Special Issue Introduction

Guest Editors

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We are pleased to present this special issue of the *Federation of Business Disciplines Journal (FBDJ)* for 2019 featuring papers presented at the Southwest Decision Sciences Institute (SWDSI) conference.

The issue contains six papers. Each paper is unique in its own way from perspective to methodology to content area. The research spans using different forecasting techniques and analysis of big data to better implementation of information systems through project management and employee professional development. The issue concludes with a teaching case related to sustainability and related financial/tax benefits. We believe this issue highlights the uniqueness of the decision sciences field and SWDSI conference where all are welcome.

Matt Lindsey and Robert Pavur contribute to the body of knowledge related to forecasting intermittent demand. The paper "Effects of Delayed Demand on Intermittent Forecasting" examines the impact of demand that occurs after a delay for an item that normally experiences a long time between demands ("lumpy" demand patterns). It expands the significant work previously done on the basic assumptions and violations of the assumptions of "Croston's Method" for forecasting demand for slow moving items and demonstrates its usefulness with a delayed demand pattern.

Christy Peel and Mark McMurtrey look at the expanding concept of big data and the inherent issues with the volume of data organizations must manage. In "Big Data and Arkansas Analytics," they examine various options for using analytics to turn raw data into actionable information. This leads into a discussion of how analyzing big data has helped better manage the Arkansas health payment system. They also look at how big data and analytics were used to manage water leaks across 175 miles in one Arkansas water district. Lastly, they consider how predictive analytics can be used by a university to help students with better course selection.

Pamela Rogers and Robert Pavur delve into the world of airline safety in "Airline Safety Data: How Predictable Are Accidents and Fatalities?" They analyze airline safety data since 1938 to determine whether airline accidents and fatalities can be predicted more accurately using traditional forecasting techniques (ARIMA) versus machine learning (artificial neural network) models. Their findings show that generally the neural network models perform better than the

ARIMA models. More accurate forecasting models could help airports and others determine where additional capacity is needed in the air travel system.

Arun Madapusi and Daniel Ortiz investigate how project management enhances the performance benefits when implementing an ERP system in "Investigating the Influence of Project Management on ERP System Integration." In the wake of many ERP implementation failures, they are interested in helping firms determine better ways to implement ERP systems to reap expected performance benefits. They develop a model and test it using survey data collected from 231 firms in India. Using factor analysis and regression analysis, they find that performance benefits increase over time for ERP system implementations and that project management is a crucial element to realizing those benefits more quickly.

Craig McMahon and Mark McMurtrey focus on determining whether leadership training is intended to just enhance organizational performance or whether it should be intended as an investment in the organization's people in their paper "Operational Management and the Leadership Indifference Epidemic." They examine issues surrounding manager/leader indifference with regard to making sure everyone is focused on doing a good job and meeting customer needs. They make several suggestions about ways firms can reduce managerial and employee indifference. By identifying those employees who can become leaders and who resist being indifferent, they suggest that firms can counter much of the resulting negativity in the workplace.

Nathan Oestreich, H. Leon Chan, and Matthew Kerr present a teaching case for tax and managerial accounting in "Sunny Expose: A Tax and Managerial Accounting Case." The case looks at the potential tax benefits in green residential products. The intent of the case is to look at whether the tax incentives the producer receives are passed on to homeowners. Students will apply cost/benefit analysis for the homeowner and complete basic capital budgeting. The case walks through the process of comparing a power purchase agreement to purchasing the system outright from the producer.

We appreciate the Southwest Decision Sciences Institute and its conference participants who helped make this special issue possible. We are grateful to the Federation of Business Disciplines bringing together academics and practitioners to explore tough questions and search for solutions. A sincere thank you to Mary Fischer, *FBD Journal* Editor, for the opportunity to contribute to the sharing and dissemination of research across disciplines.

Hopefully you will enjoy this special SWDSI issue of the *Federation of Business Disciplines Journal* and it inspires you to continue asking questions and pursuing answers to help organizations and leaders learn and make better decisions.

ABOUT THE EDITORS

Pamela Rogers is an Aassistant Professor at Stephen F. Austin State University. She earned a PhD in operations and supply chain management from University of North Texas. Her research interests include manufacturing, supply chain management, quality, and business education, which is published in journals such as *the International Journal of Production Research and Decision Sciences Journal of Innovative Education.*.

Matthew Lindsey is an Associate Professor of Management and Chair of the Management and Marketing Department at Stephen F. Austin State University. He holds a PhD from the University of North Texas. His primary research area is inventory forecasting models specializing in models

for items with intermittent demand. Dr. Lindsey's primary teaching interest includes operations management and management science.