Current XBRL State and Future Research Agenda

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SPEAKER:

Arif Perdana

Design and Specialised Businesses Cluster,
Singapore Institute of Technology

Content

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- Research Method
- Findings – What Do We Know?
- Future Research Agenda - What do we need to know further about XBRL?

Introduction

- XBRL shift the paradigm from document-centric to data centric;
  - XBRL streamline, standardize, and make accounting practices more transparent;
  - XBRL has increasingly become the international standard for the exchange of business and financial information;
- XBRL has become more tightly woven into accounting practices;
- XBRL has contributed to a vibrant accounting research landscape.

Introduction (cont)

- This current research is an update of Perdana et al.'s (2015) research that centered on the contribution to information systems (IS) made by XBRL research

Research Questions

- **Perdana et al's (2015) research question.**
  - What patterns emerge in prior XBRL research and what can be learned from that research?

- **Current research questions**
  - What do we know about XBRL?
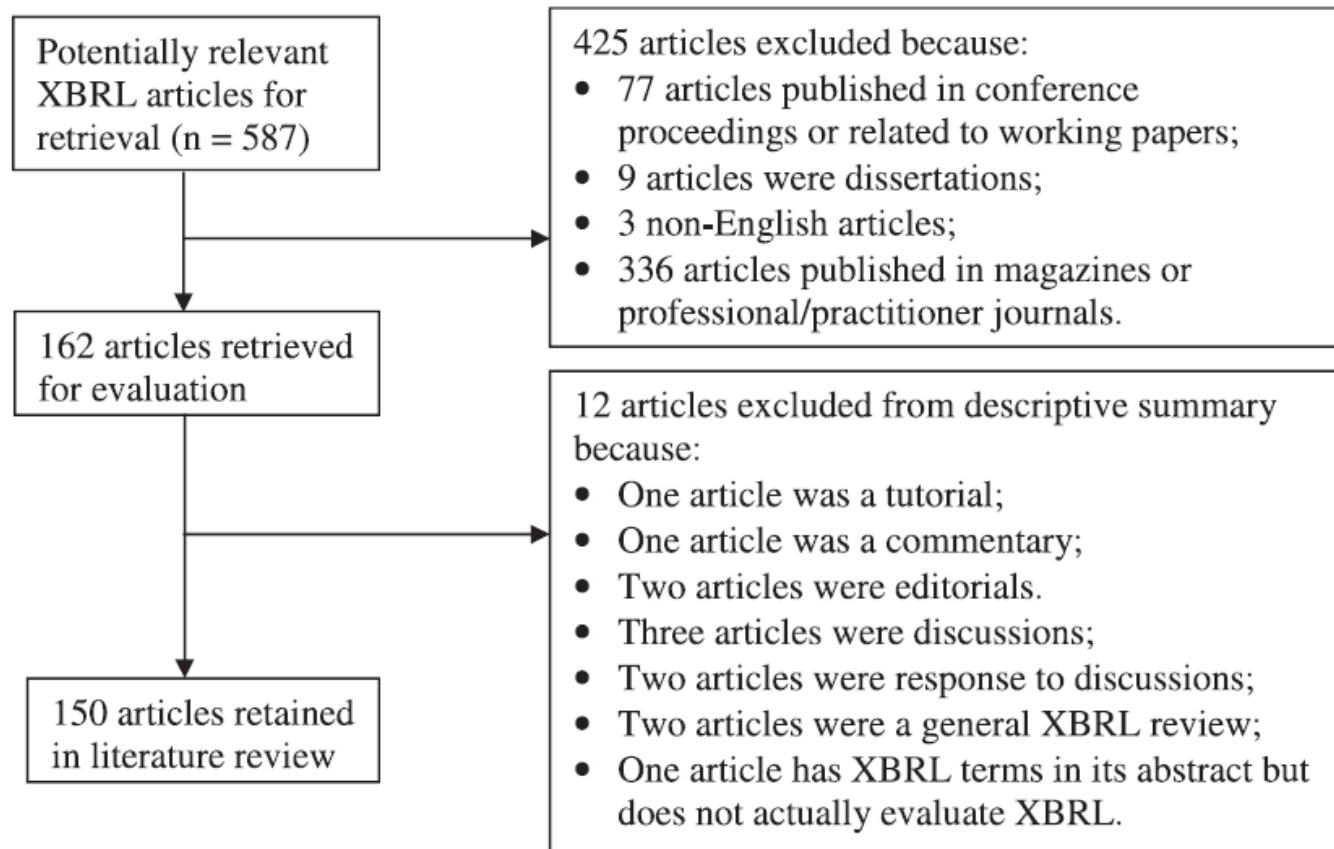 - What do we need to know further about XBRL?

Research Method

- **Integrative literature review**
  - Article selection procedures (online library and Google Scholar);
  - Classification schemes (research methodology and research topics);
  - News collection from LexisNexis for *additional analysis* of a comparison between XBRL in academia and XBRL and XBRL in the media.
    - Relevant XBRL related news started to appear in 2000. We retained 1086 (of the 1750 search results) distinct news and discarded highly similar news.

Research Method (cont)

- Article Selection Procedures (Perdana et al. 2015)

Potentially relevant XBRL articles for retrieval (n = 587)	425 articles excluded because: • 77 articles published in conference proceedings or related to working papers; • 9 articles were dissertations; • 3 non-English articles; • 336 articles published in magazines or professional/practitioner journals.
162 articles retrieved for evaluation	12 articles excluded from descriptive summary because: • One article was a tutorial; • One article was a commentary; • Two articles were editorials. • Three articles were discussions; • Two articles were response to discussions; • Two articles were a general XBRL review; • One article has XBRL terms in its abstract but does not actually evaluate XBRL.
150 articles retained in literature review	

Research Method (cont)

- **Article Selection Procedures (Updated work)**
  - We collected an additional sample of 62 peer-reviewed XBRL articles. We added these additional studies to Perdana et al.'s (2015) review, thus giving a total of 212 peer-reviewed XBRL articles.

Research Method (cont)

- **Classification Scheme-Research Methodology**
  - Case Study
  - Delphi Technique
  - Design Science
  - Experimental Research
  - Focus Group
  - Grounded Theory
  - Interview
  - Multimethod Approach
  - Secondary Data
  - Survey Research
  - Literature Review

Research Method (cont)

- Classification Scheme-Research Topic

TABLE 2

Classification Scheme of XBRL Research Themes

Research Theme	Coverage
XBRL's Impact on Business	How XBRL should lead organizations to prepare, distribute, and use financial information effectively and efficiently.
	The problems and benefits associated with XBRL implementations.
	Investigate how XBRL facilitates financial information users being able to use the information to lead them to better-informed decisions.
XBRL's Adoption	Investigate the drivers and inhibitors of XBRL adoption both at organizational and individual levels, as well as the characteristics of XBRL adopters.
XBRL's Technical Development	Examine how XBRL should be technically developed to facilitate enterprise application integration and business processes.
XBRL Education	Study and propose how to increase XBRL awareness among students, accountants, auditors, and financial information users.

Finding – What Do We Know

XBRL Academic Papers 2001-2016
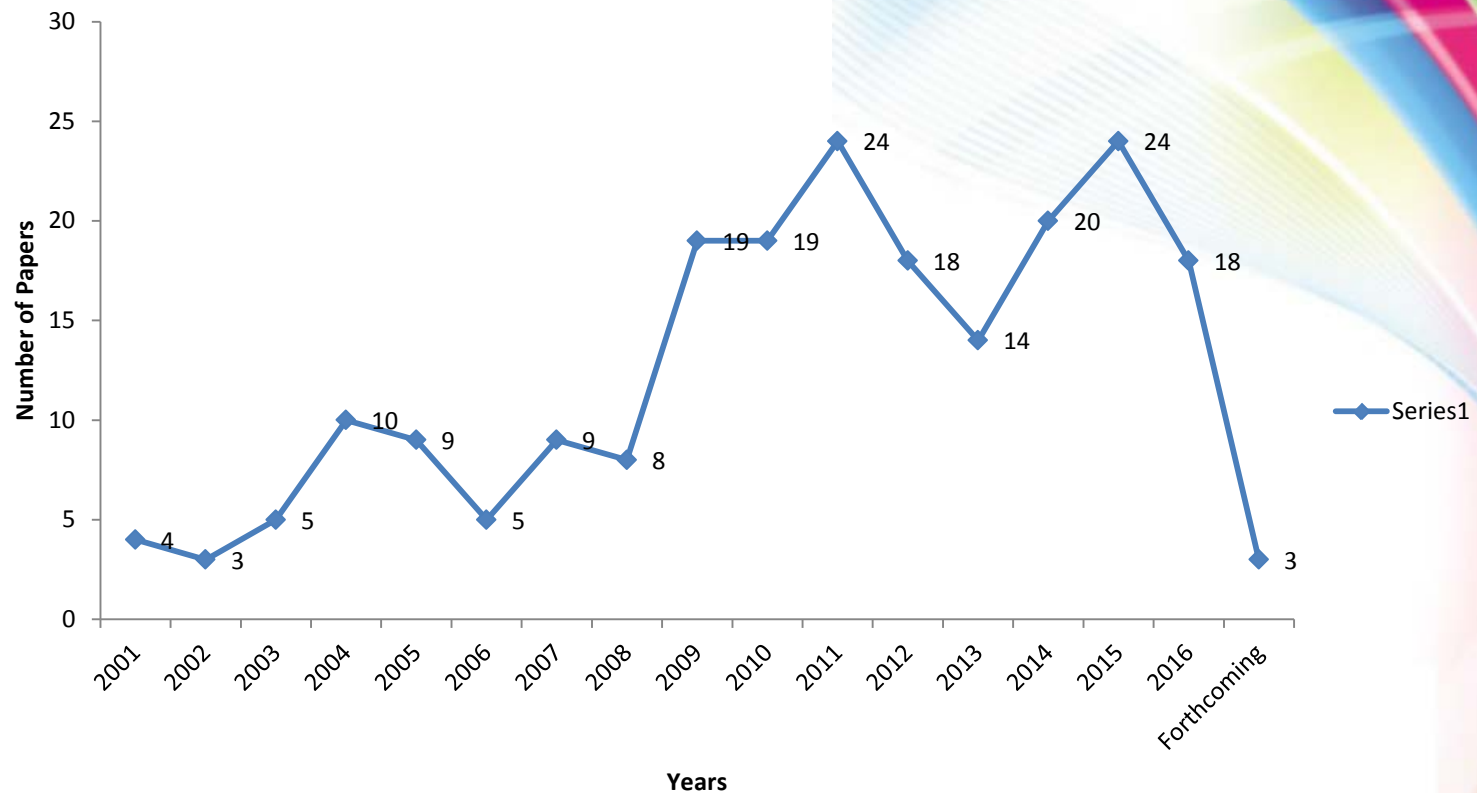
Finding – What Do We Know

Type of Paper and Research Method	Frequency of research theme				Total
	I	II	III	IV	
Conceptual Paper	38	6	20	2	66
Research Paper					
Case Study	6	9	2	0	17
Delphi Technique	1	1	0	0	2
Design Science	0	0	15	0	15
Experimental Research	9	1	0	2	12
Focus Group	0	1	0	0	1
Grounded Theory	0	1	0	0	1
Interview	2	8	0	0	10
Multimethod Approach	1	0	0	1	2
Quasi Experiment	0	1	0	1	2
Secondary Data	40	9	7	0	56
Survey Research	2	12	0	2	16
Literature Review	1	0	0	0	1
Teaching Notes	0	0	0	11	11
Total	100	49	44	19	212

Finding – What Do We Know?

- We found greater numbers of research papers (52) than purely conceptual papers (10);

- There are an increased number of studies using secondary data and design science as their research methodology;

- XBRL research streams remain unchanged when compared to Perdana et al. (2015) review.

Finding – What Do We Know

- More recent XBRL research seems to be mostly concerned with the empirical investigation of the impact of XBRL on business;

- Relative to XBRL's adoption, researchers seek to understand how XBRL-related information diffuses among stakeholders;

- Relative to XBRL's technical development, researchers proposed solutions to leverage XBRL-related documents and to help organizations to more readily produce XBRL-related documents.
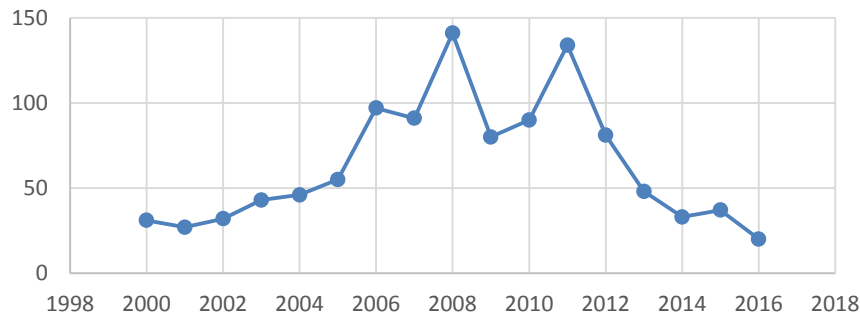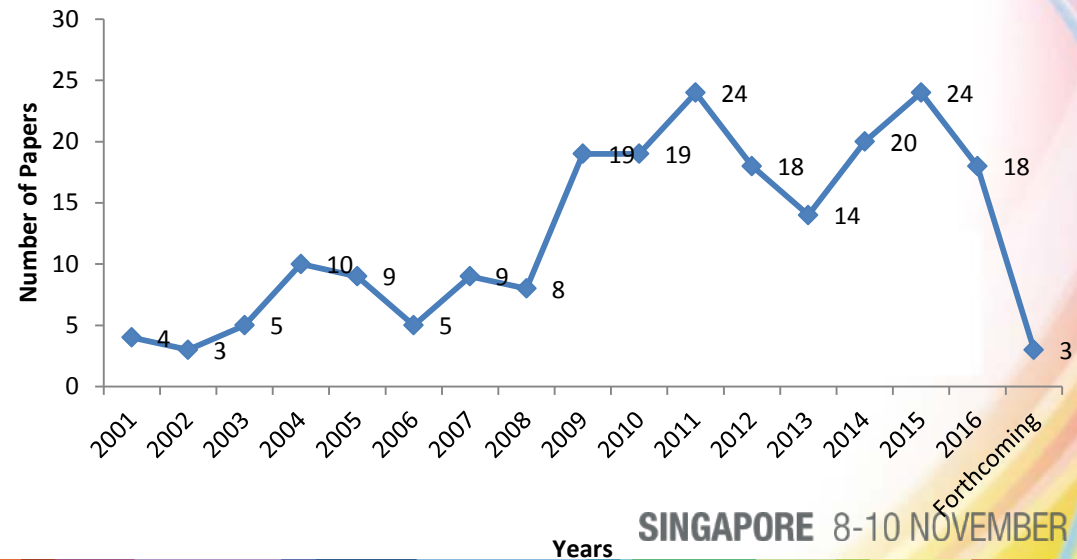
Finding – What Do We Know

- Issues related XBRL
  - Same mandate, different problems;
  - Data quality and taxonomy issues;
  - Data integration have not yet fully resolved;
  - XBRL semantic improvement.

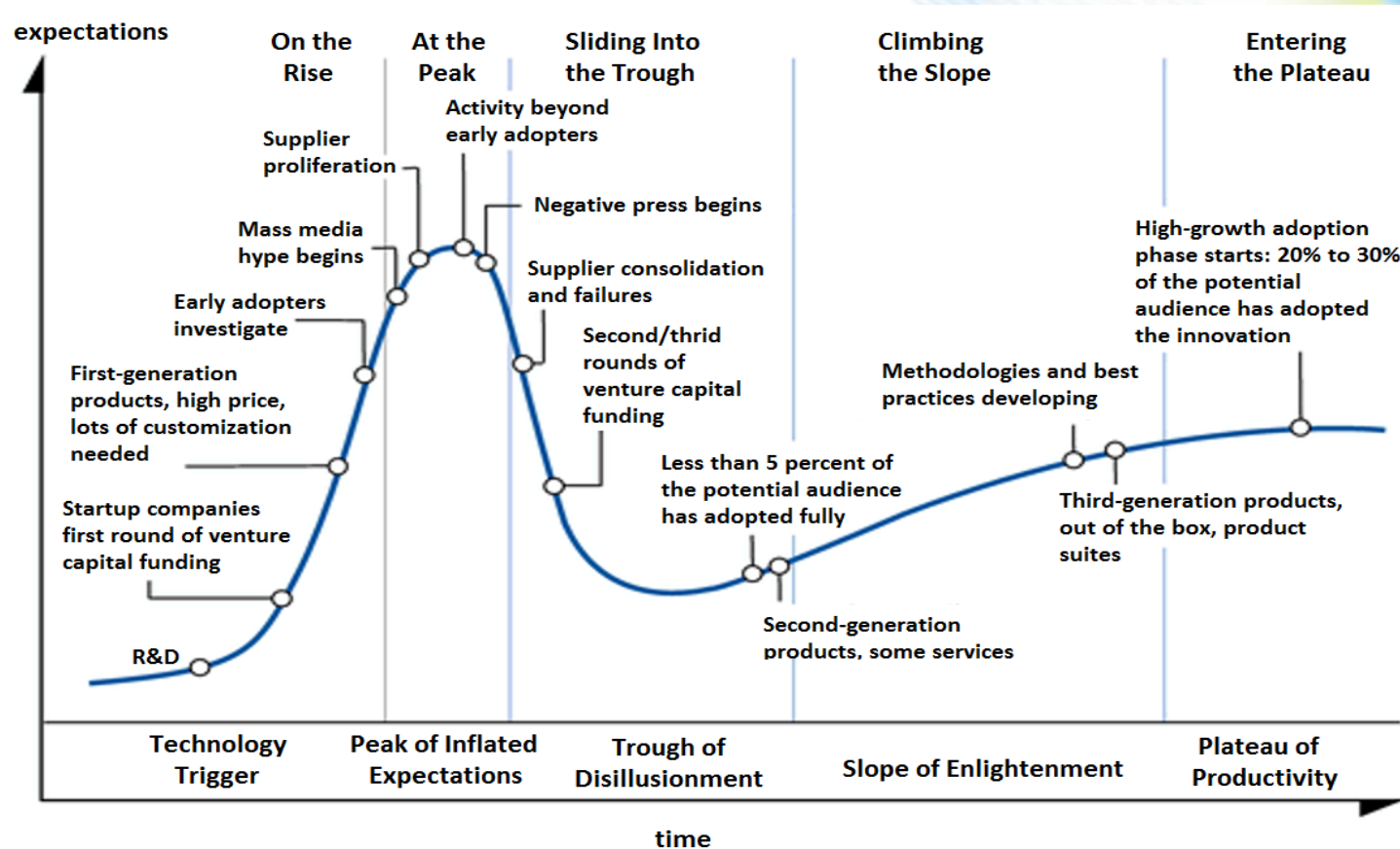# Finding – Additional Analysis

XBRL in the media 2000-2016

XBRL Academic Papers 2001-2016

Finding – Additional Analysis

Gartner Hype Curve

Future Research Agenda

- What Do We Need To Know Further About XBRL?
  - XBRL and Decision Making
    - Interactive Data Visualization
  - XBRL and Data Integration
    - Internal process, data aggregation, replacement of manual data, and automatically pulled data
  - XBRL and Structured Data
    - Facilitate business analytics or intelligence
  - XBRL and Textual Analysis
    - Increasing the semantic abilities of XBRL