

IS THE DATA PROCESSING FIELD SO DIFFERENT?

F. J. Gruenberger

September 1965

P-3236

IS THE DATA PROCESSING FIELD SO DIFFERENT?

F. J. Gruenberger^{*}

The RAND Corporation, Santa Monica, California

COMPANY A

Company A decides to produce a movie to show off its products and improve the company image. After defining the subject matter and some of the technical details (e.g., whether to use color, the amount of synchronized sound, etc.), it requests bids from half a dozen film companies. For the half-hour finished film, these bids range from \$12,000 to \$30,000 for all phases of production up to the master negative. Company A now has to decide between

- a) Selecting one of the film companies and letting it make the film;
- b) Renting movie gear and letting the brother-in-law of one of the vice-presidents (this man has made lots of 8-mm home movies and owns a tape recorder) do the job. It is estimated that by this alternative method the total cost can be held down below \$2,000.

COMPANY B

Company B has decided to launch a million-dollar advertising campaign. The million dollars is total cost.

* Any views expressed in this paper are those of the author. They should not be interpreted as reflecting the views of The RAND Corporation or the official opinion or policy of any of its governmental or private research sponsors. Papers are reproduced by The RAND Corporation as a courtesy to members of its staff.

The advertising agencies all seem to have a standard fee for their services, so that if any one of them handles the campaign, roughly \$900,000 of advertising space will be purchased. The balance goes to the agency. The head of the mail room in Company B, however, was editor of his high school yearbook, and could obviously do the job, thus allowing for \$100,000 more advertising.

COMPANY C

Company C has had its corporate offices for a century in a converted sawmill. They want to construct a modern headquarters building, for which reputable architects will charge upwards of \$50,000 for the plans alone. Someone in Company C knows a free-lance architect who works for \$5 per hour on weekends and who guesses the whole job can be done in under 100 hours.

COMPANY D

Company D finds that, through the actions of some of its officers, it is in trouble with the government over a matter of price fixing, restraint of trade, and violation of the anti-trust laws. A conviction will also lay them open to civil suits by their customers.

One of the officers of Company D was at one time a practicing attorney. Since he is already on the payroll, Company D finds that it can save a lot of lawyers' fees by letting him handle the matter.

COMPANY E

Company E is about to graduate from punched card equipment to Electronic Data Processing and has ordered a large computer for delivery next year. However, qualified EDP experts demand high salaries. Moreover, the business in which Company E engages is extraordinarily complicated, to the extent that no one can understand its peculiarities without years of training. The officials of Company E are told by the computing salesmen that data processing is essentially rather simple (really not much different from the punched card work they're used to) and that any and all of Company E's people, including management, can be trained in six weeks at the vendor's school. By following this course of action, Company E not only avoids seeking and paying for the high-priced EDP expert, but can utilize to the fullest the intimate knowledge that its own people have of the extraordinarily complicated workings of the company.

DISCUSSION

Now, are these case histories analogous or not? I think they are, of course, and I'm tired of the assumption made in article after article that somehow EDP is different. I'll gladly admit that a telephone man knows the telephone business better than an outsider, but a file is a file, whether its records are of telephone calls or apple sales. And he who forgets to sequence check the input data makes just as large a blunder in either business.

Company A may make its own film, but if they ever make another film it will be through the services of people who

know film-making. Of course, a company man will work with the film people.

Company B will either use an ad agency or go out of business. It is not just accidental that all national advertising is handled through agencies; the job has a higher probability of being done better that way.

Company C would be out of its collective mind not to buy the services of the best architect it can find.

Company D will rush to get the best team of anti-trust lawyers it can find.

And what of Company E? Frequently, businessmen begin (and end) with the premise that "no one understands the banking business but a banker" (substitute "telephone" or what you will for "banking"). They may also cite a case history or two where some company did create its own EDP experts and are doing fine. What may be overlooked is that the success they think they observe is only superficial; that there is now a 7080 installation with 30 programmers where there should be a 1401 installation with 6 programmers.

The EDP fallacy might have been justified years ago when the uses of EDP were just developing and experienced experts numbered less than 100. Today, the number of competent people with five years' experience probably exceeds 5,000. These people still come at a high price, but so do film-makers, architects, and lawyers.

