



Academic Seminar on Platforms and Mobile Competition

Hosted by Sogang University, 1.30pm on 10th November 2015 in Seoul
Samsung Gabriel Hall (Bldg. #6) Seminar Room #109, Sogang University
(Internet access & projector available)

Master of Ceremonies: Prof. Dae-Sik Hong, Sogang University

AGENDA

Time	Programme	Speakers
1.30–1.35	Opening remarks by Sogang host	Prof. Seonghoon Jeon, Economics, Sogang University; former non-standing commissioner of Korea FTC
1.35–1.50	Setting the Scene: Overview of current debates about antitrust and platforms	Maurits Dolmans, Partner at Cleary Gottlieb and well-known internet competition expert
1.50–2.45	Panel 1: Key characteristics of and recent trends in internet competition	Moderated by: Maurits Dolmans, Partner at Cleary Gottlieb and well-known internet competition expert Participants: <ul style="list-style-type: none">• Elizabeth Wang, Charles River Associates• Darren Tucker, Partner at Morgan Lewis and former US Federal Trade Commission regulator• Prof. Sung-Hwan Kim, Economics, Ajou University• Prof. Kyoungwon Rhee, Economics, Dongkuk University
2.45–3.30	Remarks by internet policy expert Marvin Ammori: Perspectives on 'neutrality' in internet policymaking	Moderated by: Maurits Dolmans, Partner at Cleary Gottlieb and well-known internet competition expert Participants: <ul style="list-style-type: none">• Marvin Ammori, Affiliate Scholar of the Stanford Law School Center for Internet & Society, prominent First Amendment lawyer and well-known Internet policy expert advocating for Internet freedom.• Prof. SangKyu Rhee, Economics, Chungang University• Jeong Seo, Attorney, Kim & Chang

Time	Programme	Speakers
3.30–3.45	Break	
3.45–4.30	Panel 2: Internet services role in spurring job creation and growth	Moderated by: Prof. Hwang Lee , Antitrust Law, Korea University; Deputy Director, ICR Law Center (Innovation, Competition & Regulation Law Center); Secretary Commissioner, MRLC (Korea–China Market & Regulation Law Center) Participants: <ul style="list-style-type: none"> • Ethan Choi, Partner and Managing Director, Boston Consulting Group's Korea office (10 minutes) • Sean Thomas and Aline Blankertz, Oxera, attending by Hangout (10 minutes) • Dong-pyo Hong, Senior Advisor, Lee & Ko • Sungchoon Lee, KT Economics & Management Research Institute
4.30–4.45	Perspective from a developer about mobile competition	Moderated by: Darren Tucker , Partner at Morgan Lewis and former US Federal Trade Commission regulator James (Jung-haeng) Lee , Co-Founder and Developer at VCNC
4.45–5.45	Panel 3: Platform management and governance – what is necessary and legitimate	Moderated by: Darren Tucker , Partner at Morgan Lewis and former US Federal Trade Commission regulator Participants: <ul style="list-style-type: none"> • Vanessa Zhang, Global Economics Group • Daniel O'Connor, Vice President of Public Policy at the Computer & Communications Industry Association and blogger for the Disruptive Competition Project • Prof. Min Soo Shin, Business School, Hanyang University • Heesu Kim, KT Economics & Management Research Institute
5.45–6.15	Closing remarks and discussion	Moderated by: Maurits Dolmans , Partner at Cleary Gottlieb and well-known internet competition expert
6.15 –	(Optional) Dinner among participants	K-Turtle, A Korean Barbeque near Sogang University, Link for directions: http://goo.gl/u3p4pe Tel: +82-2-715-3611

Academic Seminar on Platforms and Mobile Competition

Participant Bios



Participant Bios

Dr. Vanessa Yanhua Zhang is a Director at Global Economics Group and Senior Research Fellow at Market and Regulation Law Center (MRLC) of Renmin University. She serves as the chief editor of Asia Column at Competition Policy International (CPI).

Dr. Zhang specializes in economics analysis in competition policy. She has worked a wide range of competition matters and has submitted expert reports before the Supreme People's Court of China, National Development and Reform Commission and the Anti-Monopoly Bureau of Ministry of Commerce. Dr. Zhang is the author of several academic articles on the Anti-Monopoly Law (AML), economic analysis of mergers, conspiracies, and industry restructuring and has published in peer-reviewed journals such as *Journal of Competition Law and Economics*, *Review of Industrial Organization*, *Annals of Economics and Statistics (Annales d'Economie et Statistique)*, *Competition Policy International*, etc., and contributed to several books on competition policy and regulation. She is also the editor of the book “*Competition Policy in Asia: Essays on Recent Development*” (2015).

Dr. Zhang has taught at Renmin University of China and worked as a visiting researcher at CPB Netherlands Bureau for Economic Policy Analysis. Dr. Zhang holds a Ph.D. in economics from Toulouse School of Economics (France) and a B.A. in economics from Peking University (China).



Dr. Elizabeth Xiao-Ru Wang

Dr. Elizabeth Xiao-Ru Wang is a Principal at Charles River Associates. She has extensive experience working on antitrust matters with Chinese regulators and has submitted reports to antitrust government agencies in both the U.S. and China. She has presented economic analysis in front of the Ministry of Commerce (MOFCOM) and advised clients on merger reviews, antitrust investigation and private litigation in China. Dr. Wang is an active member of the American Bar Association (ABA), Co-Chair of the China Committee and a Vice Chair of the International Antitrust Committee of the ABA's International Law Section, and an active member of the Antitrust Law Section. She won the ABA International Law Section award of 2014 Outstanding Collaboration between Committees. Dr. Wang is also an affiliated senior research fellow and economist at the Competition Law Centre at the University of International Business and Economics in Beijing, China. She received her B.A. in Economics from Peking University and her M.A. and Ph.D. in Economics from the University of Chicago.



Marvin Ammori

Marvin Ammori is a prominent First Amendment lawyer and Internet policy expert advocating for Internet freedom. Ammori has been named to POLITICO 50's "list of thinkers, doers, and dreamers" "transforming politics," Washingtonian Magazine's "Tech Titans," Fast Company Magazine's "100 Most Creative People in Business," and one of the top five tech lawyers by the World Technology Network. He helped lead the online movement that killed the proposed SOPA bill in 2012 as well as the movements defending network neutrality. He drafted the complaint against the FCC's Comcast/BitTorrent decision in 2008 and was a key force behind the White House and FCC's decision to back strong "Title II" rules in 2015.

A prolific author, Ammori has published articles in the Harvard Law Review, Wisconsin Law Review, Foreign Affairs, the New York Times, USA

Today, the Atlantic, Wired, Slate, Forbes, and authored a book *On Internet Freedom*. Ammori's research includes "Proposed Remedies for Search Bias 'Search Neutrality' and Other Proposals in the Google Inquiry", in which he argued that the proposed remedies in the FTC's investigation of Google would harm consumers, impede competition and stifle innovation. He has testified before government bodies in North America and Europe.

Ammori is an Affiliate Scholar of the Stanford Law School Center for Internet & Society, a former Term Member of the Council on Foreign Relations and a Fellow of the Americas Business Council Foundation. In 2008, he served as an advisor to the Obama campaign and the transition team. He received his B.A. from the University of Michigan and his J.D. from Harvard Law School.



Daniel O'Connor

Dan O'Connor is the Vice President of Public Policy at the Computer & Communications Industry Association, where he works with government and industry leaders on competition, intellectual property, international trade and global Internet policy. As Vice President of Public Policy at CCIA, O'Connor leads CCIA's efforts on antitrust policy and covers business and technological developments in high-tech markets. O'Connor has worked within the public policy and government relations sector on many high-profile antitrust cases in the U.S. and Europe. As a frequent contributor to the Disruptive Competition Project (DisCo), O'Connor has published many articles discussing the single digital market, Android competition and platform regulation. Prior to assuming his current position, he was Director of Competition & Telecommunications Policy and the Deputy Director of Government Affairs at CCIA. Before working at the CCIA, O'Connor worked as a Legislative Aide in the New York State Assembly for the Chairwoman of the State-Federal Relations Committee. O'Connor received his B.S. in Policy Analysis and Management from Cornell University, and his Masters Degree in International Political Economy from the London School of Economics, where he wrote his dissertation on the framing of Internet censorship as a barrier to trade.



Maurits Dolmans

Maurits Dolmans is a partner at the London office of Cleary Gottlieb Steen & Hamilton LLP, having originally joined in 1985 in Brussels. As partner, Dolmans' practice area primarily focuses on EU, UK, and international competition law, as well as EU regulatory and intellectual property laws. During his legal career, he has appeared in proceedings before the EU Commission and the EU courts, national courts and national competition authorities of several Member States, and ICC and NAI arbitrations. Many of these cases have dealt with abuses of dominance, standardization, access to networks, mergers and joint ventures, cartels, licensing and distribution, the interplay between intellectual property, innovation, and competition. He was involved in the EU clearance for Google's acquisition of Motorola, UK Office of Fair Trading clearance for Google's acquisition of Beatthatquote, and has represented Google and other IT and media companies in a wide range of matters involving alleged abuse of dominance relating to patents, search services, advertising, media, and communications. Earlier in his career, Dolmans worked extensively on various complainants in Commission and European Court proceedings against Microsoft concerning the interface between IP and competition. Dolmans has published widely in patent, internet competition and antitrust issues, including a paper titled "Internet & Antitrust: An overview of EU and national case law", in which he discussed the role of antitrust policies in the online economy. His legal career led him to be honored by *Chambers* "The World's Leading Lawyers" and other publications as a leading lawyer in the areas of Competition/Antitrust and Communications. He received an LL.M. degree from Columbia University in 1985 and a Master of Laws from the Rijks Universiteit Leiden in The Netherlands in 1984.



Darren S. Tucker

Darren Tucker is a partner at Morgan Lewis and the deputy practice group leader of the firm's global antitrust and competition law practice. He represents

clients before US and non-US competition agencies in complex merger and non-merger antitrust investigations, with a focus on the technology and pharmaceutical sectors. Tucker has played key roles in many prominent merger cases, including two trials against the US government (FTC v. Arch Coal and FTC v. CCC/Mitchell). He was also an attorney advisor to Commissioners Joshua D. Wright and J. Thomas Rosch at the FTC, advising on staff enforcement recommendations, litigation strategy, and policy matters, including the 2010 Merger Guidelines. He has published nearly two dozen papers on competition enforcement and policy, including "Big Mistakes Regarding Big Data," in which he argues that most online service providers' use of big data has enhanced competition and improved product offerings, and "A Survey of Evidence Leading to Second Requests at the FTC," in which he analyzes the FTC's process for merger reviews. He currently serves as the editorial chair of Antitrust Law Developments, the leading antitrust treatise for practitioners, and is also a member of the Law360 Competition editorial advisory board. He previously served as the editorial chair of the Antitrust Source. Tucker received his B.A. from the College of William and Mary and his J.D. from the University of Pennsylvania Law School.



Ethan Choi

Ethan Choi is a partner and managing director at Boston Consulting Group Korea. Choi works with clients in financial services, high-tech, and consumer goods, and work focuses on forming strategies for new business development, credit risk management, and post-merger integration. He has published reports on the growth of the mobile Internet industry in Korea and on how mobile technology empowers and connects consumers to drive global economic growth. He also co-authored a report on intellectual property in China, which outlines strategies for multinationals entering the Chinese market. Ethan received his MBA from the Wharton School, University of Pennsylvania and his B.A. in International Economics from Seoul National University.



Sean Thomas

Sean is an economist specializing in microeconomics, competition policy, and industrial economics. He is currently a senior consultant at Oxera, a European economic consulting firm, where he recently published a report on the benefits of online platforms. He is experienced in applying qualitative and quantitative economic research tools to a diverse range of issues including economic impact assessment, economic appraisal, evaluation and monitoring, and sector research. Before joining Oxera, Sean was a member of the Government Economic Service, where he produced quantitative and qualitative economic advice on a number of topics including transport economics, government support of business, the economics of taxation, and energy markets. Sean has an MSc Economics from Birkbeck College, University of London and a BA (Hons) Economics from the University of Reading.



Aline Blankertz

Aline is a Consultant at Oxera and is responsible for conducting economic analyses as part of the Competition and Modelling teams; most recently, Aline has worked on a report on the benefits of online platforms. Aline has a Masters from Universität St. Gallen–Hochschule and studied for her Bachelors at University of Münster and the University of Oxford.



Prof. Seonghoon Jeon

Seonghoon Jeon was the dean of the School of Economics at Sogang University in Seoul during the period 2010~12, and served for the Korea Fair Trade Commission as a non-standing commissioner during the period 2009~12 (the KFTC is composed of Chairperson, Vice-Chairperson, 3 standing commissioners, and 4 non-standing commissioners). Prof. Jeon graduated from Seoul National University in 1982, and obtained Ph.D in Economics at Yale University in 1991. His major research areas are industrial organization, competition policies, and

regulation. He published many theoretical and policy-oriented papers in economics journals such as *European Economic Review* and *International Journal of Industrial Organization*. Prof. Jeon has played active roles in both academic and policy areas. He was the president of Korean Academic Society of Industrial Organization in 2009, and before joining in KFTC on May 2009, he involved in many important merger and abuse-of-dominance cases in Korea as an expert witness for defendants and interested third parties such as Hite, Posco, eBay, Intel, Naver, and Samsung as well as KFTC.



Prof. Dae-Sik Hong

Dae-Sik Hong is currently a professor of Economic Law at Sogang University Law School. Prior to joining the academia, he had an experience serving as judge at various courts for a decade and an experience practicing as partner at Yulchon law firm for about 5 years. He received LL.B., LL.M. and Ph.D. degrees from Seoul National University and was a visiting scholar at the University College London and the University of California, Berkeley. His academic interest reaches to antitrust laws, consumer laws, law of regulation, particularly involving media and telecommunications sectors, and law and economics. He has published a variety of articles in many journals and conferences in Korea. He is frequently consulting as an expert advisor to the Korea Fair Trade Commission ('KFTC'), the Korea Communications Commission ('KCC'), the Ministry of Science, ICT, and Future Planning ('MSIP'), the Korea Information Society Development Institute ('KISDI'), the Korea Development Institute ('KDI'), the National Information Society Agency ('NIA'), and the Korea Internet Securities Agency ('KISA').



Prof. Sung-Hwan Kim

Sung-Hwan Kim is Associate Professor of Economics at Ajou University. Since receiving his Ph.D. in economics from the Johns Hopkins University in 2006, he has conducted researches on various antitrust issues in network

industries including airline, telecommunications, broadcasting, payment cards, and has published in academic journals such as International Journal of Industrial Organization, Review of Industrial Organization, B.E. Journal of Economic Analysis and Policy. Before joining the Department of Economics at Ajou University in 2009, he was research fellow at the Korea Information Society Development Institute (KISDI). He currently serves as associate editor of International Telecommunications Policy Review.



Prof. Kyoungwon Rhee

Kyoungwon Rhee is currently a professor of Department of Economics at Dongguk University. He has been teaching the topics on Industrial Organization and Law and Economics in the university. His research areas are Industrial Organization and Contract Theory. He has published some articles in the peer-reviewed journals on the competition policies in the sectors such as telecommunication, portals, broadcasting, banking, etc. He advised Fair Trade Commission in Korea for a couple of cases, and Ministry of Information and Communication for the policies on telecommunication, venture capital, small and medium sized enterprises, and so on. Before he moved to Dongguk University, he had worked as a senior researcher at Korea Information Society Development Institute, which is a government-funded research institute for 4 years. He received his B.A. from Seoul National University and Ph.D. in Economics from the University of Wisconsin-Madison.



Prof. Sangkyu Rhee

Sangkyu Rhee is a professor at School of Economics, Chung-Ang University since 2001. Before joining Chung-Ang University, he was a research fellow at Korea Information Society Development Institute (KISDI) for five years. His major fields are microeconomics, industrial economics, competition policies, and ICT policies. He has worked not only on a wide range of ICT regulation matters in the Korean Telecom Industry including pricing regulation, universal service

obligation, number portability, but also on competition matters in general industries including M&A, collusion, etc. He is currently an advisor for competition policies at Korea fair Trade Commission. He received B.A. and M.A. in economics from Seoul National University, and Ph.D. in economics from University of Rochester, USA.



Prof. Hwang Lee

Hwang Lee is a professor at the Korea University School of Law and a Deputy Director at the ICR Law Center since 2008. His academic interest covers competition laws, intellectual property rights, etc. He also has long been a team-head at the Korea Fair Trade Commission and Research Counsel at the Supreme Court of Korea.



Prof. Minsoo Shin

Professor at the Business School, Hanyang University, Seoul, Korea
Ph.D. from Institute for Manufacturing & Management, Department of Engineering, University of Cambridge
Vice President of Korean Society of IT Services
Member of Board of Directors for Korea Association for Telecommunications Policies
Associate Editor, Telecommunication Systems



Dong-pyo HONG

As a highly respected expert in the field of economic analysis relating to legal damages claims and other law-related economics issues, Dr. Hong works with the Antitrust and Competition Group at the Korean law firm Lee & Ko, providing detailed economic analysis and advice for critical valuations and other determinations relating to damage calculations and other aspects of antitrust cases, as well as performing similar analytical/advisory roles for IP, M&A and

finance cases. In addition to his expert advisory work at Lee & Ko, Dr. Hong has served on the Advisory Council for the Korea Fair Trade Commission. He is also well-known in academic circles and serves as a director of the Korea Academic Society of Industrial Organization and Korean Law and Economics Association. He is a frequent speaker and has also written extensively on topics related to antitrust economics.



Heesu Kim

Dr. Kim is Senior Vice President, Economics and Management Research Institute at KT Corporation, where he oversees researches on market/tech trends and develops outreach strategies on policy and regulatory matters in the ICT sector. Of particular interest have been business and public policy issues that arise from 1) the disruptive challenges the over-the-top players (platform operators) pose to the legacy framework of telecom business and regulation and 2) the emerging world of the Internet of Things. He served as a member of the Chief Regulatory Officer Group of GSMA (Groupe Speciale Mobile Association) representing KT. Prior to joining KT in 2011, Dr. Kim was a Senior Research Fellow at the Korea Information Society Development Institute (KISDI) (1995–2010). (KISDI is a government-sponsored research institute specializing in ICT policy.) During his career at KISDI, he authored numerous policy reports and actively advised the government for developing and implementing telecom policy and regulation, especially regarding interconnection, price regulation, antitrust, and net neutrality. He obtained his B.A. in Economics from Korea University, Seoul in 1986 and his Ph.D. in Economics at the University of California, Los Angeles in 1992. Dr. Kim has been on the Board of Directors of the International Telecommunications Society since 2012. Dr. Kim has also published scholarly articles in peer-reviewed journals including *the Review of Network Economics*, *Information Economics and Policy*, *Economics Letters*, and *Telecommunications Policy*.



Sungchoon Lee

Vice President, Economics & Management Lab. at KT

Ph.D. Department of Telecommunications, Indiana University

Writing special report on the topic: IoT & Future of Manufacturing
Collaborating with Korean Institute for Industrial Economics & Trade Member of
Forum Organized by the Ministry of Trade, Industry & Energy

Research interests in ICT Innovations & Competition Strategy, IoT, Network
Externalities, Network Neutrality, Telecommunication Policy, Media Economics,
Pay-TV Market competition & OTT, etc.



Jeong SEO

Jeong Seo is an attorney at law firm Kim & Chang's Antitrust & Competition, Corporate Governance, Litigation and Corporate Investigations & White Collar Defense Practice Groups. Before joining Kim & Chang, Mr. Seo served in the judiciary for eight years, as an associate judge for two years in the appellate court as well as the district court, and as a single judge for six years in charge of both civil and criminal cases. Mr. Seo studied law in Seoul National University and Stanford University, specializing in competition law and corporate governance issues. He is a Ph.D in law at Seoul National University. Mr. Seo published articles and delivered academic presentations about competition law and corporate governance even before he became a judge. In addition, he published an article about Korean chaebols issue in the U.S. Mr. Seo has defended his corporate clients before courts including the Korean Supreme Court and the Korean Fair Trade Commission('KFTC'). Particularly, in competition law matters, he has successfully litigated and obtained important, leading precedents. Among others, his representative cases are Giro case, in which the Korean Supreme Court accepted efficiency defense and invalidated the surcharge on banks and Golf Club case, in which the Korean Supreme Court abandoned per se rule and first adopted rule of reason approach on Resale Price Maintenance. In international Air Cargo cartel case, Mr. Seo successfully

persuaded the KFTC to drop charges against his client. Mr. Seo can speak Korean, English and Chinese and read Japanese.

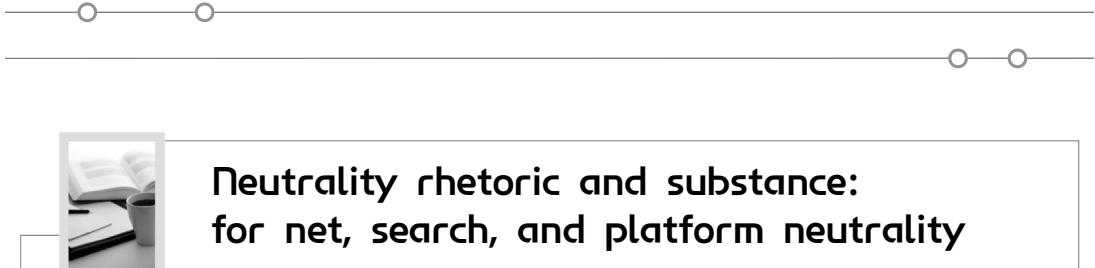


James (Junghaeng) Lee

Jung-Haeng Lee is Co-Founder and Developer at VCNC. He obtained his B.A. in Computer Science and Engineering from Korea University. He founded VCNC with friends. VCNC was founded in 2011 wishing to create value in the world through mobile technology. Vision of the company is to create a service that improves offline, social relationships, which is how we came up with Between. Between is mobile messaging and utility service for couples and used by 14M of users from Korea, Japan, Taiwan, Singapore and other countries. He is currently developing and operating Between mobile client and server in VCNC.

Academic Seminar on Platforms and Mobile Competition

Presentation Material



Neutrality rhetoric and substance: for net, search, and platform neutrality

Marvin Ammori

- The concepts of “platform neutrality” and “search neutrality” seem to echo net neutrality, but net-neutrality advocates have rightly rejected the comparison.
- Net neutrality:
 - Cost structure: There are prohibitively high costs associated with replicating existing wired infrastructure that was originally built – and in many cases still co-owned – by the state. In wireless communications, providers manage spectrum, a scarce resource, allocated by governments through various processes. These characteristics are specific to telecommunications infrastructure, and similar ones apply to other forms of infrastructure such as electricity, water, natural gas and so forth.
 - Purpose: End to end principle. No blocking, no throttling, no access fees—why these rules for the “Inter-connected network.”
 - Violations: Around the world, many examples.
- Search neutrality:
 - Cost structure: Private competitors in search, low switching costs, no licenses, and many means to reach users including browser and social networks.
 - Purpose: Search is supposed to be discriminating—find best answer.
 - Violations: Around world, governments have concluded the complaints are not meritorious.
- Platform neutrality.
 - Cost structure: Open source technologies, nonexclusive agreements, competing device makers.
 - Purpose: Include apps for immediate use and download, permit search for most relevant apps.

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- Violations: Seem to lack substance.
 - More detail here:
<http://ammori.org/2012/05/22/search-neutrality-and-network-neutrality-birds-of-a-very-different-feather/>

Op-Ed: ‘Neutrality’ Argument Is a Ruse in European Commission’s Google Case

The National Law Journal

<http://www.nationallawjournal.com/id=1202731283204?keywords=ammori&publication=National+Law+Journal>

July 6, 2015

Marvin Ammori

The European Commission's recent formal objections outlining an antitrust case against Google Inc. claim that the company uses its search engine to benefit its own Google Shopping results over listings of other so-called "comparison shopping" sites.

The E.C.'s statement of objections issued in April makes little sense from a legal or economic perspective. In fact, it seems inspired by the interests not of consumers but of some of Google's competitors. The objections echo those made by big European incumbents — primarily telecom companies and publishers targeting U.S. companies, Google above all.

The E.C.'s arguments against Google are rather narrow and weak — that Google leverages its general search engine to harm competitors in specialized shopping searches. Five years ago, a U.K. comparison shopping company called Foundem brought the first antitrust complaint against Google to European regulators. It complained that Google punished it for being a competitor by demoting its search rankings. Google's defenders replied that Foundem was just repeating other sites' content, and that nobody "deserves" a certain amount of

traffic from Google. Everyone wants to rank first in a Google search, but by definition not everyone can.

WHERE IT BEGINS

When it comes to online shopping, consumers in the United States often begin at a shopping site, such as Amazon. The New York Times in 2014 reported that more than twice as many people began at Amazon, not a search engine, and that traffic to Amazon grew by 73 percent the previous year while Google Shopping searches had been flat. According to charts provided by Google on its blog, Amazon is the No. 1 shopping site throughout Europe, with Google way behind it.

Indeed, other companies are ahead of Google. The chief executive officer of eBay Inc. — a top shopping site here and abroad — stated the obvious: eBay is a direct competitor to Google Shopping. Social media are also a means of online shopping. Facebook Inc., for example, is working on its own “graph search” and shopping ads.

Despite all this, European regulators have targeted Google Shopping and even suggested a broader desire to impose “platform neutrality” on a slew of U.S. tech companies. Europeans would apparently apply the concept of “neutrality” to what they call the “GAFA” — Google, Apple, Facebook and Amazon. Each is a U.S. company.

For years, Google's competitors have argued for a concept of “search neutrality,” a concept that professor James Grimmelmann of the University of Maryland Francis King Carey School of Law has demonstrated is both incoherent and impossible to enforce. And now Europe wants to expand a similarly fuzzy “neutrality” concept to Amazon, Apple and beyond.

The concept of “platform neutrality” seems to echo net neutrality, but net-neutrality advocates have rightly rejected the comparison. Net neutrality and platform neutrality have nothing in common: one is important and necessary; the other is incoherent nonsense. And comparing the two cheapens the open Internet battles waged against last-mile control. A simple economic comparison explains why. There are multiple search engines to shop for products — Bing, DuckDuckGo, Yahoo, or Facebook, Yelp and Amazon. There is



also an explosion of substitute products, such as apps, social networks, and new technologies such as Siri and Amazon Echo.

Not so with telecom networks. In the United States, for broadband speeds of 25 and up, 75 percent of Americans have fewer than two choices available. Moreover, the “switching costs” for search users are tiny: They can simply open a new browser window and go to Amazon or Bing. Try to switch away from Comcast. You may pay an early cancellation fee and spend 20 minutes on the phone arguing with a “retention” technician. Meanwhile, Foundem can sidestep Google in many ways to reach consumers. While the telecom network has terminating monopolies, high switching costs and lack of consumer competition, search technology has the opposite. Search features competition, extremely low switching costs, the availability of multiple different tools for consumer multihoming, and the emergence of new competitors infinitely more often than the once-every-century entry we see in the last mile. Plus, the remedy of net neutrality is clearly defined (no blocking, throttling or paid prioritization) while the remedy of platform or search neutrality is incoherent at best and forces regulators to redesign search pages and other online platforms at worst.

Some in Europe may believe that “search neutrality” or “platform neutrality” is good for consumers, but the opposite is true. Search engines are not supposed to be neutral; they’re supposed to help users find the best websites for their queries. Search engines select sites and answers, rather than provide the entire Internet neutrally.

“Neutrality” can be a good concept in the abstract. It is the right concept for last-mile networks, as the Federal Communications Commission has recognized. But there’s a real danger that regulators and incumbent European telcos and publishers might co-opt the term to harm innovation and consumer choice in all “platforms.”

Marvin Ammori is an affiliate scholar at Stanford Law School’s Center for Internet & Society, a senior fellow at the Democracy Fund and a practicing lawyer. He advises Google Inc. and advocacy groups, but these views are entirely his own.



Mobile internet role in spurring job creation and growth



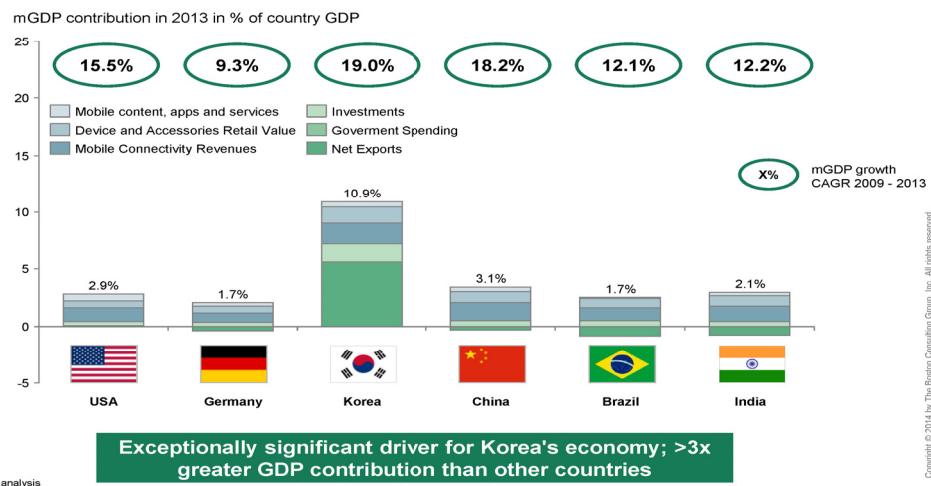
Mobile internet role in spurring job creation and growth

BCG study

November 2015

THE BOSTON CONSULTING GROUP

Mobile is a key growth driver for economies; responsible for 2-10% of country GDP, and growing at 10-20% CAGR



Consumers extract \$3.5 trillion
in value from mobile Internet



Annual total
consumer
surplus
\$3.5tr

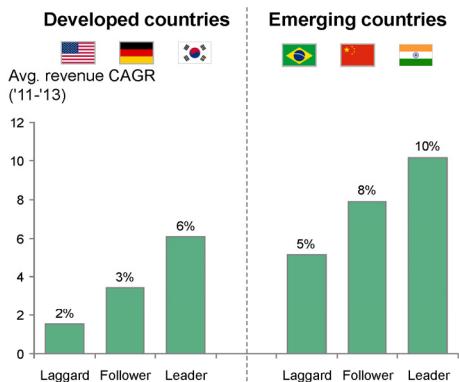
Mobile Internet creates jobs too

3m jobs globally

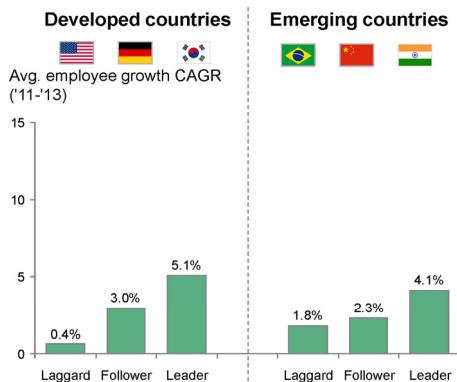
World class
developers
MindCandy
Papaya, Wooga,
ColorNote, Pandora

Mobile Leaders grew 4 p.p. faster than Laggards in terms of revenues and jobs over the past 3 years

With ~4% annual growth, mobile leaders report higher revenue growth than peers...



...With a similar patterns also seen in terms of job growth



Note: Results for SMEs only (<500 employees). Excludes results who failed attention checks or with low answer variance (straight lining)
Source: BCG Business Impact Survey (USA: n=574, Korea: n=704, Germany: n=513, China: n=489), BCG analysis

Mobile platform (BCG) pptx

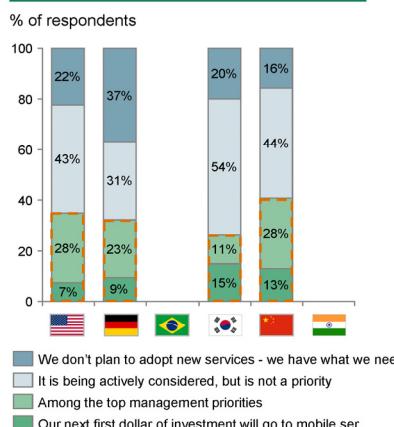
Draft—for discussion only

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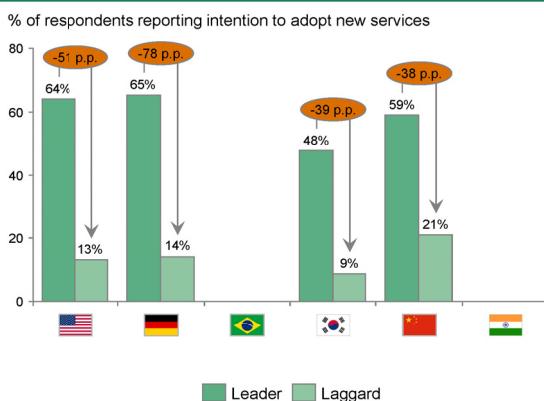
4

Mobile divide poised to grow between Leaders and Laggards

~35% of respondents report that investing in mobile is a priority...



... With a mobile divide¹ of ~50 percentage points (p.p.) between leaders and laggards



1. Defined as the delta (in p.p.) of the number of respondents reporting that investing in new mobile applications is a) where there next investment dollar will go or b) among top management priorities
Note: Results for SMEs only (<500 employees). Excludes results who failed attention checks or with low answer variance (straight lining)
Source: BCG Business Impact Survey (USA: n=574, Korea: n=704, Germany: n=513, China: n=489), BCG analysis

Mobile platform (BCG) pptx

Draft—for discussion only

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5

"Human interest" stories from Korea illustrate the fundamental impact of mobile technology on small business

Referral apps for local biz



Mr. Han (owner)
Kumkang BBQ

- Local business in Korea benefits from referral apps by using them as the key marketing platform:

"I get 20% more customers for a month for \$50 or less using location-based referral service. This is 150 times more cost efficient than traditional marketing."

Mobile payment & biz mgmt



Mr. Cho (owner)
Yicheon mart

- Mobile solution helps the transformation of traditional marketplaces in Korea to survive in the competition:

"I would've lost half of my customers if I hadn't used the mobile POS system. I can also manage my best products and best customers on my mobile phone."

Agile & fast innovation



Mr. Yoo (CEO)
Seoul Bus Mobile

- More than 10 million people use a real-time bus tracking app developed by a 17-year old student.

"Mobile is the only way for developers to 'be there' when people think something might be useful, which is the only way to make a new user habit"

Source: BCG interview
Mobile platform (BCG).pptx

THE BOSTON CONSULTING GROUP

Draft—for discussion only

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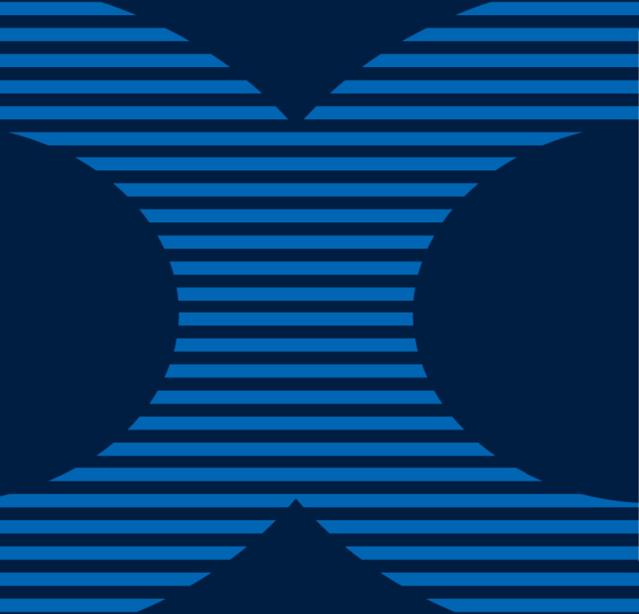
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Benefits of online platforms to consumers and businesses



Benefits of online platforms to consumers and businesses

Session: Internet services role in spurring job creation and growth

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10 November 2015

Strictly confidential

oxera
compelling economics

Overview



What is an online platform?

How do consumers and businesses use platforms?

What effects do platforms have on consumers?

What effects do platforms have on businesses?



What is an online platform?

The definition of online platforms is fuzzy

Online

- websites and apps
- available on the Internet
- brick-and-mortar businesses with Internet presence?
- blurry line between mobile Internet and classic mobile services?

Platforms

- multi-sided platforms
- but what is a multi-sided platform?
 - (pure) intermediary: how much 'control' is allowed?
 - matching function: centralised or decentralised?
 - does there have to be an exchange (financial or otherwise)?

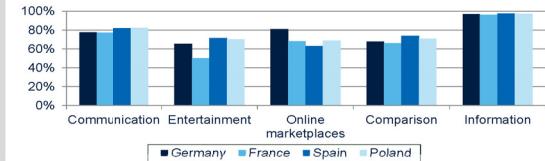
According to a 'common-sense' definition, examples of online platforms include

- communication services such as Facebook, Google+, Skype, Viber;
- entertainment services such as Youtube, Dailymotion, Instagram;
- online marketplaces and comparison services such as eBay, TripAdvisor, Kayak;
- information services such as Google, Wikipedia, Yellow pages and many others.

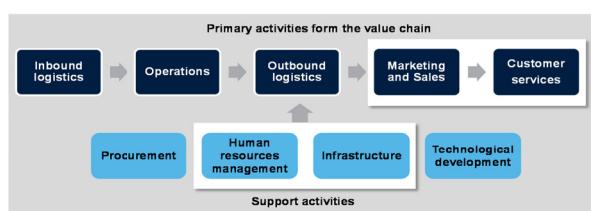
How do consumers and businesses use platforms?

Platforms are widely used by businesses and consumers for a variety of purposes

- survey of 1,500 Internet users per country
- to understand usage behaviour and perceptions of five types of online platform
- most consumers use a wide range of platforms
- consistent across countries

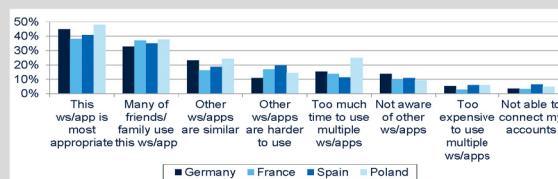
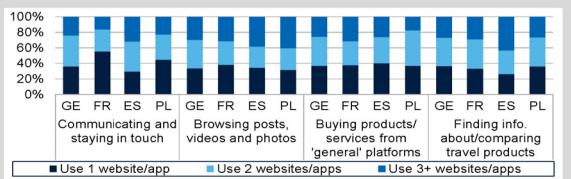


- four business processes considered
- interviews with businesses in six countries
- Marketing—social media, paid advertising (e.g. Adwords)
- E-commerce—online marketplaces, payment services
- Funding—crowdfunding (with and without financial return), social media
- Recruitment—professional networks



Most consumers ‘multi-home’ Appears to be feasible for most and desirable for many

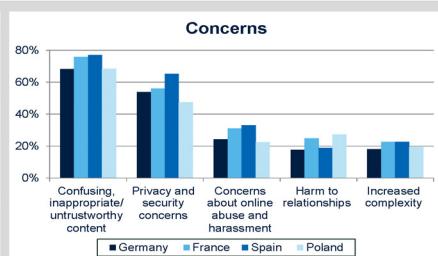
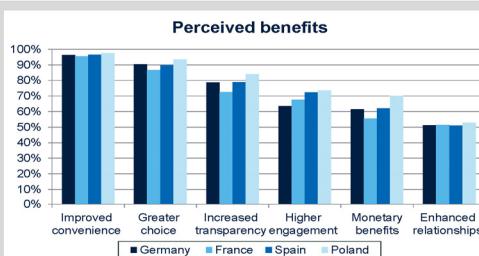
- between 60% and 70% of consumers use multiple websites or apps for specific tasks
- about 25% use three or more websites or apps
- this suggests limited potential for lock-in on the consumer side



- of consumers who use just one platform for a task, very few cite barriers as a reason for 'single-homing'
- many express an explicit preference for the platform they use
- network effects also play an important role

What effects do platforms have on consumers?

Platforms provide significant benefits Consumers perceptions are balanced, but stress benefits



- 97% of consumers perceive benefits, and just over 80% voice concerns
- 64% of consumers have a strong perception of the benefits, 36% of the concerns



Other benefits include:

- **time savings:** information platforms save their users **50–100 minutes** per month
- **monetary savings:** comparison platforms save their users **€12–€117** per year
- **social benefits:** on communication platforms, users are **connected to 81–156 contacts**, and 32–57% of users have met in person at least one person with whom they first interacted online



What effects do platforms have on businesses?

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Benefits to business are diverse (I)

Different business models use platforms in different ways

Marketing	E-commerce	Funding	Recruiting
<ul style="list-style-type: none">reaching a wider audienceadvertising is more targeted, more successfulsocial media can increase sales (1% increase in 'likes' leads to 0.15% more sales)	<ul style="list-style-type: none">enabling businesses to reach a wider marketbenefits vary (5–10% of sales in some cases; crucial to existence in others)reduces costs (compared to brick-and-mortar, adds to cost for others)	<ul style="list-style-type: none">wider range of projects able to obtain funding (23% of projects give no return)financial and non-financial returnslink between funding campaign and other outreach	<ul style="list-style-type: none">platforms increase the pool of candidatesreduces costs; advertising vacancies on platform costs 20% (or less) of print advert

Benefits to business are diverse (II)

Different business models use platforms in different ways

Online platforms reduce the effects of geographic barriers

- expand the pool of potential employees, customers and investors

Online platforms can support new and different types of businesses or products

- this could include funding a project or widening the market to support niche products

Online platforms change the cost structures of businesses

- lower staff search costs; reduce costs of posting vacancies
- lower cost of gathering customer feedback and engaging with customers
- more targeted, effective marketing; reducing the cost of acquiring customers

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Economic Impact of the Internet in Korea



Lee
&KO

Economic Impact of the Internet in Korea

Academic Seminar on Platforms and Mobile
Competition

2015. 11. 10.

Dong-pyo Hong (Lee&Ko Expert Advisor)

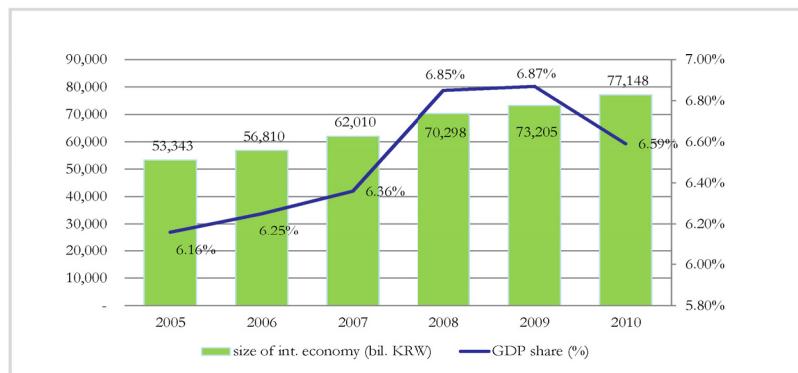
Korean research on internet economy

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- Excerpts from "A Study on the Economic Impacts of the Internet"(2012) by KISDI
 - Analyze the internet economy in Korea empirically and present implications for the government policy decision-making.
 - Estimate the size and effects of the internet economy with various methodologies use by OECD and other institutions.
 - size of internet economy in Korea
 - economic impacts of internet on firm performance, employment and consumer welfare.
 - Follow-up research is under way

Size of Internet Economy in Korea

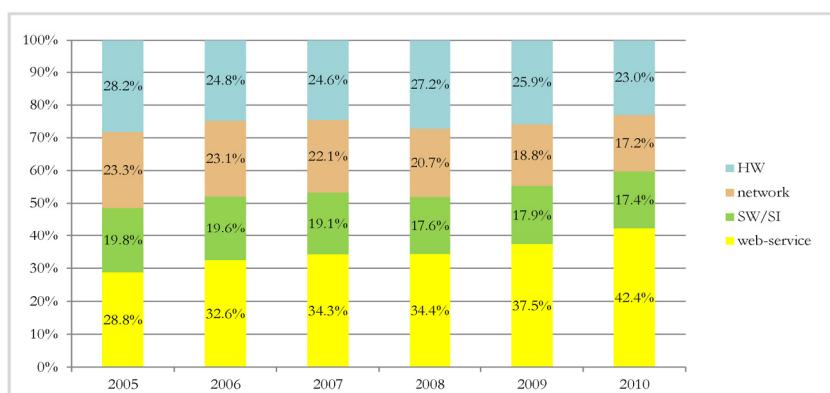
- Use Expenditure approach and Estimate internet expenditure in consumption, investment, government expenditure and net export.
- Internet economy growth rate from 2005 to 2010 is 44.6%, which is higher than GDP growth rate, 35%.
- Government expenditure on e-commerce is not included. GDP share is 9.2% if included



2

Internet economy by products/services

- Internet expenditure is composed of web-service(e-commerce, content, etc.), SW and SI, telecom network(expenditure of internet access, investment by telco), HW.
- Web-service accounts for the largest share followed by HW, SW/SI and telecom network.
- Rapid increase in web-service is due to expenditure on e-commerce and on-line contents.

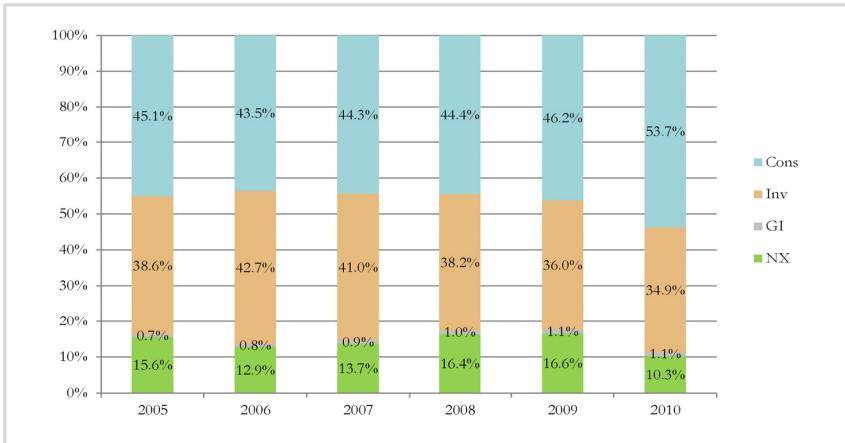


3

Internet economy by expenditure components

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- Consumption accounts for the largest share, followed by investment, net export and government expenditure.
- And the share of consumption shows steady increase.

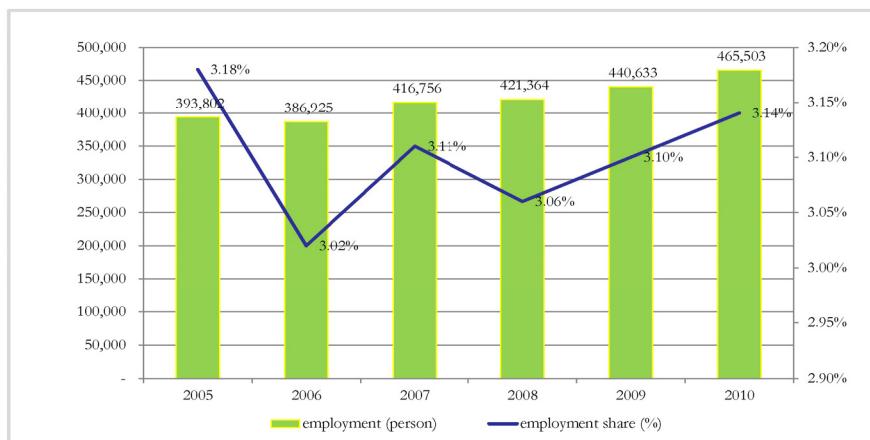


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Size of employment in internet economy

Lee & KO

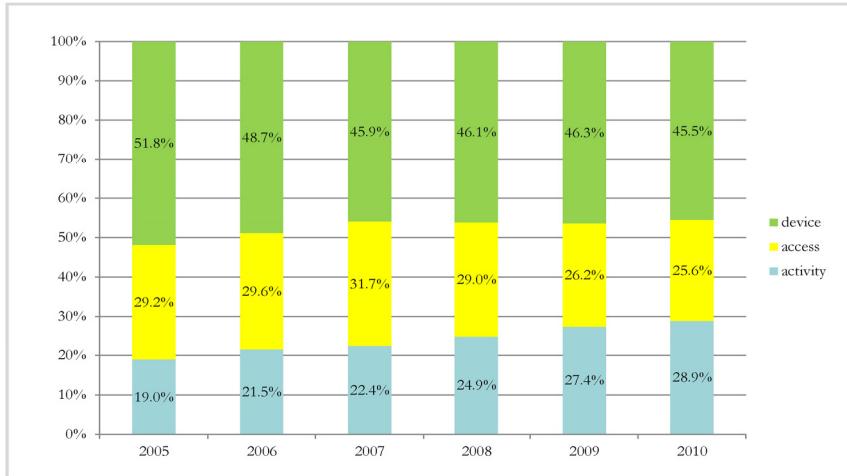
- Employment in internet economy is defined as workers employed in
 - activity sector : e-commerce, internet content sector, finance sector
 - access sector : telecom sector
 - device sector : computer, HW and SW sector



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Share of employment by sectors

- The share of device sector accounts for the largest share.
- But rapid increase in activity sector while decrease in device and access sectors.



6

Impact of internet utilization on labor productivity growth

- Firms with internet utilization realize 1.5% higher labor productivity growth rate in whole industry.
 - Similar result for manufacturing industry but impact in service industry is not statistically significant
 - Internet utilization helps cost reduction in manufacturing industry which has complex supply chain.
 - On the contrary, internet utilization in service industry increase quality of service.

	whole industry	manufacture	service
internet utilization	0.015***	0.013**	0.014
In(no. of workers)	0.044***	0.055***	0.027***
In(captial intensity)	0.028***	0.048***	0.016***
In(1+no. of patent/sales)	0.06	-0.027	0.150*
In(previous year labor productivity)	~0.209***	~0.244***	~0.174***
sample size	12,219	7,873	4,346
R-squared	0.138	0.148	0.129

*** 1%, **5%, * 10% significance level

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Impact of internet utilization on firm sale growth

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- Firms with internet utilization realize 0.8% higher sales growth rate in whole industry.
 - Similar result for manufacturing industry but impact in service industry is not statistically significant.
 - Internet utilization increase the demand as well as productivity especially in manufacturing industry

	whole industry	manufacture	service
internet utilization	0.008**	0.010**	0.005
In(no. of workers)	0.011***	0.007	0.016
In(captial intensity)	0.003**	0.017***	-0.003
In(1+no. of patent/sales)	0.185***	0.240***	0.112
In(previous sale)	~0.010***	~0.014***	~0.009**
sample size	12,219	7,873	4,346
R-squared	0.073	0.098	0.05

*** 1%, **5%, * 10% significance level

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Impact of internet utilization on labor growth

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- Firms with internet utilization realize 0.4% higher job creation in whole industry.
 - Similar result for manufacturing industry and service industry.
 - As the internet utilization increases, the demand for internet-related service workers (such as programmer, web-page management and network management) increase.

	whole industry	manufacture	service
internet utilization	0.014***	0.013**	0.015*
In(no. of workers)	~0.045***	~0.057***	~0.042***
In(captial intensity)	0.015***	0.035***	0.004
In(1+no. of patent/sales)	~0.015	0.079	~0.015
control	industry, year, city/province	"	"
sample size	12,219	7,873	4,346
R-squared	0.041	0.053	0.039

*** 1%, **5%, * 10% significance level

9



The Antitrust Analysis of Rules and Standards for Software Platforms



The Antitrust Analysis of Rules and Standards for Software Platforms

Vanessa Yanhua Zhang, Ph.D.

Global Economics Group
MRLC- Renmin University

10 November 2015

Seminar on Platforms and Mobile Competition

Sogang University, Seoul, South Korea



I. BACKGROUND

- **Software platforms play an important role in promoting innovation and economic growth**
 - Innovation in payments, transportation, health and fitness, connected homes and e-commerce which transform our life;
 - Connects the online and offline worlds and restructures traditional industries
- **Digital tools and services spur competition, driving growth and innovation**

II. SOFTWARE PLATFORM BUSINESS MODELS AND EXTERNALITIES

Business Models

- **Software platforms are multi-sided platforms**
 - two-sided (multi-sided) market
 - drive innovation by enabling entrepreneurs to develop “applications” and to reach all the users of the platform
- **Global business ecosystem**
 - Android operating system:
 - Global example:
 - South Korean example: Color-Note and Kakao Talk

Positive Externalities for Software Platforms

Used as a standard by end users, software developers, hardware makers, and other economic agents

Encourage more participation to increase private and social value of the platform

Create application stores and encourage users to find bugs

Fragmentation is an example of a negative externality

- Indirect network effects
- reduces the private and social value of a platform
- makes the platform less competitive

Fragmentation is a more serious problem for software platforms that use an open-source license

- Amazon's forked version of Android for Amazon Fire phone
- Unix

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III. RULES AND STANDARDS FOR REGULATING EXTERNALITIES

- Software platforms must employ systems to balance the interests of one set of actors against the other
 - The value of software platforms depends on the ability to
 - promote positive externalities
 - reduce negative externalities
 - Software platforms usually take governance strategy to manage externalities
 - impose rules and standards
 - monitor the quality of complementary products and exclude those that do not follow rules

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IV. COMPETITION POLICY ISSUES

Competition Policy Should Exercise Caution



Governance rules that limit fragmentation increase the value of the software platform

- Increase inter-brand competition but decrease potential intra-brand competition

Fragmentation and its costs to the platform are likely to be larger when the software platform has more participants

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Thank You!

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