

# The Information Steering in Government: Information Resource Managed by Administration in Welfare Sector

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## INTRODUCTION

In government, the impact of information on organizations and humans has been under increasing scientific interest (e.g. Jones, Boushey & Workman 2006). Information can indeed generate fundamental changes both to the structure, processes and management of inter-government collaboration and to the choices of public policy. As research has been done about information processing, usage and sharing, however, there has not been enough research neither about the role of information as a steering method in governmental organizations nor about its effectiveness. In current study, the information is seen like a valuable asset and resource for the inter-government collaboration that the government must power as a public trust on behalf of local public organizations.

The questions rise about the instrumental roles of information (e.g. Sbragia 2000). Hence, it can be asked how the steering strategies and the forms of steering are build up or could be structured in order to coordinate quasiautonomous public organizations? Also, what is the effect of information when used as a steering mechanism? As a result, the information steering is seen as an approach to manage with the information resource. Information steering has an effect to the actor's behavior by sharing or transmitting the information (Stenvall & Syväjärvi 2006). In addition, the information management is seen as interdisciplinary procedures designed to provide, create, transmit and improve appropriate information systems and resources (Soeparman & Wagenaar 2006).

An information organization (e.g. Webster 1995) can be respectively recognized as a society of separate public unions either supported or not by the information. The organizations in public administration confront many challenges due to the information and technology. Information has indeed a direct effect on organizational behavior. Public organizations have to realize the role of information, for example, in the relation to other steering methods. In addition to information steering, there is steering by resources and steering by norms recognized in public sector (Stenvall & Syväjärvi 2006). Thus, information modifies or even challenges traditional organizational practices and further activates to scrutinize organizational processes (Syväjärvi & Stenvall 2006). The suitability of information steering is based on view that organizations operate at least partly according to the information. The success in information usage influences on organizational decision making and coordination (rf. Casson 2001; Adams 2004).

## AIMS AND OBJECTIVES

This research aims to build up a theoretical framework or model for a successful information steering. In addition, the effectiveness of information steering is

under investigation. The research has focus on the role of Central government as it carries out the information steering. More precisely, the research considers steering of the Ministry of Education and the Ministry of Social Affairs and Health in Finland. The purpose of steering, which coordinates the production of public welfare services, is to power local public organizations. The main research tasks can be set as follows

*How information steering can be modeled from the perspective of inter-governmental collaboration?*

*How effective is information as a steering instrument and how it could be developed?*

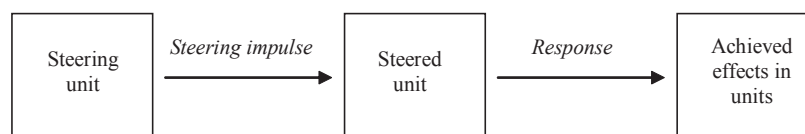
The research considers information as an instrument from the theoretical point of view, models information as a collaborative steering method, but also includes an assessment on the effectiveness of information steering. A comprehensive approach is needed when establishing information steering among inter-governmental organizations. This is partly because the autonomy and control of the public sector organizations affect the choice of coordination methods. We argue that information steering should be approached from the perspectives of traditional steering theory, communication theory, and knowledge and information management theory.

## PERSPECTIVE OF STEERING THEORY

Steering is an inherent part in the implementation of public policies. It can be seen as a part of political processes. After a democratic decision-making processes, the steering can be used to direct administration in order to execute the public policy. *Steering power* means the right, power based on status or an expertise to influence on the behavior of another operating unit. Correspondingly a *steering impulse* means incentives or means, such as information, that the steering unit sends to the steered unit in order to produce desired behavior. (Oulasvirta, Ohtonen & Stenvall 2002, 16-21.)

The objective of information steering is to provide information that helps service producers to develop their own operations. Other objectives may be to increase expertise, to provide more general information, and to ensure the implementation of norm and resource steering and, more extensively, the public policy.

Figure 1. Components of steering



Research is indicating that information steering can produce effects, but often these effects on the behavior of the object remain with respect to the expectations minor or deviate from the objectives (e.g. Vedung 1998, 117-118). In addition, the effects of information steering may be difficult to detect. It is also possible that a steering impulse is lost or remains completely unnoticed by the steered unit. In conjunction to steering impulses we can talk about noise (i.e. organization or information noise), which means factors that weaken or prevent the free transfer of information. These factors have a distorting or disturbing effect on interactive operation, flow of information and confidential observations (Zaheer et al 1998; Ivancevich & Matteson 1999).

### PERSPECTIVE OF COMMUNICATION

Communication has traditionally been considered to deal with the sending and receiving of messages. Typical communication research objectives include the question how people understand communicated messages, verbal and non-verbal communication as operating modes, and the study of changes in the contents when people exchange messages. Information steering is, indeed, quite naturally understandable and analyzable as a matter of communication. From the system perspective and combined with traditional steering ideas, the communication is a tool for management for achieving its objectives. From the viewpoint of objectives it is possible to set four different tasks to information steering: public information, promotion of objectives, bi-directional asymmetric communication, and bi-directional, symmetric communication.

Besides system perspective, the communication can be approached from a number of other directions that help in studying the success and nature of information steering. These are for example, the organizational communication (Craig 1999), the linguistic approach (Hood 1983, 38), the semiotic approach (e.g. Vedung 1998, 107-114; Oulasvirta et al. 2002, 29), and the approach of social psychology and sociology (e.g. Gibson et al 2003).

The communication principle means a process where information steering includes exchange of information. For instance, the actors in the central administration and at the local level take turns as equal senders and recipients. It should be noted now that the function and approval of information transfer and the related interactive nature seem to depend on the situation. Alternatively in long-term development operations communication and information should preferably have more bi-directional and dialogical nature (Waterhouse & Lewis 2004).

### PERSPECTIVES OF KNOWLEDGE AND INFORMATION MANAGEMENT

Information steering is connected to the idea that organizations are increasingly dependent on knowledge and information. This has been studied in organization and management theories within the areas of information management, knowledge management as well as the management of so called expert organizations. Information can be loosely defined in public administration as knowledge of the facts, values, and ideas that help in the implementation of things. Some researchers (e.g. Adams 2004, 30) also include in information the separate information element of public politics, such as political programs. Information steering can, indeed, be used for strengthening organizations. Thus organizations can combine understanding, generate information, and develop decision-making.

Many questions that have been analyzed include the different elements of information and their relations to each other (e.g. data, information, knowledge, wisdom). The more advanced information steering is the more it has been developed in the direction of knowledge and wisdom, and the more the organizations also resemble information organizations that are able to comprehensively utilize the information potential. In this conjunction we also talk about information management, which means the overall management of information, operating processes, and information technology (rf. Sena & Shani 1999; Syväjärvi & Stenvall 2006).

It is essential that the conveyed information is true and accurate. Thus, the effective information must be reliable (Pfeffer & Sutton 2006). In this case attention is paid on, for instance, the fact whether the information also contains other factors than just those corresponding to the desired political will. One consideration of information quality is also the extent of its contents. Information is often conveyed solely on what should be done. Another, wider view is also that information steering should tell how things should be implemented. (Gelders 2005, 377)

### METHODOLOGY

Both methodological and data source triangulation principles were applied (Patton 2002). More precisely, the research data was collected by interviews and by focus group meetings (Barbour & Kitzinger 1999). Totally 14 high-position officials from Central government were interviewed and eight experts attended to the focus group. All these were directed to people in Central government. In addition, a questionnaire (n=360) was implemented in local governments and a focus group meeting was arranged to eight managers representing Municipalities. The response rate was 45%.

### MAIN RESULTS

Only the key results are shortly presented. Results are comparable throughout the public welfare sector. The findings also allow structuring a preliminary model of the information steering. It was found from strategic perspective of the central government that the information steering is not well organized. This viewpoint was shared by all stakeholders of the inter-governmental cooperation. Although the information steering was not found to be in a crisis, it needs development as it can be an effective method.

Firstly, the information steering was observed in relation to other traditional steering mechanisms like steering by norms and funds. It was showed that the information steering has not a clear or independent role as a governmental steering method. The information steering executed by the central government was indeed diverse and uncoordinated. The main reason for the abovementioned is probably in the implementation processes. It seemed that the information steering consists of a bunch of variable steering elements and it is not a single manner to steer as itself.

Secondly, there was a need for more suitable, functional and practical information steering. Local governments were after more coordinated and compacted steering as otherwise all the representatives of Central government were steering without clear goals. At the same time, the Local governments attempted to gain a more simplified and clarified information steering. This was required in order to get better usability for the general information resource. The lacks of interactive and communicative procedures were immense.

Thirdly, in Local government level as well as in Central government level people were after efficient public information management. As the information steering seems to be diverse and unorganized in many ways, it is obvious that its effects are quite modest. In welfare sector, the inefficient information management was manifested as large difficulties (or lack) with future visualization, coordination and implementation, as mistrust between inter-governmental operators, and finally as a lack of change pressure that emphasize the importance of information steering in inter-governmental collaboration.

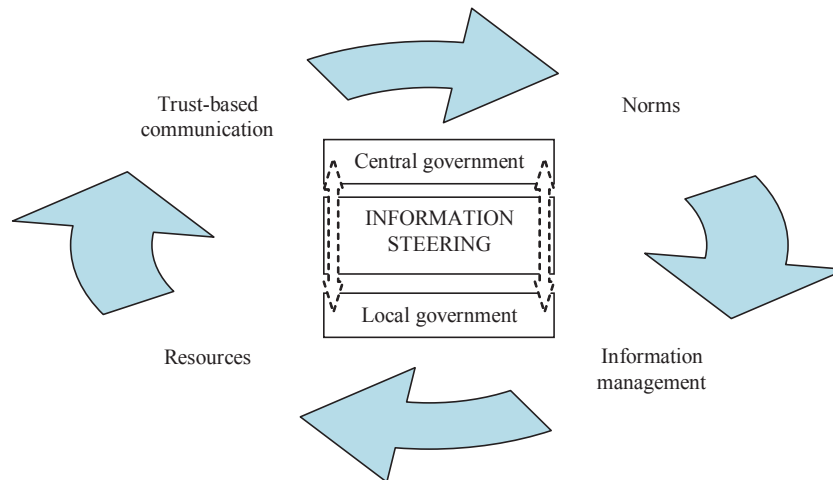
Fourthly, it was found that there are no systematic evaluations done about the effects of information steering. Awareness about the effectiveness of information steering was inaccurate as information steering has not had any stabilized models or perspectives. Steering has been executed by means of various evaluations, verifications and recommendations, which have not had any concrete position. It was recognized that huge information flows are produced, but usually those will not lead to parallel activity. However, the information steering has functioned finest in a quality-based local government work as it has assisted: to both recognize development challenges in Local governments, to increase the transparency of Central government activities and finally, to create knowledge about funding possibilities and norms.

### CONCLUSIONS

In information steering, as respectively in other organizational activities, justified and meaningful procedures are needed in relation to what is attempted to accomplish. Research literature has quite well introduced the criteria and ideas of collaborative steering. These are, for example, clear and steady goals, capability to measure execution and results, and finally enough time for implementation (Gelders 2005). It seems evident that more interaction among steering participants and the viewpoints of effectiveness and productiveness should be emphasized in public policy.

Information steering requires communication that serves mutual trust. Trust is needed as an inter-governmental and interpersonal element for communication, but also as a feature of information quality (e.g. Harisalo, Stenvall & Syväjärvi 2006). The results indicate that in inter-governmental collaboration the trust capital

Figure 2. The information steering model in public inter-governmental collaboration



is not well taken care. Elements inducing trust and mistrust will reinforce each other. The information steering can be seen, together with its deepest goals, as an element to develop more interactive inter-governmental collaboration. The quality of information is also one critical factor. Sanderson (2002) has pointed out that a problem in public administration is the lack of information quality about social conditions in where the information will be applied.

The effectiveness of information steering is somewhat blurred as steering does not have a collaborative and strategy-based logic. The outcome is thus uncoordinated, unbalanced and unfiltered. In current research a challenge is to model information steering from the perspective of inter-governmental collaboration. The shaded arrows indicate how information steering consists of four major elements that interact and are in relation to each other. In addition, the dashed arrows indicate how information steering challenges to effective inter-governmental collaboration between the Central and Local governments.

Hence, the information steering can be developed and modeled by the means of information management, trust-based communication, and also in good synchronization to traditional steering methods like norms and a mixture of resources. Information as an instrument requires overall competence with information management (cf. Soeparman & Wagenaar 2006), it requires careful planning and action with two-way communication (Waterhouse & Lewis 2004), it requires the notion of trust and mistrust (Zaheer et al. 1998; Harisalo et al. 2006), and finally it requires well coordinated harmony that takes into account the deep nature and needs of various other steering methods (Sbragia 2000).

It was noticed that the information steering without logic and systematic is not very powerful approach. The information steering seems to have significance for two different levels of information processing that are individual and organizational levels. In order to gain the information steering as a useful part of public policy information processing should be modeled one way or another. In parallel to previous arguments Jones et al. (2006) have showed the information-processing approach of policy making, which focus on both complex environment of policy-makers and on their cognitive capacities.

Finally, organizations are always operating with more or less deficient information. This was noticed already in 1940 by Herbert Simon (1977) as he introduced the bounded rationality. Due to a number of situational factors, such as limited time or intelligence, it is not realistic to assume that any operation could be based on complete information. Information steering is thus inevitably accompanied by a shortage of information between the conveyed information and the demand. This argument is supported by the thematic of information and organization noise presented in conjunction to the theoretical framework.

## REFERENCES

- Adams, D. (2004). Usable Knowledge in Public Policy. *Australian Journal of Public Administration*, 1/2004, pp. 29-42.
- Barbour, R.S. & Kitzinger, J. eds. (1999). *Developing Focus Group Research: Politics, Theory, Practice*. SAGE Publications, London.
- Casson, M. (2001). *Information and Organization. A new perspective on the Theory of the Firm*. Oxford University Press. United States.
- Gelders, D. (2005). Public Information Problems in the Implementation of Public Policy: The Long Road of the Reflecting License Plate in Belgium. *Government Information Quarterly*, (22) 2995, pp. 374-388.
- Gibson, J.L., Ivancevich, J.M., Donnelly, J.H. & Konopaske, R. (2003). *Organizations: Behavior, structure, processes*. Eleventh edition. McGraw-Hill, New York.
- Harisalo, R., Stenvall, J. & Syväjärvi, A. (2006). *Factors Inducing Mistrust in Local Board's Decision Making*. In Papadopoulos, N. & Veloutsou, C. (eds.) *Marketing from the Trenches: Perspectives on the Road Ahead*. ATINER Publishing, pp. 269-289.
- Hood, C. (1983). *The Tools of Government*. MacMillan Press, London.
- Ivancevich, J.M; Matteson, M.T (1999). *Organizational behaviour and management*. Fifth edition. McGraw-Hill International Editions, Singapore.
- Jones, B.D., Boushey, G. & Workman, S. (2006). *Behavioral Rationality and the Policy Processes: Toward a New Model of Organizational Information Processing*. In Peters, G. and Pierre, J. (eds.) *Handbook of Public Policy*. SAGE Publications. pp. 49-74.
- Oulasvirta, L., Ohtonen, J. & Stenvall, J. (2002). *Kuntien sosiaali- ja terveydenhuollon ohjaus. Tasapainoista ratkaisua etsimässä*. STM-julkaisuja 2002:19, Helsinki.
- Patton, M.Q. (2002). *Qualitative Evaluation and Research Methods*. Third edition. Thousand Oaks, CA: SAGE Publications, Inc.
- Pfeffer, J. & Sutton, R.I. (2006). *Hard Facts, Dangerous Half-Truths and Total Nonsense: Profiting From Evidence-Based Management*. Harvard Business School Press, USA.
- Sanderson, E (2002). Evaluation, policy learning and evidence based policy making. *Public administration* 1/2002, s. 1-22.
- Sbragia, A. (2000). *The European Union as Coxswain: Governance by Steering*. In Pierre, J. (ed.) *Debating Governance – Authority, Steering and Democracy*. pp. 219-240.
- Sena, J.A. & Shani, A.B. (1999). *Intellectual capital and knowledge creation: Toward an alternative framework*. In Liebowitz, J. (ed.): *Knowledge management handbook*. CRC Press London.
- Simon, H. (1977). *The new science of management decisions*. Revised edition. Englewood Cliffs, New Jersey: Prentice-Hall.

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- Soeparman, S. & Wagenaar, P. (2006). *Concern-Wide Information Management with the Dutch Police*. In Anttiroiko, A.-V. and Mälkiä, M. (eds.) *Encyclopedia of Digital Government*. Idea Group Publishing Inc., USA. pp. 215-219.
- Stenvall, J. & Syväjärvi, A. (2006). Having information? Information Steering by the Central Administration in Welfare Services. Edita Prima Inc., Helsinki. (in Finnish)
- Syväjärvi, A. & Stenvall, J. (2006). *The Core Governmental Perspectives of eHealth*. In Anttiroiko, A.-V. and Mälkiä, M. (eds.) *Encyclopedia of Digital Government*. Idea Group Publishing Inc., USA. pp. 244-250.
- Vedung, R. (1998). *Public Policy and Program Evaluation*. Transaction Publishers. New Brunswick.
- Waterhouse, J. & Lewis, D. (2004). Communicating Culture Change: HRM implications for Public Sector Organization. *Public Management Review*, 3/2004, pp. 353-376.
- Webster, F. (1995). *Theories of the Information Society*. London: Routledge.
- Zaheer, A., McEvily, B. & Perrone, V. (1998). Exploring the Effects of Inter-organizational and Interpersonal Trust on Performance. *Organizational Science*, 9, pp. 141-159.

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