Research Assistant Mentorship Program (RAMP)
Proposal, November 2016

D. Lance Revenaugh, PhD
3 undergraduate students

Project Title:
The Impact of Enterprise Systems on Mergers and Acquisitions in the Oil and Gas Industry

BACKGROUND/INTRODUCTION

With the current downturn in the Oil and Gas Industry, oil and gas companies are keenly focused on minimizing costs and operating as efficiently as possible. This has led firms to examine every aspect of their company to find where money can be saved to help them through the downturn. Also during this time many companies are either filing for bankruptcy or being bought out by larger corporations via a merger or acquisition. A key component of any merger or acquisition is the integration of the two firm's IT systems.

Enterprise systems are becoming more and more popular in the business world because of their practical use and their overall boost to company performance (Columbus, 2014). Nearly every company in the top 1000 globally use an enterprise system (ES). ES systems can have a strong influence on how business processes are carried out. Consider a living room entertainment center as an example for how an ES system works. There is a remote for the cable TV box, one for the stereo, another for the stereo receiver, the DVD player, the television, and even the lights in the room. They all have separate purposes, yet they all contribute to the overall entertainment experience. Consider the entertainment experience to be a business. An ES system creates a universal system (e.g. remote control in this example) for every department within the organization and integrates them in a way that appears to be one cohesive process.

Although the benefits of these systems are many, businesses today seem to be moving toward this technology primarily because the systems are considered to be a source of competitive advantage, or at least a way to keep up with the competition. However, these systems bring with them their share of problems. Implementing these systems usually involves a significant amount of process change and often dictates changes in organizational structure (Corporate, 2013). In fact, many ES implementations have been used as a means for re-engineering the firm (SAP UK, 1999). Management has a big role in the success and acceptance of these systems. The business process redesign inherent in ES implementations requires major technical, organizational, and cultural change. The biggest associated challenge is fostering a new culture and managing the changes with consistency and coordination (Cliffe, 1999; Wen-Hsien, 2012).

Since implementing ES systems, and especially the merging of two ES systems, can have such a major impact on the organization, its business processes, and its very culture, it has risen to the point of being a "deal-breaker" in merger and acquisition discussions and negotiations (Wen-Hsien, 2012).

OBJECTIVES

Through case study analysis and comparison, research will be conducted and a final paper written that highlights and synthesizes critical success factors for integrating ES systems during mergers and acquisitions. Particular emphasis will be placed on any factors discovered that are unique or especially critical to the oil and gas industry. Findings from the research have the potential to save companies millions of dollars and countless man hours when integrating their ES systems. This research will also enable students to explore and understand the IT aspects of the oil and gas industry as well as the challenges and ramifications of mergers and acquisitions. Lastly, the research will result in each student learning and practicing research, analytical, writing, and formal research presentation skills.

PROPOSED RESEARCH

Each student will review numerous case studies and perform an analysis of successful and unsuccessful ES mergers. This will allow for the highlighting of key issues that arise while integrating systems and lead to recommendations on how to address them.

> **Student 1** focus: ES implementation and integration in **all organizational** mergers and acquisitions
> **Student 2** focus: **Oil and Gas industry specific** ES implementation and integration
> **Student 3** focus: **Compare and contrast** Oil and Gas to General ES implementation and **integration**; preparation and **visualization** (charts, graphs, analytics, etc.)

Weekly meetings will take place between students and advisor to talk about where the research is leading. Along with this, the weekly meetings will allow the advisor to lead students in the proper direction to create a successful paper that has the possibility of being published and presented at a conference. All of the findings will also be presented at the spring Techxpo.

Budget:

Student research scholarships (300 x 3)	900.00
Faculty stipend	300.00
Support for conducting and presenting research	300.00
Total	$1500.00

Mentor Bio:
> *D. Lance Revenaugh* serves as an Associate Professor of Business and Information Technology at Montana Tech University in Butte, MT. Education includes a PhD in Decision and Information Systems from Arizona State University and BBA-Management and MBA degrees from Baylor University. He has been in full-time higher education since 1985, having served at the Air Force Institute of Technology, Wilberforce University, Thunderbird--The American Graduate School of International Management, City University of Hong Kong, and Biola University. His consulting and research is focused on the areas of enterprise systems, IS/IT strategy alignment and implementation, information overload, and global information management.

Undergraduate research involvement: He has worked with 2-5 undergraduate students each of the last three years using work-study as a vehicle to develop student research skills. Results of this work with students include three journal publications and six peer-reviewed conference presentations with one receiving the best conference paper award.

References

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