FORUM

THE JOURNEY HAS JUST BEGUN

This special issue contributes to incorporating research utilizing Big Data —in particular, the disciplines of information systems and supply chain—into mainstream academic research. It also extends Big data's contribution to establishing predictive analytics-based research as theory building. Big Data brings many features to academic research that, if properly understood, can shift the approach of most research towards that of the classical academic approach, which focuses on building and testing theory. The academic approach to theoretical research seeks to explain phenomena by applying frameworks, which are sourced from different disciplines such as microeconomics, operations research, organizational theory, psychology, and sociology.

Of particular interest to academic researchers and practitioners alike is the capability to analyze, explain, and predict consumer behavior. Most retail sales still occur in stores, and consumers who purchase online also visit stores before or after a sale. Presently, the majority of store shoppers use mobile devices to perform research on products, communicate with family and friends, and visit sites, which provide data - often, Big Data - to facilitate the shopping experience (Fildes & Kolassa, 2018). Thus, not only transactions or lack thereof, but also all technological aspects of the shopping experience, can now be extensively modeled. Much of this data is now starting to become available to academic researchers. Therefore, technology, particularly data collection, processing, and dissemination of Big Data, is making significant contributions in the global marketplace.

These new technologies and trends in Big Data are emerging in local, regional, and global consumer behavior analysis and extending throughout supply chain operations. Big Data is changing the rules of business—from the design and prototyping to the production and distribution of products and services. Academics now have what they have long required: sources of massive quantities of data. For decades, consumer behavior investigations in journal publications were limited to researcher-generated datasets. The larger Big Data datasets offer academic researchers and practitioners the means to become more aware of relevant updates on a real-time basis. Researchers no longer need time to develop a research plan - which includes specifying frameworks, developing models, and seeking permissions - to perform investigations on small samples. Researchers can now investigate multiple models and frameworks of theories integrated from several disciplines. The means to test explanatory as well as predictive theories (including grounded theory) is now available to researchers around the globe. Moreover, every investigation can be rapidly replicated and verified as the data is available to all academics, allowing a more productive and creative global research environment (Johnson, Gray & Sarker, 2019).

This special issue explores different methods to tackle on relevant analytical challenges. This exciting journey has just begun, and will certainly lead to interesting research avenues.

WILLIAM LEKSE[1]
wjlekse@katz.pitt.edu
ORCID: 0000-0002-9972-3393

[1]University of Pittsburgh, Joseph M. Katz Graduate School of Business & College of Business Administration, Pittsburgh, PA, United States of America

REFERENCES

Fildes, R. A., & Ma, S., Kolassa, S. (2018). Retail forecasting: Research and practice. *Management Science*. Working paper. Unspecified, Lancaster, UK.

Johnson, S. L., Gray, P., & Sarker, S. (2019), Revisiting IS research practice in the era of big data, Information & Organization, *29*(1), 41-56. doi:10.1016/j.infoandorg.2019.01.001