



BCStats

# Overcoming gravity & achieving escape velocity

Martin Monkman

Seattle  
2018-11-07

**EARL**  
CONFERENCE

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1 2 3 4 5 6 7 8 9

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

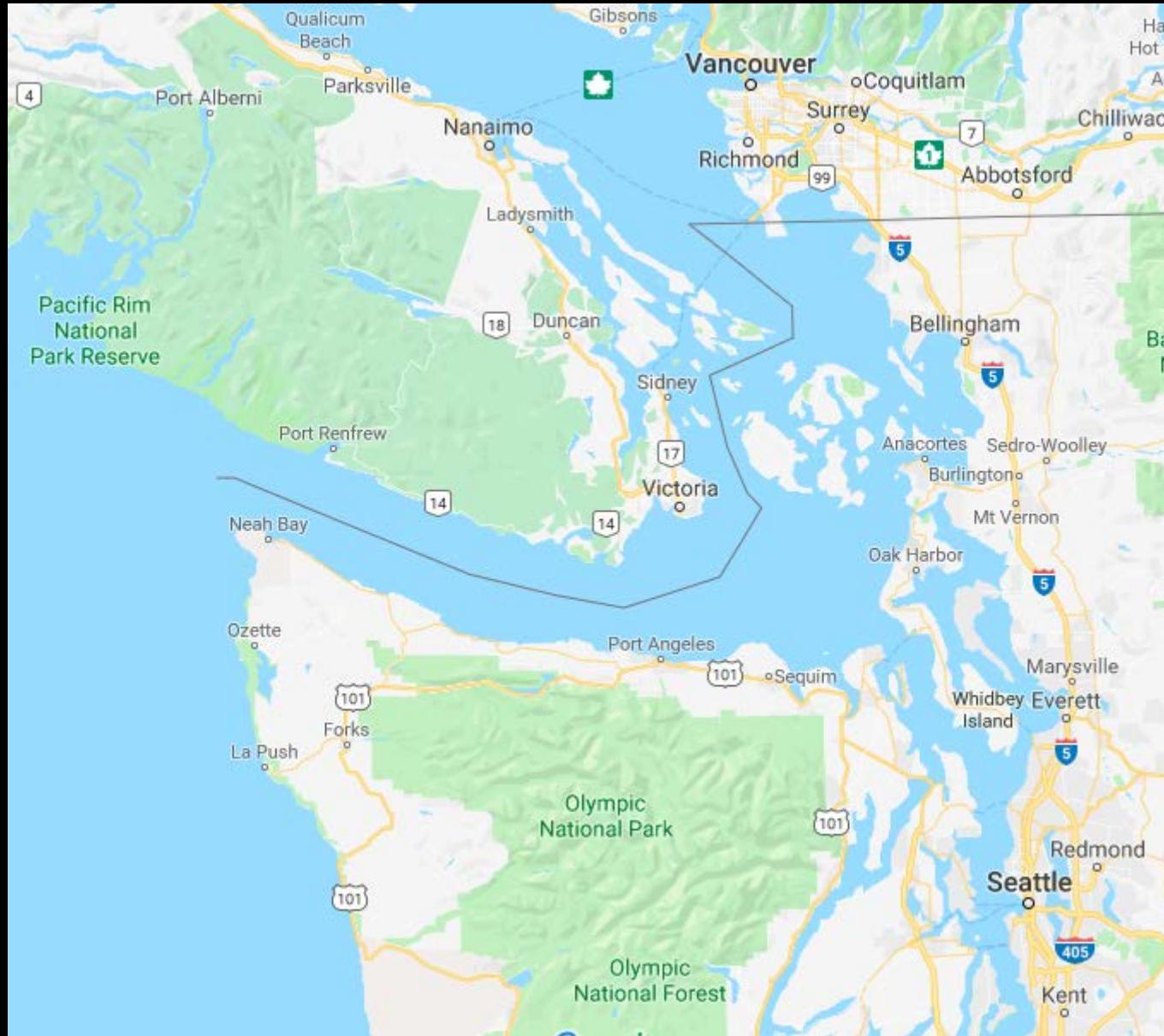
[View Details](#) | [Edit](#) | [Delete](#)

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

Digitized by srujanika@gmail.com







## CHAPTER 27.

An Act to establish and maintain a Library for the use of the Legislative Assembly and to constitute a Bureau of Statistics.

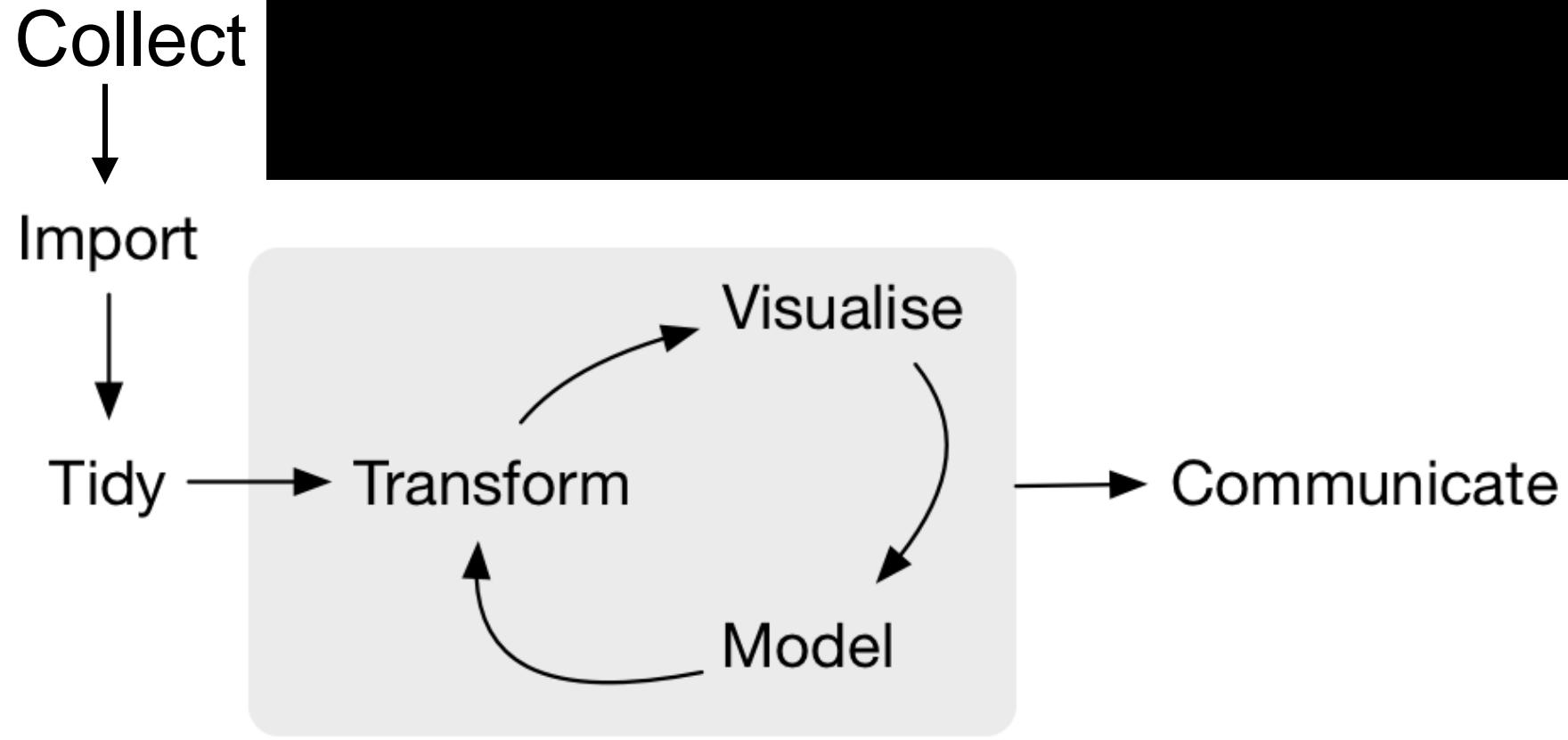
[11th April, 1894.]

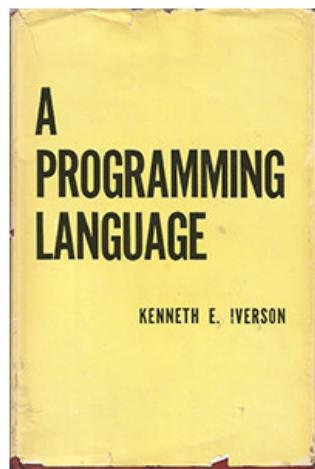
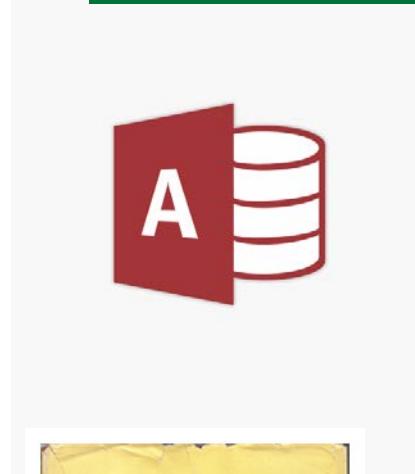


# What we do

"...collect, compile, compare, analyze, abstract, project and distribute statistical information respecting the commercial, industrial, financial, social, economic and general activities and conditions of British Columbia and persons in British Columbia or doing business in British Columbia"

# How we do it





**SPSS®**



**STATA®**







Do you want to allow the following program to make changes to this computer?



Program name:

Verified publisher:

File origin:

To continue, type an administrator password, and then click Yes.



User name

Password

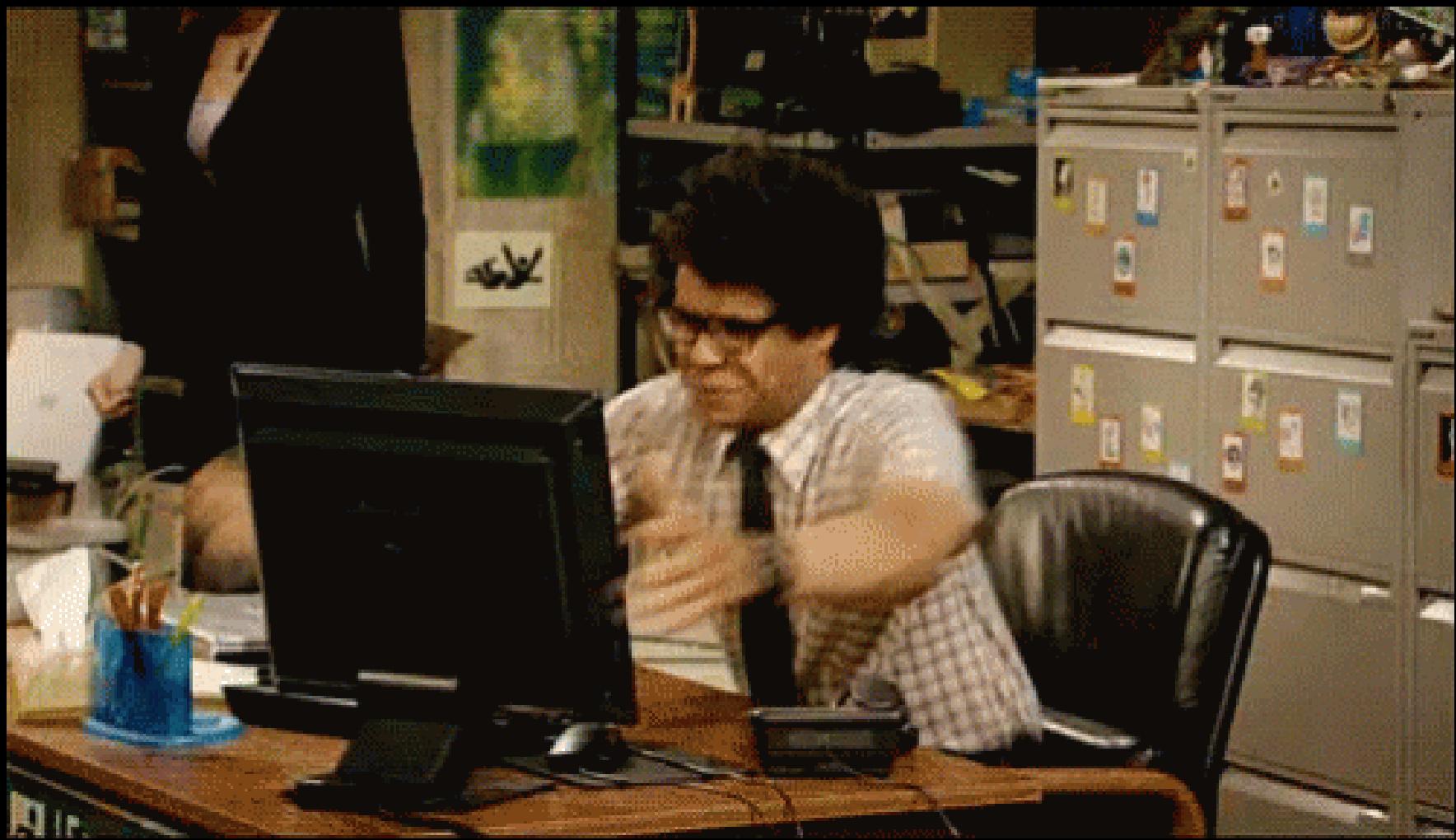
Domain: Microsoft



Show details

Yes

No



[bayesball.blogspot.com](http://bayesball.blogspot.com)





Adam BOOer



@AdamGruer

Following



Can anybody point me to some good resources for starting a conversation with the IT department about making **#rstats** , **#rstudio** , shiny etc an accepted part of software kit? As far as I know most of our servers are windows OS  
%>%

2:43 PM - 1 Jul 2018 from [Melbourne, Victoria](#)

**PLEASE RE-SUBMIT**

**FORM 117B#3 PART2**



**estherderby**  
@estherderby

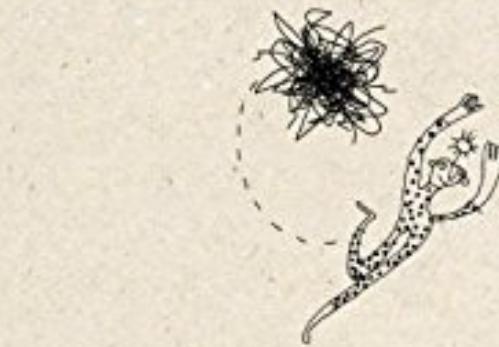
[Follow](#)



Ppl seem to think about adding processes, policies, procedures...but not retiring any of them. Sort of like always buying new clothes, without ever clearing out the closet of stuff that now longer works or fits.

12:12 PM - 23 May 2018

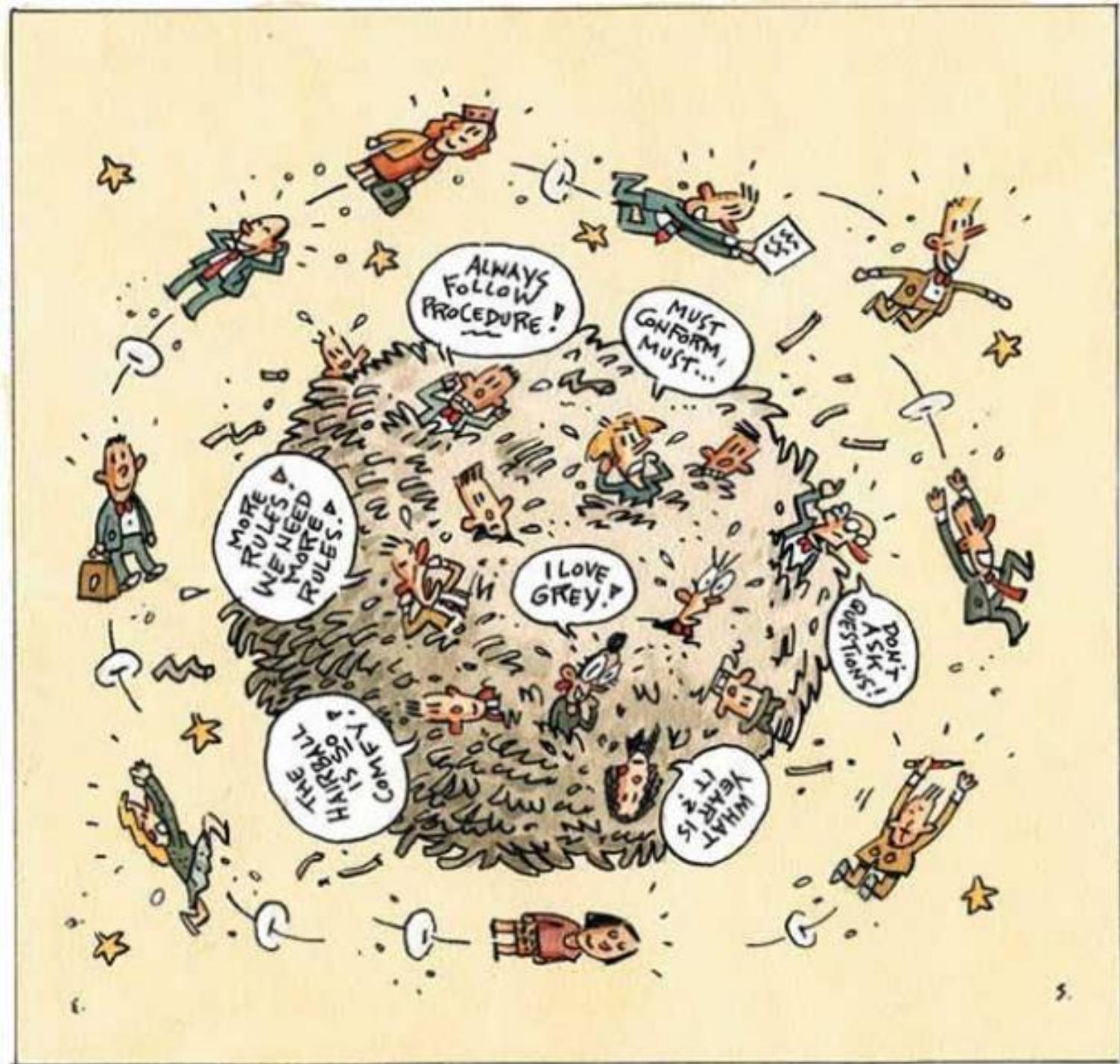
# ORBITING the Giant Hairball



(ORBITING THE GIANT HAIRBALL)

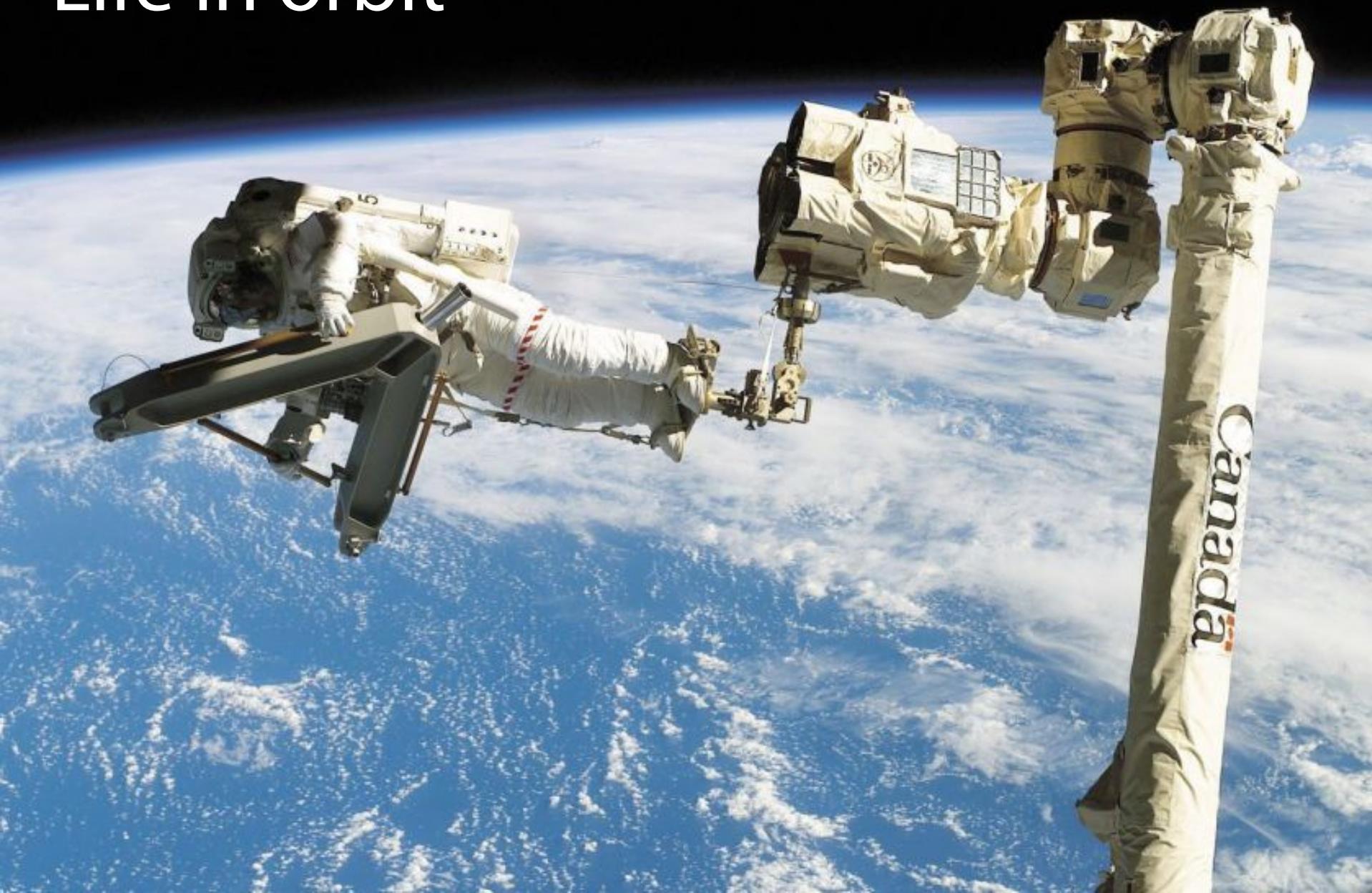
*A Corporate Fool's Guide to Surviving with Grace*

Gordon MacKenzie





# Life in orbit





Jenny Bryan  
@JennyBryan

Following



I still can't get over the fact that my province publishes `#rstats` packages on CRAN and has 243 `@github` repos.

Env Report BC @EnvReportBC

The `bcmaps` `#rstats` package just updated on CRAN, a new `#opendata` layer, `#BritishColumbia` cities & other improvements [cran.r-project.org/web/packages/bcmaps](http://cran.r-project.org/web/packages/bcmaps)

11:18 PM - 18 Jan 2018

16 Retweets 93 Likes





**Hadley Wickham**

@hadleywickham

Following



I'm looking for a data analysis .R/.Rmd on GitHub with data understandable by a lay audience, that shows analysis changes over time. Any ideas?

10:28 AM - 7 Mar 2018

---

3 Retweets 11 Likes



---

5

3

11





**Stephanie Hazlitt** @stephhazlitt · 12m



Replies to [@hadleywickham](#)

If you mean analysis code changes, we updated this population data analysis code shifting to tidyverse 📦 & style -> master vs 2018-update branches



### [bcgov/bc-population-indicator](#)

bc-population-indicator - R scripts for an indicator on trends in B.C.'s population size & distribution for Environmental Reporting BC

[github.com](https://github.com)



**Hadley Wickham** ✅ @hadleywickham · 7m



Exactly what I'm looking for - thanks!

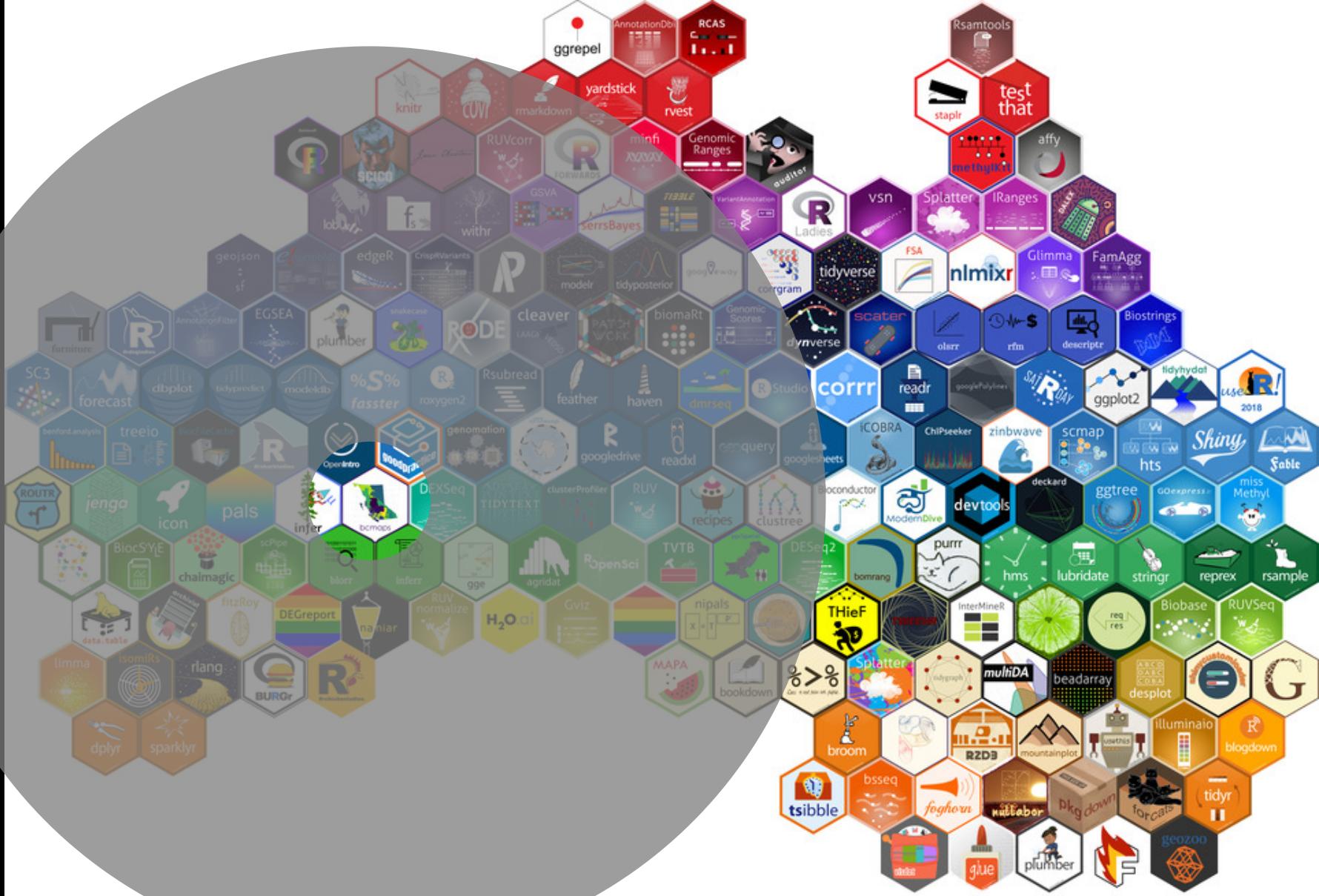


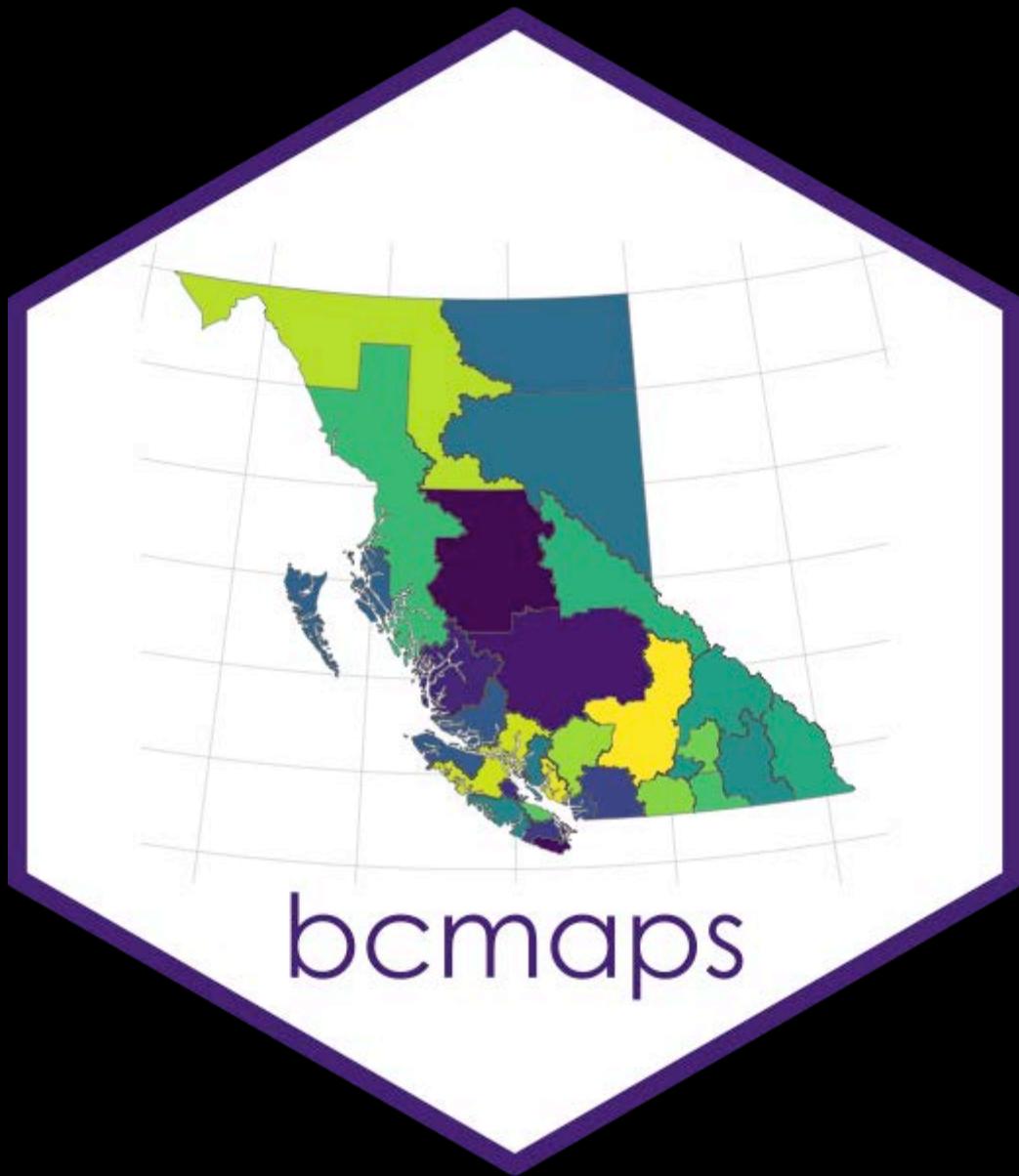
# You can't do data science in a GUI

*March 2018*

Hadley Wickham  
[@hadleywickham](https://twitter.com/hadleywickham)  
Chief Scientist, RStudio









# 2017 Voters List Quality Measurement

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PREPARED FOR ELECTIONS BC  
BY BC STATS – MARCH 2018



# Employee survey



`'xlsx'`

# Post-secondary student outcomes

BCStudent Outcomes  
Shaping Post-Secondary Education

Home   About Us   Annual Surveys   Other Surveys   Publications   Newsroom   Dashboard   FAQ   Contact Us

Quick Links   Home > Home

Newsroom   Contact Us

WHAT'S NEW?

[BC Student Outcomes - The 2017 Highlights](#)

August 15, 2018

To find out what post-secondary students in B.C. said about their education, what they learned, and what they are doing now, check out The 2017 Highlights.

[Full Story](#)

« 1 2 3 4 5 » [All News](#)

 A red circle highlights the "BC STUDENT OUTCOMES DASHBOARD" section, which displays a gauge meter indicating survey completion rates across three years.

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 ANNUAL SURVEYS

Collecting feedback from thousands of former B.C. post-secondary students.

[LEARN MORE](#)

 PUBLICATIONS

Telling the stories of B.C.'s public post-secondary institutions.

[LEARN MORE](#)

 THE FORUM

Overseeing BC Student Outcomes research and data collection.

[LEARN MORE](#)

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 Ministry of Advanced Education







# The Launch Pad





## Administrative Privilege

 Security Classification: Public

### Administrative Privilege Policy

#### For the Ministries of Community, Sport, and Cultural Development (CSCD), Jobs Tourism, and Skills Training (JTST), International Trade (MIT), Small Business and Red Tape Reduction

You are receiving this because you either requested administrative privileges on your workstation(s) or you already have administrative privileges on your workstation(s). Our ministries employ the least privilege principle in accordance with the [BC Government's Information Security Policy](#) and provide you with administrative privileges only if you need them to perform your job duties. Administrative privileges give you the ability to load software and change system settings. Accordingly, you are responsible for understanding all potential risks, and are obligated to practice safe computing as follows:

#### Limitations on Privileges

- I confirm that I must have administrative privileges on my workstation(s) for the performance of my job duties.
- I will not use my administrative privileges for activities other than those for which access was granted.
- I understand that my ministry reserves the right to revoke my administrative privileges at any time.
- When administrative privileges are no longer required, it is my responsibility to contact my ministry to request for removal of my administrative privileges from my workstation. [These requests can be submitted via the [OneStop application](#) through your IT Coordinator. You can find your branch's IT Coordinator at [this link](#).]

#### Modifying System Settings

- I will not disable security software controls, agents or configurations (i.e. encryption, anti-virus, automatic updates, and firewall etc.) or delete log information from my device.
- I will not install software onto my computer or change system settings unless I need to for work purposes.

#### Installing or Running Software

The following requirements apply to the download and/or installation of any applications (apps) or services to a government owned device or workstation.

- I am responsible for following the appropriate process prior to installing software and applications I download or run on my workstation. [Please contact your Ministry Service Manager for details on your ministry's process. Each ministry's Service Manager is listed at [this link](#).]
- I will check Shared Services BC (SSBC)'s [Self-Service Center](#) to search for software before obtaining it from other sources. [There is no way to guarantee that software downloaded from the Internet will not result in a virus or system compromise. Software downloaded from legitimate, well-known organizations is your best choice. Please contact your [Ministry Information Security Officer](#) for additional guidance on legitimate and well-known organizations.]
- Any costs for an app or service that I may expect to incur for work purposes must be requested via the [OneStop application](#) through my IT Coordinator and approved by my supervisor. Without proper approvals, I will be personally liable for any costs. [You can find your branch's IT

# DataBC catalogue

catalogue.data.gov.bc.ca

The screenshot shows the Data Catalogue homepage. At the top left is the British Columbia logo with a sun icon. To its right is the title "Data Catalogue". A search bar with the placeholder "Search datasets..." and a magnifying glass icon is positioned to the right of the title. Below the header is a blue navigation bar with links: "What is DataBC?", "Dataset Usage", "Geographic Services", "Blog", "Developers", "Contact", "Log in", "Datasets", "Organizations", "Groups", "Stay Up To Date", and "About".

The screenshot shows the "Datasets" page. On the left, there is a sidebar with a "License" section containing items like "Open Government Lic..." (1498), "Access Only (419)", "Statistics Canada (39)", "Open Government Lic... (17)", "Open Government Lic... (15)", and a "Show more" button. Below that is a "Sectors" section with categories: "Natural Resources (891)", "Finance (447)", "Economy (299)", and "Service (115)". The main content area has a search bar with the placeholder "Search datasets..." and a magnifying glass icon. It displays "2,013 datasets found" and an "Order by" dropdown set to "Published Date". Below the search bar, it says "Download permission: Public". Two dataset cards are shown: "University of Victoria Aquifer Stress Evaluation" (Natural Resources sector, published 2018-09-10) and "Office of the Comptroller General - BC Government Transfers" (Finance sector, published 2010-08-24). Each card includes a grid icon, the sector name, and download links for "xlsx" and "csv".

# Province of BC github

github.com/bcgov

The screenshot shows the GitHub organization profile for "Province of British Columbia". The header includes a search bar, a repository icon, and navigation links for Pull requests, Issues, Marketplace, and Explore. The organization's logo features a sun rising over mountains, with the text "BRITISH COLUMBIA". Below the logo, the tagline "Where Ideas Work" is displayed. The profile includes location information (Canada), a GitHub URL (https://github.com/bcgov...), and an email address (todd.wilson@gov.bc.ca). Key metrics shown are 334 repositories, 311 people, 50 teams, and 2 projects. Two pinned repositories are listed: "BC-Policy-Framework-For-GitHub" and "Gov-2.0-Bootstrap-Skeleton".

Province of British Columbia

Where Ideas Work

Canada <https://github.com/bcgov...> todd.wilson@gov.bc.ca

Repositories 334 People 311 Teams 50 Projects 2

Pinned repositories

**BC-Policy-Framework-For-GitHub**  
Policy information for BC Government employees using GitHub  
★ 59 ⚡ 27

**Gov-2.0-Bootstrap-Skeleton**  
An HTML5/CSS3/Bootstrap skeleton to accompany the gov.bc.ca Developer's Guide.  
HTML ★ 8 ⚡ 10

# BC Developers' Exchange

bcdevexchange.org

\$5,000.00   Victoria In-person work NOT required

R RMarkdown Git GitHub

## Municipal Solid Waste Data Visualization Using R

We are looking for an R programmer to work with us in bcgov GitHub on replicating and enhancing our existing D3 (JavaScript) data visualization on Municipal Solid Waste Disposal using R and R Markdown.

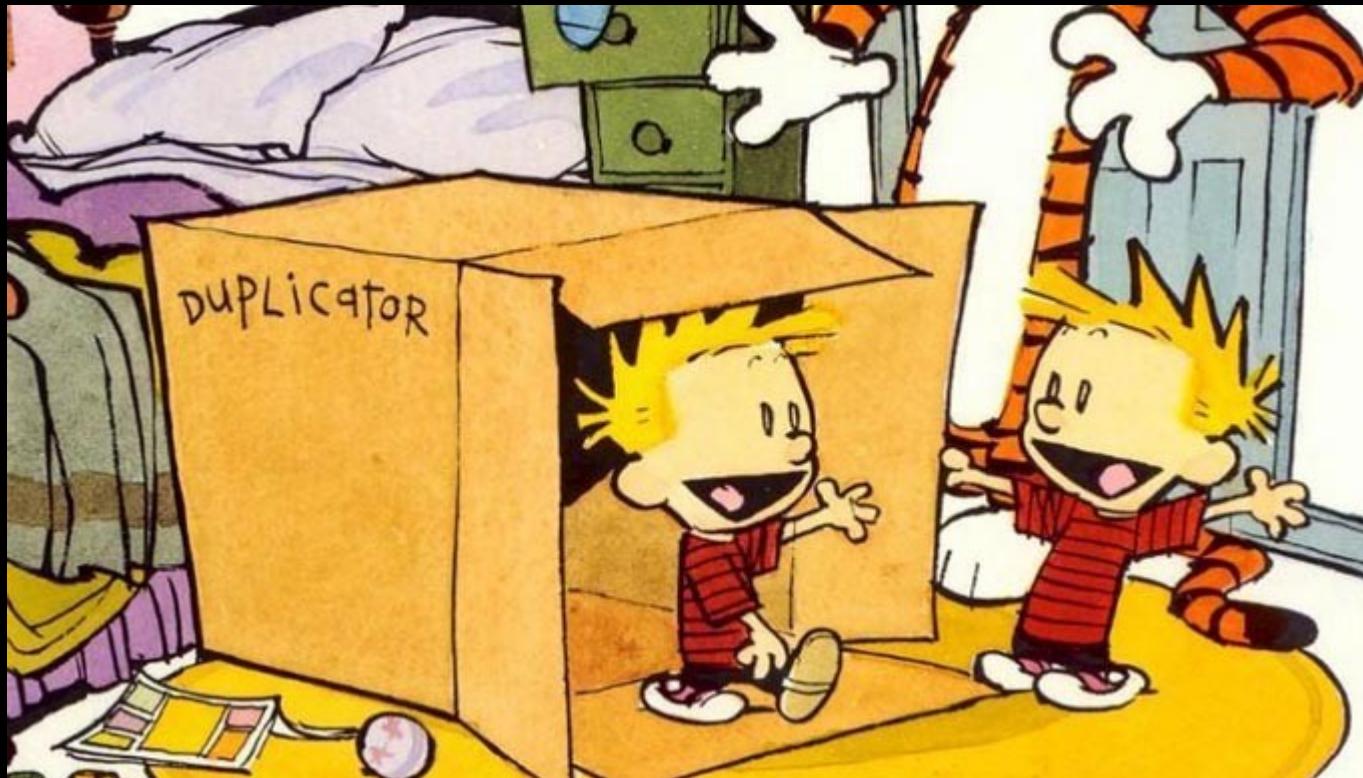
\$4,000.00   Victoria In-person work NOT required

R R Markdown Leaflet for R Git GitHub

## Trends in Groundwater Levels Data Visualization Using R

We are looking for an R programmer to work with us in bcgov GitHub on a remake of our existing interactive data visualization reporting Trends in Groundwater Levels using R and R Markdown.

# Finding like-minded people



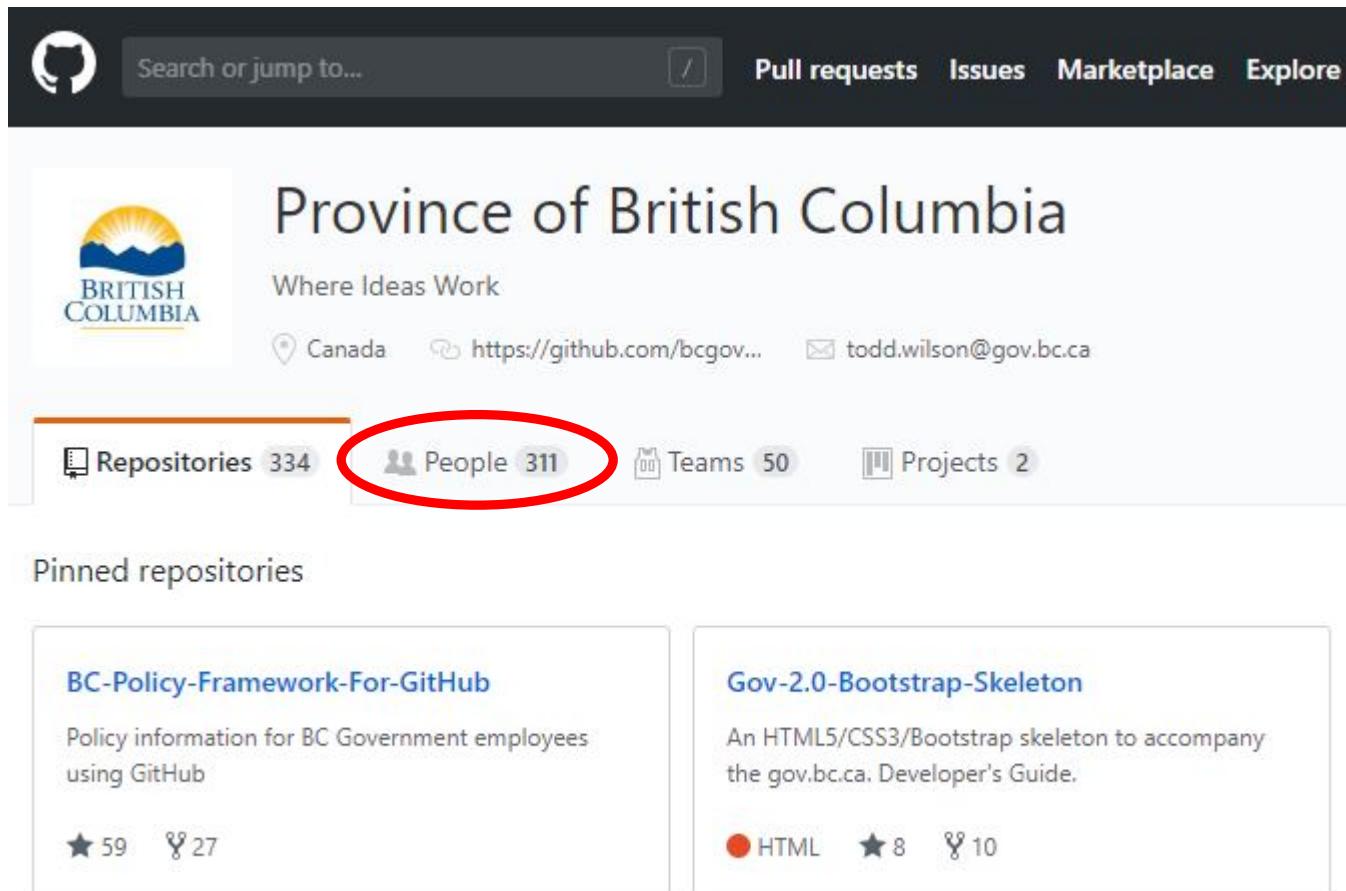
*No, not like that*

# Finding like-minded people



# Province of BC github

github.com/bcgov



The screenshot shows the GitHub organization profile for "Province of British Columbia". The top navigation bar includes the GitHub logo, a search bar, and links for "Pull requests", "Issues", "Marketplace", and "Explore". Below the header, the organization's logo (a sun rising over mountains) and name are displayed, along with the tagline "Where Ideas Work". The profile shows basic information such as location (Canada), website (https://github.com/bcgov...), and email (todd.wilson@gov.bc.ca). The main navigation bar features tabs for "Repositories" (334), "People" (311, circled in red), "Teams" (50), and "Projects" (2). The "People" tab is currently selected. Below the navigation, a section titled "Pinned repositories" displays two repositories: "BC-Policy-Framework-For-GitHub" and "Gov-2.0-Bootstrap-Skeleton".

Province of British Columbia

Where Ideas Work

Canada <https://github.com/bcgov...> todd.wilson@gov.bc.ca

Repositories 334 People 311 Teams 50 Projects 2

Pinned repositories

**BC-Policy-Framework-For-GitHub**  
Policy information for BC Government employees using GitHub  
★ 59 ⚡ 27

**Gov-2.0-Bootstrap-Skeleton**  
An HTML5/CSS3/Bootstrap skeleton to accompany the gov.bc.ca. Developer's Guide.  
HTML ★ 8 ⚡ 10

# Staying in orbit



# Building the team



- Diverse set of talents
- “Expand the boundaries of the team’s knowledge sphere” (Angela Bassa)

# Professional development



- Make time!
- Different modes
  - Self-directed
  - Online
  - Classroom



# Collaboration

- within BC Stats
- within BC government
  - packages
- DevEx “code with us”



# New tools



**There is no cloud**  
it's just someone else's computer

- shinyapps.io
- NLP and LDA packages

# Supporting R development

- Package enhancement
  - expand functionality
- Package creation
  - data



# Community

# Revolutions

Daily news about using open source R for big data analysis, predictive modeling, data science, and visualization since 2008

[« Interactive R visuals in Power BI](#) | [Main](#) | [Because it's Friday: Mario in the Park »](#)

June 23, 2017

## The R community is one of R's best features

R is incredible software for statistics and data science. But while the bits and bytes of software are an essential component of its usefulness, software needs a **community** to be successful.

# ...inside the BC Public Service...

## bcgov-useR

This repository is intended to house presentation materials from bcgov-useR days. If you have participated in a bcgov-useR day and would like to contribute your presentation materials to this repository please open a pull request. Individual useR days are given their own sub-directory. Please contribute your materials to that sub-directory.

### Presentations

[bcgov useR day \(Victoria 2018-10-11\)](#)

[R from Start-to-Finish: A Case Study Using the Voter List Quality Measurement \(Julie Hawkins\)](#)



# ...and around the world!



[Home]

Download

CRAN

R Project

About R

Logo

## Call for Proposals to Host useR! 2020

The R Foundation Conference Committee invites proposals to host the useR! 2020 conference, to be held in North America.

A distinctive feature of useR! is its emphasis on innovative contribution; as such we require all proposals to have substantial involvement from academic partners.

Further details are given below. Please submit your proposals to [R-conferences@r-project.org](mailto:R-conferences@r-project.org) by **Friday 16 November 2018**.

# useR! 2020 – Vancouver!



# It's personal, too



**Jeff Leek**  
@jtleek

Following

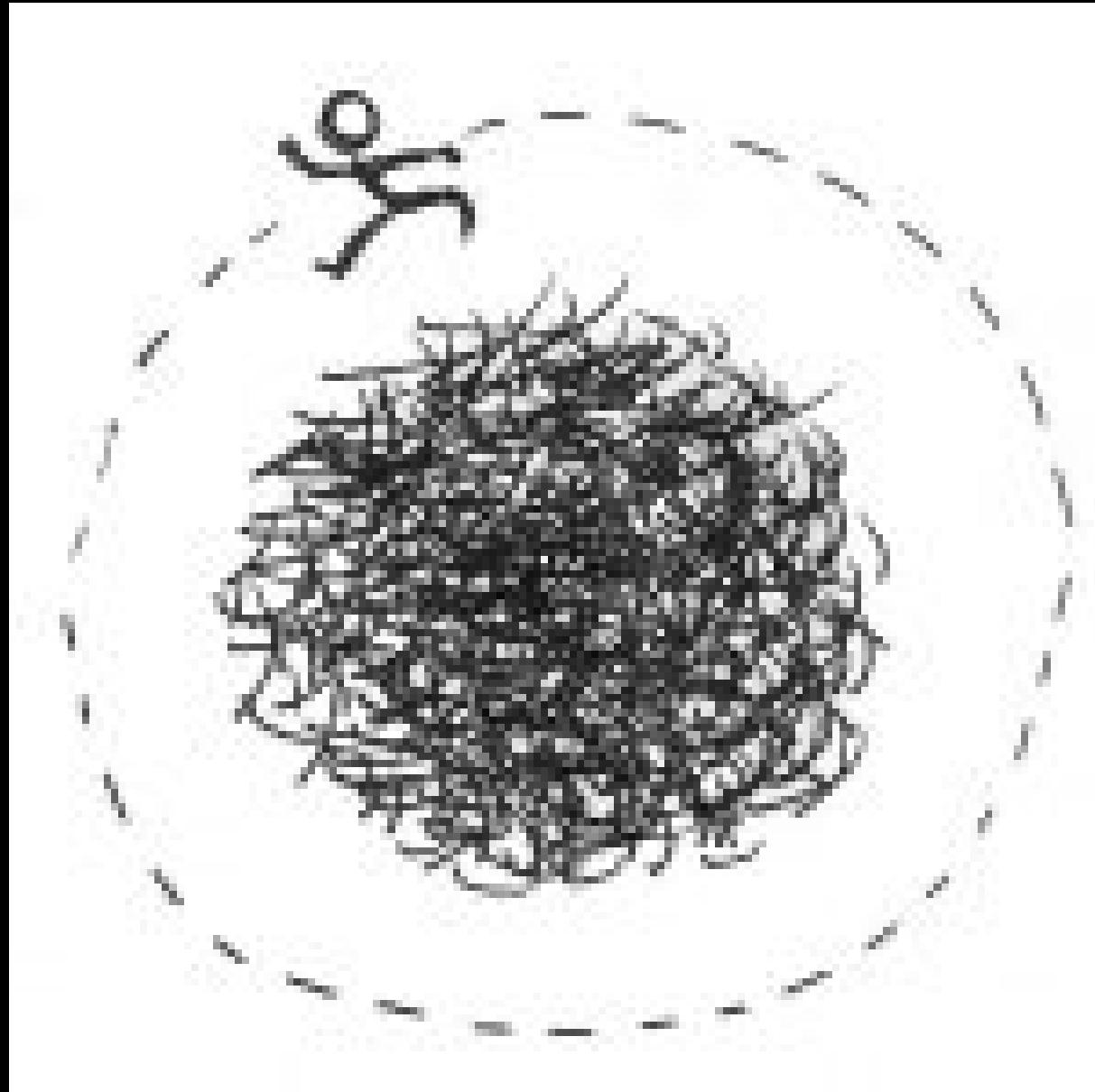
Anyone else have the problem of being an  
outcome productivity person in a process  
productivity place?  
[simplystatistics.org/2018/04/19/pro...](http://simplystatistics.org/2018/04/19/pro...)

12:00 PM - 19 Apr 2018



“Find the goals of the organization that touch your heart and release your passion to follow those goals.”

- Gordon Mackenzie



Martin Monkman  
Provincial Statistician & Director  
BC Stats  
[martin.monkman@gov.bc.ca](mailto:martin.monkman@gov.bc.ca)  
250.216.5848

[www.bcstats.gov.bc.ca](http://www.bcstats.gov.bc.ca)  
@BCStats