NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

I S S E M I N A R

Title:	**Establishing The Long-term Causal Link Between Relative Age Effect and Entrepreneurship: Evidence from 16 Million Users Across 4.9 Decades on Taobao**

Speaker:	Dr. Phan Tuan Quang, Assistant Professor, Department of Information Systems, NUS School of Computing
Date/Time:	25 October 2016, Tuesday, 10:30 AM to 12:00 PM
Venue:	Executive Classroom, COM2-04-02
Chaired by:	Dr Faik, Isam, Assistant Professor, School of Computing (faik@comp.nus.edu.sg)

ABSTRACT:

While education plays a critical role in human societies, it has been difficult to separate the impact of natural and man-made factors on long-term outcomes. Population-wide policies such as school cut-off dates (COD) have created a relative-age effect (RAE) whereby some students within a cohort are almost one year more mature mentally and physically. Yet, it is not known whether the COD results in long-term outcomes on economic success and entrepreneurship. Establishing long-term causal relationships RAE on a large population is difficult due to lack of long-term data, difficulties separating birth-month effects, challenges in implementing controlled studies and interventions, and endogeneity in historical data. Here, we use an extensive longitudinal dataset of 16 million individuals born between 1947-1995 from China's largest marketplace, Taobao, to study the impact of RAE on the propensity to become an entrepreneur in China. Using events surrounding the Cultural Revolution (between 1966-1976) and the issuance of the Compulsory Education Law (in 1986) whereby COD policies varied; we conceptualize a natural experiment design to separate RAE from natural and cultural factors. We find that the youngest students are 3.12% less likely to become an entrepreneur compared to the oldest within the cohort. Our results provide evidence of the causal effect of government-induced cut-off date policies on individuals' entrepreneurial endeavor later in life.

BIODATA:

Dr. Phan is an Assistant Professor at NUS in the Department of Information System. His research brings together social sciences, computer science, and statistics to investigate social networks, social media, Big Data, product diffusion, word-of-mouth, and web and mobile commerce. He looks at a number of topics related to online and offline social networks, effects of natural disasters on human social networks, reactions to privacy changes, how

some individuals become influential, the ROI of social media, innovative uses of FinTech, factors which impact success of crowdfunding projects, effective mobile advertising, and pricing models for news and streaming media.

He has published in the Proceedings of the National Academy of Sciences, Journal of Marketing Research, Social Computing and Social Media, Database and Expert Systems Applications, and book chapters. He has also presented his works at leading conferences such as the International Conference on Information Systems (ICIS), Marketing Science, Statistical Challenges in Electronic Commerce (SCECR), Workshop on Information Systems and Economics (WISE), Workshop on Information Technology and Systems (WITS), European Conference on Information Systems (ECIS), Pacific-Asia Conference on Information Systems (PACIS), Workshops on Information Networks (WIN),China-Europe International Business School Marketing Workshop, Fudan University Research Symposium, Cheung Kong Graduate School of Business Marketing Research Forum, Complexity in Business Conference, Society for Economic Dynamics, Public Economic Theory Annual Conference, and INFORMS Annual Meeting. Dr. Phan is an active reviewer for leading journals including Management Science, Information Systems Review (ISR), MIS Quarterly (MISQ), Journal of the Association of Information System (JAIS),ACM Transactions, Annals of Applied Statistics, Internet Research, and Information Technology Management.

Before going for his graduate studies, Dr. Phan has also started a company providing 3-D computer graphics for mobile devices. He continues to be consult for a number of firms dealing with Big Data in marketing and advertising, retail and e-commerce, telecom, social media, IT, publishing, logistics, healthcare and consumer finance. He has worked closely with companies such as Facebook, Viki, Singapore Press Holdings, Changi Airport Group, Lenddo, ReadyFor, Lenovo, CashSlide, HP Enterprise, and Wing Tai Group.

He has also been in the top 100 competitive ballroom dancer in the world, and top 10 dancer in North America. Dr. Phan likes to build robots and tinker with technology in his spare time.

He holds a Doctor of Business Administration from Harvard Business School in Marketing, and a Bachelor of Science from MIT in Computer Science & Electrical Engineering with concentrations in business and economics.