

Data Infused Leadership

Harnessing Data to Lead the Way



Alison Rosewarne
*Exec Mgr., Architecture and
Tech L&D (REA Group)*



Hello!

Alison Rosewarne

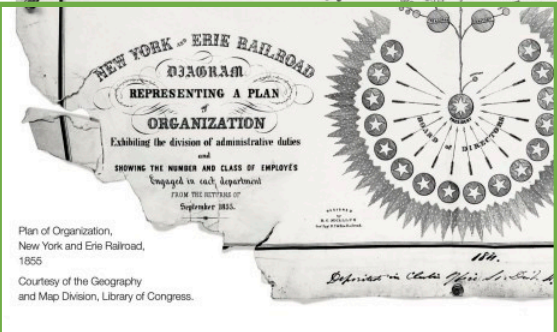
Executive Manager, Architecture
and Tech L&D



20+ years IT experience







Plan of Organization,
New York and Erie Railroad,
1855

Courtesy of the Geography
and Map Division, Library of Congress.



Plan of Organization,
New York and Erie Railroad,
1855

Courtesy of the Geography
and Map Division, Library of Congress.



A photograph of a large, ancient tree with extensive, moss-covered roots spreading across the forest floor. The roots are thick and gnarled, with a dense network of smaller roots extending outwards. The moss is a vibrant green, contrasting with the brown bark and the dry, brown pine needles on the ground. The background is a soft-focus forest scene with green foliage and a stone wall in the distance.

How do you effectively scale your own leadership?



Seeking input



Gathering insights

Measuring effectiveness

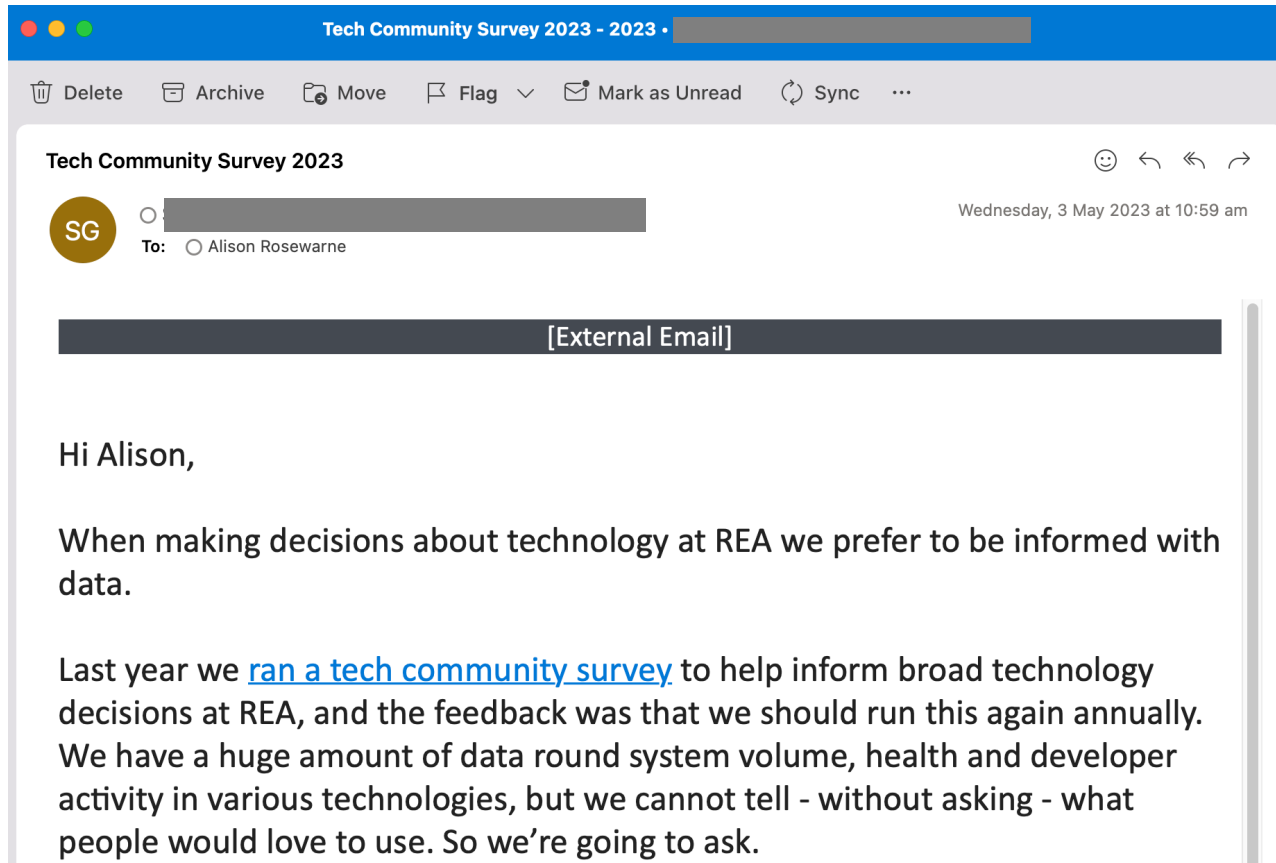




Photo by [David Iskander](#) on [Unsplash](#)



Asking people ... at scale



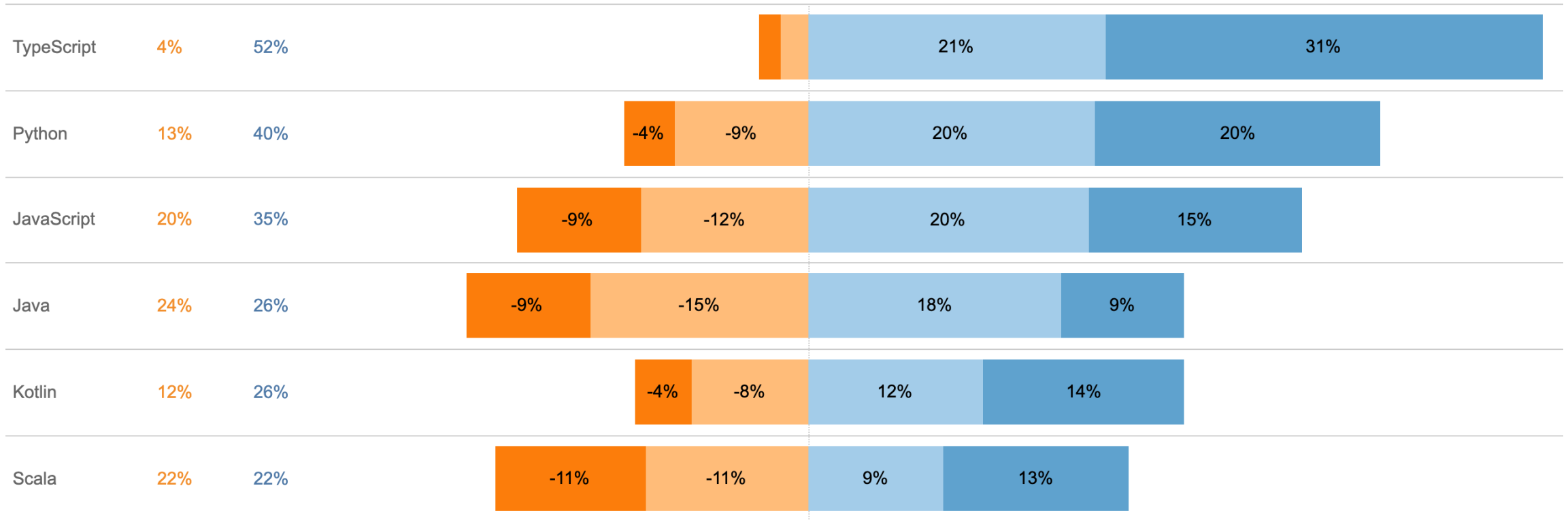
What is your appetite to use the following languages to write production software?

What training provided by School of Tech have you attended/used in the last 12 months?

What do you do when you get stuck on a problem?



What is your appetite to use the following languages to write production software?



- 1 - Not at all, please don't make me
- 2 - Wouldn't pick it myself
- 3 - No opinion/don't mind (not shown)
- 4 - Generally happy about working with it
- 5 - Super keen

Note: old data!



From data to decisions



Principal Developer –
Functional Programming



Back
Tech Community Survey 2022 - Results

Tech Community Survey 2022 - Results

Drum roll please ... after 5 weeks and a small amount of prompting the results of the **2022 tech community survey** are in!

Insights

Learning

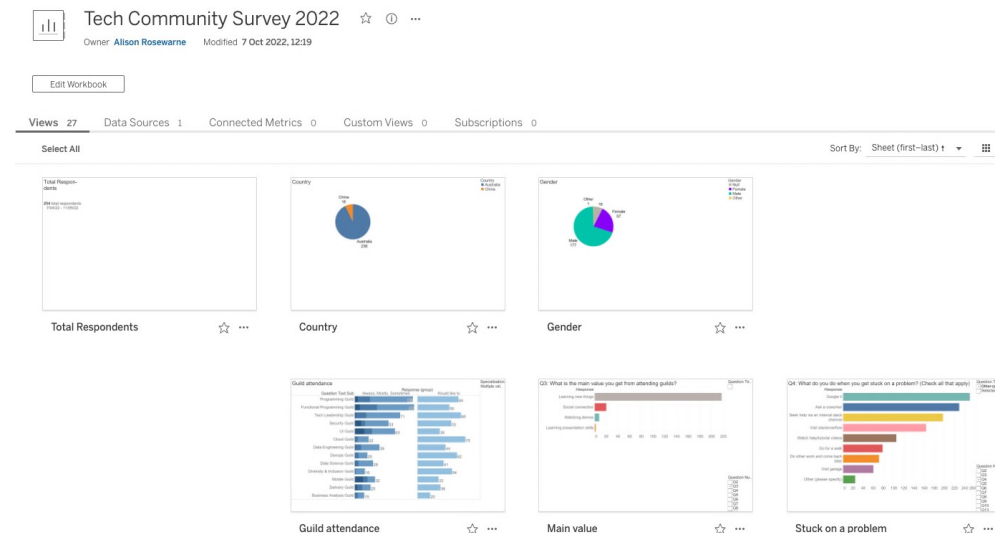
The questions related to learning covered:

- What guilds are people attending and why?
- How are people problem solving?
- What approaches to training and learning are people taking?
- How much time are we investing in learning?

That's a wrap

I'd like to thank everyone again for taking the time to fill out the survey – it was a pretty long one. The value of this data, and the general positive response, indicates we should do this again; so next May we'll repeat the exercise.

To recap on actions:



Seeking input

CHALLENGES

Actionable data depends on asking the right questions

Design surveys carefully to prevent biases and survey fatigue

KEY TAKEAWAYS

Scalable input speeds up decisions and boosts confidence

Transparency of process, results, and outcomes builds trust





Seeking input

Gathering insights

Measuring effectiveness





Source code
management

Collaboration

Issue tracking

Distributed
development

Documentation

...



Language
detection

Author
contributions

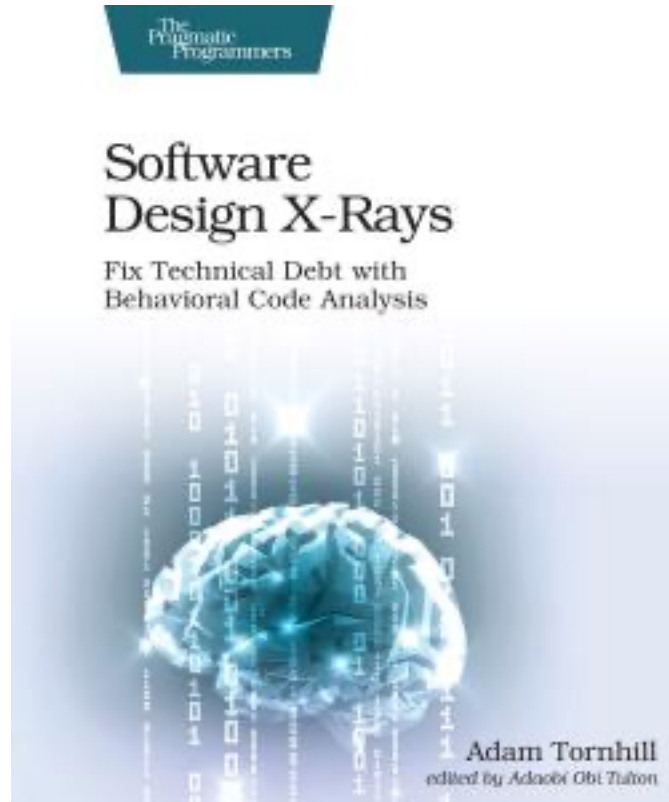
Churn / hotspots

Merge lag

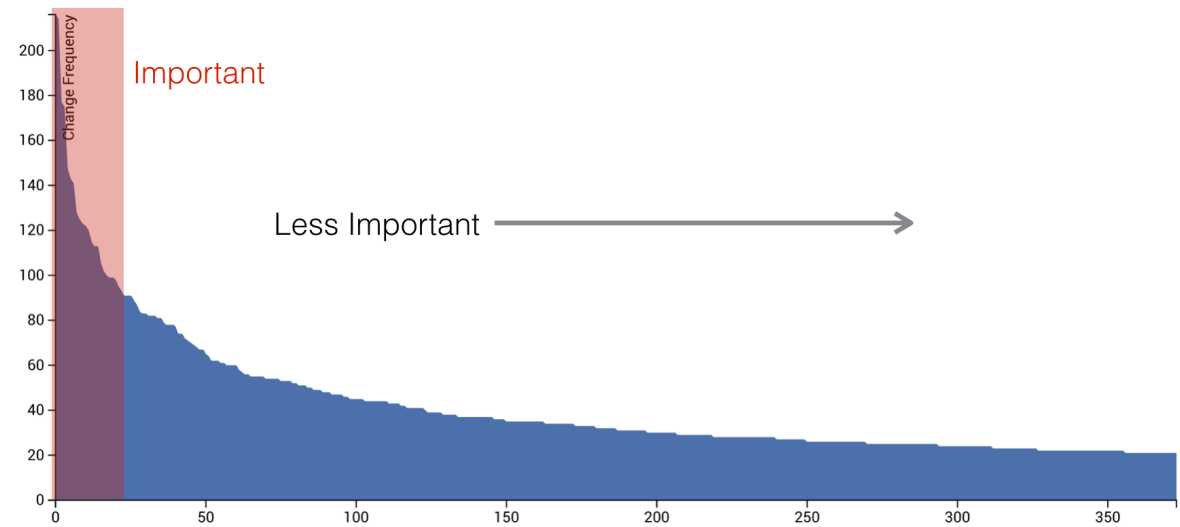
...



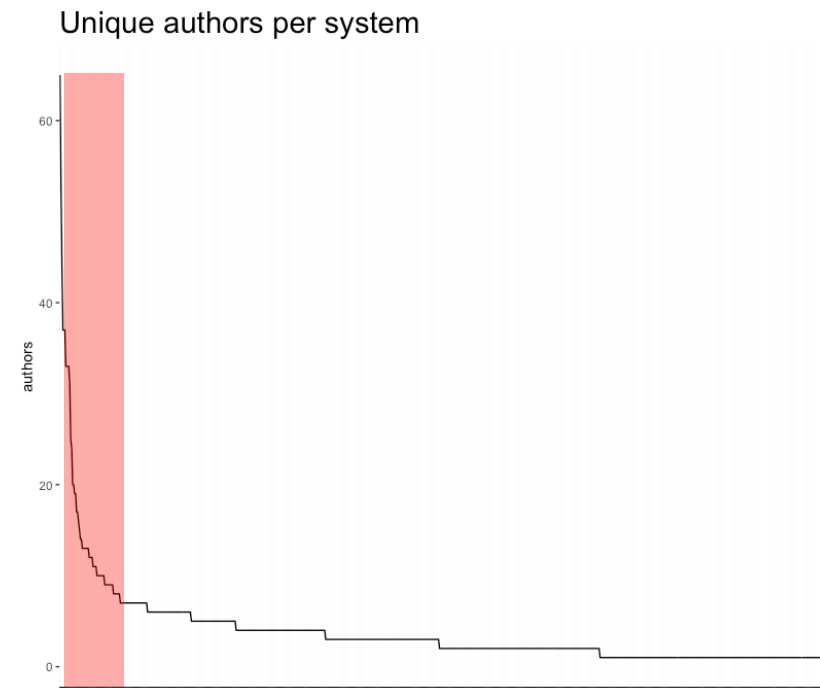
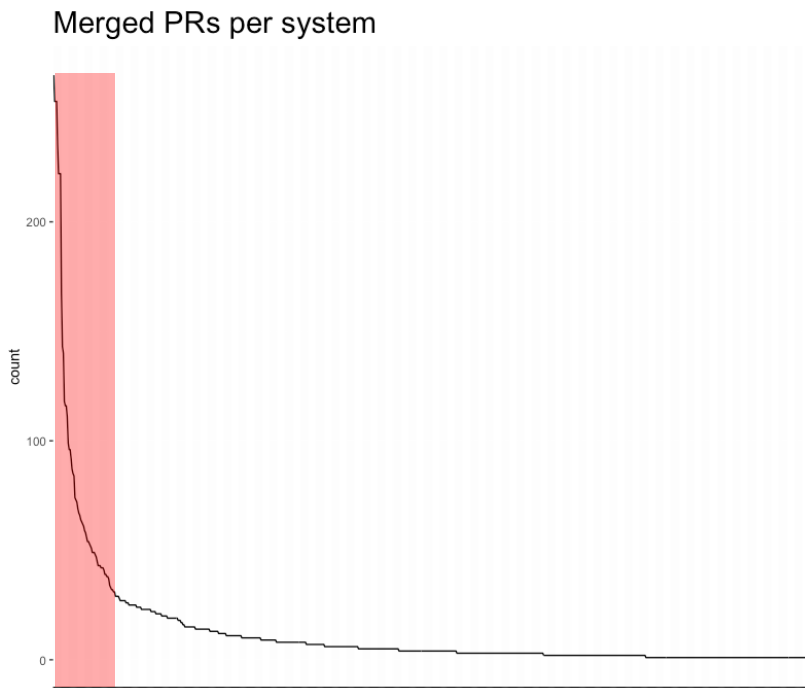
Adam Tornhill: “Most of your code isn’t important”



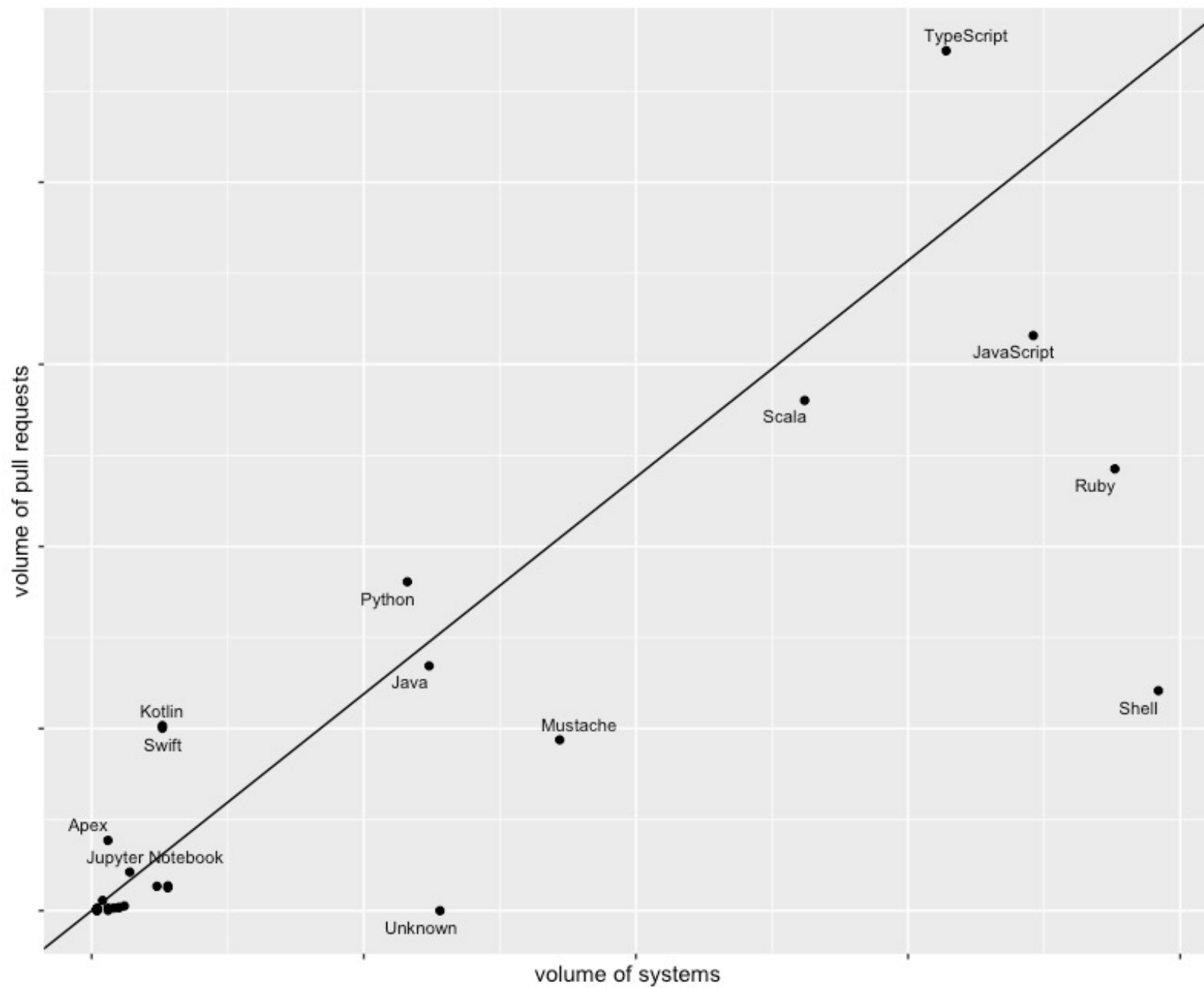
Focus on the Code that Matters



80/20 rule applies at the portfolio level too

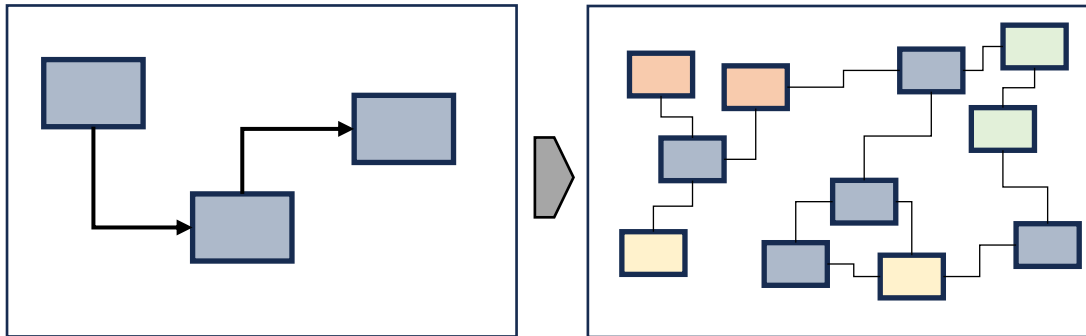


Language 'Popularity'



From data to insights

Systems a, b, and c will benefit from developer experience uplift



Systems x, y, and z should be decomposed into discrete components



Polyglot programming is required of all developers and engineers



Gathering insights

CHALLENGES

Chasing perfect data can stall decisions

Having data does not absolve your responsibility

KEY TAKEAWAYS

Existing systems, like git, allow you to sense at scale

The 80/20 rule is a powerful prioritization lever





Seeking input

Gathering insights

Measuring effectiveness



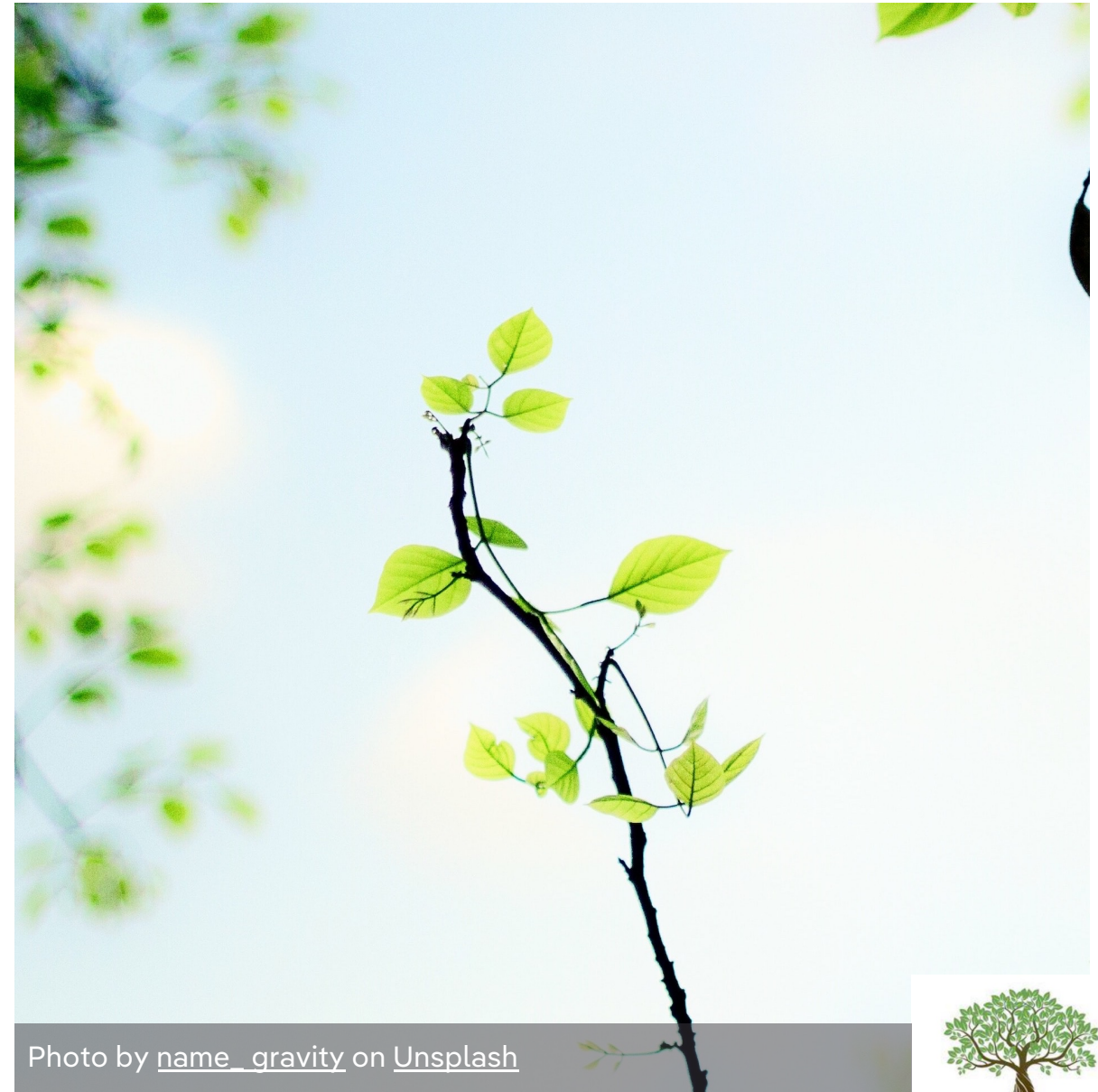
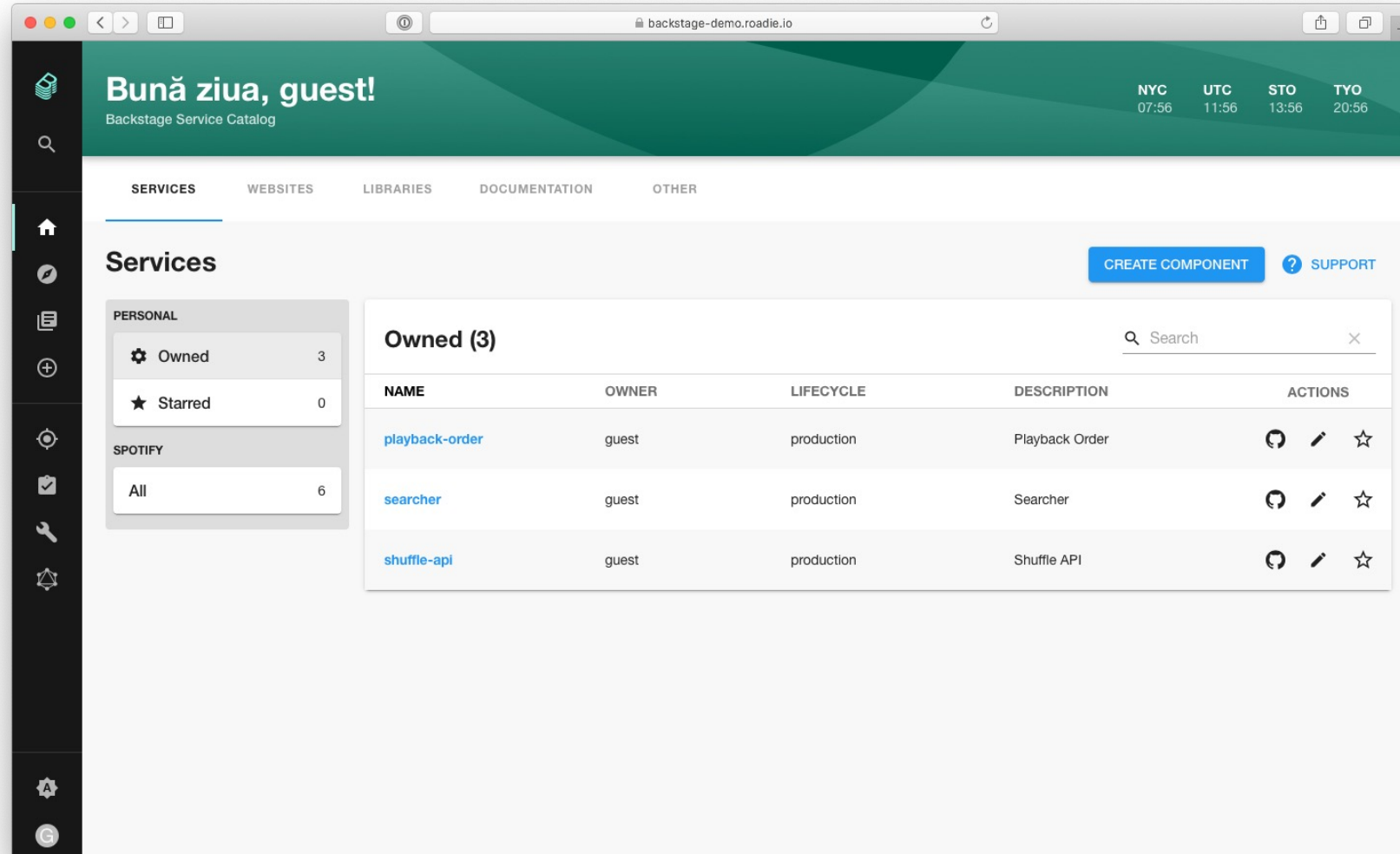


Photo by [name_gravity](#) on [Unsplash](#)



Catalogue your technology assets



Source: <https://backstage.io/docs/features/software-catalog/>



Align on a measurable definition of engineering excellence



Development

Is it easy and safe to change?



Operations

Is it servicing customers reliably?



Architecture

Is the investment sound for the long run?

Endorsed Language

Multiple Contributors

Multiple Deployments

Continuous Deployment

Static Analysis

SLIs/SLOs

System Recovery Tested

Cost Optimised

Single Responsibility

Documented Decisions

Platform Aligned

Supported Language

Containerised

Up-to-date libraries

Continuous Integration

Infrastructure As Code

Support documentation

Adequate Logging

Actionable Alerts

Security Controls

System Recovery Plan

Well-defined Interface

Documented Architecture

Clear Data Ownership

(START HERE)

DEVELOPMENT

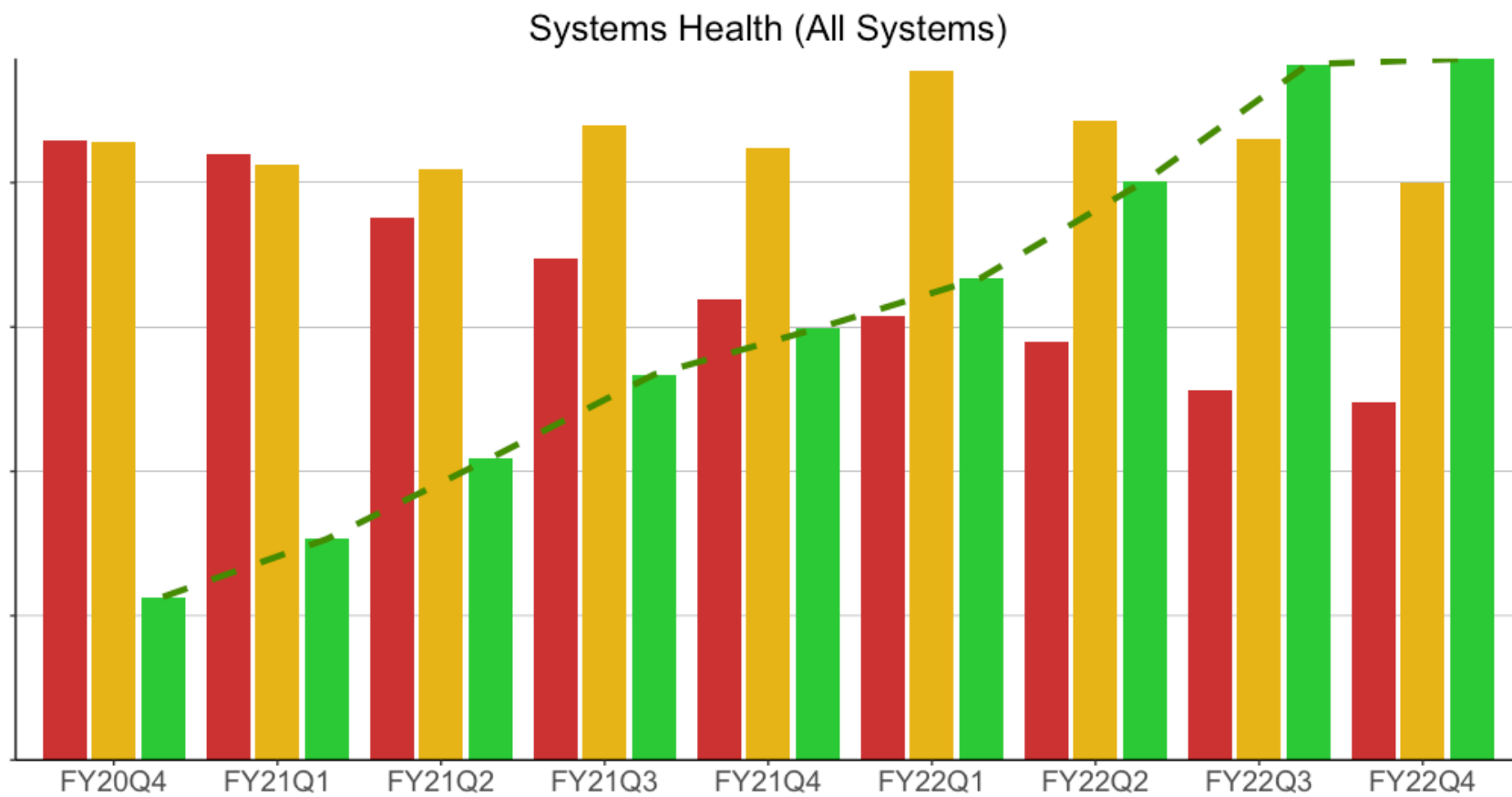
(START HERE)

OPERATIONS

(START HERE)

ARCHITECTURE





Measuring effectiveness

CHALLENGES

Embedding
objective
engineering
measures takes
time

Improvement only
comes with
investment

KEY TAKEAWAYS

Clear, measurable
objectives scale
well

A culture of
engineering
excellence
provides a strong
foundation

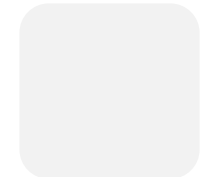
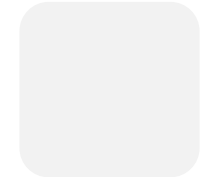




Seeking input

Gathering insights

Measuring effectiveness



“Culture is the collective behaviours and engagement is how we feel”

BONUS ROUND

Measuring culture and leadership is both possible and important.

Let's Talk About EX.

S2 EPISODE 5 - 'Leading with Purpose - How REA Group Creates a Successful Culture'



The podcast cover has a bright yellow background. At the top, the title 'Let's Talk About EX.' is written in large, bold, dark blue letters. Below it, the episode title 'S2 EPISODE 5 - 'Leading with Purpose - How REA Group Creates a Successful Culture'' is in smaller, pink letters. In the center, there are two circular portraits on a pink background. The left portrait is of Ryan McGrory, a man with a beard wearing a white t-shirt with the 'exsona' logo. The right portrait is of Mary Lemonis, a woman with long brown hair wearing a silver jacket. Below the portraits, their names and titles are listed. At the bottom left, it says 'a podcast by' followed by the 'exsona' logo. At the bottom right, there are three curved pink lines.

Ryan McGrory
(Host)

Mary Lemonis
Chief People & Sustainability
Officer at REA Group

a podcast by
exsona



Data Infused Leadership - Key takeaways

The approaches that work in a small setting can scale – with data

You are likely sitting on rich sources of insights, with plenty of research available

A strong leadership base, nourished with data, supports growth

Data does not replace human judgement - it enables it



Data Infused Leadership

Harnessing Data to Lead the Way



Alison Rosewarne
*Exec Mgr., Architecture and
Tech L&D (REA Group)*