

# CHEAPER, BETTER, FASTER: THE INTERCONNECTIVITY BETWEEN AUTOMATION, OUTSOURCING AND ORGANIZATIONAL EFFECTIVENESS

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# INTRODUCTION



Goal of this Research is to Connect...


Automation

Outsourcing

Impact on Organizational Efficiency

# Introduction - Automation

- Automation has changed the business game.
- As of 2015, 45% of business processes can be automated w/help from artificial intelligence & robots.
- Automation of business processes has helped the mortgage industry, emergency room staff with logistics, sales organization to generate leads faster (Chui et. al, 2015).



# What informs this research? Outsourcing

1. (Belcourt, 2006) noted that outsourcing has been linked to a 50% reduction in repetitive administrative projects and a 40% percent increase in an organization's strategic focus.
2. Outsourcing helps a business thrive and survive and continues to be an important strategic tool for firms to adopt (Freytag, Clarke, & Evald, 2012)
3. Outsourcing is advantageous in helping organizations to improve performance, realize cost savings, flexibility and access to high skilled workers (Tayauova, 2012)
4. Improves service levels, access to advance technology and strategic experience (Belcourt, 2006)

# Outsourcing for business practices


5. Liu & Trefler (2008) noted that for the first time, United States skilled workers were in a more competitive environment with educated but lower paid workers were competing for the same opportunities.

**6. *Outsourcing* or *off shoring***-providing services to a third-party or transferring work, responsibility and decisions to others because it is cheaper, faster and better (Tayauova, 2012)

# Business Case of Research and Focus



- The research focuses on the argument that younger firms who outsource and use automation have a lower level of organizational effectiveness, compared to mature firms who outsource and use automation have a higher level of organizational effectiveness.
- The *liability of newness* perspective based on the notion that older organizations have an advantage over younger organizations or there is a greater risk. (Stinchcombe, 1965; Rabbiosi & Santangelo, 2013).



# Automation Key Factors

- Automation has changed the business game.
- As of 2015, 45% of business processes can be automated w/help from artificial intelligence & robots.
- (Chui, Manyika, & Miremadi, 2015) believe that leaders and organizations who embrace automation will continue to have a competitive advantage over the competition.
- In the current environment, automation can enhance business processes and make retrieving information more efficient.
- Chui et al. (2015) “the level of technical automation currently in use can already match, or even exceed, the median level of human performance required” (2015, page 3).



# Automation (Process)

1. Automation is changing occupations and redefining business processes and how future jobs are defined (Chui et al., 2015).
2. As of 2015, 45 percent of work related business process activities can be automated with the help of artificial intelligence and robots.
3. As modeled by (Chui et al., 2015) demonstrated that an increase in automation also increased quality business output at a significant benefit of 3 to 10 times the cost.



# Theoretical Framework

- *Transaction cost economics theory (TCR) and resource dependency theory (RDT) explain and define the relationships.*
- Transaction cost economics theory approaches the study of economic organizations and transaction costs as they relate to efficiency and contracting as the basic unit of analysis and structure (Williamson, 1981).
- Resource dependency theory is where organizations transact with each other to secure resources needed for environmental contingencies and negotiation exchanges (Pfeffer & Salancik, 2003).



# Outsourcing Contributes to Business Efficiency

- Improved service levels, access to advance technology and strategic experience contributes to business success (Belcourt, 2006)
- Key drivers for outsourcing are -----**Managing costs, increasing profitability and innovation** (Vaxevanou & Konstantopoulos, 2015)
- Some of the largest outsourcing is professional services, technical services, IT, legal services and engineering functions (Liu & Trefler, 2008)
- International focus --- China, India. Before 1995 China and India has very little outsourcing – that has since changed.



# Organizational Efficiency


*Organizational effective has been studied by Georgopoulos and Arnold S. Tannenbaum (1957) who noted “organizational effectiveness as a complex problem.”*

Four approaches used to classify organizational effectiveness: goal model, Internal process, open system model and multiple consistencies model (Matthew, 2011).

*And “organizational effectiveness was conceptualized as the extent to which an organization, as a social system, fulfills its objectives without incapacitating its means and resources and without placing undue strain upon its members.”*

# Challenges of Organizational Efficiency

1. Organizational efficiency is difficult to measure because of lack consistency and continues to be elusive in defining and measuring organizational efficiency.
2. There is limited research to effectively measure effectiveness in organizations.



# P-ep factor- (New) Organizational Effectiveness

- *P-ep factor* which is short for *Performance Effect Factor*.

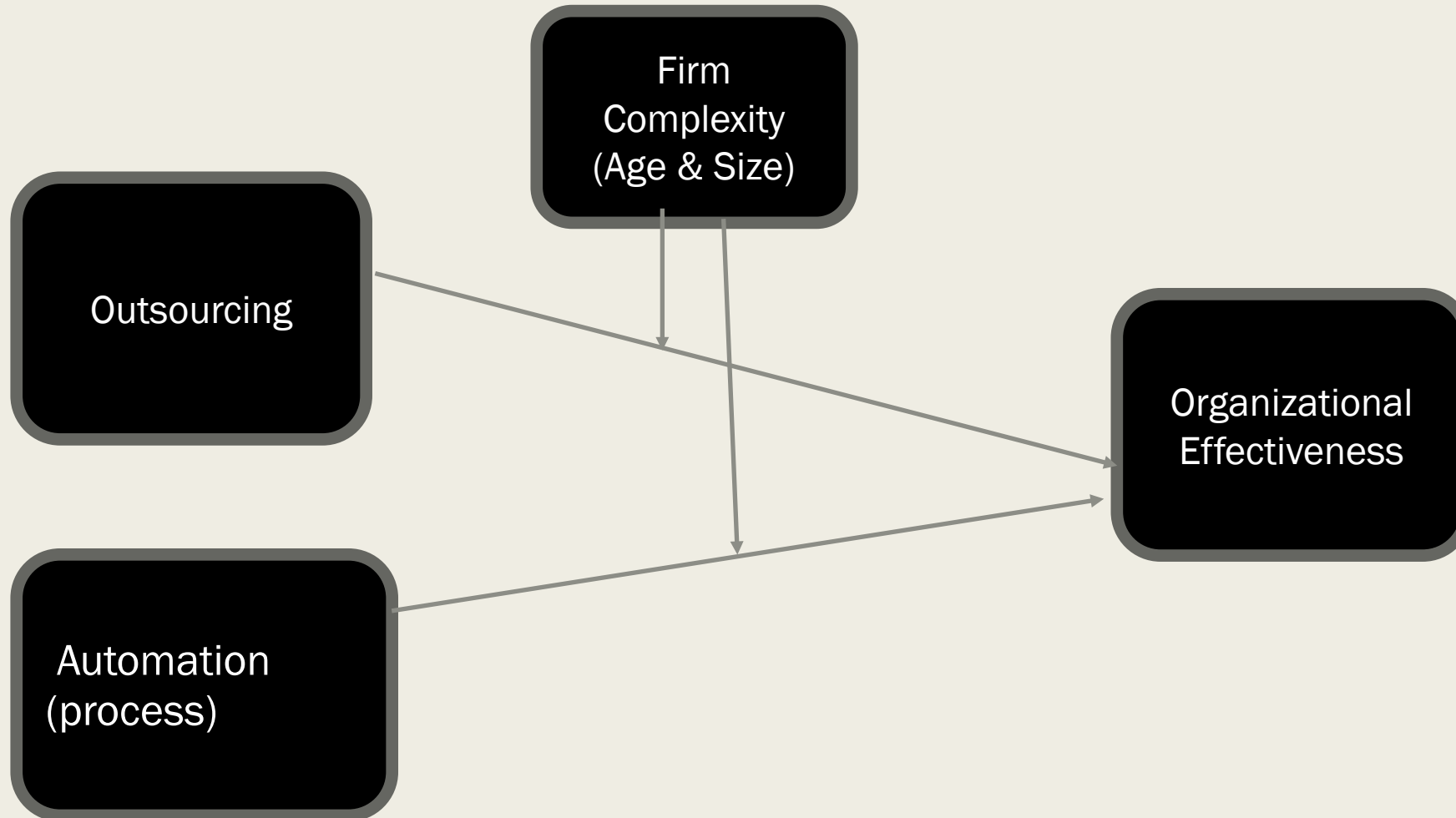
It takes a detail look at the:

- Objectives
- Opportunities
- Outcomes
- Effectiveness

Each aspect is to be ranked qualitatively to fully get a grasp of how reconceptualize organizational effectiveness.

# Conceptual Model

Figure 1 – Organizational Effectiveness



Control Variables:

- Age of Firm
- Firm Complexity
- Number of Employees



# Research Question

Are organizations who outsource and incorporate automation more organizationally effective?

# Propositions

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*Proposition 1a* – Outsourcing of services or products results in a lower level of organizational effectiveness in organizations when cost and productivity are equal, and the age of the firm is younger.

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*Proposition 1b* – Outsourcing services and product results in a higher level of organizational effectiveness when cost and productivity are equal, and the age of the firm is mature.

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*Proposition 2a* – Incorporating more automation in an organization leads to a higher level of organizational effectiveness.

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*Proposition 2b* – Incorporating less automation in an organization leads to a lower level of organizational effectiveness

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*Proposition 3* – An effective system of measuring organizational effectiveness can positively change how automation and outsourcing is measured in younger and mature organizations.



# Methodology

1. The additional survey questions will include measuring the IV, DV and moderator.
2. Control variables are: Size of the age of the firm (500 + 300 +, 100 < employees), the industry, number of employees, number of years in operations and complexity of the firm.
3. Considering the amount and types of of automation and outsourcing in the firm.
4. Functions outsourced and whether there more or less effective specifically when asked about outsourcing and automation.
5. Test the organizational effectiveness of companies who outsource and use automation in their daily operations.

# Questions for Qualitative Research

1. Do you believe that by automating processes and using various systems, manufacturing computing or analysis applications it has made your organization more or less effective?
2. During the 2020 global pandemic, did your company increase, decrease or kept the same level of processes which use automation?
3. Do you believe that if your company hired outside (outsource) employees, laborers, contractors, companies, or staff that the organization would be more efficient?
4. As a business practice does your organization outsource more high-end critical or smaller operational tasks?
5. In your daily job and within your specific department, do you use (robotic – non-human) automation to help complete specific job functions?

# Theoretical Contributions & Practical Implications

- Theoretical Contributions –

Identify how automated processes and incorporating outsourcing by considering a new way to measure organizational efficiency.

- Practical Implications –

Scholars and practitioners could consider a consistent measure of efficiency and expand business processes by incorporating process automation & outsourcing.

■ Thank you