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Understanding the Path to Value Creation with Business Analytics

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This study seeks to understand the path to creating value with business analytics. We define business analytics as the application of technology, techniques, and human talent to diverse data to gain insights and make data-driven decisions that enhance business performance. Although business analytics has gained traction in recent years, scholarly literature on how analytics can lead to competitive advantage and business value are scarce (Grover et al. 2018). To understand how firms create value with analytics, we rely on the social shaping of technology perspective (Williams and Edge 1996) as a synthesizing device.

This study is based on a 2.5 – year multi-case study of a large US-based distribution firm that partnered with a technology provider, to implement analytics to improve its profit margins. During this time, we observed four different analytics projects, i.e., predictive analytics, competitive intelligence, trailer advertising, and driver retention. The predictive analytics project focused on predicting product price increases so the distributor could earn a price change gain. The competitive intelligence project was aimed to garner information on critical competitors to help make more informed decisions when bidding for new business. The trailer advertising project objective was to increase revenue by using the sides of delivery trailers as mobile billboards. The project used a combination of the internet of things with location-based services from mobile devices to show advertisers, the number of viewers, and demographics. Furthermore, the driver retention project focused on reducing the high turnover rate with truck drivers.

We conducted interviews, observed meetings, and reviewed work documents to understand why some of these projects succeeded, and others did not. We are currently analyzing our data with NVivo12 and hope to make contributions to the analytics literature. Our preliminary analysis show mechanisms such as experimentation and co-evolutionary learning, i.e., learning by doing play an essential role in the value creation process with business analytics.

References

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