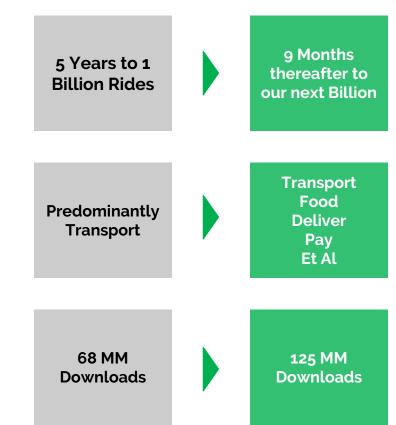
November 15, 2018 Version 1.0

Building Data Driven Products... At Scale

Nikhil Dwarakanath



In the last 18 months...



In the next 30 mins

Set context of the problem

Share how we solve it

Showcase an example

What usually happens with Early Stage Products

Product Managers & Engineers think up cool stuff

A development cycle is then quickly created around these features

Built features are then taken to production

...The Fallout

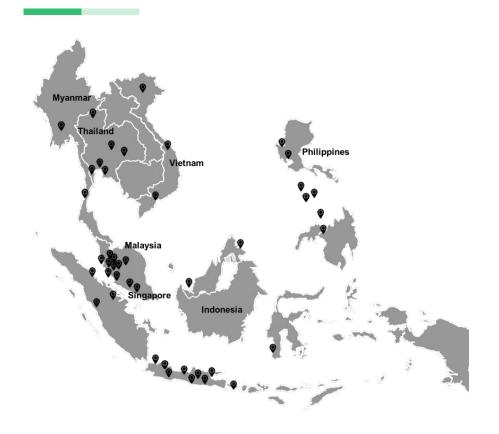
Less important product features get picked up
No objective prioritization, besides the PM's clout

Features are lauded as successes immediately following the launch
Makers usually Checkers

 [Some] of these same features may then be quickly switched off / rolled back / bandaged

No tangible impact near term | Success not defined well upfront

This is all the more difficult for us...



- 8 Countries | 235+ Cities
- 2 Billion + Rides
- 125MM + Downloads

- The Yin & Yang of the network
- Core Human Need
- Same, yet different
- 20 TB of Data processed everyday

Therefore, imperative to view the Product with a Data lens

Comprehend user interaction & product performance data

Develop Data driven Hypotheses....
And therefore Feature Development

Prototype at Massive Scale

How do we typically do this

1. Instrument...like crazy

Front End | Back End | System









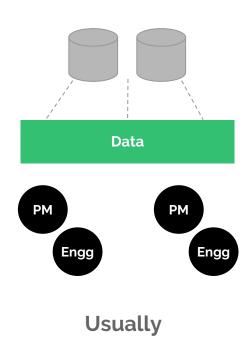


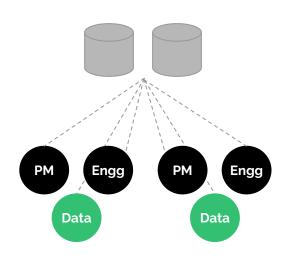






2. Integrate & democratize scalable systems to mine data

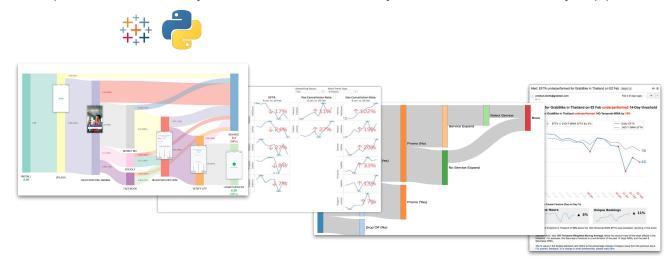




Today

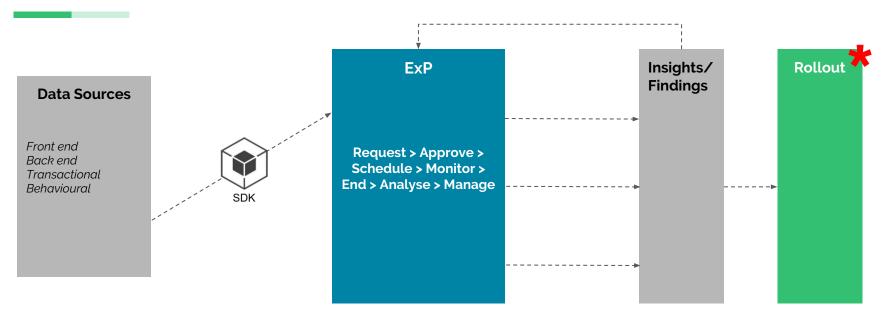
3. Generate (a large # of) data driven hypotheses

- **A.** Define Target Metrics & Set Ground Rules
- **B.** Build Heat maps, Information systems, etc., \rightarrow Identify anomalies, causality, opportunity areas



C. Build hypotheses for plausible features

4. [A | B] Test!



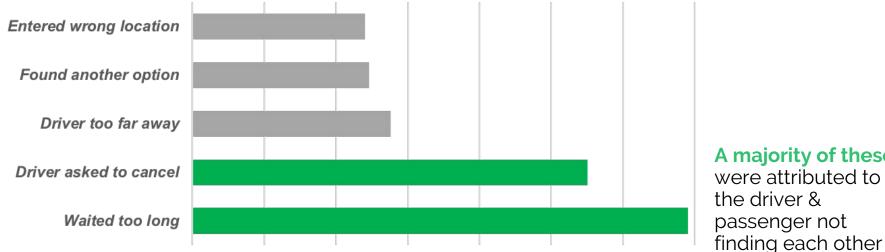
- Democratized testing across product Families
- Standardized & partially automated measurement
- Continuous effort to make it easy to iterate & rollout

What does this usually tr

translate into, for our users

Circa 2017

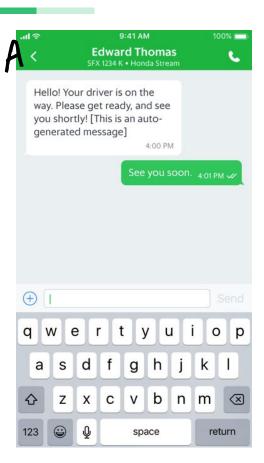
High #cancels.... after 2 mins. of a vehicle getting allocated



A majority of these were attributed to passenger not

So, Allocation has happened and Intent has been expressed... by both parties

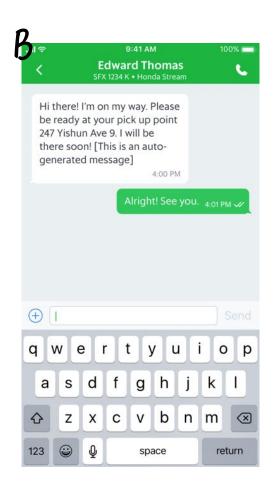
We tried Native chat



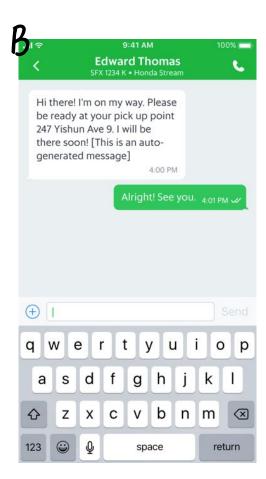
- A|B tested an informal line of communication
- Seldom a real conversation.

But guess what!!

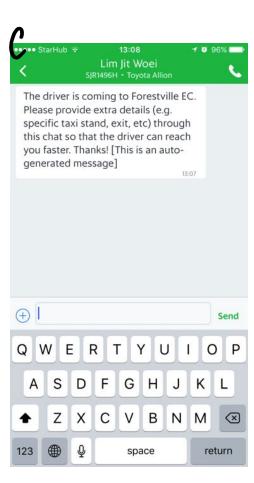
On my way...



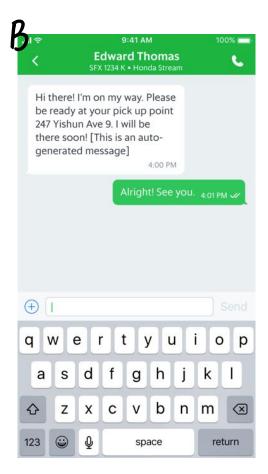
On my way...



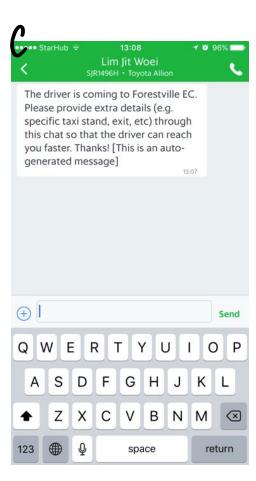
Where are you...



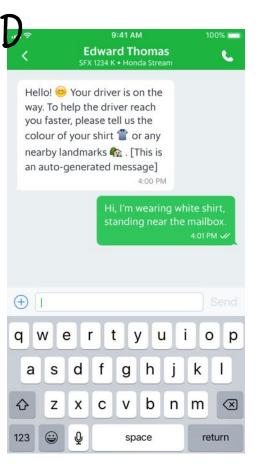
On my way...



Where are you...



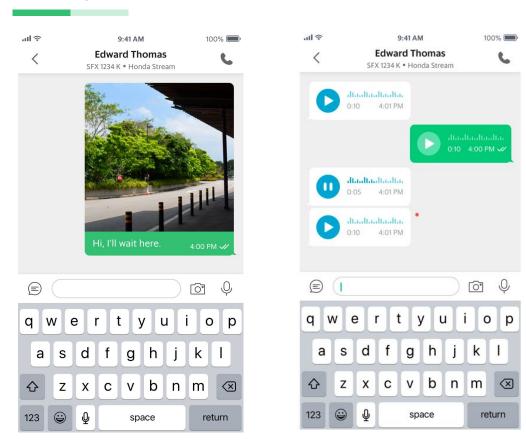
What are you wearing...



The Outcome



Today,....



Building this ethos has meant...



Is there a downside?

Absolutely!

Consider what is the cost of the average test...

Engineering: SDK Integration

PM / Analytics: Test Setup

Design: Variant Creation

QA: Performance Testing

Analytics: Monitoring, Measurement & Communication

Assuming a test runs for ~2 weeks....

** Delay to Market ~2 weeks or more

When not to Test

Avoid simple CTA type tests

When we didn't have something and now do

When the test is a proxy for something else

Thank You.

And We Are Hiring!!

