

CITIZENS LEAGUE REPORT

No. 12

**Report on the use of new office
machine technology for voter
registration and billing procedures in
Minneapolis**

June 1953

June 2, 1953

To: Charles T. Silverson, Chairman
Citizens League Government Operations Committee

From: Sub-Committee on Office Machine Applications

Subject: Report of Sub-committee on Office Machine Applications

I. ORIGIN AND SCOPE OF SURVEY AND METHOD OF INQUIRY.

- A. Origin of Project. Among the recommendations in the Public Administration Service report of 1947 was one concerning the possibility of simplifying and improving voter registration procedures through machine methods. The sub-committee on PAS recommendations of the Government Operations Committee concluded that this was one of the several phases to be dealt with in more detail. As a result, a sub-committee on Office Machine Applications was appointed from the City Government Operations Committee made up of John Savage and Dan Magraw, Chairman.
- B. Scope. Although this project was originally limited to voter registration, it came to the attention of the sub-committee that there were proposals in the hands of City Engineering personnel relative to changes in billing procedure. Furthermore, it was soon apparent that the scope would have to be extended to cover the general subject of machine applications.
- C. Survey Methods. Surveys began last fall and included a meeting with Mr. Hugo Erickson, City Engineer, and a meeting with Mr. George Johnson, representing the International Business Machines Corp., which has a number of machine installations in city and county offices. In addition, a number of discussions were had with city employees concerned with present and potential machine applications. No discussions were had with county personnel because county operations are outside the scope of the committee.

II. DISCUSSION

To serve as the basis for the recommendations appearing in the following section, there follows a brief discussion of the two specific areas of inquiry and the more general area.

- A. Voter Registration: The Deputy Commissioner of Registration, Mr. Allen Anderson, is interested in making improvements in voter registration methods. Proposals which were submitted many months ago were studied by him. Because of the nature of the records, the opinion of the Attorney General of the State of Minnesota was requested as to the legality of adopting either of the methods proposed. The Attorney General ruled that the proposed methods were not legal. A bill to legalize new methods was introduced in the 1953 Legislative Session by the Hennepin County legislators, and was passed. Mr. Anderson is of the opinion that a change to a mechanical method would be in the best interests of the city. In the period before an election, a large number of employees are hired to attend to clerical details (as many as 80 employees have been hired for one election). Mr. Anderson stated that in all probability total costs could be substantially reduced.

- B. Water Department Billing Procedures. Representatives of a number of office equipment firms are of the opinion that substantial savings to the city will result from introduction of other methods and equipment than those being used. A number of firms have submitted proposals outlining what they believe to be advantages to be obtained from use of their equipment. The Water Department Committee of the council referred the proposals to Mr. Harris, City Research Engineer, for study. He has prepared a report which the Water Department Committee has not yet reviewed. It is our understanding that the report was completed in the fall of 1952. So far as can be determined, no one in the city administration is pressing a decision on this matter nor is the City Council. The matter is lying dormant.

There is a difference of opinion as to whether better methods are available than those now being used. Attached to this report as Exhibit I is an excerpt from a 1949 report of a survey of accounting practices and procedures of the Water Department prepared by Touche, Nevin, Bailey, and Smart. This report specifically recommends the installation of a tabulating machine system. The City Research Engineer's office is in favor of a change in system. On the other hand, E. W. Johnson, Water Works Supervisor, is of the opinion that the office equipment people have not conclusively demonstrated that new methods will prove economical. The City Engineer is receptive to new methods but prefers to look at it as part of the total problem of mechanization. (This is discussed in 3 below.)

- C. Overall Implications of Machine Applications. It is impossible to look at either of the above possibilities without bumping immediately into the whole problem of office machines, particularly tabulating machines. There is attached hereto as Exhibit II a letter from a representative of the International Business Machine Corporation which outlines the IBM equipment installed in various city and county offices. Since this letter was received, there has been an additional major installation of IBM equipment in the City Department of Education. The city is paying IBM rentals of approximately \$3,314 per month and the county \$3,865 per month.

There appear to be two primary problems: centralization vs. decentralization and proper machine application.

1. Centralization vs Decentralization. There are arguments in favor of both centralization and decentralization. In favor of centralization in this instance it can be said that:
 - a. There has already been considerable "centralization" of city IBM equipment and procedures with satisfactory results.
 - b. The term centralization is relative. In the situation under consideration, distances are so small that the usual disadvantages of centralization are minimized.
 - c. Fuller machine use is ordinarily possible when interchangeable equipment is centrally located. This includes day to day use and also emergency jobs.
 - d. Where machinery is in smaller units and full use is not being made of it - and even though it is paying its own way with much to spare, there is a tendency for personnel to dig/items to be put on the machine which might be accomplished more economically in other ways.

- e. The nature and timing of certain tasks amenable to machine methods make "geography" a negligible factor in accomplishing those tasks.
- f. Centralization may support a new type, high efficiency machine which could not be justified for any one agency under decentralization.

In favor of decentralization it can be said that:

- a. The unit concerned can fully control its own machine operations and obtain greater flexibility in administration.
- b. Under centralization the controlling unit tends to give preference to its own requirements, relegating other needs to a secondary position.
- c. Decentralization permits control of cards by the unit concerned. This is particularly significant when punched cards are also original documents to which reference is made.

The proper answer can be determined only after appropriate study, but in all probability it would attempt to combine the advantages of each method by completely centralizing some types of equipment, partially centralizing other types and decentralizing certain others, to be adjusted by peak load requirements. The lack of strong central administrative control in Minneapolis City Government might be a factor which would permit unnecessary decentralization. In this connection it should be noted that the PAS report calls for centralization of tabulating equipment.

- 2. Proper Machine Applications. The question of whether the present machine applications, the proposed applications discussed in this report, or other applications planned by city personnel are proper is quite obviously beyond our ability to answer categorically in view of the time spent. So is the question as to whether there are proper additional applications which have not been given serious thought by the city. However, the sub-committee suggests that these same questions may be beyond the "ability" of the city to answer under present circumstances discussed below.

In the face of a lack of central administrative authority it is virtually impossible to implement modern practices of organization and administration. Machine applications provide an excellent example of this because they cut across many operations. The history of the proposals on improving Water Works billing procedures is a case in point. This is as it appeared during the survey.

- a. The Water Works supervisor is lukewarm on the subject.
- b. His superior, the city engineer, is more favorably inclined but is desirous of postponing action until such time as the organization and administration of the machine program can be reviewed.

- c. The Water Works Committee of the Council referred the proposals to the Research Engineer (responsible to the Council).
- d. The Research Engineer prepared a report on the proposal - reportedly favorable - and filed it until such time as the Water Works Committee asks for it.
- e. The Water Works Committee has not asked for the report even though it was completed over six months ago.
- f. The Water Works Supervisor has not pushed for action.
- g. The City Engineer, not having been able to settle the problems of organization and administration, is not ready to recommend action.
- h. In the meantime - assuming a certain degree of reliability in the proposals - the city is losing money.

There are two things askew, and these are the same things that have been pointed out time and again. First, the Council is interfering unnecessarily in administrative matters and second, there is no one person charged with administering the affairs of the city.

There is still another problem here. The city does not have personnel who are really qualified to determine the advisability of mechanizing this operation or that, or in what manner. These are not matters to be left to salesmen's representations or administrative guess or hunch. They are matters to be determined in as scientific a manner as possible. A rough example of what this means was apparent in the water billing survey.

One proposal stated that the number of customer accounting personnel could be reduced from 21 to 9. These figures may or may not be right but let us assure that they are. They look good. For a number of years - at least since 1949 because the recommendation is carried in the Toucho, Niven report Exhibit I - a recommendation has been lying around which if adopted would eliminate immediately at least two full-time employees. The writer of this report has investigated this suggestion in detail. It is without question workable; it is so simple as to be almost ridiculous; and it can probably be installed immediately. What this would mean is that instead of showing a reduction of 21 to 9 the reduction would be 19 to 9. The figures do not look quite so good as they did. Implementation of other improvements with present methods might reduce that to a much lower figure.

This example is cited to emphasize the need for a sound approach to these problems. For years many private organizations and some governmental units have employed personnel trained in management engineering, systems and procedures, and organization and management work to devote their whole efforts to improving administration which in government means in the last analysis improving service and/ or cutting costs. Minneapolis has not had one person to perform this function except perhaps the city research engineer.

His activities and effectiveness in this area are limited, however, because most of his inquiries are into other matters and because he is a council employee rather than an employee of the administrative "branch".

The example of the recommendation poses still another question. What happened to the recommendation and why? In any organization many recommendations, good as well as bad, fall by the wayside. But under the form of government existing in Minneapolis, it is clear that the odds against success of a recommendation multiply. This is particularly true in the absence of a suggestion system or other type of employee participation program.

III RECOMMENDATIONS

It is suggested that the following recommendations be approved by the Government Operations Committee:

1. The Water Works Committee of the City Council should be asked to consider the report on water billing proposals prepared at the request of that Committee by the Research Engineer. The reason for this recommendation is that there is considerable opinion, including that of this sub-committee, that modern machine methods would cut the cost of billing and collections.
2. The City Engineer should be asked to request an opinion as to the legality of the Touche, Niven, Bailey, and Smart recommendation pertaining to allocation of Sewer Rental Fund receipts. He should be asked further, upon receipt of a favorable opinion, to put the recommendation into effect. If the decision is unfavorable, he should be asked to initiate action necessary to change the law on agreements involved so that the recommendations can be put into effect.
3. Since the possibility of introducing revised methods for voter registration is being carefully considered by personnel who appear receptive to improvements, the staff of the Citizens League should be asked to check periodically on progress being made and report to the Government Operations Committee.
4. The overall organizational deficiencies of the Minneapolis City government became quite apparent in a survey of this nature. The Forms and Structure of Government Committee should be advised of our findings in general and should be asked to give consideration to establishing a formal organization and management program in the administrative branch of the city government. This report provides examples of what such a program would involve: determination of the degree of centralization or decentralization; the desirability of certain machine applications; maximum economies through a new method such as water billing revisions.