Big Data Ecosystem
Reference Architecture

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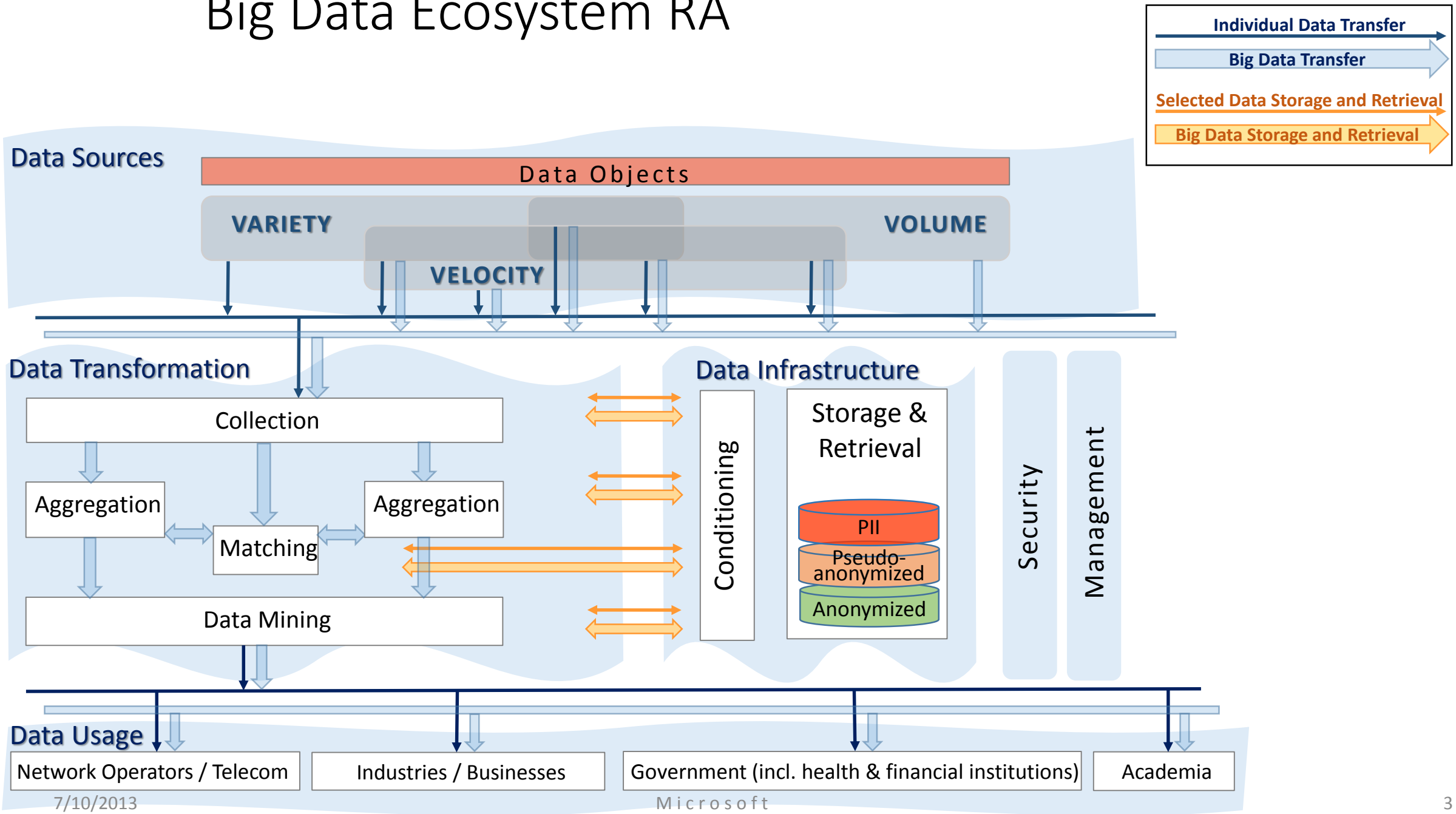
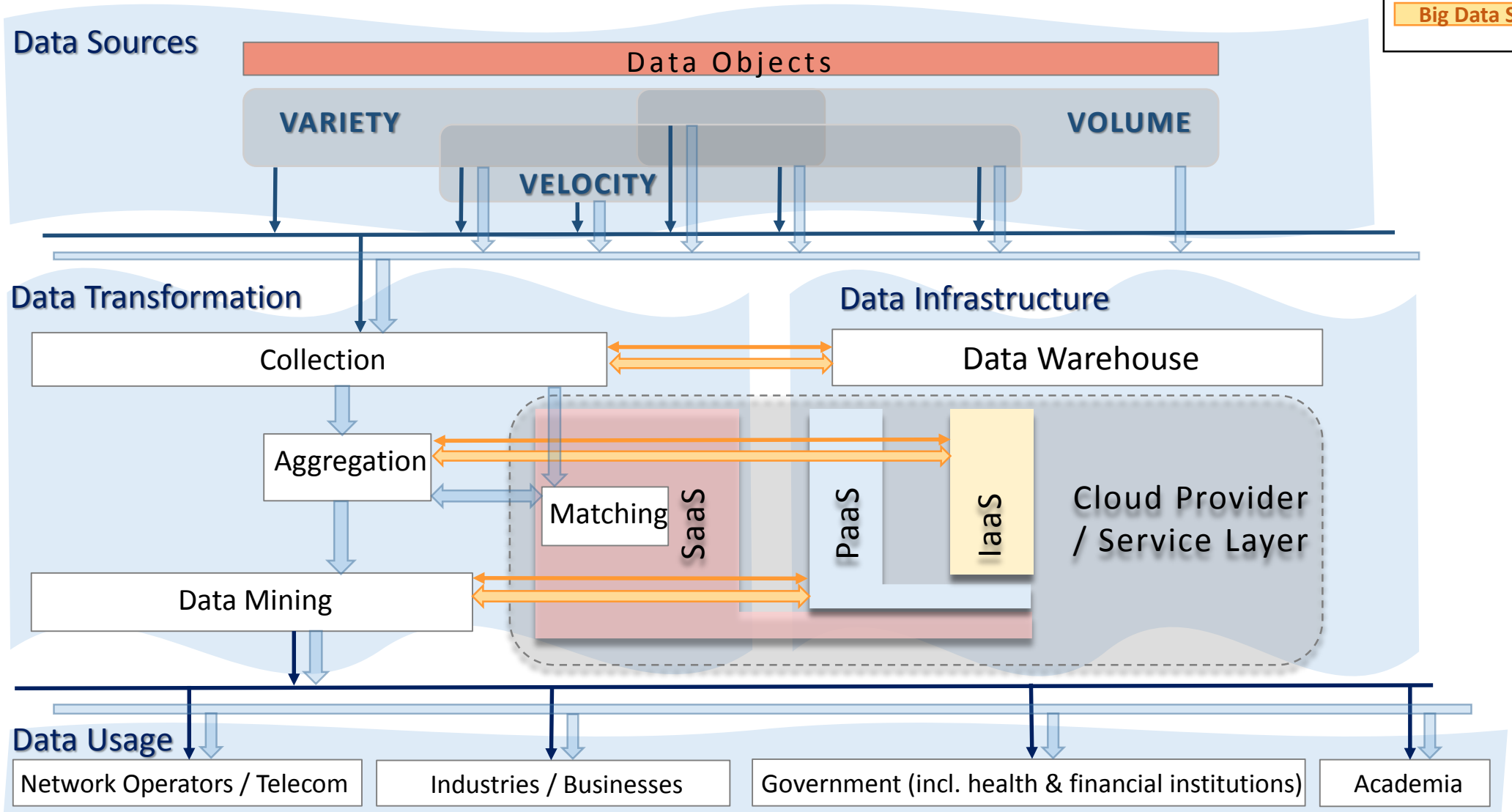
RA Objectives

- Audience: Useful to industry, policy makers, and users (or “data owners”)
- Scope: Encompasses the whole data life cycle
- Focus:
  - Exposes projected “interoperability surfaces”
  - Assists in identifying security and privacy issues
- Addresses radically different Big Data use cases
  - An ecosystem comprised of independent stakeholders (e.g., advertising industry)
  - A stand-alone Enterprise Data Warehouse
  - Outsourcing of selected or all data transformations to SaaS providers
  - Outsourcing of data storage and/or computing to IaaS providers
  - Etc.
- Agnostic to any specific technologies
- Shows the mapping to NIST CC RA (slide # 4)

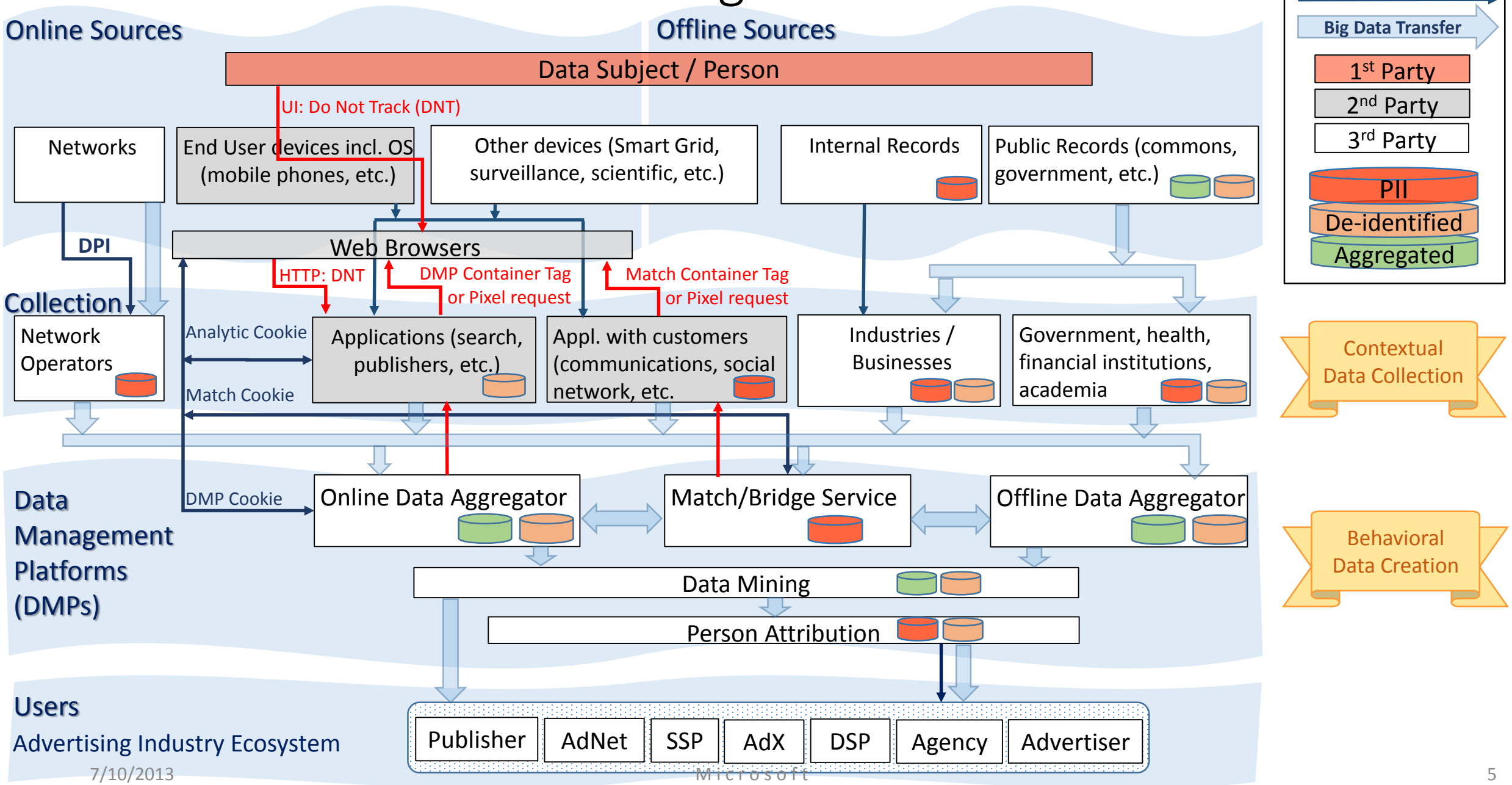
Big Data Ecosystem RA



An Example of Cloud Computing Usage in Big Data Ecosystem



Use Case: Advertising



Use Case: Enterprise Data Warehouse