



# 35 WCAS Update -> the CarLab

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# **The New CA(from Pinkbook chapter 1)**

- a methodology that enables auditors to provide assurance on a subject matter for which an entity's management is responsible, using a continuous opinion schema issued virtually simultaneously with, or a short period of time after, the occurrence of events underlying the subject matter.**
- The continuous audit may entail predictive modules and may supplement organizational controls.**
- The continuous audit environment will be progressively automated with auditors taking progressively higher judgment functions.**
- The audit will be by analytic, by exception , adaptive, and cover financial and non-financial functions.**

## Some news

- Three PhD students completed their dissertations doing CarLab related work:
  - Daehyun Moon,
    - Continuous Risk Monitoring and Assessment: CRMA
  - Abdullah Alawadhi
    - The Application of Data Visualization in Auditing
  - Paul Byrnes
    - Developing Automated Applications for Clustering and Outlier Detection: Data Mining Implications for Auditing Practice
- We accepted 4 new students in our PhD Program in AIS and some Accounting PhD students are working with us
- We hired 2 additional faculty members

## News (2)

- We continue our certificate in Audit Analytics with positive results
- The Digital Library is growing exponentially
- 34WCAS was in Sao Paulo
- Planning WCASes next year for Newark, Sao Paulo, Brisbane (AU), and Tunisia
- Turning some attention to Open Data
- Presentation to IAASB on data Analytics.
- Several efforts tried with the Brazilian government
- Progressed in setting up the Rutgers AICPA Audit Analytics Research Initiative (RAAARI)



Reaching out – forward looking attempts

- **Multiple machine learning projects**
- **Including AI into an audit platform**
- **Government electronic reporting**
- **Audit Analytics**
- **Improving the audit courses**
- **Our electronic education mission**
- **Our mission to include AIS in the curriculum**



# Axioms for evolving conceptualization

- There are no reasonable limits of sources of data, but there are great limits on what data an organization can actually store and make useful.
- In general data will tend to exist to support particular decisions or processes, but the great challenge is to anticipate such needs and create software and processes for its examination.
- The costs of system development, improvement, and overlay obey much different rules than the traditional fixed and variable cost managerial accounting model.
- Many IT provisioning economic models are charged on an incremental basis proportional to usage (Siegele, 2014).



# Innovation and Costs

- 1) Continuous audit IS analytics**
- 2) Information storage and retrieval is being progressively automated.**
- 2) The cost of creating a report that previously required incremental labor per report now, once established, costs nothing to repeat and is typically developed by the ERP developers.**
- 3) With the modern systems, automatic data collection is changing the schemata of data collection. Data from e-commerce transactions, GPS, and RFID can be captured at defined time intervals contingent on the business need being satisfied.**

# Innovation and costs (2)

- 4) Cloud distribution and storage of created/sensed files creates ubiquitous access and much more robust backup. Third party sourcing creates several challenges on assurance but also some degree of professionalism and competence in the data custody function.**
- 5) A progressive incorporation of some forms of artificial intelligence into several business functions is creating a more stochastic and judgment based set of decision rules. It cannot be assumed any more that a well validated business procedure will respond “correctly” as the rationale in the computer logic is a mix of heuristic rules and complex analytics.**
- 6) Robots are taking a larger and larger role in business processes and progressively systems with artificial intelligence will be integrated into the manual performance of tasks.**
- 7) The ubiquitous access to information and devices will also be of great import. Two additional sources of internet connection - “the Internet of Things” and “Wearables” will provide further substantive data of particular value for detective and preventive assurance.**







