



FUTURE OF THE AUDIT (I.E., INVENTORY)

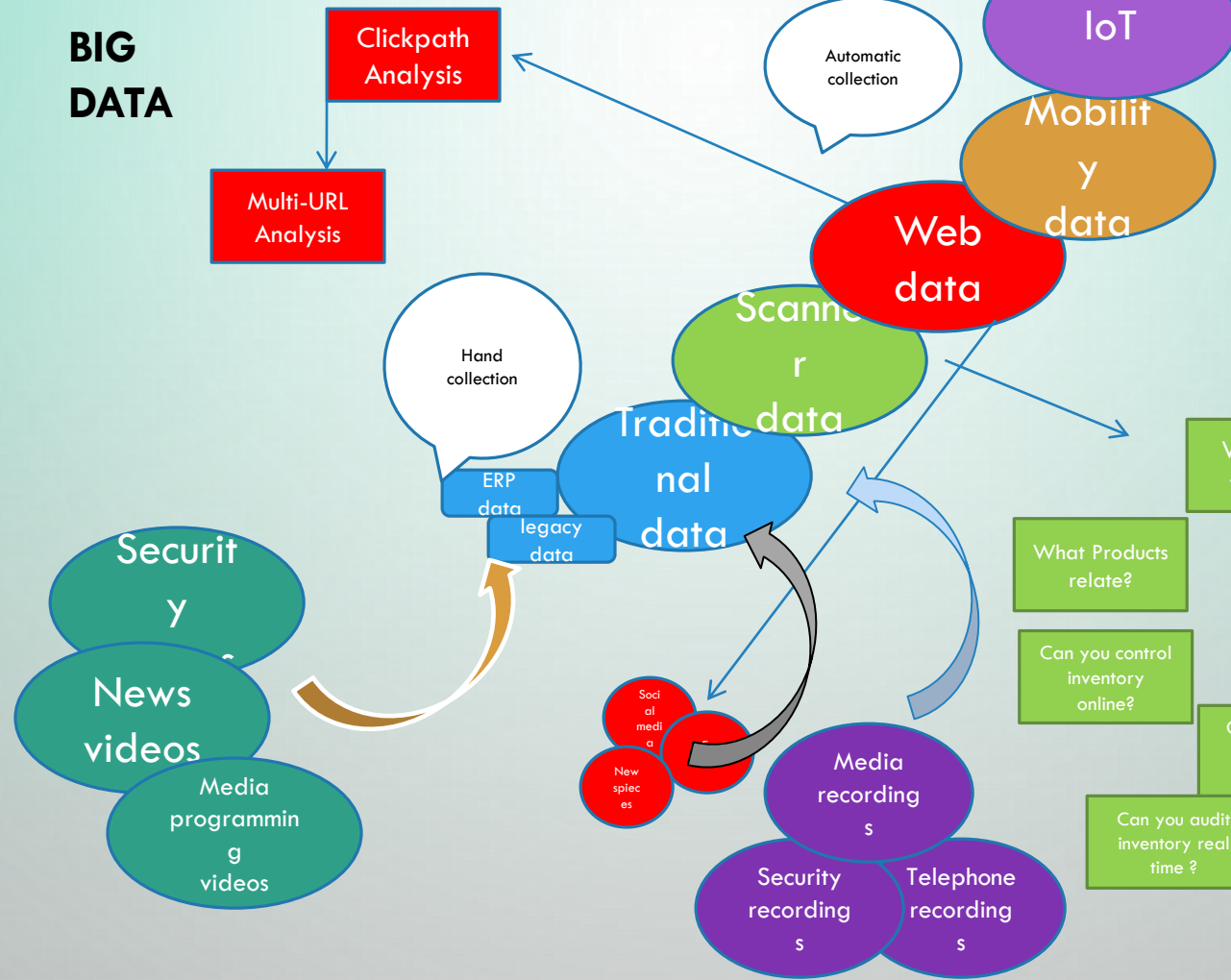
LOOKING AHEAD (IMAGINEERING)

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AUDIT SECTION MIDYEAR MEETING – ARIZONA – JANUARY 16 2016

BIG DATA



Where are / were you?

Descriptive Statistics

Visualization and Dynamics Dashboards

Analytic modeling and discovery tools

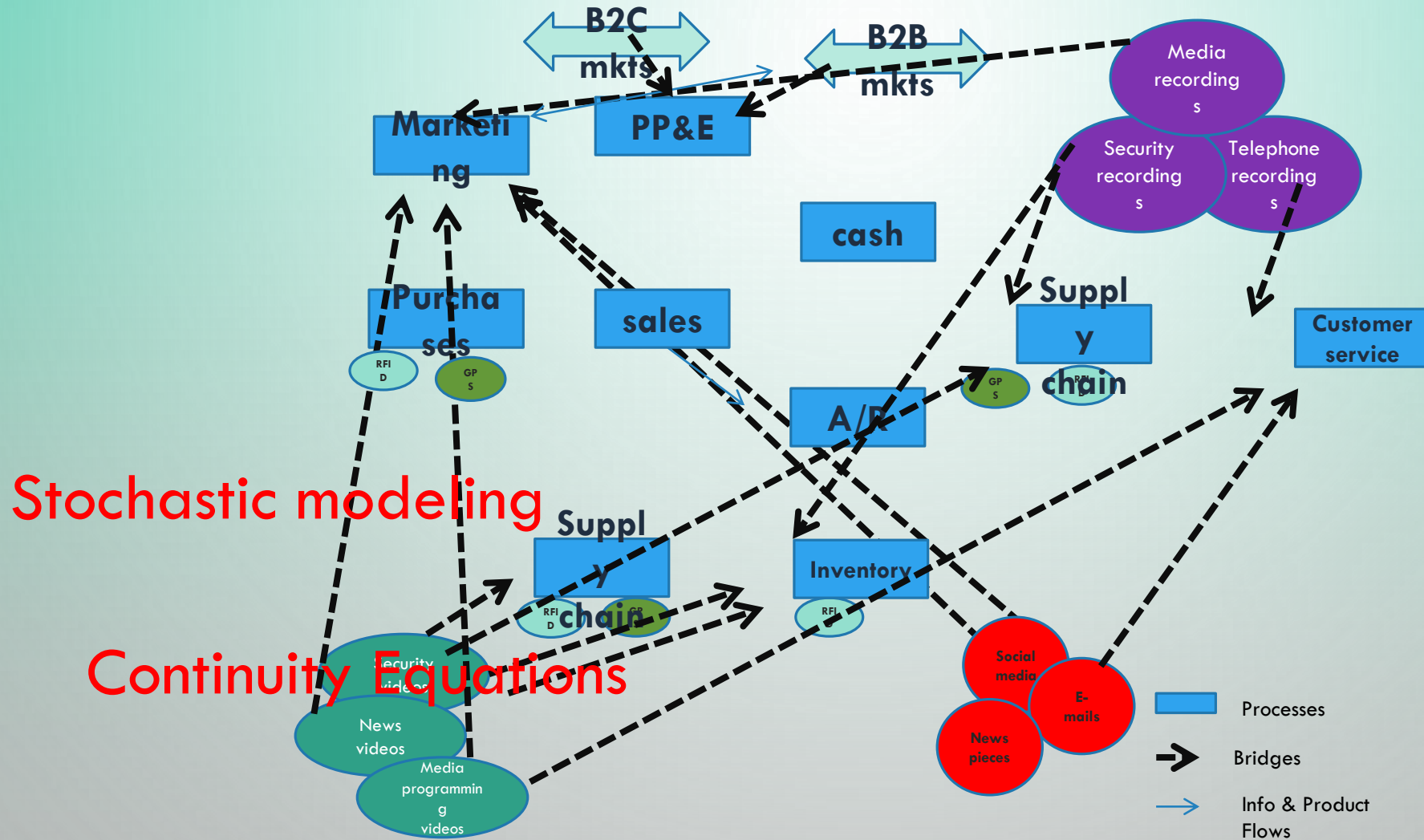
- What did you buy?
- What Products relate?
- Can you predict results?
- Can you control inventory online?
- Can you keep real time inventory?
- Can you audit inventory real time ?

Traditional IT

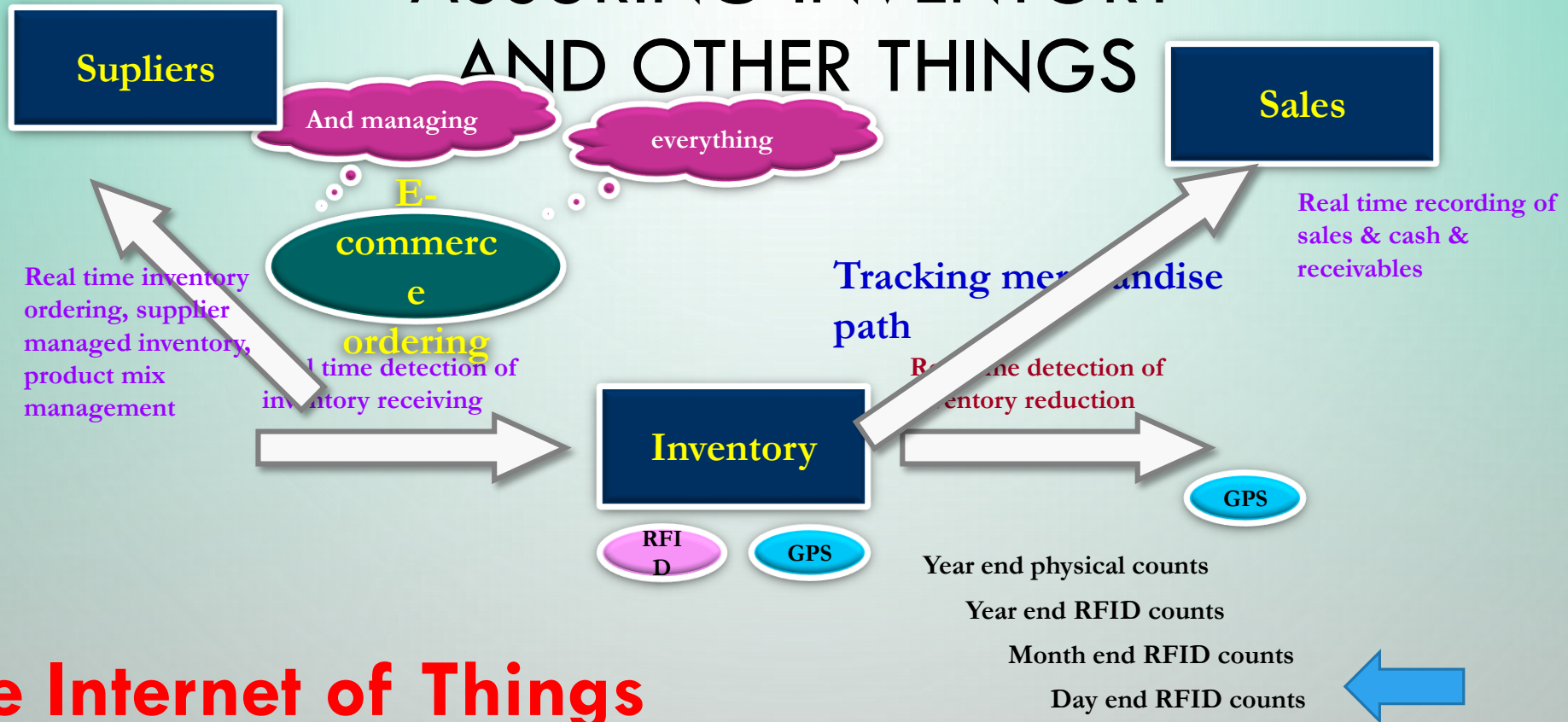
Unstructured data

Text mining

New Methods of Business Measurement

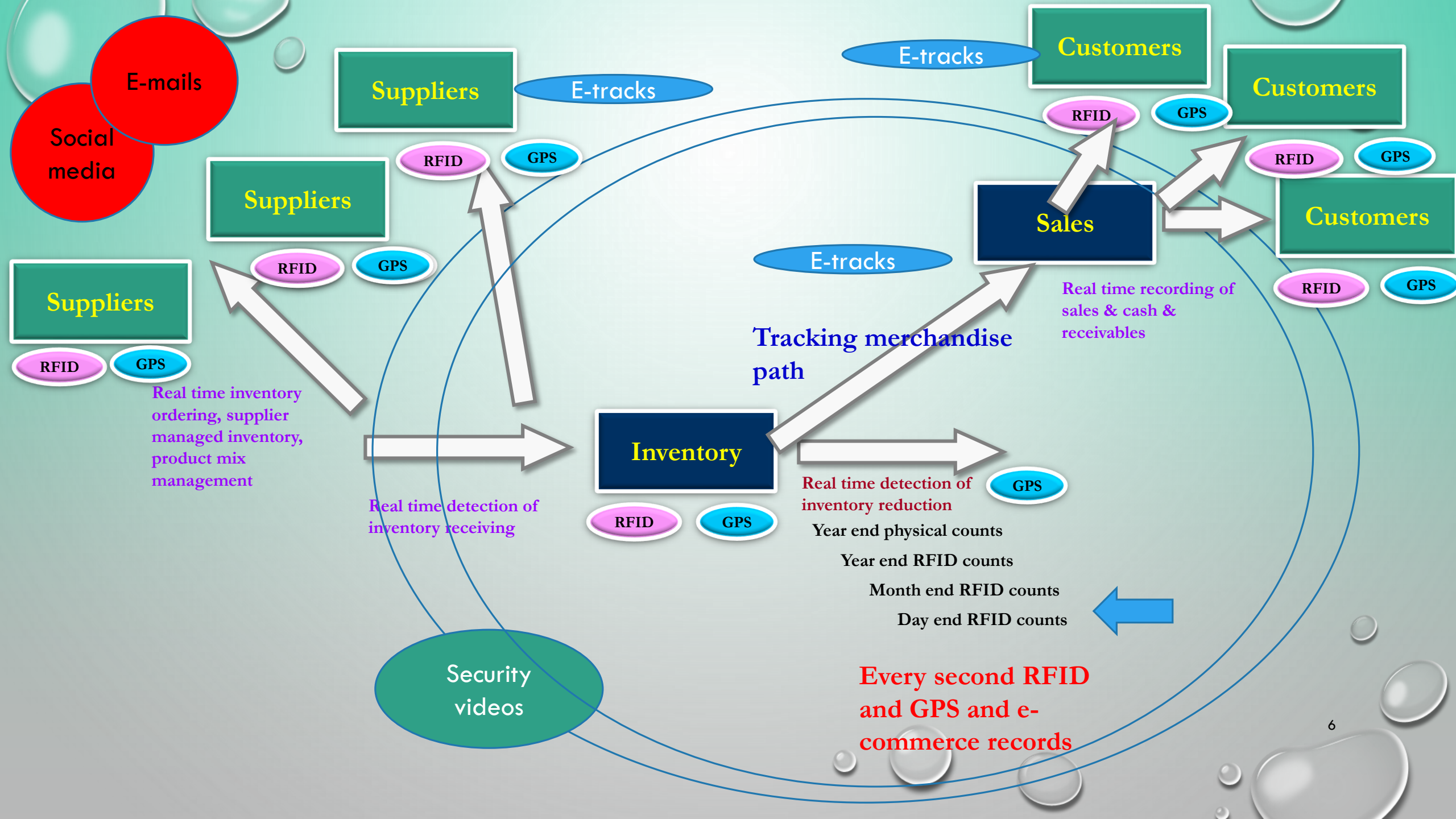


ASSURING INVENTORY AND OTHER THINGS



The Internet of Things

Every second RFID and GPS and e-commerce records



INDUSTRY 4.0

- INTEROPERABILITY
- VIRTUALIZATION
- DECENTRALIZATION
- REAL-TIME CAPABILITY
- SERVICE ORIENTATION
- MODULARITY

DEVICE INFORMATION GATHERING


- LOCATION
- IDENTIFICATION
- ADDITIONAL CONTENT
 - TEMPERATURE
 - PRESSURE
 - MOVEMENT
- DERIVED RELATIONSHIP
 - COMPANY (WHO WAS WITH WHOM)
 - SPEED
 - INTENTIONS
 - FACE RECOGNITION
 - DEFECT DETECTION

INDUSTRIAL REVOLUTIONS

- 1. INTRODUCTION OF THE FIRST MECHANICAL PRODUCTION FACILITIES – SECOND HALF OF 18TH CENTURY
- 2. ELECTRIFICATION AND DIVISION OF LABOR (TAYLORISM) 1870+
- 3. DIGITAL REVOLUTION (1970 +++) ADVANCED ELECTRONICS AND INFORMATION TECHNOLOGY DEVELOPED FURTHER PRODUCTION PROCESSES
- 4. FACTORY 4.0 INTEGRATING: INTERNET OF THINGS, INTERNET OF SERVICES, CYBER PHYSICAL SYSTEMS, SMART FACTORY

REFERENCES

- HERMAN, PENTEK & OTTO, DESIGN PRINCIPLES FOR INDUSTRIE 4.0 SCENARIOS: A LITERATURE REVIEW; WORKING PAPER NO. 01 /2015 TECHNISCHE UNIVERSITÄT DORTMUND.

The background is a light teal color with a gradient. There are several realistic-looking water droplets of various sizes scattered across the top and bottom edges, some overlapping. The text is centered in a bold, black, sans-serif font.

- FORGET ABOUT PRIVACY.... ITS GONE.... FORTUNATELY YOU ARE NOT VERY INTERESTING

- TECHNOLOGY GIVETH
TECHNOLOGY TAKETH





Introduction to Audit Analytics:

<https://www.youtube.com/playlist?list=PLauepKFT6DK8nsUG3EXi6lYVX0CPHUngj>

Special Topics in Audit Analytics:

<https://www.youtube.com/playlist?list=PLauepKFT6DK-PpuseJtSMlly-YBhaV4TH>

Information Risk Management:

https://www.youtube.com/playlist?list=PLauepKFT6DK8uxePhPCoHjDf8_DlhRtGS



Special Topics in Audit Analytics

by Rutgers Web • 26 videos • 145 views • Last updated on Jun 5, 2015


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BIG DATA

1  **Special Topics in Audit Analytics: Week 1- (Lecture 2: Analytics Big Data Audit Automation)**
by Rutgers Web

2  **Special Topics in Audit Analytics: Week 1-(Lecture 3: The Audit Ecosystem)**
by Rutgers Web

3  **Special Topics in Audit Analytics: Week 1-(Lecture 4: Audit Data Standard)**
by Rutgers Web

4  **Special Topics in Audit Analytics: Week 2-(Lecture 2)**
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5  **Special Topics in Audit Analytics: Week 3-(Lecture 1- Hypothesis Testing)**
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6  **Special Topics in Audit Analytics: Week 3-(Lecture 2- Hypothesis testing 2)**
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7  **Special Topics in Audit Analytics: Week 3-(Lecture 3 : Confidence interval)**
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8  **Special Topics in Audit Analytics: Week 3-(Lecture 4 -Two sample test)**
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9  **Special Topics in Audit Analytics: Week 3-(Lecture 5: two dependent sample test)**



