ERPSim for High Schools: an Event Guide

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Abstract

ERPSim is recognized as an important pedagogical tool. Its use in post-secondary education has been, and continues to be, well documented (Léger et al. 2016, 2011, 2007). However, via SAP's Young Thinkers program, opportunities exist to expose students outside of traditional post-secondary education to the benefits of ERPSim. Based on our own experiences, we offer a guide for the successful execution of ERPSim for high-school students.

The targeting of high-school students changes what has been an in-class activity into a full blown 'event'. As such, many new variables are introduced that will influence the ultimate success of the event. An 'ERPSim Event' is an exercise in project management. This is especially true for novice faculty who have had little or no experience coordinating such activities before.

Our experience has shown that there are 5 critical success factors for a fruitful and productive 'ERPSim Event': event planning, simulation coaching, well defined event materials, clearly defined team roles, and a nurturing learning environment. We have captured and documented the steps/deliverables necessary to adequately address these critical success factors; along with example deliverables, this document prescribes the steps for a successful Young Thinkers ERPSim event.

Keywords: ERPSim, Young Thinkers, Pedagogy, Secondary Education

Introduction

The ERP program at Grand Valley is well known and regarded for graduating students with strong business process, ERP and analytics skills. The demand for graduates with these skills exceeds supply. One of the challenges is that there are not enough students interested in pursuing careers that require these skills. When brainstorming ways to address this challenge with our industry advisory board, it was determined that the problem is more a lack of awareness of the program and the tremendous career opportunities that follow. Instead of waiting for students to find the program, a decision was made to proactively promote the program and encourage students to investigate if it fit their career goals. Additionally, a decision was made to reach further back into the talent supply chain and target high school students who had a general interest in business and technology.

Historically, high school students interested in business are guided towards majors in accounting and marketing and those interested in technology, towards computer science and engineering. It is rare for these students to be even aware of majors such as MIS which merge business and technology. Indeed, most high school counselors are unware of such programs.

The fun, gamified environment of ERPsim was deemed well suited for to provide high school students with a meaningful introduction to business processes, technology and decision making. In addition, it was considered essential to have corporate executives to provide a "real world" perspective to augment the academic exercise while promoting future opportunities for students in their organizations.

Is this right for you?

There are several considerations in determining if a similar event is appropriate in your university. The following questions will guide your decision:

1. Is there a need to grow your ERP program?
2. Are there executives from local companies willing to sponsor and participate in the event?
3. Do you have faculty with the skills to execute an ERPsim event with students that are younger and less experienced than typical college students?
4. Do you have college students who can serve as mentors to the high school students?
5. Do you have the support of college administrators?

What we've learned

A High School ERPSim Event is an exercise in project management. Time is both a friend and an enemy. Plan early, in good detail, and build in 'buffers' to address the hic-ups along the way. While explicit detailed activities may seem like overkill, they will illustrate the complexity of some tasks and help to better estimate the time needed. There are five critical success factors: Event Planning, Simulation Coaching, Well Defined Event materials, Clearly Defined Team Roles, and a Nurturing Environment.

Event Planning

One needs to look at an ERPSIM event as an exercise in project management. The actual competition/event is analogous to the 'go-live' of an information system. Most of the effort will happen before anyone takes a seat. One must first scope out the project with the various stake holders, manage the technical infrastructure needs, establish documentation and training protocols, test the product, and then practice the go-live event to smooth out the rough spots. Logistics involving the venue must also be well planned. Lunch, snacks, drinks, parking, seating etc... require close attention.

Simulation Coaching

Novice ERPSIM users need support to succeed. Nuances of the software, data, processes, people, and even the event 'procedures' may be overwhelming to the uninitiated. A dedicated coach for each team is essential. The bespoke mentor for each team helps to: adhere to event scheduling, facilitate student learning, and provide business and 'technical' support. For high school students, strategy and communication require a

little more attention; while some non-ERP college students maybe little intimated by the technology being used.

These mentors can be upper division students, industry partners, or faculty. In our experience, the 'closer' the mentor is to the target student, the more relaxed the simulation environment is. For high school students, we used college students currently taking ERP coursework. Mentors receive targeted training in how the simulation works, business strategy and effective communication.

Well Defined Event Materials

The ERPSIM Job Aids are the foundation for event materials. Each Student/role needs documentation that reinforces their duties within the simulation. However, additional documentation focused on the event itself is also needed. Facility maps, chaperone/observer materials, as well as publicity materials are just a few examples.

Clearly Defined Team Roles

In addition to the students, mentors, and the 'Master of Ceremonies', there are a wide range of roles needed to properly execute the event itself. For example, a VIP facilitator provides structure and communications for the chaperones and observers in attendance. This helps to prevent interruptions in the simulation activities. The facilitator can answer logistical questions, comment on the execution of the simulation, and discuss strategy separate from the student events. Timekeepers and runners help the MC in the execution of the simulation. Media coordinators, photographers, help promote and document the event while it happens. Facilities personnel help manage food/environment needs. This does not imply you need a small army, people can hold multiple roles; those roles however, just need to be explicitly identified.

Nurturing Learning Environment

ERPSim, especially for novice participants, needs a nurturing environment that supports the student's questions and discovery. More attitude rather than a 'thing', this type of environment needs to provide students with the opportunity to discover, execute, and possibly fail. Learning from their success and controlled failure is what provides students with experience. Pre-round strategy discussions, post-round debriefing sessions (lead by the mentor) help teams/students identify what "'works and doesn't work". Explicit goal setting before the first round (e.g. what is the measure of success) provides the framework that students use to assess their progress.

Contributed Materials

We have developed a 'How To' document that contains the necessary checklists, deliverables and overviews for a successful ERPSim Event. The current deliverable directly supports the water bottle distribution game, but can be easily adapted to other ERPSim games. Topics include: Overview of the ERPSim Event, Initial Planning, Pre-Event Preparation, 'Day of' Execution, and Post Event review. For each topic, a number of supporting files are provided: project plans, slide decks, communication material, ERPSim material, and various template documents. Everything from project plans to table tents are provided or referenced.

We trust that these deliverables help to reduce the effort needed to execute an ERPSim event, and that they improve the quality of the learning that will take place. Our hope is that the UA community continues to add and refine these deliverables to advance the value that our students (secondary and post-secondary) will derive from ERPSim.

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