**CONCLUSION**

The entrepreneurial environment is characterized by high levels of uncertainty about the markets that entrepreneurs wish to enter .We develop a dynamic data analysis technique based on a POMDP model to answer our research question about how to analyze imperfect market data for business opportunity evaluation, while accounting for the entrepreneur’s individual risk preference and operational shortages. Specifically, we obtain a probabilistic information measure in the form of an emission matrix. That measure enables insights from an observable process related to external factors, which, in turn, helps assess the state of the hidden market. Owing to Markovian modulation of the POMDP model, the findings of our dynamic model are more realistic than standard static models. Whereas one can derive a closed-form solution for certain probabilistic measures using a POMDP, closed-form analytical expressions cannot be obtained for certain cases, such as situations where the investment dollar amount determines the level of

Information gain. Therefore, our algorithm numerically mimics the POMDP-based model. We offer insights from our numerical analysis in response to our research question on the impact of the entrepreneur’s risk preference and operational shortages on the data-driven investment portfolio. Rather than pursuing the highest expected returns, an entrepreneur may choose perfect information, risk hedging, or market controlling investments,

based on his/her cash level and risk preference, in order to maximize

the venture’s prospects.