

USE OF NEW TECHNOLOGIES

by

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1. Max Weber and Informatics

Max Weber whose name was mentioned so often during this Round Table was a was a highly versatile man. He was interested in such fields as:

- sociology
- history
- economy
- political science
- law, or
- social philosophy.

I am almost sure that Max Weber if he lived today, would be interested in informatics as well because he had a holistic mind (and integration/systematization is a feature of modern information technology), and because he believed in rationalization as behavior based on ethical criteria applied to facts and knowledge (here, also, a close link to information systems and information technology is rather obvious).

2. Strong Interaction between Administration and Information Technology

Public administration can be defined as "canalizing information processing and communication in and between agencies and other institutions by rules". From this a rather strong interaction of administration and information technology should be expected. And, indeed, IT is a fact in the public administrations of all countries. This is reflected by the high number of papers dealing with this topic at this Round Table.

3. The Context of Information Technology as a Means against Bureaucratization

Information technology is one means among others to fight bureaucratization, however it is not more - and not less - than a catalyst.

The problems facing modern public administrations are

- controversial interests in a pluralistic society
- complex interactions between spheres of life which used to be independent
- internationalization and globalization

- changing value systems.

None of these problems is going to disappear because of new technology alone. Many remedies are required to equip public administration with a "bureaucracy model" adequate for today. However, modern information technology does have a potential and a role to play in such a model.

4. Principles to guide the Introduction of Information Technology

Today's "3rd generation of IT application" (after centralized mass processing and online dialogue now featuring office automation) principally reaches each office desk and penetrates administrative work in a way which no longer allows to leave the rule-regulated procedures of administration out of consideration.

In fact, when information technology is introduced into an agency it becomes apparent how media-dependent its processes are in terms of their form, goals and costs. Take a simple example: A citizen who has moved intends, among others,

- to register his family with the citizen registration office
- to order electricity from the utility company
- to enroll his children in school
- to register his car with the vehicle registration department
- and to declare his dog at the city tax office.

All of the above could be handled, all together, by one of the five administrations mentioned, and by either one, if all the files and procedures necessary were electronically accessible. The contributions of information technology applied in this way to de-bureaucratization are obvious:

- convenience for the clients
- interesting work for the employees
- higher guarantee that laws and rules are followed
- in-house competition in public administration because the citizen would have a choice which agency/department to turn to
- and higher economy.

This example already indicates that modern information technology does open up new ways for public administration but also that this requires social innovation beyond technical innovation.

5. Systematization

There were many aspects under which bureaucracy was discussed at this conference. I have tried to group them and to look at them from the viewpoint of IT: One feature of information technology is its potential for systematization. Of course, the core question comes to one's mind right away: Don't we rather prefer an unsystematic public administration in order to reduce its power? Considering the many popular complaints about narrow-mindedness, red tape, double work, mistakes, or long processing times, I think that a systematic administration with "zones of calculated ignorance" is welcome, however.

6. Re-organization

Information technology offers quite a few opportunities for re-organization which should also be welcome in view of the common criticisms of bureaucracy concerned with too detailed regulations, too long chains of command, or useless procedures.

Organizational structures, as rules for the division of labor, for cooperation, start from the human capacity for information processing and from the available access to information. Wherever these two pre-conditions as bottlenecks have determined given organizational structures in the past, changes via information technology become possible.

Among the most interesting effects here is the capacity of information technology to reduce the division of labor which is phenomenal in the history of technical progress. Instead of permitting a certain case or file run from office to office which, then, add bits and pieces of information, it becomes possible to give one employee electronic access to all of this information and thus to integrate, and very likely simplify and speed-up the work process.

Where several agencies cooperate, information technology invites to tuning the data and procedures involved.

Where the employee's electronic access to files no longer requires a central location, field agencies can be opened up in order to move administration closer to its clients.

Typical for public administration is the "world of the inner services", the course of business, the daily routine of an agency. Here, information technology allows the public servants' behavior to be programmed in such a way that they must comply with the due process of work: e.g. a case would definitely pass through official channels and all laws and regulations would be observed. Also, all necessary data would be collected, calculations would be made without mistakes, even when an employee applies her/his personal judgement where the norm calls for discretion and when he/she has been reminded by the system to check for new court decisions or facts.

7. The Quality of Working Life

The IT-potential to reduce the division of labor diminishes "Taylorism" and the alienation of employees. This is important at a time when critics feel that public administration attracts the wrong kind of people because of too many restrictions for self-development.

Holistic work integration is supported by information technology in two dimensions: horizontally through online access to data scattered over several offices today, and vertically due to better performance information and overview that give superiors an opportunity to delegate responsibility and to integrate planning, decision-making, operation and control competencies in the same job.

Combined with a re-investment of working time saved by routine automation, this would give public administration the chance to put a higher emphasis on client consultation. There would also be more time for each employee to reflect on his/her contribution to the agency's task.

8. Citizen/Administration Relations

The information technology potential for the improvement of citizen/administration relations can be divided into two categories. The first concerns the citizen as client, the second as voter. Firstly: Information systems have become possible - and are in existence - which aim at overcoming the complexity of administration and its dense network of norms by providing easy retrieval information. The State might even provide services without being requested, if the data in the computers indicate that certain requirements are met. For example, an "active administration" could at least send the application forms without a formal request. The chances for greater personal consultation and for giving the citizen, in certain fields, a choice as to which agency/employee to deal with, have been mentioned already. With respect to the language which sometimes obscures the intentions of public administration, word processing might have a certain potential to make the "user surface" of administration more "user-friendly". There are more aspects which could be mentioned here, like electronic exchange of applications and acts of administration, at least with important clients, or automated self-service.

As far as the citizen as voter, or subject of public administration is concerned, a responsible participation in political decision-making presupposes that one knows enough about the political-administrative system, its functioning and the proposed issues, in order to be able to judge them. The informed citizen is the more important, the less political issues can be solved by law, and the more they are left to an interactive bargaining process between the groups involved. Public Administration, here, must play the role of a political, scientific and administrative information mediator. It should open its information systems and use them for active public relations.

9. State/Society Relations

The main reproaches with respect to state/society relations are

- too much state and
- too many norms.

The main remedies suggested are privatization and deregulation.

Information technology can contribute to privatization in four ways:

1. with information systems the knowledge about effects and costs in a certain sphere of public action can be improved, as a basis for decision-making about privatization
2. privatization is just another example of the general phenomenon: being able to measure results in a certain sphere of life facilitates decentralization
3. information systems can support the establishment, training, operation, and information of self-help associations and third-sector institutions
4. in as much as the demand for privatization is caused by public mismanagement, the general potential of information technology to improve leadership and control is of particular importance.

The "flood of norms" is influenced by information technology, among others, in the following five ways:

1. information retrieval systems can, at least, make the norms system transparent
2. the application of norms can be built into software and, thus, enforced
3. information technology helps to reduce the number of regulations by work simplification, clearing up of public tasks and by delegation of responsibility as consequences of the re-organization mentioned above
4. information systems can monitor the effects of "sunset laws" to check the needlessness of norms
5. where information technology does not reduce the number of norms it can, at least, contribute to their consistency (e.g. by computerized amending of norms such that all dependent norms are updated accordingly) and to their suitability (one hinderance to amendments has been lessened, namely their conversion into administrative practice, which is much easier where the administrative process is computer-supported as can be observed, e.g., in the fields of personnel law or social security law).

10. Political Control of Bureaucracy

The final aspect of the criticism of bureaucracy, to be dealt with here, is the maintained lack of political guidance and leadership of administration. Indications of this phenomenon are:

- incrementalism and "negative coordination"
- short time horizons
- reduction of political issues to a common denominator which is, more or less, the status-quo.

To strengthen political leadership which is inseparable from information systems, requires, both an indirect and a direct approach.

On the one hand the frequent calls for management systems seem like an attempt to pull oneself out of the swamp by one's own hair. The assumption is that the will to exert leadership exists in the first place. Dependent on the political system, however, this must not be the case. Elections, e.g., might hinder longer-range and co-ordinated management: Why raise the level of conflict earlier than necessary? The indirect strategy to stronger political leadership over administration, therefore, is to open the administrative information systems to the public, to the opposition, to the comptroller generals, to the press, to interest groups etc. by a "freedom of information" strategy and, in addition, to promote the establishment of data bases outside the political-administrative system as, e.g., in science and research. This would generate information which creates political issues which, then, will be taken on by politicians because this is their very métier.

In as much as political leaders become interested in management, the direct approach of supplying management systems and management information systems is promising, too. This trend is supported by the financial crisis, as it forces leaders to look for arguments in the fight for resources. In addition to that political leaders realize that the laws not necessarily tell them anymore what is going on in their departments. Laws based on "legitimation by procedures" leave much room for discretion. It therefore follows that both measures are required to control bureaucracy: laws and management systems.

11.

All in all, then, there is a potential of modern IT to contribute to de-bureaucratization! IT is only a catalyst, however, as I said at the outset. This means, IT is no longer a technical affair which could be left to the EDP-specialists. IT has become an instrument of administrative policy. And this requires that politicians and administrators become involved.