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Michel Avital

*Case Western Reserve University*

Betty Vandebosch

*Case Western Reserve University*

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# **SAP IMPLEMENTATION AT METALICA: AN ORGANIZATIONAL DRAMA**

**Michel Avital**

**Betty Vandebosch**

Weatherhead School of Management

Case Western Reserve University

U.S.A.

Metalica Inc. was a leading international producer of metal-ceramic alloys specializing in high performance engineered materials and products. Using a theatrical genre, the case series attempts to reconstruct the social reality of central stakeholders at Metalica during the first three years of SAP implementation. At the request of the company involved, the names and locations in this case have been disguised.

## **THEATER IN THE CLASSROOM**

The “SAP Implementation at Metalica” case series facilitates experiential learning through role play and sets the stage for a subsequent discussion about central issues related to the implementation of an ERP system or any other large scale information system. In consideration of class time restrictions, the play is divided into two acts, each comprising three scenes, that describe critical points during the implementation.

Written as a stage play, the cases reconstruct the social reality of key players in one particular organization during the first years of SAP implementation. Rather than adopting one observant perspective about the SAP project, we provide the views of different participants using their own words, arguments, and ideas as much as possible. The play was designed as a unidimensional heroic-saga describing a series of progressive-regressive phases (Gergen 1994). Based on principles of *Ethnodrama* (Mienzakowski 1995), the plot was constructed from summaries of systematic interviews that have been transformed with minimal modifications to the script. Scenes were altered and text was changed only to suit scholarly objectives and a dramatic presentation.

The actual performance of the play in the classroom and a subsequent discussion among the participants would be a way to recreate and experience the thrills, frustrations, dilemmas, and concerns originally expressed by the people who inspired this account of SAP implementation. One of the case study approach premises is that one learns best when engrossed in a topic. Role play in the classroom has the potential to raise the bar for this premise. Using theater in an academic environment opens new avenues for critical observation, integrative sensemaking, and experiential learning.

## **LEARNING OBJECTIVES**

The “SAP Implementation at Metalica” case series has been written for graduate level students in a course relating to the management of information technology or for undergraduates in a capstone course. The cases create a classroom environment in which students can discuss considerations and discover implications of implementing ERP, or other large scale information systems, in organizational settings.

The case series illustrates and facilitates learning concerning the major issues of ERP system implementation. The analysis of the cases should help the students to:

- Act One:*
- Understand the concept of ERP information systems
  - Become familiar with the implementation methodology of ERP/SAP
  - Determine critical success factors of information systems implementation
- Act Two:*
- Identify pitfalls and risks involved in implementing ERP systems
  - Recognize the dynamics among the implementation team members
  - Become aware of organizational repercussions beyond initial system implementation

## CASE OVERVIEW

Act One describes the company's vision concerning the implementation of an ERP system, a crisis that emerged during the initial phase of implementation, and the actions taken to remedy the shortfalls. Act Two describes the project management, the dynamics among the implementation team members, and some of the organizational implications of ERP systems.

Scene 1, *The Vision*, is a meeting of Metalica's executive team who are making the decision about whether or not to implement SAP. The Head of Systems Development and the Chief Trainer describe the premises behind SAP and what the application can do to help Metalica manage its value chain from end to end. The group explores the risks associated with implementing such a large mission-critical system. The scene sets up the disconnect that can occur when groups with different agendas and objectives discuss a technical area in which they have little common ground. It also demonstrates a case of support without involvement.

Scene 2, *Meltdown*, portrays a discussion between the Head of Systems Development and the General Manager of the service center in which the initial implementation of SAP has gone very badly. It illustrates how weak decisions were made, and how shifting blame and defensiveness do nothing to alleviate a difficult situation. (Scene 2 appears below as an example.)

Scene 3, *Reorganization*, describes a meeting among the new Project Manager, the Head of Systems Development, and the Chief Trainer, in which the new project manager provides a vision of how the project will proceed. It includes discussions of the importance of taking care of both business and technical issues, the ASAP implementation methodology, decision-making speed, and various training philosophies that can be used to manage the change process.

Scene 4, *Back on Track*, is a discussion among the CEO, the Project Manager, the CFO, and the Chief Trainer. It describes the successful implementation of SAP at the San Diego facility and explores the reasons for the difference between this and the Hopewell disaster.

Scene 5, *Table Talk*, is a lunchtime conversation among three members of the SAP implementation team: two consultants who serve as team leaders and a unit manager at Metalica who serves as a team member. The table talk between the team leads (two consultants) and the team member (a unit manager) reveals a tension between those who attempt to apply the technical experience they have learned elsewhere and those who attempt to preserve the prevailing business practice. Furthermore, it illustrates the time constraints placed on those who strive to keep the implementation on schedule and at the same time attempt to take care of their other organizational agendas. Finally, it reminds us that although an ERP implementation project is a major investment of resources at the hands of a relatively small and diverse task force, very little is usually done in the area of preliminary training and team building.

Finally, Scene 6, *Soliloquy*, contains the ruminations of the project manager as the implementation nears completion. It draws conclusions about large-scale projects in general and the never-ending organizational journey that results from the implementation of an ERP system such as SAP.

## A SAMPLE SCENE

### Scene Two: Meltdown

*(June 30, 1997—At the General Manager's office in the Hopewell Service Center. In the background, a humming industrial fan unsuccessfully fights another hot and humid summer day in Virginia.)*

*Participating Roles: General Manager and Head of Systems Development*

GENERAL

MANAGER: *(In a serious tone)* You've just installed SAP here and my service center is in a shambles. You've come with the premise that SAP will streamline our business process, enhance competitiveness, and contribute to the bottom line. Yet, what we've experienced so far is just the opposite. My people are disoriented and frustrated, our customers are furious, and we're losing business. *(Assertively, after a pause.)* We're willing to do what it takes to make this work, but you need to lead the way. I can't believe you would put us in such jeopardy.

HEAD OF

SYS DEV: *(Looks exasperated while interrupting General Manager)* I understand your concerns and share your frustration, but here we are and it's not all our fault. We had to let IBM go because they were sending us second string consultants. We work now with VOBW. They are much better. Yet, they told us we were ready to go live even though it's clear now that we weren't. They should have known. *(Pause.)* And we're paying the price...

GENERAL

MANAGER: *(Furiously)* This is a disaster. *(Sighs, and after a brief pause asks)* So what do you suggest? What should we do now?

HEAD OF

SYS DEV: *(Assertively)* We can't blame the technology for our troubles. SAP is a top notch system that has already proven itself in many organizations similar to, as well as those more complex than Metalica. I suggest that we cool it *(grins and wipes a thin layer of sweat from his forehead)* and try to get our act together so we can take advantage of this golden opportunity to streamline the business process.

GENERAL

MANAGER: *(In a flabbergasted tone)* What do you mean by getting our act together? It's not us, the service center people, who need to take a hard look at our actions. *(Points a blaming finger toward Systems Development Head)* It's you and your team who have failed to implement what you describe as a miraculous fail-safe technology. *(Pause.)* We were just fine before you guys showed up here with the gospel.

HEAD OF

SYS DEV: *(Defensively)* My team is a hard-working competent bunch and we did our share of planning. *(Pause.)* Yes, things could have moved a bit faster, but we really weren't ready. We hadn't even tested the printing of basic invoices and material certifications before we went live. *(Pause.)* VOBW should have warned us instead of encouraging us to meet the originally planned D-day.

GENERAL

MANAGER: *(In a blaming tone)* You can't just point fingers at others. It's not right.

HEAD OF

SYS DEV: *(Apologetic)* We're doing our best, but we can't guarantee a flawless implementation. There are too many things beyond our control. Bear in mind that our situation is not unique. A survey completed recently by The Standish Group found that while about 16% of MIS projects were successfully executed as planned, about a third were canceled at some point. The rest were eventually completed, but suffered from crippled features, serious delays, and

cost overruns. In fact, for every successful project there are two that are abandoned. Unfortunately, this is the state of the industry.

GENERAL

MANAGER: *(Grumbling)* So why aren't we among the happy 16%? *(Unhappy)* We'll be cleaning up this mess for months. We're just lucky those bad invoices didn't get sent to customers. One of them was for \$5 million instead of \$50 thousand. It's a good thing our people are so dedicated to our customers, but now they're completely frustrated. You can't blame them for being upset with a new system that disrupts the business process. Bear in mind that these are the people who face the irritated customers and write off the lost sales that have been caused by the poor implementation of SAP. They expected improvement and ended up with aggravation. We'll sort it out, but it seems as if we could have avoided all this completely.

HEAD OF

SYS DEV: *(Rather frustrated)* We used project management tools and broke down the implementation into manageable tasks with clear objectives and time lines. We streamlined the business process and put the information systems in place. *(Pause.)* We just ran out of time and didn't train enough.

GENERAL

MANAGER: *(Grim-faced)* This conversation makes me feel like a dog chasing its tail. *(In a firm tone)* I'm very disappointed by the new system, I find your performance inadequate, and I seriously doubt your ability to take us to the promised land any time soon. *(Pause.)* We need an immediate and concrete remedy. *(Pause.)* And don't forget, we're tired. It's hard for anyone to be enthusiastic at this stage, so working with us is not going to get any easier. I don't think our process is very strong yet, but I'm not prepared to work on that until after SAP is working properly across the board.

## REFERENCES

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