Talent magnet for data analysts

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Motivation

- Everyone is talking about analytics

- Is it a popular skill for the job market?

Source: http://data.library.virginia.edu/statlab/

Top 5 Skills of 2013 and 2014 on LinkedIn

2013	2014
Social media marketing	**Statistical analysis and data mining**
Mobile development	Middleware and integration software
Cloud and distributed computing	Storage systems and management
Perl/python/ruby	Network and information security
Statistical Analysis and Data mining	SEO/SEM marketing

Top 5 Skills of 2015 and 2016 on LinkedIn

2015	2016
Cloud and distributed computing	Cloud and distributed computing
Statistical Analysis and Data mining	**Statistical Analysis and Data mining**
Marketing campaign management	Web architecture and development framework
SEO/SEM marketing	Middleware and integration software
Middleware and integration software	User interface design

Big paychecks for analytics professionals?

glassdoor

Recent Salary Reports

Below are the most recent Data Analytics salary reports. Employer name has been removed to protect anonymity.

$25 hourly   A **Data Analytics** reported making **$25** per hour

Job Highlights

Intern   Company - Public

10000+ employees

$100,000 per year   A **Data Analytics** reported making **$100,000** per year

Job Highlights

1-2 years experience   1 to 50 employees

Intern   Company - Private

Short of supply?

- McKinsey estimates that there is a shortfall of up to 250,000 positions about analytics in the next decade.

- Such job opens for about 45 days (average for other jobs is 30 days)

Research Question

- What is the current state of analytics related jobs on LinkedIn?

- Any talent magnet?

Data Collection Process

- Search S&P 500 with data analyst related keywords from year 2000 to 2016

- We found 6810 titles related to data analyst (!)

Example of Data Collection

Example of Data Collection

Education

Purdue University
PhD, Management Information Systems
2005 – 2009

National Taiwan University
MBA, Accounting
2000 – 2002

National Taiwan University
Bachelor of Business Administration (BBA), Accounting
1996 – 2000

16 **Honors & Awards**

Best Paper Award • Best Paper Award, IT Governance Track • Best Reviewer Award • Best Paper Award • Best Reviewer Award • Outstanding Reviewer Award of the Emerald Literati Network Awards for Excellence • Recognized Reviewer, Electronic Commerce Research and Applications • Shirley M. Lee Research Award, Shidler College of Business, 2013-2014 • Accuity LLP Accounting Faculty Fellow • Bilsland Dissertation Fellowship, Purdue University, 2008-2009…

4 **Certifications**

Harvard Case Teaching Level I • Jacksoft Certified CATTs Practitioner • Certified Internal Auditor • Certified Public Accountant, Taiwan
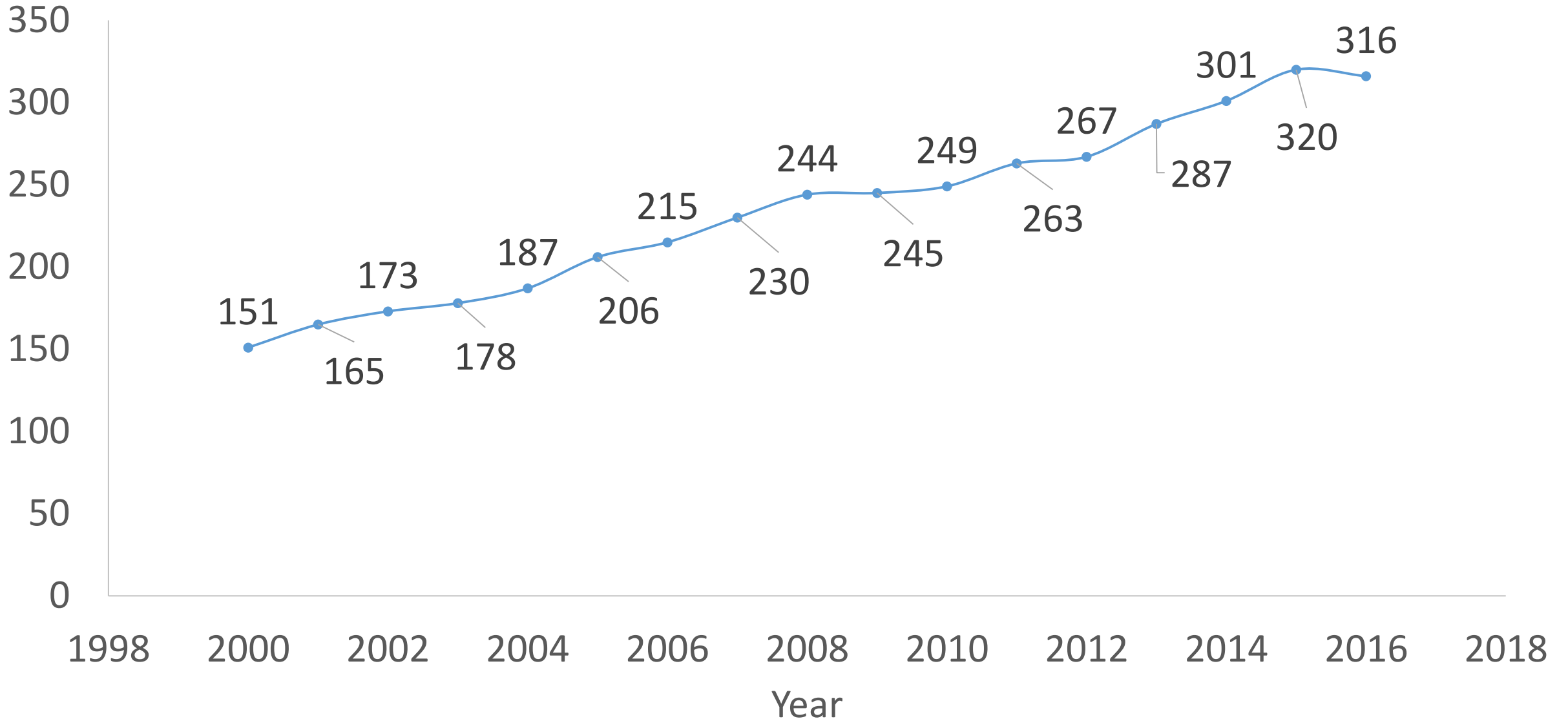
3 **Organizations**

American Accounting Association • Association for Information Systems • INFORMS
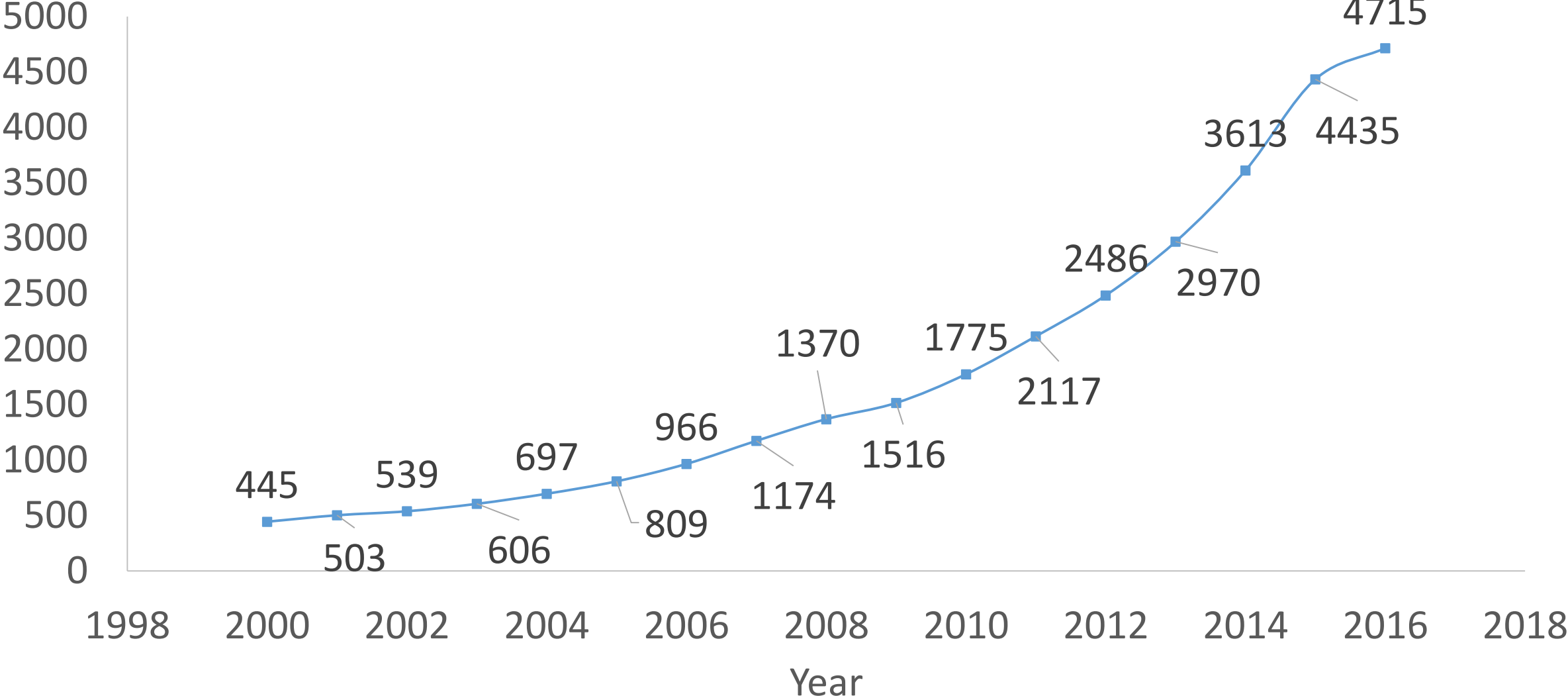
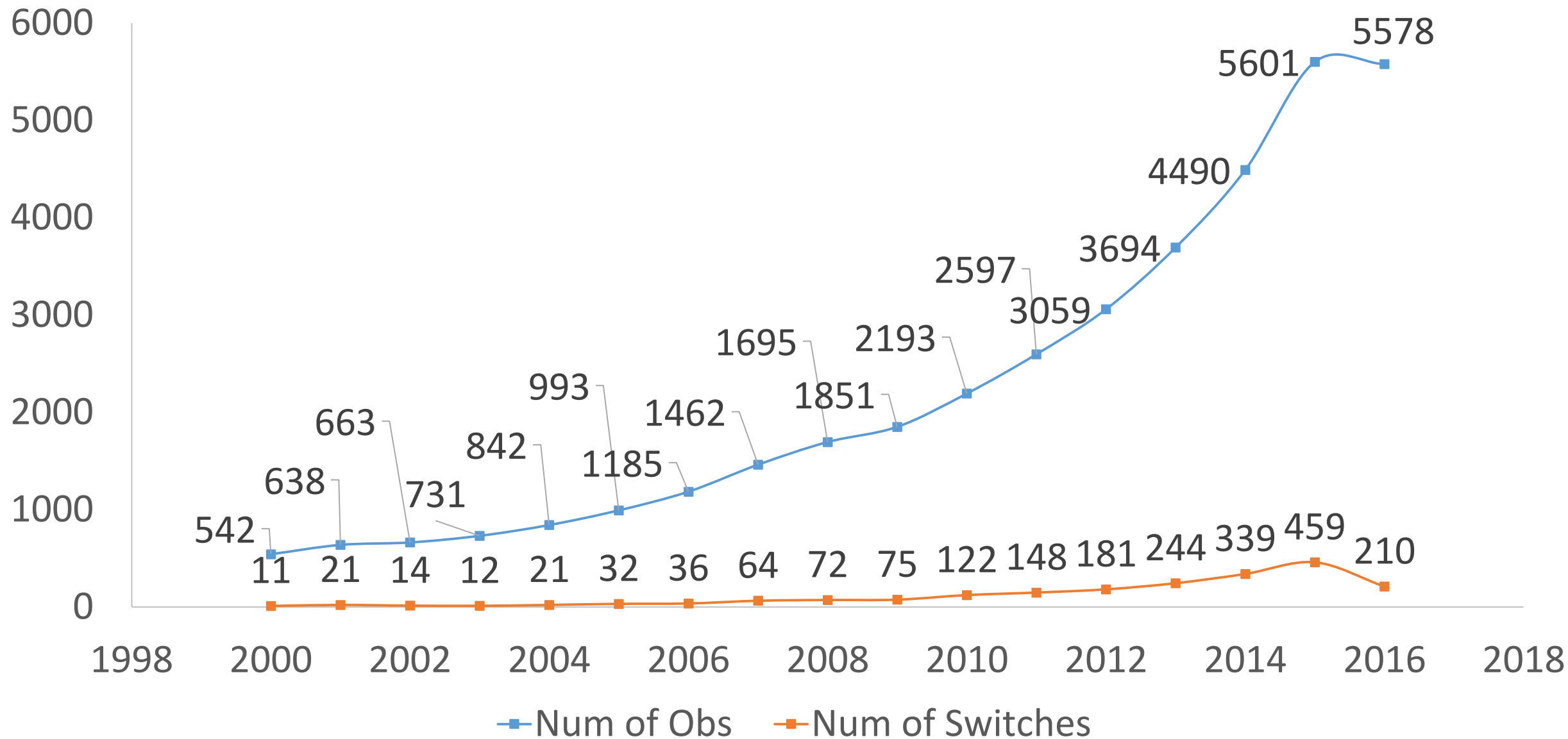2 **Languages**

Chinese • English

Number of Companies

Number of Analyst

Number of Analyst—Top 20 Companies

1. ACCENTURE PLC
2. BANK OF AMERICA CORP
3. WELLS FARGO & CO
4. MICROSOFT CORP
5. AT&T INC
6. UNITEDHEALTH GROUP INC
7. APPLE INC
8. HEWLETT PACKARD ENTERPRISE
9. BOEING CO
10. AMAZON.COM INC

11. INTL BUSINESS MACHINES CORP
12. TARGET CORP
13. PROGRESSIVE CORP-OHIO
14. CISCO SYSTEMS INC
15. CENTENE CORP
16. INTEL CORP
17. JOHNSON & JOHNSON
18. MOODY'S CORP
19. GENERAL MOTORS CO
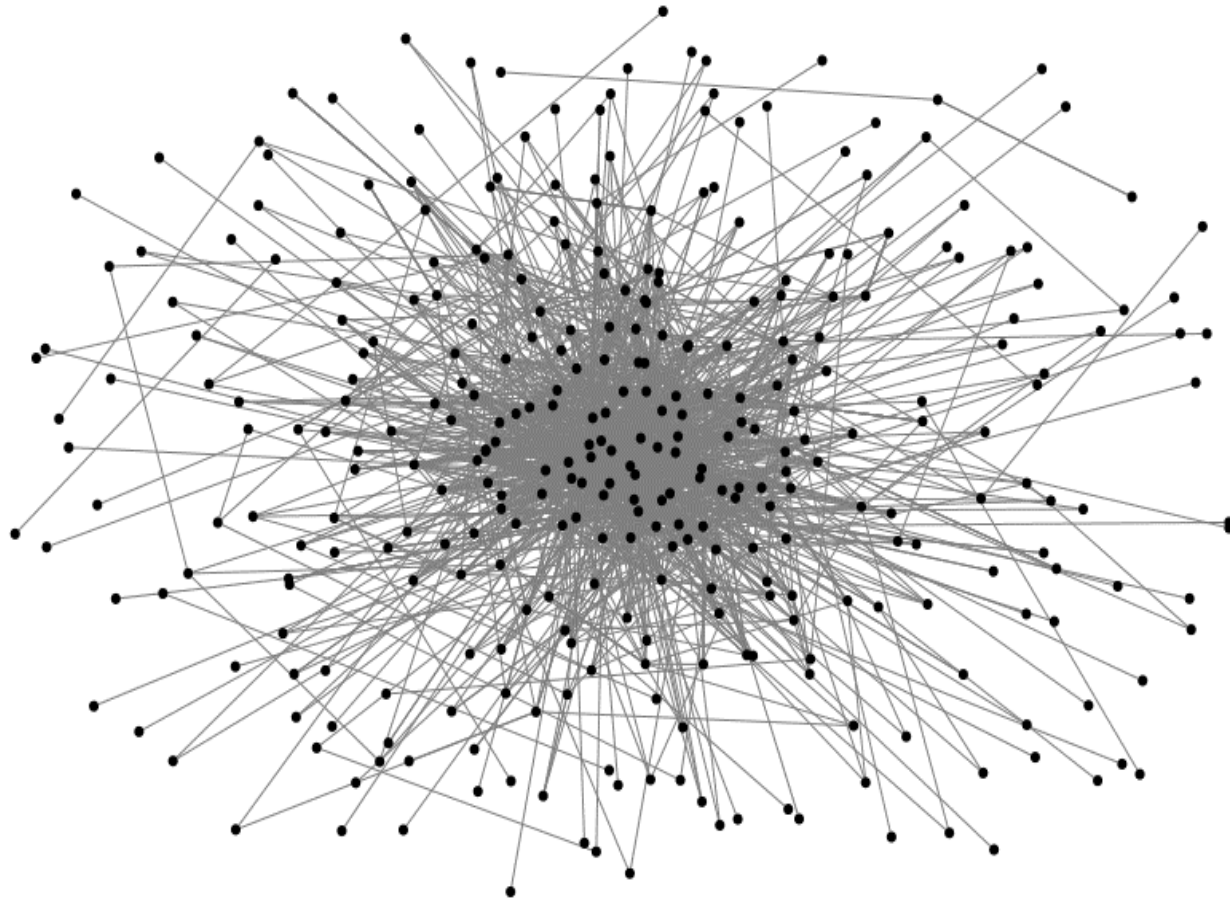20. JPMORGAN CHASE & CO

Num of Obs vs Num of Switches

542 638 663 731 842 993 1185 1462 1695 1851 2193 2597 3059 3694 4490 5601 5578

11 21 14 12 21 32 36 64 72 75 122 148 181 244 339 459 210

Num of Obs   Num of Switches
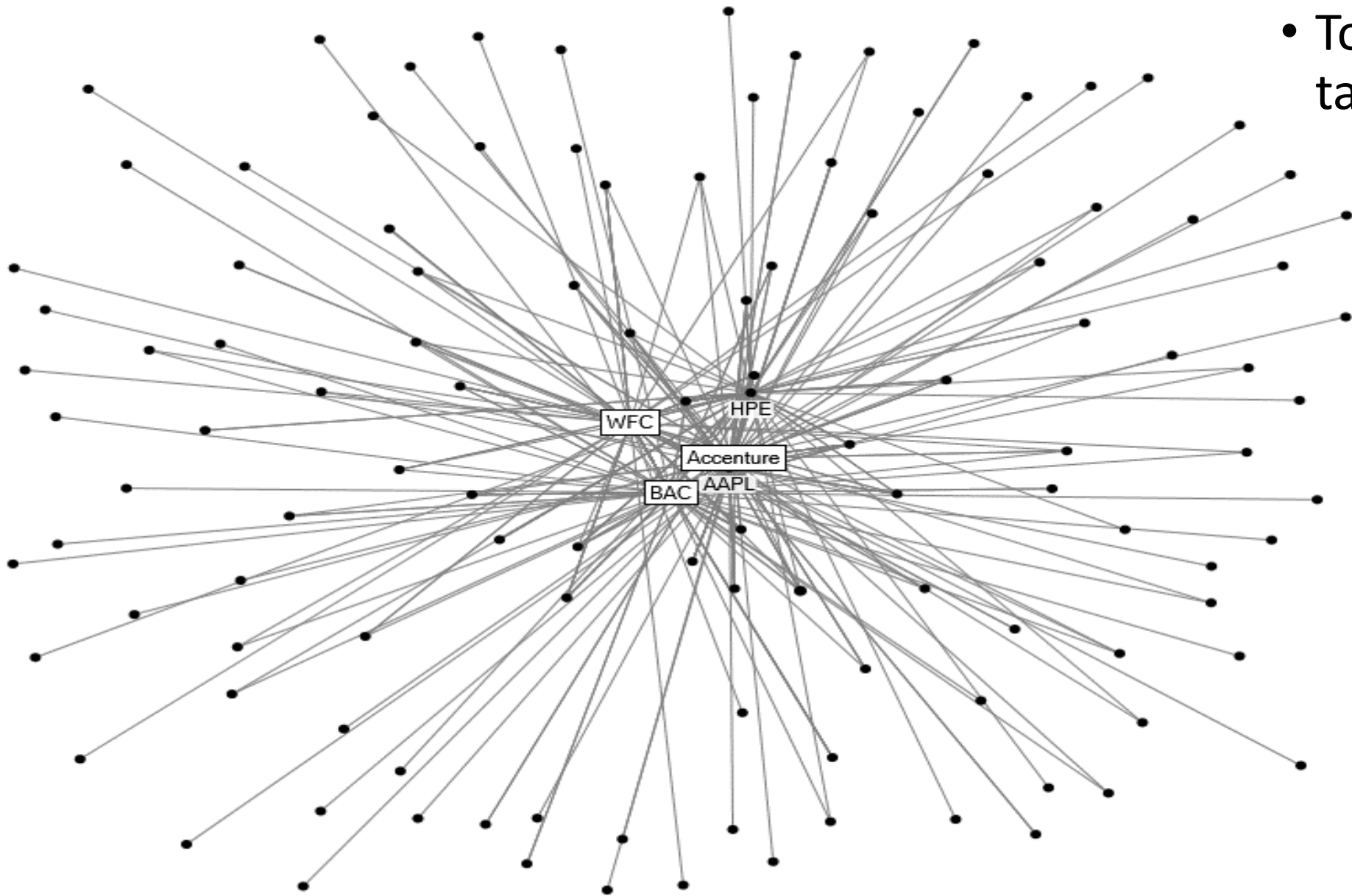
14

Job Switch by Year
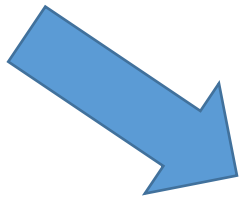
Network of Companies of Analytics Jobs

→ wait, what?

- Top 5 analytics talent importer

Top 5 Talent Importer
- Bank of America
- HP Enterprise
- Wells Fargo
- Apple
- Accenture

Top 5 Talent Exporter
- HP Enterprise
- Bank of America
- Wells Fargo
- IBM
- AT&T

Top 5 Talent Magnet
- Apple
- United Health
- Boeing
- Centene Corp
- Facebook

Determinants?

Summary

- One of the biggest challenges faced by companies → talent

- This study provides some initial observations on the current state of data analytics jobs on LinkedIn

Thank you!
Questions? Comments?