Information Technology Firms: Creating Value through Digital Disruption

Panel

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ABSTRACT
This panel will describe the diverse ways in which information technology (IT) firms organize for and manage disruptive technologies to enhance company market value. The panel will include two practitioners offering very different perspectives and strategies on how their respective IT firms create value using disruptive technologies. First, Aaron French (founder of Sociaible, a social networking site startup) and Ben Pace (Chief Financial Officer of C-Spire) describe their firm’s strategies for digital disruption. Next, Kai Larsen will offer his perspective on how he anticipates that a specific emerging disruptive technology (automated machine learning) may be exploited to create value for IT firms. Finally, Stacie Petter (Baylor University) will talk about the complexities academics face developing frameworks and other artifacts of common understanding in a sector with so much strategic heterogeneity.

Keywords
IT Firms, Digital Disruption Strategies, Disruptive Digital Technologies

PANEL OVERVIEW

IT Firms
IT firms are those that create value, either through direct sales or user attention, by using digital disruption. In fact, IT firms are often rapidly created for the purpose of disrupting industries (Greenwood and Gopal, 2015). Such endeavors are often motivated by the enormous market valuations of IT firms Apple, Amazon, Microsoft, and Facebook. Each of these examples illuminate how IT firms often operate in digital-only workplaces where competitive forces require them to initiate their own digital disruptions in order to maintain performance and a public image of innovativeness (Dery, Sebastian, & van der Meulen, 2017). Resulting digital business models are transforming all sectors of the economy, especially in the delivery of information-based products such as newspapers (Karimi and Walter, 2015), media (Gottfried, 2016) and advertising (Wilmot, 2017). However, significant digital disruptions have also been observed in capital-intensive sectors, such as in hospitality (Kane, 2017), automobile manufacturing (Mocker and Fonstad, 2017), and agriculture (Economist, 2014). For this reason, digital disruption should be addressed by strategy makers in all firms (Vermeulen, 2017).

The Digital Disruption Strategies of IT Firms
It is widely accepted that technology-based firms must innovate in order to survive and prosper (Banker, Wattal & Plehn-Dujowich, 2011). However, too little research has been done on strategies aimed at digital disruption. For example, perhaps the most prominent digital disruption strategy for IT firms is investing in R&D (Jha and Bose, 2016). Another strategy is to leverage internal IT firm competence by offering operations for outsourcing (Wickramasinghe & Jayaweera, 2011). Another common way IT firms may manifest market value is to be bought during merger and acquisition events (Change and Cho, 2017). Data analytics has become a digital disruption strategy affecting firm value that is challenging to attain (Chen, Preston, & Swink, 2015).
Heterogeneity Conclusion

The panel will emphasize the heterogeneity of the digital disruption strategies of IT firms. Further study may reveal some surprising structural differences between seemingly direct competitors. For example, two gaming companies (Nintendo and Electronic Arts) may appear similar to casual observers. Looking deeper into how these IT firms create value using digital disruption, their stark differences are highlighted. Nintendo’s revenue derives almost entirely from hardware sales, while practically all of the revenue captured by Electronic Arts is via software sales. This difference shows that value creation is done very differently by IT firms that are both heavily involved in digital disruption. The panel will also discuss specific disruptive technologies, such as mobile payment platforms (Kazan, Tan, Lim, Sørensen, & Damsgaard, 2018) and automated machine learning. Because the digital disruption strategies are potentially unique to each company, the panel will conclude by calling for further research on this topic.

PANEL DESIGN

The Panel Chair will briefly introduce the topic and all panelists. The Chair will then summarize the background of a panelist as it pertains to the topic and then pose a question. The panelist will answer the question. This process will be repeated once for each panelist. The first panelists will be practitioners (Aaron French and Ben Pace) who will describe their company’s strategies for creating value through digital disruption. The third panelist will be Stacie Petter, who will delve into the challenges and opportunities facing academics in understanding the heterogeneous approaches to exploiting digital disruption. The fourth panelist will be Kai Larsen, who will focus on Automated Machine Learning (AML), which promises to radically alter organizations and individual behavior. He will anticipate how IT firms will exploit AML to create value. The Chair will then open the floor for questions. Finally, the Chair will make concluding remarks and acknowledge the panelists for their participation.

PARTICIPANTS

Gary F. Templeton, Mississippi State University, Panel Chair

Dr. Gary F. Templeton is an Associate Professor of Business Information Systems in the College of Business at Mississippi State University. He received his PhD in Management Information Systems at Auburn University. He has published in MIS Quarterly, the Journal of Management Information Systems, the Journal of the Association for Information Systems, the European Journal of Information Systems, Decision Support Systems, the Journal of Information Systems, Communications of the ACM, and other IS journals. Dr. Templeton contributes to the panel his research focus on the theory and practice of IT firms. He is currently researching a wide array of studies pertaining to the topic, including the development of theories for predicting IT firm market values and bankruptcies using qualitative and messy quantitative data.

Aaron M. French, University of New Mexico and Sociabile (Founder)

Dr. Aaron M. French is an Assistant Professor of Management Information Systems in the College of Business at the University of New Mexico. He received his PhD in Business Information Systems at Mississippi State University. His academic research has been published in the Journal of Information Technology, Information & Management, Behaviour & Information Technology, Journal of Computer Information Systems, Communications of the Association for Information Systems, and Pacific Asian Journal of the Association of Information Systems. His research interests include social networking, cross-cultural studies and emerging technologies. Dr. French will contribute his vast understanding of social media to the panel. He is actively reengineering his social networking site startup, Sociabile. In this role, he actively evaluates emerging technologies to better enhance user experiences to promote adoption and usage continuance of the Sociabile app.

Ben Pace, C-Spire (CFO)

Ben Pace is the Chief Financial Officer of C-Spire, headquartered in Ridgeland, MS. He brings extensive and broad practical experiences evaluating disruptive technologies to the panel. He evaluates information technology as part of a formal capital budgeting process for its impact on shareholder wealth in addition to customer satisfaction. He also studies the value propositions of information technologies his function uses to interact with other organizational stakeholders. Finally, C-Spire is the largest private wireless service provider (and sixth overall) in the United States (TELCOMA, 2015). The company is known as an innovation leader by using cloud-based analytics, metadata tagging, video-to-data (V2D), and other technologies in its 30-year history to create firm value.

Kai R. Larsen, University of Colorado, Boulder

Kai Larsen is an Associate Professor of Information Systems at the Leeds School of Business at the University of Colorado, Boulder. He is also a courtesy faculty of Information Science in the College of Media, Communication
and Information. He received his PhD from the Nelson Rockefeller College at SUNY Albany. Dr. Larsen contributes to the panel a deep understanding of specific disruptive technologies. With Daniel S. Becker, he recently had a book entitled *Automated Machine Learning for Business: An Introduction to Accurate, Easy, and Fast Analytics* accepted for publication by Oxford University Press. Kai is most known for providing a practical solution to Edward Thorndike’s (1904) Jingle Fallacy (Larsen and Bong 2016; *MIS Quarterly*) and for his contributions to the Semantic Theory of Survey Response (STSR), which holds that results of surveys using attitude scales (such as the Likert scale) primarily reflect the linguistic relationships between survey questions.

### Stacie Petter, Baylor University

Dr. Stacie Petter is an Associate Professor at Baylor University. She received her PhD from Georgia State University. She has published in *MIS Quarterly*, the *Journal of Management Information Systems*, the *Journal of the Association of Information Systems*, the *European Journal of Information Systems*, and *Information & Management*. She is a current Co-Editor-in-Chief of *The Data Base for Advances in Information Systems* and is Senior Editor for the *AIS Transactions on Replications Research*. She brings an extensive publication record on topics pertinent to creating value through information technology development processes: software project management, evaluating information system success, and knowledge management and transfer.

### REQUIRED EQUIPMENT

Computer, data projector and screen, MS-PowerPoint, microphones and speakers

### ACKNOWLEDGMENTS

We wish to thank all of the organizers and volunteers who made the AMCIS 2018 experience a good one.

### REFERENCES


