PRACTICE ARTICLES

The Organizational Exchange of Talent: Rotating MIS Professionals into User Areas

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ABSTRACT

The authors explored the value of rotating MIS professionals into user areas by conducting a roundtable discussion with 16 MIS directors from the Houston area. The participants identified the objectives, problems and critical success factors involved in a job rotation program. The major objectives included product development, organizational and behavioral issues. The problems that were identified (evaluating and managing MIS personnel) were not viewed as a serious threat to the success of a job rotation program. The participants also developed a strategy that would allow companies to inexpensively experiment with job rotation programs.

INTRODUCTION

ECENTLY there have been a number of articles written suggesting that MIS personnel and users should periodically rotate jobs. These articles propose that job rotations would diminish the cultural gap between MIS and user areas. provide career development opportunities, and reduce development costs. Most of these articles consider only transferring users into the MIS department, a strategy already used by many companies. This arrangement reduces user resistance to changes made by new applications, assures a smoother implementation of new systems, and increases overall user satisfaction with the organizational MIS function. However, few articles have investigated the objectives and problems associated with rotating MIS professionals into user jobs to learn the business functions.

Two trends in business support the idea of rotating MIS professionals into the

functional areas. The first is the decentralization of the MIS department; the second is the flattening of organizations. These two trends are examined to show the rationale behind MIS job rotation.

The decentralization of the MIS department has resulted from many technological advances. Less expensive minicomputers and sophisticated networking have provided a cost effective way to decentralize transaction processing. The

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ANALYSIS OF ATTENDEES AND THE ORGANIZATIONS THEY REPRESENTED (In Millions of Dollars)										
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Industry	# of Attendees	Range of Revenues	Range of Assets	Range of # of MIS Employees
Accounting	4	\$1,450-\$2,315	Not available	Notavailable
Airlines*	2	\$4,406	\$8,194	1,600
Energy	6	\$1,237-\$35,315	\$846-\$33,962	104-1,490
Engineering*	2	\$3,661	\$3,110	120
Utilities*	2	\$3,832	\$8,687	363

^{*}Attendees have the same parent company

proliferation of microcomputers, information centers, and fourth generation languages have allowed users to handle many of their own computing needs. Many software houses and consulting firms offer alternatives to in-house application development. These changes have caused companies to depend on their MIS professionals more as business integrators rather than as technological innovators. Therefore, a rationale for MIS job rotation is that the more analysts know the business, the more valuable they will be to the company.

The second trend, the flattening of the organization, will occur as companies become more information-based and less manufacturing-based. In "The Coming of the New Organization," Peter Drucker [1988] states that most work will be performed by task forces in the functional areas. Therefore, MIS specialists will be needed in operations, not in headquarters.

To empirically explore the value of MIS job rotation, MIS managers were invited to attend a roundtable sponsored by the Information Systems Research Center at the University of Houston to discuss the objectives, problems, and critical success factors associated with rotating MIS professionals into the functional areas. Sixteen MIS directors, assistant directors and managers from various industries attended the session. Three of the companies represented have implemented job rotation programs. Their experience provided valuable input into the session by sharing the successes and problems they have encountered. Five other companies have informally transferred analysts into user areas, but have not implemented formal job rotation programs.

Information about the attendees and the organizations they represent is presented in Figure 1. Data have been classified and aggregated by industry type to keep the identities of the participating companies confidential. In particular, the figure presents the number of attendees from each industry, the size of the companies within each industry (measured by revenues and assets), and the number of IS employees managed by the participants. These numbers are presented as ranges within industries to demonstrate relative size. The revenues and assets were extracted from the annual reports from the parent companies. In cases where companies share the same parent company, the same revenue and asset figures are listed. In general, the roundtable participants represent large firms with large MIS departments.

Prior to the roundtable session, participants were asked to read three articles [Drucker, 1988; Herschel, 1987; Brzezinski, 1987] to familiarize them with the two trends mentioned above. Two articles dealt with the decentralization of MIS and the other with the flattening of organizations. The objectives of the session were to: (a) identify the objectives of a rotation program; (b) explore any operational problems with such a program; and (c) to develop a strategy for implementing such a program. This article reports on the outcomes of the roundtable and the

FIGURE 2 THE OBJECTIVES OF MIS JOB ROTATION

PRODUCT DEVELOPMENT ISSUES

- 1. Ensure early user buy-in
- 2. Provide a higher quality product sooner

ORGANIZATIONAL ISSUES

- 1. Create task oriented employees
- 2. Create a flexible MIS structure
- 3. Create a more responsive MIS structure

BEHAVIORAL ISSUES

- 1. Develop MIS career
- 2. Close the cultural gap between users and MIS
- 3. Promote a unified vision of the organization's mission

potential implications of an MIS-Functional area job rotation program on the organization.

OBJECTIVES OF MIS JOB ROTATION

During the first part of the round-table, participants discussed the objectives of a job rotation program. Fifteen objectives for moving analysts into the business functions were initially identified. The participants then reviewed this list to eliminate any redundant or trivial objectives until eight objectives remained. The authors categorized these eight objectives into Product Development issues, Organizational Structure issues and Behavioral issues (see Figure 2).

PRODUCT DEVELOPMENT ISSUES

The product development issues dealt mainly with the objectives of creating and implementing the best possible product (system). The two specific objectives that were identified are (1) ensure early user buy-in and (2) provide a higher quality product sooner. These objectives are discussed below.

1. Ensure Early User Buy-In

Typically, users have been temporarily assigned to an application development team to relay their needs to systems analysts. Users are more likely to buy into the system if they are part of the project team. One of the problems identified with this strategy is that users are removed from their work environment and they often become frustrated trying to convey business needs to analysts. Thus, a better way to determine user information requirements may be to have the analysts temporarily perform the users' jobs. Users would be more likely to buy into any future systems developed by the analysts, because they would have confidence that the analysts truly understood their needs. The users would perceive the analysts as co-workers and not as outsiders trying to change their jobs.

2. Provide a Higher Quality Sooner

A substantial portion of the system development life cycle is spent on identifying functional requirements. Many MIS professionals assume they have a thorough understanding of the users' needs only to find that they have misinterpreted much of what the users meant. This results in a poor system that must be reworked. When analysts are moved into the functional areas, they gain valuable business knowledge. Less time is needed to understand user needs. The net benefit is a higher quality product that is delivered much sooner.

ORGANIZATIONAL ISSUES

The organizational issues identified by the participants related primarily to the flattening of the organization and the need to restructure the way work is performed. In particular, the group felt that MIS job rotations would prepare companies for the future structure of business by creating task-oriented employees and by creating a flexible and responsive MIS structure. These objectives are briefly discussed below.

1. Create Task-Oriented Employees

When analysts are rotated among different functional areas, they adapt to different work environments. They learn how to perform multiple roles in the organization. This experience would prepare them to operate in a flatter organization where most of the work will be done by task forces.

2. Create a Flexible MIS Structure

The long lead time it can take the MIS department to respond to user requests was identified as one of the most frustrating issues facing functional area managers. The inability to mobilize analysts to a functional area problem in a timely fashion is not only frustrating but also potentially quite costly, both in incremental and opportunity costs, to the organization. By having analysts work in the functional areas they will become part of the user organization. This strategy eliminates negotiating with a centralized MIS department for MIS expertise and potentially allows for a quick and effective solution to problems.

3. Create a More Responsive MIS Structure

The business knowledge analysts gain by working in the users' jobs will

allow them to be more responsive to the users' particular needs. Each decentralized business unit may operate differently. The analysts who have actually worked in an area will be able to tailor applications to fit the areas' unique needs.

BEHAVIORAL ISSUES

Behavioral issues of several types were identified with moving analysts into the functional areas. These behavioral issues dealt with developing better career opportunities for MIS professionals and with creating a closer knit company by reducing the formal boundaries between MIS and the rest of the company. These ideas are further explored below.

1. Develop MIS Careers

MIS professionals can no longer remain myopic. If they harbor any hopes of becoming middle or upper level managers, they must learn the business. MIS job rotation would help groom future managers. Currently, there are very few managers whose origins are in MIS. The participants indicated that in their organizations most upper level managers joined the organization in an engineering or marketing position. When organizations become more information based, as Peter Drucker predicts, top managers with MIS experience will be very valuable commodities to the business.

2. Close the Cultural Gap Between Users and MIS

When the MIS organization is segregated from the rest of the company, communication channels tend to be formal rather than informal. The formality often results in a cultural gap. Each side is more comfortable in their own organization. By assimilating MIS people into the functional areas, informal communication becomes possible. The users and analysts come to understand each other, and the cultural gap diminishes.

3. Promote a Unified Vision of the Organization's Mission

The fundamental purpose of a business is to make a profit by providing

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goods or services. MIS managers need to know the business to ensure that the information systems department promotes corporate objectives. One company represented at the roundtable insisted that every employee must be able to articulate the mission statement of that organization, including every MIS professional. This MIS manager indicated that understanding the corporate business objectives has assisted the MIS function in his organization in directing its application of technology. In prior years, the attitude often had been technology for technology's sake. Presently it has changed to technology to facilitate the corporate mission.

Rotating MIS professionals into the functional areas becomes an attractive proposition considering the eight objectives mentioned above. However, participants who have had experience with MIS job rotation shared several problems with operationalizing this concept. The next section of this article discusses the problems the participants encountered.

THE PROBLEMS OF MIS JOB ROTATION

The participants created an initial list of problems associated with moving MIS personnel into the functional areas by brainstorming. The list addressed problems the analyst might experience if moved to a functional area. The participants then reviewed the list to eliminate any superficial problems until four problems remained. The participants then discussed how these problems could be managed. These problems and some suggested solutions are presented below.

1. Resolving Salary Differentials

Several panel members stated that the salaries are inequitable between the MIS organization and the functional areas. For example, a systems analyst may earn a higher salary than an accountant, but less than an engineer. Analysts should not be paid the same salary as the people whose job they are performing. Experience and potential are different for every employee.

This problem may be resolved by basing employee salaries on the value of their skill sets. Salaries would be a function of their technical skills plus the additional value of the business knowledge gained in the functional areas. Overall, analysts should expect to be equally or better compensated than their peers who remain in the MIS department.

2. Evaluating MIS Personnel

A second problem associated with moving MIS personnel into the functional area is evaluating job performance. For example, in one panel member's company, a highly rated systems analyst was transferred into operations to work with chemical engineers. His superior, a chemical engineer, consistently rated the analyst as a low performer because the analyst was evaluated against a chemical engineer's criteria for performance.

This problem can be solved by developing an effective evaluation tool for the functional manager. It is unreasonable to evaluate the analysts against functional employees who have much more experience. Perhaps the emphasis should be on how well the analysts learn and how well they assimilate into the functional unit. This is especially applicable if the rotation period is relatively short.

3. Managing MIS Personnel

Panel members also stated that it is not clear who the MIS professionals should report to. If MIS analysts continue to be managed by the MIS department, they cannot be totally committed to the functional area. If they report solely to a functional management, they may be evaluated as low performers (unless managers are given an appropriate evaluation tool as mentioned above).

Several management structures can be applied to solve this problem, depending on the duration of the assignment and the overriding purpose of the job rotation program. For example, if MIS professionals are assigned to functional units for the purpose of developing a system for that department, they should continue to be supervised by the MIS department. If the MIS professionals are being groomed for

future management positions, they should report solely to the functional managers. Thus the objectives of the job rotation program must be matched to the management structure.

4. Fear of Losing Technical Skills.

Analysts may be reluctant to move into the functional areas because they are afraid to lose their technical skills. Professional systems people are often more loyal to their profession than to the companies they work for. The analyst who shares this sentiment is obviously not a good candidate for job rotation.

Eliminating this problem involves careful selection of analysts to participate in a job rotation program. Analysts concerned only about their technical skills are not broad-minded enough to be selected as job rotation candidates. More advice on choosing candidates is presented in the last section of this article.

None of the difficulties discussed in this section are so overwhelming that they preclude the success in a job rotation program. They were presented so that they could be addressed before they become a problem in future experiments with job rotation.

The first two sections of this article provided insights from companies who have already moved some MIS professionals into the functional areas. The last section presents a plan for implementing a job rotation program for companies who have not yet transferred MIS personnel into functional areas.

PRESCRIPTION FOR AN MIS JOB ROTATION PROGRAM

The eight companies which have not experimented with MIS job rotations were interested in a strategy for implementing such a program. The firms which have installed job rotation programs suggested that the other firms should begin by implementing a pilot program, which is of low risk and easy to sell to upper management. The experienced companies also gave advice on what type of analysts to look for, how to select the proper user job an analyst could perform, and how to evaluate their work. From their advice,

the authors were able to sequence the steps of a pilot program.

The MIS job rotation program could conceivably be initiated by the MIS department or some other segment of the firm. However, the pilot program may be more successful if it is initiated by an MIS manager with good rapport with functional managers.

A pilot program may consist of transferring only a few analysts to a functional area for a short period of time. A suggested duration period of three months seems workable. Eight steps are proposed in Figure 3 for developing a pilot program. These eight steps are explained below.

1. Obtain Upper Management Support

As with most MIS endeavors, it is difficult to assign a dollar value to the benefits of a job rotation program. Therefore, it is critical to have the support of upper level management. Since MIS job rotation is a strategy for adapting to the flatter organization of the future and for decentralizing the MIS function, upper level managers will probably view the pilot program favorably. In addition, a pilot program possesses few financial risks.

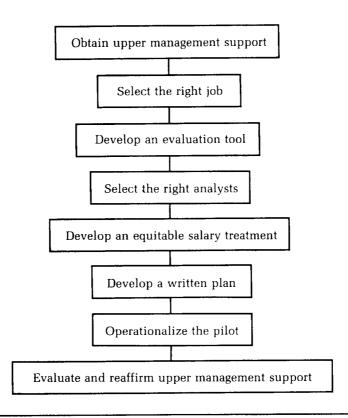
2. Select the Right Job

The second step in developing a pilot program is to find a functional unit that is willing to participate in the experiment. Perhaps there are functional units with personnel shortages who would be delighted to have skilled analysts to help them relieve the workload. The jobs must be challenging to the analysts, and it must utilize their skills. For example, analysts' quantitative problem solving skills are suitable for scheduling, optimizing or detecting problems. Since the pilot program will have a short duration, the position selected should not require intensive training before the analysts can be productive.

3. Develop an Evaluation Tool

Once the positions are selected, the MIS department and the functional area

FIGURE 3
PROCESS TO DEVELOP AND OPERATIONALIZE AN MIS JOB ROTATION PILOT PROGRAM



should develop a performance evaluation tool together. As stated previously, the evaluation of MIS personnel should emphasize how well the analysts learn their new jobs and how well they assimilate into the functional unit. During the pilot test, the MIS department and functional unit should communicate often and give immediate feedback and guidance to the analysts.

4. Select the Right Analysts

Choosing the right analysts is crucial for the success of the pilot program. Good candidates should have some business background, good communication skills, and a commitment to the company. A business background could consist of an undergraduate degree in business, an MBA, or some practical work experience

in a non-technical position. Good communication skills are crucial because analysts will work with many types of employees and customers. Analysts must also have a desire to learn the business. People with long term commitments to the company will be more likely to succeed in the functional unit. The MIS department should identify an initial pool of candidates, then the functional unit manager should interview and help select the analysts. All three parties—the MIS department, the functional area and analysts—should be happy with the selection.

5. Develop an Equitable Salary Treatment

Depending upon the length of the assignment this may or may not be a

critical step. For short rotation periods keeping salaries at current levels is acceptable. For longer periods both salary inequities as well as using salaries as motivation and incentives must be considered.

6. Develop a Written Plan

A written plan for the program should be developed. The objectives of the program should be clearly stated. Potential objectives may include the eight identified previously. These objectives will be used to determine the success of the pilot test when it is completed.

7. Operationalize the Pilot

Assuming the pilot project receives the go ahead, the analysts can be transferred into their new assignments. The functional manager should prepare his group for the new analysts. Co-workers should be informed of the pilot project and make the analysts feel welcome. The analysts should also be properly trained to ease the transition into their new positions. During the analysts' stay in the functional area, the MIS and functional managers should communicate often to discuss the status of the pilot test. These managers may decide to make modifications during the assignment, such as changing the length of the assignment or work responsibilities.

8. Evaluate and Reaffirm Upper Management Support

After the pilot test is complete, the MIS manager and functional manager must evaluate if it was successful. They can compare the outcomes of the program with the objectives that were identified in the written plan. Analyst and user opinions should be considered also. The managers will most likely present a report to upper management. If the pilot test was successful, the next step may be to operationalize an on-going MIS job rotation program. The sequence of steps involved in the pilot test may be followed again, except on a larger scale. For

example, more attention might be paid to developing an equitable salary treatment (Step 4). Other options may also be considered such as keeping the analysts in the functional units for longer periods of time, or even permanently. Lessons learned from the pilot test should be incorporated into the on-going program. Managers can tailor an MIS Job Rotation Program to fit the unique needs of their company. At this point a public affirmation and long term strategy for the program needs to be addressed by executive management.

CONCLUSION

This article presents a prescription for developing a job rotation program to send MIS professionals to functional units of the organization. The prescription is developed with the understanding that both benefits and problems will likely occur during implementation.

This topical area was of great concern to high level MIS managers of organizations belonging to the University of Houston Information Systems Research Center. Based on discussions during a roundtable the group expressed the need to have MIS take a proactive role in an organizational exchange of talent program. The consensus of the group was to try to place a greater number of MIS professionals in functional areas so that not only would work be done in a more expeditious fashion but the MIS professional would also begin to understand the business of the organization.

As computer-based technology becomes more pervasive within organizations, and as users become more comfortable and sophisticated with computer-based technologies, functional demands will grow at an ever increasing rate. It is therefore appropriate at this time, as the first interest in issues such as functional connectivity and departmental computing becomes apparent, that the organization begin to think about strategies to support these concepts. The exchange of talent program introduced in this article might be an initial starting point.

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