



October 20, 2015

Denis Healy
Development Director
National Bureau of Economics Research
1050 Massachusetts Ave
Cambridge, MA 02138

Dear Denis Healy,

I'm pleased to learn about the NBER project on the Economics of Digitization and the upcoming meeting in March 2016. I'm a doctoral student focusing on empirical industrial organization in the Marketing Department at the Kellogg School of Management, Northwestern University. Digitization and its economic consequences is one of the key themes of my research interests and previous works. Hence, I strongly believe that the NBER Digitization Tutorial will provide me an opportunity to learn more about the field and to contribute to the society in the near future. The application is structured as the following: (i) a brief bio, (ii) course of study, (iii) research interests, and (iv) previous work. Contact information is attached at the end of this document. Please note that the Ph.D. coordinator of my department¹ has allowed me to apply for the meeting, and that I can receive my own funding from the department if necessary.

A brief bio

I'm a second year doctoral student in the Marketing Department at the Kellogg School of Management, Northwestern University. I have completed first-year requirements of my department, including taking coursework and passing preliminary exams from both Economics and Marketing department. Before joining Kellogg, I received a B.Sc. in Industrial and Management Engineering from Pohang University of Science and Technology (POSTECH), and a Ph.D. in Engineering from Korea Advanced Institute of Science and Technology (KAIST). From 2011 to 2014, I worked as a researcher at KAIST for the mandatory military service, where I also completed my doctoral dissertation. From 2008 to 2011, I was a member of board of directors at an independent record label based in South Korea.

Course of study

I'm currently taking the field course from the Economics Department, focusing on Industrial Organization and Economics of Information. By March 2016, I'll be completing two units of Industrial Organization (Dr. William Rogerson, Dr. Aviv Nevo, and Dr. Robert Porter) and two units of Economics of Information (Dr. Asher Wolinsky and Dr. Yingni Guo) in the Economics Department. In addition, I have completed a series of first-year core courses from both Economics and Marketing Department to build a rigor methodological foundation for my research. The core economics courses include Microeconomic Theory (Dr. Eddie Dekel, Dr. Marciano Siniscalchi, and Dr. Jeffrey Ely) and Econometrics (Dr. Charles Manski, Dr. Joel Horowitz, and Dr. Alexander Torgovitsky).

¹ Dr. Brett Gordon, Associate Professor of Marketing at the Kellogg School of Management. E-mail: b-gordon@kellogg.northwestern.edu



Before joining the Northwestern University, I completed my doctoral study at KAIST. The program I attended at KAIST was designed to provide an interdisciplinary education and research environment in the purpose of investigating the impact of digital technologies on the cultural aspects of our society. There, I took multiple courses on the issue of digitization, such as Digital Technology (taught by a computer scientist), Digital Economics and Digital Marketing (an economist), Digital Content Industry (a sociologist), Online Social Network Analysis (a physicist), to name a few.

Research interests

I'm interested in investigating the consequences of digital technology in markets, and utilizing it to better understand and predict consumer behavior. One of my ongoing research projects focuses on utilizing consumer-generated information in the digital world to predict digital music sales by incorporating the network structure of musicians into a spatial model framework. Using the data of online blog posts and news articles, I constructed market perceptual maps to infer the interdependencies among musicians.

Previous work

I had been fortunate to enjoy unique opportunities as a student enrolled in an interdisciplinary program. Collaborating with researchers from diverse backgrounds, I horizontally expanded my knowledge on online social media and related technologies that demonstrate the growing importance in the digitization of our society. I investigated several research topics of my interest, and published research articles in peer-reviewed journals including *Journal of Media Economics*, *European Journal of Marketing*, and *PLoS One*. For instance, one paper discussed the heterogeneous impacts of digital word-of-mouth on product sales that are differ in mass and niche entertainment markets. I also published research papers in the field of social computing and human-computer interaction, many of which were published in academic journals or conference proceedings.

Again, it is my honor to learn about the NBER project on the Economics of Digitization and the NBER Digitization Tutorial. I look forward look forward to attend the meeting and grab the valuable opportunity of learning and engaging with other colleagues.

Thank you for your valuable time on considering my application.

Sincerely,

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