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RESEARCH INTERESTS

Topics: Viewership behavior, video marketing strategies, customer lifetime value, virtual reality, top management teams, IT & Business alignment
Methodologies: Econometrics, Deep Learning, Structural Equation Modeling, Network Analysis, Experiments

EDUCATION

2016-2021 (expected)	Georgia Institute of Technology , Atlanta, GA Ph.D. in Information Technology Management
2014-2016	Oklahoma State University , Stillwater, OK M.S. in Hospitality Administration
2009-2014	Belarusian State University , Minsk, Belarus B.S. in International Management

PEER REVIEWED PUBLICATIONS

2018	Siamionava, K., Slevitch, L., & Tomas, S. R. (2018). Effects of spatial colors on guests' perceptions of a hotel room. <i>International journal of hospitality management</i> , 70, 85-94.
2017	Siamionava, K., Slevitch, L., & Chandrasekera, T. (2017) Application of Virtual Visualization Tools in Hospitality Environment Experiments. <i>International Journal of Electronic Engineering and Computer Science</i> , 2(4), 23-27.
2016	Ishida, K., Slevitch, L., & Siamionava, K. (2016). The effects of traditional and electronic word-of-mouth on destination image: A case of vacation tourists visiting Branson, Missouri. <i>Administrative Sciences</i> , 6(4), 12.

UNDER REVIEW

2019	Siamionava, K., Mitra, S., Westerman, G. Conversations about metrics: A new model for IT– business integration. (Revise and Resubmit at Information Systems Research)
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WORKING PAPERS

“Cross-channel Engagement: The Effect of Mobile TV Streaming on Traditional TV Viewership.” with Mitra, S., Narasimhan, S., Puzyrev, Y., Wu, L.

“The best of two worlds: Ensemble of traditional Pareto/NBD and Deep learning models for better customer lifetime value prediction.” with Puzyrev, Y., Wu, L.

“Secrets of attention grabbers: Using Deep learning to explain why video ad gets attention.” with Mitra, S., Narasimhan, S.

TEACHING EXPERIENCE

Spring 2020, 2019

Instructor

Georgia Institute of Technology, Atlanta, GA

Undergraduate-Database Management

- Introduced a new module on Cloud Database Management
- Organized guest speaker lectures on Database Management and Cloud Data warehousing with experts from Microsoft and AT&T

2016, 2017, 2018

Graduate Teaching Assistant

MBA-Managing Information Resources, Instructor: F. Niculescu

2018

Graduate Teaching Assistant

Undergraduate-Business Programming, Instructor: L. Xu

2017, 2018

Graduate Teaching Assistant

Undergraduate-Information Technology, Instructor: F. Niculescu

2014-2016

Graduate Teaching Assistant

Undergraduate-Intro to Hospitality Technology

CONFERENCE AND WORKSHOP PARTICIPATION

2019

Workshop on Information Systems and Technology, Munich, Germany;

Conference on Information Systems and Technology, Seattle; American

Economic Association, Atlanta; Data Analytics Summit by AASCB, Atlanta

2018

Workshop on Information Systems and Technology, San Francisco, CA

2017

Structural modeling applications of research on technology (SMART)

workshop, Seattle; Conference on Information Systems and Technology,

Houston

2016

Conference on Information Systems and Technology, Nashville

AWARDS AND HONORS

2020

Ashton Watson Stalnaker Memorial Award for Ph.D. Student Excellence

2017

Management Graduate Teaching Assistant of the Year, Georgia Institute of Technology

2016

CHTR Research Award, Oklahoma State University

Outstanding Graduate Student Nominee, Oklahoma State University

2015

First place at Teradata Business Analytics Competition

Teradata PARTNER'S Student Scholarship

2014	International Visegrad Fund scholarship for the Eastern Partnership
2012-2014	Government scholarship for the academic excellence
2013	Education USA Opportunity scholarship The second-place award at the 19th Belarusian National Student Research Competition
2012	The Best Paper award at the 69th Student Scientific Conference
2011	Finalist of the competition for the best promotional concept for Belarus at the 2nd International Forum: "Image of Belarus: The strategy of development" The Best Paper award at the 68th Student Scientific Conference

SERVICE

2019	Reviewer- International Conference on Information Systems
2017	Reviewer-Electronic Commerce Research
2015-2016	President of the Russian Language Club at OSU: Stillwater, OK Vice President of the HRAD Graduate Student Association
2015	Toastmaster International club member: Stillwater, OK
2013	AIESEC Global community development program, Pecs, Hungary Volunteer for the 7th Belarusian Investment Forum: Minsk, Belarus
2012	Volunteer for Lubcha castle renovation summer camp: Lubcha, Belarus

PROFESSIONAL EXPERIENCE

2018-Present	Chief Data Office, AT&T , Alpharetta, GA Data Science & Engineering intern
2014	PricewaterhouseCoopers (PwC) , Minsk, Belarus Junior Associate
2010	DomDecorStroj , Minsk, Belarus Economic manager

TECHNICAL STRENGTHS

Python, R, Hadoop, Hive, MySQL, Pytorch, Keras Tensorflow, MXNet, Pyspark, Java, Microsoft Azure, AWS, STATA, SAS, SPSS, IBM Modeler, LaTeX, XAMPP, Gephi, Tableau, 3D Max, Unity

LANGUAGE SKILLS

Belarusian & Russian (Native Speaker), English (Proficient User), Spanish, Italian, German (Beginner)

EXTRA CURRICULUM ACTIVITIES

Latin dancing (advanced), piano (beginner), cascading (beginner), kayaking (intermediate)

SELECTED COURSEWORK

Economics /Econometrics	Microeconomic Theory, Economic Decision Analysis, Econometric Analysis I & II, Structural Equation Modeling (audit)
Computer Science	Intro into Analytics Modeling, Machine Learning, Deep Learning
Research Seminars	<ul style="list-style-type: none">• Empirical research methods in IS by Eric Overby and Saby Mitra• Analytical models by Florin Niculescu and DJ Wu• Experimental methods in IS by Han Zhang• Bayesian inference and structural modeling by Lizhen Xu• Models and methods for causal inference by Alex Oetl• Machine Learning & AI methods in Economics by Sri Narasimhan

SELECTED RESEARCH ABSTRACTS

Dissertation Essay 1: Cross-channel engagement: The effect of mobile TV on traditional viewership

Abstract: With the proliferation of mobile devices, consumers increasingly consume video content through apps on their smartphones. Many traditional cable and satellite companies have responded to this shift in viewership preferences by offering their own mobile apps that allow consumers to engage with live television (TV) on their smartphones and tablets, in addition to watching live TV on their satellite receivers or time-shifted content through digital-video-recorder (DVR) technology. We use data from DirecTV, the largest satellite TV provider in the United States, to study the effect of mobile app adoption on the duration, content, and temporal distribution of TV viewership. We find that consumers who adopt the mobile app increase their total viewership of TV content across all platforms (legacy at-home devices and mobile app). Thus, the mobile app is complementary to and not substitutive of legacy platforms. We also find significant changes in how consumers distribute different content genres (movies, news, sports, etc.) across the platforms available to them. In the short-term, we observe a significant increase in viewership across most content genres indicating an initial period of exploration by the consumer. However, in the long term, we observe a substitutive effect where consumers who adopt the mobile app increase viewership of time-sensitive content such as sports and news at the expense of other categories, increasing the concentration of TV viewership on fewer genres. Finally, we show temporal viewership habits are less subject to change in the long term. Our results have implications for content providers, advertisers, wireless, cable and satellite companies. We are also investigating whether TV app adoption is the first signal of the cord-cutting, that is, we study the long-term effect of the mobile TV app adoption on churn.

Dissertation Essay 2: The best of two worlds: Ensemble of traditional Pareto/NBD and Deep learning models for better customer lifetime value prediction

Abstract: In this paper we propose a new approach to model customer repeated purchase behavior using the sample of pay-per-view (PPV) transactions of 500k TV customers in the US. We propose an ensemble of the classical Buy-till-you-die (BTYD) Pareto/NBD model (Fader, 2005) and DeepAR (Salinas, 2019), autoregressive recurrent network model for probabilistic forecasting, as a way to improve PPV transactions prediction. We show that estimating DeepAR model using BTYD-based customer clusters leads to reduction in MSE of PPV transaction prediction. Thus, by ensembling these two models, we are able to identify sub-groups of customers that exhibit similar behavior patterns and achieve an improved prediction of customer PPV transactions.

Dissertation Essay 3: Secrets of attention grabbers: Using Deep learning to explain why video ad gets attention

Abstract: In this paper we partner with a large beverage company in the US to study how different video ads affect beverage sales in 40k stores throughout the US between January and April 2019. We use Deep learning video recognition model to extract sentiment values from video ads. We then study how different emotional appeal strategies, an overall emotional concentration of video ads affects the success of the video ad. We also investigate optimal video ad appeal strategies for different product categories. The results of this study will provide companies with the effective strategies for video ad development and will make it possible to obtain the quantitative estimates of the video ad impact on sales prior to airing of the ad.

Dissertation Essay 4: Conversations about metrics: A new model for IT-Business Integration

Abstract: In this study we develop a comprehensive framework of performance metrics for IT and empirically validate a theoretical model based on the framework, that explores the role of performance metrics in improving IT/Business integration and enabling digital business strategies. Specifically, we investigate the role of two types of performance metrics – IT metrics that are directly related to managing the IT function (e.g. IT budgets, on-time project delivery and IT reliability) and business metrics (e.g., business profits, customer satisfaction, and new product revenue) that IT can influence but are not directly controlled by the CIO. Through a survey of 268 CIOs, we find that conversations based on IT metrics improve trust between the CIO and corporate top management team (TMT), while conversations focused on business metrics (along with trust) increase shared understanding of the role of IT in the organization. Through an analysis of secondary data, we further demonstrate that shared understanding between the CIO and TMT is associated with better corporate financial performance. Our theoretical model and empirical analysis enunciate the importance of metrics in shaping CIO-TMT conversations and improving the strategic role and contribution of IT.

REFERENCES

Sridhar Narasimhan

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Sabyasachi Mitra

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