From Machine Man to Information Manager:

Class Formation and Group Mobility in Corporate Computing, 1953-1964

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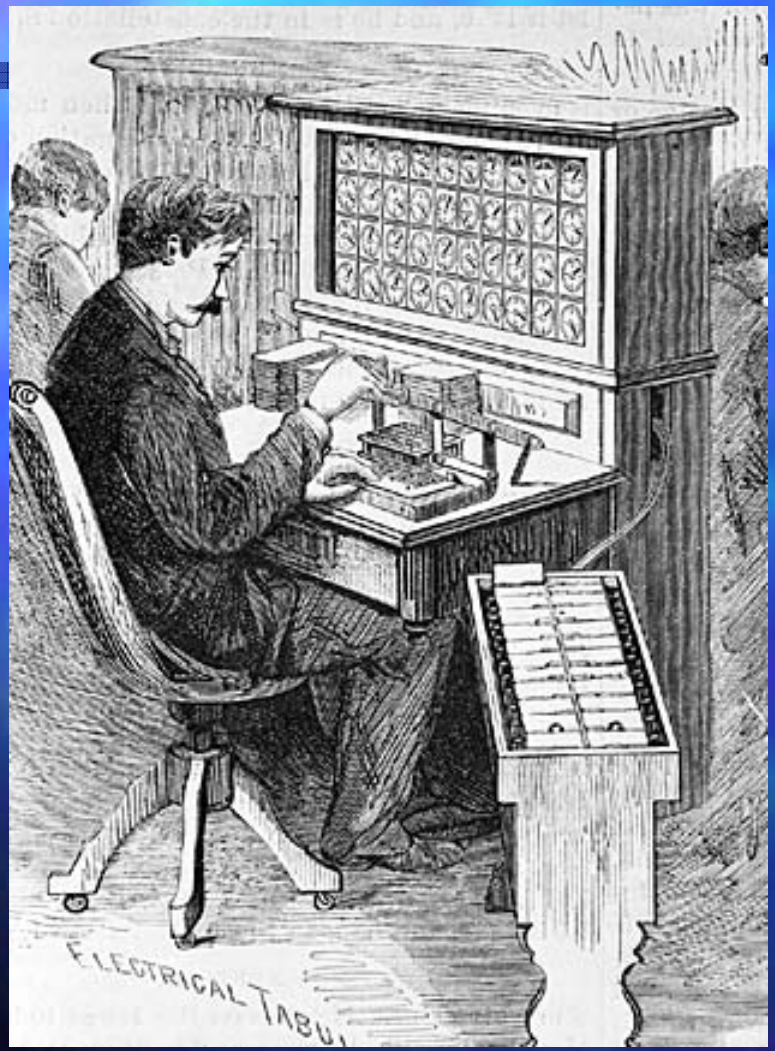
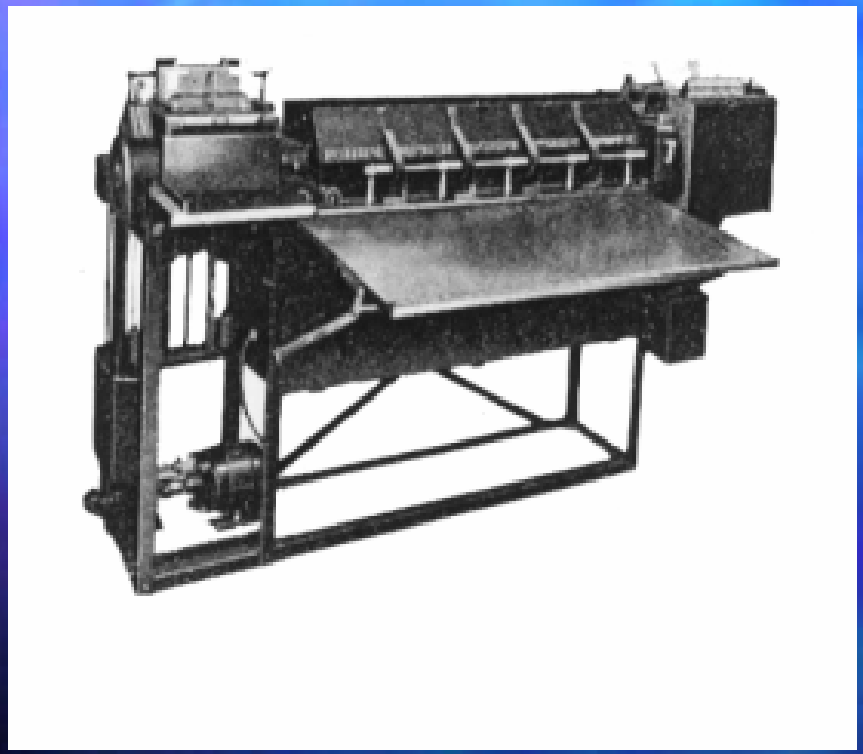
Punch Card Machines

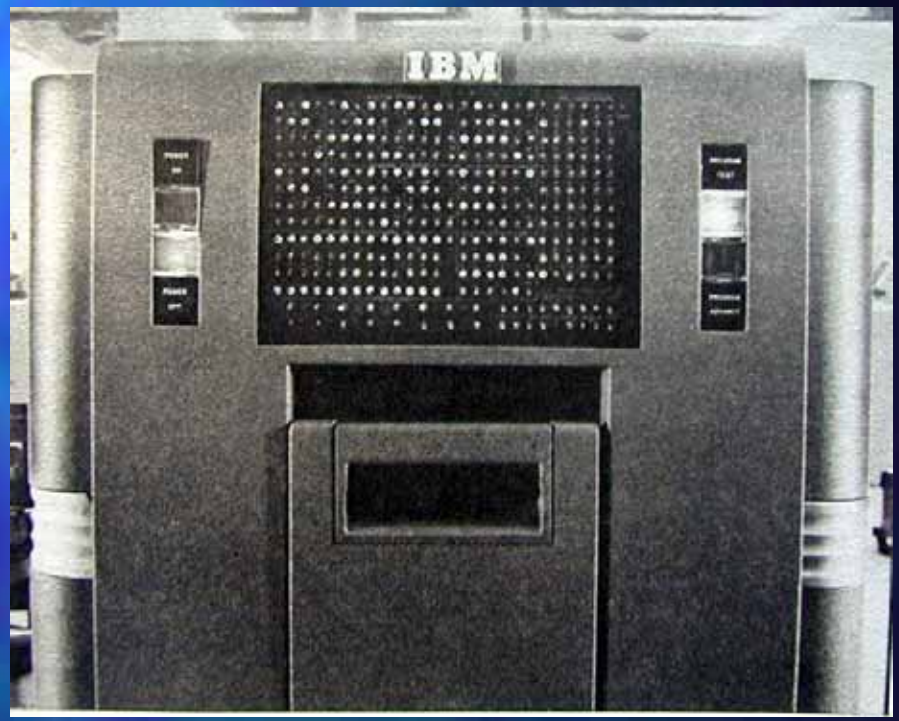


- Invented by Herman Hollerith
- Original use for 1880 Census
- His company eventually becomes IBM

Punch Card Machines Evolve



1920s



Late 1940s

THE HOPPER

Official Publication of the Machine Accountants Association

SEPTEMBER 1950 CHICAGO, ILL. VOL. I - NO. I

The Kickoff

Here is your first issue of THE HOPPER. It's your baby, designed to provide you with a means of expression, a printed forum, a voice, an ear. How good it will be, how well it will serve you, depends on you. We're kicking the ball to you. Now let's see you carry it by sending in your thoughts, ideas, suggestions, and the like, on anything that will strengthen and improve the MAA and the service it provides to its members, on anything that will help Machine Accountants in their efforts to serve Management more competently, more fully.

We feel THE HOPPER marks another important step forward in the progress of the machine accounting profession. As you know, the science of punched card accounting has expanded to the point where no one man can acquaint himself with all the complexities of the subject. It is the aim of THE HOPPER to keep you abreast of this ever-broadening field by presenting informative articles by specialists in the various technical phases of machine accounting.

I cannot stress too strongly the fact that each of you should take an active interest in MAA publications. If you will examine the articles that are available today on the subject of machine accounting I am sure you will agree that they are not what we need. They are too vague, too general, and all too often written without a full understanding of the punched card equipment used.

This is a condition which the MAA can remedy!

We have men in our own ranks who are capable of writing the kind of detailed, factual, helpful articles we need. Now we have THE HOPPER providing the opportunity for publication of such articles, the ideal means of getting your story before intelligent, interested readers.

Now it's up to you! THE HOPPER is designed to provide you with the opportunity to present your theories on machine accounting and also to show you what others in the profession are thinking and doing that may be of assistance to you in your own operation.

I feel confident that through continuing efforts in this direction all of us in the Machine Accountants Association will soon see the day when we will take an ever-increasing part in the thinking and planning of Management.

Robert L. Jenal

LOOKING AHEAD

After sounding out the membership and looking over all available facilities, we have arranged the following schedule for our general meetings. Throughout the fall, meetings will be held on the second Friday of each month at Henrici's in the Merchandise Mart, as follows:

October 13th
November 10th
December 8th

Dinner will be served promptly at 6:30 P.M.

The meetings will be adjourned prior to 9:30 P.M.

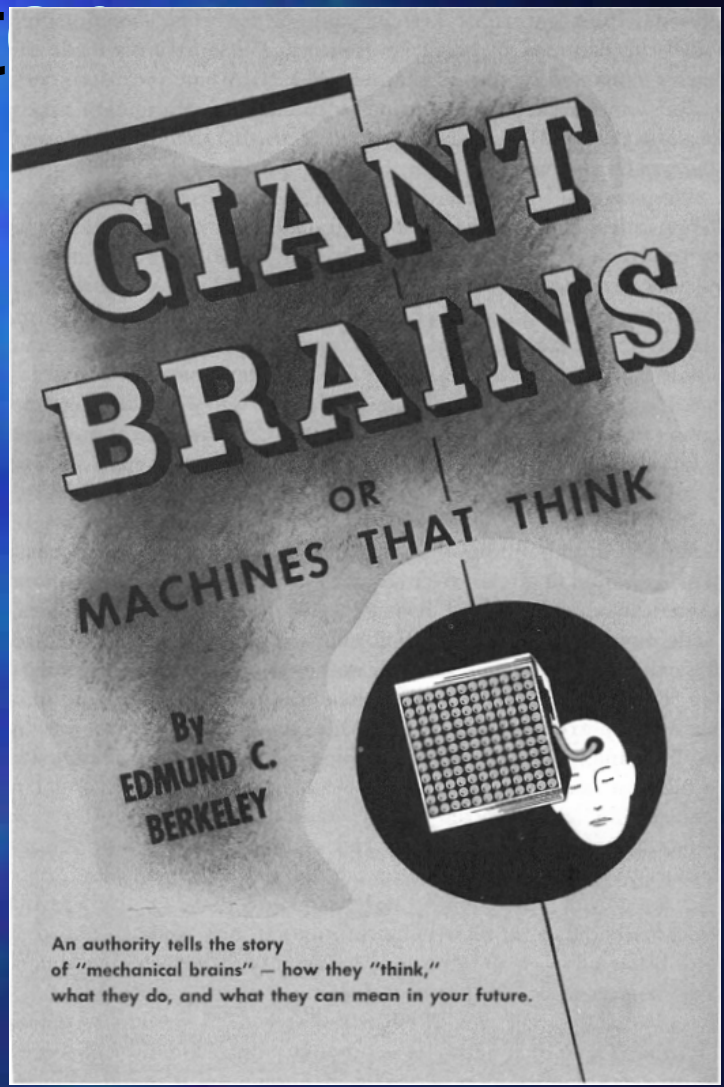
"The Hopper"

- Magazine of the (National) Machine Accountants Association
- First issue produced in 1950

Computers Arrive in Business

Eyeing The Comput

- Prominent
- Well-funded
- Emblematic of modernity
  - The ultimate form of automation



Data Processing Management Association

The first in a new series of articles on associations in the data processing industry is this profile of the DPMA.

Toward a New Profession

To its members, the Data Processing Management Assn. holds a promise of professional status in a vital new career field, not yet fully defined.

Comprised of data processing department managers from thousands of large and small installations across the nation, the DPMA originally was founded in 1951 as the National Machine Accountants Assn. Its chapters started as local meetings between those with a mutual interest in data processing, its techniques, its equipment and its advancement as a management science. Chapters now number 190, including thoses in Anchorage, Alaska; Honolulu, Hawaii; Baldrich,

spur our nation's schools to adopt a badly needed data processing curriculum at all levels of education.

Future projects include the publication of a manual showing "how to teach data processing instructors to teach," plus a course for corporate management on how to understand the functions of data processing and get the most out of them.

DPMA international conferences and trade shows are held each year during the month of June. The next such meeting will be held June 25-28 in Cobo Hall, Detroit. This, too, will be the occasion for the association's annual directors' meeting and election of officers.

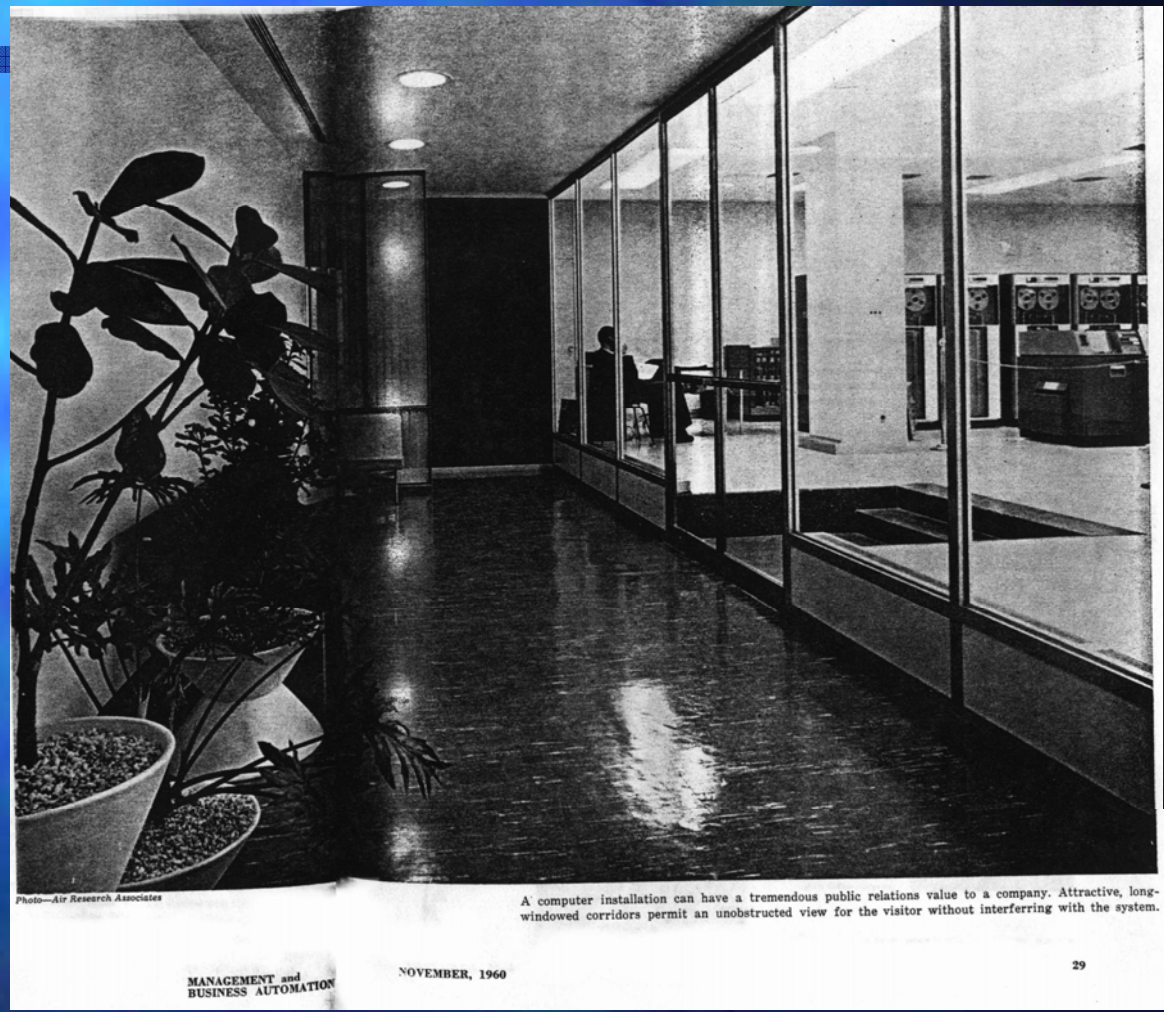
The DPMA Executive Committee includes (front row, left to right) Charles Prince, vice president; Robert Goliwas, vice president; Robert Gilmore, executive vice president; Elmer Judge, president; Billy Fields, vice president; Clyde DuVall, treasurer; John Drew, vice president—1963 Conference; (second row) Carroll Parry, vice president; Daniel Will, vice president; John Swearingen, vice president; R. Calvin Elliott, executive director, headquarters staff; Alfonso Pia, immediate past president; Marge Rafferty, office manager, headquarters staff; James Adams, education director, headquarters staff; Vic Lota—1964 Conference director.

- Name of NMAA changed in 1962

The Computer as Showpiece

"a computer installation can have tremendous public relations value for a company"

Management and Business Automation - 1960



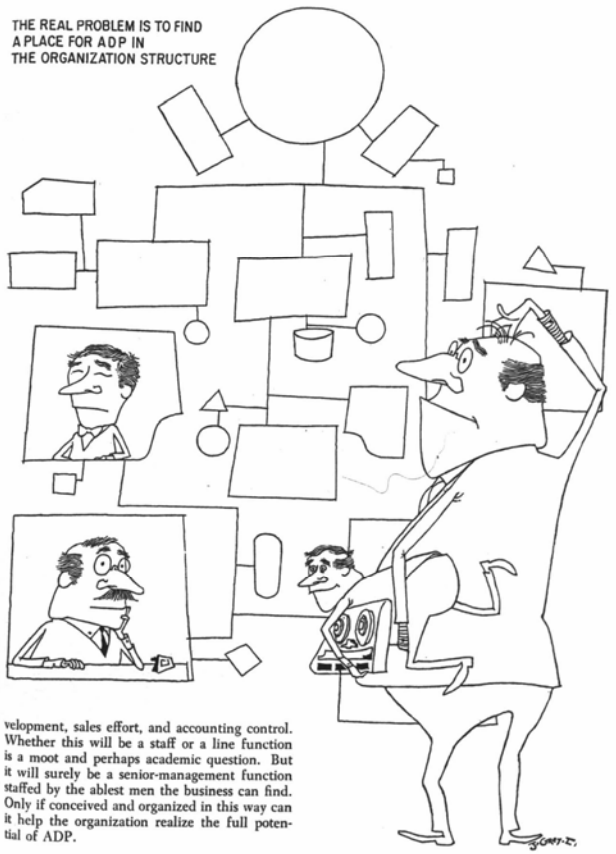
Photo—Air Research Associates

A computer installation can have a tremendous public relations value to a company. Attractive, long-windowed corridors permit an unobstructed view for the visitor without interferring with the system.

MANAGEMENT and BUSINESS AUTOMATION NOVEMBER, 1960 29

Eying the Organizational Chart

THE REAL PROBLEM IS TO FIND A PLACE FOR ADP IN THE ORGANIZATION STRUCTURE



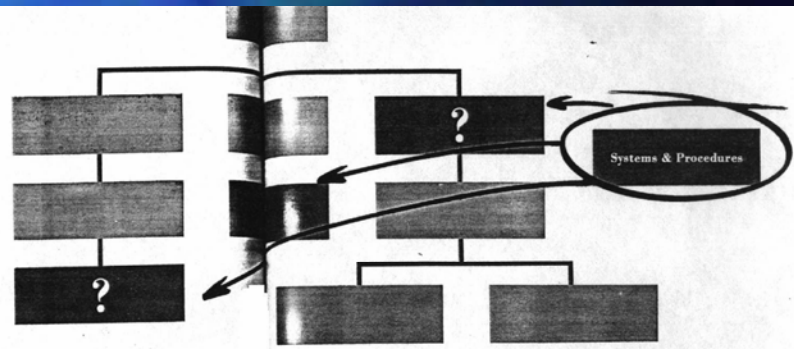
velopment, sales effort, and accounting control. Whether this will be a staff or a line function is a moot and perhaps academic question. But it will surely be a senior-management function staffed by the ablest men the business can find. Only if conceived and organized in this way can it help the organization realize the full potential of ADP.

Harvard Business Review

must determine on its own the optimum answer to the vital, pressing question

Whither The S & P Group?

By Albert Kushner



SYSTEMS planning is occupying an increasingly important place in today's business operations, particularly in view of the spectacular growth of data processing activities. And as more and more data processing work has been converted to computers, the proper role and organizational location for systems planning responsibilities have become an increasingly important problem.

Not only must the responsibilities for computer feasibility studies, computer systems changes, and integration of data processing systems throughout the company be appropriately assigned, but the handling of inter-unit, as well as intra-unit, procedures work must also be given thought.

To see our problems in proper perspective, we might review the history of systems work as we know it today. Such work began in the factory, which anticipated the office in its efforts to eliminate, simplify and measure work. In the early part of this century, the excellent work of men like Taylor and Gantt started that kind of thinking, which gained added impetus during World War I and in the early twenties. However, even though by that time work measurement and simplification had become commonplace in the factory, the office did not receive much concentrated attention.

In the early twenties, clerical costs were not considered too great a burden to management, nor were they thought to offer much of an opportunity for profit improvement. Most accounting was historical in those days; the various techniques of planning and control as we know them today, including budgetary control and standard costing, were used only in the more progressive corporations. Market and sales analysis techniques and their advantages to management were just beginning to be understood. The potentials of mechanized office equipment, such as tabulating gear, for processing great masses of data did not really start to take hold until the middle twenties, with the life insurance companies being among the early users.

The real opening wedge for office systems and procedures work was the great depression of the early thirties, which stirred up a tremendous interest in clerical costs. In addition to the low company incomes of the depression years, there was a dawning recognition that the boom economy of the later twenties had built up inefficient overhead in the office. Also, new federal, state and local tax and insurance forms and requirements created payroll and inventory accounting problems that had been unknown before this time.

Then World War II came along, not only creating a shortage of trained clerical help but also compounding the office workload with all sorts of paper work, such as the priority schemes required by the War Production Board. This situation perforce gave another great impetus to systems and procedures work.

New twist for an old game

The early fifties saw the advent of the electronic computers into the business world. These devices brought with them great opportunities for procedural improvement through mechanization. The systems planner was slow to recognize this was simply an extension of the work he had already been doing, and before long the systems field was invaded by a new breed of systems man—the computer specialist. As a result, one of our big problems today is integration—the integration of computer and noncomputer systems efforts.

As more and more data processing work has been converted to computers, it has become evident that the integration of computer and general systems work is only one of the problems we face. More broadly, the proper role and organizational location for the entire systems and procedures responsibility have become a problem. The controversies we have seen arise in client organizations that are symptomatic of this kind of problem can be categorized in three broad areas—the role of a systems function, computer programing, and computer operations.

The following are typical controversies that arise over the role of the systems function. Has an operating department the right to approve or reject, or simply advise on, changes in the reports they are now receiving? Does responsibility for tabulating systems design rest with the tabulating operation or with the systems group? Is systems planning usurping the right and obligation of line management to do systems work within a department? Can computer systems work be combined with general systems work? Should line operating personnel be involved in the company's systems design?

In the computer programing area, too, questions arise as to responsibility and location. For example: Are the delays in developing computer systems due to programing incompetency or to the continual introduction of systems changes by operating personnel? Should the computer operating group have its own programers? Should pro-

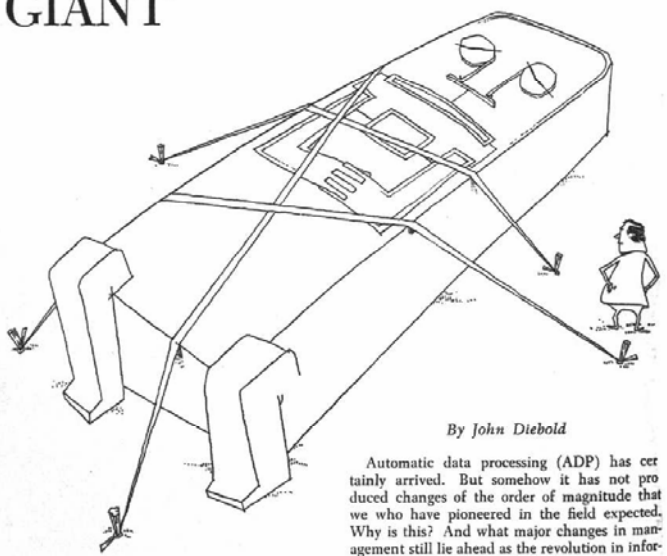
Systems and Procedures - 1965

The Systems Men

If he manages through systems, the boss will have time for leadership.

Information Will Unlock "True Potential"

ADP – THE STILL-SLEEPING GIANT



By John Diebold

Automatic data processing (ADP) has certainly arrived. But somehow it has not produced changes of the order of magnitude that we who have pioneered in the field expected. Why is this? And what major changes in management still lie ahead as the revolution in information technology gathers momentum?

Speedy and Spotty

Let's take a quick look at the record since ENIAC and Mark I made their appearance 19 years ago. In that brief period five distinct phases may be discerned:

(1) First, there was the coldness of potential users in the early 1950's. Typical of this period is the controller who quoted me Pope's "Be not the first by whom the new is tried, nor yet the last to lay the old aside." Everyone was from Missouri and had to be shown.

(2) Next came the status "kick" of 1956–1957 when corporate presidents decided they had to keep up with the Joneses. Four-color photos of walnut paneled, deep-carpeted, "showcase" installations graced corporate annual reports, and yet-to-be-realized savings by computers were what the presidents bragged about to one another out on the golf course.

(3) Then, with the onset of the 1957 recession, came disillusion as the initial installations failed to live up to expectations. Naive early projections of big payoffs changed in a matter of months to an attitude reminiscent of Damon Runyon's character, Harry the Horse, on his way to the track: "I hope I break even today — I need the money."

(4) The fourth era was ushered in during the early 1960's. It was characterized by a growing sophistication on the part of business regarding at least the obvious data-processing applications (as more programmers and other trained personnel became available). Of especial importance, there was a growing appreciation by computer manufacturers of business data-processing problems, which affected computer design.

(5) Finally, today, we have routine acceptance of the electronic computer as an everyday tool of business. Almost 15,000 computer systems are now installed in this country alone. And, of even greater significance, more computers are now on order than have been built in the past 15 years.

"BE NOT THE FIRST BY WHOM THE NEW IS TRIED, NOR YET THE LAST TO LAY THE OLD ASIDE!"

"OF COURSE OUR INSTALLATION IS A SUCCESS – FOUR-COLOR PICTURE SPREAD IN LAST MONTH'S OFFICE INTERIORS – NEXT MONTH, HOUSE BEAUTIFUL!"

"I HOPE WE BREAK EVEN TODAY – WE NEED THE MONEY!"

Unrealized Potential

Of course, many of the 15,000 ADP systems in use are more than paying their way, and some are performing tasks that were not possible before. But even in the best applications we have not come close to realizing the computer's true potential. Let me hazard some reasons why.

Deterring factors differ from installation to installation. Sometimes — but rarely now — the equipment is at fault. In most cases the problem can be laid right on management's doorstep:

- Inadequate planning, mostly parochial rather than corporate-wide in scope.
- Not enough fresh thinking, and too much reliance on canned approaches.
- Selection of the wrong people to plan the installation — i.e., technical specialists who fail to acknowledge or even appreciate their limited understanding of business practice.
- Overemphasis on hardware and underemphasis on the design of comprehensive systems.

These are serious faults. But the basic problem lies deeper. It is far more subtle, yet in a

Harvard Business Review - 1964

Managerial Class Formation

- Must take serious the different social groups and castes **within** corporate management.
- Hybrid Identities
  - Trad: Class, Race, Gender, Ethnicity
  - Here: Employee of Firm, would be Professional, technical artisan, member of Managerial class
- “Management” itself is a constructed, overarching category
  - Group mobility, realignment of managerial castes
  - Class consciousness, ideology crucial

Relationship of Programmer to Management Remains Strained