



Meta-Analysis on Enterprise Resource Planning (ERP) Systems

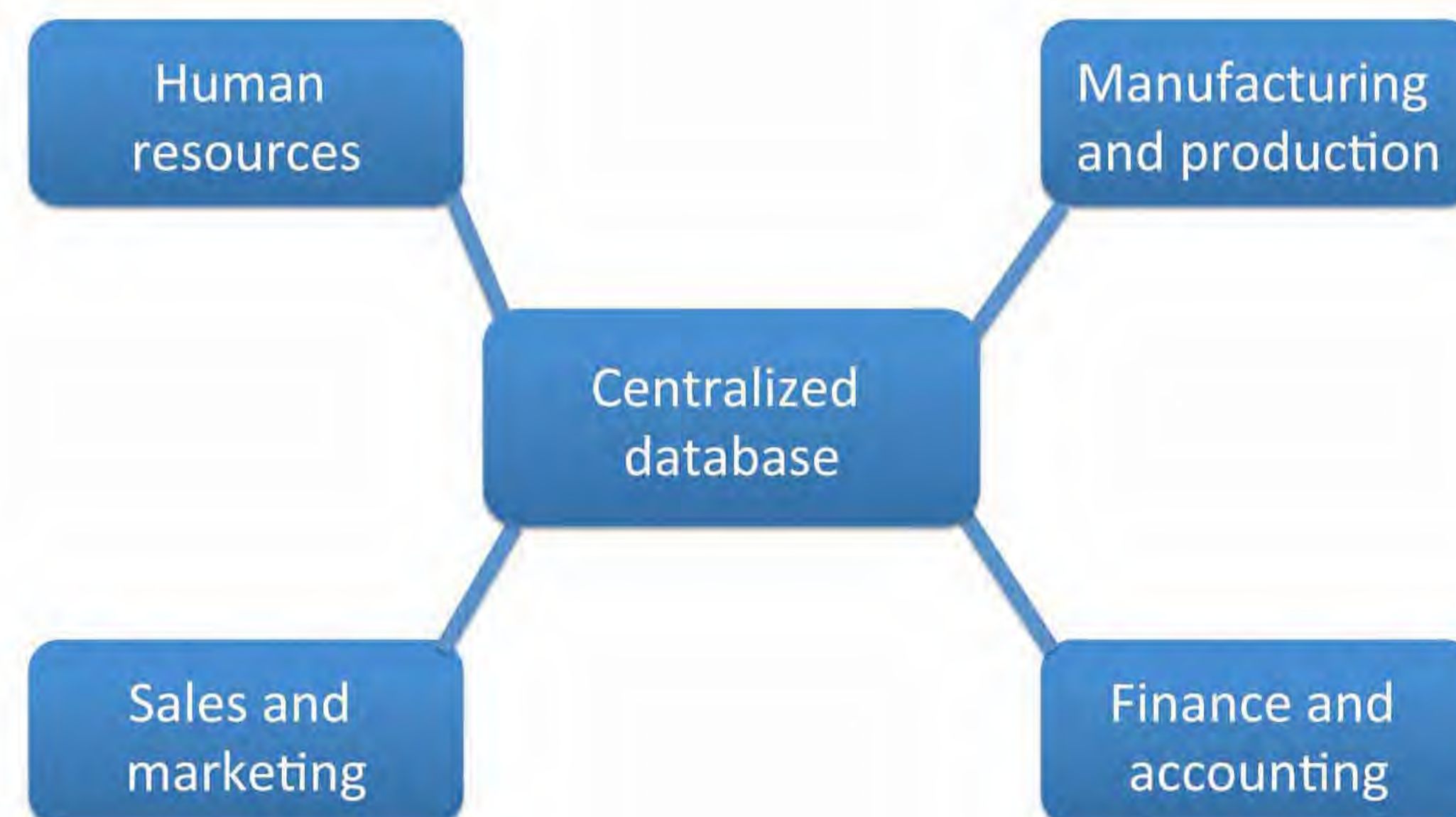
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Introduction/Objective

The objective of our project is to synthesize data in the existing literature on enterprise resource planning (ERP), statistically examine the constructs (categories) formulated previously, and find relationships among the constructs. This project is a work in progress, and a continuation of a previous study that summarized and organized existing ERP literature.

What is ERP?

- Enterprise resource planning systems are software systems that integrate data from multiple branches of a company (Laudon & Laudon, 2013).
- ERP allows multiple branches to interact with each other by sharing one pool of data; data entered by one branch is accessible to other branches (Laudon & Laudon, 2013).
- The free flow of information increases operational efficiency and improves decision making (Laudon & Laudon, 2013).



(Laudon & Laudon, 2013, p.264)

Previous Research (Hunt & Choi, 2015)

- Studies on ERP spanning 2006 to 2011 were found using ProQuest's Dissertation Abstracts and Dissertation Abstracts International (DAI).
- Key words included "enterprise resource planning (ERP) systems," "enterprise systems (ES)," and "enterprise information systems (EIS)."
- The authors summarized these articles and identified four constructs streams, categories of topics that continually appeared in the literature.

Previous Research Findings: Constructs Streams (Hunt & Choi, 2015)

1. Critical factors and determinants of successful enterprise systems
2. Outcomes and challenges of ERP implementation
3. Strategic consideration: Fit to organizational needs
4. Designing and implementing different types of enterprise systems

Current Status of Research

We are using MSU's EBSCO database to collect articles. Using the key word "enterprise resource planning," we have collected studies and correlation data from the following journals:

- Journal of Information Systems
- European Journal of Information Systems
- Journal of the Association for Information Systems
- Information Systems Journal
- MIS-Quarterly
- Communications of the ACM
- International Journal of Human-Computer Interaction
- Annals of Operations Research
- INFORMS Journal on Computing

Further data collection will be performed.

Future Plans

- The plan is to perform a meta-analysis on the collected data, statistically examining the constructs identified previously and attempting to find relationships among them. We will do this using path analysis and/or regression analysis.
- The research is intended to eventually be presented at the annual Southern Association for Information Systems (SAIS) conference and then published.

References

Hunt, C. S., & Choi, H. (2015). Critique of the empirical literature on enterprise systems—Over a half decade of research. *Journal of Management Information and Decision Sciences*, 18(1), 1-12.

Laudon, K. C., & Laudon, J. P. (2013). *Essentials of Management Information Systems (10th ed.)*. Upper Saddle River, NJ: Prentice Hall.