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Recommended Citation

Bartolo, Erin, "Data Science: A lifecycle perspective" (2012). *Upstate New York Science Librarians Conference*. 17.

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Data Science: A lifecycle perspective

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Agenda

- **Data science and big data**
- **Perspectives**
- **Our view and approach**
- **Recent products of iSchool**
- **Discussion**

What is data science?



As the world's data grow in **variety**, **volume** and **velocity**, organizations and professionals need to become equipped to handle such complex data, commonly known as *big data*.



Big Ideas: How Big is Big Data?

Data science perspectives

- **Analytics-centric**
- **Lifecycle view**

The analytics-centric perspective



- **Data-driven / evidence-based decision making**

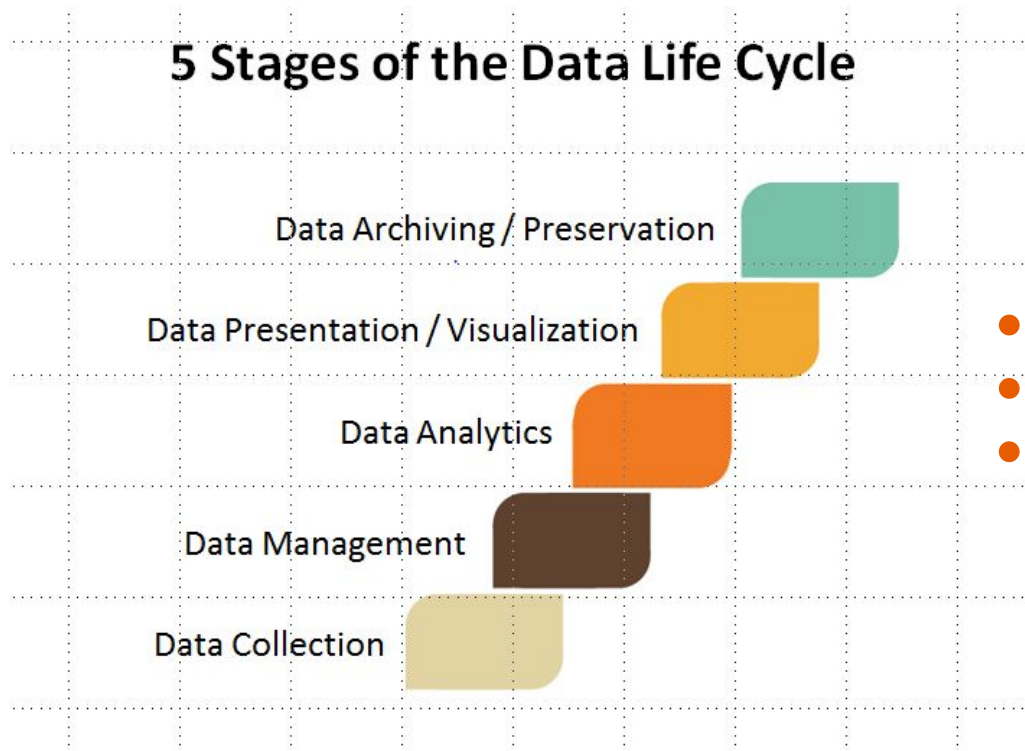
The lifecycle view



Taking analytics beyond its own hype

- Analytics is one component
- Interconnected stages
- Dynamic, ever-changing

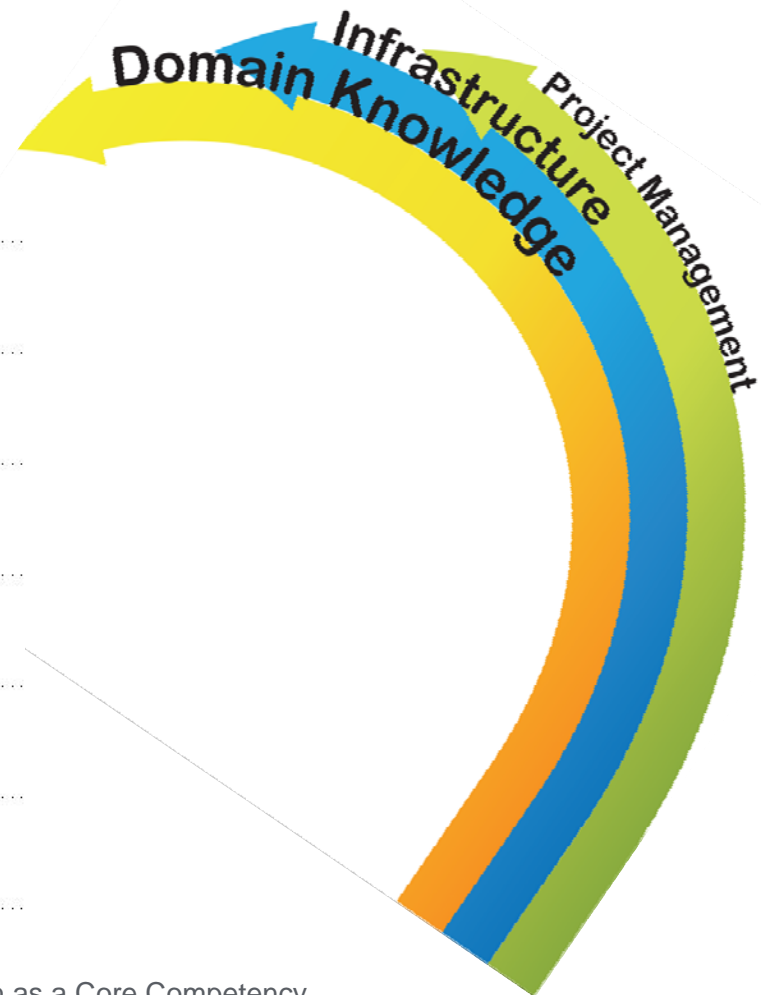
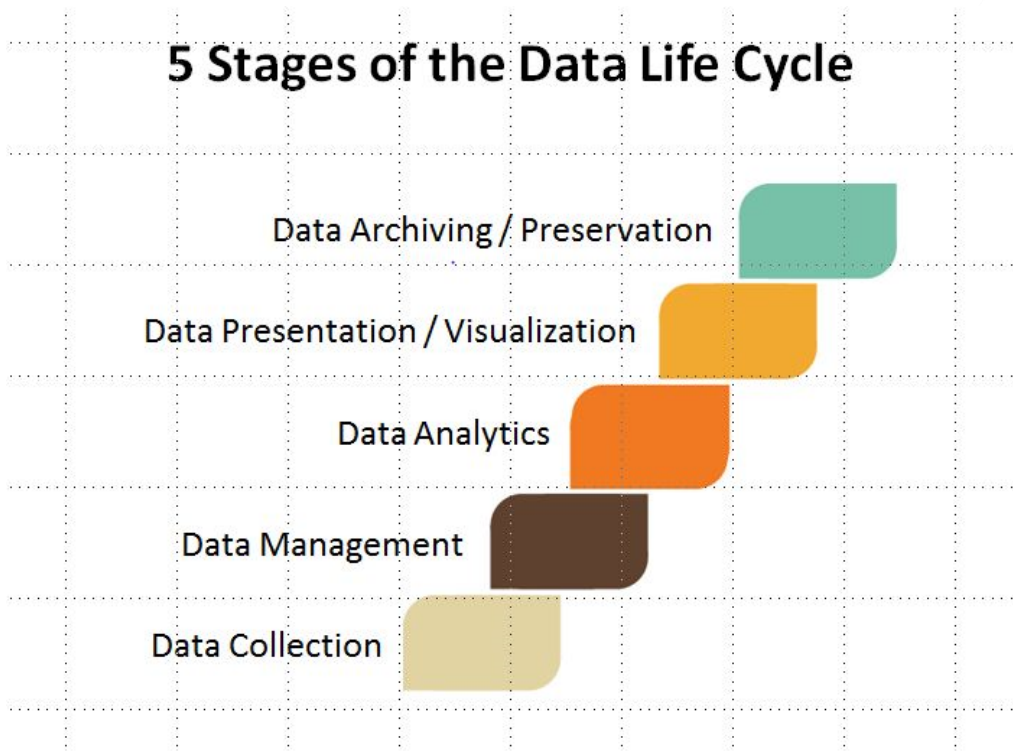
Our view and approach



- **Data lifecycle**
- **iSchool at Syracuse University**
- **Certificate of Advanced Study (CAS) in Data Science**

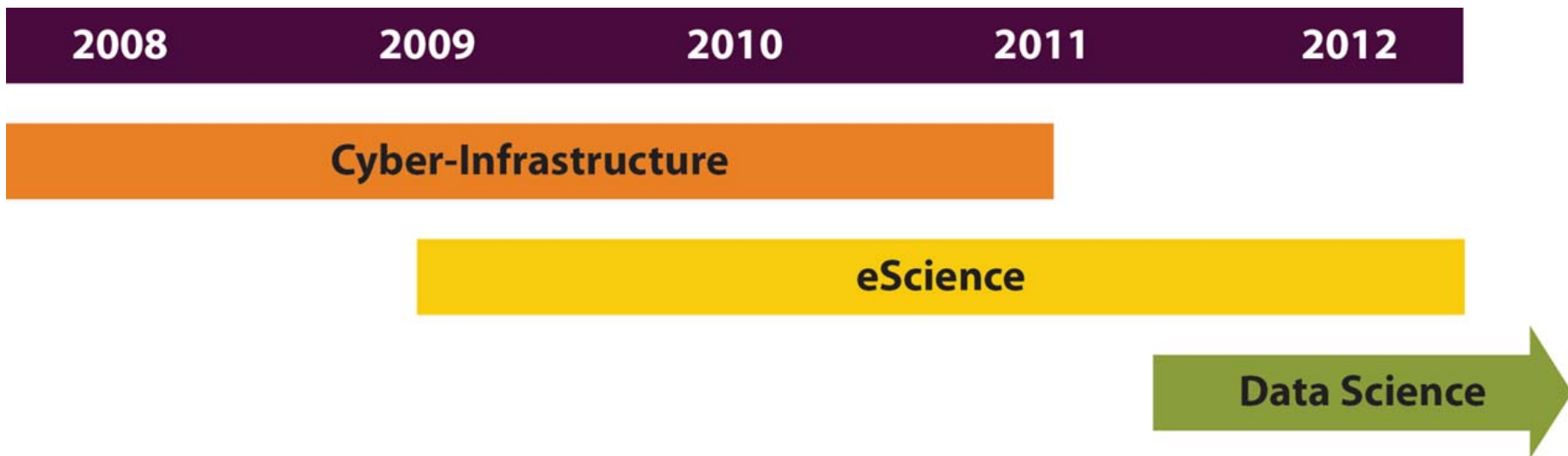
Liddy, E. D. (2012). Digital Curation as a Core Competency.

Data lifecycle view



Liddy, E. D. (2012). Digital Curation as a Core Competency.

The evolution of this lifecycle view



- **Data science is new**
- **Data science is not new**

Liddy, E. D. (2012). Digital Curation as a Core Competency.

CAS in Data Science at SU



- Faculty of one
- Foundation in librarianship
- Technological component

Open source eBook



- A true introduction
- Ready for your contribution

CHAPTER 1
About Data

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	2	3	4	5	6	7	10	11	12	13	14	15	16	17
1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	10	11	100	101	110	111	1000	1001	1010	1011	1100	1101	1110	1111

Data comes from the Latin word, "datum," meaning a "thing given." Although the term "data" has been used since as early as the 1500s, modern usage started in the 1940s and 1950s as practical electronic computers began to input, process, and output data. This chapter discusses the nature of data and introduces key concepts for newcomers without computer science experience.

Scholarship-eligible program

Syracuse iSchool Introduces New Scholarship Program to Increase the Upstate Information Technology Talent Pool

3/25/2009



During these difficult economic times, several Upstate New York companies and organizations find themselves in an unusual situation. They have many jobs available with not enough qualified candidates to fill them. This is especially true in the Upstate New York area.

The Syracuse University School of Information Studies (iSchool) is proud to announce the creation of a new scholarship program to help address this need. The iSchool will be providing funding for 105 permanent Upstate residents who are newly entering the workforce.

Syracuse iSchool continues Upstate IT Scholarship program to increase IT talent pool

2/10/2010



Companies across the United States are struggling to find qualified IT professionals to fill information technology positions. This is especially true in the Upstate New York area where device production and software development are key industries.

Between 2007 and 2009, New York produced digital or electronic devices at a rate that was 13.7 percent higher than the same time frame in the 12-county area. This increase is a testament to the talent pool in the region.

iSchool Invests \$1.3 Million in Upstate IT Scholarships

4/5/2012



By: [Diane Stirling](#)
(315) 443-8975

Almost like an angel investor, the School of Information Studies (iSchool) at Syracuse University made a decision in 2009 to fund a stake in the future careers of Upstate New York residents looking to enhance and retool their information skills.



The School created a 50% tuition scholarship, and has since provided \$1.377 million worth of funding for 105 permanent Upstate residents to pursue graduate education in the information field. Now, the iSchool program is expanding upon its initial success. Two new degree areas, graduate certificates in social media and data science, are being added for the 2012-2013 year, and the iSchool has committed to fund all recipients for the entire course of their studies.

- Select local scholars
- Significant tuition scholarship (50%)



FUNDING OPPORTUNITIES
FOR LOCAL APPLICANTS

Thank you!

ischool.syr.edu/datascience

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