enterprise with no on-prem servers on multi-cloud vs enterprise currently migrating to the cloud, etc) or can be grouped differently (e.g., by industry)

# User Persona Prioritization and Evaluation Matrix<sup>1</sup>

User Persona	Market Opportunity <sup>2</sup>	Business Impact <sup>3</sup>	Market Complexity <sup>4</sup>
High Intent Users	<b>B</b> – a large portion of enthusiastic customers may already be on Datadog <sup>5</sup>	<b>C</b> – the ROI of helping high intent user can be limited, given they were already likely to procure Datadog	<b>A</b> – the needs of this user group can be addressed by current Datadog offerings
Exploratory Users	<b>B</b> – this segment remains a large growth area, as stated in the Key Assumptions <a href="#">slide</a>	<b>A</b> – better converting exploratory users to paying customers will further contribute to Datadog’s growth	<b>A</b> – the needs of this user group can be addressed by current Datadog offerings
International Users	<b>A</b> – international market is tremendous and still largely untapped	<b>B</b> – barring language barriers, these users will likely use the best-of-breed solutions and can fall under “high intent” and “exploratory users”	<b>C</b> – the needs may be complex, e.g. language and customer support localization, unsupported integrations
Large Enterprise Users	<b>A</b> – large enterprises remain a focus area for Datadog’s growth strategy	<b>D</b> – the impact of showing lower level engineers at enterprises the value of Datadog may be limited, given that C-suite and management are the final decision makers at enterprises	<b>C</b> – enterprises have sophisticated needs in comparison to SMBs and midmarket players, though their needs are now better met as Datadog further matures

1. These estimations are completed only on a very high level. In-depth market research, as well as product insights, will be required for a more accurate assessment. The objective of this exercise is to provide a more scientific, thoughtful, and objective approach to evaluating these tradeoffs

2. Market Opportunity is defined as “how much of this user persona have yet to convert to Datadog?” (“A” = high growth area, low adoption; “F” = high % has already adopted Datadog)

3. Business Impact is defined as “potential value (monetary, retention, etc) the user persona falls into” (“A” = high value to Datadog; “F” = low value)

4. Market Complexity is defined as “how complex are the needs of this persona?” (“A” = simple needs, requiring low effort; “F” - complex needs, requiring large engineering effort)

5. Additional datapoint required to validate this assumption

# User Persona Prioritization and Evaluation Matrix<sup>1</sup>

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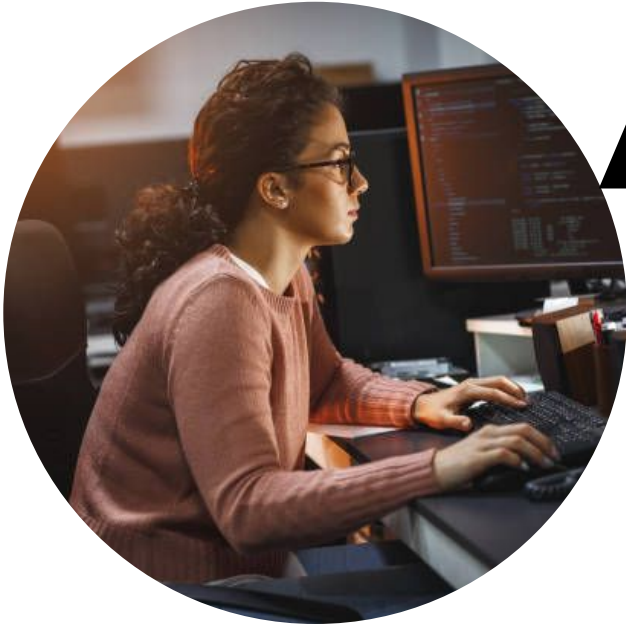
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## Opportunities – User Problem 1: Josie



“As a developer at a high-growth startup with significant venture backing, I want to fully understand the complete offerings, how everything fits together, and the value of Datadog faster so that I can determine whether I want to use Datadog for my company’s monitoring *and* security solution”

- Josie, Exploratory Datadog User at Company Alexis

## Opportunities – User Problem 2: Janice and Cindy

// As DevOps engineers at a midmarket player in the e-commerce space, we want to have an **easier, frictionless sign-up experience** so that I can start playing around with Datadog even faster”

– Janice and Cindy, Exploratory Datadog users at Company Olivier



## Opportunities – User Problem 3: George



As an engineering manager at a rapidly scaling startup, I want to more easily show and evangelize the value of Datadog to the rest of my dev, DevOps, and DevSecOps teams, so that I can more easily persuade my team to use Datadog”

- George, Exploratory Datadog User  
at Company Akiyoshi

# Opportunity Matrix

User Problem	Likelihood of having significant impact on objective <sup>1</sup>	Business Impact	Level of Effort <sup>2</sup>
Josie – wants to fully understand the complete offering and the value of Datadog faster	<b>A</b> – if users are able to better understand Datadog’s full offering, more users will convert given the product quality of Datadog	<b>A</b> – high return on investment given the likelihood of converting a customer	<b>A~C</b> – depends on the solution; can iterate
Janice and Cindy – wants an easier, frictionless sign-up experience	<b>C</b> – limited direct cause-and-effect for faster sign-up experience causing the engagement metrics to rise	<b>C/D</b> – unclear business impact given Datadog’s ease of set-up is the best in the industry	<b>A</b> – reducing steps in the sign-up experience could be low effort
George – wants a more easily show and evangelize the value of Datadog to the rest of my dev team	<b>A/B</b> – could lead to better conversion from free trial to paying customer	<b>B</b> – developers will be well familiar with the value of infrastructure monitoring; showing rest of the team the value of Datadog largely comes down to trying the free trial themselves	<b>A~C</b> – depends on the solution; can iterate

1. Defined as the likelihood of achieving and affecting the key metrics outlined on the Objectives section (“A” = high likelihood of significant positive delta in net customer addition; “F” = limited effect on net customer additions)

2. Defined as ease of implementation (“A” = requires low effort; “F” = requires significant engineering effort)

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# Hypothesis and Solutions

## Hypothesis

**Hypothesis: “We believe that improving the onboarding experience by providing better education and tips for enterprise exploratory users will enable them to understand the Datadog’s offerings more quickly and clearly, which will achieve higher number of unacquired SMBs and midmarket companies to pay for Datadog”**

# Hypothesis can be validated through these metrics:

### Short Term

Statistically significant changes in *Engagement* during the free trial

- Increase in CTR, setup of features, feature usage, and impression
- Increase in session number (customers are logging in more)

Statistically significant changes in *Conversion*

- Increase in conversion rate to a paying customer in comparison to period prior to new feature launch
- Decrease in time-to-pay (time from original trial sign-up to paying customer decreases)

### Long Term

Increase in net customer additions

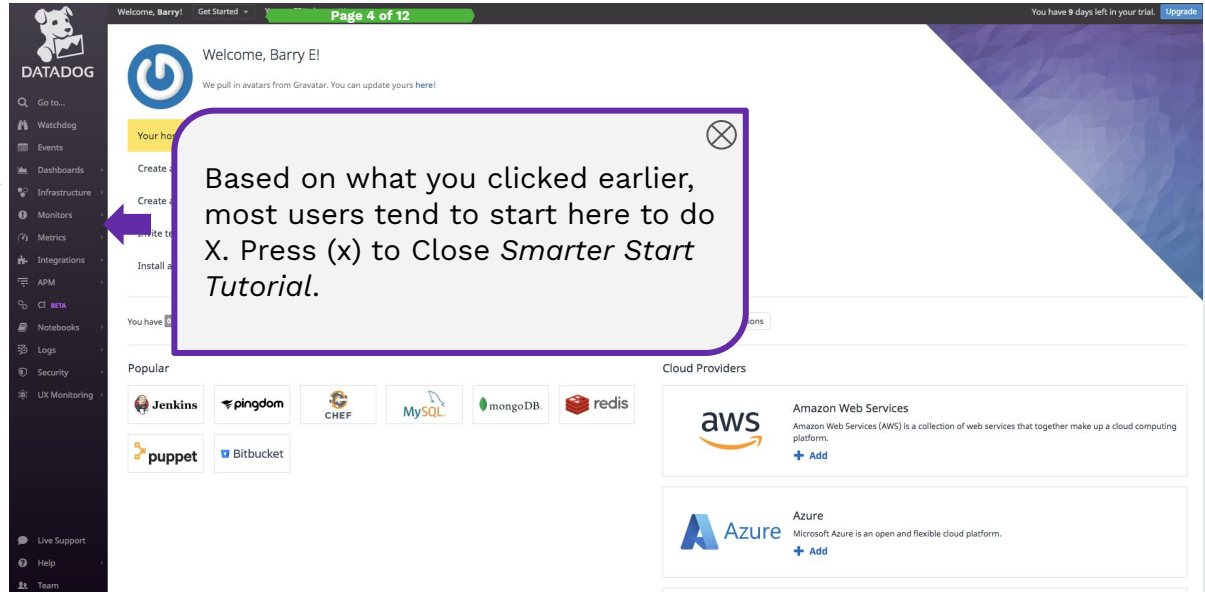
Increase in the number of new logo acquisition for SMBs and midmarket companies

# Potential Solutions

1. **Common user journeys** that other developers explore and making **recommendations** for areas to explore
2. **Starter kit and template projects** that are fork-able and display all the functionalities of Datadog holistically and provide more educational content, with minimal set-up time (no agent installation)
3. **Quick questionnaire** (similar to Stitch Fix) to understand developer's needs and priorities better, providing **recommendations** based on that

# Idea 1: Common User Journey – “Smarter Start”

The purpose of this feature is to provide a common workflow that many new users take after completing setup. Similar to FAQ, but more so FCWs—short for “Frequently Completed Workflows”

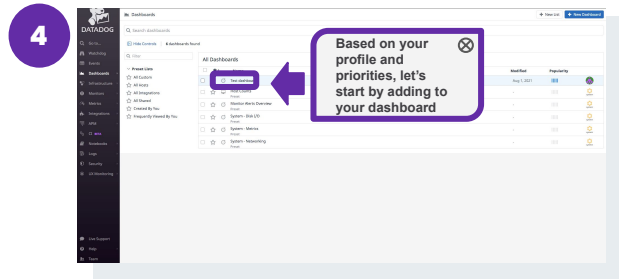
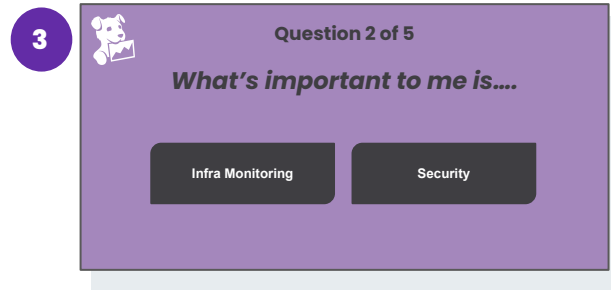
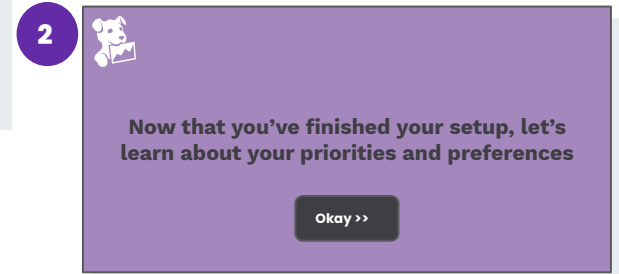
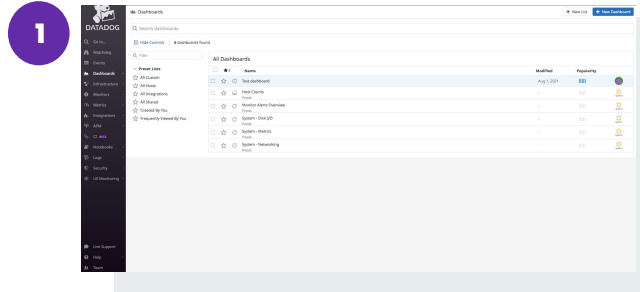


# **Idea 2: Forkable starter kit, templates, and additional educational resources**

Templates provide prototypical projects — that have pre-set configurations and data — that new users can fork to explore the full functionality of Datadog

## Idea 3: Stitch Fix Recommender (Prototype A)

The purpose of this feature is to understand developer's needs better. Users will answer a series of questions, which will place them into specific user buckets based on a **decision tree** algorithm, and provide recommendations based on that



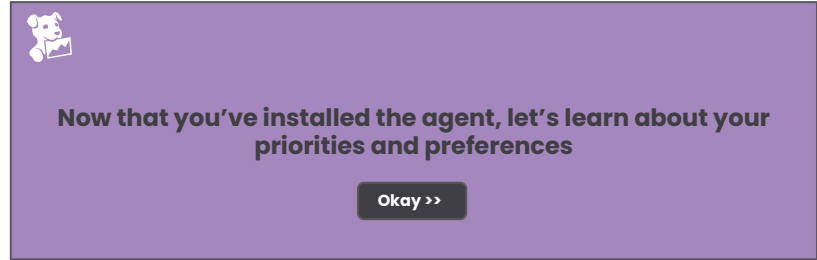
# Solutions - Solution 3 (Very) Low Fidelity Prototype

## Idea 3: Stitch Fix Recommender (Prototype B)

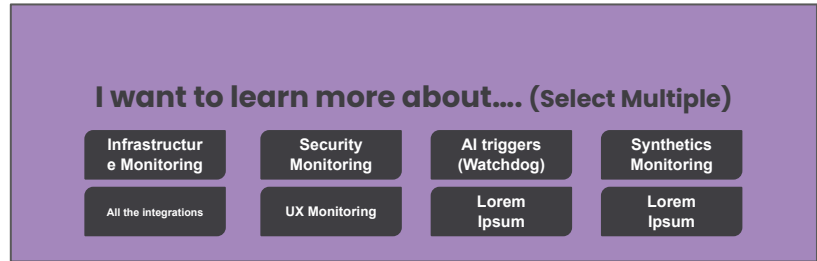
The purpose of this feature is to understand developer's needs better; users will select areas they want to learn, which will provide guided crash-course and overview of all the features

The benefit of this feature is that there are less clicks required to get from start to finish, though information gathered will provide less insight than Prototype A

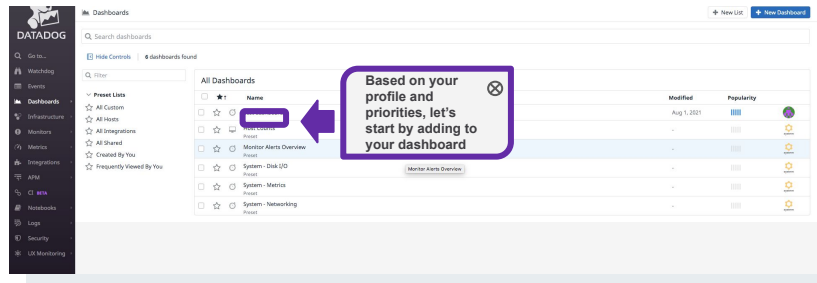
1



2



3





# Solution Evaluation

Solution	Likelihood of having significant impact on objective	Level of Effort	Qualitative Analysis
Idea 1 – AI based User Journey Advisor	<b>A</b> - the effect of this feature can provide the best advice and information to new users	<b>F</b> - high effort given the need for training data	Though the feature is likely to provide effective help to new users, the timeline for this functionality is challenging given the level of effort required to ship this product
Idea 2 – Forkable templates	<b>D</b> - Users are likely to be more interested in playing with their own implementations, rather than fork a template; high effort for user	<b>A</b> - low effort	Most users will likely not use this feature unless made very prominent; however, making it prominent may annoy most users
Idea 3 – Stitch Fix Recommender	<b>A</b> - can provide catered and helpful information for the newly onboarded user	<b>B~D</b> - depends on the level of granularity	Similar to Idea 1, this solution can provide more relevant insight and help to users to help them understand Datadog faster; this solution is iterable and better functionality can be built in

# Solution Evaluation

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# Recommendation

**Proposal: Personalized Recommendation System that provides a catered introduction and offering overview based on user's priorities**

### Milestone 1: Discovery and Alignment<sup>1</sup>

- Gather Qualitative Data & Validate Assumptions (e.g, where in the workflow/user journey to add the questionnaire)
- Align team (dev, product, data science, design)
- Align all relevant stakeholders (product, UX writing, marketing, sales, legal, etc)
- Design sprint
- Create prototype<sup>1</sup>
- Plan for MVE/MVP
- Technical validation

### Milestone 2: MVE<sup>2</sup>

- Launch a minimum viable experiment (e.g., A/B testing or Fakedoor testing)
  - Release to 1-10% of users
  - Monitor key results and metrics<sup>2</sup>
- Holdback testing (release to larger audience)

### Milestone 3: Rollout & Beyond (TBD)

- This milestone is largely TBD because it depends on our findings from Milestone 2
- Iterate upon learnings from experiment (assuming key metric targets are met)
- Once experiment has been validated, plan a roll-out, looping in all relevant stakeholders for a GTM strategy
- Build out and plan the next milestone and goal to improve algorithm, experience, and (potential) feature offering

1. Mockups and high-level requirement available in appendix

2. Metrics to monitor available in appendix

**Regardless of  
the success or  
failure of the  
experiment,  
we will learn:**

If we see an increase in the aforementioned metrics for the experiment, we can **build upon the tests and iterate based on the learnings** with better built out functionality, ultimately moving towards a roll-out

If we don't see any significant impact on the aforementioned metrics for the first experiment, **experiment with other solutions through MVEs**

If no other improvements, **revisit hypothesis**; key assumptions may have been incorrect (e.g. exploratory users might not want any recommendations and explore freely)

# Questions?

Reach out to Barry @ [bari.eom@gmail.com](mailto:bari.eom@gmail.com)

# Appendix<sup>1</sup>

1. The purpose of the appendix is to provide a high-level spec on how the very first version of the product can be architected, such that it can be shipped on a short timeline for quick insights; as a result, the following slides contain potential approaches to the recommended solution with 2 priorities in mind: simplicity and ease of implementation for a fast delivery



## Appendix - 1. Utilizing fake door test for a minimum, minimum viable experiment

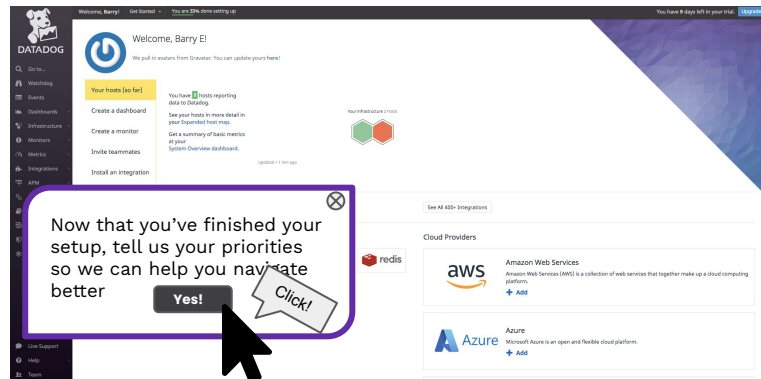
# Fake door test to quickly validate assumptions with quantitative data

For our very first iteration of the MVE, running a fake door testing technique may provide additional, though there are some risks associated with this experiment<sup>1</sup>

However, insights retrieved from this step could be crucial in determining the potential value of this feature to users and provide us more confidence regarding the level of investment required for this feature<sup>2</sup>

1. Even if this fake door is shown to only 1% of users, the 1% of users who engage with this fake door functionality may be disappointed by the dead-end, thereby harming its credibility  
2. High CTR for this feature would indicate users are genuinely interested in this kind of help to navigate and explore Datadog better

1



2



## Appendix - 2. Classifying users

### Understanding and classifying user needs when exploring Datadog

To the right, we have four examples of potential user needs. User research is crucial in this step to understand validate users' needs on a qualitative level and create "user needs profile" buckets that describe what kind of help the user will require

Understanding how security monitoring and setting security signals works	Understanding the ins-and-outs of APM
Understanding how Watchdog adds additional value to IM	Learning how to create an organized dashboard

## Appendix - 3a. Point based (high-level) algorithm

# Increment relevant category based on question

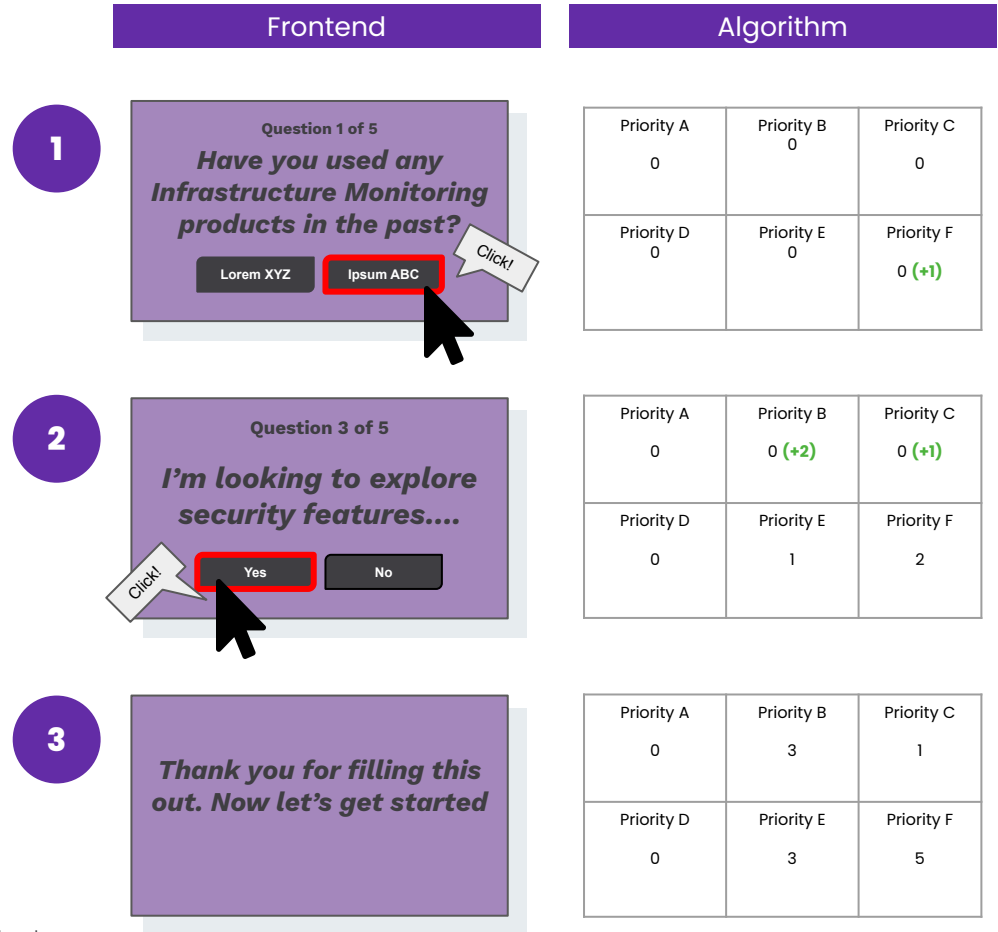
User is prompted to fill out a quick series of question after agent installation is complete

User fills out a series of questions, while on the backend, the algorithm allocates points to relevant user need categories based on the user's answers<sup>1</sup>

By the end of the series, we have a general “user needs profile” of the user, with an understanding of what the user's priorities are

An educational tooltip experience guides users through an overview and “how-to” of Datadog according to the user's profile

1. For a (little) more sophisticated system, each question can allocate weighted points, rather than incrementing by 1



## Appendix - 3b. Decision tree based (high-level) algorithm

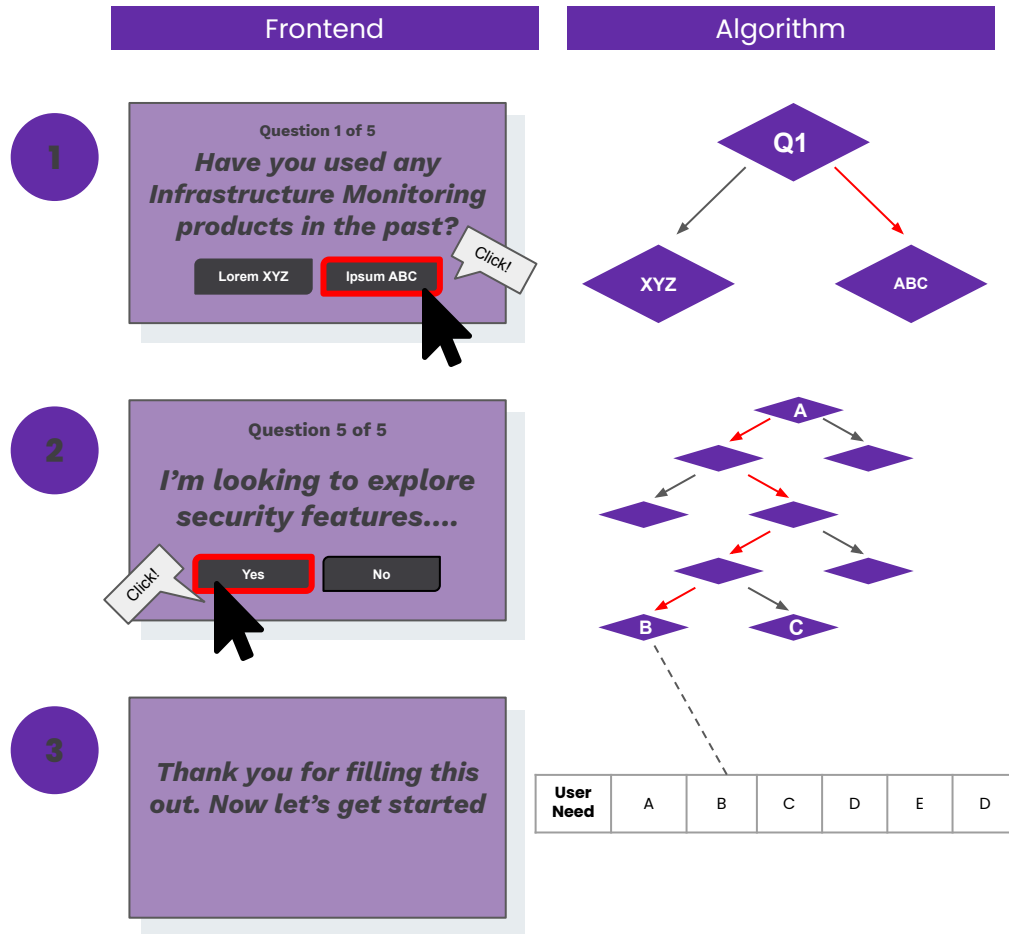
# Simple decision tree model

User is prompted to fill out a quick series of question while agent installation is complete

User fills out a series of questions, while on the backend, the algorithm takes the user down a decision tree path based on the user's selections

By the end of the series, we have a general "user needs profile" of the user, with an understanding of what the user's priorities are

An educational tooltip experience guides users through an overview and "how-to" of Datadog according to the user's profile



**Outside of *net customer acquisitions*, these are the metrics to look out for**

1. Impression and CTR for questionnaire
2. Impression, CTR, and relevant call-to-action metric for each step of the education process
3. Change in user session time
4. Change in interval between each session
5. Change in number of session within a critical period (e.g. first week of creating an account)
6. Change in churn rate after questionnaire
7. Time to convert to paying customer
8. Conversion rate to paying customer



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