

Author Comment

Critical Success Factors of Chief MIS/DP Executives — An Addendum

A group of six Critical Success Factors that appear to characterize the position of Chief MIS/DP Executive in the United States was reported in the June 1982 issue of the *MIS Quarterly* [1]. The following question arises: Does this set of critical success factors apply to Chief MIS/DP Executives in other parts of the world, or would a different set of CSFs be found for Chief MIS/DP Executives in other countries? In other words, which, if any, of these CSFs are characteristic of the MIS/DP organization, and which of them are altered by the environmental differences found in different countries? To shed some light on these questions, this note reports on a study of the CSFs of a group of Chief MIS/DP Executives in England and Scotland (hereafter referred to as the U.K.) and analyzes the differences between the two sets of CSFs.

The concept of a "Critical Success Factor" (CSF) was proposed by John F. Rockart as an approach to defining the information needs of top level managers [2]. According to Rockart:

"Critical success factors . . . are . . . the limited number of areas in which results, if they are satisfactory, will insure successful competitive performance for the organization. They are the few key areas where 'things must go right' for the business to flourish. If the results in these areas are not adequate, the organization's efforts for the period will be less than desired."

The study in the U.S. was based on fifteen Chief MIS/DP managers from a wide variety of U.S. businesses and three government organizations.

Description of this study

The sample in this study was composed of nine chief Management Information Systems or Data Processing executives of sizable business or governmental organizations in the U.K. The Chief MIS/DP Executive was defined as the highest level executive in the organization that was directly responsible for the development and operation of the organization's computerized information or data processing services.

The data for this study was collected by structured interviews with the Chief MIS/DP Executive in his office. Before the interview, the executive was sent a description of the concept of a CSF and was asked to give some thought to the objectives of his MIS/DP organization and to his personal CSFs. It was obvious at the interviews that most of these executives had given considerable thought to this subject and were well prepared for the interview. Several of them included their deputy in the discussion, and all of them were most hospitable, frank, open, and helpful. The interviews required from one to three hours.

The organizations in the sample included two utilities, a large brewery, a bank, two consumer products companies, one regional government, and two large public enterprises. The MIS/DP departments ranged in size from 40 to 1,050 employees, and their yearly budgets ranged from about 7,000,000 pounds to 20,000,000 pounds. Over half of them used IBM computers, and the rest used ICL computers. Five of the nine were using database management software, and three of them were using database technology on about one-third of their applications.

The MIS/DP managers ranged in age from 40 to 59. They had worked for the organizations from 11 to 45 years. All but one of them had worked in the computer area for at least 17 years. The typical manager had been in the Director of Management Information Systems position for about six years.

Results

The Chief MIS/DP Executives in the U.S. and the U.K. shared the following five CSFs, and about half of each group reported the sixth one:

1. Systems development
2. Data processing operations
3. Human resource development
4. Management control of the MIS/DP organization
5. Relationships with the management of the parent organization
6. Management of change

There were two significant differences between the CSFs discovered in the U.S. and those found in the U.K.; one CSF was found in each country that did not appear in the other.

Industrial relations in the U.K.

In the U.K. study, four of the nine managers considered *Industrial Relations* to be an area that was critical to their success. Although this factor was reported by less than half the sample, it appeared to be quite important to those managers that mentioned it.

One manager reported that Industrial Relations was his number one problem in management of his organization, for he had to negotiate with the union before he could contract our programming, obtain application packages, or locate mini-computers in user organizations. Other managers reported that potential industrial relations problems dictated that critical systems be designed to be transportable to another site. One organization maintained a separate computer centre as an alternate site that was not ordinarily used for production work so that critical systems could be transferred to the alternate site in case of disruption during a labor dispute.

To understand why Industrial Relations is so important to Chief MIS/DP Executives in the U.K., one must be aware of two differences between unionization in the U.K. and the U.S. In the U.K. many DP organizations are completely unionized: operators, programmers, system analysts, and management of both data processing operations and systems development are members of the union. In at least one instance, the Director of MIS and his deputy reported that they were also union members. Secondly, in a labor dispute in the U.S. the union will strike and try to close down the entire organization, but in the U.K. a common tactic is to selectively disrupt company operations while the company continues to operate (and continues to pay most of the members of the union). For example, while the author was in the U.K., there was a continual dispute between the government and the union of government workers in which the disruptions were periodic walkouts by air traffic controllers and refusals by workers at government data processing centers to process both incoming and outgoing checks (not including, of course, paychecks to government workers). It is easy to see why data processing managers would be quite concerned with Industrial Relations in that environment.

Support of organizational priorities in the U.S.

In the U.S. study, one of the most important CSFs (reported in one form or another by eleven out of the fifteen managers) was "support of the objectives and priorities of the parent organization." This CSF was reported by *only one* of the U.K. managers. In the U.S. study, this CSF appeared as a concern for aligning MIS/DP priorities so that they support the priorities of the parent organization, or that project selection be determined by parent organization or user needs.

Unlike the case of the *Industrial Relations* CSF, it is not immediately obvious why this CSF should appear in one country and be absent in the other. One possible explanation is that an area may be critical to success, but it probably will not be mentioned by a manager unless it is a problem for the manager. Thus one might argue that alignment of the MIS/DP priorities in the U.K. is not an issue because the problem has been solved, while in the U.S. managers have not successfully coped with that problem.

An alternate explanation lies in possible differences in reward systems and attitudes between the U.K. and the USA. It was the author's impression that the U.K. managers were under significantly less pressure than their counterparts in the USA, and that in general there is less competitive pressure throughout British society than in the USA. Thus there may be less concern in the U.K. with maximization of organizational objectives.

The latter explanation is reinforced by the results of an unpublished study of the CSFs of Directors and Data Processing of several big ten universities where "support of the objectives and priorities of the parent organization" also did not appear as a CSF. Since universities appear to lack emphasis on organizational objectives and priorities, it is pretty obvious why this CSF did not appear in the University environment.

Conclusions

There was an impressive degree of commonality between and CSFs of Chief MIS/DP Executives in the U.S. and those of their counterparts in the U.K. However, there were two CSFs that were apparently related to differences between the two environments. Given the very pervasive similarities between the cultures in the U.S. and the U.K., one would not be surprised to find significant differences between the CSFs of chief MIS/DP managers in the U.S. and their counterparts in other environments such as Japan and Soviet block countries.

References

- [1] Martin, E.W. "Critical Success Factors of Chief MIS/DP Executives," *MIS Quarterly*, Volume 6, Number 2, June 1982, pp. 1-9.
- [2] Rockart, J.F. "Chief Executives Define Their Own Data Needs," *Harvard Business Review*, Volume 57, Number 2, March-April 1979, pp. 81-93.