ENABLING SCIENTISTS TO DEVELOP

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OVERVIEW AND AGENDA

Can you be savvy with data and algorithms without being savvy at coding?

We will explore 3 Journeys and 4 takeaways filled with failure, insight, and success.

THE BACKSTORY

JOURNEY 1: START-UP @ LLAMASOFT

What Happened

$1.5B valuation

Team of 6 to 28

Multiple products created

Key Findings

Use cases were well understood and core to success

Testing was poor at the start

Release process was cumbersome and lacked trust

Siloed teams, throwing it over the fence

JOURNEY 2: INTERNAL STARTUP @ RYDER

What Happened

Grew from 4 to 60 people over 3 years

Warehouse efficiency solution rolled out to 45+ warehouses

Key Findings

Close to the users, nearly daily interactions

Testing was a challenge

Deployment required continuous work with Corp IT

Teams were integrated, but DataSci remained siloed

JOURNEY 3: START-UP @ OPTILOGIC

What Happened

Grew from nothing to 64-person team

Fought hard to perfect the architecture

Released a 100% SaaS Product

Key Findings

Business problem understanding was essential

Unit testing throughout the process is crucial

System-wide build process
(the tools have gotten better here too)

Feature team experience was solid

TAKEAWAYS

What can we learn from these experiences?

ALGORITHM RELEVANCY

Don't get lost in the algorithm

Requests should be use-case driven, watchout for “I need AI” asks

Continual feedback and collaboration with business users is crucial

Get out of the chair and in the field

TESTING IS KEY

Teach it, Grow it, make it happen

Types of Testing: unit, stress, behavior, integration, …

Each testing approach has unique strengths

Create patterns that they can replicate

Teach by doing, guiding, and observing

DEPLOYMENT PROCESS

Deployment is smooth(er) with good testing

Tool up so that researchers aren't doing this work

Set clear definitions for what is passing

Gates should reduce noise, not create it

FEATURE TEAMS

Birds of a feather flock together

Create the classic independent team that can do everything (including DataSci)

Encourage cross-team collaboration and mixing

Enable feature teams for improved productivity and efficiency

WRAP-UP

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