MGMT 8170 – Global Growth of Emerging Firms Course Syllabus, Spring 2023 TTh 1:45-3:15pm, [room tba]

Faculty: Professor Natalie CarlsonOffice: Steinberg-Dietrich 2015Office Hours: TBA. Feel free to email me directly for appointments outside of regular office hours.Email: ncarlson@wharton.upenn.edu

COURSE DESCRIPTION

Emerging firms are a critical element of economic growth, and a key source of gains in innovation and social welfare. This course is designed to depart from the U.S.-centric conversation on startups – with its outsized focus on Silicon Valley – and train a critical eye on some of the unique innovations emerging from new regional hotspots across the globe, with a particular focus on developing and emerging economies. We will discuss the challenges faced by founders in different global contexts, the components of a robust institutional ecosystem, and the ways in which creative solutions may flourish in response to local problems. Along the way, students will gain a virtual view into global startup communities, and personalized insights from firm founders operating around the world – from Rio to Accra to Bangkok.

The course will be structured in three primary parts. The first and longest section will discuss the *Key Challenges* for emerging firm growth across the globe, such as access to talent and resources, political risk, and legal institutions. The second section will highlight particularly active areas of *Context-Driven Innovation* that are thriving in various regions, such as financial technology, mobile health products, and clean energy. The final section will train *Regional Spotlights* on different geographic areas in turn, so that we may focus on the challenges and opportunities specific to various parts of the world.

This course is relevant to both U.S. and non-U.S. students, and it is expected that students will bring their own backgrounds and experiences to contribute to lively class discussions. The course will culminate with a group project done in teams of four, in which groups will give short presentations to the class.

COURSE READINGS

You can find the readings in one of three places: (1) the Study.net course pack, (2) the library, or (3) the hyperlinks provided for those readings that are publicly available online. *If you have any issues accessing the readings or any other course materials, please contact me so that we can find a solution.*

Recommended Listening

For most of the sessions, I have included recommended podcast episodes that complement the course content. These are not required, but I encourage you to listen, as they allow opportunities to apply the course materials and may provide inspiration for topics for your midterm paper or final group project.

GRADING

This course offers an optional midterm paper, which must be written to be considered for an A in the course. Without the midterm paper, the maximum grade you may receive is an A-.

If you choose to write the midterm paper, the grade breakdown is as follows: attendance and participation (20%), class writeups (20%), midterm paper (30%), and final project (30%), for a total of 100% maximum.

If you choose not to write the midterm paper, the grade breakdown will be as follows: attendance and participation (25%), class writeups (25%), and final projects (40%), for a total of 90% maximum.

Information about each of these assignment components can be found below. No late submissions are accepted for any assignments.

Attendance and Participation

Lecture attendance is required and counts toward your grade. Attendance will be taken at every lecture. Missing more than ten minutes of lecture counts as missing the entire class. Attendance will not be taken for the first lecture.

Authorized Absences: You have two "freebie" absences throughout the semester, no questions asked. Each additional absence beyond the two permitted ones will result in a 1-point deduction from your attendance grade. Attendance is important for your understanding of course concepts because exams draw heavily on the content covered in lectures; this content goes well beyond the readings.

Participation: To earn full participation points, you must actively and productively engage in any group discussions and exercises.

Class Writeups

Pick four classes from throughout the semester and submit a short reaction paper to the readings the day BEFORE class (no later than 11:59pm the day before). The reaction paper should focus on one or more of the discussion questions listed in the syllabus. Papers will be graded on the basis of their insightfulness, use of concepts learned during the course, quality of answers to the questions posed in this syllabus, and clarity of the writing. This is an individual assignment, so no teamwork, please. Word limit: 1000 words, or roughly 2 pages, single spaced.

Final Group Project

The final project should be completed in teams of four (I will accept teams of three to five; expectations will scale proportionally with group size). In this project you will focus on an entrepreneurial firm operating in an international context (this may be multinational, or a firm operating in a single non-U.S. country). You may also write about a more established firm by taking a historical perspective on its early years of operation.

Please highlight several of the themes and frameworks discussed in the course in the context of your focal firm. For example, topics you might address include:

- How did the characteristics of the institutional ecosystem in the country of origin contribute to the emergence of this firm?
- How did the experiences of the founding team members affect their founding strategy?
- What challenges did the founders encounter in their institutional environment?
- How did the founders address political or legal risk in their operating country(s)?
- How did the firm approach international expansion?
- How specific is the underlying value proposition of the firm to its founding context (i.e. context-specific innovation)?

You should prepare a **report** (target range 1000-2000 words per group member) and a lightning talk **presentation** (approximately 1-2 minutes per group member) summarizing your main themes and findings.

In evaluating your paper and presentation, I will look to see whether the theories/concepts you use are described accurately, applied appropriately, and illustrate the firm's situation. Please don't choose a firm highlighted in the cases from the course.

You are welcome to form your own team. If you do so, please finalize your group and list your names on the worksheet <u>here</u> by **March 21**. After that, I will randomly assign the remainder of the class to teams.

The report and presentation slides will be due **Monday, April 17**, by 11:59pm. Presentations will be in class on April 18 and 20.

[OPTIONAL] Midterm Paper

For the individual midterm paper, I would like you to write an **ecosystem report** on a global entrepreneurial ecosystem or subfield of your choosing. This ecosystem may be as broadly or narrowly conceived as you like (e.g., high-tech firms in Tel Aviv, solar energy in East Africa, multi-sided platform startups in Southeast Asia).

In the report, please address the strengths and weaknesses of elements of the ecosystem, including market institutions, human capital, financing, support system, infrastructure, regulatory environment, educational institutions, and cultural support.

Target length should be approximately 3000-4000 words (absolute maximum 6000 words) – please strive for quality over quantity!

The midterm paper will be due Friday, March 3, by 11:59pm.

COURSE POLICIES

All students are responsible for reading, understanding and following the course policies posted below and on Canvas regarding class expectations, absences, withdrawals, exam conflicts, and academic integrity.

Final presentation conflicts: Per university policy, excused absences are only granted in cases of a conflicting class, a conflicting exam, a religious holiday, a serious illness or a grave family emergency, and each of these situations must be documented to our satisfaction. Note that Student Health Services do not deliver justifications for absences from class or exams, per their policy. Job interviews, incompatible travel plans, and forgetfulness will be considered unexcused absences. We require at least two weeks' notice for foreseeable conflicts.

Special needs: If you have any kind of learning or physical disability, please notify me (by email or during office hours) so that we can discuss how best to support you. Any students who require special arrangements for their classes or exams must have an official letter from student disability services. They should submit this letter together with their request for special arrangements to the professor as early in the semester as possible, and at least two weeks before an exam.

Academic integrity: Students are required to abide by the University's policy of academic integrity at all times. This applies to exam-related issues as well as plagiarism on graded assignments.

Student-faculty meals and coffee breaks: I will hold breakfasts and lunches during the semester with up to five students each time, to give us a chance to meet and chat informally. Sign-up sheets will be made available on Canvas.

Ethics and use of prior materials: You should not use previously completed case write-ups, summaries of readings, or other "cheat sheets".

READINGS AND SCHEDULE

Part 1: Key Challenges

Classes 1-5: Innovation in Context

Introduction/Ecosystems (1/17)

<u>Readings</u>

- Breznitz, D. (2021). *Innovation in Real Places: Strategies for Prosperity in an Unforgiving World*. Oxford University Press, USA. (Chapter 1: "The New Globlization of Innovation.")
- Lazarow, A. (2020). Beyond Silicon Valley. *Harvard Business Review*.
- "A Note on Entrepreneurial Ecosystems in Developing Economies." Stanford GSB Case Note (2016).
- [*OPTIONAL*] Habiby, Anne S., and Deirdre M. Coyle. "The High-Intensity Entrepreneur." *Harvard Business Review* 88.9 (2010): 74-78.
- [*OPTIONAL*] Florida, Richard and Ian Hathaway. "How the Geography of Startups and Innovation Is Changing." *Harvard Business Review* (2018).
- [*OPTIONAL*] Isenberg, Daniel J. "How to Start an Entrepreneurial Revolution." *Harvard Business Review* 88.6 (2010): 40-50.
- Recommended Listening: "How Entrepreneurs Succeed Outside Silicon Valley," HBR IdeaCast, <<u>https://hbr.org/podcast/2020/04/how-entrepreneurs-succeed-outside-silicon-valley</u>>
- *Recommended Listening:* "Silicon Valley is Not Normal What Innovation Looks Like in the Real World," The Essential Podcast, <<u>https://www.spglobal.com/en/researchinsights/articles/the-essential-podcast-episode-43-silicon-valley-is-not-normal-whatinnovation-looks-like-in-the-real-world></u>
- Recommended Listening: episodes of The Ecosystem Show, <<u>https://www.audible.com/pd/Podcast/B08JJNN5RX</u>>

- Contrast the approaches to global innovation found in the Breznitz and Lazarow readings. Which piece resonated more with you?
- Consider a city or region you know well. Is it an innovation center? Which of the four stages of innovation describes it best?
- Evaluate the eight pillars framework given by the Stanford case note. Is there anything you would change, add, or subtract if you were creating your own taxonomy of an entrepreneurial ecosystem?

- How would you rank the eight pillars in importance? Does this vary by the industry, goals, stage, etc. of a startup?
- Do you think dynamic entrepreneurial ecosystems can be deliberately engineered by public or private actors? If yes, how? If not, why not?
- Using the eight pillars, evaluate Philadelphia or another ecosystem you know well. What are the strongest and weakest aspects of the ecosystem?

Incubators, Accelerators, and Hubs (1/19)

<u>Readings</u>

- Gonzalez-Uribe, Juanita, and Michael Leatherbee. "The effects of business accelerators on venture performance: Evidence from start-up Chile." *The Review of Financial Studies* 31.4 (2018): 1566-1603. [*Please read Introduction, Discussion, & Conclusion sections and skim the rest*]
- "Homes for Africa's Tech Entrepreneurs." *The Economist* (2015).
- [*OPTIONAL*] Roberts, Peter and Randall Kempner. "Startup Accelerators Have Become More Popular in Emerging Markets and They're Working." *Harvard Business Review* (2017).
- *Recommended Listening*: "Innovation Hubs (CcHub, iHub & others)," Afrobility, <<u>https://www.afrobility.com/episode/12-innovation-hubs-cchub-ihub-others-how-african-incubators-accelerators-co-working-spaces-are-nurturing-entrepreneurship-and-building-the-tech-ecosystem</u>>

Discussion Questions

- Hubs and coworking spaces are an aggregate of several functions: how do they provide value to emerging firms? What do you view as the most important function?
- How do these benefits differ between developing and developed economies?
- The study of Start-Up Chile found that entrepreneurship schooling improved venture performance, but basic services like coworking space didn't have much impact. Why do you think this might be? Do you think this generalizes to other countries and contexts?

Talent (1/24)

Guest Speaker: Federico Repetto, CEO & Co-Founder, Alkemy (Argentina)

<u>Readings</u>

• Khanna, Tarun, Nancy Hua Dai, and Shu Lin. "Talent@Tencent." Harvard Business School Case 717-500, May 2017. (Revised November 2018.)

- [*OPTIONAL*] Kempner, Randall. "Help Wanted: Solving the Talent Challenge for Emerging Market Entrepreneurs." *Financial Times* (2015).
- Recommended Listening: "Smart People Should Build Things On Recruiting and the Global Competition for Top Talent," The Flip, <<u>https://theflip.africa/podcast/s2e10/</u>>
- *Recommended Listening*: "Tencent: The Ultimate Outsider," Not Boring, <<u>https://www.notboring.co/p/tencent-the-ultimate-outsider</u>>

- Discuss the ecosystem in Shenzhen and how it shaped Tencent's recruitment strategy in its early years of operation.
- How did Tencent's corporate culture interact with recruitment?
- What are some of the advantages and disadvantages of high-investment internal training programs such as Tencent Academy?
- How does risk tolerance impact the ability of emerging firm founders to recruit talent?

Economic and Social Institutions (1/26)

<u>Readings</u>

- "Entrepreneurship in a Harsh Business Climate: Reform-Era Vietnam." Stanford GSB Case (2003).
- [OPTIONAL] Levy, Brian, et al. "South Africa: When Strong Institutions and Massive Inequalities Collide." (2021). Carnegie Endowment for International Peace.
 <<u>https://carnegieendowment.org/2021/03/18/south-africa-when-strong-institutions-andmassive-inequalities-collide-pub-84063</u>>.
- Recommended Listening: "The Story of Vietnam's Economic Revolution," Dollar & Sense, <<u>https://www.brookings.edu/podcast-episode/the-story-of-vietnams-economic-revolution/</u>>

- How did the three Vietnamese entrepreneurs in the case navigate the market reform transition period?
- Dispute resolution is a key theme in each of the three entrepreneurs' stories. How do they approach disputes in the absence of reliable courts?
- How do intermediaries and credibility-enhancing organizations impact the trust environment in a given market?
- How does economic inequality within a country interact with its institutional environment?

Political Risk (1/31)

<u>Readings</u>

- Bayrasli, Elmira. *From the Other Side of the World: Extraordinary Entrepreneurs, Unlikely Places* (2015). Public Affairs, New York, NY. (Chapter 6: "Order in the Court.")
- [*OPTIONAL*] Bounds, Andy. "Entrepreneurs Weigh Effects of Geopolitical Upheaval." Financial Times (2019).
- Recommended Listening: "What Global Political Risk Consulting is All About w/ Ian Bremmer, Eurasia Group," Time4Coffee, <<u>https://time4coffee.org/339-what-global-</u> political-risk-consulting-is-all-about-w-ian-bremmer-eurasia-group/>

Discussion Questions

- How can firms prepare differently for local political risk (e.g. the Arab Spring) versus global political risk (e.g. the 2008 crisis)?
- Discuss the importance of on-the-ground knowledge with respect to assessing local political risk.
- What are some of the most important political risks (local or global) that you anticipate facing firms in 2022 and beyond? Discuss one or two of these in detail.

Classes 6-9: Securing Resources

Early-Stage Financing (2/2)

- "A Note on Financing Entrepreneurial Ventures in Developing Economies." Stanford GSB Case Note (2020).
- [*OPTIONAL*] Runde, Daniel F. et al. "The New Missing Middle in Development Finance." CSIS Brief (2019). <<u>https://www.csis.org/analysis/new-missing-middle-development-finance</u>>
- [*OPTIONAL*] Arditti, Guillaume. "How to Close Africa's Financing Gap." World Economic Forum (2019). <<u>https://www.weforum.org/agenda/2019/02/closing-africa-s-financing-gap</u>>
- *Recommending Listening:* "Yele Bademosi On people, startups and funding in Africa, pt 1," Building the Future, <<u>https://drdotun.com/yele-bademosi-on-people-startups-and-funding-in-africa-pt-1/</u>>
- *Recommended Listening:* "Seedstars World in Asia with Karen Mok," Analyze Asia, <<u>https://analyse.asia/2015/12/20/episode-82-seedstars-world-in-asia-with-karen-mok/</u>>

- Consider the different funding sources discussed in the Stanford case note. How would you organize them into categories? What do you see as the strongest advantage of each category?
- How does business informality affect the early stage financing gap?
- Discuss some of the benefits and drawbacks of bootstrapping in the early stages of growth.
- How do legal regimes and country of incorporation affect a firm's ability to raise funding?

Venture Capital (2/7)

<u>Readings</u>

- [CHOOSE ONE OF THE TWO FOLLOWING READINGS TO READ CLOSELY]:
 - Gilson, Ronald J. "Engineering a Venture Capital Market: Lessons from the American Experience." *Stanford Law Review* 55 (2002): 1067.
 - Lerner, Josh, and Joacim Tåg. "Institutions and Venture Capital." *Industrial and Corporate Change* 22.1 (2013): 153-182.
- [*OPTIONAL*] Duhigg, Charles. "How Venture Capitalists are Deforming Capitalism." *The New Yorker* (2020).
- *Recommending Listening:* "A Vision of Venture Capital in Latin America Amid the Pandemic," Latin America News, <<u>https://labsnews.com/en/news/technology/a-vision-of-venture-capital-in-latin-america-amid-the-pandemic/</u>>
- Recommending Listening: "VC Investment Booming in Africa," The Moneypot, <<u>https://podcasts.apple.com/us/podcast/ep-15-vc-investment-booming-in-africa/id1475500357?i=1000468170264</u>>
- Recommending Listening: "Building at VC Scale in Southeast Asia," The AWS Startup Podcast, <<u>https://podcasts.apple.com/us/podcast/building-at-vc-scale-in-southeast-asia/id1482058988?i=1000488074126</u>>

- Both readings pertain to the importance of the institutional environment for supporting venture capital. Discuss one or two of what you view as the most important institutional factors (e.g. tax policies, labor market regulations, stock markets) and how they impact the venture capital industry.
- What makes it difficult for the government or other players to engineer a dynamic venture capital market?
- How does staged financing assist in managing uncertainty?
- Is traditional venture capital investment the best funding structure for firms in developing and emerging economies? What aspects could be changed to better suit these contexts?

Investor Perspectives (2/9)

<u>Readings</u>

- "Scaling ALLVP in Latin America." Stanford GSB Case (2020).
- [OPTIONAL] "Private Equity Valuation in Emerging Markets." HBS Case Note (2017).
- Recommending Listening: "Becoming the youngest female VC partner in LatAm: Antonia Rojas, ALLVP," Latitud Podcast,
 https://podcasts.google.com/feed/aHR0cHM6Ly9mZWVkcy5idXp6c3Byb3V0LmNvb S85OTU3MjIucnNz/episode/QnV6enNwcm91dC05MDU3MjAy>

Discussion Questions

- From the perspective of local investors such as ALLVP, what are some of the advantages and disadvantages of prominent international investors (e.g. SoftBank) gaining interest in a region?
- Discuss interregional competition between markets (e.g. Brazil versus the rest of Latin America) and how investors might weigh domestic versus regional opportunities.
- What do you view as some of the greatest risks and opportunities for a firm like ALLVP?
- The case ends with the two founders discussing bringing on more senior level talent, which they seem to have found in Antonia Rojas (see *Recommending Listening*). What value does her expertise and experience bring to the firm?

Impact (2/14)

Guest Speaker: Dhananjay Goel (WG'22), Co-Founder, DetoXyFi

- Addy, Chris, et al. "Calculating the Value of Impact Investing: An Evidence-Based Way to Estimate Social and Environmental Returns." *Harvard Business Review* 97.1 (2019): 102-109.
- [*OPTIONAL*] Chen, Jane. "Should Your Business Be Nonprofit or For-Profit?" *Harvard Business Review* (2013).
- Recommended Listening: "Jane Chen Embrace the Entrepreneurial Journey," Stanford eCorner,
 <<u>https://podcasts.google.com/feed/aHR0cHM6Ly9mZWVkcy5zb3VuZGNsb3VkLmNvb</u> <u>S91c2Vycy9zb3VuZGNsb3VkOnVzZXJzOjIwMTg2ODAvc291bmRzLnJzcw/episode/d</u> GFnOnNvdW5kY2xvdWQsMjAxMDp0cmFja3MvMjkwMDgyNzE1>

- How can investors estimate the value of social or environmental returns? What are some of the associated practical and moral issues?
- What are some of the advantages and disadvantages of trying to simultaneously maximize financial and social returns (i.e., the double- or triple-bottom line approach)?
- How should entrepreneurs in emerging markets think about approaching an impact investor versus a more traditional funding source?
- How does a firm's legal status affect its ability to raise funding?

Classes 10-13: Globalization

Born-Global Firms (2/16)

<u>Readings</u>

- "Andela: Africa's AWS for Talent." Harvard Business School Case (2021).
- [*OPTIONAL*] Isenberg, Daniel J. "The Global Entrepreneur." *Harvard Business Review* 86.12 (2008): 107-111.
- [*OPTIONAL*] Kerr, William R. "Entrepreneurship Reading: Launching Global Ventures." Harvard Business Publishing 5277 (2015).
- *Recommended Listening:* "Investing in Future Africa with Iyinoluwa Aboyeji," Glocal Citizens,

<<u>https://podcasts.google.com/feed/aHR0cHM6Ly9mZWVkcy5maXJlc2lkZS5mbS9nbG9jYWxjaXRpemVucy9yc3M/episode/YzZiMjU5NTEtYzQ5Yi00NDc2LWFlZmItNmUxMWM1MzZkYWNk</u>>

Discussion Questions

- What are some of the key risks facing enterprises that seek to be global from the outset? What competencies do born-global founders need to master?
- Discuss the importance of diaspora networks in supporting born-global firms.
- What future do you see for a firm like Andela in a post-Covid-19 world? What adjustments would you make to their business model?

Interactions with Multinationals (2/21)

Guest Speaker: Jihyo Lee (WG11), Cofounder and CEO, FADU Technologies (South Korea)

<u>Readings</u>

- Prashantham, Shameen, and George S. Yip. "Engaging with Startups in Emerging Markets." *MIT Sloan Management Review* (2016).
- [*OPTIONAL*] Lang, Nikolaus et al. "Why MNCs are Winning Big in Emerging Markets." Boston Consulting Group (2018).
- Recommended Listening: "African Corporate VCs & Softbank Why African Corporates are Not Investing in Tech Startups," Afrobility, <<u>https://www.afrobility.com/episode/22-african-corporate-vcs-softbank-why-african-corporates-are-not-investing-in-tech-startups</u>>

Discussion Questions

- What are some of the advantages and disadvantages of being an "intrapreneur" inside a large organization, versus an independent entrepreneur?
- Why do you think some large multinationals choose to have a high level of startup engagement?
- What role can multinationals play in an entrepreneurial ecosystem? What factors might affect the role that they play?

Globalization of the Silicon Valley Ethos (2/23)

<u>Readings</u>

- "Polymath Ventures: Building an International Incubator." USC Marshall Case SCG-521 (2016).
- [*OPTIONAL*] Andrews, Edmund. "Lost in Translation: Can Silicon Valley Export Its Best Practices?" *Stanford Engineering Magazine* (2016).
- Recommended Listening: "Startup Corporate Structures for Latin America and Silicon Valley," Crossing Borders Podcast, <<u>https://www.nathanlustig.com/dan-green-gunderson-dettmer-startup-corporate-structures-for-latin-america-and-silicon-valley-ep-122/</u>>

- Should it be the goal of emerging ecosystems to become a "Silicon-Hyphen"? Why or why not?
- What standard Silicon Valley practices and norms do you think are most easily exported? Which are most difficult to export?
- How do the layouts of physical work spaces translate across different cultural contexts?
- How has Covid-19 impacted the prominence of Silicon Valley, both culturally and economically? What dynamics have shifted in the wake of the pandemic?

Founding Teams/Internal Networking Session (2/28)

<u>Readings</u>

- "Embrace (A)." Ivey Publishing 9B13M005 (2013).
- Reinert, Sophus A. "Case Study: Pursue Your Dream or Move On?" *Harvard Business Review* (2020).
- [*OPTIONAL*] Molinsky, Andy, and Ernest Gundling. "How to Build Trust on Your Cross-Cultural Team." *Harvard Business Review* 87.2 (2016): 43-49.
- Recommended Listening: "Mira Mehta The Tenacious Founder of Nigeria's Tomato Jos", Young African Entrepreneur, <<u>https://podcasts.google.com/feed/aHR0cHM6Ly95YWVwb2RjYXN0LmxpYnN5bi5jb</u> 20vcnNz/episode/NDVmMzBhMTQ10GM5NGI2MThiNzhlNWU5NmU4YThhNDc>

Discussion Questions

- Discuss some of the advantages/disadvantages of having a multinational founding team.
- In the Embrace case, how would you allocate each of the teams to the different proposed projects and why?
- How do Team A's diverse backgrounds and experiences shape their strategy with respect to the infant warming device?
- Which step would you recommend for Sonia (in the *HBR* article) and why?

Class 14: Midterm Paper Working Session (3/2)

Part 2: Areas of Innovation

Context-Specific Innovation (3/14)

- "ZipDial: Reaching the Next Three Billion Consumers." Stanford GSB Case IDE07
- [*OPTIONAL*] Christensen, Clayton M., Efosa Ojomo, and Karen Dillon. "Cracking Frontier Markets." *Harvard Business Review* (2019).
- [*OPTIONAL*] Netessine, Serguei and Ioana Popescu. "A Lean Startup Approach to International Development." *Harvard Business Review* (2014).
- Recommended Listening: "Sanjay Swamy, Prime Venture Partners," 100x Entrepreneur, <<u>https://podcasts.apple.com/gb/podcast/sanjay-swamy-prime-venture-partners/id1457308560?i=1000463718137</u>>

- What role does experimentation play in the development of products for local markets?
- Discuss some of the ways that ZipDial leveraged understanding of local consumer behavior in designing their campaigns.
- What is the value in being able to connect offline to online behaviors?

Artificial Intelligence (3/16)

<u>Readings</u>

- "TikTok's AI Strategy: ByteDance's Global Ambitions." INSEAD Case (2020).
- [*OPTIONAL*] Strusani, Davide and Georges Vivien Houngbonon. "The Role of Artificial Intelligence in Supporting Development in Emerging Markets." *IFC Note* (2019).
- Recommended Listening: "Voyc: Artifical Intelligence from Africa to the world", Built in Africa Podcast, <<u>https://builtin.africa/?utm_source=techpoint-</u> africa&utm_medium=website&utm_content=20201027>

Discussion Questions

- What makes a company an "AI company"? Is the term overused?
- What role does AI play in ByteDance's TikTok, and how does it differ from previous-gen recommendation systems?
- How can potential investors evaluate a firm's AI offering?
- Discuss the ecosystems that support AI innovation in the US and China.

Healthcare (3/21)

<u>Readings</u>

- Khanna, Tarun. *Trust: Creating the Foundation for Entrepreneurship in Developing Countries*. Berrett-Koehler Publishers, 2018. (Chapter 2: "The Mindset Change.")
- [*OPTIONAL*] Ehrbeck, Tilman, Nicolaus Henke and Thomas Kibasi. "The Emerging Market in Health Care Innovation." *McKinsey Insights* (2010).
- [*OPTIONAL*] Beck, Melinda. "The Challenge of Health-Care Innovation in Developing Nations." *The Wall Street Journal* (2016).
- Recommended Listening: "High Tech Health", Disrupt Podcast, <<u>https://soundcloud.com/disruptafricapodcast/dp-5-high-tech-health-nnena-nkongho-and-corporates-offer-startups-a-helping-hand</u>>

- What are some of the unique challenges inherent in the provision of healthcare versus other types of goods?
- Narayana Health's model does not rely on any particular breakthrough technologies. What are the keys to its success?
- What are some of the ways in which healthcare innovations can piggyback on existing technology and infrastructure to lower costs?

Energy and Agribusiness (3/23)

<u>Readings</u>

- "A Green Bubble? We Discuss the Investment Boom." The Economist (2021).
- "Follow the Sun: Solar Power is Reshaping Energy Production in the Developing World." *The Economist* (2016).
- [**OPTIONAL**] Aglionby, John. "Lightbulb Moment for M-Kopa." *Financial Times* (2016).
- Recommended Listening: "Unpacking Africa's Solar Power Revolution With Chad Larson Of M-KOPA Solar," African Tech Roundup, <<u>https://soundcloud.com/african-tech-round-up/89-unpacking-africas-solar-power-revolution-with-chad-larson-of-m-kopa-solar</u>>

Discussion Questions

- Do you think the recent increase in climate-conscious investing is a bubble? If yes, why? If not, what's different this time?
- What are some of the infrastructure challenges inherent to electrifying rural areas in developing countries?
- Discuss the centrality of pay-as-you-go (PAYG) systems to solar offerings like M-Kopa.

FinTech (3/28)

- Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, *354*(6317), 1288-1292. [*Please read the introduction and conclusions of the article; you may skim the empirical results*]
- Wheatley, J., and Adrienne Klasa."Cryptocurrencies: Developing Countries Provide Fertile Ground." *Financial Times* (2021).
- [OPTIONAL] "How Mobile Money is Spreading." The Economist (2018).

- [*OPTIONAL*] Piper, Kelsey. "What Kenya can teach its neighbors and the US about improving the lives of the 'unbanked". *Vox* (2020).
- Recommended Listening: "Amadou Sy: Fintech Breaking Down Barriers in Africa," IMF Podcasts, <<u>https://www.imf.org/en/News/Podcasts/All-Podcasts/2019/02/13/fintech-amadou-sy</u>>

- How can local institutions and government policies affect the diffusion of innovations like mobile money?
- Discuss some of the creative ways in which unbanked consumers have used existing technology to mimic the functions of traditional financial products.
- What are some of the factors that prevent widespread adoption of financial products like microinsurance in emerging markets?
- What kinds of data can substitute for prior financial history when providing financial products to people without such histories? Are you optimistic or pessimistic about these approaches?

Logistics (3/30)

<u>Readings</u>

- Twilley, Nicola. "The Cold Rush." The New Yorker (2022).
- "A Flotilla of Startups Wants to Streamline Global Supply Chains." The Economist (2022).
- [*OPTIONAL*] Georgiadis, Philip. "Distribution Groups Grapple to Reduce their Carbon Footprints." Financial Times (2021).
- Recommended Listening: "Bridging Gaps In Food and Market Security Across Africa ft. Caine Wanjau," Tech For Granted (2021).
 <<u>https://podcasts.apple.com/us/podcast/musings-and-monologues-episode-5-bridging-gaps-in/id1459643488?i=1000536509165</u>>

- How would you map out the landscape of logistics innovation? What do you see as some of the most promising subareas for entrepreneurial firms?
- Discuss the difficulties in maintaining the cold chain in regions like rural Rwanda.
- How do efforts to digitize global supply chains intersect with decarbonization goals?

Africa (4/4)

Guest Speakers: Dario Giuliani & Joshua Murima, Briter Bridges (Kenya)

<u>Readings</u>

- Leke, Acha, and Saf Yeboah-Amankwah. "Africa: A Crucible for Creativity." *Harvard Business Review* (2018): 116-126.
- Hersman, Erik. "Mobilizing Tech Entrepreneurs in Africa." *Innovations: Technology, Governance, Globalization* 7.4 (2012): 59-67.
- [OPTIONAL] Albert, Eleanor. "Backgrounder: China in Africa." Council on Foreign Relations <<u>https://www.cfr.org/backgrounder/china-africa</u>>
- Recommended Listening: "Acha Leke: Chairman of McKinsey & Co Africa," Africa State of Mind, <<u>https://omny.fm/shows/life-podcasts/acha-leke-chairman-of-mckinseyco-africa</u>>

Discussion Questions

- Discuss some of the challenges and opportunities related to manufacturing and food production on the African continent.
- Consider the commonly cited hubs for innovation on the continent e.g., Lagos, Nairobi, Johannesburg and write about some of the advantages and disadvantages of these ecosystems.
- What are some of the differences and barriers between Anglophone and Francophone Africa?
- Discuss the complexities and importance of the Sino-African relationship.

Southeast Asia (4/6)

Guest Speakers: Ethan Choi (WG13), Venture Partner, Indies Capital Partners (Indonesia), + additional panel members tbd

- "Grab vs. Uber vs. Go-Jek: Digital Platform-based International Competition in South East Asia." INSEAD Case (2018).
- **[OPTIONAL]** Sender, Henny. "Southeast Asia Aims to Shed Shackles on Tech Start-Ups." *Financial Times* (2016).
- *[OPTIONAL]* Ruehl, Mercedes. "Foreign Investment Drives Surge in South-East Asia Tech Takeovers." *Financial Times* (2019).

• *Recommended Listening:* "Gojek vs Grab - Dawn of the Super App with Jon Russell," Analyze Asia with Bernard Leong, <<u>https://analyse.asia/2019/05/10/episode-297-gojek-vs-grab-dawn-of-the-super-app-with-jon-russell/</u>>

Discussion Questions

- What is unique about the market in Southeast Asia, and what are some of the factors that have led to the rise of "super-apps" like the ones we see in the case?
- What role do large investors like SoftBank play in shaping competition between major regional players in a nascent industry like ridesharing?
- Discuss some of the ways in which Grab and Go-Jek instituted a tailored or "hyperlocal" strategy.

Latin America (4/11)

Guest Speaker: Rosanna Ramos-Velita (WG'92), Chairman, Caja Los Andes, Wharton Executive Board for Latin America

<u>Readings</u>

- "Nubank: Democratizing Financial Services." HBS Case (2021).
- *[OPTIONAL]* Webber, Jude and Federica Cocco. "Latin America Tested by Lack of Medium Companies and Middle Class." *Financial Times* (2019).
- *[OPTIONAL]* Remes, Jaana and Andres Cadena. "Latin America's Digital Spring: Work in Progress." *Financial Times* (2019).
- Recommended Listening: episodes of Crossing Borders
 <<u>https://www.nathanlustig.com/category/crossing-borders-podcast/</u>>
- Recommended Listening (for Spanish speakers): episodes of En Contxto <<u>https://contxto.com/en/en-contxto/</u>>

Discussion Questions

- Discuss Nubank's founding team. How did their prior experience prime theme for Nubank's development? What complementarities exist between the founders?
- What do you view as Nubank's most promising pathways for expansion, both geographically in Latin America and into different financial products?
- How can "missing middles" hold back the productivity of a region?

South Asia (4/13)

Guest Speaker: Shivani Bhasin Sachdeva (WG02), Founder and CEO, India Alternatives

<u>Readings</u>

- "Paytm: Building a Payments Network." HBS Case (2019).
- [*OPTIONAL*] Dang, Geetika. "Sustainable and Inclusive Growth in South Asia." Brookings (2019). <<u>https://www.brookings.edu/blog/up-front/2019/11/25/sustainable-and-inclusive-growth-in-south-asia/</u>>.
- [*OPTIONAL*] Basu, Kaushik. "Why is Bangladesh Booming?" Brookings (2018). <<u>https://www.brookings.edu/opinions/why-is-bangladesh-booming/</u>>.
- Recommended Listening: "The Best Bits," The Indian Startup Show, <<u>https://www.indianstartupshow.com/episodes/the-best-bits-part13</u>>

Discussion Questions

- Discuss some of the opportunities and difficulties presented by the digital payments space in India. What are some of the challenges faced by Paytm as they move towards an IPO?
- Discuss the influence of local and national regulations on the founding of new firms.
- Why might a potential entrepreneur prefer a government job to starting a firm?

Final Projects

Class 25-26: Student Presentations and Wrap-Up (4/18 and 4/20)