

Empowering Business Users with Shiny

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Agenda

1. What do we mean by “empowering” business users?
2. Two examples to show how we have used Shiny within Allstate to engage our business partners with analytics
3. Some observations about using Shiny in this way

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- Building relationships by:
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 - Sharing ownership
- Shiny can be an effective tool for building these relationships

Why Shiny?

- R's active open source community
- Low barrier to entry
 - E.g. No need to learn HTML/CSS/JS
- Exploiting your existing R code

Example 1: Exploring Messy Data

- Case: A technology group wants to be able to proactively identify server outages

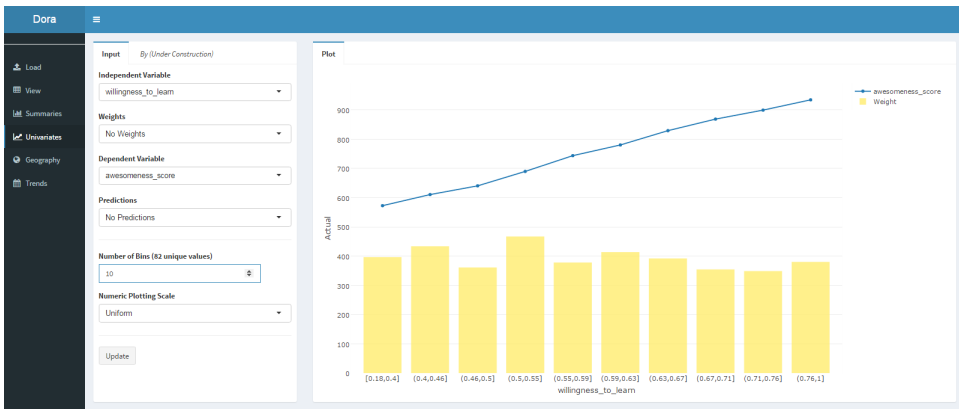
Example 1: Exploring Messy Data

- Case: A technology group wants to be able to proactively identify server outages
- Data: Primarily user-documented and hence is very messy and inconsistent
 - E.g. recent changes, assigned resources, and meeting notes that describe incidents along the way
- Our business partners had some experience analyzing this data but were not able to dive as deep as they wanted

Example 1: How Did Shiny Help?

- Shiny helped us more easily collaborate with our business users to explore and understand this data
 - We get to leverage their perspective on how the data is generated
 - Our business partners get to leverage our experience working with and asking questions about data

Example 1: The App!



Example 2: “Delivering” Models

- Case: Claims adjusters want to be able to make faster decisions

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- Case: Claims adjusters want to be able to make faster decisions
- Data: A mixture of closed- and free-form data on claims
 - E.g. Involved parties, assessed damages, and case notes from the adjuster
- Claims adjusters have worked extensively with this data but need help understanding what can help predict claim amounts early in the process

Example 2: How Did Shiny Help?

- Shiny helped us quickly create a prototype application to provide estimates of claim amount and allow adjusters to update incorrect information
 - We get to leverage their perspective on claims cases
 - Our business partners get to leverage our experience building predictive models

Example 2: The App!

Claims app

████████████████████ Fetch Claim

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Recommendation \$

Some Notes to Using Shiny in this Way

- Shiny is a fantastic **supplement** to great work but does not **replace** great work
- As with any tool, it requires:
 - Strategic direction
 - Good communication
 - Good data work