The Value of a Consortium to an ERP Implementation

By

Frederic S. Gore, Southwestern Assemblies of God University

Given the importance of both the value of the ERP system to a college and the difficulties that can ensue if said ERP system implementation results in a poor running system, colleges should welcome and utilize assistance that will aid them in better implementing ERP. Unfortunately, due to the high cost of ERP implementations and the expertise required to facilitate them, colleges can ill afford the cost of learning from their own mistakes on their pathway to getting their system operational. This article, therefore, will provide to potential ERP system implementers in the college arena those factors most critical to the success of an ERP implementation and suggest the manner in which working in a consortium with other like colleges can result in better decision-making and a better ERP system at a comparably favorable cost.

This study asked what factors were most critical to the success of an ERP implementation project and whether the success of an ERP implementation can be improved by the participation of the college in a consortium with like colleges. The methodology of this study entailed employing an online survey of 30 key implementation participants from four Texas community colleges which had all implemented the same commercial ERP system at their respective schools within the three-year period prior to the survey. Literature on ERP implementations was reviewed to determine five categories of factors most frequently listed as critical. Additionally, the literature was reviewed to develop a list of those metrics which determined whether an implementation became successful. Survey questions were developed to represent each of the critical input factors as well as the success measurement factors. Additionally, one of the colleges surveyed had performed their implementation as a member of a consortium, while the other three conducted their implementations without consulting or partnering with other colleges. The survey results were tabulated, and the results presented in this paper represent those factors which had the highest correlation with the level of success reported in the implementations.

> Enterprise resource planning (ERP) systems are critical to college operations, but can be challenging for colleges to implement. Consortia present a unique solution to address gaps in their expertise and the skills needed to achieve a successful ERP

Findings

.The key success factors identified in the literature (Baykasoglu, A. & Golcuk, 2017; Fadelelmoula, 2018; Finney & Corbett, 2007; Qian, Schmidt & Scott, 2015; Ram, Wu & Tagg, 2014; Soja, 2006; A. Tarhini, Ammar, T. Tarhini & Masa'deh, 2015; Yeoh & Popovic, 2015) were as follows:

- Project planning
- Quality and trained personnel
- Management support of the project
- Best practices in ERP implementation (including consultant utilization, avoidance of customizations, end-user participation, and adequate allocation of personnel resources to the project)
- Testing and feedback systems

Additionally, the factors identified as measurements of success were as follows (Fadelelmoula, 2018; Soja, 2006; Yeoh & Popovic, 2015):

- Support of business practices
- Satisfaction with data conversion
- Support of decision-making
- System performance
- Completion of the implementation on-time

While the study generally found that those colleges who rate their critical inputs as higher also reported more successful implementation results, as one would expect, certain of the factors proved to be more highly correlated with success than others. Specifically, higher reported levels of the adequacy of a colleges project planning was most highly correlated with implementation success. Secondly, those reporting a greater utilization and availability of vendor consultants also reported being more satisfied with the results of their implementations. While all of the critical success factors listed were shown to be positively correlated with the success of the ERP implementation, the two factors above showed the highest correlation by a significant margin. It should also be noted that the two colleges which rated their input factors significantly more highly than the other two colleges reported their satisfaction with their implementations from 50% to 110% higher than the other two colleges.

It should be noted that this survey was conducted among a set of four Texas community colleges concerning the implementation of a single, common ERP software brand. Additional research should be conducted to determine the degree to which the results of this survey and analysis are transferable to other sectors of higher education and to what degree the results are impacted by the particular ERP software brand utilized by these colleges.

Conclusions

With the pressures on colleges to operate efficiently and produce reliable and timely information both internally and for their constituents, an effective ERP system is required to meet these standards of performance. Further, due to the imposing investment of both finances and personnel required to purchase and implement an ERP system, colleges can ill afford to waste efforts on poor results and are best advised to commit their resources where they will have the greatest opportunity to realize success. Of those factors deemed important to the implementation of an ERP system, the effectiveness of project planning and an adequate utilization of consultants have been shown to be most highly correlated with implementations that have been deemed to be successful by their implementation teams. What does this mean to managers of an ERP implementation as they contemplate where they will commit their resources? It means that those colleges, especially when they are faced with hard choices about what resources to commit to what phases of their implementation processes, should take steps to ensure that they commit adequate resources to these two critical input areas to provide them with the greatest opportunity for a successful implementation. Of course, none of these areas should be purposefully neglected, as all of these areas have been supported as being important.

A second conclusion that can be drawn from this study involves the potential value of a college's participation in a consortium with other like colleges to assist it in delivering a successful ERP implementation. A consortium, especially if it includes other colleges who have already completed a like ERP installation, can supply valuable advice and documentation to an implementing college to save the college from making the same mistakes that others have made. It is well established that a consortium can help an organization "fill gaps" in its personnel or expertise. This is just the sort of assistance that is needed by an organization that contemplates venturing into an ERP implementation, as it requires high technical ability and is also an undertaking that many personnel may not have previous experience with. The value of another party who has been there before and can share their advice and lessons-learned from their experience can greatly enhance an organization's preparations and plans to undertake their own effort. It can represent valuable potential savings in cost and time. And who doesn't need that?

Where to Find Out More

This research has yet to be published.

For more information contact:

Frederic S. Gore, CPA
Vice President for Business and Finance
Southwestern Assemblies of God University
1200 Sycamore St.
Waxahachie, TX 75165
Phone: 972-825-4630
email: fgore@sagu.edu

References

Baykasoglu, A. and Golcuk, I. (2017), Development of the two-phase structural model for evaluating ERP critical success factors along with a case study. *Computers & Industrial Engineering, 106*, 256-274.

Fadelelmoula, A. A. (2018), The effects of the critical success factors for ERP implementation on the comprehensive achievement of the crucial roles of information systems in the higher education sector. *Interdisciplinary Journal of Information, Knowledge, and Management, 13*, 21-44.

Finney, S. and Corbett, M. (2007), ERP implementation: A compilation and analysis of critical success factors. *Business Process Management Journal, 12*(3), 329-347.

Qian, L., Schmidt, E. K. and Scott, R. L. (2015), ERP Pre-Implementation Framework for Higher Education Institution: A Case Study in Purdue University. In *2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 1546-1550). IEEE.

Ram, J., Wu, M. & Tagg, R. (2014). Competitive advantage from ERP projects: Examining the role of key implementation drivers. *International Journal of project Management, 32*(4), 663-675.

Soja, P. (2006). Success factors in ERP systems implementations. Lessons from practice. *Journal of Enterprise Information Management, 19*(4), 418-433.

Tarhini, A., Ammar, H., Tarhini, T and Masa'deh, R. (2015). Analysis of the critical success factors for enterprise resource planning implementation from stakeholders' perspective: A systematic review. *International Business Research, 8*(4), 25-40.

Yeoh, W. & Popovic, A. (2015) Extending the understanding of critical success factors for implementing business intelligence systems. *Journal of the Association for Information Science and Technology, 67*(1), 134-147

Review

This article was accepted under the ***constructive peer review*** option. For futher details, see the descriptions at:

http://mumabusinessreview.org/peer-review-options/

Author

Frederic S. Gore currently serves as the Vice President for Business and Finance of Southwestern Assemblies of God University in Waxahachie, Texas. He has over 35 years of accounting experience with extensive leadership in not-for-profit entities and higher education. He has directed his efforts specifically toward accounting and ERP process improvements. Frederic is currently a doctoral candidate at the Muma College of Business, University of South Florida, expecting to graduate in 2019. He also holds a Master of Business Administration, a Master of Divinity, and a Bachelor of Business Administration in Accounting and is a licensed CPA in the State of Texas.