PROFESSIONAL ACCOUNTING CENTRE (PAC)

2023 INVITED CONFERENCE

Emerging Technology and Risk

June 2, 2023   In-person and online using Zoom

UTM Room, David Building Room DV3140
University of Toronto Mississauga, Mississauga, Ontario

PAC is pleased to acknowledge funding for this conference from CPA Ontario

AGENDA

**8:30   Gather in person in the UTM Room (Davis Building Room DV 3140)
Sign-in on Zoom**

8:45   Opening Remarks

The application of increasingly sophisticated technology to professional accounting activities is both inevitable and presents complex risks and opportunities that must be sufficiently understood to protect those who rely on the profession, and those who are or who aspire to be part of it. Exploring challenges such as these is the purpose of the Professional Accounting Centre, and the reason for this conference.

Leonard J. Brooks, Director, Professional Accounting Centre
Shauna Brail, Director, Institute for Management & Innovation, UTM
Craig Smith, EVP, Member & Student Services, CPA Ontario
Samir Trabelsi , Incoming President, Canadian Academic Accounting Association

9:00   Keynote: Miklos Vasarhelyi, Rutgers Business School

How is Technology Changing Accounting

Miklos A. Vasarhelyi [Ph.D in MIS (UCLA) MBA (MIT) and BS in Economics and Electrical Engineering (the State University of Guanabara and Catholic University of Rio de Janeiro)]. Professor Vasarhelyi is currently the KPMG Distinguished Professor of Accounting Information Systems and Director of the Rutgers Accounting Research Center (RARC) & Continuous Auditing and Reporting Laboratory (CARLAB) at Rutgers University. He has published more than 300 journal articles, 25 books, and directed over 60 PhD theses. He is the editor of the Artificial Intelligence in Accounting and Auditing series and the co-editor of the Journal of Emerging Technologies in Accounting and in the International Journal or Digital Accounting.

Professor Vasarhelyi is credited with the original continuous audit application and as the leading researcher in this field. The CAR Lab's projects include among others AICPA's Radar, Siemens, KPMG, P&G, AICPA, CA Technologies, and Itau-Unibanco. Prof. Vasarhelyi has been awarded the Outstanding Educator of the year by the AAA in 2014, AICPA distinguished scholar in 2018, notable contributions to the accounting literature in 2021, and the Wasserman award by ISACA in 2013. His current work includes continuous prediction and intervention expansions on the CA schema, blockchain, smart contracts, process mining, and several machine learning projects.

There will be an opportunity to share your views. Type in the Chat.

10:00 Break

10:10 Bryant Ramdoo, Director of Digital Transition, KPMG

AI and Other Digital Transition Risks for Professional Accountants

Brant will discuss issues raised by the transition to AI and other digital tools such as: misunderstanding or ignoring the logic of algorithms used (Blackbox), new tools take more time than the old – efficiency vs effectiveness of use, lack of IT

competency/skillset, upskilling needed particularly by clients and auditors, outcomes assumed to be correct, data problems, storage with 3rd party access, and a disconnect between what clients expect and what can be delivered in terms of savings.

 Bryant Ramdoo is Partner and National Audit and Assurance Innovation Leader at KPMG in Canada. With more than 15 years of experience providing professional audit services to large multinational clients, Bryant's experience includes securities filings in both Canada and the United States, carve-out financial statements, bankruptcy filings, IPOs, and the successful coordination of large global audit transitions. Prior to his role as National Innovation Leader, Bryant was a founding member of the National Audit Innovation team and is among the first graduates of Digital Academy, KPMG's industry leading audit innovation program built in collaboration with Simon Fraser University. He also leads KPMG's National Japanese Practice in Canada, overseeing the development and growth of Japanese clients operating in Canada. Bryant holds a Master of Science in Accounting with Cognitive Analytics, from Simon Fraser University

There will be an opportunity to share your views. Type in the Chat.

11:10 Break

11:20 Thomas Bourveau, Columbia University

Decentralized Finance (DeFi) Assurance: Audit Adoption Rates and Capital Markets Effects

Abstract:

Decentralized finance (DeFi) represents a large capital market where users conduct transactions primarily through digital smart contracts. These contracts are susceptible to cyber-attacks and coding errors that can result in significant financial losses, which has led to the emergence of smart contract audits to reduce information asymmetry and foster trust among DeFi service providers and users. Using a large hand-collected

sample of these audit reports from DeFi service providers, we provide some of the first evidence showing that (1) these audits are pervasive, (2) the audit firm market is predominantly composed of new technical audit firms, (3) the scope of these audits can span a variety of contract features, and (4) the market reacts positively to the release of these audit reports, suggesting that these reports are value relevant. These findings highlight the demand for novel assurance services driven by blockchain technology.

Thomas Bourveau is an Associate Professor of Business in the Accounting Division of Columbia University's Graduate School of Business and a faculty fellow at the Millstein Center at Columbia Law School. His research lies at the intersection of accounting, law, and economics. In his research, he primarily examines the role of voluntary disclosure and verification in both regulated and unregulated markets, with a broad focus on capital, product and labor markets

There will be an opportunity to share your views. Type in the Chat.

12:10 Lunch in the UTM Room

1:30 Lisa Liu, Columbia University (online)

Financial Statement Audits and Data Breaches

Abstract:
Financial statement audits for public companies require that auditors test the internal controls over the client's information systems that are material to the financial reporting process. Given the increasingly integrated nature of corporate data and control systems, a standard audit may therefore have a positive effect on firms' other information systems such as those that help prevent data breaches. In this paper, I provide evidence on whether and how auditors help prevent data breaches. I find that plausibly exogenous improvements in auditing reduce the likelihood of data breaches. I explore two mechanisms through which the effect occurs: auditors' provision of relevant information about financial data systems and increasing firms' ex ante incentives for internal controls. I find evidence consistent with both mechanisms.

Collectively, this paper provides evidence that an improvement in accounting information systems can have a positive impact on non-accounting systems.

Lisa Yao Liu is an assistant professor at Columbia University's accounting division. Her research focuses on the regulatory process and the economic consequences of financial reporting regulations, such as disclosure, ESG, and auditing. Her specific research interests lie in the intersection of regulation and technology, law and accounting. One economic mechanism she explores is information transfer and learning among economic agents. She uses different research methods, including empirical archival analyses, theoretical models, structural estimation, field surveys, and interviews. Lisa holds a PhD in Business and an MBA from the University of Chicago Booth School of Business, along with a master's degree in Economics from Duke University and a bachelor's degree in Business Administration from the Renmin University of China.

There will be an opportunity to share your views. Type in the Chat.

2:20   Break

2:30   Jasmijn Bol, Tulane University

Employee Preferences for Artificial Intelligence-driven Performance Evaluation Systems

Abstract:
The COVID-19 pandemic ushered in a new age for the workplace with more environmental instability and remote work, which led many firms to rethink their performance evaluation systems. At the same time, technological improvements have allowed AI-driven performance evaluation systems to become a realistic alternative to human-driven systems for an increasing number of jobs. As a result of these simultaneous changes, firms are increasingly interested in making the transition to AI-

driven systems. However, prior research suggests that employees are concerned about the use of AI, because they believe that AI does not consider the context in which performance occurs. We argue that employee preferences, which are critical to the motivational impact of the incentive system, are not uniform. Specifically, we predict and find that employee preferences for AI are relatively weaker when the business environment is unstable. We predict and find that employees who have experienced workplace discrimination in the past have a higher relative preference for an AI-driven system, and this preference is stronger when working remotely than when working in a shared workspace. When working in a shared workspace, employees with lower social intelligence have a stronger relative preference for AI-driven systems than employees with higher social intelligence. We find that this effect disappears when employees work remotely. These findings help guide firms that are considering investing in AI-driven performance evaluation systems.

Jasmijn Bol was born and raised in The Netherlands where she finished her Master of Science in International Business from Maastricht University in 2002. In 2007 she earned a PhD in Management from IESE Business School, University of Navarra (Spain) with highest honor. In 2007 Bol was appointed at the University of Illinois at Urbana-Champaign as an assistant professor of accountancy. She joined the faculty of the A.B. Freeman School of Business at Tulane University as an associate professor with tenure in 2012. Professor Bol became the PricewaterhouseCoopers full professor in 2018 and was awarded the Francis Martin Chair in Business in 2020.

Professor Bol's research focuses on operational risk management and control system design with a special focus on incentive systems. She examines the role AI can play in control systems and how AI can improve efficiency and other employee outcomes. She draws on a variety of theories (i.e., economic theory, psychology, sociology), and uses various research methods (i.e., field, experimental, archival, and survey).

Professor Bol has authored numerous articles that have appeared in prestigious scholarly journals including The Accounting Review, Journal of Accounting Research, Contemporary Accounting Research and Accounting, Organizations & Society. She has also written a book and several book chapters. Her research has significantly impacted the Accounting and Business community. She is highly ranked in the Managerial

Accounting Research category based on publications in top journals. Professor Bol has also presented her research at over 50 national and international academic institutions and conferences, including her service as keynote speaker and as panelist. Professor Bol has received several awards for her research, among which the 2015 Notable Contribution to Management Accounting Literature Award presented by the American Accounting Association and her recognition as the Best Early-Career Researcher in Management Accounting, also awarded by the American Accounting Association. Her research has also been funded by several prestigious institutions like the IMA, CIMA and FAR.

Professor Bol has taught several managerial accounting courses and developed a course in Operational Risk Management. For this course, she has written a book and has created a variety of other teaching materials, among them two Harvard Business School Cases. Professor Bol has been highly recognized for teaching by her students and colleagues as she has received an Award for Excellence in Accountancy Education from the Accountancy Department of the University of Illinois, Urbana-Champaign. In addition, Professor Bol received the Alumni Association Excellence-in-Teaching Award for Undergraduate Teaching from the College of Business of the University of Illinois.

There will be an opportunity to share your views. Type in the Chat

3:20   Break

3:30   Panel: *Risk Insights from Applying Emerging Technologies*

The panelists will offer their insights as a regulator, AI provider and assurance provider, on the issues and risks facing professional accounting from the increasing use of technology including data analytics, AI, and other software.

Joe Spinelli, Canada Public Accountability Board
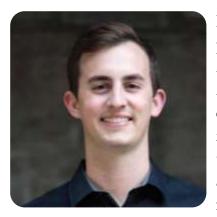
Presentation: Technology in the Audit

Joe has been an IT Inspections Director at the Canadian Public Accountability Board (CPAB) for close to 9 years.

Joe is focused on supporting CPAB's inspections regarding the work that auditors perform when testing IT processes and controls that support an intended audit approach. Joe is also involved in a number of other initiatives at CPAB which focus on how the use of technology is changing the audit and impacting the quality of audits.

Joe started his career at EY in Montreal in a financial audit role within EY's Retail & Manufacturing groups and later joined EY's IT audit group. He has held various positions working for public companies such as Bell Canada and more recently Gildan Activewear, where he was Head of Internal Audit.

Michael Bottala, Director Strategic Insights, MindBridge, Los Angeles

Michael Bottala, CPA is an experienced accounting professional in audit and consultancy. With a Master of Accounting from Loyola Marymount University (Los Angeles), Michael spends his time identifying, communicating and strategizing the best ways for financial professionals to leverage artificial intelligence in their current roles. As a result of these innovative approaches to leveraging new technologies, Michael was named a Top 100 Accountant by the Los Angeles Business Journal.

Andrew Morgan, Partner, EY Canada

Andrew Morgan is a Partner in the Financial Services group in the Assurance practice in Toronto. He has sixteen years of experience auditing banks, a leasing company, broker-dealers, mortgage companies, mutual funds, pension funds, and investment companies. He also is head of our blockchain assurance practice in Toronto.

Andrew is a Chartered Professional Accountant (CPA), Chartered Accountant (CA) and a Chartered Financial Analyst (CFA) Charterholder.

His engagement experience includes:

- Responsibility for the audit of the implementation of the impairment portion of IFRS 9 (Financial Instruments) at a large Canadian bank, including walkthroughs and control testing, model vetting in conjunction with the EY credit modelling team, macroeconomic forecasts with the EY economics team, IFRS 9 whitepaper review, and project management.
- Auditing the wholesale division of a large Canadian bank for eighteen years, including the IIROC registered broker-dealer for three years, auditing the derivative model valuation, the model management SOX controls, Fixed Income, Credit, Equity, Interest Rate, Foreign Exchange, Energy, and Precious Metals Derivatives trading businesses, the value at risk (VaR) process, fair value hierarchy, funding valuation adjustment (FVA), credit valuation adjustment (CVA) and other valuation adjustments.
- Working with the data analytics and automation team for the financial services audit practice, working with a group of programmers to automate various steps of audits including bond valuation and the use of drones in inventory counts.

Andrew is a member of the CPA Canada's Crypto-Asset Auditing Discussion Group, working on developing audit methodology for crypto-currencies.

At the conclusion of the three presentations, there will be an opportunity to share your views. Type in the Chat

4:30   Closing Remarks & Adjournment – Len Brooks & Dushyant Vyas

After the conference, videos and PowerPoints used will be posted on the website of the Professional Accounting Centre at https://www.utm.utoronto.ca/pac/