Some Teaching Reform Ideas on Management Information System of Master of Business Administration

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Abstract
Management information system (MIS) is one of the core courses of master of business administration (MBA). Based on the educational characteristics of MBA, this paper studies the teaching issues and strategies of MIS course of MBA. The discussion includes three parts: modification of educational content; improvement of educational ability; case methods of teaching.

Keywords: Management information system, Master of business administration, Teaching reform

1. Introduction
Management Information System (MIS) is an essential tool to support business, management and making decision in various companies and organizations. And MIS is regarded as a powerful weapon to grab the competition advantages, reach the strategic goals by many companies and organizations. Thus, MIS is a compulsory subject for MBA in most universities.

As the rapidly development of information technology, MIS has not only developed at the same time in the field of concept, content and method of system construction, but also made a greater impact on the operating patterns of companies and organizations. In this case, to be as a MBA student, it is necessary to have a good understand of MIS's meaning, content and construction strategy.

In early 1990s, there is a great amount of need for software engineer in the society. Influenced by this social acquirement, the conventional teaching content of MIS lays stress on the design and development of software system. Recently, with the rapidly increase of the amount of MBA, it calls for reforms of MIS curriculum’s target, curriculum’s content, teaching method for the education of MBA. Especially pay more attention to these aspects to guide the study of this subject: improve the company’s management and support the development of strategy. In this case, it is necessary to reform MIS curriculum of MBA on conventional teaching content and method, which means with the characteristics of MBA, reform the teaching content and implement the teaching reform.

Recent years, many academic documents about MIS curriculum reform had been published. However, few papers about MIS curriculum reform especially for MBA had been published. The author of this paper has been the consultant of information system management in above 50 companies for 10 years and has been teaching MIS of MBA for a long time. This paper gives some teaching reform Ideas on MIS of MBA, hoping that it could help the research and application of MIS curriculum of MBA in China.

2. Modification of Teaching Content
2.1 Set Teaching Target Properly
There are different requirements in MIS’s teaching to different major students, which requires teachers regard students differently when teaching. For example, for the major of Information Management and Information System students, the target to cultivate them is to MIS engineer. So they need to know the basic theories and its trend but also need to have knowledge of software development method and process as well. What’s more, they need to analysis and apply
different development methods in face of practical situations. While for the students of Business Administration, the target to cultivate them is to managers and users of organizations. For the sake of their weak abilities of computer, they consider more from being a manager or user that how to use MIS to improve the efficient of the organization, to help make decisions. So they only need to get to know the method and process of MIS development and basic concept.

Teaching targets decide teaching content and pattern. The cultivation target of MBA is manager of companies and administrations instead of technique engineer. According to the author’s experience, MBA students who have backgrounds of software industry account little among the all, not to mention about those who intend to be software program engineer as job after graduation. For MBA, therefore it is obvious that cultivate them into programmer, developer of information system, specialist of computer is not the target of MIS curriculum. What should be the goal is cultivating them to adapt to the need of modern information society, get the knowledge of basic principles of modern economic management, control the knowledge of modern information skills and applied skills, and cultivate them into an excellent comprehensive talent specialize in economic management with wide fundamental knowledge and great ability.

Development of information techniques makes the companies’ operating circumstances and methods change all the time. A modern manager can’t get control of information skills professionally, nor do they need to, but he or she needs to know the abilities and characters of information techniques or information systems macroscopically, as well as information techniques that how to support the improvement of companies management and accomplishment of implement strategies. Based on such general cultivation target, it can be ensured that the concrete teaching target of MIS curriculum is that: make students get to control the related basic principles of MIS, have a clear awareness of information and a great ability of information application; make students have a sufficient understanding of the supportive role of information system information techniques in the information society to the strategies; make students be familiar with function principles and methods of various management information system, like ERP, CRM, PDM, DSS etc, make them get to control the construction of management information system and implement methods, to know how to apply manage, evaluate and preserve the management information system; lead them to pay a careful attention to the development of new information techniques and find out the business values.

2.2 Modify Educational Content Scientifically

In order to reach the teaching target of MIS curriculum, it should be modified scientifically and properly and design the teaching content. MIS curriculum which covers deep and a wide rang of knowledge changes quickly combines Economics, Management, Information Science, System Science, Behavior Science, Computer Science and Network Communication Techniques all together, so it is a great academic practical and comprehensive curriculum. For the students who are majored in MBA, their knowledge of economic management is excellent but weak in the field of information techniques, meanwhile, their structure of knowledge and direction of cultivation leans to management, therefore it should avoid regarding MIS curriculum as computer subject, but a kind of management subject. This major should put stress on the basic knowledge of computer, which means on the basic of understanding of data base, various software and hardware platform, put the main teaching content in the functions of information techniques to solve management problems and improve management abilities. The curriculum should include four different parts:

Part one: basic concept. This part consists of three aspects: introduction of MIS’s definition concept and structure; basic knowledge of management information and system; the meaning of company information (Fan Chongjun, 2006). What the author believes is that, the MBA students should understand how information improves the level of companies management and how strategy accomplish the supportive function, as well as the inner management and information mutual action (Fan Chongjun, 2004).

Part two: information technique, include computer hardware, software, network and data base these for aspects.

Part three: application system, it is mainly about introduction of important information system, which account for most part. Enterprise Resource Planning (ERP) contains much, like purchase and stock, sale and retailer, production plan and control, quality management, equipment management, financial accountant and management accountant etc. Other systems consist of Customer Relationship Management (CRM), Human Resource Management, Development Management, Decision Support System (DSS) and Business Intelligence (BI), E-Business, E-Administration, Cooperation Business and Automatic Office, Enterprise Application Integrate (EAI), Enterprise Information Portal (EIP) etc. In author’s point of view, MBA students should broaden their horizon through the introduction of each application systems, this will help the students have a better and deep understanding of information techniques’ concrete functions in the companies’ management.

Part four: system construction. Includes for aspects: information system planning, which is also called information technique strategy planning (Fan Chongjun, 2004, Fan Chongjun, 2006); information system selection (Fan Chongjun, 2006, Fan Chongjun, 2007); information system implementation (Fan Chongjun, 2006); information and business process reengineering (Fan Chongjun, 2004); information system development. Author holds the view that it should
lessen the content of information system development, while the mature software’s modification implement and reform management should be regarded as the essential content to introduce.

3. Case study Teaching Methods

When teaching the MIS theories, this subject should pay attention to cultivating of information awareness, information ability and information character to help student form abilities of applying the curriculum knowledge in practice. In order to reach this target, case study should substitute for teaching purely principles. Teachers should guide students take advantages of MIS knowledge to analyze and solve practical management problems by connecting principles and practice through case study, to improve the management efficiency, decision making level and profits of business, to make the students have a direct understanding of totally new concept and ways of working brought by information times.

Case study plays an important role among many kinds of subjects of MBA, as well as MIS.

Actually, many companies have already used various information systems to manage business, some of author’s MBA students have experiences of system application or even practical construction. In the way of some familiar cases to the students, like ERP system in some industries, CRM system’s construction and operation etc., can make them have a direct understanding of MIS. The proper cases adapt for theory teaching content should be selected firstly. When teaching the concrete theory knowledge, case used through the whole teaching is recommended, cases step forward as theories do, guide the students to be positive, profound and logically solve problems. As soon as the whole teaching content is finished, cases will leave a deep impression upon students with theories and practice. Lively cases not only increase the level of students’ emotional understanding, contribute their interests in study, but also reach the target of one example three practical applications through students’ imitations of cases and consideration.

During the teaching of theory, especially for the MBA students’ characteristics, it is necessary to emphasis the new characteristics and behavior patterns of management theories and thoughts in the times of information. It emphasizes the case methods of teaching which is dominated by analysis. Through the discussion and analysis of practical cases, students will concern about the development of companies information, and their initiative will be stimulated.

Now domestic textbooks are lack of proper cases, that requires teachers to research catalog and accumulate cases as much as possible, so that cases base for both teaching and students reading and referencing can be found then. Besides, in order to improve the students’ creativity and share their experience, students can also design search cataloging and analyze cases on their own and make speeches in the class. What’s more, their prepared cases can be put in the cases base for next grade students.

Cases come from companies practical cases, but pay attention not to get rid of theory systems in the textbooks, otherwise, students may not understand the fundamentals of the questions. Thus, firstly, explained briefly the main theory knowledge related to the cases, secondly, instruct students to put cases into practice so that theory knowledge and practical cases will be combined together.

Teachers can instruct students to discuss cases according to the teaching content after each unit, to analyze the questions bought up before, and new questions will be found at the same time, finally lead students discuss and express themselves. Acting different roles in different cases is undoubtfully a good and vivid way, or even makes each small groups debate fiercely on purpose, which can arouse students’ interests and recognition of MIS.

What concerns about is not the so-called correct answer to the cases after analysis. Probably there is simply no correct answer to one case or the answer is not unique. The result of cases analysis perhaps is a fruit from one part of the whole process, with some questions that are left without solutions. In this case, “Process more, result less” should be the method to adopt.

4. Practice Teaching Methods

Except for the great integration, another characteristic of MIS is its strong practical application. The practice part of MIS class is so important that would be helpful to study and understanding the curriculum. By practice, students could apply their learned knowledge from curriculum as possible and improve their abilities to analyse and solve problems all by themselves at the same time.

For the business management students, the experiment curriculum for them should be distinguished from the science students’, be careful not to make MIS practice teaching become information system developing class, instead, according to the teaching targets, let students get to master the dealing processes of companies management business under the modern information technique circumstances, and master how to operate and apply the management information system when doing the practical works, so that students’ adaptable ability operating ability and creative ability will be improved a lot. As far as this part of teaching content, we believe it contains experience experiment and simulation analysis experiment.
4.1 Experience Experiment

The target of this experiment in this part is to instruct students have a perceptual recognition, learn the basic structure and functions of MIS, master the skill of applying MIS to manage business.

This experiment put several students in one experimental group, each member simulates one terminal user and operate on the information system according each one’s roles. After finishing their flow missions according to the set business process, students could learn how the companies’ function and management could come into practice with MIS and also learn how MIS could connect information techniques with company management. This experiment asks students to submit an experiment report which consists of two parts: one is the explanation of the experienced system’s basic structure basic function and business and process covered by the system, with management knowledge. The other is the analysis and judgment of the experiment system from two aspects: management and technique. All this will encourage students to find questions and come up with modified solutions.

4.2 Simulation Analysis Experiment

This experiment is accord to the process of information system development, based on the setting of one simulated company, doing system analysis and design, to let students step into every cycle of information system’s development and correctly understand missions in related sessions, which requires students sublimate their perceptual cognition to sensible cognition. Considering the fundament of MBA students, the degree of the experiment should be controlled, and the system analysis should come before the design, under this thought, the teachers instruct students doing experiment. This experiment report mainly consists of business management of system analysis and design sessions, and another is process analysis and design of management data, this examines students how to apply information techniques to deal with companies’ requirements, how information techniques is combined with companies business of strategy level tactic level and executive level, the analysis ability of management requirement research and the information system modeling ability based on this.

5. Improvement of Teaching Ability

MIS curriculum contains both relative many abstract theories and colourful application background, negative study is hard to assimilate the knowledge. While class discussion and ask-and-answer part which analyse questions on the class is a very efficient method, and this is popular among the MBA students. Meanwhile, teachers will find out problems of teaching during the class discussion, what’s more, modify the teaching plans in time for each member in the class.

5.1 Enrich the Teaching Methods

MIS is a fruit which combines information techniques and management thought. Not only the introduction of the basic concept of information techniques should be noticed, which presents the whole process of information system development, but the introduction of functions of mature business management software and application tactics as well. And drawing a great many of easy-understanding diagrams should not be ignored, like organization structure diagrams, function structure diagrams, business process diagrams, data flow diagrams and data dictionaries. Depending on modern teaching methods and equipment, taking advantages of information techniques to make vivid multi-media courseware can take MBA students out of abstraction and tediousness, and help improve their ability by using multi-media instruments in the work.

Situation teaching is an additional form of case teaching, which explains experiences and simulates the cases. For example, invite the companies’ information directors or information management consultant to make speeches or play their lecture shows; make courseware by multi-media techniques; make videos of situation cases for curriculum. Besides, author always make DVs of the processes of students’ cases analysis and play the videos to them or even other students. Without any doubt, this vivid reappearance of situations arouses students’ interests and minds.

5.2 Improve the Teaching level

Because of the MBA students’ work experiences of being senior managers in companies before, teachers are required higher degrees, especially the practical experience. To improve the teaching quality of MIS curriculum, not only should update the teaching content, but also modify the teaching methods, and the most important is constructing a more powerful group of excellent teachers.

As MIS is a comprehensive interdiscipline, marginal, practical subject, in addition to the rapid development of information techniques, to act as the teacher of this subject, not only should prepare a knowledge of software theory, computer, management, but also should cultivate the ability of computer application, at the same time, the experience of developing MIS or application experience of ERP and CRM is also important. Teachers need to learn the developing direction of this subject and changing trend of techniques, take part in more practical activities of this fields, optimize the structure of knowledge rapidly, add new knowledge into teaching content in timely.
6. Conclusion

MIS, as a core subject of MBA, is a comprehensive and applicable subject, with the development of information techniques and management thought, its teaching content and teaching pattern should be modified and reformed rapidly, in order to adapt to the new requirement of MBA cultivation, in the new economic situation.

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References