

# Cybera & Data Science

Encouraging Adoption

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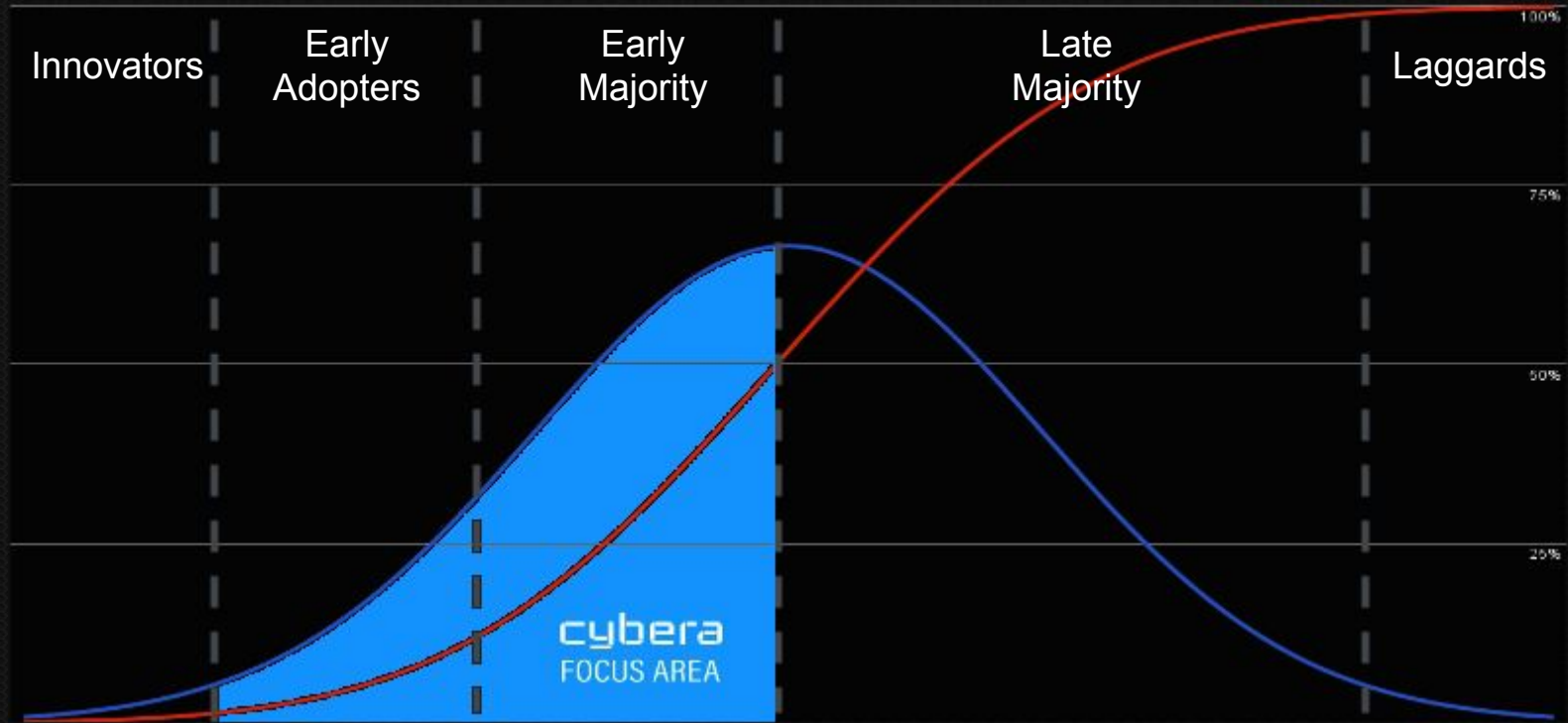
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# About Cybera

Cybera is a not-for-profit IT organization that works to spur and support innovation for the economic benefit of Alberta through the use of cyberinfrastructure.



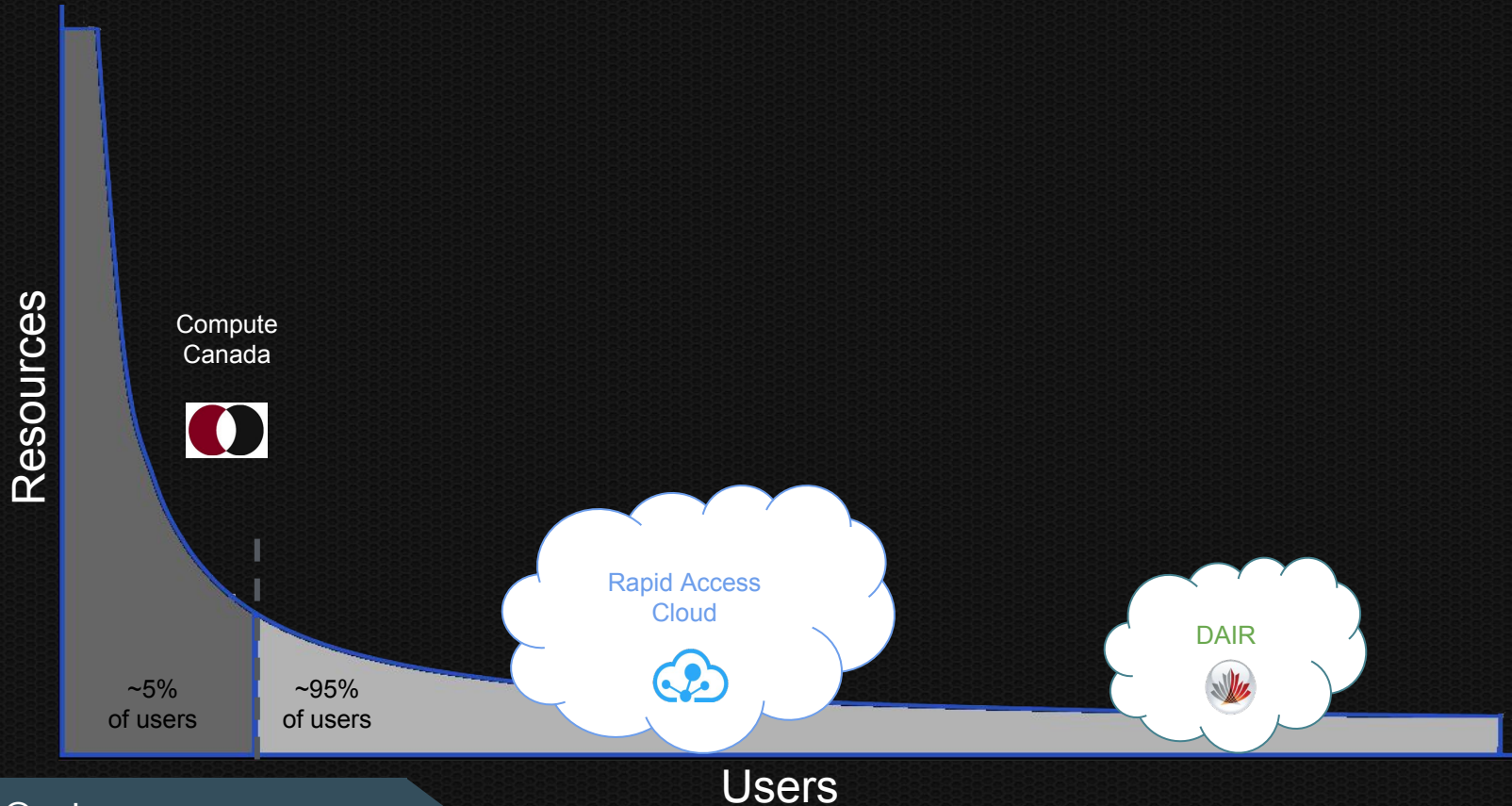
# Technology Adoption Lifecycle



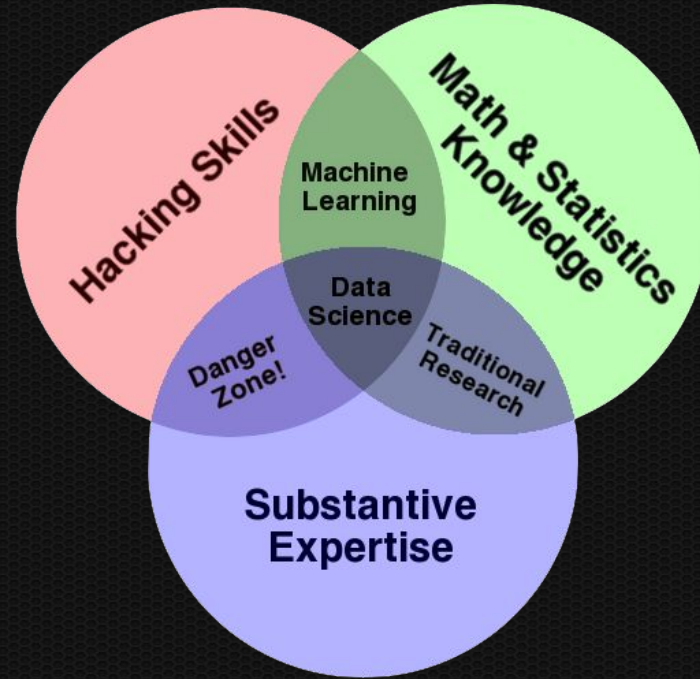
# Cybera & Data Science

We would like to encourage the adoption of data science tools and techniques.

# What Problems Are We Trying To Solve?



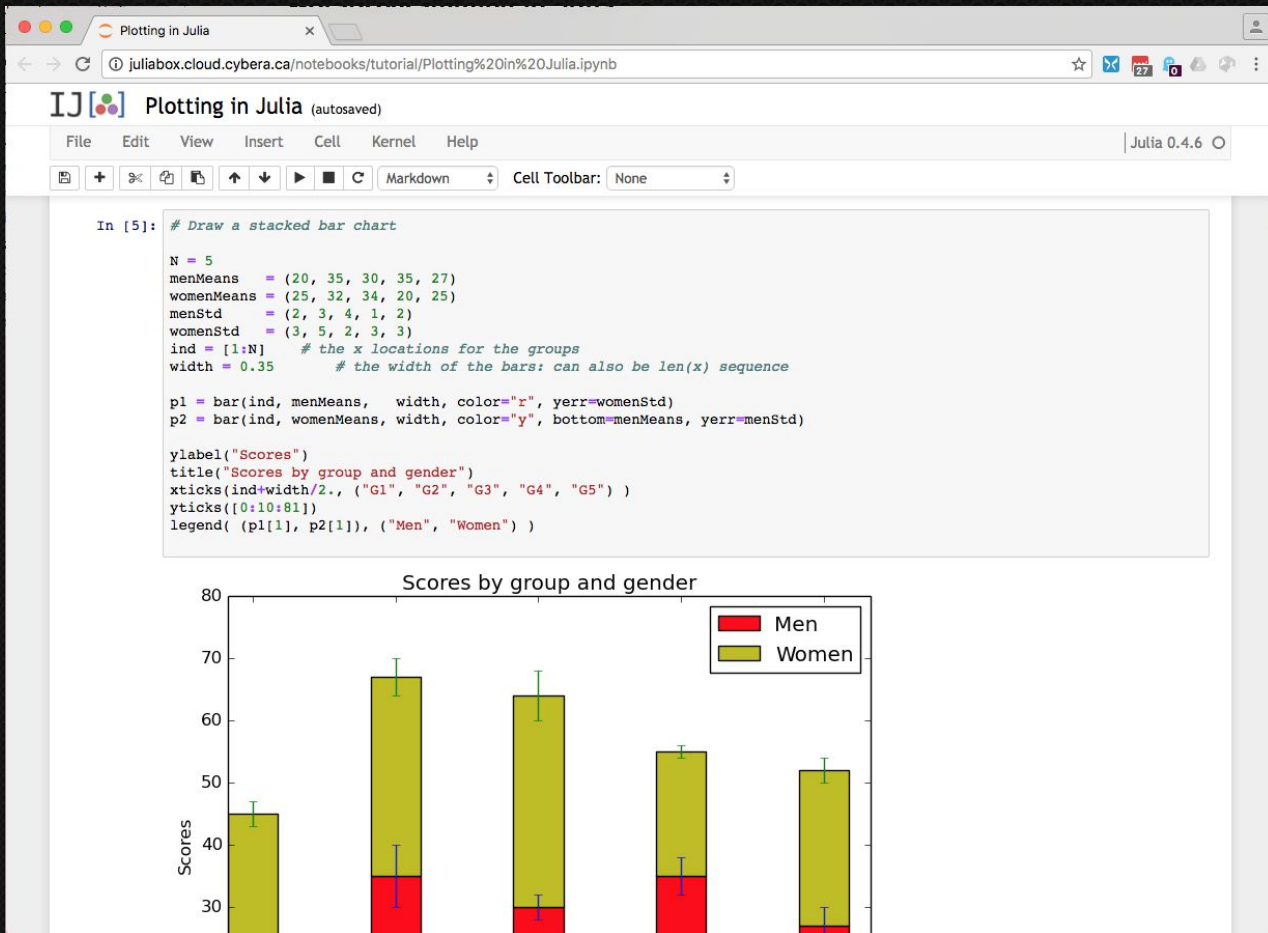
# Data Science Skills



# What We're Doing Today

- Our Team:
  - 2 scientists, building their dev skills
  - 3 developers, building their stats skills
- Learning by doing
  - Analysing Canadian Internet
  - Building tools and infrastructure to help collaboration









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### Download Speeds for Urban and Rural Communities in Canada

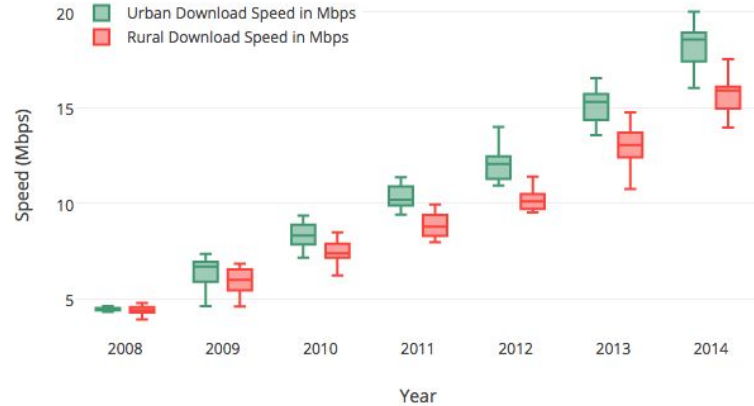
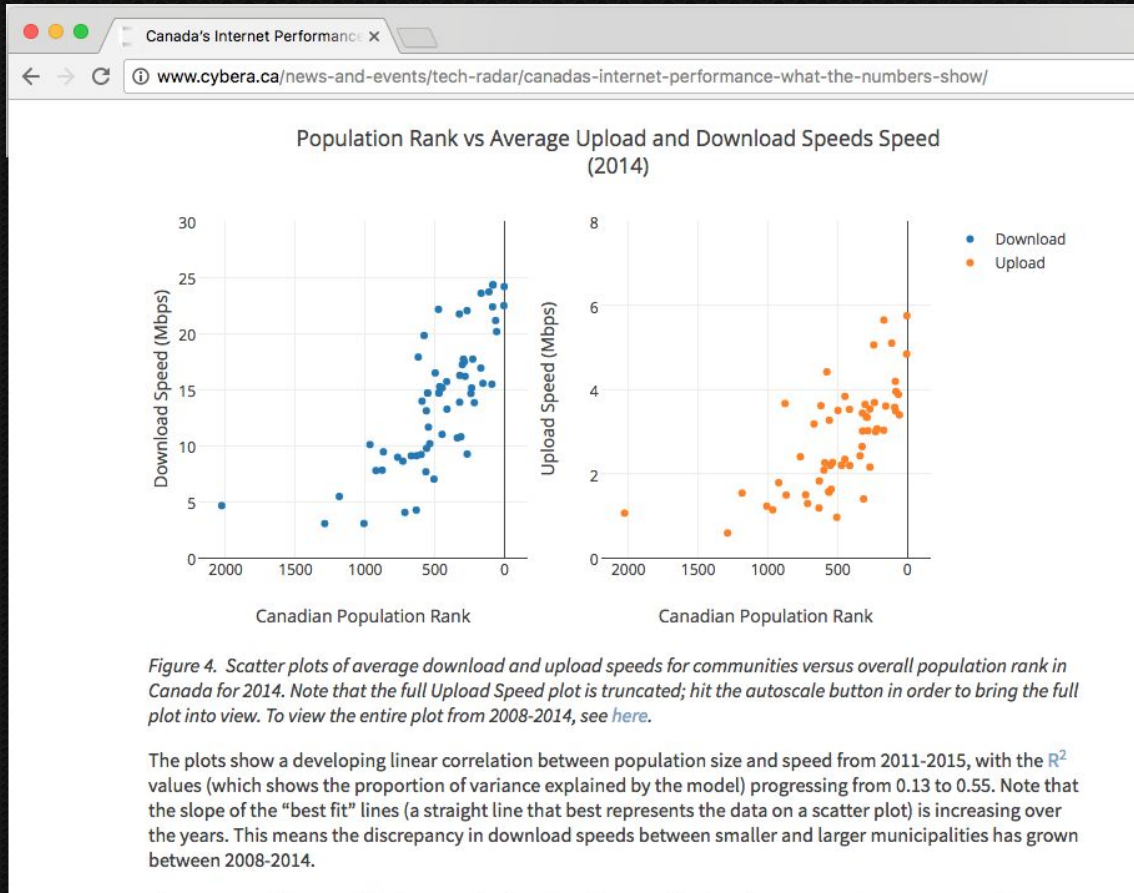


Figure 3. Boxplots for download speeds in Canada by year, based on rural or urban community classifications. Median values are indicated by horizontal lines within their respective boxes. The data is aggregated weekly (for clarity).

Digging a little deeper into the differences between network speeds in urban and rural Alberta, there appears to be a correlation between the national population rank and the download/upload speeds. The following two plots show the least populous areas on the left, and the most populous on the right (Calgary is ranked 3rd and Edmonton 5th, nationally), and how the population size relates to download speeds.



# What We're Doing Tomorrow

- Huge data sets
- Predictive modeling
- Machine learning
- Explore additional tools
  
- Build tools and infrastructure to support all this, of course



# We'd Like to Ask You...

- What problems do you see?
- What services would you like to use?
- How do you collaborate on an analysis?
- How to organize your data science team?
- What skills does your team lack?



# What Would You Like to Ask Us?

Contact us!

[cybera.ca](http://cybera.ca)



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