



# **Future-Proof Your Analytics Career**

**Digital Analytics Association Symposium – October 30, 2018**

HEATHER A. CARSON  
DIRECTOR, ANALYTICS CAPABILITY & PLANNING  
DATA STRATEGY & DECISION SCIENCE  
THE COCA-COLA COMPANY

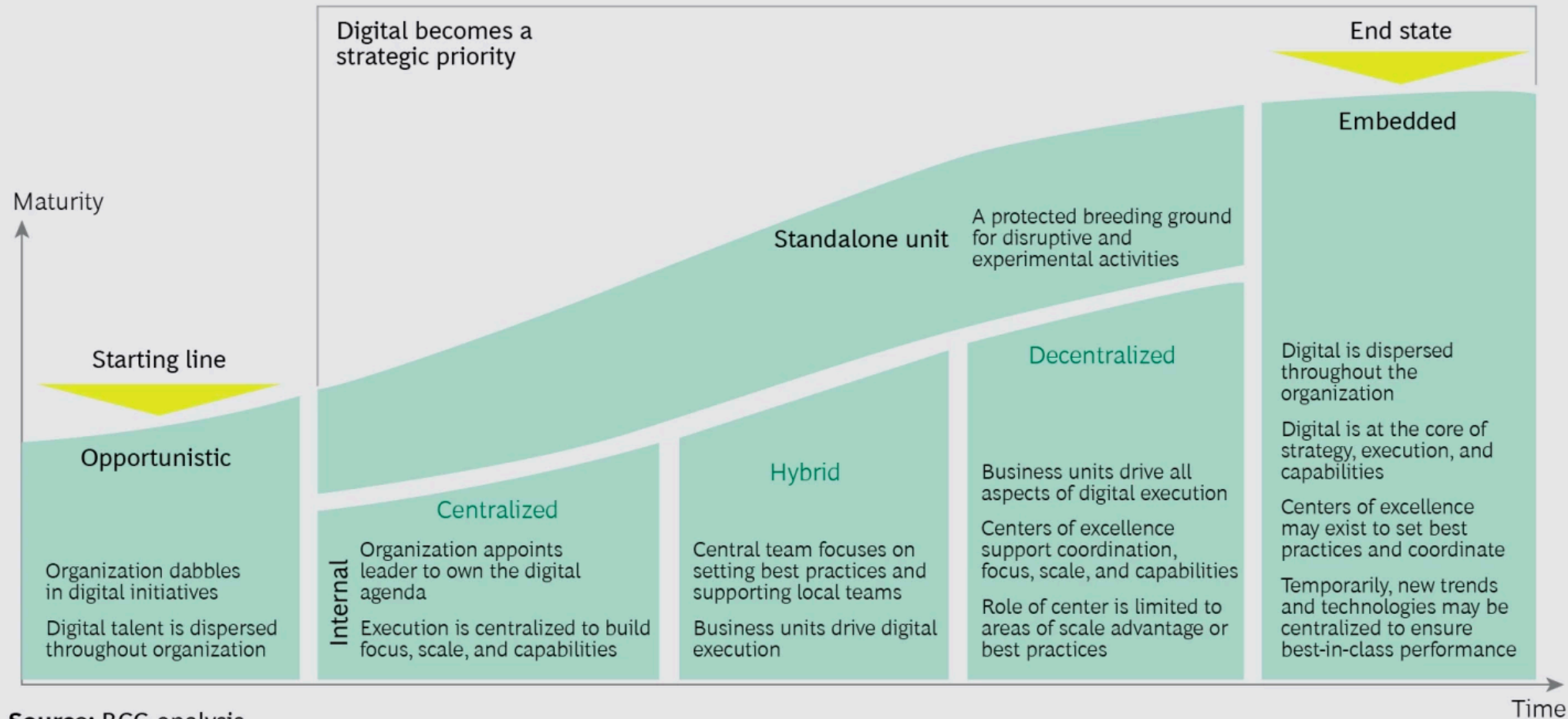
A woman with long brown hair is shown in profile, drinking from a chilled, condensation-covered Coca-Cola bottle. She is wearing a blue denim jacket. The background is a warm, out-of-focus indoor setting. In the bottom right corner, there is a circular inset showing a close-up of a sandwich with lettuce, tomato, and meat. In the top left corner, there are two overlapping white circles. In the bottom left corner, there is a logo consisting of several overlapping white circles of different sizes.

**Why Do You Need to Future-Proof Your Career?**



# #1 - Digital Shifting from Centralized to Embedded

**EXHIBIT 1 | The Evolutionary Path to a Digital-Everywhere Organization**



## #2 - Rise of Self-service Data & Analytics

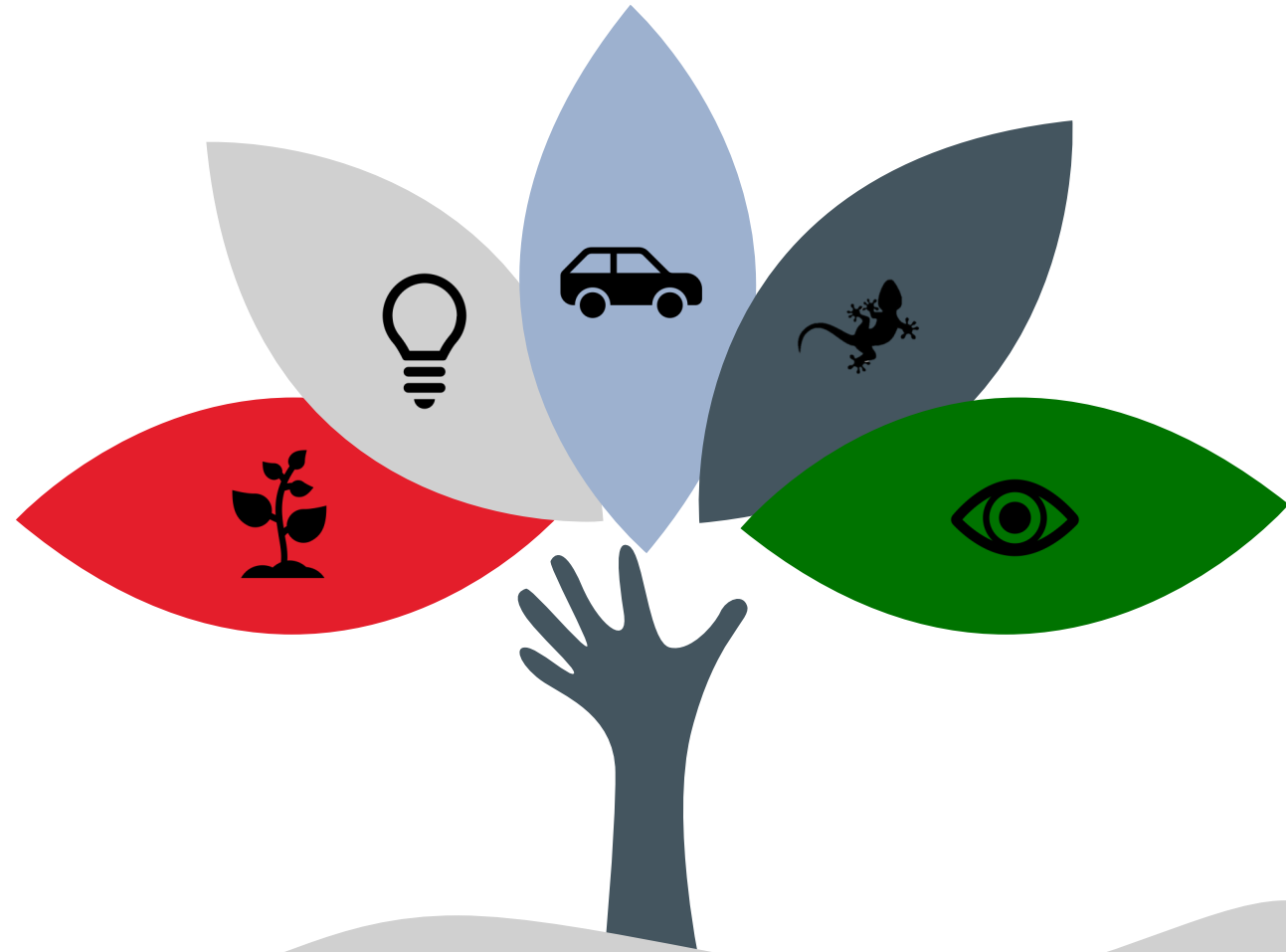
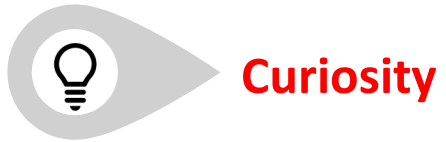
- Organizations are embracing self-service analytics and business intelligence (BI) to bring these capabilities to business users of all levels.
  - Tools like Tableau, Alteryx, and Qlik are hitting enterprise scale
- Tableau Conference 2018 last week had 17,000 attendees!



**You Are in the Driver's Seat**



# Skills No One Can Teach You





**We Don't All Pop Out of the Womb  
Knowing What We Want to Do!**

**"I CAME  
OUT OF  
THE WOMB  
ON A SURF  
BOARD"**



# My Unique Career Path

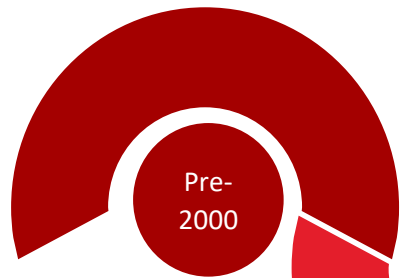


Pre-Law



English  
Major?

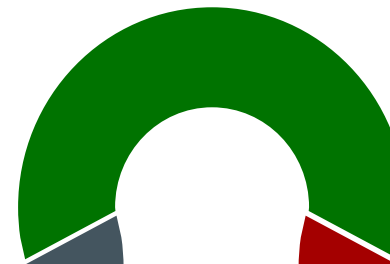
Admin  
Assistant



Engineering  
Analyst



Digital  
Analytics



Business/Financial  
Analyst




Marketing  
Research

Data Strategy  
Decision Science

# Steps to Future-Proof Your Career



## Three Easy Steps

-  Explore Your Options
-  Find your Champion
-  Set a Learning Agenda



# Explore Your Options



**Determine what you like (don't like)**



**Assess your key strengths and weaknesses**



**Define your dream job**

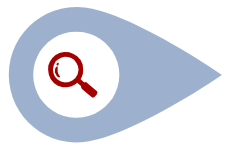
- Do you need broader experience than what you have?
- Do you need deeper experience than what you have?
- Do you need an entirely different body of experience than what you have?



The background of the image is a solid red color, densely covered with numerous small, clear water droplets of varying sizes. Some droplets are in sharp focus, showing their spherical shape and the way they reflect light, while others are blurred in the background, creating a sense of depth. The droplets are scattered across the entire frame, giving it a textured, organic appearance.

One of the greatest values of mentors is the ability to  
see ahead what others cannot see and to help them  
navigate a course to their destination.

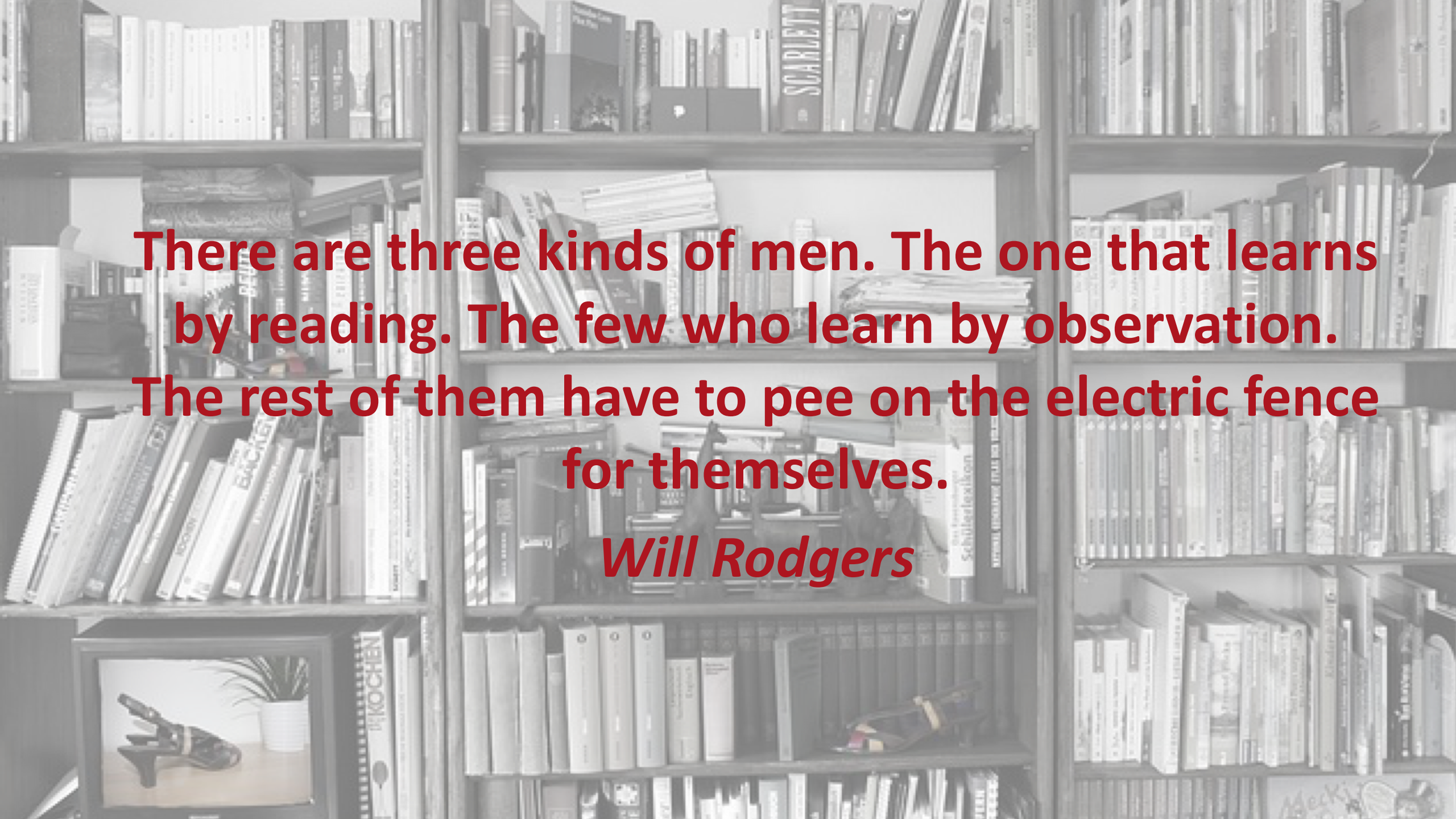
*John C. Maxwell*



# Find Your Champion

- Identify your Champion
  - Champion can be your boss (or not)
  - Champion can be an associate you work with
  - Champion can be someone outside of organization
    - Networking and Membership organizations like the DAA are GREAT for this
- Share your career Options: Ask for advice
  - Define your From → To
  - What knowledge, skills/abilities, experience do you need?
  - How should you prioritize?
- Ask them for a time commitment & establish coaching sessions

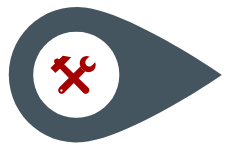




**There are three kinds of men. The one that learns  
by reading. The few who learn by observation.  
The rest of them have to pee on the electric fence  
for themselves.**

***Will Rodgers***





# Set a Learning Agenda

- Understand how you learn best
- Use prioritized skills & abilities to map out your learning agenda
  - Do time-box your knowledge, skills/abilities, and experience acquisition
  - Focus on transferable skills, not tools – statistics, SQL, Python, R, Data Visualization
- **You** need to craft your learning agenda - Don't put this on your Champion
- Use your Champion check-ins as accountability sessions

# Resources

- Consider how much time and money you are willing to invest
  - Formal Degree Programs/Certificates
  - Continuing Education
  - Boot Camps & Workshops
  - Online learning environments
  - Books, websites, blogs



A vibrant, warm-toned photograph of a young woman with blonde hair, smiling broadly and wearing red, winged sunglasses. She is holding a classic glass Coca-Cola bottle. In the background, another person is holding a Coca-Cola Zero bottle. The scene is set outdoors, possibly at a beach or poolside, with a blurred background of water and rocks. The overall mood is joyful and summery. The text "Questions?" is overlaid on the left side of the image.

Questions?





# Appendix

Extended Resources

# Data Visualization

- Edward Tufte: One-day course on Presenting Data and Information.
  - The fee for the one-day course is \$380 per person. The price of the course includes a copy of all four of Tufte's books: *Visual Explanations*, *Envisioning Information*, *The Visual Display of Quantitative Information*, and *Beautiful Evidence*. The books are practical and useful; however, they also look super smart on your bookshelf or coffee table.
  - Groups of 10 or more receive a 20% discount. Full-time teaching faculty, students, and, postdocs receive a discount as well.
  - Just want the books? You can order them individually or order all four [here](#).
- Tableau:
  - The software costs \$999 for a Personal version. Professional version starts at \$1,999.
  - No complex coding is required to use Tableau, which makes it great for beginners trying to escape the shackles of Excel and Powerpoint!
  - Tableau.com offers online [free training videos](#), [live online training](#), and in [classroom training](#).

# Data Visualization Programming

- Processing.org:
  - You can download Processing here for free.
  - Processing is a data visualization and automation tool that requires programming and leverages an extensive JavaScript library.
  - Good news! Processing.org is all open source, which means you can easily find free and/or cheap books, tutorials, code, online videos and cool data visualizations.
  - Processing.org courses are also available on Lynda.com
- D3:
  - Like Processing, D3 is also a JavaScript library that lets you visualize and automated data using HTML, SVG, and CSS.
  - It is open source with a GitHub repository – including examples, tutorials, and gallery.

# SQL

- Official Microsoft SQL Certification Training:
  - Click the hyperlink to see the recommended courses for certification. You can also find an Official Microsoft Training Provider near you.
  - The cost can vary depending on length and format (Intensive Boot Camp vs. weekly class) but it will run you around \$6,000 for an intensive 9-day Boot Camp style program.
- Joes2Pros:
  - I've used their books, courses, and content to help my folks with strong stats skills learn SQL and general Database structure for several years now.
  - The series of five books are available from Amazon.com. You can get the Kindle version for \$9.99 per book or pay around \$50 for all five books.
- SQL Cheat Sheet: Laminated 4-page reference card you can keep handy on your desk for the bargain price of \$3.49.
- Codecademy:
  - Offers all kinds of free programming courses (including python).
  - SQL programming comes in three flavors: Learn SQL, SQL Table Transformation, and, SQL Analyzing Business Metrics. Note that you can upgrade your free subscription to \$19.99 a month and get access to all Codecademy extended content.

# Python

- Violent Python:
  - The Kindle version is available for \$24.28, and the paperback costs \$30.30.
- RealPython:
  - Offers three distinct python courses.
  - Exercises, sample files, assignments, and videos are included with your \$60 access fee.
- Codecademy:
  - The Python course provided with the \$19.99 a month subscription fee includes 8 projects, 9 quizzes, and final project. Perfect for a beginner.
- Coursera



# Local Atlanta Resources

- Emory Continuing Education:
  - Accelerated Training in Big Data
  - Accelerated Training in Business Intelligence
  - Python
  - SQL
- Georgia Tech Continuing Education
  - Georgia Tech Data Science & Analytics Boot Camp
  - Computing for Data Analysis
  - Introduction to Analytics Modeling
- Kennesaw State Continuing Education
  - Online Certificate in Applied Statistics using SAS
  - Online Certificate in Applied Statistics using R
  - Online Certificate in Applied Data Science using Python

# Websites

- Kahn Academy
- Coursera
- flowingdata.com:
  - Offers both free and subscription based content.
  - Fee of \$59 a year for access to tutorials, guides, and various courses like visualizations in R programming.
- Kaggle.com:
  - Free community of data scientists, statisticians, and analysts.
  - Kaggle offers competitions and really cool, downloadable datasets. Members have the ability to run code in the cloud, get feedback from the community, and share modeling projects.
- FiveThirtyEight:
  - Nate Silver. 'nough said.
- Data Science Central:
  - Mix of content and community.

# Websites

- Probably Overthinking It:
  - Blog by Allen Downey.
  - He's written a book or two (understatement).
  - Professor of Computer Science at Olin College.
- rpsychologist.com:
  - Swedish, clinical psychology PhD Student, Kristoffer Magnusson.
  - Pretty darn smart guy – background in web dev – does cool D3.js visualizations and has a decent sense of humor.
- informationisbeautiful.net:
  - Blog of David McCandless.
  - British author, information designer, and data journalist.
- visualisingdata.com:
  - Andy Kirks.
  - UK based designer with a creative eye for data storytelling.



# Authors

- Thomas Davenport:
  - This guy (literally) wrote the book on *Big Data at Work, Competing on Analytics, Analytics at Work*, and *Keeping Up with the Quants*.
  - He also launched the IIA (International Institute for Analytics) which has great content, webinars, thought pieces, and newsletters.
- Dan Ariely:
  - Professor of Psychology and Behavioral Economics at Duke University. *Predictably Irrational*, *The Upside of Irrationality*, *Payoff: The Hidden Logic That Shapes Our Motivations*.
- Tyler Vigen:
  - Runs a blog on Tylervigen.com otherwise known as SpuriousCorrelations.
  - He's now turned his blog into a little book, Spurious Correlations.

# Authors

- Malcolm Gladwell:

- This guy wears funky, miss-matched socks. He's also brilliant.
- Just incase you missed one of his books - Blink, Outliers, The Tipping Point, David and Goliath, and What the Dog Saw.

- Avinash Dixit:

- Game Theory and Economics professor at Princeton.
- He has published more academic papers in the field of Game Theory that I can possibly list here - just Google Dixit if you want to uncover more. The Art of Strategy, Thinking Strategically, Optimization in Economic Theory, The Art of Smooth Pasting, Games of Strategy, The Theory of Equilibrium Growth.

# Books & Textbooks

- *SAS Essentials: Mastering SAS for Data Analytics*
- *Making Hard Decisions*
- *The Statistical Sleuth*
- *Database System Concepts*
- *Cryptography and Network Security*
- *Mastering the New Media Landscape*
- *Naked Statistics: Stripping the Dread from the Data*
- *An Introduction to Statistical Learning: with Applications in R*
- *Python Machine Learning*
- *Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies*
- *Combinatorics: A Guided Tour*