mongoDB.
Atlas

MongoDB Atlas Growth Proposal

Outside-in Product Strategy and Proposal for Atlas Cloud's Growth Team

Barry Eom, February & March 2021

Agenda

Hi.

1. Context

Purpose of this presentation and other contexts

2. Objective

Definition and outline of goals for Atlas' Growth Team

3. Insights + Data

Analyses of insights

4. Problems + Opportunities

Assessment and prioritization of problems and opportunities

5. Hypothesis + 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 MongoDB Cloud Atlas product's expansion and growth moving forward

Given the outside-in nature of this proposal, this presentation contains key assumptions as appropriate 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 Team, a product organization within Spotify with similar objectives as Cloud Atlas' Growth team

Spotify's Growth Opportunities team's 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 has 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

Focus areas and responsibilities of Cloud Atlas Growth Team

Across Cloud Atlas' 4 acquisition channels[1], Cloud Atlas' growth team focuses on self-serve use cases, building a frictionless way of onboarding, exploring, and engaging with Atlas for developers

2

Across the AARRR Metric, Cloud Atlas focuses on Activation pillar

Though there is an emphasis on Acquisition as well, the main focus of Atlas Growth Team is on *Activation*, enabling users to understand the real value of Atlas and say “Holy cow, I love this!”, ultimately converting them to paying customers

3

New Atlas’ users first start with the free solution, then convert to paid clusters

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)

1. The four acquisition channels are field organization, inside sales team, self-serve business (frictionless way of engaging with Atlas), and parter team

Objectives

Objectives - Goals for MongoDB Atlas Growth Team[1]

North Star Objective

Increasing net customer additions, which is the number of newly converted, paying enterprise users on Atlas Cloud in a given timeframe (month, quarter, year, etc)

Relevant Key Metrics

Time to convert from free shared shared cluster to paid cluster

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:

- user session time
- number of session per user in the first month
- churn
- interval between session per user

1. No specific target number is specified for any of these metrics given the lack of data regarding current usage to act as an anchor/benchmark; these objectives are assumptions based off of available data

Insights + Data

Insights + Data - Key numbers:
High-level overview[1]

Atlas' growth has been bonkers since its launch

Atlas has grown 61% year-over-year

Atlas represents 47% of MongoDB's revenue

22,600 customers on Atlas, with **addition of 2,000 net Atlas customers** via self-serve digital marketing funnel

1. As of end of Q3 2021; all data from Q3 2021 Earning's Call

Insights + Data – Key numbers regarding its tailwind

Atlas has significant momentum and tailwind

NPS of 74[1]

Customers love Atlas; exceptional NPS score of 74 speaks to the world-class quality and offering of Atlas.

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

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

Market Trends

Enterprises are moving to the cloud and are looking for multi-cloud cluster support

85% enterprises today already use services from multi-cloud providers, with numbers expected to rise to 98% over the next 3 years

Customers will naturally turn to Atlas given Atlas' offering

1. As of end of Q3 2021; all data from Q3 2021 Earning's Call

Problems + Opportunities

Problems - User Persona Exercise[1]

There are four main user personas, who are not necessarily mutually exclusive

1

High intent users

Users who sign-up knowing they want to use MongoDB Atlas solution; users with general high MongoDB “mindshare” and/or pre-existing customers, e.g. EA customers looking to transition to Atlas

Enterprise customers, Small (startups) to midscale customers

2

Exploratory users

Developers who sign up through self-serve and want to get a feel for Atlas, who are big parts of big organizations or enterprises. They are precursors to potential big deployments on Atlas

3

International users

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

Enterprise customers

4

Low intent users

Users who are “checking it out” for a personal project or educational purposes with no real intention of converting

Students, “Hobby” developers, etc

1. These user personas are assumptions based off of available data; there personas can further be segmented into specific groups

User Persona Prioritization and Evaluation Matrix[1]

User Persona	Market Opportunity[2]	Business Impact[3]	Market Complexity[4]
High Intent Users	C - after launch of Atlas in 2016, high intent users were likely early adopters	B - the impact of helping high intent user can be limited, as the ROI may be limited given they were already likely to sign up	B - the needs of the user are not the same but generally similar given they already know what they are looking for
Exploratory Users	A - this segment remains a large growth area	A - converting these users will bring in larger, paid users, as noted by CEO Dev Ittycheria in Ben Thompson's Stratechery	B - the needs of this user group is fairly complex, with experienced developers exploring Atlas for the first time
International Users	A - international market is tremendous and still largely still untapped	A - CEO Dev Ittycheria noted the importance of this group in Q3 2021 earnings call	C - the needs of this market is complex given potential barriers, e.g. language, specific needs
Low Intent Users	D - there may be a large demand	D - the likelihood of converting these users to high LTV users remain low	B - users may not have the most sophisticated needs

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 Atlas? ("A" = high growth area, low adoption; "F" = high proportion has already adopted Atlas)
3. Business Impact is defined as "potential value (monetary, retention, etc) the user persona falls into" ("A" = high value to MongoDB; "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)

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Low Intent Users	D - there may be a large demand	D - the likelihood of converting these users to high LTV users remain low	B - users may not have the most sophisticated needs

Note: The persona with the highest overall grade is chosen. In this case, *Exploratory User* has the highest score across all three categories and therefore is selected
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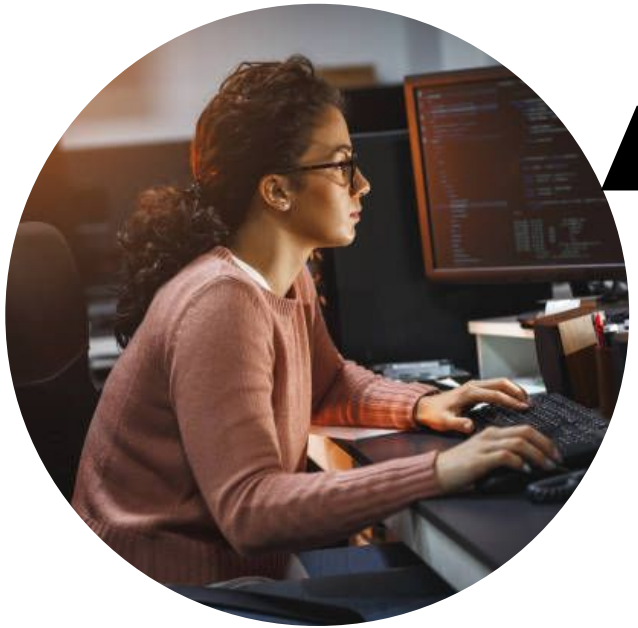
Opportunities - User Problem 1: Josie

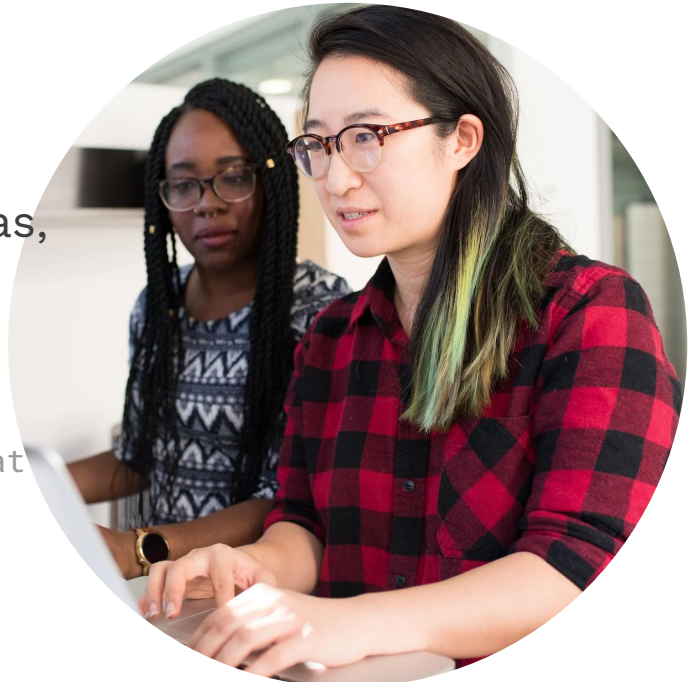


"As an enterprise developer exploring Atlas, I want to fully understand the complete offering and the value of Atlas faster so that I can determine whether I want to use Atlas Cloud for potential big deployment for my enterprise solution"

- Josie, Exploratory Atlas User

Opportunities - User Problem 2: Janice and Cindy

> As enterprise developers exploring Atlas, we want to have an easier, frictionless sign-up experience so that I can start playing around faster”
>
> – Janice and Cindy, Exploratory Atlas users at Company XYZ



Opportunities - User Problem 3: George

"As an enterprise developer exploring Atlas, I want to more easily show and evangelize the value of Atlas to the rest of my dev team so that I can more easily persuade my team to use Atlas"

- George, Exploratory Atlas User at Company ABC

Opportunity Matrix

User Problem	Likelihood of having significant impact on objective[1]	Business Impact	Level of Effort[2]
Josie - wants to fully understand the complete offering and the value of Atlas faster	**A** - if users are able to better understand Atlas' full offering, more users will convert given the product quality of Atlas (NPS=74)	**A** - high return of investment given the likelihood of transitioning to larger deployments	**A~C** - depends on the solution; can iterate
Janice and Cindy - wants an easier, frictionless sign-up experience	**C** - limited direct cause-and-effect for faster sign-up experience causing the engagement metrics to rise	**C/D** - unclear business impact	**A** - reducing steps in the sign-up experience can be low effort
George - wants a more easily show and evangelize the value of Atlas to the rest of my dev team	**A/B** - could lead to better conversion from free cluster user to paid user	**A/B** - likely high return of investment, though takes lower priority in comparison to Josie's need given that Josie's problem arises before George's	**A~C** - depends on the solution; can iterate

1. Defined as the likelihood of achieving and affecting the key metrics outlined on Slide 9 ("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 + Solutions

Hypothesis: “We believe that improving the onboarding experience by providing education and tips for enterprise exploratory users will enable them to understand the Atlas Cloud offering more quickly and clearly, which will achieve higher number of enterprises to migrate to Atlas Cloud”

Hypothesis - Validation Method

We will know our hypothesis is true when we see:

Short Term

Statistically significant changes in Engagement

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

Statistically significant changes in Conversion

- Increase conversion rate to paid cluster
- Decrease in time-to-switch to paid, expanded Atlas offering

Long Term

Increase in net customer additions

Increase in paying customer additions

Potential Solutions

1. Overview of all the features on Atlas using tooltips during cluster build time

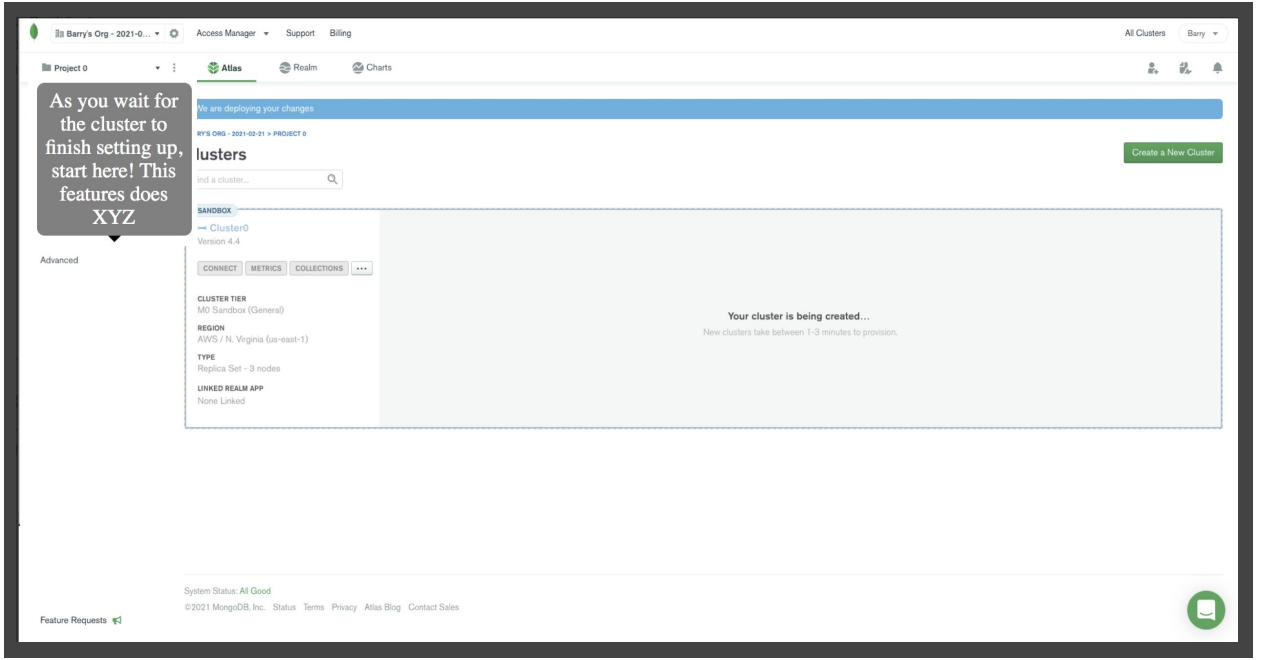
2. Common user journeys that other developers explore and making AI based recommendations for areas to explore while the cluster builds

3. Starter kit and template projects that are fork-able and display all the functionalities of Atlas holistically and provide more educational content

4. Quick questionnaire (similar to Stitch Fix) to understand developer's needs and priorities better, providing recommendations based on that

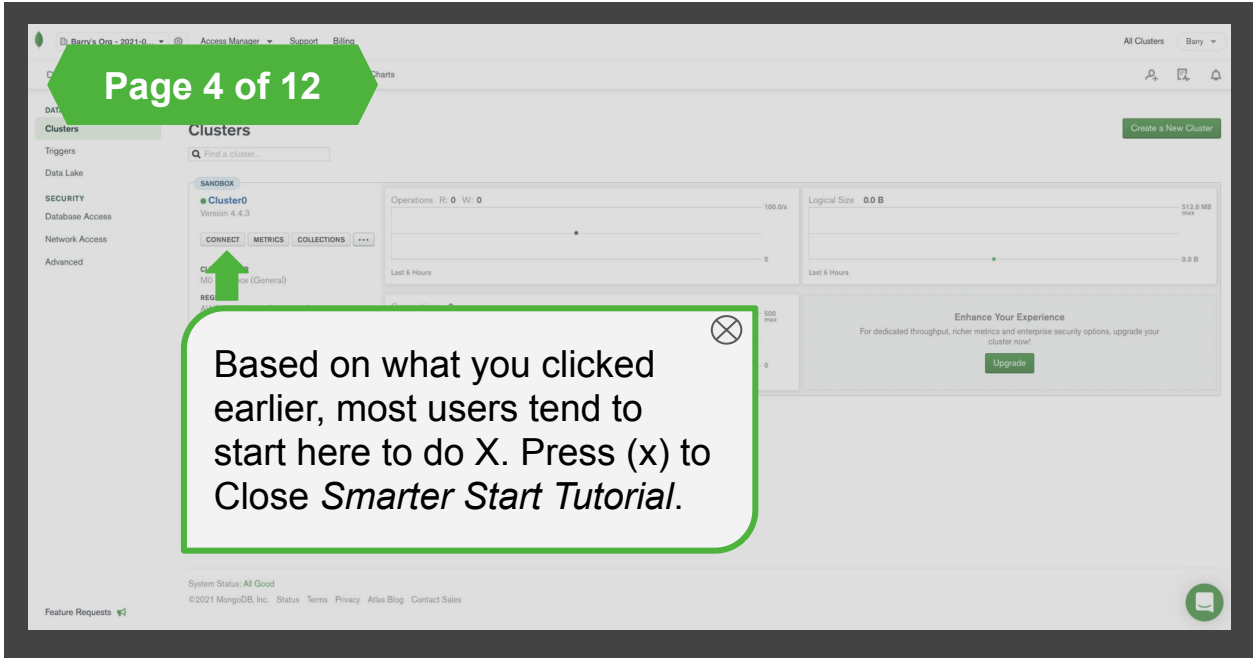
Solutions - Solution 1 (Very) Low Fidelity Prototype

Idea 1: Interactive tooltip



Idea 2: Common User Journey – “Smarter Start”

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



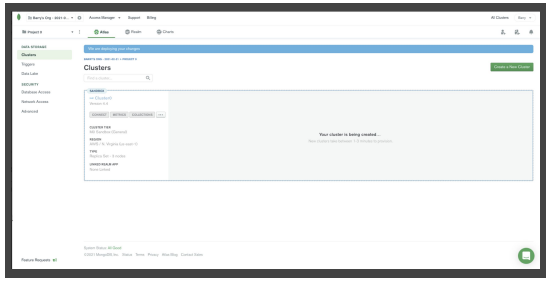
Idea 3: Forkable starter kit, templates, and additional educational resources

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

Idea 4: 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

1



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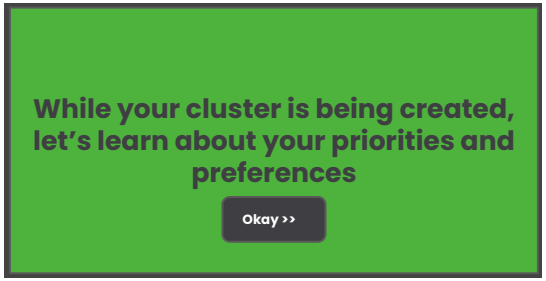

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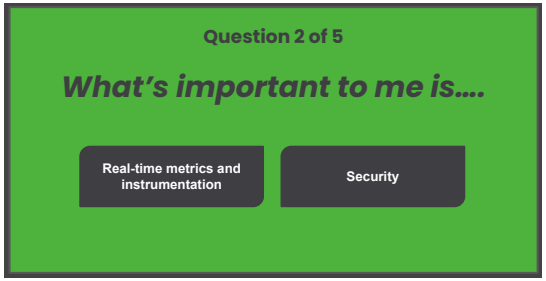

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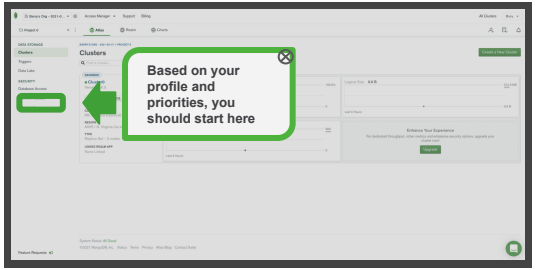
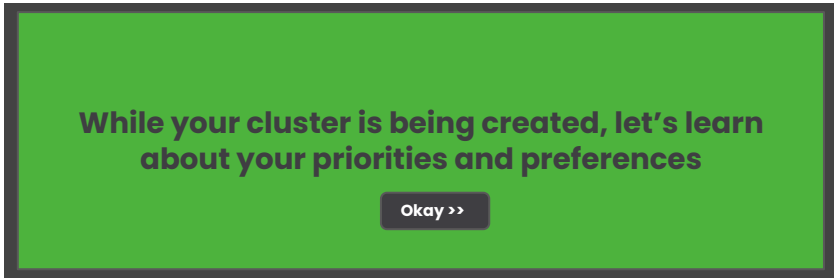


Idea 4: Stitch Fix Recommender (Prototype B)

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



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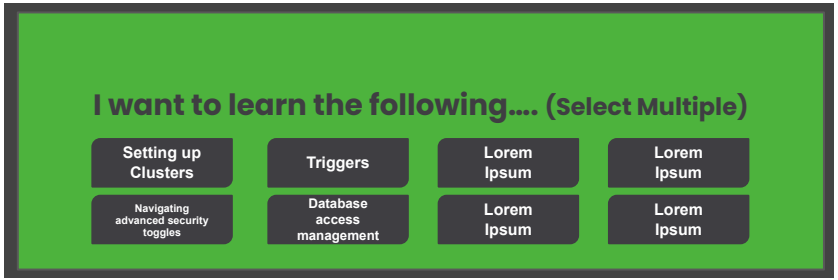

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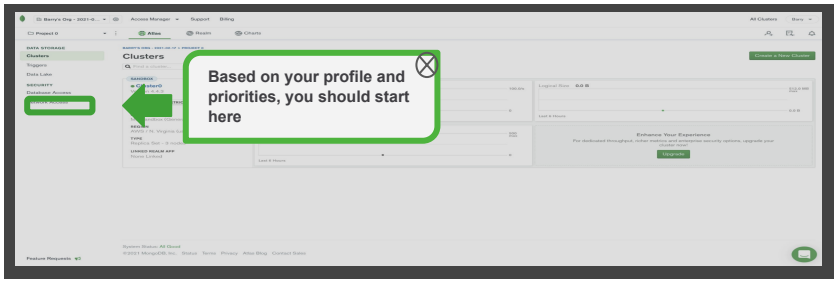

Solution Evaluation

Solution	Likelihood of having significant impact on objective	Level of Effort	Qualitative Analysis
Idea 1 - Interactive Tooltip	C - very basic offering but could provide better understanding of feature offering on a high-level	A - low effort	This functionality is easily implementable, though most users may not receive useful information given the new users will be exploring different functionalities
Idea 2 - AI based User Journey Advisor	A - the effect of this feature can provide the best advice and information to new users	F - 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 3 - Forkable templates	D - Users are likely to be more interested in playing with their own implementations, rather than fork a template; high effort for user	A - low effort	Most users will likely not use this feature unless made very prominents; however, making it prominent may annoy most users
Idea 4 - Stitch Fix Recommender	A - can provide catered and helpful information for the newly onboarded user	B~D - depends on the level of granularity	Similar to Idea 2, this solution can provide more relevant insight and help to users to help them understand Atlas faster; this solution is iterable and better functionality can be built in

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Recommendation

Proposal: Stitch Fix-like Recommendation System that provides a catered introduction and functionality overview based on user's priorities

Recommendation - Rough Roadmap

Milestone 1: Discovery and Alignment[1]

- Gather Qualitative Data & Validate Assumptions
- Align team (dev, product, data science, design)
- Align all relevant stakeholders (product, UX writing, marketing, sales, legal, etc)
- Design sprint
- Create prototype[1]
- Plan for MVE/MVP
- Technical validation

Milestone 2: MVE[2]

- Launch A/B testing (multivariate testing possible but simplified to A/B to simplify recommendation given some of our assumptions)
  - Release to 1% of users
  - Monitor key results and metrics[2]
- Holdback testing (release to 1% of users, then 5%, and afterwards 10%)

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 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

Recommendation - Ideal Outcome

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 A/B testing and go forward to the next level of holdback testing 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

Appendix[1]

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

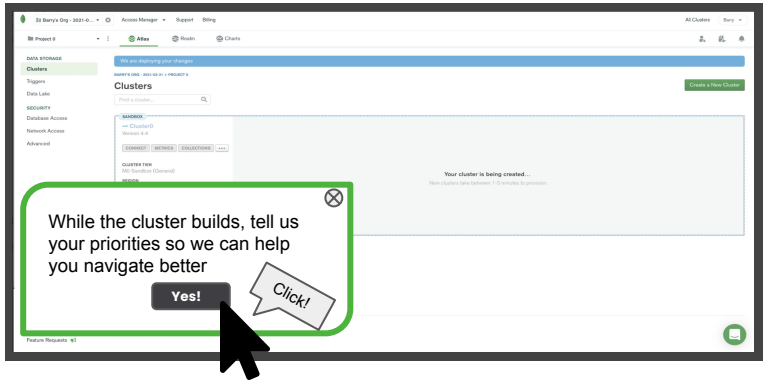
Appendix – 1. Utilizing fake door test for a minimum, minimum viable experiment

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[1]

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[2]

1



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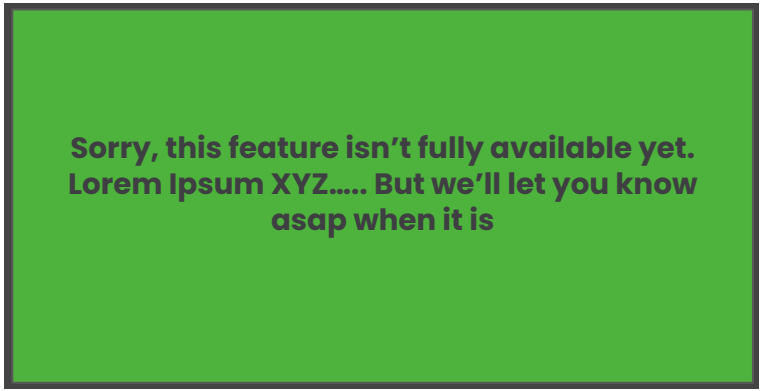


1. Even if this fake door is shown to only 1% of users, the 1% of users who engage with this fake door functionality may be disappointed by the quality of Atlas, thereby harming its credibility
2. High CTR for this feature would indicate users are genuinely interested in this kind of help to navigate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

Understanding and classifying user needs when exploring Atlas

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. However, for the scope of this proposal, we'll stick with these four needs we've identified

Setting up and linking to an existing project	Understanding how to use Atlas Data Lake
Understanding the value of Realm with Sync	Understanding instrumentation

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

Increment relevant category based on question

User is prompted to fill out a quick series of question while the free-tier shared cluster builds

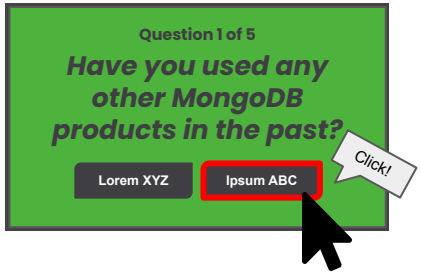
User fills out a series of questions, while on the backend, the algorithm allocates points to relevant user need categories based on the user's answers[1]

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 Atlas according to the user's profile

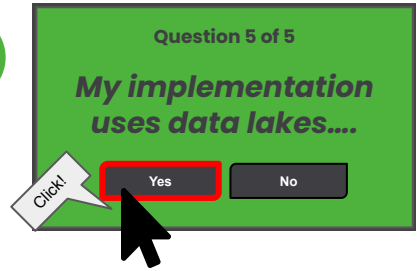
Frontend	Backend

1



Setting up an existing project 0	Understand Atlas Data Lake 0	Lorem Ipsum XYZ 0
Understand Realm with Sync 0	Understand instrument-ation 0	Lorem Ipsum ABC 0 (+1)

2



Setting up an existing project 0	Understand Atlas Data Lake 0 (+1)	Lorem Ipsum XYZ 0
Understand Realm with Sync 0	Understand instrument-ation 1	Lorem Ipsum ABC 2

3

Setting up an existing project 0	Understand Atlas Data Lake 1	Lorem Ipsum XYZ 0
Understand Realm with Sync 0	Understand instrument-ation 1	Lorem Ipsum ABC 2

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 the free-tier shared cluster builds

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 end

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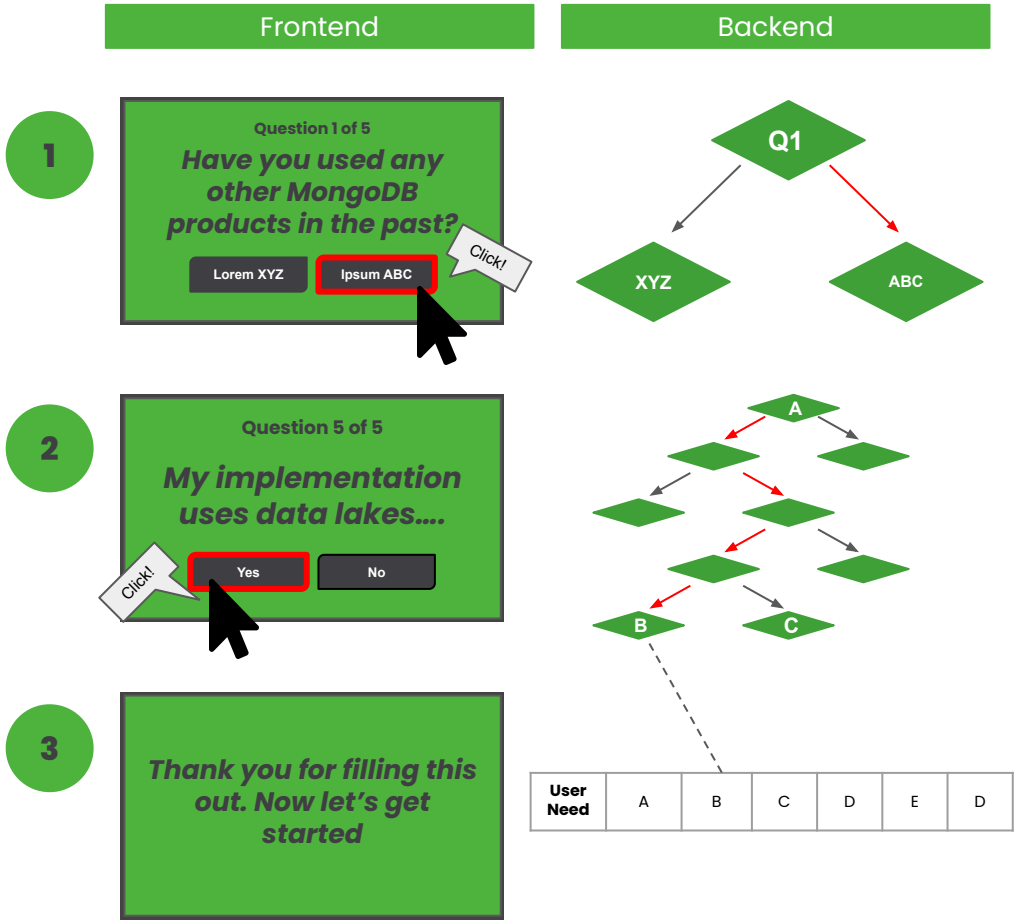
An educational tooltip experience guides users through an overview and "how-to" of Atlas according to the user's profile



Appendix - Metrics to measure for the MVE

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. User session time
4. Interval between each session
5. Number of session within a critical period (e.g. first week of creating an account)
6. Churn
7. Time to convert to paid cluster
8. Conversion rate to paid cluster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Product - Competitors