Teaching Tip

Teaching Information Systems Management via Action Memos

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ABSTRACT

As a variation to the case study method, action memos can be used to educate students about IS management concepts. Action memos are mini-cases, written in the style of an in-basket memo, demanding a response, usually in form of a decision or an opinion. Action memos have several positive characteristics. They have realism, and prepare students for a real world activity. They can be read and comprehended relatively quickly, yet at the same time they can reveal students' knowledge, insight, and problem solving capability.

Keywords: Action memo, case study, information systems management, decision making

1. MOTIVATION

Case based teaching is a popular means for the communication and illustration of IS management concepts. Cases offer several advantages over the traditional discussion of concepts. Cases create realism, require decision making under uncertainty and lack of information, teach problem structuring and information extraction, and permit role play. As such, case based teaching is very appropriate for courses in IS Management.

Yet this teaching format also has drawbacks. A typical "Harvard"-style IS case (whether developed at HBS, Western Ontario's Ivey School, or the National University of Singapore) usually requires 10+ page reading, insight into details of information systems technology, and the review of supporting materials. In addition, (depending on case difficulty), the actual decision situation is not clearly identified. In consequence, students with a limited IS background may find it confusing (even though the decision problem may be of a general managerial nature), and class participants who have not completed the necessary preparatory work (i.e., careful analysis and reading of background materials) are excluded from meaningful learning from the case.

2. ACTION MEMO

The action memo enables case based teaching while overcoming shortcomings of typical cases. The action memo is essentially a short case (e.g., 1 – 2 paragraphs) presented in memo form. The decision situation is very similar to that faced by company decision maker on a daily basis, in form of in-basket memos, or e-mails.

2.1. Structure
Action memos, properly written, have the same informational content as regular cases, albeit in abbreviated form. They therefore "tell a story" with the following components: organization/company, organization environment, problem area, major players, scenario ("plot"), and decision.

The brevity of action memos makes every word count (see Freeman, 1999). Hence, the company/organiza-tion is introduced via the "From:" or "To:" lines, as are (possibly) the major players. The organization environment is explained in the body of the memo, yet usually in a very abbreviated form. The problem area is introduced in the memo "subject line" ("Re:"), while the decision is typically presented via a question at the end of the memo.

2.2. Managing Difficulty

Case difficulty is managed as in any other case, fundamentally by varying complexity along three dimensions: information dimension (see criteria above), conceptual dimension, and analytical dimension (compare Leenders and Erskine, 1989). On the information dimension, the author can vary difficulty by mixing up the informational elements. Obviously, the short action memo format limits this somewhat. On the conceptual dimension, the author can choose between simple concepts, with few factors and few relationships (e.g., software "make vs. buy"), and complex concepts with many factors and numerous relationships between them (e.g., ERP software selection). Finally, on the analytical dimension, the author can again vary from simple (known problem and known solution) to complex (with unknown problem and solution). Thus, an analytically difficult memo might describe a decision situation which is only the symptom of another, more profound issue.

2.3. Example

The following action memo was used in an introductory MIS course for MBA students. It outlines the potential dangers of developing a new application that integrates with a company's existing systems.

Despite its brevity, the case highlights several issues, such as the danger of bringing a new project manager into an important project at a critical stage, perceived drop in project importance when the project champion (here COO) gives up project ownership, and the management of software developer morale when the project leads to their obsolescence. This case also uses a bit of levity (see e-mail address) to hint that this company is not managing its affairs wisely.

2.4. Solving the Case

Action memos can be solved either via in-class discussion, or in written form. When written, the obvious response is another memo. The respondent takes on the role of the recipient of the memo. Part of the problem solving process is to determine the content of the response (i.e., how to solve the core problem), whom to respond to (maybe not the sender of the memo, but some third party who needs to act), and in what manner to respond (responding reasonably or unreasonably). On the latter issue, it may for instance be reasonable for the respondent to reply to the sender that the original memo did not make sense at all, or that it may have contained too much IT jargon.

The reply memo (see Appendix) expresses the main issues of the action memo. For the reader's benefit, five main issues are identified by number. Students answering the memo can be asked to add further background information, such as information about the typical duration of data warehouse projects, failure rates of large projects, or critical success factors in the implementation of enterprise software. I consider an action memo successful when students can answer it in general managerial terms, while drawing on IS principles and facts. In the end, a short one-

paragraph action memo can result in a 2-page written answer or 20 minutes of discussion.

3. EXPERIENCE

My experience with action memos has been very positive. They have been used in several courses, predominantly at the post-graduate level (MBA and EMBA). They can be applied both in-class and in an exam situation (even with open notes / open book). Students who have managerial responsibility in their companies report that this form of learning more closely reflects their work situation than other forms of problem solving. Action memos also have the (dubious) benefit of not requiring significant preparation. EMBA students who frequently do not complete all their assigned readings are nevertheless able to review an action memo in 5-10 minutes and contribute positively in the classroom.

From the case writer's perspective, action memos also offer the advantage of being written quickly and being easily adaptable to a particular class situation. Memos are usually fictitious, but based on real situations, which are abbreviated and intensified. From a case teacher's perspective, they significantly reduce the teaching risk, i.e., when too few participants are sufficiently prepared. Less experienced case teachers may also feel more comfortable with a "short story" than with a case that requires 45-60 minutes of well structured build-up and discussion.

From: Herbert Wang, EVP and COO
To: Strategic IS Steering Committee
Date: April 24, 2003

Colleagues:
Here a quick progress report:

Our integration of the new Real Estate Division (RED) is progressing well. As you know, for the last six months we have been working very hard to make RED's MIS "talk" to our existing systems. I never thought this would be so difficult. But now, it is almost done. I estimate that another three months of effort, as we just ordered a new data warehousing software to make the integration smoother. Janie Lee has joined us last week as new data warehousing manager. Please send her a warm welcome (janie@fools-we-are.com). I will hand project oversight over to her during the few remaining months of this project.

We have not yet informed the IS staff of RED division that there will be some significant restructuring in their group after project completion. I thought it'd be bad for morale. In time, I will ask Janie to explain the restructuring.

Please keep up the good work and inform me about any concerns you might have. You know there's a lot riding on this project.

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4. CONCLUSIONS

Action memos provide a useful addition in the instructor's portfolio of teaching tools. They can incorporate some of the best features of regular cases, such as realism and emotional involvement, while avoiding some of the difficulties associated with regular length (and difficulty) cases. They clearly are restricted in their application, as their brevity allows only a limited level of complexity and detail. For me, however, they have proven to be one of the most successful teaching innovations, resulting in high student satisfaction, as measured by students' feedback.

5. REFERENCES

Freeman, H. (1999), "How to... write effective memos Be brief and precise - or get yourself a PA." The Guardian, Manchester (UK), October 30, 1999, p. 4.

Leenders, M. and J. Erskine (1989), Case Research: The Case Writing Process. Research and Publications Division, School of Business Administration, University of Western Ontario.

AUTHOR BIOGRAPHY

Christian Wagner is an Associate Professor in the Department of Information Systems at the City University of Hong Kong. His scholarly interests include the areas of knowledge management, virtual communities, and e-learning. Wagner is the author of over 40 published manuscripts, with several articles on virtual learning, knowledge management, and learning with game software. Previously he managed an e-learning project that led to the development of CityU's iMBA program, Asia's top ranked distance MBA (AsiaWeek, 2000). Her currently leads an effort at the City University to innovate the first year education in the Faculty of Business. CityU maintains Hong Kong's largest business faculty with a yearly intake of more than 800 full-time undergraduate students.

APPENDIX

From: Chris Wagner, Member, Strategic IS Steering Committee
To: Herbert Wang, EVP and COO
Date: April 24, 2003

Herbert:
Your memo concerns me, so I want to reply right away.

I am also glad that this large enterprise software integration effort has gone relatively smoothly over the last few months. Clearly this is due largely to your leadership and management skill. This brings me to my first concern. (1) While I am very happy that Janie Lee is joining us, I urge you to please stay at the helm of this project. Use the next few months to bring Janie gently into the project, let her learn and gain respect. Don't let others think the project is suddenly less important, or not challenging anymore. (2) Also, Janie may have to spend a lot of effort on the operational aspects of bringing the new data warehouse software into the organization. This, in itself is a project of considerable complexity and requires close attention. It will be enough to keep her busy. (3) Be prepared that the project will go on for a little longer than 3 months, especially with the new data warehouse software just being introduced. This may luckily give us a little more time to prepare for the restructuring. (4) I would suggest addressing the restructuring issue head-on. News of the restructuring will leak eventually. If that happens before we announce our plan to manage the transition, endless rumors will fly, people will be frustrated, and the success of the project may be jeopardized at the last minute. (5) You should communicate the restructuring plans. People respect you and know you are the boss. Janie will not be the right person. It surely would create a very rocky start for her.

Overall I am as confident as you that we are close to the successful completion of a very ambitious project. However, the next few months will be very critical and will require your leadership and close attention, I am afraid.