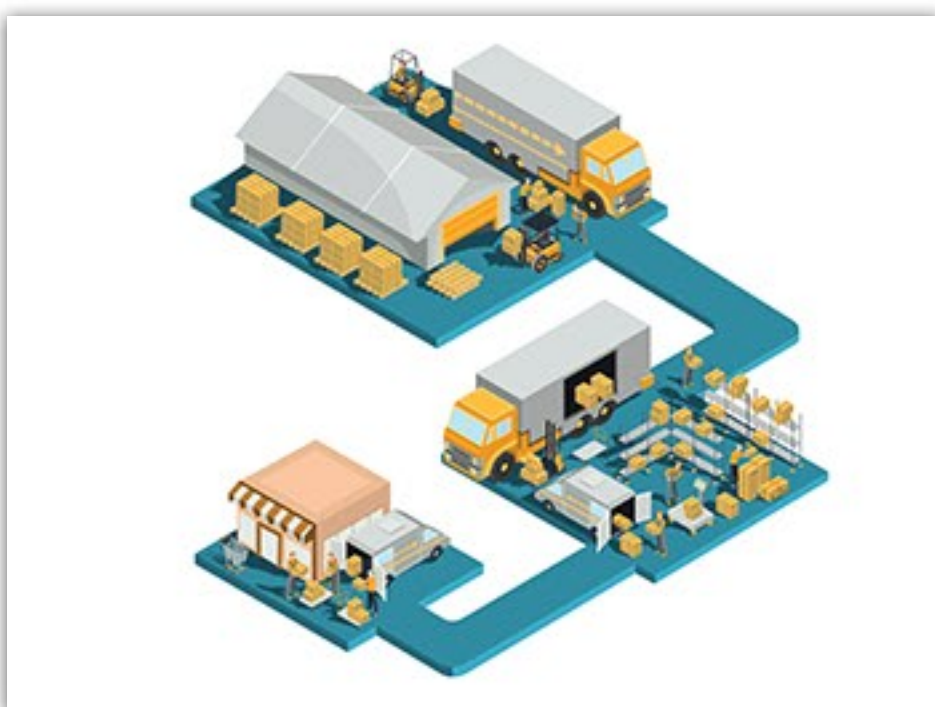


## *Banking from Your Palm*



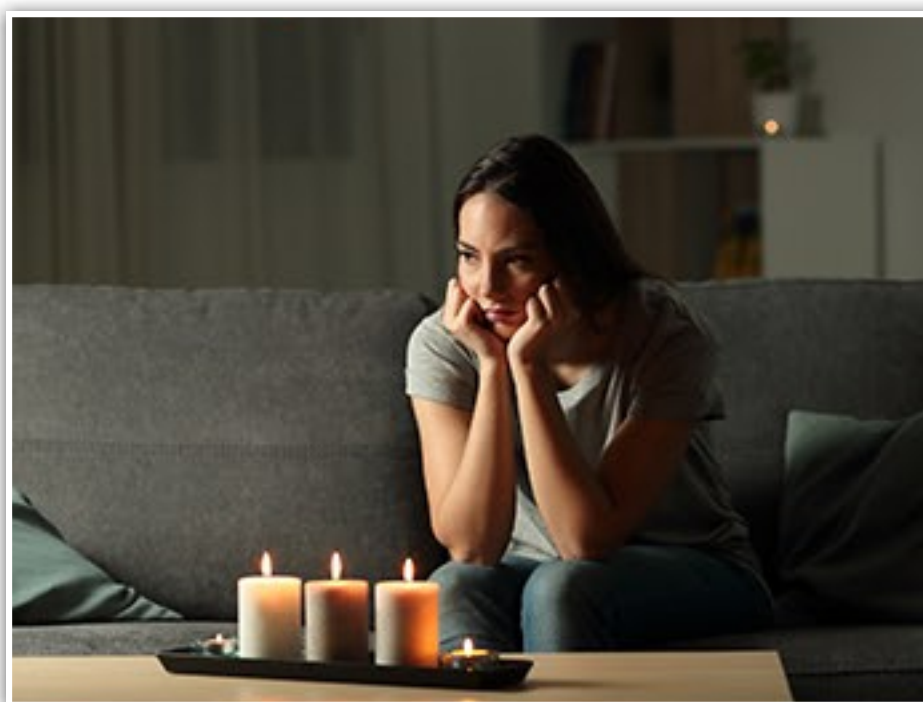
## *Supply Chain Management for the Future*



## *Going Viral on Social Media*



## *Your UPS May Be Causing Load Shedding*



## *Happiness, Hope & Compassion: Transforming Lives in Pakistan*



## *About SDSB Impact*

SDSB Impact is the newsletter of the LUMS Suleman Dawood School of Business (SDSB).

The SDSB faculty engages in cutting-edge research in all major fields of business studies. SDSB Impact summarises the findings of the faculty's research for the benefit of the larger public—especially managers, executives, entrepreneurs, and policymakers. These findings emerge from pioneering research conducted by the SDSB faculty and are published in the world's best journals and case hubs. The newsletter attempts to distill the most important or practically relevant lessons from these findings and share them with its readers.

SDSB Impact will facilitate the sharing of knowledge and dialogue between the academia and the industry, thereby bringing LUMS one step closer to its goal of creating synergy between theory and practice.

## Banking from Your Palm

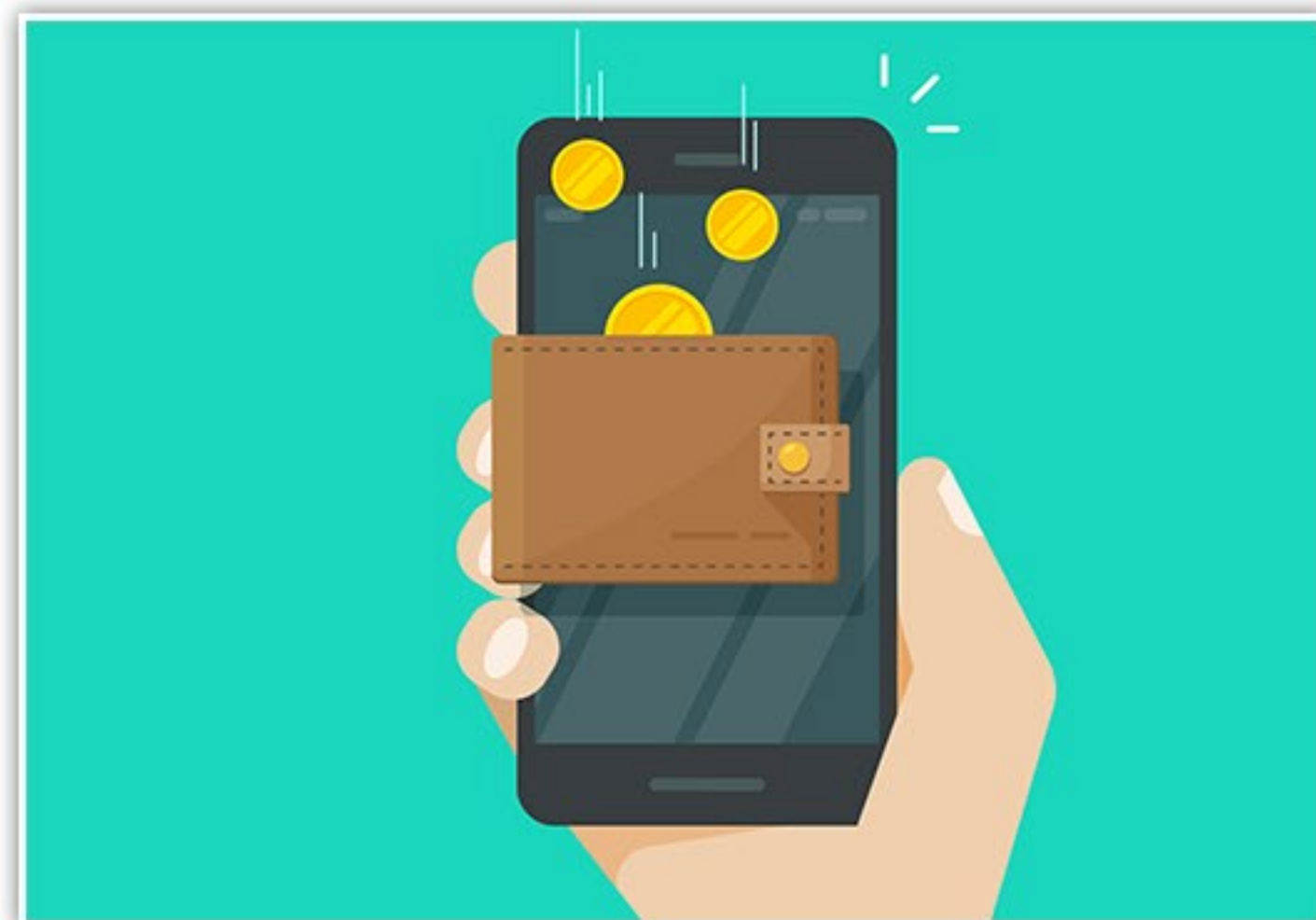
Usage of mobile applications has dramatically grown in the last five years, leading to technology enabled transformation of financial services (or Fintech). Mobile applications that allow users to check balances, deposit cheques, and perform other transactions are the cornerstone of Branchless Banking Services (BBS). The rate of BBS adoption is sometimes higher in emerging economies than in the developed world. In Pakistan, however, growth of mobile accounts (MA) has been slow despite the popularity of the over the counter (OTC) channel.

Latest research by Muhammad Adeel Zaffar, Ram L. Kumar, and Kexin Zhao focuses on adoption and diffusion of BBS through the intense use of mobile devices (e.g., a smart phone) to perform financial transactions. It also aims to identify important factors that drive MA diffusion and illustrate main and interaction effects between these factors. Furthermore, the research examines how the relative effects of the different sides of the market have evolved over the course of the MA diffusion across both rural and urban consumer segments, and helps to understand the dynamics of diffusion of an important financial technology innovation.

Using interview data, literature review, and agent-based simulation modelling, the authors investigated social and economic factors simultaneously to understand key factors behind individual consumers' adoption behaviour. These factors were examined in light of a) different sides of the BBS market and how they might interact with each other to affect the process of diffusion, and b) individual-level attributes and behaviours of key stakeholders.

The findings suggest that BBS platform providers should differentiate incentive strategies to rural and urban customers. The research emphasises the need to treat rural and urban populations differently since a strategy that works with rural customers may not be as effective with urban customers. For example, access to online merchants has a stronger appeal for rural customers than it has for the urban population who in any case have greater access to brick-and-mortar merchants. Overall, it is important to coordinate stakeholders from multiple sides of the market and differentiate incentive strategies to different customer segments.

This research can help BBS providers to understand and influence agent behaviour; brainstorm how different types of advertisements could influence components of the decision functions; emphasise ease of learning (set-up costs), reduced wait time, access to a greater range of merchants, estimated transaction volume, and other factors. Similar analyses may also benefit Near Field Communication (NFC) based devices, 4G/5G mobile phones and services, mobile app platforms, etc.



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## Supply Chain Management for the Future

A firm's supply chain risk is defined as a combination of likelihood and impact associated with the disruption of supply, internal-manufacturing, and delivery operations, i.e., the entire set of supply chain activities. New research by Drs. Shakeel Sadiq Jajja, Kamran Ali Chatha and Sami Farooq identifies how companies can cope with supply chain risk by using integrative practices with suppliers and customers in order to enhance agility performance.

Supply chain risks stem from diverse factors, such as the firm's supply and customer base, regulatory regime, forecasting capability, transportation means, labour issues, and firm size. Strategic collaboration with key supply chain partners and an effective and efficient management of intra- and inter-organisational activities related to the flow of products, services, information, finance and joint decision-making are all part of supply chain integration.

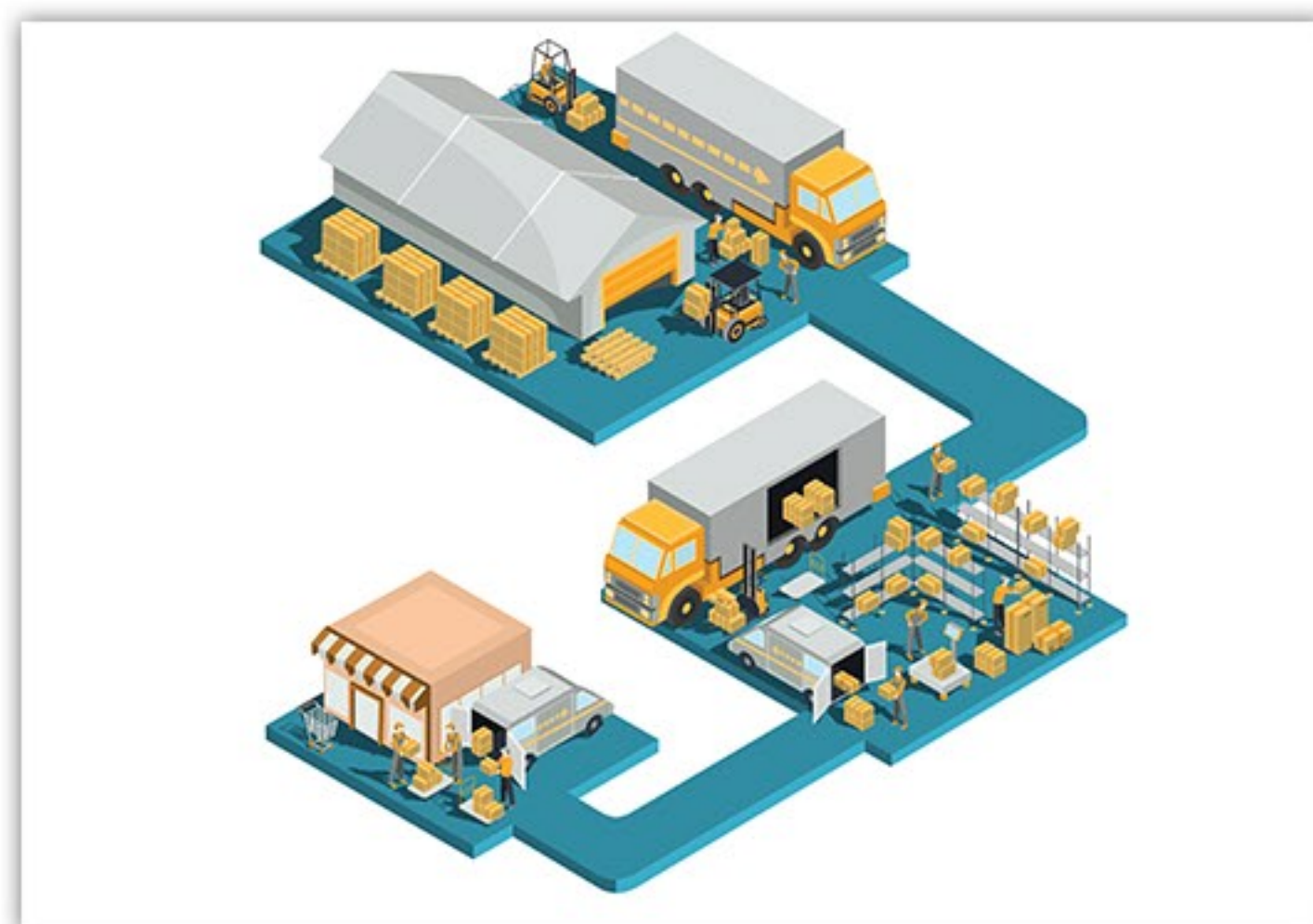
This research also focuses on agility performance, and how supply chain risk and integrative practices affect agility outcomes and metrics. Agility performance outcomes and metrics generally relate to enhanced product customisation, shortened new product development and lead time, reduced system changeover time and cost, and efficient scaling up and down of operations. The researchers use Dynamic Capabilities View to examine relationships between a firm's supply chain risk, supply chain integration, and agility performance.

The authors highlight the importance of supplier and customer integration to achieve enhanced agility performance. Suppliers and customers are the source of supply and demand markets information, which is a key input in the organisational sense-making process in risk prone circumstances. Imperfect connections with key suppliers or customers would have weakening and cascading effects on the firm's planning, organising, and controlling of supply chain activities for agility performance. Thus, managers should develop integrative practices with key suppliers and customers to manage risk and enhance agility performance.

In addition, this research finds that internal integration also positively affects agility performance by enabling supplier and customer integration. Managers should view supplier and customer integration as direct antecedents of agility performance and internal integration as an enabler of supplier and customer integration. In conclusion, all three elements of supply chain integration have different but important roles in enhancing agility performance.

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## Your UPS May Be Causing Load Shedding

Widespread electricity shortage has been a major challenge for Pakistan; at its peak, this amounted to over a 7 GW supply-demand gap and caused the electricity grid to be offline for vast swathes of the population for many hours daily. Millions of households have countered this by investing in self-generation and battery storage technologies. This paper, by Hussain Kazmi, Fahad Mehmood, Zhenmin Tao, Zainab Riaz, and Johan Driesen assesses the impact of these technologies on the broader energy system in terms of efficiency losses for households, and contribution to low-voltage grid congestion. It highlights the unintended consequences arising from wide-spread and unregulated adoption of uninterruptible power supply (UPS) systems to mitigate electricity outages. Practical insights on how the detrimental effects of residential batteries can be reduced are also presented, and possible policy choices to provide the roadmap for a future electricity grid are discussed.

The case of Pakistan is unique in the sense that a majority of its population, without access to electricity, is above the poverty line. In general, supply has lagged behind demand and two significant factors leading to persistent shortage are the increasing electrification rates and rising electricity demand in grid connected users caused by population and economic growth. Widespread electricity load shedding has led to mass adoption of backup systems or UPS which usually employ lead acid batteries. UPS systems have become pervasive because of their perceived low cost, and seamless and noiseless operation.

This research is based on a survey of 200 respondents conducted at LUMS. In order to validate the research findings and investigate the efficiency of commonly installed backup systems, two test batteries were installed in households. The research findings suggest that the low efficiency of these backup systems (usually around 50% or less) has caused annual losses of around 3–4 TWh for the electric grid in Pakistan as well as overloading of transformers and frequent supply-demand imbalances. It has also led to an additional burden on households because of the installation and operational costs of such backup systems.

On the other hand, the mass adoption of these backup systems has also created an entire ecosystem which can enable massive demand side management (DSM) and provide the framework for a future smart grid in Pakistan. Foremost amongst these opportunities is the potential to use smart controllers to improve energy efficiency and offer ancillary services to the electric grid. It is important to note here that the capacity of installed batteries in households already outstrips the primary reserve in most developing and developed countries. The study also recommends mandating energy efficiency labels for UPS systems to inform users not just about the upfront costs of such systems, but also their true operational costs. Furthermore, proper dimensioning guidelines must be made available to households to ensure minimum wastage, both in terms of investment and operational costs as most households currently over-dimension their backup systems above what is ideally needed.

Finally, this study emphasises the need to update the legal framework surrounding interactions with the electric grid to enable demand side management at a large scale. It also recommends a broader systems view by relevant stakeholders in the government and industry, updated building and grid codes, price-based incentives and minimum legal requirements to help the widespread adoption of such measures.



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## Going Viral on Social Media

This case presents the conundrum of an entrepreneur, Tahir Basra, who faced a major hurdle due to social media virality. Tahir set out to establish a brand for bespoke (tailored) casual wear, called DYOT – Do Your Own Thing. The brand would target young middle class urban female consumers, allowing them to either buy clothes immediately or to customise colours, prints, and cuts within a week's time. Using social media as the primary marketing tool, Tahir's team decided to launch the brand with a video of an impromptu flash mob of female models in one of the oldest markets of Lahore. While initial reactions were supportive, DYOT soon faced enormous backlash, and a critique article by the BBC sealed the ad's fate.

Tahir's marketing team had decided to take on the persona of a modern Pakistani female; creative, empowered, vocal, and assertive. When the team's first social media campaign failed to gain sufficient traction on Facebook, Tahir decided to focus on his target audience. The idea behind the concept was to show young Pakistani women defying social norms, shrugging off the male gaze, and asserting their freedom. The team believed that these women would become flag-bearers for the larger female community, who would in turn idolise their choice of apparel. Statistics showed that most social media users from Pakistan were women, and the team expected significant support for their efforts.

The DYOT ad was initially welcomed with positive reactions; within half an hour, however, scathingly negative comments started pouring in. By the third day the video, which had been estimated to reach a few thousand, had been viewed over 100,000 times, with negative reactions turning to anger at DYOT. Women chided DYOT for taking commercial advantage of women's rights; tabloid media picked up the criticism, and discussions on the ad soon started on major TV channels.

Tahir now had to choose the next steps very carefully: he could either distance himself from the strategy by deleting the video from his page and apologising, or he could integrate the brand with the women's rights cause by announcing charity proceeds to relevant NGOs or other Corporate Social Responsibility (CSR) tactics. A third option was to simply wait for the next big social media phenomenon to take over.

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## Happiness, Hope & Compassion: Transforming Lives in Pakistan

### BACKGROUND

This case discusses challenges in the performance evaluation and impact assessment in the context of a leading non-profit organisation, Akhuwat. Founded in 2001, this microfinance organisation provides financial capital to the poor in the form of interest-free loans. Operational costs are covered through charity and donations. In 2010, the organisation underwent rapid expansion following a credit injection from the provincial government, resulting in a sevenfold increase in its loan portfolio to PKR 2,460 billion and establishment of 289 branches around the country by 2014. This massive transition was accompanied by challenges in performance monitoring and other avenues. While monitoring processes followed in the microfinance industry and some indigenous checks were incorporated into the system, the need for comprehensive impact assessment was felt.

### THE DECISION

Dr. Amjad Saqib, founder and CEO of Akhuwat faced the dilemma of assessing the impact his organisation was making on the ground. While conventional measures being used to assess Akhuwat's performance – such as financial performance, loan disbursement, and recovery rates – were all showing impressive signs, Dr. Saqib wanted to know whether these measures had achieved their intended social impact as well. His original intention of establishing Akhuwat was to increase tolerance, compassion, volunteerism, and happiness in communities. In order to assess these factors, he decided to consult an old friend, who led a team of researchers to understand the extent of Akhuwat's intended impacts. The researchers understood that based on the vision of the organisation to create a poverty-free society on the tenets of compassion and equity, a number of social impact factors would have to be considered.

During the impact assessment, the researchers uncovered the need to define key terms in the organisation's vision, mission, and goals. Moreover, assessing outcomes such as happiness, hope, compassion, mutual respect, volunteerism, and social support is a complex effort that requires consideration of many social indicators. The researchers posit that after defining key terms properly, a variety of measures can be used to gauge mission impact. Some of the recommended measures include: number of school going children; access to basic amenities, including food, shelter and clothing; frequency and scale of donations, and attitudes towards other groups, gender, and communities.

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