MANAGEMENT EMOTION AND FIRM'S STRATEGIC IT INVESTMENT

Weijun Zheng, College of Business Administration, California State Polytechnic University Pomona, 3801 West Temple Avenue, Pomona, CA 91768, weijunzheng@cpp.edu
Nan Wang, School of Business, Eastern Illinois University, 600 Lincoln Ave. Charleston, IL 61920, nanwang@eiu.edu

ABSTRACT

Firm's strategic IT investment is an investment decision managers make regarding strategically deploying and developing IT assets and capabilities. It reflects managers' perception of IT's strategic role in business value creation and signals firm's IT strategic direction to the markets. As firms' decisions on strategic IT investment are fundamental in the shaping of their information systems, it would be interesting and important to ask what factors are shaping those strategic IT investment decisions? Existing literature has predominantly taken a rational decision-making view in IT strategic investment, in which managers, when facing highly uncertain strategic IT decisions, would prefer an investment with higher payoff and lower risk [1]. However, it is questionable that management as human being are immune from the influences of psychological and emotional factors when it comes to strategic IT investment decision. In fact, it is well known that psychological and emotional factors played big roles in financial market when it comes to investment decisions, evidenced by many abnormal effects in investment decisions due to psychological and behavioral factors, including overreaction, group behavior, the emergence of speculative bubbles, thee excessive volatility of the stock market, and so on [2]. Similarly, the past IT business value research has reported mixed results in which rational IT investments are not always paid off [3, 4]. In this research, we argue that if management judgement can be influenced by their emotion when making strategic IT investment. Our research question is thus: Will and how can management emotion affect firms' strategic IT investments?

Using the Aberdeen Technology Datasets and COMPUSTAT database, we generated our sample sets consisted of 35 companies from the retail industries in a 6-year period (i.e., (2016-2021) fiscal years). For each of the companies, we found the annual reports downloaded from SEC website and performed sentimental analysis to retrieve emotion scores for each company at each year. We then applied regression modeling on the generated emotion scores and firms' next year IT spending data from Aberdeen Technology Datasets. Our results show that there are significant relationships between the two constructs. Specifically, positive emotion promotes more IT investments, especially more risky IT investments. While those IT investments can generate unexpected (abnormal positive or negative) return, their inherent risk may not grantee investment payoff. Those findings suggest that the role of management emotion can not be ignored in IT strategic investment. Further research is therefore needed in understanding impacts of management emotion in IT strategic investment.

REFERECES

- 1. Brav, A. and J.B. Heaton, *Competing theories of financial anomalies*. The Review of Financial Studies, 2002. **15**(2): p. 575-606.
- 2. Huang, J.Y., J.C. Shieh, and Y.-C. Kao, *Starting points for a new researcher in behavioral finance*. International Journal of Managerial Finance, 2016. **12**(1): p. 92-103.

- 3. Carr, N.G. (2003) IT Doesn't Matter. Harvard Business Review, 81, 41-49.
- 4. Brynjolfsson, E., *The productivity paradox of information technology*. Communications of the ACM, 1993. **36**(12): p. 66-77.