Public Sector Accounting & Data Analytics Colloquium

A joint symposium between FGV and Rutgers University
Friday May 26th, 2017 8 AM – 3:20 PM

ABOUT

Sponsored by FGV and co-sponsored by Rutgers University, this event explores the application of data analytics in the public sector.

The Public Sector Accounting & Data Analytics Colloquium will be held at FGV/EBAPE, Praia de Botafogo, 190 – auditório 1014 (10th floor), Rio de Janeiro, Brazil on May 26th 2017.

The purpose of this colloquium is to provide insights from a research and practitioner perspective on the benefits of enhanced analytical methodologies in the government sector. There is an increasing demand for transparency and accountability of public funds, thus, government auditors have the responsibility to provide assurance concerning the performance of government programs and the financial position of government entities. Since, government entities are primarily funded by taxpayers, auditors are required to ensure these public funds are adequately spent.

Anecdotal evidence and numerous research studies in the private sector have suggested that Big Data and Data Analytics can provide more accurate and timely assessments. Therefore, data analytics, open government data, and Big (unstructured) data may help governments identify patterns, trends, and useful information that may not have been discovered using a manual approach. Topics for discussion in this event will include the application of analytical methods including text mining, recommender systems, and other methods, to government projects. Furthermore, the potential of Blockchain technology for the public sector will be discussed. Overall, data analytics in the public sector can improve audit efficiency and effectiveness and increase reporting transparency and accountability.

Agenda:

Time	Presentation Topic	Presenter
8h00 – 8h20	Opening Remarks	Prof. Dr. Miklos A. Vasarhelyi & Prof. Dr. Ricardo Lopes Cardoso
8h20 – 9h00	AI and analytics in Public Sector Accounting and Assurance	Prof. Dr. Miklos A. Vasarhelyi
9h00 – 9h40	Perspectives on subnational budget and State Audit Institutions studies	Profs. Bernardo Fajardo & Ricardo Lopes Cardoso
9h40 – 10h20	Applications for Text Mining in Corporate and Government Settings	Prof. Dr. Kevin Moffitt
10h20 – 11h00	Data Analytics and The Public Good	Maria Helena Pettersson - PIOB
11h00 – 11h40	Exploring the Possibilities of Blockchain for Government Accounting and Assurance	Profa. Andrea Rozario
11h40 – 12h20	Analytics with public data: a Mathematical perspective	Profs. Eduardo Mendes and Rodrigo Targino
12h20 – 13h00	The Dronnovation of Governmental Accounting and Auditing	Profa. Dr. Deniz Appelbaum
13h00 – 14h00	Lunch	
14h00 – 14h40	Research Ideas for Artificial Intelligence in Governmental Auditing	Prof. Dr. Hussein Issa
14h40 – 15h20	Experiences from the Brazilian National Treasury Secretariat	Bruno Ramos Mangualde

Presenters:

Dr. Miklos A. Vasarhelyi - 39th WCARS Chair

KPMG Distinguished Professor of Accounting Information Systems
Rutgers Business School
Dr. Miklos A. Miklos A. Vasarhelyi Vasarhely is KPMG Professor of Accounting Information Systems, Graduate School of Management, Rutgers University, and a technology consultant, ECommerce Solutions Group AT & T Laboratories. He has his BS degree from the State University of Guanabara (Economics) and the Catholic University of Rio de Janeiro (Electrical Engineering) an MBA from the Massachusetts Institute of Technology and his Ph.D. in Management from the University of California, Los Angeles (Management Systems Information). Current research interests of Prof. Vasarhelyi dealing with the area of monitoring, auditing / continuous control, business agents and electronic commerce. He has taught accounting topics and system programs for both graduate and executive in the U.S., Europe and South America consulted on accounting matters and

information to the government and big business in the U.S., Europe and Brazil. He has received research grants from the FASB, the Touche Ross Foundation, the Peat, Marwick and Mitchell Foundation, the American Accounting Association, Accounting Education Change Commission, the Institute of Internal Auditors, Ernst & Young, and others. Prof. Vasarhelyi is the director of the Rutgers Accounting Research Center also Laboratory Continuous Auditing and Reporting (Carlab) (http://raw.rutgers.edu/Miklos).

Prof. Dr. Ricardo Lopes Cardoso

Professor of Accounting
Brazilian School of Public and Business Administration (EBAPE), FGV

Ricardo Lopes Cardoso joined the Brazilian School of Public and Business Administration, Fundação Getulio Vargas, in 2004, where he teaches Accounting to undergraduate and graduate courses, both for private sector and public sector. In 2005 he received his PhD in Accounting from the University of Sao Paulo. In the last ten years he has also served the IFRS Foundation, Education Initiative, as an Academic Fellow responsible for preparing training material in IFRS; the World Bank as an independent consultant responsible for reviewing Accounting and Auditing (A&A) practices as part of the Reports on the Observance of Standards and Codes (ROSC) initiative; the Brazilian Federal Association of Accountants (CFC) and Group of Latin-American Accounting Standard-Setters (GLASS/GLENIF) as a special advisor; and the Fiscal Council of CTEEP, an electric energy transmission company in Brazil. Ricardo's research interests are on judgment and decision making in accounting and auditing, both in public and private sectors.

Prof. Dr. Bernardo Fajardo

Professor of Public Administration
Brazilian School of Public and Business Administration (EBAPE), FGV

Bernardo Fajardo joined the Brazilian School of Public and Business Administration, Fundação Getulio Vargas, in 2015, where he teaches Public Administration to undergraduate course. In 2016 he received his PhD in Administration from the same school. Previously, he was assistant research of the Brazilian Institute of Economics (IBRE-FGV), studying of Brazilian fiscal policy in central and subnational governments. His research areas include fiscal policy and fiscal federalism, regarding the role of budgetary management in subnational governments.

Prof. Dr. Kevin C. Moffitt

Professor of Accounting Information Systems
Rutgers Business School

Kevin Moffitt received his PhD the University of Arizona. His research areas include Automated credibility assessment, fraudulent financial reporting, knowledge discovery through text mining, motivation in online communities.

Maria Helena Pettersson

Independent Consultant and Board Member
Public Interest Oversight Board (PIOB)

Maria Helena is a Senior professional with over 30 years of experience in finance, accounting, internal controls and corporate governance having acted as coordinating partner serving various multinational and local listed companies in different sectors, involving large and complex audits and consulting engagements. Since 2012 she has served as independent consultant and board member of the PIOB – the global independent oversight body that seeks to improve the quality and public interest focus of the international standards formulated by the Standard Setting Boards supported by the International Federation of Accountants (IFAC) in the areas of audit and assurance, education, and ethics. Concurrently, she also has served as vice-president of the National Association of Accountants and Finance Professional (ANEFAC). Before that she was an EY audit partner for more than 20 years. In her presentation she discusses an overview of the current regulatory ecosystem, the role of the Public Interest Oversight Board and the challenges posed by the speed of changes in technology as well as the emergence of new audit data analytics techniques.

Profa. Andrea Rozario

PhD Candidate in Accounting Information Systems
Rutgers Business School

Andrea Rozario is a PhD Student in Accounting Information Systems at Rutgers, the State University of New Jersey, USA. She is a licensed CPA and has worked for one of the "Big Four", as well as a large

healthcare company. Her research areas include Audit Analytics, Continuous Auditing, Blockchain, and Governmental Accounting. Blockchain technology has the potential to be as disruptive as the Internet, in her presentation she discusses the application of Blockchain to government auditing.
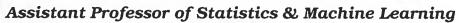
Prof. Rodrigo S. Targino

Assistant Professor of Statistics

School of Applied Mathematics (EMAp), FGV

Rodrigo Targino joined The School of Applied Mathematics (EMAp) at Fundacao Getulio Vargas (FGV) in 2016. Previously to that, he held positions in the Risk Management teams of two large financial institutions in Brazil: Itau-Unibanco bank (2010-2011) and Credit-Suisse Hedging-Griffo asset management (2011-2012). He holds a PhD degree in Statistics from the University College London (2016) and his research is mostly devoted to statistical methodology (Bayesian and Monte Carlo methods), applied to problems in financial and actuarial risk management. Since joining FGV he has also been working in collaboration with The Brazilian Institute of Economics (IBRE-FGV) using Data Analytics tools to extract information from news articles.

Prof. Eduardo F. Mendes

Assistant Professor of Statistics & Machine Learning

School of Applied Mathematics (EMAp), FGV

Eduardo Mendes received his PhD in Statistics from Northwestern University (2012) and worked as a post-doctoral research fellow at the School of Economics at the University of New South Wales in Sydney, Australia, before joining the School of Applied Mathematics (EMAp) at FGV in 2015. His research interests lie on the intersection between statistical learning and econometrics, in both methodological and theoretical aspects. His work has been applied in financial econometrics and, more recently, in macroeconomic modeling. In a recent line of work he is interested in using publicly available data to understand social behavior and the usage of it in public policy evaluation. He is also associated with the Brazilian Institute of Economics (IBRE-FGV) in the developing indices using scrapped data from the.

Profa. Dr. Deniz Appelbaum

PhD Candidate in Accounting Information Systems
Rutgers Business School

Deniz Appelbaum is a PhD of Accounting Information Systems at Rutgers, the State University of New Jersey, USA. She has written and presented papers on fraud detection systems, belief networks, CA/CM in the nonprofit area, and on Big Data. Her current presentation discusses the automation of accounting and auditing, utilizing drones, robots, and bots.

Prof. Dr. Hussein Issa

Professor of Accounting Information Systems
Rutgers Business School

Hussein Issa received his PhD in Accounting Information Systems from Rutgers University. His research areas include the identification and prioritization of exceptions (which was the topic of his dissertation "Exceptional Exceptions"), expert systems, XBRL, governmental accounting, continuous auditing and continuous control monitoring, and data analysis. He teaches Advanced Design and Development of Information System (MAccy in Governmental Accounting), Information Technology in the Digital Era (Professional Accounting MBA), Introduction to Financial Accounting (Undergraduate). He also co-teaches AIS Research (PhD course).

Bruno Ramos Mangualde

Finance & Control Analyst
National Treasury Secretariat

Bruno Mangualde received his Master in International Accounting and Finance from Birmingham University (UK). He has a specialization in Administration and Finance from the School of Finance Administration (ESAF), and holds a degree in Accounting from the University of Brasília and a degree in Computer Science from the Federal University of Minas Gerais. Experience in the area of Public Administration, with knowledge in Accounting and Public Finance. At the National Treasury Secretariat he acts as Accounting Standards and Procedures Manager, responsible for the Coordination of the Accounting Procedures Technical Group (GTCON) and publication of the Accounting Manual Applied to the Public Sector MCASP).