Data Science:

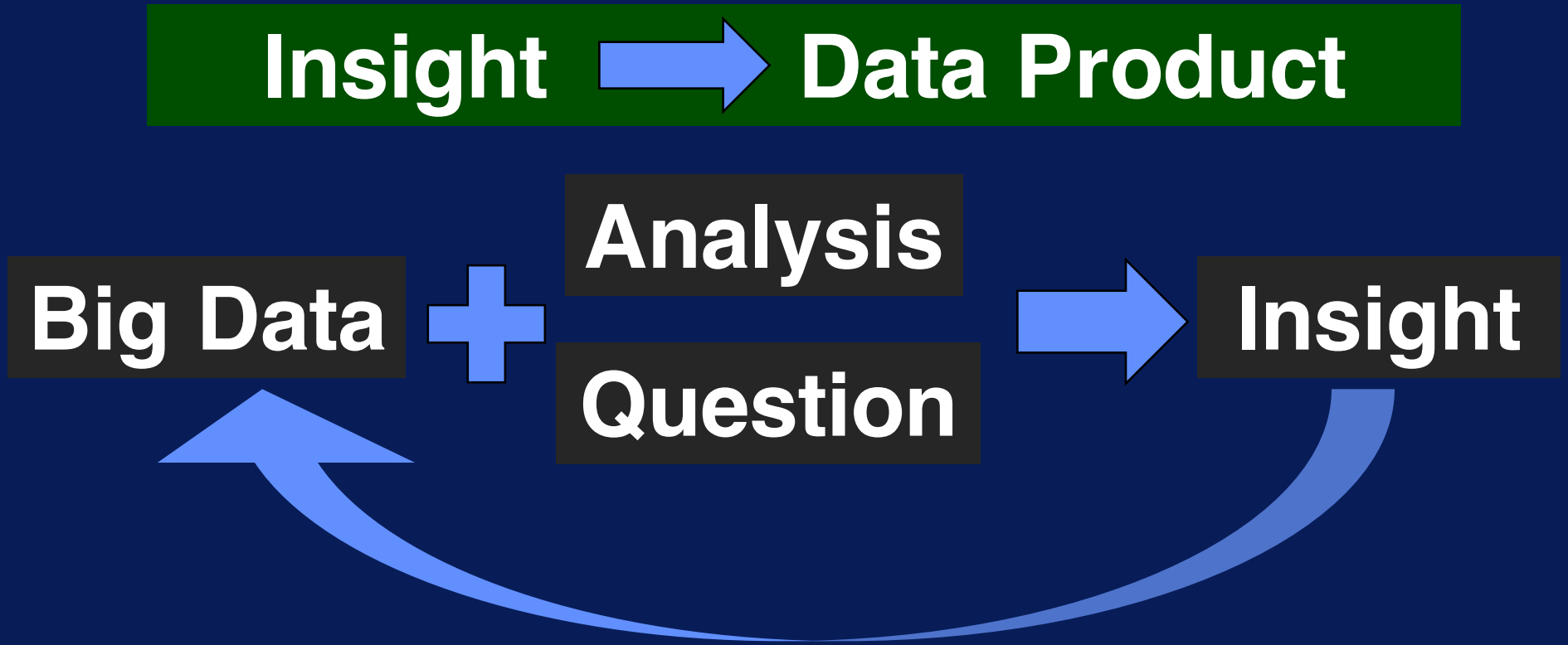
Getting Value out of Big Data

After this video you will be able to..

- Describe what modern data science is and its connections to big data
- Explain why data science is the key to getting value out of big data
- List the right set of skills for a data scientist to fit your organization

Big Data
Insight
Action
Data Science

Insight
Data Product
Big Data
Analysis
Question
Insight


Insight
Data Product
Big Data
Analysis
Question
Insight

Book Recommendations

Customer Demographic

Previous Purchases

Book reviews

What kind of books does this customer like?

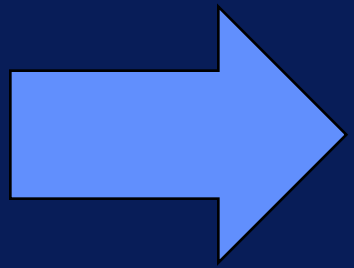
Book recommendations

Find Potential Audience for a Book

Model of customer's book preferences

+

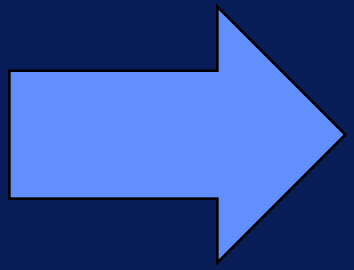
New book information



Who is likely to like this book?

Market a New Book

Who is likely to like this book?



Action to market the book to the right audience

Market a New Book

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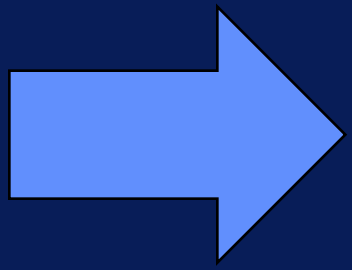
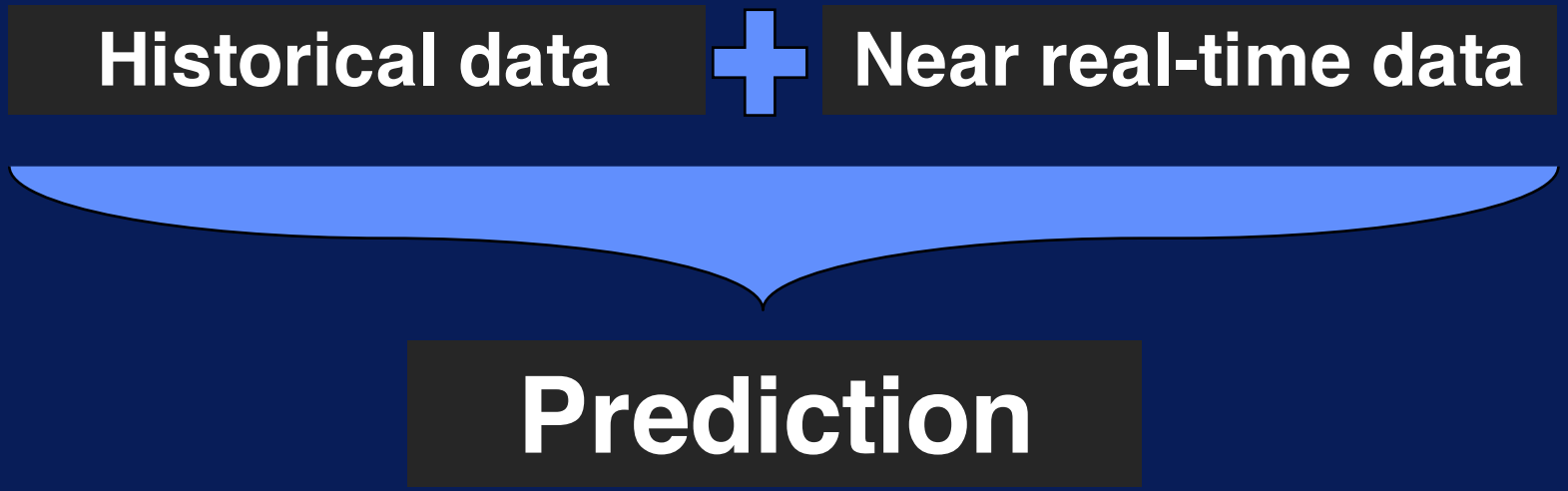


Action to market the book to the right audience

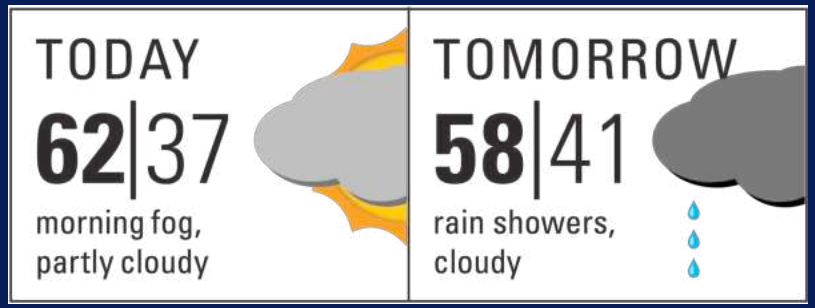
Insight

Action

Actionable Information

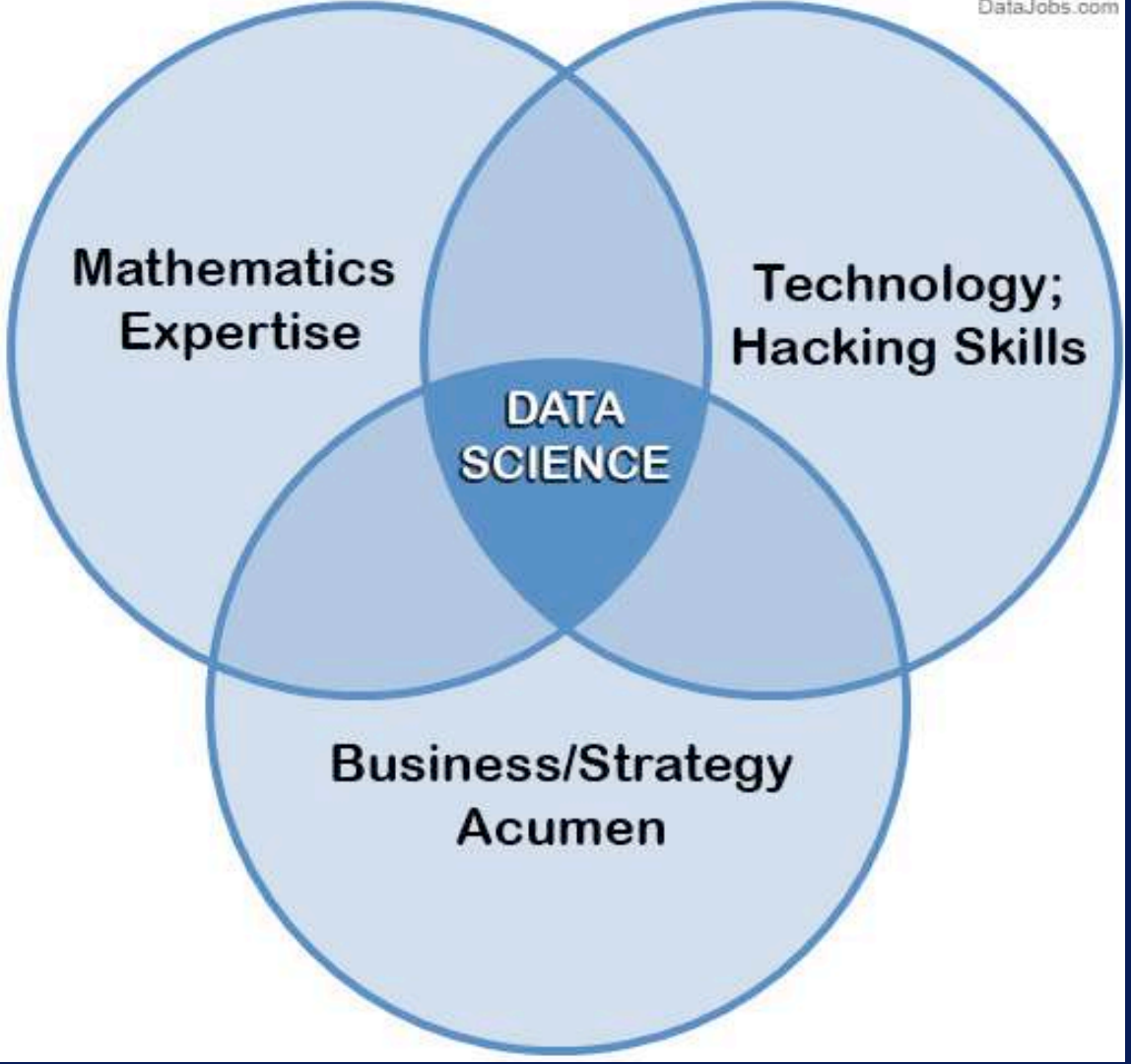


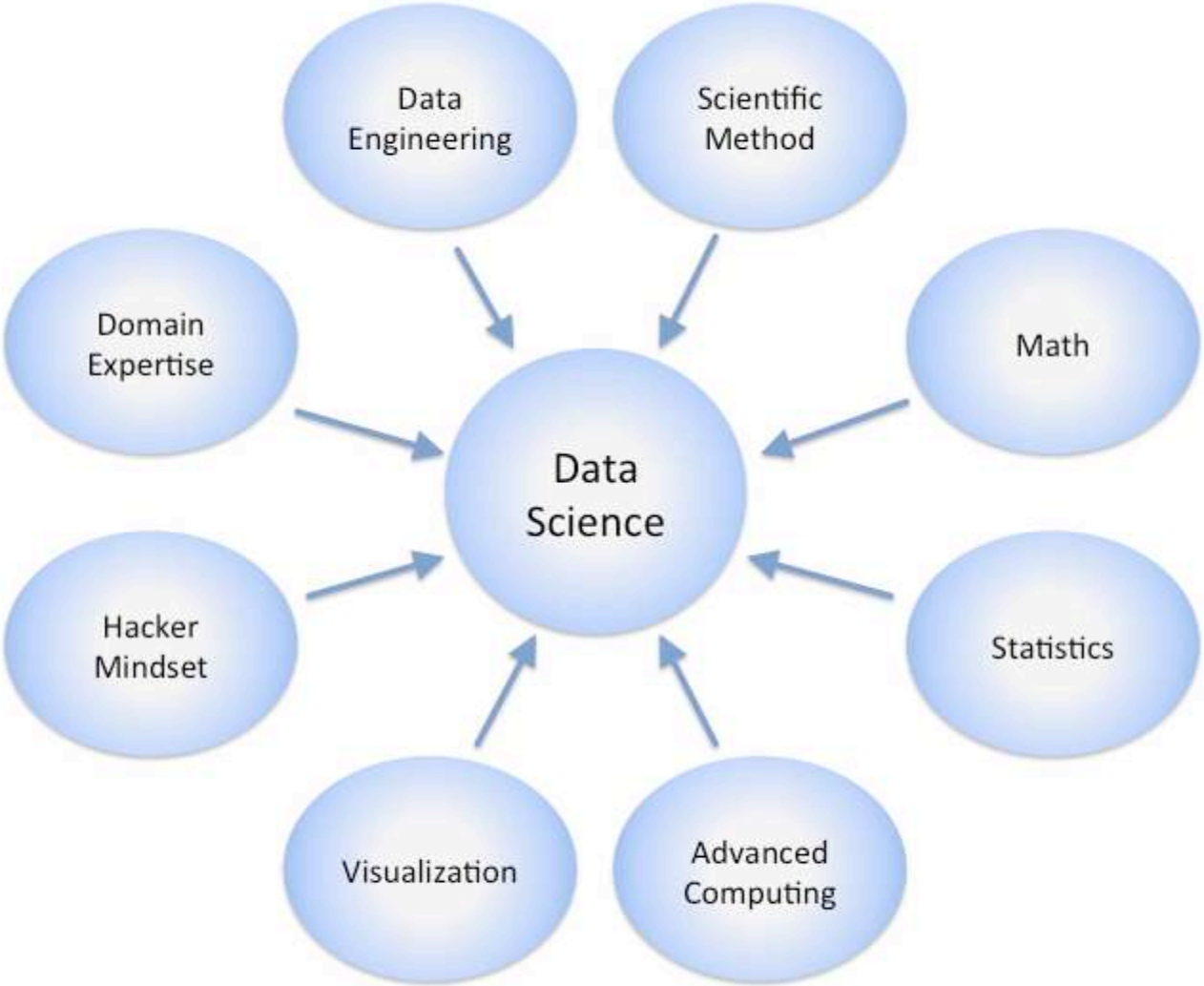
Prediction



Action

Data Science is Team Work!


DataJobs.com
Mathematics Expertise
Technology; Hacking Skills
DATA SCIENCE
Business/Strategy Acumen


Data Engineering
Scientific Method
Domain Expertise
Math
Data Science
Hacker Mindset
Statistics
Visualization
Advanced Computing

MODERN DATA S

Data Scientist, the sexiest job of 21th century requires a mixture of intersection of mathematics, statistics, computer science, comm scientist is hard. Finding people who understand who a data scien cheat sheet on who the modern data scie

MATH & STATISTICS

- Machine learning
- Statistical modeling
- Experiment design
- Bayesian inference
- Supervised learning: decision trees, random forests, logistic regression
- Unsupervised learning: clustering, dimensionality reduction
- Optimization: gradient descent and variants

DOMAIN KNOWLEDGE & SOFT SKILLS

- Passionate about the business
- Curious about data
- Influence without authority
- Hacker mindset
- Problem solver
- Strategic, proactive, creative, innovative and collaborative

MarketingDistillery.com is a group of practitioners in the area of e-commerce marketing. Our fi marketing strategy and optimization: customer tracking and on site analytics: predictive analytics warehousing and big data systems: marketing channel insights in Paid Search, SEO, Social, CRM a

MODERN DATA SCIENTIST

Data Scientist, the sexiest job of the 21th century, requires a mixture of multidisciplinary skills ranging from an intersection of mathematics, statistics, computer science, communication and business. Finding a data scientist is hard. Finding people who understand who a data scientist is, is equally hard. So here is a little cheat sheet on who the modern data scientist really is.

MATH & STATISTICS

- Machine learning
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- Experiment design
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PROGRAMMING & DATABASE

- Computer science fundamentals
- Scripting language e.g. Python
- Statistical computing packages, e.g., R
- Databases: SQL and NoSQL
- Relational algebra
- Parallel databases and parallel query processing
- MapReduce concepts
- Hadoop and Hive/Pig
- Custom reducers
- Experience with xaaS like AWS

DOMAIN KNOWLEDGE & SOFT SKILLS

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- Influence without authority
- Hacker mindset
- Problem solver
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COMMUNICATION & VISUALIZATION

- Able to engage with senior management
- Story telling skills
- Translate data-driven insights into decisions and actions
- Visual art design
- R packages like ggplot or lattice
- Knowledge of any of visualization tools e.g. Flare, D3.js, Tableau

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Marketing DISTILLERY

(c) Krzysztof Zawadzki

Are data scientists unicorns?

"ALL FOR ONE - ONE FOR ALL"

DOUGLAS FAIRBANKS

presents

"THE THREE MUSKETEERS"

Adaption, Costuming Research under
EDWARD KNOBLOCK

Direction under
FRED NIBLO

Photography under
ARTHUR EDESON

Have passion for data

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Relate problems to analytics

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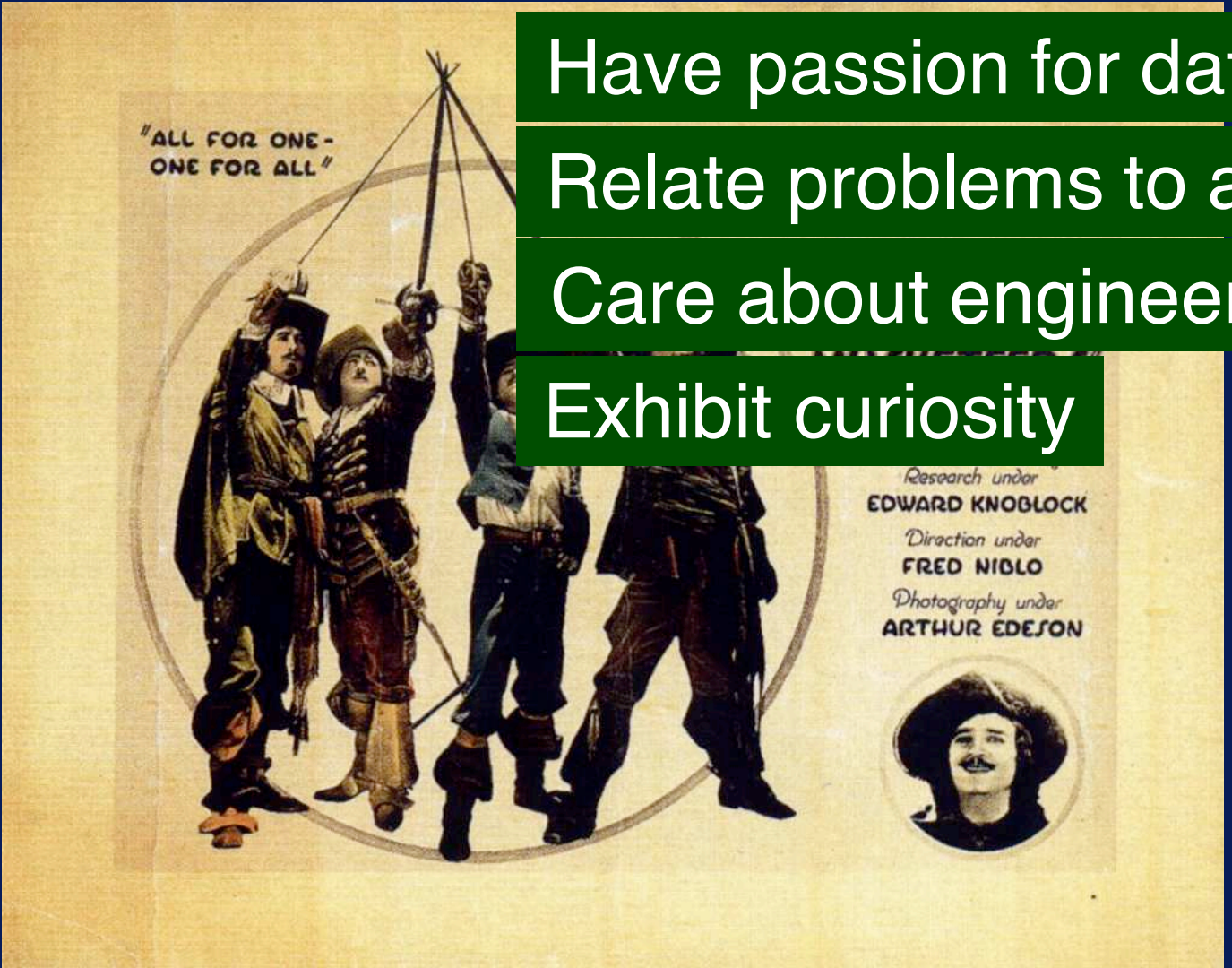
Care about engineering solutions



Have passion for data

Relate problems to analytics

Care about engineering solutions

Exhibit curiosity

- Have passion for data
- Relate problems to analytics
- Care about engineering solutions
- Exhibit curiosity
- Communicate with teammates

Data Science

The sum is bigger than the parts!

Big Data → **Actionable Insight**

Data Scientist

- Technical Skills
- Business Skills
- Soft Skills