Big Data in Accounting: An Overview
The Meaning of Big Data

• Differs across various domains
• Determined by whether the data pushes the limit of capabilities of information systems that work with this data
• 4 V’s: huge Volume, high Velocity, huge Variety, and uncertain Veracity
• Size of Storage
• Processing
Accounting and Big Data

• Big Data has the potential to cause a paradigm shift allowing economic activities to be traced and measured earlier and deeper.

• Automatic capture of data through sensors, RFID, GPS data streams.

• Semi-structured and non-structured data stores complementing the current structured data stores of ERPs.
Non-traditional Big Data

• Addition of new types of data fields within specific accounting transaction records beyond what was traditionally recorded.

• Extractions from video data can serve to support marketing and identify bottlenecks in the supply chain.

• Textual data streams from social media can support marketing, give an early warning to customer service of product flaws, and serve to predict volume of sales.
Practical Applications of Big Data

• Process and analyze detailed rather than summary transaction data.

• Integrate into analysis a variety of both internal and external data with financial data.

• Do “soft integration” of environmental Big Data (e.g. social networks and news pieces) with accounting measurement and audit assurance processes.

• Transform accounting, business, and audit processes based on the above.