

Electronic service delivery in public administration: some trends and issues

Victor J.J.M. Bekkers and Stavros Zouridis

Introduction

Contemporary Dutch public administration increasingly uses new information and communication technologies (ICTs) to support its service delivery. As in many other European countries, Dutch municipalities experiment with one-stop shops. National government has also initiated new experiments (see, for an international comparison, Lips and Frissen, 1997). For instance, the Student Loans Agency tries to optimize its accessibility by means of ICTs. Students are able to use the traditional paper forms to communicate with the agency, but they can also use their smartcards or the Internet.

In this article we analyse the use of ICTs for public service delivery. We also explore the democratic implications of electronic service delivery. Although the quality of public services can be improved with ICTs, its use may also cause a drift away from the traditional constitutional democratic relationships between the state and its citizens. This development may threaten some fundamental legal and democratic guarantees, which are rarely taken into account by the leading political coalitions.

Political and administrative backgrounds for increased attention on service delivery in the Netherlands

The attention on public service delivery is related to some general trends in Dutch public administration. Although it was partly inspired by the experiences in the United States and the United Kingdom, some of the political and administrative background to this development may be specific to the Netherlands. Two alleged 'crises' mainly caused the increased attention on public service delivery: (1) the 'crisis' in the welfare state which developed after the Second World War and (2) the 'crisis' in the constitutional democratic relationship between citizens and politicians.

The gradual expansion of state intervention after the Second World War led to a welfare state in which citizens were nurtured from 'the cradle to the grave'. During the 1980s public administration increasingly met financial limits. Slowly

Victor Bekkers is Senior Management Consultant with BDW Management Consultants. Stavros Zouridis is a Researcher at Tilburg University, The Netherlands. CDU: 681.3(412).

International Review of Administrative Sciences [0020-8523(199906)65:2]

Copyright © 1999 IIAS. SAGE Publications (London, Thousand Oaks, CA and New Delhi), Vol. 65 (1999), 183-195; 008329

a consensus grew within the leading political coalitions that the welfare state as it had developed thus far should be transformed. For example, the leading political coalition believed that public administration should return to its 'core business'. By means of budget cuts public administration was forced to reconsider its policy programmes and its organization. In the eyes of politicians budget cuts as such did not suffice though. Public administration should not only deliver fewer services, it also had to increase the efficiency with which these services were produced. The efficiency drive, which was not specific to the Netherlands but a general trend in Western Europe and the United States, has had several implications for public administration's service delivery.

First, public administration was increasingly conceptualized and managed as a business corporation (see, for example, Osborne and Gaebler, 1992). Within this framework, a strong emphasis was laid on the service delivery aspect of public administration. Managing public administration would, to a certain extent, be similar to managing a business corporation. The new generation of public managers, which was partly inspired by the Anglo-American hype about 'new public management', conceptualized public administration as a business which should be managed with business-like techniques (see Hood, 1995; Noordegraaf and Ringeling, 1995; Naschold, 1996; Hondeghem, 1998). Suddenly some of the classical government tasks (like policing) were defined as (public) services; and because these tasks became services, they had to be assessed by the criteria of quality, efficiency and the satisfaction of clients. To meet these criteria, government agencies increasingly had to reorganize their structures and processes. For example, the functional orientation and organization of public administration had to be replaced by an orientation on citizens and their needs and preferences. In the past it was common that the workflow was taken as a starting point for the organization of public service delivery. That proved 'inefficient' from a client's perspective: clients were confronted with an organization they could not comprehend, with different departments and different civil servants for a single service and generally citizens were confronted with slow and compartmentalized service delivery. Thus, organizations were and still are restructured to improve the coherence from the point of view of the citizen. The bureaucratic organization is replaced by a more flexible consumer-oriented organization. These 'new' organizations also proved to be an answer to a second alleged 'crisis' which was discovered in the mean time: the 'gap' or the alleged democratic deficit between citizens and institutionalized politics (see, for example, Tops et al., 1991; Van Praag Jr, 1993; Tops, 1994; Van Gunsteren and Andeweg, 1994). Ever since the 1970s, when compulsory attendance was abolished, voter turnout in the Netherlands has been gradually decreasing both for the national and the municipal elections (Janssen and Korsten, 1995; Van Holsteyn and Niemöller, 1995). The municipal elections of 1990 were an all-time low. In several municipalities voter turnout was less than 50 percent. Many local politicians concluded that the legitimacy of local politics and city councils was endangered because of the low voter turnout. Therefore, many municipalities

started a process of political and administrative renewal which aimed to restore and improve citizen involvement (see Gilsing, 1994; Tops and Depla, 1994; Depla, 1995). One of the programmes of this renewal process was to improve local service delivery. Politicians assumed that citizens were not satisfied with service delivery: service delivery by public administration was supposed to be slow and inefficient and, above all, very compartmentalized. By reorganizing public administration, both the quality and the efficiency of public administration could be improved. Furthermore, politicians assumed that an improved service delivery would be attributed to their efforts. Therefore citizens' trust in local politics could be restored by improving the municipalities' service delivery.

Thus, at the end of the 1980s two developments coincided. The new leading generation of public managers was committed to a more efficient, business-like public administration. Service delivery should be the core of that new public administration. This generation of managers was partly inspired by the new public management (Osborne and Gaebler, 1992). According to these managers, the 'crisis' in the welfare state should be dealt with by improving public service delivery and improving the leniency and efficiency of public administration. This new generation of public managers was supported by the leading political coalition, because improving service delivery was also one of the main programmes of the politicians. They believed that an improved public service delivery and a more efficient organization of public administration would restore citizens' trust in (local) politics. As a result, the programmes of leading politicians and officials coincided around 1990. The 'discourse coalition' came into being because of the shared commitment to improve public service delivery. Both sides were strongly committed to a more efficient, business-like public administration. Within that framework, which was technocratic to a certain extent, they were both attracted by the new (information and communication) technologies.

ICTs and the quality of public service delivery

The (leading) coalition of politicians and public managers with a preoccupation to improve public service delivery embraced the (new) possibilities of ICTs. Related to the quality and efficiency of public service delivery, the strategic potential of ICTs can be found in a number of aspects, such as speed or quality of service delivery (see also Taylor et al., 1996; Bellamy and Taylor, 1998). Whether this strategic potential of ICTs is realized depends upon the specific ICT application in question.

First, services can be delivered more rapidly. The fact that it is possible to process and retrieve more information in less time increases the quality and efficiency of service delivery. The time it takes for clients to complete their transactions with civil servants can be reduced. The time it takes to handle cases may even be diminished, especially when it concerns routine cases. The speed of service delivery also increases when the civil servant who handles a specific case has real-time access to databases which are located in other units or organizations.

Second, ICTs can be used to increase public access to service agencies. Information kiosks facilitate a better access to public services. People who want to retrieve government information are able to visit the web pages of an agency whenever they want. Citizens are also able to apply electronically for permits or benefits, without leaving their homes. This increased access to service agencies could stimulate the openness of government (Zouridis and Frissen, 1995a). Improved access to government information may also enhance the bureaucratic competences and skills of citizens (Scheepers, 1991).

Third, new technologies are able to facilitate remote communication and transactions. Thus new ways of communication and transaction have already been developed together with the new ICTs. According to recent research, in 1998 the Dutch spent an amount of approximately NLG 1.1 billion (£300 million) via the Internet. If electronic payments become safer than they are at this moment, the electronic handling of transactions will probably increase even more. Network technology can also be used to increase the (remote) political participation of citizens. A digital political discussion on the Internet between elected representatives and citizens is one example, but future developments may also lead to new kinds of 'virtual participation' via virtual-reality applications (for an example we refer to Huizendveld et al., 1998).

The use of ICTs for public service delivery may also be directed towards enhancing the transparency of citizens. ICTs are sometimes used to register and process the needs and preferences of citizens. Data-coupling and data-mining techniques enable policy-makers to acquire a better insight into their clients' situations. This facilitates a better targeting of policy programmes and a more tailor-made service. Clients are not just seen from one aspect or one perspective, but are seen as whole persons: information which was collected for different purposes (tax, social security, population registration, and so on) is combined and integrated (see also Lips and Frissen, 1997). The starting point for service delivery thus becomes the clients' needs and preferences, instead of the bureaucratic organization. This prospect attracted and still attracts both the new public managers and leading politicians.

The integration of public services and the destruction of the administrative walls between bureaucratic departments and government agencies are further stimulated by the communication potential of ICTs. New technologies can be used to encourage linkages and communication across organizational boundaries, both within and between organizations. By means of network technologies separate organizations are able to share their information. 'The network is the computer', according to the advertisements of SUN microsystems. Information-sharing means that the functional and geographic boundaries of units and organizations blur (see Frissen, 1996); clients no longer have to visit several counters. Although these strategic potentials relate to the use of ICTs for service delivery, they cannot be seen as given entities. The potential of ICTs to improve service delivery and to promote a more business-like public administration (as described earlier) is not imposed by some universal and absolute technological characteristics. Although

some of these potentials could be seen as inherent characteristics of the technology, they also reflect the design choices of leading (political) coalitions. How transparent should an organization be for other organizations? Who has access to which information systems? Which data should be combined? And for which purposes should these data be combined? Which elements construe a profile of a citizen?

Generally the use of ICTs for a more efficient public service delivery might become a value which serves the vested interests of some stakeholders, while other stakeholders see them as constraints (or even infringements) of their freedoms. Therefore, we have to acknowledge that ICTs are important resources in the hands of certain actors because they influence the access, distribution and exercise of power. But whose values and whose power are served by electronic service delivery? Do these values relate to a specific model of democracy? And which model(s) of democracy are promoted or stimulated by electronic service delivery? To answer these questions we first have to look at some examples of electronic service delivery. After that, we analyse some of the administrative and political issues concerning electronic service delivery. Both the description and the analysis provide some clues for the questions with regard to democracy and its (future) development.

Some typical examples of electronic service delivery in the Netherlands

In this section we describe some illustrations of the way in which the Dutch public administration uses ICTs for service delivery. Although the illustrations are Dutch, illustrations which are comparable can also be found in the United States, Western Europe, Australia and New Zealand (see Huizendveld et al., 1998). The illustrations relate to different types of technological applications. Therefore, the way they affect the democratic relationships between public administration and its citizens also differs. They seem to share a theoretical inspiration from a consumerist model of democracy. Although some of the applications do not directly concern the communication between citizens and public administration, they relate to the democratic (or consumer) relationships between public administration and its citizens.

Electronic handling of student scholarships (<http://www.ibgroep.nl>)

The Dutch Department of Education uses an information system to handle student scholarship applications. By means of this information system service delivery in this realm has been improved substantially, for example by reducing the time which was necessary for the handling of the application. To apply for a scholarship students fill in a form, which is processed automatically by an information system. When the information is registered, the system automatically checks whether the information is complete. Then the system automatically reviews the application by comparing the information of the student with the conditions which are stated by law: Is this student entitled to a scholarship and what will be the amount of the scholarship? The system then draws up the

decision and sends it to the student. If students are entitled to a grant, the system automatically transfers the amount of the scholarship on a monthly basis. The information system handles nearly all applications without human intervention. Bureaucratic discretion is almost completely absorbed by the information system. Even the clause that states that situations in which strictly holding to the Act would be unreasonable is automatically implemented.

RINIS (international routing institute for information flows)

In the Dutch social security sector a broker institute or clearing house has been established in order to rationalize the exchange of information between a large number of social security organizations. Policy programmes to detect fraud and abuse of social benefits have made those organizations more aware of the interdependencies with respect to the exchange of information between them. RINIS is a network with standardized data definitions and procedures which enable an agency to retrieve information (personal data) from other agencies. The RINIS institute functions as a broker or as a go-between. If one of the organizations which functions in the area of social security needs information on a specific client, it retrieves its information via RINIS. Because of the exchange of information, the necessary personal data only have to be retrieved once. In the past every organization collected the personal data it needed, and therefore citizens had to provide the same information several times. One of the basic assumptions of the RINIS concept is the protection of the informational autonomy of the organizations which participate in the project. RINIS can therefore be defined as a means of procedural and technical integration which tries to rationalize the exchange of information between the back offices of the organizations involved.

The EZ shop (<http://info.minez.nl>)

The EZ shop is a project of the Dutch Department of Economic Affairs (Ministerie van Economische Zaken). It is a hypertext application which can be accessed via the Internet. By means of this application the Department of Economic Affairs is able to inform the public and to distribute its information among its target groups. The EZ shop offers summaries of policy documents which are disclosed through a system of key words. Users are able to order the policy documents electronically by filling in a digital form. On several subjects the department has construed a digital dossier. Every dossier contains linkages to policy documents, press reports and other information on the subject. The information to which the dossiers refer is also available electronically via the pages of the EZ shop.

The EZ shop offers a digital subsidy guide for private enterprises. This guide contains the subsidy regulations for which companies can apply. Information is supplied about the conditions under which a company is able to apply for a subsidy, where and when one can apply for certain subsidies, and how long an entrepreneur is entitled to receive a subsidy from the Department of Economic Affairs.

Digital discussions on the Internet (Department of the Interior)

The Internet can be used for service delivery or the distribution of government information, but it can also be used for communication purposes. An example of a digital discussion on the Internet was the digital debate on the implications of ICTs for the openness of government and the supply of government information. We organized this debate for the Department of the Interior (Zouridis and Frissen, 1995b), and evaluated its possibilities for interactive policy preparation and interactive evaluation of public policy. Everybody with an e-mail address was able to participate in the debate. One could participate actively by sending contributions, but the participants were also able to participate passively (by merely receiving the contributions of other participants). We first analysed the group of participants. The participants in the experiment were mostly men. Their age varied from relatively young to middle-aged (mostly from 20 to 50 years old). Many of the participants were scientists and politicians, although a number of participants were mere citizens. A majority of the participants did not have an active contribution to the debate. As far as they became active, they usually reacted on the contributions of other participants. The experiment demonstrated that electronic mailing lists can be used effectively for the distribution and dissemination of government information. ICTs then contribute to the speed of dissemination and the interactive means of communication.

Matching digital databases

Dutch municipalities are free to give additional financial aid to citizens who find themselves in a socially and economically deprived position. Research showed that people who were to benefit from these funds did not benefit because they did not apply for this financial aid. The effectiveness of the policy programme was therefore found to be very low. In several municipalities digital databases were coupled in order to get a better profile of the people who should apply for these additional funds. In addition to these profiles, targeting strategies were developed to reach out for these people and to show them how to apply for additional financial aid. Thus by means of ICTs municipalities were able to increase the access of their citizens to additional financial aid.

Some issues with regard to electronic service delivery

Although the examples demonstrate that ICTs can be used to improve the quality of public services (the speed of service delivery, the remote communication between citizens and politics, and the transparency of both organizations and clients), they raise some issues regarding their democratic implications. These issues may provide clues with regard to the (hidden) agendas and leading coalitions, but also with regard to the democratic models that lay behind the design of ICTs. These issues also question the consumer model of democracy and its contribution towards improved democratic relationships between citizens and public administration. We address five — related — legal, political, and administrative issues: (1) the informational privacy of citizens, (2) boundaries within and

between organizations, (3) political and public accountability, (4) the automation of bias and (5) citizenship in a consumer democracy.

Informational privacy: big brother and soft sister

Electronic service delivery requires the collection of citizens' personal data. The electronic handling of student scholarship applications demonstrates that these personal data are increasingly collected and processed by means of ICTs. For example, the collection of personal data can be 'outsourced' to the customer or it can be done by means of data-coupling. With the possession of more personal data public administration is able to improve its services. Service delivery can then be developed towards more tailor-made services and government agencies are better able to take into account the individual needs and preferences of citizens. Thus, under the veil of service delivery public administration increases its possibilities to collect personal data. The examples demonstrate at least three new possibilities for collecting personal data. First, by means of data-coupling and the integration of information systems government agencies are able to exchange personal data. Second, public administration increasingly uses data-mining techniques to generate new personal data. An analysis of databases provides insight into the preferences of citizens, but, for example, also into the relationship between their consumer profile, their political profile and their satisfaction with service delivery. By means of profiling government is better able to anticipate the (future) behaviour of citizens. A third way to collect additional client information is created by recording the digital footprints of citizens. For example, when citizens or enterprises use the EZ shop to retrieve government information they can be logged: which pages are retrieved, which key words are used by (which) citizens, which links are used by which types of consumers, and so on? Thus, the citizen's digital footprints can be recorded and analysed to process their search patterns and their fields of interest.

This development inherently creates a new dilemma (see Frissen, 1996): on the one hand public administration is better able to serve its citizens; on the other hand the informational privacy of citizens might be violated. Data-coupling and the recording of the citizen's digital footprints form the two sides of the same coin: public administration will become both 'big brother' (by surveilling its citizens) and 'soft sister' (by improving service delivery and tailor-made services) at the same time.

Blurring and reifying organizational boundaries

Electronic communication and the sharing of information have a profound impact on the boundaries of government organizations. Very often scholars conclude that ICTs lead to fading organizational boundaries (for example, Ashkenas et al., 1995; Martin, 1996). Empirically this is just one of the changes which may occur. There are some other possibilities. It is important to raise the issue of changing organizational boundaries because these changes may have some important legal, political and administrative implications. If organizational boundaries are going

to blur, what does this mean for public and political accountability? What does it mean for the ownership of information? And who does account for the accuracy and preciseness of information if ownership is dispersed among many different agencies? Before answering these questions, we have to look at some of the scenarios which give us an impression of the changing nature of organizational boundaries (for a complete summary of the scenarios see Bekkers, 1997; 1998).

For example, we may analyse the changes which might occur in the nature of organizational boundaries. First, as a consequence of the electronic integration of information systems the organizational boundaries fade. For an illustration of this scenario we refer to the example of RINIS. Because of the exchange of information the boundaries between the participating organizations fade. Although the EZ shop is also an example of fading organizational boundaries, it demonstrates that the degree of accessibility can be controlled. The second scenario can thus be referred to as a scenario of controlled transparency. In the last scenario organizations try to protect their boundaries by making them much harder to penetrate. Authorization procedures, the establishment of firewalls and the development of Intranets are just some examples of protection strategies. In the RINIS system the autonomy of the organizations is protected by the agreement that some organizations have a monopoly on certain data. Income information is the exclusive domain of the Tax and Customs Administration. Income information can be collected by other government organizations, but the only income information which is recognized as such is the information which carries the trademark of the tax authorities. Thus, although sometimes ICTs may lead to a reinforcement of existing tasks and competences, the illustrations demonstrate that in other cases the tasks and competences of individual organizations become entangled.

Political and public accountability and the idea of a political centre ('politiek primaat')

The integration of information systems and databases challenges the idea of political and public accountability. If the tasks of two or even more organizations become entangled, it is not always clear who is responsible for the execution of these tasks. The unity of command and a clear division of responsibilities are necessary conditions for effective public and political control (in western constitutional democracies). Another point of interest is the idea of a political centre. The idea of a political centre in society or in public administration may be challenged by the emergence of virtual policy organizations of virtual policy sectors (Frissen, 1996). The interconnectivity of systems and infrastructures is facilitated by network technology. Network technology is often assumed to lead to a horizontalization of (power) relations in cyberspace. A horizontalization of relations, which can be observed in the digital discussions on the Internet, undermines the idea of a political centre. The electoral chain of command is based on the assumption that there is one central, superordinated place in our society: a cockpit where the (democratic) decisions are made. In a virtual world there may be no such central point. And even if there is such a central point, it is by no

means certain that it is a political centre as it is conceptualized in the traditional western constitutional model (Castells, 1996).

The citizen concept of public administration: automation of bias and quasi-transparency

The data in government databases reflect the way a leading coalition of policy-makers define the world. Kraemer and Dutton (1982: 193) speak of an 'automation of bias'. Information systems may be seen as indications of what an organization or a leading coalition of stakeholders define as relevant. In this way information systems and the data definitions which lay behind them influence decision-making processes and how public administration approaches its citizens. Therefore, the idea of increased transparency has to be questioned. Should we not speak of quasi-transparency (Bekkers, 1993)? First, computer technology favours hard, quantitative data. Qualitative aspects can hardly be incorporated in the system. Second, the leading coalition of stakeholders and systems designers within a policy field define the actual contents of a policy problem. If these problems address citizens, these citizens are rarely consulted when the information systems are designed and used. Third, data-coupling underlines the fact that there are many definitions of one and the same phenomenon. For instance, in Dutch higher education there are about 12 definitions of a student. Which definition wins if these databases are coupled? And which interests are served when a specific definition wins? Mostly the vested powers of stakeholders are served by the automation of bias. ICTs automate the democratic control (by public administration) of (groups of) citizens or societal organizations (see Van de Donk, 1997).

Citizenship in a consumer democracy

One of the political and administrative backgrounds for the emphasis on service delivery and efficiency had to do with the alleged 'crisis' in the democratic relationship between citizens and politicians (the alleged democratic deficit in the electoral chain of command). According to the politicians, citizens' trust in politics and administration had diminished because of the low degree of efficiency of services and the compartmentalization of government agencies. By restructuring public administration and introducing ICTs, citizens would become more involved in politics. Politicians supposed that an increasing satisfaction with service delivery would automatically lead to an increasing political involvement of citizens. Although research shows that citizens generally do not attribute the quality of public services to the efforts of politicians (see Tops et al., 1991), this remains a leading ideology in the political discourse.

An active government which does not wait for citizens to apply for decisions (on allowances, grants, and so on) could also have counterproductive effects from a democratic point of view. Because of the emphasis on service delivery citizenship has been reduced to a consumer role. As a consumer, citizens do not have to take responsibility for their lives. Instead, they can wait for government to take the appropriate measures. Thus at the same time that citizens' trust is restored

their political involvement decreases. Active citizenship (which is sometimes regarded as a basic element of a democratic society) is no longer necessary because, by means of ICTs, public administration 'knows' the preferences and needs of its citizens. One of the goals of political and administrative renewal ('active citizenship') is thus frustrated by the way in which public administration collects and uses the personal data of its citizens.

Conclusions

ICTs increasingly support processes of public service delivery. In many ways they improve the quality and efficiency of service delivery. Their design and their use for service delivery supports the framework which has been promoted by leading coalitions of politicians and (new) public managers: an efficient, business-like public administration. Improving service delivery was seen as a remedy both for the alleged 'crisis' in the welfare state and the 'gap' between citizens and politicians. ICTs played a crucial role in the process of improving service delivery. By means of ICTs service delivery could better be geared to the needs and preferences of citizens while at the same time improving the efficiency of public administration, for example by redesigning the service delivery processes (see Taylor et al., 1997). Therefore, electronic service delivery seems to meet the demands of both public managers and politicians. Partly these have been inspired by a consumer model of democracy. ICTs are meant to serve better the clients of public administration or to empower clients by making the organization of service delivery more transparent. Although to a certain extent the consumer model of democracy may probably be valid, the issues we have raised demonstrate that the use of ICTs for public service delivery may threaten some fundamental aspects we inherited from the traditional western constitutional model of democracy (e.g. self-determination of citizens, their informational privacy and their active citizenship).

Besides a shift towards a more consumerist democracy ICT's may electronically restore the traditional electoral chain of command by using the 'informating capacity' or the reflexivity (Zuboff, 1988) of ICTs for public service delivery. But the examples also demonstrate that this will probably be a new kind of electoral chain, a new way of organizing the 'input side' of the electoral chain of command. ICTs create direct relationships between consumers and the bureaucracy. This development raises some specific issues with regard to the legal guarantees inherited from the traditional constitutional model of democracy. Although some of the guarantees can be institutionalized by new and modern means (for example citizens' charters), they explicitly need to be deliberated and discussed.

References

- Ashkenas, R. et al. (1995), *The Boundaryless Organization. Breaking the Chains of Organizational Structure*. San Fransisco, CA: Jossey-Bass.
- Bekkers, V.J.J.M. (1993) *Nieuwe vormen van sturing en informatisering*. Delft: Eburon.
- Bekkers, V.J.J.M. (1997) 'Een grenzeloze overheid? Over de betekenis van informatiser-

- ing voor de verschuiving en/of vervaging van overheidsgrenzen — een theoretische verkenning', *Bestuurswetenschappen* 1: 27–42.
- Bekkers, V.J.J.M. (1998) *Grenzeloze overheid. Over ICT en grensveranderingen in het openbaar bestuur*. Alphen aan den Rijn: Samsom H.D. Tjeenk Willink.
- Bellamy, C. and Taylor, J.A. (1998) *Governing in the Information Age*. Buckingham: Open University Press.
- Castells, M. (1996) *The Rise of the Network Society. The Information Age. Economy, Society and Culture*, Volume I. Oxford: Blackwell.
- De Kerckhove, D. (1996) *Gekoppelde intelligentie. De opkomst van de WEB-maatschappij*. Den Haag: Stichting Maatschappij en Onderneming.
- Depla, P. (1995) *Technologie en vernieuwing van de lokale democratie: vervolmaking of vermaatschappelijking*. Den Haag: VUGA.
- Frissen, P.H.A. (1996) *De virtuele staat. Politiek, bestuur, technologie: een postmodern verhaal*. Schoonhoven: Academic Service.
- Gilsing, R. (1994) 'Lokale bestuurlijke vernieuwing in Nederland', *Acta Politica* 29: 3–37.
- Hondeghem, A. (1998) *Ethics and Accountability in a Context of Governance and New Public Management. EGPA Yearbook*. Amsterdam: IOS Press.
- Hood, C. (1995) 'The "New Public Management" in the 1980s: Variations on a Theme', *Accounting, Organizations and Society* 20 (2/3): 93–109.
- Huizendveld, H.H. et al. (1998) *Vergezichten. Gemeentelijke revoluties in communicatie en dienstverlening aan de burger*. Alphen aan den Rijn: Samsom.
- Janssen, J.I.H. and Korsten, A.F.A. (1995) *Gemeenteraden kiezen. Analyse van de gemeenteraadsverkiezingen in Limburg en Nederland*. Delft: Eburon.
- Kraemer, K.L. and Dutton, W.H. (1982) 'The Automation of Bias', in J.N. Danziger et al. (eds) *Computers and Politics*, pp. 170–93. New York: Colombia University Press.
- Lips, M. and Frissen, P.H.A. (1997) *Wiring Government. Integrated Public Service Delivery through ICT*. Alphen aan den Rijn/Diegem: Samsom Bedrijfsinformatie.
- Martin, J. (1996) *Cybercorp. The New Business Revolution*. New York: Amacom.
- Naschold, F. (1996) *New Frontiers in Public Sector Management — Trends and Issues in State and Local Government in Europe*. Berlin: Walter de Gruyter.
- Noordgraaf, M. and Ringeling, A.B. (1995) *De ambtenaar als publiek ondernemer*. Bussum: Coutinho.
- Osborne, D. and Gaebler, T. (1992) *Reinventing Government. How the Entrepreneurial Spirit is Transforming the Public Sector*. Reading, MA: Addison-Wesley.
- Scheepers, A.W.A. (1991) 'Informatisering en de bureaucratistische competentie van de burger', PhD dissertation, Tilburg University.
- Taylor, J. et al. (1996) 'Innovation in Public Service Delivery', in W.H. Dutton (ed.) *Information and Communication Technologies. Visions and Realities*, pp. 265–82. Oxford: Oxford University Press.
- Taylor, J.A. et al. (1997) *Beyond BPR in Public Administration: Institutional Transformation in an Information Age*. Amsterdam: IOS Press.
- Tops, P.W. (1994) *Moderne regenten. Over lokale democratie*. Amsterdam: Atlas.
- Tops, P.W. and Depla, P. (1994) 'Vier jaar politieke en bestuurlijke vernieuwing in grote gemeenten', *Bestuurswetenschappen* (48): 120–34.
- Tops, P.W. et al. (1991) *Lokale democratie en bestuurlijke vernieuwing in Amsterdam, Den Haag, Utrecht, Eindhoven, Tilburg, Nijmegen en Zwolle*. Delft: Eburon.
- Van de Donk, W.B.H.J. (1997) *De arena in schema. Een verkenning van de betekenis van informatisering voor beleid en politiek inzake de verdeling van middelen onder verzorgingshuizen*. Lelystad: Vermande.
- Van Gunsteren, H. and Andeweg, R. (1994) *Het grote ongenoegen: over de kloof tussen burgers en politiek*. Haarlem: Aramith.

- Van Holsteyn, J. and Niemöller, B. (1995) *De Nederlandse kiezer 1994*. Leiden: DSWO Press.
- Van Praag Jr, Ph. (1993) *Een stem verder. Het referendum in de lokale politiek*. Amsterdam: Het Spinhuis.
- Zouridis, S. and Frissen, P.H.A. (1995a) *Openbaarheid van digitale informatie*. Tilburg University.
- Zouridis, S. and Frissen, P.H.A. (1995b) 'Digitale participatie. Verslag van een experimenteel digitaal debat over (de Wet) openbaarheid van bestuur'. Tilburg University.
- Zuboff, S. (1988) *In the Age of the Smart Machine. The Future of Work and Power*. Oxford: Heinemann.