Digital Financial Services Workshop Lahore 2017









Overcoming barriers to financial inclusion requires partnerships between academic researchers and industry specialists to determine technological solutions that can be translated and widely adopted. To work toward such partnerships, on the 15th and 16th of November, 2017 the University of Washington's Digital Financial Services Research Group (DFSRG), under the School of Computer Science and Engineering, and Information Technology University's FinTech Center hosted the 2017 Digital Financial Services Workshop in Lahore, Pakistan. The workshop was co-located with the 2017 Information Communication and Technology for Development (ICTD) International Conference.

The goal of this workshop was to bring together members of the ICTD academic community with industry specialists of digital financial services to create opportunities for collaboration and knowledge sharing. The workshop bridged between the Pakistan FinTech community and the international ICTD research community through panel discussions, working groups, and position papers. The workshop also functioned as the starting point for creating a robust research agenda to address technology challenges for the adoption of Digital Financial Services in Pakistan and beyond. This workshop will be a model for other such international DFS workshops in the future.





Workshop Day One

he first day of the workshop's included presentations by Kentaro Toyama, W.K. Kellogg Associate Professor of Community Information at the University of Michigan School of Information, Mudassar Aqil, CEO FINCA Microfinance Bank, Richard Anderson, Professor of Computer Science and Engineering at the University of Washington, and Umar Saif, Vice Chancellor at Information Technology University, and closed working sessions for invited guests from the financial and telecom industries, development organizations, and academia. Kentaro Toyama presented on, "Potential Dark Sides of Digital Money." He cautioned the audience to not expect technology alone to solve problems of poverty, and also warned that in some instances technology could have a negative impact. His talk underscored the need to promote social change along with any new technological implementation in order to achieve optimal results. Mudassar Aqil gave a talk entitled, "The Road to Financial Inclusion in a Digital World," which outlined the important collaboration between FINCA and Finja to elaborate the need for banks and FinTech startups to work as equal partners, to open architecture for banks, to speed up the onboarding process, to ensure free digital payments for creating financial inclusion. He also shared that universities can help bring new talent in the areas of artificial intelligence and data science which are much needed within industry.

Four working groups for the first day were led by Rehan Akhtar (Karandaaz), Kurtis Heimerl (UW), Kentaro Toyama (UMich), and Qasif Shahid (Finja). Each group's members were specialists from industry and academia. We tasked each group with 1) identifying a challenge related to DFS uptake in Pakistan, 2) developing a methodology for exploring the selected challenge, 3) defining a beta test as well as goals for scaling up, adoption and use, and 4) sharing the group's plan with the other groups. Meaningful conversations within the groups emphasized figuring out ways that academia and industry could better work together. Part of the challenge with this was understanding the timelines and goals for both academic researchers and industry players. Other groups highlighted the challenges of using telco data to study how different segments of the population use cellular devices, and thus make conjectures about groups or individuals who may adopt DFS more readily. Finally, all groups discussed the challenge of how to create DFS for underserved populations, especially with the goals to increase gender inclusivity and reduce poverty.



Workshop Day Two

 ${f T}$ he second day of the workshop was held as an open session of the 2017 ICTD International Conference and featured presentations by Qasif Shahid, cofounder and CEO Finja, Yahya Khan, Chief Financial Services Officer Telenor Pakistan, and Joshua Blumenstock, Assistant Professor at the University of California Berkeley School of Information. Qasif Shahid gave a talk entitled, "The War on Cash, Pakistani Style," which emphasized the benefits of offering digital payments free of cost and how that can lead to behavioral changes and adoption by a wider population. He argued that simplicity, affordability and unconditional access can create exponential growth led by the users. Yahya Khan, spoke about "Digitization in Pakistan," explaining that successes seen in other countries could be replicated to the advantage of many people in Pakistan and could have significant impact on the alleviation of poverty. He encouraged building more holistic 'contextual' services which go beyond simply digitizing payments by utilizing data and artificial intelligence. He also urged both industry and academia to utilize systems that were already in place, but to expand their scope to be more inclusive. Joshua Blumenstock spoke about, "Improving Financial Inclusion with Big Data, Machine Learning, and Randomized Experiments." He took his research in Afghanistan as an example of how specifically big data could be used to the increase DFS update and claimed that telcos and academics must work together to optimize this data.





Industry Perspectives From Pakistan

Two panel discussions focused on "Industry Perspective in Pakistan" and "Gender and Financial Inclusion" brought together perspectives from the social sciences and humanities, computer science and engineering, NGOs, and the financial and telecommunication industries.

"Industry Perspectives from Pakistan" was a well-represented panel discussion with Qasif Shahid, CEO Finja, representing FinTech as the panel moderator, Yahya Khan, Chief Financial Inclusion Officer Easypaisa, representing telcos, Inayat Hussain, Executive Director Operations State Bank of Pakistan, representing the regulator, Rehan Akhtar, Director DFS Karandaaz, representing donor, Tughral Ali, Head Branchless Banking FINCA Microfinance bank, representing Microfinance banks. While discussing industryacademia partnerships, the panel expressed that industry is open to collaboration on profitable ideas, that we must build a sandbox not only for regulatory approval and commercial experimentation but also for research, that we should include social scientists in the conversation, and that we have to locate propositions which cause behavioral shifts in favor of DFS adoption and digital lending.

Gender & Financial Inclusion

 ${f T}$ he "Gender and Financial Inclusion" panel was joined by Murium Hadi (Advisor to Women's Financial Inclusion, Karandaaz), Faisal Malik (CTO Kashf Foundation), Dr Maryum Mustafa (ITU faculty, Computer Science), Sarah Suhail (ITU faculty and Arizona State University, Gender Studies), Samia Ibtasam (UW Computer Science and Engineering). Jennifer Webster (UW Computer Science and Engineering) moderated the panel, which discussed the need for a gender segregated approach to DFS design, adoption, and use. The discussion highlighted the ways in which gender as a marker of inequality, and that by overlooking research on women in particular, there is a missed opportunity to serve a diverse set of needs with significant, positive welfare impacts. More mixed method research is required to determine how women's financial life cycles differ from those of men, in what ways access is context specific, and how to increase DFS so that it accommodates both men and women taking into account the complex ways in which people interact. Finally, an important discussion about how the positionality of the researcher, consultant, or industry specialist may or may not affect the research approach, findings, and analysis.





Both days of the workshop were well attended, and we anticipate an ongoing discussion between many of the participants through projects specific to DFS in Pakistan. We observed an emphasis on discussions around the use of data and artificial intelligence in the for the purpose of segmentation, contextualization, and building propositions to change behavior. Both groups agreed that data would be more easily generated through digitization. Based on industry insight, DFS adoption is a spiral that requires constant innovation on the supply side to create a motivation for that adoption. While, at the same time, DFS adoption is dependent on building solutions and solving problems on the demand side. Ultimately, DFS adoption with the purpose of financial inclusion is a complex issue that requires strong partnerships between experts with different backgrounds in industry (especially, telecommunication, financial, and regulatory) as well as academics who specialize in computer science, information science, and the social sciences. In addition to these collaborations, our discussions indicated that academics, while traditionally working on a longer timelines and with publications as a primary objective, have valuable skillsets that are outside the focus of industry yet can be incorporated to drive DFS adoption.

