Abstracts of the Day's Presentations

SPJIMR Chicago Booth India Quantitative Marketing Conference 2023

Title, Authors	Abstract	
Title: Impact of Influencers and Microfinance in the Adoption and Valuation of Subscription-Based Services		
<u>Authors</u> Madhur Mohan*, UGA; Vedha Ponnappan, IIM U; Prakash Satyavageeswaran*, IIM U; Raghunath Rao, UT Austin	Out-of-Pocket Expenditure (OOPE) in healthcare is a significant challenge in low- and middle- income countries. Prepayment-based subscription service offers a solution to overcome the debt trap due to OOPE. However, the uncertainty about future usage, provider credibility, and liquidity crunch could present significant challenges in the adoption of such plans. The authors examine the impact of two marketing levers - influencer and credit provision - on the adoption of subscription services and the relative efficacy and valuations of these levers relative to mere information provision (control). Using a randomized controlled field experiment among a tribal population in India, authors find that microfinance significantly increases adoption and valuation relative to the control arm, signaling the importance of credit provision in such contexts. While the local influencers greatly enhanced the valuation of the service, they did not boost adoption relative to the control arm. The authors also estimate heterogenous treatment effects using machine learning based causal forest approach. The research contributes to the theory and practice by extending the conversation on the causal effect of influencers and credit provision on the adoption and valuation of a subscription service where future usage is uncertain.	
Title: Understanding Individual Charitable	Giving in Natural Disasters: Substitution, Persistence, and Targeting	
<u>Authors</u> Sai Siddharth VK*, IIM A; Nikita Gupta, IIM A; Anirban Adhikary, IIM U; Sourav Bikash Borah, IIM A	Nearly every day, a natural disaster strikes some part of the world. Not-for-profits raise donations from individual donors to aid in disaster relief efforts. However, the impact of natural disasters on donations is unclear. This paper investigates whether natural disasters affect overall donations across both donors who donated and those who did not donate to disaster relief efforts. Importantly, this study investigates whether donors substitute donations from either non-disaster causes or future donations to donate to disaster relief efforts. Utilizing longitudinal data of donors from USA and India across 2 disasters, this paper shows that overall donations increase in the case of natural disasters, and this effect persists even after prolonged exposure to natural disasters. Furthermore, donors do not substitute donations either from non-disaster causes or from future donations. Finally, it investigates managerially relevant variables to predict which types of donors are more likely to donate to disaster-relief efforts.	
Title: Visibility Graphs for Sales Forecasting		
<u>Authors</u> Saikat Das*, SPJIMR Mumbai; Janakiraman Moorthy*, SPJIMR Mumbai; Raghuram R*, SPJIMR Mumbai	We transform time series into a complex network for sales forecasting. The approach is described briefly with a small dataset and applied to US automobile sales data. Network representation of univariate and multivariate time series offers new insights into the influence patterns in the empirical data. We use a range of network metrics to predict future sales. It is a novel method that departs from traditional time series analysis and captures patterns of influences from several periods based on visibility. We draw contributions from contemporary network science and extend it to the marketing and sales domain. For academicians, it is an emerging and rich field that offers an opportunity to conceptualize and analyze complex phenomena. Besides improved analytical tools, visualization of time series as a network helps better interpretation. Given that the network paradigm is gaining traction in marketing research (Ameri et al. 2022; Leng et al. 2022; Yang et al. 2022), current work opens up a new opportunity to apply in forecasting. We also discuss avenues for future research at the end. For practitioners, network forecasting is a new tool that approaches the forecasting problem from a different perspective and offers an opportunity to triangulate with other methods for increasing validity. Further, visual representation provides a better understanding of the data and can act as an exploratory analysis tool. We offer a simple toy example for easy comprehension and demonstrate using a real-life data set.	
Title: 'Oops, Mercury Did It Again'! Examining Consumer Behaviour During Mercury Retrograde Phases		
<u>Authors</u> Saravana Jaikumar, IIM C; Bibek Guha Sarkar*, IIM C	Over the past couple of decades, the market for astrology has seen considerable growth with beliefs related to astrological phenomena such as Mercury retrograde becoming mainstream and dictating how consumers go about making decisions in their lives. According to proponents of astrology, Mercury retrograde is a time where things go wrong and people are advised to not make any major decisions (including purchase-related decisions) during this period of time. The current study delves into this intriguing cross-disciplinary realm of astrology and consumer behaviour by investigating the impact of astrological beliefs linked to Mercury Retrograde on consumer behaviours, a domain that has received limited scholarly attention from marketing and consumer research scholars. Employing a mixed-methods approach that includes an exploratory qualitative analysis of consumer discourse on Reddit as well a quantitative analysis of a purchase-specific secondary dataset from DMEF, this research establishes initial foundations on how Mercury retrograde can impact consumer behaviours related to purchase. The findings of our study hold crucial theoretical as well as managerial implications.	
Title: Do Stronger IPR Incentivize Female Participation in Innovation? Evidence from Chinese AI Patents		
<u>Authors</u> Shubhangi Agrawal, University of Edinburgh; Sawan Rathi*, IIM A; Chirantan Chatterjee, University of Sussex Business School	Do stronger intellectual property rights (IPR) incentivize female participation in innovation? We provide new evidence on this question using a unique database of Artificial Intelligence (AI) patents publicly shared by the USPTO. Our identification strategy leverages China's WTO TRIPs accession, which led to a stronger IPR in 2002. We find a significant rise in the number of female inventors and an increase in the number of patents with females in the inventor team vis-a-vis a control group of countries. We also found that post a stronger IPR, the quality of patents improved for Chinese AI patents with female inventors in the team. Results are robust controlling for unobserved heterogeneity at country, technology class, and time. Additional robustness checks with synthetic control, coarsened exact matching, randomized inference and alternative control groups support the benchmark findings. Our results highlight that stronger IPR can be helpful in better gender division of labour thus benefitting society and innovation.	

Title: Should I wait more before asking my customers to review my product?		
<u>Authors</u> Astha Singhal*, IIM K; Praveen Sugathan, IIM K;	Customers' increasing reliance on online reviews for purchasing decisions has led firms and e-commerce platforms to encourage their customers to review products. While the usual practice followed by firms and e-commerce platforms is to ask for a review immediately after purchase, the present research suggests otherwise. Using archival data, the current study examines the effect of the duration of product use before writing a review (PUBR) on consumption behaviour, specifically continued product usage. The study uncovers a positive relationship between PUBR and continued product usage, and a moderating effect of affective and cognitive feelings generated while writing the review on the relationship between PUBR and continued product usage. The study product usage by the reviewers.	
Title: How to Incentivize Sales Managers: Learnings from a Field Study		
<u>Authors</u> Aritra Bhattacharya*, ISB; Raghu Bommaraju, ISB; Dr. Rob Waiser, University of Kansas;	While there is a vast literature on the design of incentive schemes for sales representatives, little theoretical or empirical research in academia has examined sales managers' incentive structures. In practice, however, the design of managerial incentives is an important issue that firms grapple with – for example, whether a manager's incentives should be based on achieving a cumulative sales target (the sum of targets across territories they manage) or instead be a function of the average bonus earned by their salespeople. The authors address this question by leveraging a quasi-experiment in which a pharmaceutical firm in India switched from a cumulative-target scheme to an average-bonus scheme for its sales managers. Results indicate that managerial incentives linked to the average salesperson bonus can not only enhance performance but also foster performance balance among the firm's territories as compared to incentives contingent on cumulative target achievement. The authors also examine the moderating impact of the number of salespeople in a territory. Additional evidence using secondary data on monthly revenues of all pharmaceutical firms in India attests to the robustness of the results. These findings provide insights into the design of sales managers' incentive structures.	
Title: Great Remains Great, Poor Becomes Poorer? Examining the Influence of Platform's Signaling Cues on Provider Performance		
Authors Dhrithi Mahadevan*, SPJIMR Mumbai	Customer experience is a growing phenomenon of interest and is increasingly challenging to understand in emerging access-based businesses involving multi-actor interactions. This paper seeks to study how platform-based signaling interventions influence the impact of customer experience on provider performance. We employ a mixed-method approach that combines text mining and panel data fixed effects regression. Our results suggest that providers who have not been signaled by the platform are hurt relatively more from negative CX than signaled providers. However, no significant differences are observed in the case of positive experience. However, in the presence of high valence, the effect of negative customer experience on provider performance is reduced, indicating that peer-reviewed valence can act as a substitution to platform signaling. Additionally, we find that the presence of high variance significantly improves the performance of signaled providers (viz-a-viz non-signaled providers) in the case of positive CX. Our research provides specific insights for access-based firms to manage the customer touchpoints and improve CX.	
Title: Unraveling Prosumption Behavior for Online Reviews during Environmental Uncertainty: A Stimulus-Response Perspective		
<u>Authors</u> Manisha Rathi*, IIM B; Adrija Majumdar, IIM A; Sawan Rathi, IIM A	Online reviews are effective information-sharing tools due to their word-of-mouth characteristics. The extant literature has largely considered reviews as independent variables influencing business performance, while the environmental aspects that affect those reviews are under-studied. We examine the impact of environmental uncertainties due to COVID-19 on change in review prosumption (production and consumption) behavior. Drawing upon the Stimulus-Response theory, with COVID-19 as the stimulus and prosumption as the response, we look at the change in online review characteristics. We apply the difference-in-differences (DID) methodology to the online reviews of restaurants in two cities in the US. On the production side, we find a decrease in review sentiments, increased usage of COVID-related terms, and writing complexity. On the consumption side, we find an increase in review rating and usefulness and a decrease in funniness. The results are robust with Coarsened Exact Matching and falsification tests. We conclude by discussing implications and contributions.	
Title: Government as Marketer: The Labor Market Effects of Product Promotion by the Government		
<u>Authors</u> Neeraj Katewa*, IIM L; Tanmoy Majilla, Plaksha University; Sangeeta D Misra, IIM L	Traditionally, product promotion has fallen under the purview of marketers. Rarely do governments act as conventional marketers. In this paper, we assess the labor market effects of a government-led product promotion in the Indian state of Uttar Pradesh. The policy promotes one specific product in each district in the state. The breadth of the program offers a rare opportunity to evaluate how product promotion affects those who work for the promoted products on a wider scale. Using a large, nationally representative, high-frequency household survey, we employ a difference-in-differences strategy by exploiting plausible exogenous district and product level variance due to program implementation. We find evidence of a short-term decline in the earnings of associated workers. Mechanism analysis indicates that product promotion policy draws an influx of intra-industry inter-district migrants, resulting in labor market congestion. This causes a decline in income for the affected workers. However, over time and as the program evolves, the negative impact on the job market begins to diminish, and the workers begin to realize the benefits of the program. Perforce, despite the fact that government product promotion may adopt a more holistic approach and have broader social goals, it is imperative to account for the short-term negative effects caused by migration shocks.	