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## Service Spotlights

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### **Transforming Through Unbundling: Visualizing the Global FinTech Ecosystem** (p. 379)

The infusion of digital technology into financial services, also known as FinTech, is creating a massive disruption of the entire financial sector. Services traditionally offered by incumbents are now rapidly unbundled by a growing set of startups, leading to new models of collaboration and a significant shift in power. Using data of nearly 7,000 companies across 24 FinTech market segments, this study examines the structure of the FinTech ecosystem. Analyses and visualizations reveal a highly skewed global footprint of FinTech activities, differential growth patterns across ecosystem segments, highly interdependent network structure, and a variegated nature of investments and acquisitions led by key incumbents and venture capital firms. The study provides important structural insights into the emergence and evolution of a technology-centric service ecosystem and reveals the competitive challenges incumbents face when exposed to technological disruptions and business model changes.

### **Determinants for Value Cocreation and Collaborative Paths in Complex Service Systems: A Focus on (Smart) Cities** (p. 397)

In the last few years, service science has opened a debate on the need to adopt new approaches to better understand emerging social and economic dynamics. Different research pathways are now considering the management of complex service systems (CSSs). In this paper, the authors focus attention on the phenomenon of "smart cities" as an example of CSSs with the aim of investigating which ways actor perceptions affect opportunities and willingness for value cocreation and collaborative action. Using a survey of a random sample of 374 providers and users of a city service platform in the city of Brno, Czech Republic, actor perceptions were analyzed, and through structural equation modelling, the relationships between actor perceptions and willingness to build value cocreation and collaborative paths were tested.

### **Development of a Lifelogs-Based Daily Wellness Score to Advance a Smart Wellness Service** (p. 408)

Smart wellness services collect various types of lifelog data, such as the number of steps taken and sleep duration, via smart devices. However, most existing smart wellness services simply display each individual lifelog to users, limiting their ability to support overall user understanding. In this article, the authors develop a lifelog-based daily wellness score (LDWS) to resolve such limitations by combining various lifelog data to calculate a score that represents overall daily health behaviors. LDWS was developed as part of a smart wellness service for college students in collaboration with an IT company. Lifelog data of 41 college students were collected through a four-week trial and were subsequently fitted to a random effects model. Based on the model estimates, LDWS was determined by linearly aggregating seven behavior variables. The utility of the developed LDWS was validated through a second trial of the service. The authors also discuss other potential uses of LDWS and the factors to be considered for developing a lifelog-based wellness score for a smart wellness service.

### **Encouraging Innovations of Quality from User Innovators: An Empirical Study of Mobile Data Services** (p. 423)

Can mobile data service platforms support users to make quality mobile apps? If so, what should the platforms do to encourage quality mobile data services from users? Cognitive evaluation theory is useful in explaining human behaviors based on individuals' innate psychological needs. In this article, the authors use this theory to explain how platforms can design their features (i.e., software development tools and design rules and regulations) to fulfill user needs for competence and autonomy. As a result, users can make mobile data services of better quality. The authors propose that toolkits can support the need for competence in terms of ease of effort and idea exploration, whereas regulations in design autonomy can support the need for autonomy in terms of decision-making autonomy, scheduling autonomy, and work method autonomy; and they find that indeed toolkits supported idea exploration and ease of effort, decision-making autonomy, and work method autonomy, enhancing the quality of users' service innovations. The insights for managers are that platforms can mindfully design their regulations and tools to support users to develop quality innovations, and that platform regulations and tools should be developed complementarily rather than separately.

### **Insight into Gender Differences in Higher Education: Evidence from Peer Reviews in an Introductory STEM Course** (p. 442)

Gender inequality in STEM has been a long-standing issue in U.S. higher education. Despite this known fact, educators have paid little attention to how course design can impact the participation and experience of under-represented groups. This study builds upon the increasing use of peer feedback in STEM courses and examines how anonymity can improve the quality of peer feedback. The authors conduct an experiment in a large introductory undergraduate statistics class for computer science and engineering majors and use machine learning and sentiment analysis to assess how anonymity alters the nature of peer feedback for team-based video projects. A unique feature of the peer-review context is that the video teams were either gender balanced or imbalanced. They find that women exemplify greater changes in feedback behavior as anonymous reviewers than men, providing more even positive and negative comments in their anonymous reviews but targeting the negative feedback toward gender imbalanced teams. The insight for management and educators: STEM course designs need to consider the implications of gender imbalance on students' learning experiences. In courses with peer reviews, anonymity may enhance the ability of women to participate more equally in their courses.

### **Professional Service Jobs: Highly Paid but Subject to Disruption?** (p. 457)

Professional service jobs are attractive because they pay well and, because of advanced skill requirements, have been relatively resistant to disruption. This research considers the potential for highly skilled professional jobs to be taken over by less-skilled workers, perhaps with the assistance of advanced artificial intelligence technologies. We consider jobs in healthcare, higher education, legal services, and management and show some areas in which less-professional workers may be able to do the work of more professional counterparts. We specifically focus on two types of job characteristics that other research suggests inhibit automation and justify advanced professional training. The first is low task structure with less-structured tasks being more likely to require professional attention and less likely to be performed by less-trained workers or by automation. The second is high decision impact, supposing that high-impact jobs are more likely to justify the higher pay of professional workers. Our empirical results show that professional jobs, in some ways, are distinct and require the advanced training that leads to higher pay. In other ways, it appears that paraprofessionals who are paid less could do the professional jobs. Professional jobs may not be as disruption-resistant as was previously thought.