The ICT use of Finnish MPs

– now and in the future

Olli Mustajärvi

EDUSKUNTA

The ICT use of Finnish MPs
– now and in the future

Olli Mustajärvi

Abstract of dissertation

This study examines the ICT use of the Eduskunta and its MPs as well as the changes in this use starting from 1985. The aim of the study is to ascertain how ICT can be used to support the work of MPs as well as possible. The study was conducted using the methodology of action research.

The tasks and work processes of the Eduskunta and its MPs are explained to facilitate the setting of a frame of reference for this study. MPs play many different roles in a variety of interaction environments, and ICT support must extend into all of these. The need to profile and personalise the ICT services on offer to MPs emerges from these environments. The MPs mission statements were also found to be useful from the perspective of service development.

ICT use and experiences of it were explored with the aid of a written questionnaire survey targeting MPs and their assistants. This revealed that use amounts were relatively high, but that use was primarily limited to basic services, for example e-mail utilisation. The findings of the survey were complemented with interviews of MPs that went over the problems and development areas of MP work, also from non-ICT-related aspects. It is possible to substantially improve the prerequisites for MPs' knowledge work with the aid of ICT in, for example, time and information management as well as communications. One of the results of this research has been the development of a model, which depicts the ICT utilisation of MPs and can be used as an aid in conjunction with the strategic work of the information management function. A comparison of information management at different parliaments places the findings into a broader frame of reference.

An analysis of the personal webpages of MPs reveals that the use of e-democracy-type tools is still quite undeveloped. The study also more generally examines trends related to e-democracy and e-parliament.

Keywords: parliament, Member of Parliament, use of information technology, knowledge management, e-democracy

Contents

1 Introduction

The better our MPs are able to use ICT – the greater their competence as well as the quality of the ICT they can avail of is – the better our democracy functions, enabling the Eduskunta to produce higher-standard democracy services.

This summary presents the key points of my doctoral dissertation (300+ pages in Finnish, approved in 2009). I have drafted this summary in order to make the findings of my research known more widely.

The Eduskunta, the parliament of Finland, its Members and information and communications technology (ICT) make for a fascinating topic of study – each individually as well as all together. Can ICT promote democracy and if so, can this progress be measured? This question boils down to an extensive and multifaceted research problem. For practical reasons, I have concretised and limited this problem into narrower subtopics. However, the study examines possible consequences also from the perspective of democracy.

The time-span of the study is lengthy, covering more than two decades. The information management policies of the Eduskunta as well as their implementation and the consequences of implementation are examined over the duration of this period.

When viewed in retrospect, the ICT development path of the Eduskunta appears clear and well-grounded, but thing's were not always quite so apparent in their day: many solutions were born in uncertainty or even quite randomly. Examples worth mentioning include the replacement of the e-mail system in 1999 or the introduction of the Eduskunta intranet, the Fakta system. The adopted solutions could often have been entirely different with good justification or they could have led to completely different results. According to Markus (2000), it is obvious that one technical solution can be rationally justified with many different reasons, that one technical solution can be applied to different uses and that different technical solutions can be applied to one and the same use purpose.

1.1 Research problems and questions

The goal of this study is to examine the effects that ICT and the management of information and knowledge have on the work of MPs as well as to consider the opportunities they present in this respect. The subject of my research is primarily the work of MPs, but also the Eduskunta as a whole. The aim is to answer the following questions:

1. What ICT tools are and have been available for the work of MPs and the Eduskunta?

The goal is to find out what kinds of ICT tools are available to assist MPs and the Eduskunta in their work. For this purpose, I analyse the different tasks and roles of Members and examine how ICT tools have been used in their support over a 20-year time perspective.

2. How and for what purpose have MPs utilised ICT tools?

The aim is to discover how much existing ICT tools are utilised, what they are used for and how users have experienced them.

3. What impact has the use of ICT tools had?

The aim is to examine how users have experienced available ICT tools, what impacts their use has had as well as study what effects were anticipated, what results were gained and how the standard of operations has developed.

A further goal is to construct a model that depicts how MPs and the Eduskunta utilise ICT. The model is intended as an aid to help identify more clearly than now the totality for which ICT tools and services are being developed and utilised at the Eduskunta.

1.2 Implementation of the study

Collecting the material

Material for the study was collected through questionnaire surveys, interviews and evaluations of www pages. In addition, an abundance of documents related to this topic, the development of the Eduskunta's information processing capabilities over a 20-year period, were collected.

Questionnaire surveys targeted MPs and their personal assistants. Each survey consisted of the same questions in order to ensure the comparability of findings.

A further hope was that the findings would provide answers to the following extensive totalities:
1. What benefits have actually been derived from the Eduskunta's ICT investments?
2. In what direction should the Eduskunta develop its ICT services in future?
3. Is it possible to increasingly strengthen our reliance on electronic information instead of traditional printed information?
4. Has communication become smoother with the aid of modern communications equipment?
5. Has ICT made it easier for MPs to do their work?

Questions were divided into six categories in the questionnaire form:
1. Use of ICT tools in the personal offices of Members at the Eduskunta (use amounts, impact on effectiveness of work, traditional or electronic format)
2. Impact of ICT tools on group work
3. Channels used for information searches
4. Utilisation and impact of communications tools
5. Evaluation of the content of Eduskunta webpages
6. Development suggestions

In total, 59 responses were received from Members (30%).

Their personal assistants submitted 99 responses (56% of all assistants replied)

Interviews of MPs

After the questionnaire survey had been conducted, 13 MPs were interviewed. The interviewed Members were selected in a way that included representatives of different parliamentary groups (parties), men and women, young and old, experienced and new MPs as well as "ordinary" ICT users and "super-users".

Even though the interviewed group of Members was quite small, it was apparent that already after 7-8 interviews, new interviews no longer yielded much fresh information from the perspective of the study. In other words, the material was saturated. The size of the sample was sufficient.

The interview request described the themes to be covered in the following manner:

1. How would you describe the nature of an MP's work in different kinds of interaction environments (work at plenary sessions, Parliamentary Committee and parliamentary group meetings, cooperation with stakeholder organisations, constituency work, maintaining contact with the citizenry, the media and EU organs, other international cooperation, working in your office at the Eduskunta and distance work)?

2. What information-management-related (e.g. retrieving information from the Eduskunta intranet or the Internet, organisation of documents or other information) needs have you identified in association with the abovementioned interaction environments?

3. What communications-related needs have you identified in association with the abovementioned interaction environments?

4. What needs related to the management of your own work (e.g. time management, task organisation or steering your assistant) have you identified in association with the abovementioned interaction environments?

5. How would you like these matters to be handled in the future?

2 Knowledge management challenges for managers and MPs

Performance differences between organizations can ultimately be attributed to differences in management.
—*Peter Drucker*

A manager has many roles - as does a Member of Parliament. Consequently information needs vary according to the situation. How can we offer these demanding professionals as broad a supply of information as possible, now and in the future?

Technical development, mainly growth in information technology capacity, has significance for information work, but the most important changes happen slowly. Technology is likely to lose more and more of its significance over the years and matters related to the application of technology, such as the management of information, communications and time, will become more important.

Peter F. Drucker (1999) has described and compared the development of modern information technology to the development and introduction of printing technology in the 15th and 16th centuries. This series of events, which Drucker calls the third information revolution, was faster in terms of impacts than the information revolution that is currently under way, the formation of the information society. Technology's significance is declining and it is becoming basic infrastructure. Attention is increasingly focused on information and its management and utilization. We are thus shifting in the development of the information society from a technology-oriented stage to a content-oriented stage.

Knowledge workers are people who design products and services and create new knowledge (Laudon & Laudon 2006, 21). For example, researchers, managers and MPs are knowledge workers (Gummesson 2000, 7). Knowledge workers define their tasks quite independently and manage their activities themselves and are thus independent in their objectives and work. They cannot be supervised in the same way as people who do manual work. Similarly measuring and developing productivity and the results of knowledge work are more difficult and less precise than measuring and developing manual work (Drucker 1999, 136).

"Working on the right things is what makes knowledge work effective. This is not capable of being measured by any of the yardsticks for manual work. Knowledge workers cannot be supervised closely or in detail. They can only be helped. But they must direct themselves, and they must do so toward performance and contribution, that is, toward effectiveness." (Drucker 2002, 156).

The success of businesses and organizations depends more than before on good management. Performance differences between organizations can ultimately be attributed to differences in management (Drucker 1999).

2.1 Management and decision-making

One key problem for managers and MPs is managing one's own work. Managing one's own work involves managing information, time, matters and work processes as well as decision-making.

"Today we sit with various *lists* of what managers do but virtually no serious *theory*." (Mintzberg 1991, 99) I think that the situation is still same.

In my opinion a good summary of the nature of managerial work is in the following figure presented by Mintzberg:
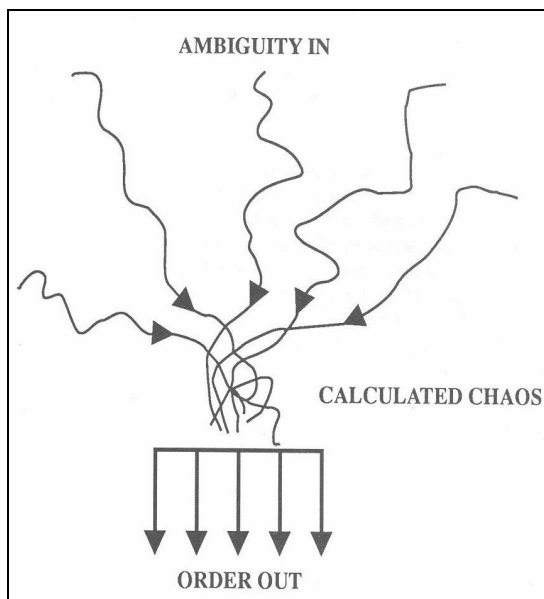
Figure 1. The nature of managerial work (Mintzberg 1991, 111)

According to the figure, a characteristic feature of the work of managers and in my opinion also MPs is to turn disorder into order. Work is of this nature at all levels of management. Knowledge work has many of the same features, with the key problem being to manage the chaos of information. I have noticed that sometimes as a result of work, disorder is only turned into a different kind of disorder. And sometimes –especially in politics?- order is turned into disorder.

An essential part of the work of a manager and of every knowledge worker is making decisions. Nowadays decision-making is considered more complex and difficult than before, for many reasons. The number of available technical options is growing, the amount of information is growing, the matters that must be decided are more complex because of globalization, and political development may be unpredictable. The consequences of wrong decisions can have greater impacts than before (Turban, Aronson, Liang & Sharda 2007).

The supply of information is constantly growing. Astonishingly, the effect of increased information would appear to be marginal: after reaching a certain level, additional information does not affect the activities of workers or organizations (Dijk 1999, 183). More information is used to make decisions than before, but the quality of decisions has not

improved very much. This may be due to the fact that additional information often does not answer the questions that have been asked, but produces answers to questions that have not yet been asked. Producing information has at least partly become an independent, automatically self-supplementing process.

According to one study, 20% of organizations' intellectual capital is still in paper form and as much as 80% of knowledge workers' time may go into searching for information, if proper document management solutions are not available (Butler-Group 2005). According to another study, knowledge workers use up to one-third of their time seeking the information they need and 15-25% of their time in tasks related to the production of information (Butler-Group 2006). Whatever the actual figures may be, it is fair to say they are too high. It is essential to achieve better solutions for knowledge management.

2.2 Management and utilizing information technology

Management and utilizing information technology in management involve many challenges. Research regarding management itself is fragmented and a generally accepted theory does not exist. Management as a work task also contains many different roles in which information technology can be utilized in different ways.

The rapid pace of change in information technology and the lack of generally accepted standards even in key areas of information technology make things even more difficult. Management's information systems form a very broad and fragmented whole that is constantly changing. The use of mobile devices, which is particularly important for managers and Members of Parliament, is in a state of intense flux. The fact that users are guided by the market does not help: New devices often with apparently new features can shift attention to the wrong things. Usually a new feature does not provide any significant benefit for managerial work. Significant development that will affect management's information technology support is under way, however. Note the development of the web and particularly the semantic web.

The work of managers and MPs is knowledge work in which every knowledge worker sets his or her own objectives and limits. The problem is that in these professions time belongs to everyone. Setting limits can be difficult, but without limits the danger of burning out is real. On the one hand information technology can reduce the work load, but on the other hand information technology, for example e-mail, can cause an additional burden and constant interruptions. (Turban et al. 2007)

Developing information systems has traditionally been based on technological and methodological possibilities. The way in which information is generally recorded and processed differs from how people remember and think. Data processing problems are the difficulty of individual processing, the lack of a context and simplifying formalization. New possibilities are offered by soft information technology, for instance fuzzy systems, evolutionary programming and neural networks.

According to Koivunen (1997, 221), information technology system applications have started with the false assumption that people behave in a strictly rational manner and arrange and seek information logically. "However, a person even when using a computer is a complex being who acts largely on the basis of tacit knowledge." A computer user is always an active, conscious individual. How tacit knowledge can be taken into consideration in developing information systems, perhaps particularly systems related to

management, is a decisive question. In designing user interfaces, "the key thing is not a hierarchical search structure, but the multidimensional seduction of the user, appealing to all senses and emotions."

What does this mean for the development of information systems? Some clear trends are visible:
1. Technology alone cannot produce systems that serve users sufficiently well.
2. Systems, from the user's viewpoint above all user interfaces and services, must be profiled, given roles and personalized.
3. In addition to codified "hard" information, consideration must also be given to tacit knowledge, perhaps even the user's mental structure.
4. To accomplish the above even to some extent, users must be involved more in development.

2.3 Challenges for knowledge management in Parliament

The number of matters handled by Parliament has grown significantly. The scope and complexity of the matters that must be handled have also increased Parliament's and MPs' work load. This has many consequences: the number of hours in plenary sessions remains high, committees' work load has increased and the amount of information that must be handled has multiplied - unstructured information flows from every direction and the tools that are available to manage it are inadequate. MPs have to coordinate their many tasks according to the restrictions imposed by available resources, such as time and assistants. On the other hand the large number of matters and the resulting pressure also influence Parliament's real position. The opinion of one parliamentary group leader: "We are already, especially in autumn, operating on the limits where the power that belongs to the Eduskunta is weakened because of the rush that is our reality."

Resolving problems related to knowledge management is also essential in the work of a Member of Parliament. The amount of information and matters that must be managed is large - one often speaks of the information deluge and resulting information fatigue. The load can be truly large. It is further increased by the fact that "big and small" matters are handled side by side at the same time. According to one estimate, an MP can process less than 5% of the material related to legislative work and even less of the material related to committee reports.

In the flood of matters and information it is difficult to pay attention to important issues for social policy or even notice the value choices that are behind individual proposals, which appear only technical (TuV 2007).

MPs must filter information in a disciplined manner and absorb only what is relevant for their own needs and drastically reduce the number of sources of information. The breadth of the hundreds of pages of information and electronic communication that come to an MP daily requires means to manage the situation. In this MPs' missions and information technology can together form an effective tool. MPs should be offered profiled and even personalized information technology services and support - the same standard services for everyone are not longer enough.

The distribution of paper documents could largely be ended. According to MPs, the same documents are distributed as many as 4-5 times.

Summaries of documents should be available online. Link databases could be used to influence knowledge management, which has already been done in some committees. Similarly information packages on a key theme could be helpful in work.

Knowledge management can be developed with information technology to make it significantly better. Essential help can no doubt be found in computers' possibility to handle more and "more intelligent" information. Important methods are the expansion of the use of meta-information and the filtering of information according to profiles and key objectives, missions that this allows. This work is under way in the Finnish Parliament in many projects. For example, Parliament is participating in the Semantic Web 2.0 Intelligent Web Services project[1] conducted by the Finnish Funding Agency for Technology and Innovation. Strong development is currently under way in these areas of knowledge management, whose effects are difficult to predict. In the work of an MP and a manager unstructured tasks for which it is difficult to develop information technology tools are often emphasized. MPs' tasks are very broad, since decision-making concerns the whole of society and its activities. Even nations' activities have become "globalized, internationalized and networked" more than before and at the same time decision-making involves more uncertainty. Information systems and agents that support decision-making may be beneficial for management's procurement and analysis of information. Owing to the broad scope of MPs' tasks, the need to procure information cannot be satisfied with a single information system; it is necessary to use several different systems and services, which should nevertheless appear to the user as a single system.

In knowledge management the emphasis has been on the management of Parliament's official information, but from an MP's viewpoint political and social, largely unofficial, so-called grey information may have even more importance than official information. These two viewpoints should be combined in some way. With regard to the management of official information (mainly codified information), Parliament's information systems already provide fairly good service, but in the area of grey information there is a lot that needs to be done. In managing information and knowledge Parliament appears to have application areas for both main strategies: codification and personalization.

Problems related to management's use of information systems are also familiar in Parliament. Some MPs are averse to information technology and its use, in which case use is largely up to a personal assistant. MPs' busy schedule requires that systems must be easy to use; use should be possible without lengthy training sessions.

---

[1] Semantic Computing Research Group (SeCo) http://www.seco.tkk.fi/#

3 Interaction between MPs and citizens

To strengthen democracy we need direct democracy, writes Minister of Justice Tuija Brax in the preface of a book on direct democracy (Büchi, Braun & Kaufmann 2008). According to Brax, direct democracy is about the fairer sharing of power. According to the book, direct democracy complements and strengthens representative democracy and allows matters that state institutions and parties have not addressed to be placed on the political agenda. In practice this involves the broad use of citizens' initiatives and referendums. In this Switzerland is Europe's model country and Finland is a society that lags far behind. In a UN study concerning e-government in different countries, Finland was ranked 45th with regard to citizens' possibilities to participate. This gives a stark picture of the current situation in Finland.

3.1 Introduction

A report on consultation and participation describes how citizens are consulted and how their participation is supported in information networks on different levels of government. Citizen participation channels can be grouped according to whether practice supports participation in the decision-making process on the level of giving feedback, consultation or participation and submitting initiatives. The basis for grouping can also be the effect of consultation on the decision-making process. In the report the problem with regard to citizens' participation is citizens' difficulty in conceptualizing processes in government projects and the effect of participation. Projects and other matters that are the subject of participation must be described clearly online. The results of electronic consultation and participation should be utilized as part of the preparation and decision-making process. (Korkiakoski 2005)

In order to succeed, goal-oriented civic discussion requires a suitable forum in which contributors are aware of participants, the discussion has a timetable, objectives and specific form. The essential thing for success, however, is that discussion has an effect on the state of the matters that are discussed. Goal-oriented discussion differs from random discussion, which is not aimed at any goal.

A significant threshold for participation in electronic consultation is citizens' inadequate information technology skills. A survey of digital skills that was conducted in the Netherlands found that a significant portion of citizens have trouble using a CD player, television or ATM, for example, much less a computer (Dijk 1999, 166). Negative experiences, a feeling of losing control and the complexity of technology have led to "computer fear" or "keyboard fear". Another significant obstacle is that not everyone has the possibility to use modern information technology services.

Politics and parliamentary activities appear to be in some sort of crisis. The crisis is visible in low voter turnout particularly among young people, a blurring of the differences between parties, citizens' limited possibilities to participate and politicians' lack of credibility in a world saturated with business and globalization.

One should at least be concerned about the situation. In Sweden citizens' confidence in Parliament (the Riksdag) collapsed in ten years: As recently as 1986 a majority of Swedes had confidence in Parliament, but ten years later only 19% did and party membership is also down by tens of percent; in Sweden by

almost 30% and by nearly 50% in Norway (Zittel 2004). Development in Finland has been similar. Only about 40% of Finns say they have confidence in Parliament to some extent (Mannermaa 2006).

The solutions offered by information technology are viewed as having possibilities to change the situation, but information technology is considered more a way to support and strengthen present operating models than to bring an entirely new operating model. According to Strandberg's doctoral thesis (2006), judging from parties' and candidates' web pages, in Finland the Internet has not yet caused a major change in political operating models. The large parties have maintained their position and the Internet has been adopted as a new channel that is nevertheless used in a very traditional way. The Internet's possibilities are almost entirely unused and citizens' role is to be the object of the distribution of information, not active participants in discussion. It would appear that the situation will change in the future, however, since young people consider online sources more important than the traditional media. Interest in using election engines also appears to be a sign of change.

What is Parliament's role in this difficult situation? Will Parliament change its operating procedures in the direction of a modern organization's operating models or can it even look modern? According to Mannermaa (2006, 130-135), non-representative influence will increase and over the long term voting models, for example, will change. The political party system created in an agrarian and industrial society will change (for example parties will weaken and fade) and the industrial mental model with its time and place constraints will unravel (for example Parliament will meet less frequently in the same physical space). Citizens' and small groups' possibilities to influence matters will increase. Will the EU's national parliaments be seen as unnecessary intermediaries between the European Parliament and regional governments in the future?

Increasing citizens' possibilities to participate has constantly received attention, and for instance in interviews many MPs hope that this development will happen rapidly. Similar hopes have also been expressed in connection with Parliament's information management strategy work. This type of development is prevented by the political delay mentioned by Mannermaa: "Modern society has the technology and economy of the information society, but a union-like party-political map and a political culture that were born of agrarian and industrial society." Political parties do not want to make the structural changes that are needed in the technological base of society and the economy - they have too much to lose in status and power. (Mannermaa 2006, 62, 100).

In the opinion of Kuronen (2000, 150), "In Finland the essential development of democracy would mean seriously encroaching upon corporations' power and the political system's activities." Consequently essential changes are practically impossible, since they require the support of all the major actors. Every significant actor thus has a veto. "Protecting interests also leads easily to a situation in which no group in power is ready to give up the benefits it has achieved, whether there is still a need for them or not." (Berndtson 2008, 209).

The same conclusion is reached in an article by Keskinen and Kuosa (2004): "The more experiments have been made in citizen participation, the clearer the threat of quasi-democracy has become. A citizen's right to speak has not produced real influence, the decision-making machinery has not taken wishes into consideration, the decision-maker has not learned from discussions - all this has caused frustration and disappointment. Ultimately this is one probable reason for the drop in voter turnout."

On a small scale the political delay is visible in how Parliament develops citizens' possibilities to participate. Although the need has generally been acknowledged and the necessary technical solutions exist, possibilities to participate are being increased extremely slowly. Old and familiar ways seem less scary than new ways that increase possibilities to participate and influence matters. Parliament as an important producer of democracy services should prepare a clear strategy for proceeding towards democratic practices in the information society. Parliament's information systems and information technology services are in line with solutions generally used in parliaments. The most significant exception

concerns tools that increase citizens' possibilities to participate in parliamentary work, which in practice are not available. In practice citizens can get attention drawn to matters through Members of Parliament. On the basis of citizens' input, MPs can present a written question to the Government or submit a motion.

3.2 E-democracy, e-government, e-parliament

Parliament is a very interesting social actor in that many functions of e-government appear in it. First are processes associated with e-democracy (e.g. citizens' participation), then electronic services (e.g. Parliament's website) and business (e.g. complaints sent to the Parliamentary Ombudsman), Parliament's internal processes (e.g. management of documents, administrative processes) and processes between Parliament and the Government (e.g. shared information systems and the transfer of information). It is interesting to observe MPs acting in a sense as interpreters between citizens and the "system".

Key functions of e-government and e-democracy from citizens' viewpoint are shown in Figure 2 according to which information is essential for both e-government and e-democracy. Information generally takes place nowadays through web services. E-government is also characterized by different online services and e-democracy by services that allow citizens to participate.
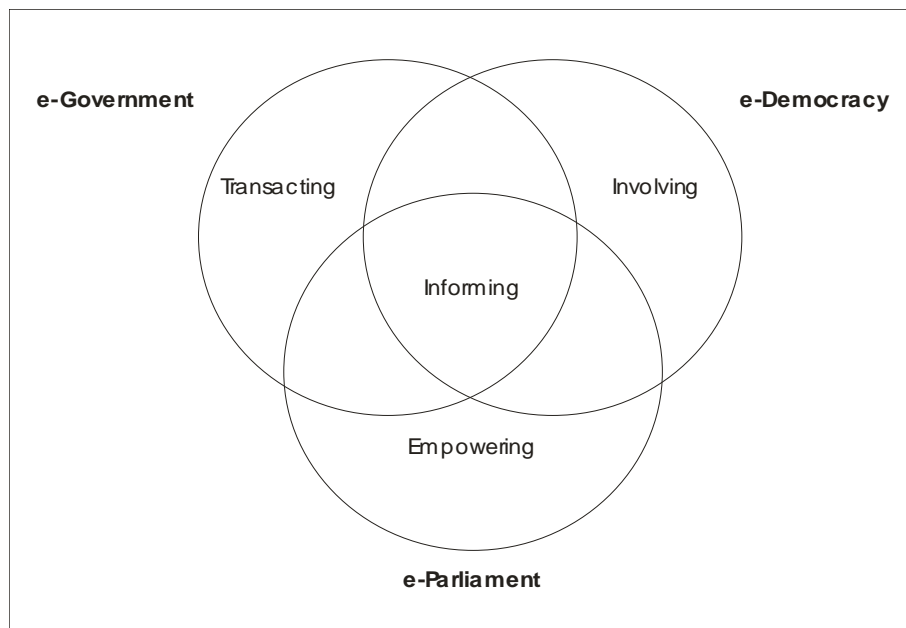
Figure 2. E-government, e-democracy and e-parliament

Increasing citizens' possibilities to participate, which is typical of e-democracy, has progressed but in many people's opinion too slowly. Technical capabilities exist, but civic discussion even regarding major government projects is seldom arranged. No established practice has yet been created in Finland. The goal of the Otakantaa.fi discussion forum has been to obtain citizens' views, expertise and opinions for project and preparation work. At the same time there is a desire to increase interaction between citizens and government and improve the quality of the preparation of projects. Participation in discussions started by government is quite passive, however.

E-parliament uses information technology above all to promote citizens' possibilities to influence matters and participate or in other words the emphasis is on the e-democracy side. For this to succeed, Parliament must proceed in the use of information technology through many stages, for example by developing information technology solutions first in its internal processes and inter-governmental connections. Only

after a certain level of maturity has been reached is it possible to start developing and applying solutions that can increase citizens' participation in a fundamental way so that the influence can extend to representative democracy's operating models as a whole. E-parliament, e-democracy and e-government give citizens more power by allowing broader participation in Parliament's work.

Is it self-evident that citizens want to participate actively in politics and social decision-making in general? There are often demands that representative democracy should be developed more in the direction of direct democracy, direct influence. Research results suggest otherwise, however: Citizens want to be aware of matters that are being decided and decisions, but very few want to participate actively in politics and even fewer do so in practice. Furthermore those who want direct participation do not form a random sample of society but are typically middle-aged, well-educated and affluent (McHugh 2006). This means economically and socially secure, civically competent and socially active people who are "advantaged", if one uses the three-tiered division "elite", "advantaged" and "disadvantaged" (Nousiainen 1992). According to many studies, those who are least advantaged in society are least likely to participate in politics and thus make their voice heard (Berndtson 2008).

The image of ideal democracy may be one of free men gathering in the town square, where everyone has a say. "In the public spaces of real life - the media - however, the one with the loudest voice and the best manipulated crowds wins it all. Media can make the system of local democracy, elections and boards and city councils and rights of appeal, all based on law, look like a bureaucratic sidetrack. The urge to participate has produced an illusion that if an individual expresses an opinion in a public debate or writes a letter to the editor, the decision-makers have no other alternative than to accept the view as the only correct one." (Taipale 2001). In a democracy matters proceed to a decision after many preparatory stages; in political parties, for example, there may be ten such stages. When they reach the final decision-making body, Parliament or a local council or party council, people generally think that it is too late to influence the content of a decision. This need not be so, however.

One can of course examine citizens' willingness to participate in a different way and think that easier operating models and tools will attract citizens. According to Dator, almost all humans are involved in some kind of activity outside their home, which is increasingly online or virtual. People participate in things they care about, when their participation or nonparticipation matters and when they can participate easily and effectively. Governance structure is designed to prevent participation in policy-making or to make it extremely difficult. "If structures existed that made political participation easy, fun, and effective (and nonparticipation costly), more citizens would participate in formal government just as they participate in religious, sports or other activities that they are interested in." (Dator 2006).

In practice what is needed is a combination of many different tools. Espoo's youth parliament experiment used direct, representative, participatory and consultative democracy in different stages. The information technology solutions that are available today are not yet adequate to take care of processes that require flexibility, cheapness and ease of use. Software must allow better possibilities to start a dialogue. (Keskinen & Kuosa 2004).

It is difficult to imagine that new models of democracy can be achieved with a single giant leap to new information technology - progress takes place in an evolutionary process step by step. On the other hand it is possible that the breakthrough of certain new phenomena can happen with astonishing speed.

The intention is to expand the Otakantaa.fi discussion forum and prepare a comprehensive electronic consultation strategy and implementation plan for central government (Oikeusministeriö 2006). On 21 March 2007 the Ministry of Justice appointed a working group to prepare a proposal for the development of a second stage of consultation in central government. I took part in this working group. According to its report, the objective is to develop a shared service that different parties can use in their own activities. A key proposal is to establish an Internet-based, interactive, guiding and informing participation environment that brings together Parliament's and central and local government's participation services

(Oikeusministeriö 2008). In addition the working group proposes trials of participation methods, the more extensive publication of documents in electronic form, the development of possibilities to follow preparation and decision-making, and training civil servants in different forms of electronic participation. The working group's most significant proposals are to introduce online voting in the 2011 parliamentary election and to introduce electronic citizens' initiatives.

3.3 Parliament's role

Parliament's role in arranging citizens' participation has been unclear, since on the one hand increasing citizens' possibilities to participate is viewed as indispensable but on the other hand in the opinion of many MPs arranging civic discussion once a matter is before Parliament is hopelessly too late. The objective could be to allow participation during the preparation of matters in ministries and the results of different forms of participation would then be at Parliament's disposal. Parliament could itself arrange citizens' consultations in matters that have broad significance. Discussions arranged by Parliament would not have to be limited to matters concerning which the Government has submitted a proposal to Parliament. In this respect Parliament could act more independently.

The progress of e-democracy will not happen all by itself or by chance, however. Parliament should formulate its own strategy for this purpose.

Coleman (2006) presents two scenarios for parliamentary democracy:

In the first scenario parliaments will remain as they are now. On the Internet parliaments will mainly communicate their existence but no significant solutions increasing citizens' participation will be introduced. Parliaments would have less significance than ever before, because they would continue their lives in their own lofty solitude in a world in which interactivity is an essential part of activities in all spheres of society. Without the use of IT interactive solutions promoting e-democracy, parliamentary government is likely to become more top-down, remote and ultimately undemocratic.

In the second scenario parliaments will consult citizens constantly, not just occasionally, and citizens' opinions will be taken into consideration. The possibilities offered by information technology will be used in citizens' participation, for example questionnaires, consultation and participation in decision-making. According to studies, this type of activity has proved beneficial for all parties. It is positive to note that according to a survey of European parliaments conducted by Coleman (2003b; 2006), 80% of respondents believed that the use of information technology will reduce the democratic deficit. A lot still depends on the attitudes of parliamentary personnel: The survey observed a strong correlation between those parliaments in which responding officials supported developing citizens' possibilities to participate and parliaments offering citizens' possibilities to participate on their websites. Similarly, if officials had a negative attitude towards citizens' participation, parliaments did not offer possibilities to participate on their websites. Whether officials' attitudes towards citizens' participation were due to politicians or politicians' attitudes were due to officials was not studied.

Considering questions related to e-democracy and introducing new ways of operating are also necessary in Parliament. On the basis of several scenarios and research reports, it appears clear that the traditional, remote parliamentary operating model can move parliaments away from the centre of democratic activity. In the information society, where people are accustomed to online services anywhere and anytime, Parliament must function as a modern part of society. Change is indispensable and inevitable.

According to political techno-optimism, technology can also increase democratic pluralism. The data transmission made possible by telecommunications technology keeps society open and citizens up to date

and aware of what is happening in politics. Information flows and cannot be hidden (Airaksinen 2003, 338):

> "New information technology promises even more. Soon we can vote on many things directly from our homes, using a computer. We can express our opinion directly in an e-mail to decision-makers, whose interface with voters is then direct and effective. Democracy will become more direct than ever before. Citizens will be knowledgeable and aware of issues and will not fall prey to populism. A McLuhanistic Veikko Vennamo[2] will be impossible. Decision-makers in turn will recognize voters' wishes without delay."

For political optimism the situation appears clear. However, technology has its own requirements; it is not just humans' humble servant. Who is the master and who is the servant, technology or politics? "The danger is that technology's thin pluralism will begin to restrict democracy, since technology determines a person's lifeworld primarily." (Airaksinen 2003, 339)

If the Internet is really as revolutionary in terms of influence as people believe, it will change many current traditions and operating methods in interaction between Members of Parliament and voters. The Internet will also place interesting challenges on party leaders, the party elite, since with its help MPs will be in a better position to manage their own marketing and communications. MPs can more easily be in direct contact with voters without the media's interpreting role. Election work will become constant campaigning and the significance of work for the electoral district will increase. In this, new technology can also serve as an efficient force for change.

Can citizens' activeness and participation in politics be increased, for instance with the help of data networks and the services available on them? One application of technology is to provide MPs new tools to help them keep in touch with citizens, their own electoral districts. At best this can have an activating effect on political and social activity. On the other hand danger signs of the advent of a political cyborg have been recognized; humans have accepted machines as an extension of themselves in a new way. "We are at the same time clearly stepping into the posthumanist era." (Pulliainen 2006, 86)[3]

3.4 Keeping in touch with citizens

"The relation to voters has changed over the years. Nowadays many of us have to seek confidence through publicity. If we fail, we won't be elected."[4]

Interviewed MPs had similar views concerning the role of the media. On the basis of what is reported in the media, MPs are fit or unfit in citizens' eyes. Quite often citizens' image of MPs is entirely based on the media.

MPs' contacts with citizens take place largely in their own electoral districts. MPs of course meet citizens elsewhere, often in Parliament. They typically speak at the invitation of different associations or organizations and attend the opening of different types of occasions. Furthermore MPs are naturally in touch with citizens in many other ways, for example by phone, e-mail, text message, videoconference or conventional mail. Nowadays e-mail is clearly the most popular contact tool and its popularity has increased the number of citizens' contacts considerably. The growing use of e-mail has also meant that younger citizens are contacting MPs. What significance this lowering of the age of people making contact will have, only time will tell. E-mail has also replaced other traditional forms of contact, especially conventional mail. The reason for this is the same reason for the spread of e-mail in general - e-mail is easier to use and faster than sending letters or cards.

---

[2] Veikko Vennamo was a very popular populistic MP in Finland.
[3] Erkki Pulliainen is an MP
[4] Speaker Timo Kalli at the opening of Parliament on 28 March 2007

MPs have also become aware of the possibilities of the Internet and are striving with the help of their own websites to come in direct contact with citizens, bypassing the media. E-democracy tools can be used to open direct connections between MPs and citizens and reduce the media's interpreting role. In spite of this, with a few exceptions, MPs' personal websites play a minor role in MPs' work. MPs generally use their own websites only for passive information dissemination; active marketing is still in the future. In the 2007 parliamentary election about 15% of eligible voters used a candidate's or candidates' web pages as a source influencing their voting decision and about 10% used a party's or parties' web pages.[5]

A special form of contact between citizens and candidates made possible by the Internet is election engines, which allow voters to determine how well a candidate's opinions match their own opinions. The first Finnish election engine was developed by the Finnish Broadcasting Company for the 1996 European Parliament election. Since then election engines have become quite popular and in the 2003 parliamentary election as many as 12 engines were in use and the most popular were visited by tens and even hundreds of thousands of people. Around a third of eligible voters used election engines in the parliamentary election. Election engines help voters make a voting decision and also provide additional information on the opinions of candidates who are less well known, but they can contribute to turning an election into entertainment or a carnival on the Internet, where "the law of the jungle" supposedly rules. The way questions are phrased in election engines involves a significant use of power, since it allows emphasis to be placed on particular themes and certain election themes favour particular parties. On the other hand, with the help of election engines a new medium that increases equality has been added to campaigning, though the effective use of this medium requires skills on the part of candidates. (Haukio & Suojanen 2004).

According to a vision of MPs' work in 2015 the situation in the future will be different:
"Election engines in themselves are a good tool. However, when candidates answer questions, they often suffer because questions do not focus on the most important issues, questions may be poorly phrased and options require too much explanation. The solution has been simple: in Parliament we formed a working group that before an election prepares questions that in our opinion are as good as possible. This has produced a database that is maintained on Parliament's website. During the electoral term it contains the views of sitting MPs. Before an election all candidates are included. People can look for results in many different ways: there are profiles, self-organizing maps, theme indices and human interest trivia." (Särkijärvi 2005).

The Finnish Broadcasting Company planned an electoral term engine as an extension to its election engine, so that MPs' activities could be monitored throughout the electoral term.[6] Most of the information in the electoral term engine would come from Parliament's public web service. The new electoral term engine would have a search based on an MP's name from the Finnish Broadcasting Company's news materials and a search link with an MP's name to Google. In addition MPs would be offered an opportunity to keep a blog on the electoral term engine. A key matter in the electoral term engine on the basis of a demo version that was presented in September 2006 appeared to be the presentation of statistics on MPs' absences. This is of course not sufficient.

An election engine should go much farther in its analyses than looking at statistics on MPs' absences. For example, on the basis of parliamentary materials it would be possible to analyse automatically MPs' activities and present results with the help of a self-organizing map. In this case it would be possible to look at where MPs stand in relation to different groups - whether on the basis of their activities they stand with their own parliamentary group or are there other divisions.[7]

Perhaps one should not speak of an electoral term engine but of a parliamentary engine.

---

[5] Study conducted by TNS Gallup (Marko Hamilo: Selvitys: Käyttäjät kokevat vaalikoneet hyödyllisiksi, Helsingin Sanomat 3.8.2007)
[6] Helsingin Sanomat: Yle suunnittelee vaalikausikonetta, 30.8.2006
[7] Olli Mustajärvi: Edustajien toimia seuraava kone mainio idea. Helsingin Sanomat 3.9.2006.

3.5 Parliament - The Big Brother House?

From the viewpoint of the use of information technology, Parliament's task is to see that connections to Parliament's information systems work anytime and anywhere. In addition contact possibilities could be further developed by making it possible to establish discussion groups online easily. In this case keeping in touch could become more active and broader and real cooperation networks could be created between MPs and citizens. At the same time the citizen viewpoint that is an essential part of Parliament's work would receive more attention.

Stephen Coleman (Coleman 2003a) has studied viewers of TV broadcasts from the House of Commons and the popular reality TV format The Big Brother House and their attitudes. The two groups of viewers differ considerably in terms of age and sex, for instance. Young viewers are less interested in politics than older generations. Both formats are nevertheless similar: MPs' activities in Parliament are monitored and scrutinized quite closely on the basis of the image provided by television, the press and other media. Then citizens vote to determine who stays and who must leave. Similarly in the Big Brother format the audience monitors and scrutinizes what housemates do and say and votes on who should be evicted. In both, participants stay or leave according to what or whom people feel they represent. They are representation games. According to Coleman, television could develop a new format that would increase involvement in politics, draw more attention to issues and give citizens more possibilities to participate.

Is this game politics? Can Parliament itself influence the rules of the game and in what way? Should it influence them? In my opinion Parliament should increase citizens' possibilities to participate in its activities, since current possibilities are quite limited. Today's information technology solutions could help in this.

4 The Eduskunta and its work

It is so, if it looks so.

4.1 The tasks of the Eduskunta

The legislative task of the Eduskunta is often emphasised in accordance with the doctrine of the separation of powers, but its status and powers could be better described by speaking of *"the making of fundamental decisions, which apply to the nation, and overseeing their realisation"* (Nousiainen 1992, 185). The Eduskunta also performs functions of a more general nature; for example, it serves as the nation's public forum for debate, politically educates citizens and promotes their activism (Nousiainen 1992; Aula 2003).

The tasks of the Eduskunta are:

– Legislation: the Eduskunta deliberates on legislative proposals presented to it in the form of either Government bills or Members' initiatives. Each year the Government submits 220-300 bills and Members submit 150-200 initiatives. In practice, the large majority of legislative amendments or new laws are introduced as Government bills. Only a few Members' initiatives lead to legislation each year.

– The Eduskunta exercises its budgetary powers first and foremost by voting on the Government's budget proposal.

– The Eduskunta's decision-making role on EU-related questions is strong when compared to the national parliaments of other Member States. All of its committees handle EU affairs, but the Eduskunta's positions are generally decided by the Grand Committee. The way in which the Eduskunta handles EU-affairs effectively safeguards the national assembly's opportunity to wield influence.

– The Eduskunta is responsible for steering and monitoring the Government and the activities of the administration. This enables the Eduskunta to ensure that the Government observes the objectives and instructions issued by it. In this same conjunction, MPs can ascertain whether or not the Government enjoys the confidence of the Eduskunta. The Eduskunta's opportunities for exercising oversight of the management of State finances were strengthened in 2001, when the National Audit Office became directly affiliated with the Eduskunta. The Eduskunta exercises judicial oversight through its Constitutional Law Committee and the Office of the Parliamentary Ombudsman.

4.2 Organisation of the Eduskunta

The Parliamentary Office is tasked with providing the Eduskunta with the prerequisites for performing its responsibilities. The Office reports to the Parliamentary Office Committee. The Parliamentary Office is divided into the Central Office, the Committee Secretariat and the Administrative Department. It can be said that the Parliamentary Office forms the central element of the so-called civil service component in the organisation of the Eduskunta. The parliamentary groups, the Speaker's Council, the Parliamentary Committees and many other organs of the Eduskunta form the political component of the organisation. The Office of the Parliamentary Ombudsman, the National Audit Office and the Finnish Institute of International Affairs are also parts of the Eduskunta.
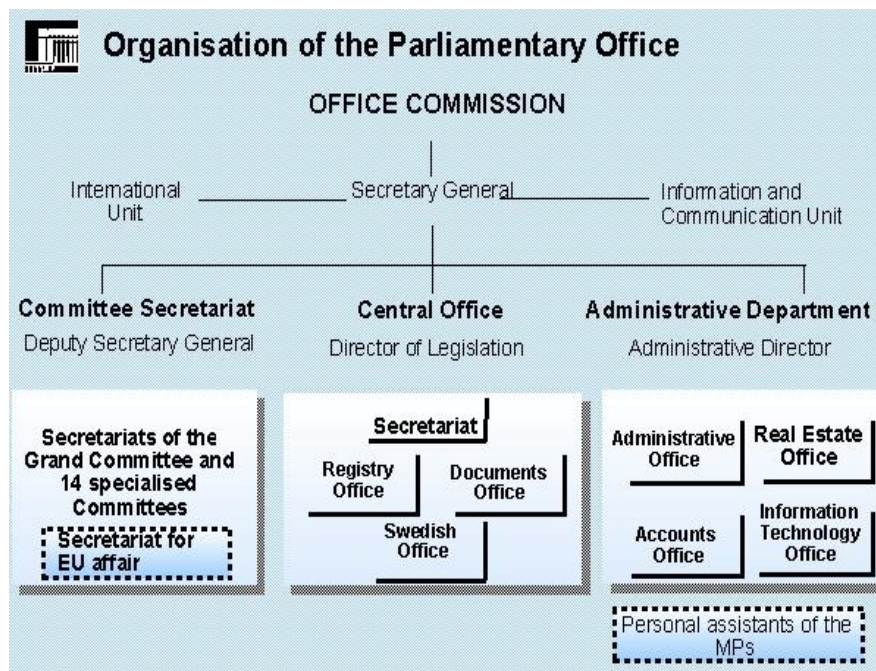
Figure 3. Organisation of the Parliamentary Office

A distinctive feature of the culture of the Parliamentary Office is the presence of strong subcultures. These occur within different professional groups, fields of specialisation and operational units. Expertise is seen more as something that emanates from within various professions and hierarchical territories instead of being rooted in the cooperation between different areas of proficiency. The management system of the Parliamentary Office is complicated, incoherent and inadequate. The functional model of organisation causes problems in inter-unit communication of information and in questions related to authority such as, for example, information system development projects. There is little direct communication and provision of feedback. All of the factors mentioned in the foregoing create major challenges to the success of any development projects meant to impact the operations of the Parliamentary Office.

An intriguing source of tension within the organisation of the Eduskunta is formed by the differing natures of its political and civil service organisations. Civil servants and politicians behave and act differently. Bureaucratic decision-making is based on an ideal, according to which the civil servant must base his or her decisions on formal, written rules

and not let his or her personality or private interests affect it. Thus the roles of the politician and the civil servant are each other's opposites because, for a politician, personality, charisma, a demagogic manner of speech, passionate commitment to causes, questioning of the facts as they stand and an ability to create new meanings are very important attributes.

The tasks of the Parliamentary Office

The Parliamentary Office is tasked with providing the Eduskunta with the prerequisites for performing its responsibilities. In other words, the Parliamentary Office is responsible for helping MPs in decision-making. MPs make decisions in various gatherings, such as plenary sessions and Parliamentary Committee meetings. The Office organises meetings and takes care of the meeting arrangements, which includes the reserving of facilities, the drafting, translation, distribution and archiving of documents, the gathering of information and inviting experts to attend meetings. The highest-ranking official titles of the Eduskunta are indications of this: Secretary General, Secretary of Parliament and Committee Secretary.

The nature of the work resembles that of the tasks performed at Government ministries or major civil service departments. Put in a simplified manner, the Parliamentary Office could be called a meeting organiser.

4.3 Matters dealt with by the Eduskunta

The activities of the Eduskunta are formal and regulated to quite some detail. On the other hand, however, it is fair to say that the Eduskunta has a high degree of freedom to organise its internal work practices and processes in any way that it sees fit. The majority of the matters the Eduskunta deals with are presented to it by the Government in the form of Government bills.

A legislative proposal is sent before a Parliamentary Committee by the plenary session. Notification of a decision by the plenary session is sent both electronically and through an extract from the resolution minutes. This "two-fold notification procedure" reveals a characteristic, which is fairly commonly associated with the services of the Eduskunta: when a new, often ICT-related operating practice is adopted, the old practice is maintained alongside the new method. This means that many of the potential benefits are not realised and resources are tied up in the maintenance of corresponding functions.

It is so, if it looks so. A problem associated with parliaments and other old and traditional institutions boils down to this old saying. One Finnish MP expressed a similar thought by saying: "If the Eduskunta [in the eyes of the citizenry] looks old-fashioned, then it is old-fashioned."

In any event, if citizens think of the Eduskunta and the entire political system as old-fashioned bureaucratic institutions, it is not surprising that they are not interested in politics. The constant decline in voter turnout is a clear indication of this. If only 30–40% of those entitled to vote bother to exercise their right, it is truly fair to speak of a crisis in democracy. Democracy is not democracy without the people and their participation.

If we are to believe the forecasts, e-democracy will bring about changes that will have a substantial effect on the work of MPs and the Eduskunta already in the near future.

The credibility image of politics and, by the same token, of the Eduskunta would appear to be a reflection of how difficult it is to engage citizens to participate more closely than at present. The Eduskunta should change as society develops and perhaps even serve as a pioneer in some fields. Providing the citizenry with more opportunities for participating with the aid of new ICT solutions is one possible avenue for such action. Also in the more general sense, it would often be appropriate to replace old, rigid operating practices with fresh methods that are better suited for modern society. Proposals to modernise working practices have been made, but they do not often lead to practical measures. However, national parliaments do need renewal if they are to retain their status in society.

5 MPs and the work of an MPs

There are 200 Members of Parliament, which means that there are 200 different job descriptions for an MP. The work of an MP varies between different Members and from one situation to another. Each MP acts in his or her own way. It is also characteristic of an MPs work that no-one else can define the job description of a Member. Each MP determines it for him- or herself in accordance with their private goals by selecting the matters they wish to focus on. Some MPs concentrate on plenary session work and consider this part to be the fundamental aspect of their duties, while other Members think that their fundamental duties are performed at Parliamentary Committee meetings. The independent nature of MP work is alluring.

The basic tasks of an MP are derived directly from the powers that the Constitution grants to the Eduskunta: passing laws as well as deciding on and exercising oversight of State finances.

5.1 The interaction environments of an MP

I have described eleven *interaction environments* to facilitate a more detailed analysis of the tasks of MPs. These refer to work locations, forums, organisations and other corresponding environments in which MPs work on a recurring basis.

The following interaction environments of MPs are examined:

1. Plenary session work
2. Parliamentary Committee work
3. Work in parliamentary group
4. Work at own office in Eduskunta
5. Cooperation with stakeholder groups
6. Work in constituency
7. Maintaining contact with citizens
8. Maintaining contact with the media
9. Maintaining contact with EU organs
10. Other international cooperation
11. Distance work

The following is an examination of the tasks an MP performs in different interaction environments. I have also included a brief description of how ICT is currently used in these environments.

1 Plenary session work

The plenary session hall is the most visible platform for parliamentary work, it is the nation's discussion stage. MPs have at times requested that the hall be equipped with

overhead projectors, video projectors or other AV technology, but these requests have been rejected: "The plenary session hall is a venue for speeches, not presentations."

The plenary session hall's information systems are made up of three totalities: the audio, voting and session proceedings monitoring systems. A laptop PC can be used[8] in the plenary session hall to access electronic documents, search for information on the intranet or Internet, handle e-mail, etc.

It is now possible to follow proceedings in the plenary session hall through live Internet streams. In 2000–2008, these broadcasts were only available on the Finnish University and Research Network Funet. The video recordings are also archived, enabling viewers to observe plenary session proceedings at their convenience.

2 Parliamentary Committee work

Parliamentary Committee work is just as an essential aspect of an MP's job as is participation in plenary sessions because all of the decisions made at plenary sessions are based on reports and memoranda drafted by the committees. The general public is not very familiar with Parliamentary Committee work because their meetings are not public.

Parliamentary Committees have traditionally worked by discussing matter, just like in the plenary session hall. Use of technical aids has, in practice, been non-existent. The Parliamentary Committee content management system is not used at committee meetings, as it is intended only for the recording of information on a matter's handling and for preparing documents. Meeting rooms are fitted with modern AV equipment and Internet connections. In addition to this, a dedicated solution has been created for each Parliamentary Committee that presents a structured compilation of background information related to that specific Committee's field of activities.

3 Work in parliamentary group

A third component of the workweek of MPs involves participation in the Member's parliamentary group. In practice, parliamentary groups are formed by MPs who belong to the same political party. Group meetings are where Members agree on common objectives and take a stance on topical issues and legislative proposals.

Parliamentary groups can use the basic ICT services of the Eduskunta (e.g. office software, communications services, intranet and Internet). Parliamentary groups can also set up restricted-access webpages, which can only be accessed by group members, on the intranet as well as unrestricted pages on the public web server of the Eduskunta.

4 Work in own office at the Eduskunta

An MP's private office at the Eduskunta can be considered a workspace that is connected to all of his or her work environments. This is a place where MPs can prepare their speeches and submissions, go over the day's programme, read and reply to their mail, arrange and organise meetings as well as steer the work of their assistants. Their private offices are the only place in the Eduskunta where Members can retire to work independently without being disturbed by others.

---

[8] Technically it is possible to use laptops in the session hall. In practise it is not possible, because the Speaker's Council has denied it –it would change too much the Parliament's traditional atmosphere.

MPs and their assistants can avail of a reliable, easy-to-use and diverse ICT environment. A fresh development challenge is formed by the profiling and personalisation of services to correspond with the individual goals, missions and various interaction environments of different MPs.

5 Cooperation with State administration and stakeholder groups

Deliberating on Government proposals (legislative changes and the budget) forms the most central part of the Eduskunta's work. Another substantial aspect of MP work is dealing with reports and accounts the Government submits to the Eduskunta.

The Eduskunta and the Council of State (Government) have adopted different ICT solutions in spite of the close cooperation that exists between the two. An Eduskunta consultation document on information management policy has proposed that cooperation be developed through, for example, utilising international standards in document storage, developing common interfaces for data transmission and even common information systems for content management. The Eduskunta and the Council of State very much deal with the same matters, but both parties and different ministries have their own, unalike information systems for content management. This poses challenges that often appear insurmountable in practical-level cooperation.

6 Work in constituency

The Finnish term for an MP is kansanedustaja, the direct translation for which is people's representative. This means that an MP represents the entire nation. The way in which Finnish elections are conducted means, however, that MPs are also representatives of the constituency that elected them. In practice, this means that, in regional questions, an MP will often side with the stance that is most popular in his or her respective constituency.

In practice, MPs handle constituency-related affairs themselves. ICT support consists mostly of the opportunity to utilise services via their home workstations or a mobile device. The realisation of the so-called electronic work table for MPs will also enable the planning and implementation of a profiled user interface for ICT services that is tailored to the needs of constituency work.

7 Maintaining contact with citizens

A major part of an MP's communications with the citizenry takes place in the respective constituency of that Member. In addition to this, MPs of course meet with citizens elsewhere as well, often in the Eduskunta. They also maintain contact through many other means, such as with telephones, e-mail, text messages, video conferencing or regular mail. E-mail is nowadays by far the most popular means of communication and its popularity has led to the amount of contacts from citizens to increase substantially from earlier levels. Another feature associated with the growth in e-mail communications is that MPs are contacted by citizens whose average age is clearly lower than before.

MPs have also recognised the opportunities presented by the Internet and try to connect directly with citizens through their own webpages, thus bypassing the media. The instruments of e-democracy could enable the establishment of direct contacts between MPs and the people, reducing the interpretative role of the media.

In spite of this, the personal webpages of MPs play, apart from a few exceptions, a fairly insignificant role in their work. MPs typically use their own webpages only for the passive distribution of information, active marketing measures have not yet been discovered.

8 Maintaining contact with the media

In Finland, parliamentary work is based on openness. It is thus clear that cooperation with the media is an integral aspect of the work of an MP. Dedicated facilities have been set aside for media representatives in the Eduskunta building. About one hundred journalists have accreditation to work at the Eduskunta.

The Eduskunta functions openly and this is of course visible on its www service (opened in 1995). The Eduskunta website, actually a portal, contains up-to-date information on speeches and decisions made at plenary sessions, documents on parliamentary affairs as well as of the work MPs have done at the Eduskunta. On the other hand, MPs need to be able to follow the media. The Eduskunta intranet contains a selection of central Finnish and international online publications to facilitate this. Included are, for example, the news services of the Finnish News Agency and Reuters as well as the online editions and archives of major dailies and magazines.

9 Maintaining contact with EU organs

After Finland joined the European Union in 1995, the tasks of MPs became more diversified with the addition of EU affairs. MPs maintain constant contact with EU organs. MPs who serve as ministers play an especially important role for the Union's decision-making by representing Finland on the Council of the European Union.

10 Other international cooperation

Although membership in the European Union has emphasised the importance of relations with the other Member States, cooperative relationships with other countries have not weakened – quite the contrary, in fact. The international relations of the Eduskunta and its MPs have continued to diversify and deepen. International contacts are maintained through, for example, meetings of parliamentary speakers, committee exchanges, participation in various cooperation organs and friendship committees.

11 Distance work

In the end, it is in fact difficult to point out a location where MPs do not perform their duties when talking about the physical work environments of MPs. For this reason, MPs are equipped with tools for mobile work. These tools include smart phones and laptop PCs, which enable MPs to work and access the Eduskunta's systems when they are travelling. In addition to this, MPs can, through broadband Internet connections, access the same services from their homes as are available at the Eduskunta. Many MPs go home to perform a lot of tasks that they had no time for at the Eduskunta or which were impossible to concentrate on to a sufficient degree in the often-hectic atmosphere of parliament. Thus MPs have, at least in principle, the possibility to work wherever and whenever they please with the help of ICT tools. Certain undeveloped aspects of available mobile devices and data transmission connections place some restrictions on this ability, however.

5.2 Problems and challenges

An MP's management of his or her own work

A factor of central importance to MPs is the development of tools for the management of their own work: how can they enhance the efficiency of their personal time management, find correct information for a specific purpose, handle communications within their networks, steer the work of their assistants. There is no package solution available that would suit the needs of every MP and the totality has to instead be assembled from several different modules.

The problem is that working practices and objectives vary between different MPs. Is it possible to come up with a totality that services all basic needs and could be complemented with MP- or group-specific components? Any possible basic system would need to be complemented with parts, which are customised up to the level of an individual user to enable the realisation of, for example the provision of information tailored according to the mission and concern profiles of the MP in question. The result must not, however, be 200 different information systems, which are fully tailored to support the work of an individual MP – any outcome must instead in some way be realised through the means of mass customisation. The idea behind mass customisation is to combine customer-driven design with cost-effectiveness through the use of modular solutions. Customers feel like they are receiving a "precision solution" to meet their individual needs even though the solution is assembled out of standardised modules much like Lego blocks. The modules can be physical apparatus, software, services or combinations of these. The realisation of information systems is just one side of this matter – the bigger problem involves the updating of tailored systems and adapting them as the needs of MPs develop.

A matter that affects the personal work of an MP is what kind of policies he or she chooses to promote: is the MP a representative of the nation or an agent of individual voters or does he or she attempt to be both. This influences the nature of the MP's own work as well as the solutions that are used to manage it. The creation and targeting of information-management services encounters the same problems: how to identify and how to offer relevant information and services to support the activities of the Eduskunta and MPs? Should the focus be primarily on the work of the entire Eduskunta and its so-called official processes or on providing service to individual MPs? From the perspective of service development, these objectives may be contradictory.

Time management

When the Eduskunta is in session, a considerable portion of an MP's working hours, 18–40 hours per week, is spent at so-called mandatory standard meetings that are associated with legislative work. If an MP serves as a minister, his or her calendar will be even fuller than this. ICT cannot solve these kinds of time-management problems. In practice, MPs have adopted a pragmatic solution to this problem: they are either absent from some meetings or attend more than one meeting simultaneously. A real solution would probably require changes to the working practices of the Eduskunta. For example, plenary sessions could be made shorter by placing limits on the duration and number of speeches or by applying a streamlined deliberation process to simple routine matters. ICT can only offer limited assistance to time management because the total amount of available time cannot increase no matter how much its allocation is managed with electronic aids.

Information management

Solving problems related to information management is of substantial importance also in the work of an MP. The amount of information and matters in need of management are great – there is often talk of information flooding and the info-congestion that it causes. Each day, MPs receive hundreds of pages of documents, dozens of e-mails plus attachments, countless telephone calls... – their load can be very heavy indeed.

Information management can be improved substantially from the present with the aid of ICT. Significant assistance can probably be gained from the potential of computers to process greater amounts of information "more smartly" than now. Expanding the utilisation of meta-data and the filtering of information that it enables in accordance with the concern profiles and central goals or missions of MPs are important methods in this respect. Such efforts are underway as part of several ongoing projects at the Eduskunta. In addition, mobility will enable the utilisation of information everywhere. These areas of information management are currently experiencing a strong development phase, but it is difficult to forecast the effects this will have.

5.3 Summary

Lack of time and the performance of many different roles associated with the tasks of an MP are major characteristics of the work of a parliamentarian. On top of this, MPs perform their duties in many different environments – an MP is a mobile knowledge worker. The work practices of different MPs are not alike. The ICT solutions designed to aid MPs in their work need to be flexible, they must adapt to different roles and environments, they must have mobile and global functionality. The change-resistant atmosphere of the Eduskunta forms a separate challenge to the development of MP work. An interesting feature in this respect is that many MPs appear to be more open to change than the civil servants of the Eduskunta.

It is difficult to evaluate the results and effectiveness of the work of an MP. Their task is defined openly, so there is no point where an MP can determine his or her task as being completed. There are always new challenges, fresh opportunities around the next corner and only MPs themselves can set the limits of how much time they spend on their tasks.

6 ICT in the Eduskunta

The development of ICT in a parliamentary setting comes with special difficulties. According to Leston-Bandeira, old institutions, such as parliaments, are traditionally resistant to change. They are especially against externally emanating changes, which are caused by, for example, ICT. Observing the effects of the rapid development and evolution of ICT through the more sluggish processes of politics causes difficulties for the staff of parliaments. Taking ICT into use always entails changes to work processes and culture – and these are difficult and slow to implement. Parliaments have, over the decades or even centuries, developed an "institutional memory" that is resistant to change. Furthermore, assuming the status of an ICT professional means that you are breaking away from "political" activity into a separate domain. (Leston-Bandeira 2007.) I think that these observations hold true also in the case of the Eduskunta.

The more permanent and repetitive the work conducted by a part of an organisation is, the more bureaucratic and regulated it becomes. Certain parliamentary tasks are by nature subject to very specific regulations, even constitutional requirements, and they recur unchanged from one decade to another. On the other hand, the work of an MP as well as a substantial share of the work of civil servants is quite clearly knowledge work by nature, to which bureaucratic and rigid guidance is ill suited. In my view, this makes for an intriguing conflict situation.

Perhaps there has not been much need for operational changes. The German parliamentarian Uwe Küster (2004) said the following of this question: "The process of bill-making hasn't changed for the last 150 years." This is an extreme opinion, but probably quite descriptive of how seldom the processes of legislative institutional organs change.

6.1 The present situation in information management

The information management of the Eduskunta has been developed systematically for almost 20 years now. Over this time, the utilisation of ICT has undergone several radical changes, which the Eduskunta has managed to adopt – at times, even successfully. It has managed to satisfy needs related to basic processes and support services quite well. On the other hand, this has caused these services to develop a substantial ICT dependence – ICT is a part of the Eduskunta's core functions. Many of the central information systems are already second- or third-generation solutions. Technology and services have intertwined to form an extensive and challenging totality.

The following tables contain volume data that describes the extent of the Eduskunta's information management.

Table 1. Volume data on the information management of the Eduskunta

Specification	Amount
Number of user IDs	1.400
Number of users	1.000
Number of key information systems	
– legislation systems	8
– legislation support systems	9
– administrative systems	15
– shared support services	9
Technology, amounts	
– servers	50
– workstations	1.400
– LAN routers	82
– WLAN access points	53
– mobile phones	1.000
Information Management Office personnel	25
ICT expenses	8,5M€/year

The Information Management Office outsources a large share, some 65%, of its services. Only user-support services are primarily produced in-house, although some purchased services are used in this category as well (for example, in distance-work support services). The operational focal point is, when measured by personnel resources, clearly on user-support services. The largest portion of the budget (almost 50%) is spent on the procurement of use and maintenance services. Investments on applications and equipment account for about a third of the Information Management Office's budget.

The Information Management Office's most important services and their production amounts in 2008 are presented in the table below.

Table 2. Services produced by the ICT Office in 2008 and their amounts

Description	Amount
Public web server	Hits 865.000/year, Visitors 352.000/year
Public web server of the library	Hits 93.370/year Visitors 47.688/year
Disk space allotted to users:	
- 1/2005	700 GB
- 1/2006	1.000 GB
- 1/2007	1.600 GB
- 1/2008	2.500 GB
- 1/2009	3.500 GB
E-mail:	
- number of incoming messages	2.303.000/year
-	6.400/day
- number of outgoing messages	728.000/year
-	2.000/day
- number of junk-mail messages	32.366.127/year
-	90.000/day

6.2 Summary

The use of ICT in parliaments has spread rapidly in recent years. In the initial stage, developments focused on technical infrastructure, but the focus has now shifted into the information systems that support the basic functions of parliaments. Basic applications and solutions still account for the majority of ICT use; this involves the utilisation of, for example, systems for registering information on matters being deliberated, e-mail and www services. Utilisation of new solutions associated with e-democracy and e-parliament is still in the trial stages at many parliaments.

ICT costs are a major expense item at many parliaments, which utilise ICT extensively, and account for 7-8% of their overall budgets. This provides good reason to scrutinise the potential advantages and costs of development projects even more carefully than before. Closer cooperation between parliaments could perhaps help lower costs.

7 MPs and ICT

The work of an MP is knowledge work by nature. Knowledge workers make decisions and decision-making can be supported with various ICT solutions. However, information systems can only offer limited support to decision-making, which has constantly become more complex and difficult. MPs serve in many different roles and interaction environments, and the nature and information requirements of these tasks can be completely different by nature. This means that the ICT solutions required for various tasks are also different and can together form a highly heterogenic totality.

An MP is almost entirely free to focus on precisely those matters that he or she is genuinely interested in – the MP's own mission. The problems that MPs face in their work are quite familiar to other knowledge workers: the management of their own work, time management and information management are all areas of concern. What kind of an information system could best serve all MPs in their tasks? In what way could a single information system be adjusted to starkly different operating practices? It is hardly plausible to consider the realisation of a fully customised information system to assist each individual MP in his or her parliamentary duties. The starting point for development should probably be the assumption that the Eduskunta's information systems, which provide support for the performance of a parliamentarian's tasks, can be flexibly tailored, "parameterised", according to the needs of each MP.

One opportunity for developing the ICT tools of MPs involves the utilisation of their mission statements. This would lead to the realisation of individualised solutions and to at least some level of profiling. Consideration of an MP's different roles and interaction environments in the development of ICT solutions brings a further dimension to this individuality. The solutions an MP will use in, for example, plenary sessions or Parliamentary Committee meetings at the Eduskunta will probably be different from the solutions the MP uses at home, during travel or at meetings with citizens. Correspondingly, the MP will need different ICT tools for the role of a decision-maker, legislator, than he or she does in, say, the role of a people's representative who advocates the interests of his or her region. An information system set up to support MPs in their work must therefore be flexible for it to be capable of serving all MPs in all possible use situations. A "traditional" information system in which input and output data, processing rules and the user interface are defined in detail beforehand to be the same for all users is not a possible or a sufficient solution.

Different information environments and the information management practices associated with them form another challenge to the development of ICT systems and services. The applications on offer, for example different support systems for decision-making, provide only partial solutions for supporting knowledge work. The rapid development of ICT makes it more difficult to develop services and discover a lasting solution.

The current information management systems of the State administration are a far cry from a system, which could depict the status of the entire administration and inform interested

MPs about where Government projects stand at the moment. For MPs, the most significant component of such an administration information system would be the possibility to monitor the realisation of the Government Programme as well as to keep track of up-to-date State budget information. I believe that such matters would also be of interest to the citizenry, so this system should be open to them as well.

Characteristic of the work of the Eduskunta is, on the one hand, its closely regulated processes, but the work can also be very surprising because of its political nature. The Eduskunta makes the fundamental decisions of the nation and monitors their realisation. The Eduskunta exercises the power of the people according to the principles of representative democracy. The importance of its connection with the granter of that power, the people and voters, has in recent years been strongly highlighted, as there's been talk of a crisis in democracy, which is indicated by, for example, low voter turnout and a general disinterest in political activity. ICT could offer suitable solutions for increasing the interaction between the Eduskunta and the citizenry.

The work of an MP includes many elements, which are shared by business executives. This supports the assumption that similar ICT tools and solutions could be utilised in all professions that fall under the category of knowledge work.

A significant factor in the development of ICT is the increasingly emphasised importance of data communications. It enables services to be comprehensively utilised irrespective of location and time, and this, when coupled with the development of mobile equipment and software, provides MPs with fresh opportunities to perform the tasks of all of their roles and in all interaction environments. However, the possibility to limit personal availability in some way must also be retained in conjunction with this in order to prevent the job of an MP from becoming a 24/7 function.

From the user perspective, an ICT totality that serves MPs should include the following characteristics[9]:

> The services ICT and information systems offer should be extremely easy to use. The realisation of sufficient data security should be carried out in way that maximises the ease of user identification in different situations, it could possibly even be automatic, and always performed in a uniform manner. All services should be usable from any location through different mobile devices, information synchronisation should be automatic and services should be profiled and personalised according to user needs. The processes and ICT solutions of the Eduskunta really must support one another.

The practical realisation of the solutions included in this vision is becoming possible and has in fact already started to take place. In a way, "the one gadget vision" incorporates three related trends, all of which are interconnected and the focus of maximisation efforts. These trends are the *maximisation of individual mobility* (maximum mobility), *enabling constant connectivity with everything* (maximum connectivity) and third, although quite paradoxical with respect to the previous two, striving to ensure that *the individual almost never has to go anywhere* (maximum immobility) – because almost everything can be done from home (Mannermaa 2006, 42).

The development of a mobile device to replace fixed solutions is not yet a sufficient representation of such technology. An application is required to be mobile, distributed and

---

[9] The description of the target situation, which was used as an aid in the interviews of MPs, was largely the same as this.

adaptable as well as to be integrated into something else and to support the co-functioning of several different components.

This vision emphasises the growing importance of information networks, the enabling of more comprehensive automated information processing with the aid of, for example, meta-data, and the provision of extensive, profiled ICT support for operational processes.

The work of MPs and executives often emphasises unstructured tasks, for which it is difficult to develop ICT aids. The field of tasks an MP performs is extensive because the focus of his or her decision-making is all of society and its activities. The activities of states have also become more "globalised, internationalised and networked" than before, while, at the same time, decision-making involves an increasing degree of uncertainty. Information systems and agents that support decision-making may be useful from the perspective of gathering and analysing information for management purposes. A single information system is not sufficient to fulfil the information-gathering requirement posed by the extensiveness of the field of tasks MPs perform, and several different types of systems and services must instead be utilised – these should, however, appear to the user as a single system.

One of the largest work-related problems MPs face is the flood of information and the abundance of matters to be dealt with – the information overload that this flood brings about is a cause of exhaustion and stress. MPs must with great discipline filter and digest only information, which is relevant from their perspective; this quite simply requires them to heavy-handedly prune the number of information sources they utilise. The amount of information contained in the hundreds of pages of documents and the extensive electronic communications MPs receive on a daily basis demand the implementation of effective measures to bring the situation under control. Coupling the examination of MPs' mission statements with ICT could become an effective tool in this area. MPs should be provided with profiled, even personalised ICT services and information support – the provision of standardised services to all is no longer sufficient.

The following table details the expectations and demands that MPs have with respect to ICT:

Table 3. Expectations and demands on the ICT used by MPs

Tasks of an MP	Expectations and demands on ICT
Plenary session work	More detailed and longer-term planning of the handling of legislative matters than at present. Opportunity to use ICT tools in the plenary session hall. Move over to electronic handling and documentation.
Parliamentary Committee work	Group work tools, electronic workspace. Improved solutions for information management. Use of video conferencing in expert hearings. Presentation of expert submissions in electronic format. Calculation models. Move over to electronic handling and documentation.
Oversight of State administration activities	Management system that would provide information on the status of Government projects and the realisation of the Government Programme. Up-to-date State budget info. Opportunity to utilise the systems of the State administration.
Parliamentary group activities	Group work tools, electronic workspace.
Work in own office at Eduskunta	Profiled basic tools for time, information and communications management. Tools for aiding the cooperation with personal assistants.
Distance work (EU, other international cooperation, State administration, constituency, maintaining contact with citizens and the media)	Mobile services (portable PC, smart phone and opportunity to utilise Internet kiosks or other corresponding means of communications). Discussions on the web and maintaining contact with the constituency using solutions such as video conferencing. Opportunity to conduct parliamentary work from a distance.
All tasks and roles	Ease of use. Sufficient data security without making use too difficult. All services accessible from anywhere. "One gadget" vision. Automated synchronisation of information between different devices. Profiling and personalisation of information. Context-aware services. Support for unstructured tasks. Support for maintaining contact with the citizenry. Support for management of own information.

8 The ICT tools and solutions of the Eduskunta

The ICT tools, systems and services at the disposal of the Eduskunta and its MPs have been the focus of systematic development over the past 20 years. The information systems of the Eduskunta and their associated services for the largest part focus on arranging and processing codified "official" information. The Eduskunta's intranet and its public www service provide comprehensive access to codified information on its activities and the handling of different questions. On the other hand, there is very little, even none at all, non-codified information on offer. One central area of development in the modelling of MPs' ICT use is the inclusion of tacit knowledge as well as of the unofficial knowledge that is related to the work of MPs.

8.1 Information management strategies and their realisation

The following table depicts the focal points of the Eduskunta's information management policies in simplified form. These focal points have been identified as central policies/development areas. The priority classification of these focal areas is based on my own estimate.

Table 4. Focal areas in information management policy guidelines

Information management policy guidelines (year when drafted) Focal point of development plan	1985	1991	1994 (VPA project)	1995	1998	2002	2005	2008
Basic services								
- infrastructure	***			***	**	***		**
- content/document management	**		**		**	**		**
- information management			**	*		**	**	**
- communications, publication			**				**	*
- cooperation with stakeholders			*				*	
Organisation of information management		***			***			
Development of competence			*		*	*	*	*
Management support		**		**			**	*
Legislative work	*	*	***		*		**	**
Handling of budget					*			
Monitoring and oversight of government								

***	most important focal area of policy guideline
**	important focal area of policy guideline
*	policy guideline includes project proposals for this area

Attention is drawn to the fact that the monitoring and oversight of Government, one of the key tasks of the Eduskunta, has never been a focal area in the policy guidelines of information management. Neither has ICT support for the preparation of the budget been strongly present in these policy guidelines. The development of competence and

cooperation with stakeholder groups are likewise only modest considerations in this regard. It is also surprising that the development of MPs' ICT tools has not been specified as a separate focal area. The view has been that it would evolve through the development of other areas.

The ICT support for the work of MPs mostly comprises the basic tools of the office system (e.g. word processing program and presentation graphics application), e-mail, calendar and www browser for information searches that provides access to, among other things, processing information on parliamentary matters and the documentation associated with these.

Although there has often been talk of a workstation for MPs – there have even been plans to develop one – the ICT services on offer to MPs have, in practice, been standard services that are uniform up to the user interface level. The workstations are all alike and they run the same set of programs – it is wrong to say that these have in any way been personal computers. The information users generate and handle is stored on network-based systems, not on a PC disk drive. The intention of these centralised solutions has been to promote the activities of the entire organisation, not just the objectives of individual users. These days, users are expressing hopes for, among other things, limiting the information flood with the aid of interest profiles or for user interfaces to be customised according to the different roles or interaction environments or even personal missions of MPs. This would constitute more of an actual opening towards personalised information processing than was possible to achieve with personal computers in the past. These development hopes are not easily realisable. They must nevertheless be incorporated into the ICT services available to MPs in the future because the provision of uniform services to all is no longer sufficient to meet the demands posed by increasingly comprehensive and diverse tasks.

The realisation of these policy guidelines can be summarised by saying that the two first ones were, in practice, realised in full. After this, the implementation of outlined policies has become more difficult because the upkeep of already-implemented systems and services started to eat up a substantial share of available resources. Now, an estimated 80% of resources is spent on the upkeep of old solutions. Development is restricted and limited; past decisions influence all questions.

Traditional ICT development projects have been replaced with projects aiming to develop and change the practices of the Eduskunta. For its part, this contributes to the increasingly greater demands that the ICT professionals, who are involved in development, have to answer. They need to both master ICT and grasp how the Eduskunta conducts its actual business as well as communicate effectively with users. Information management policy guidelines have even expressed a desire to recruit into the information management function multi-skilled employees, people with hybrid competence, that master ICT as well as the operational processes of the Eduskunta and are thus capable of promoting the utilisation of ICT to maximal effect. Such a dual role can be impossible to play for many ICT professionals, who are usually technically inclined.

Change will also cause fresh demands on the leaders of the Eduskunta: in the past, the may have been able to say that ICT is not of great significance to the operation of the Eduskunta, but the situation today is entirely different. Without ICT, the practical running of the Eduskunta would be extraordinarily difficult, even impossible today; this is verified by observations made during some ICT malfunctions. As every operational-development project is in practice also an ICT project and each ICT project in turn also an operational-development project, also the leaders must have some kind of a view on ICT strategy because they cannot just give full responsibility for technological questions to the technical

staff alone. On the other hand, it can be also said that ICT must play a role in any successful operational-development efforts.

Evolutionary development is typical for parliaments as well. This has often led to ICT developments spurring the creation of fresh operating practices that exist parallel to old methods, which the institution is hesitant to relinquish.

8.2 Star moments in the development of the Eduskunta's ICT

In this section, I will highlight six star moments in the development of the Eduskunta's ICT, decisions that at their time were significant and received attention also outside of the Eduskunta. These are the selection of microcomputers as workstations, the new systems of the plenary session hall, the adoption of the intranet and the public www service of the Eduskunta, the introduction of a structured document standard, projects related to knowledge management and the electronic work table.

Star moments in the development of ICT at the Eduskunta:

1985 adoption of networked microcomputers as workstations
> Choosing microcomputers as workstations was still exceptional in the 1980s. At the time, a common solution was a central computer connected to ordinary, "dumb" terminals. The Eduskunta network was, up to the beginning of the 1990s, one of the most extensive networks in Europe that had been realised using the DEC technology.

1992 plenary session hall systems
> The plenary session hall's information, voting and audio systems were replaced at the beginning of the 1990s. The new system with its Finnish-made electroluminescent flat displays represented the state of the art. The system remained functionally up-to-date even after 15 years of use, but the ageing of its technology eventually necessitated a full replacement.

1995 Intranet and the public www service of the Eduskunta
> The words that would eventually lead to the birth of the Eduskunta intranet were expressed as far back as 1991, when a strategy called for the development of the Fakta system. The information content of the system was later specified and the home page of the intranet was completed in 1992, although no-one at the Eduskunta would have known to call it that yet. The proliferation of www technology enabled the intranet and the Eduskunta's public www service to be realised in just a few months in 1995.

1998 Adoption of the SGML standard
> The Eduskunta started to produce its parliamentary documents in the structured SGML standard format, which made it considerably easier to utilise them in the www services of the Eduskunta.

2000 Knowledge Management project
> The Eduskunta's information and knowledge management project delved into many difficult questions in cooperation with the Committee for the Future. Participating MPs were eager to pilot new solutions and many of these were in fact taken into productive use.

2008 Electronic Work Table project
> The electronic work table integrates information, work processes and profiled information into a personalised user interface.

8.3 Summary of the Eduskunta's ICT development

"CIO versus the rest of the world"

The development of the Eduskunta's ICT activities has, over the years, progressed according to drafted strategies and plans. Development has focused on the building and utilisation of basic systems and services. These development efforts have resulted in significant results, such as the www services and the production of structured (SGML) documents.

The Eduskunta units, which are engaged in legislative work, have always demanded that ICT bow to the processes of legislative work. Although justified as such, this demand has led to a situation where the Eduskunta's information systems have been embedded with all of the possible, and even impossible, details of the old manual processes, and this has resulted in the creation of exceptionally rigid systems that together form an inflexible totality. The rigidity has at times been so severe that it has in part prevented the realisation of changes, which users have eventually requested, to the desired schedule and any prospects of innovation have been ruled out. This observation probably hold true also in the case of many other organisations both in public administration and in the private sector.

Development work almost always faces resistance to change. This can, in a very traditional and unchanging organisation such as the Eduskunta, at times manifest itself in somewhat amusing forms as well. The arguments made against change can be very emotional and forgetful of the facts:

> The management group of the Parliamentary Office was talking about the Eduskunta's ICT-development related projects, of which there were many differing views. At some stage, the Legislative Director said that the setting here was that of "*the CIO versus the rest of the world*". I said that such a setting felt very disproportionate to me. After a moment of thought, the Legislative Director said that the setting was in fact more like the CIO versus the Central Office. Relieved, I replied that the situation was now a lot more equal, one that we could live with. We continued our work from there.

Once use practices had become established, some services were also developed and introduced on the basis of the needs of MPs. Examples of this are the introduction of externally-produced information services or the various implemented communications solutions, for example. The needs of MPs did serve as one of the starting points for development in the specification of MPs' workstations and the subsequent specification of the Fakta system. The identification of service needs and the development of services have not, however, taken systematic consideration of the different roles and work environments of MPs nor of the unalike working practices employed by different MPs. These have been highlighted only in the Eduskunta's knowledge management projects and specification of the electronic work table.

# 9 Use of ICT tools and their impact on the work of MPs

9.1 Questionnaire on the use of ICT

Amount of ICT tool use by MPs

ICT tools are used a lot. The amount varied from 2.5 to 10.5 hours per day between respondents and the average daily use amount was over six hours.

MPs use their ICT tools a lot, more than five hours per day on average, in addition to which more than an hour-and-a-half is spent handling traditional mail and documents. Problems appear to a very large extent to be concentrated on getting the different components of infrastructure to work together, for example on the synchronisation of information between different equipment, and on the large volumes of e-mail (filtering junk mail). It has been suggested that common queries, which are often sent to all MPs, could be replied to collectively. All of the received replies stated that mobility should be a priority in all solutions.

The respondents stated their daily use amounts for various tools. The average daily use amount was calculated from these figures. There were only very small differences in amount of use between different user groups (e.g. age, gender, parliamentary group).
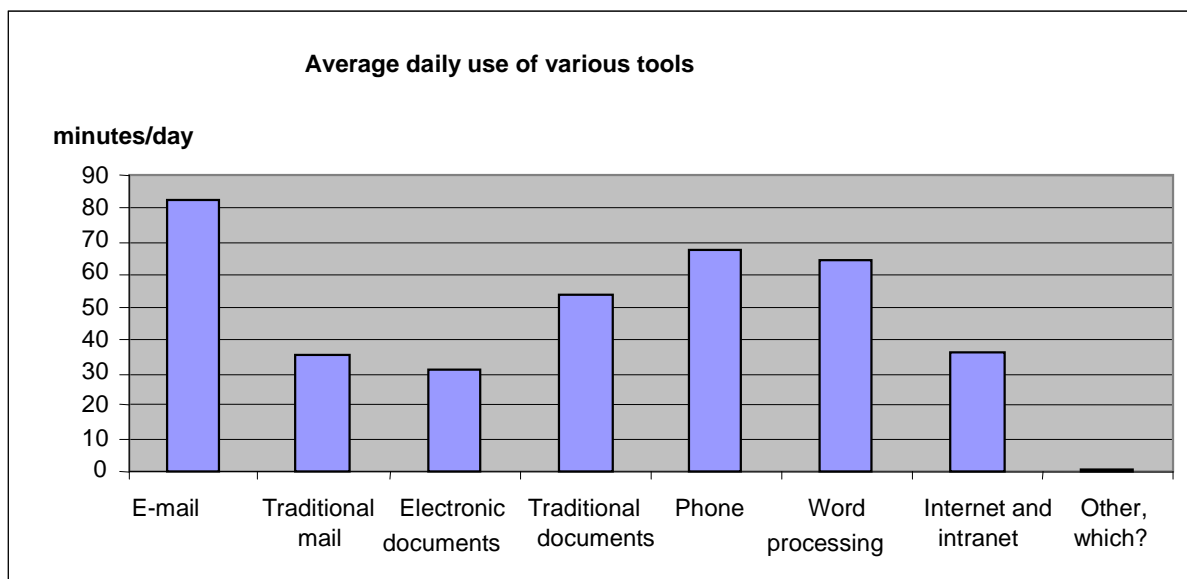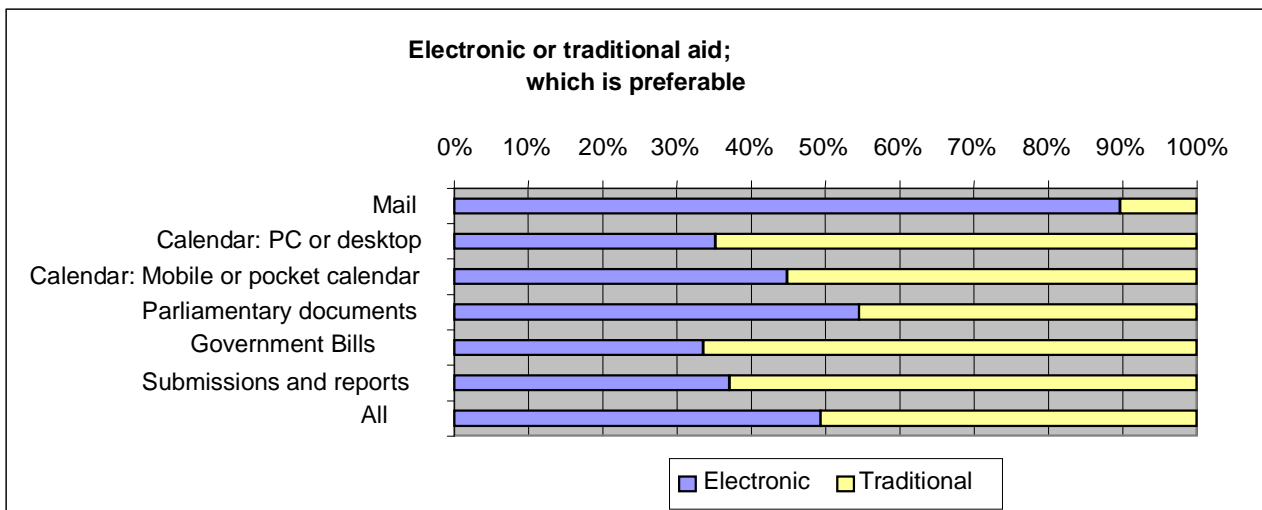

Graph 1. The ICT tool use of MPs

The average use amount appears to be quite substantial. Is it possible to use several tools at the same time, for example browse the Internet and talk on the phone? On the other hand, knowledge work inevitably causes the use amount of ICT tools to increase substantially. These results can be compared to the findings of a study on knowledge work in Finland, according to which e-mail and phone calls eat up 2.5 hours of working time each day (the same amount as in this study) and knowledge workers use computer programs for an average of five hours a day (in this study, about two hours). MPs are thus not as active users of computer software as general knowledge workers.

On the basis of this large use amount, it appears clear that these tools are considered useful. On the other hand, existing tools are quite primitive, so their development can probably yield even very substantial benefits.

Electronic or traditional tools

Electronic or traditional aid;
which is preferable

	Electronic	Traditional
Mail		
Calendar: PC or desktop		
Calendar: Mobile or pocket calendar		
Parliamentary documents		
Government Bills		
Submissions and reports		
All		

Graph 2. Electronic or traditional tool – which is preferable?

E-mail is clearly considered preferable to traditional mail in spite of the message flood, which is largely caused by junk messages and spam, that hampers e-mail utilisation. Traditional calendars are considered slightly preferable to electronic calendars on either desktop computers or mobile phones. The discrepancy in answers to the two different electronic calendar alternatives is probably an indication of how users don't yet sufficiently comprehend the nature of electronic calendars: they are both a personal tool and a shared tool that can be accessed with the aid of different networked devices (e.g. tabletop computers or mobile devices). The MP's electronic calendar, which can be accessed also by his or her personal assistant, has aided MP-assistant cooperation according to the replies received from assistants. At the same time, it has liberated MPs from having to perform large amounts of secretarial-type work associated with the making of appointments.

The difference between replies favouring electronic or traditional documents are difficult to interpret because parliamentary documents also include Government bills and Parliamentary Committee reports and submissions. These are the most common form of parliamentary documents, and there is a greater preference to use the traditional format in their case than when dealing with other types of parliamentary documents. Moving over to

the electronic format would call for some quite major changes in handling processes. If these are not implemented, the personal gains of individual users can remain fairly minor.

Amount of ICT tool use by MPs and their assistants

The average total amount MP assistants spent using ICT tools was 7.28 hours per day, which was more than the MPs (6.22 h/day). These results are quite well in line with the study of knowledge work in Finland that was mentioned in the foregoing. According to that study, e-mail messages and telephone calls eat up 2.5 hours of daily working time (the same amount as in my study) and knowledge workers use software for five hours a day on average (little less than four hours in the case of assistants included in my study).

Significant differences can also be observed in how the ICT use of MPs and their assistants is allocated between different tools:

ICT tool use in the work of MPs and their assistants (average minutes/day)
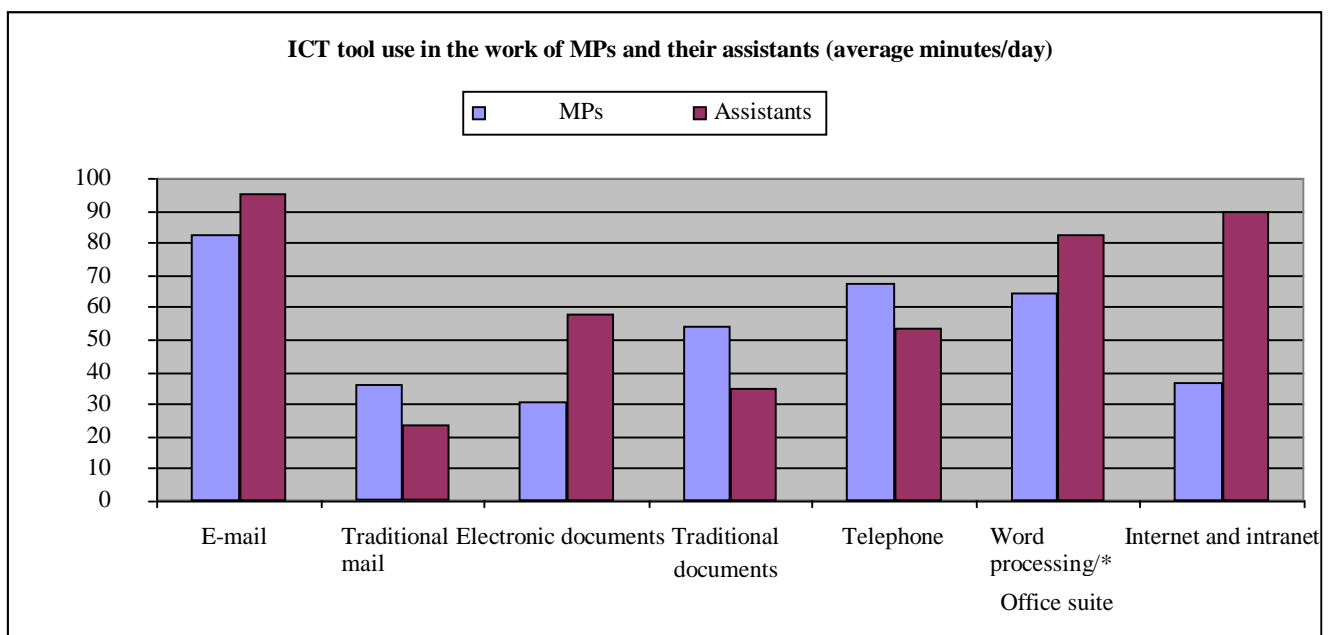
* The MPs' questionnaire asked about word processing, while the assistants were asked about their use of the office software suite.

Graph 3. Average time MPs and their assistants spend using ICT tools

The greatest differences are associated with use of the Internet and intranet (average of MPs 40 minutes/day, assistants 90 minutes/day), electronic document utilisation (MPs 35 minutes/day, assistants 60 minutes/day) and handling of traditional documents (MPs 60 minutes/day, assistants 23 minutes/day). The different use amounts are probably explained by the practice of assistants looking up information using electronic tools and then passing it on to the MPs either in the form of printouts or printed documents. A further explanation is that the Eduskunta's deliberations are still based on printed documents; electronic documents remain the unofficial alternative.

Conclusions:

The daily ICT tool utilisation times of assistants exceed the use amounts of MPs. In practice, they spend all of their working time using these tools. The length of the overall time is probably explained by the fact that it is possible to use two or even more devices at the same time. On the other hand, their use time is smaller than the average of Finnish knowledge workers. The time spent using ICT tools is nevertheless so long that

the development of existing services could yield substantial benefits. A significant portion of these benefits can probably be attained in practice with fairly reasonable development investments. The greatest benefits would require more work and also general development in the field of ICT. However, more attention than now should be paid to the removal of "small, everyday problems" alongside the "big and interesting development projects" because this is likely to result in outcomes – such as the often called-for user-friendliness – that are appreciated by users and are quickly achieved with only minor development investments.

Electronic or traditional tools

Although the electronic format is preferred by both MPs and their assistants, the latter were clearly more in favour of the electronic alternative.
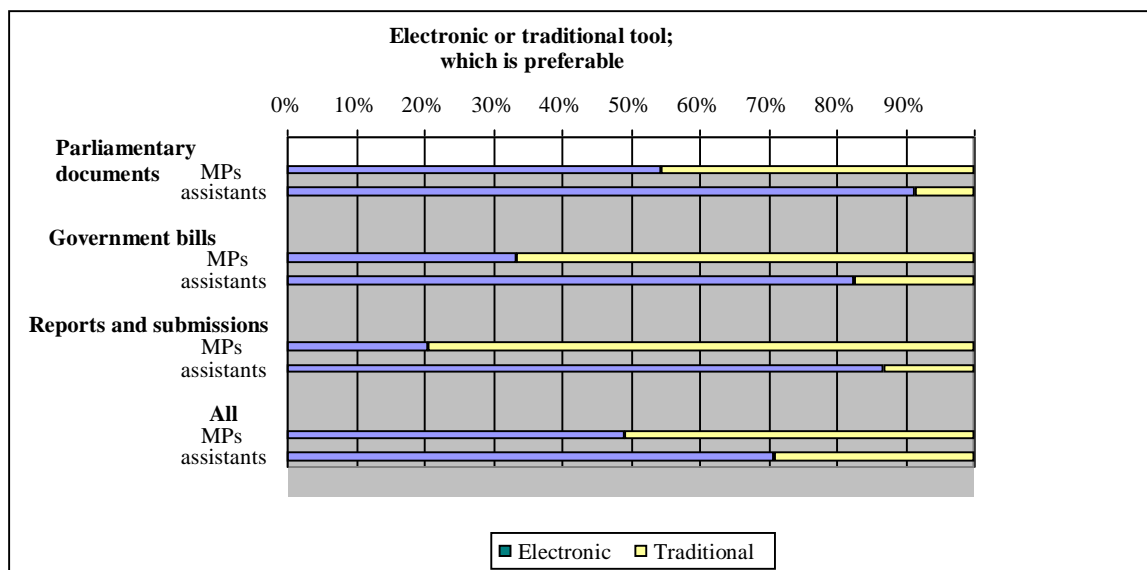
Graph 4. Preference regarding electronic and traditional formats

When asked about their preference with respect to a certain type of parliamentary document, the Government bill, 67% of responding MPs said that they preferred the printed format, while 83% of responding assistants said that they preferred the electronic alternative. The difference in responses is probably indicative of how MPs need these documents to perform their work duties at, for example, Parliamentary Committee meetings, where it is not possible to use electronic documents. For their part, the assistants retrieve documents for their respective MPs and do not themselves actually work on them.

9.2 Interviews of MPs

The perspectives of MP work examined include its problems, shortcomings, interaction environments, time and information management, development, communications, support services and future prospects. These viewpoints were selected on the basis of development/problem points identified earlier at the Eduskunta. Only a small part of the

interview results[10] are presented here. Unless otherwise stated, all quotes are taken from the interviews of MPs.

Achieving changes, development responsibility

The respondents hoped that the leaders of the Eduskunta would participate in development responsibilities. They also hoped that the roles and tasks of the Parliamentary Office Committee and the Speaker's Council would be redefined:

– "In the business world, corporate management would participate in development alongside employee representatives; at the Eduskunta, responsibility for development is primarily shouldered by civil servants and, in ICT-related questions, by the Information Management Office and ICT support function. I give our ICT services a good grade. The Eduskunta is traditional in its work practices (although the advance expectations of a fresh MP were for it to be even more traditional)."
– "The task description and operating practices of the Parliamentary Office Committee are not up to date. At the European Parliament, for example, politicians are active in the management of corresponding organs. They set the boundaries and direction of development and civil servants function as realisers. At the Eduskunta, the situation is reversed: civil servants have their decisions made by politicians at the Parliamentary Office Committee, and the methods of decision-making are not overly transparent. On top of the management of the agendas for plenary sessions, the Speaker's Council has relatively little else to do."
– "Developing efficiency and quality would introduce fresh effectiveness into work processes as well. The Speaker's Council should increase its development participation from the present and promote fresh ideas."

The achievement of change calls for personal commitment, a perceived compulsion that requires energy. When matters are relatively OK, there is a danger of getting stuck in the status quo. An enthusiasm for renewal and a willingness to experiment are needed, there should be a bolder attitude towards trying new things. The Eduskunta should do its part and provide an example in the development of the knowledge society. MPs are more prepared for change than civil servants, who often strive to maintain the status quo:

– "Implementing changes in an organisation, where matters are relatively OK as is, can be a very challenging task. Change is easier to realise when it is a matter of life or death and there is an "in-your-face compulsion" to bring it about. The difficulty of achieving changes applies both to MPs and, perhaps to an even greater extent, to civil servants."
– "MPs are more open to change than are civil servants because they are positioned in the middle of a continuous change process. Civil servants will easily try an justify things by pointing out that this is the way things have been done before."
– "MPs will more readily accept changes because shortcomings more usually affect them than they do civil servants (e.g. oversight methods that are suitable for use in schools)."

---

[10] The transcript of the tapes is 150 pages long.

What will it be like in 2015?

To close the interview, the MPs were asked how they thought things should be like in the future. In order to spur the conversation, I brought up subjects such as increasing interaction between the Eduskunta and the citizenry, working practices, the opportunities provided by ICT and the achievement of change.

The achievement of change at the Eduskunta was perceived as difficult. As was observed earlier in relation to these interviews, MPs consider themselves to be more open to change than civil servants:

– "As a work community, the Eduskunta is old-fashioned and its hierarchy is based on a precise order. The habits of this old institution do not change easily. The leaders of the parliamentary groups and the Parliamentary Office Committee take care of things. Over the years, you start to get used to not being able to wield much influence yourself, and you learn to identify the matters, which you can do nothing at all about. The introduction of working practices, which are freer than now, would be desirable. Overall, however, it is fair to say that MPs are more receptive to the possibility of change than the civil servants. A certain order and a set of customs prevails among the civil servants, and it is not easy to alter them. A natural explanation for this is provided by the fact that MPs are replaced by fresh representatives from time to time, while the civil servants of the Eduskunta stay put. A civil servant also has to think about getting ahead within the system; it is not wise to rock the boat because you might fall overboard."

Thinking about the future of the Eduskunta was seen as a good idea. A real need to do so was also identified:

– "The idea that some party, any at all, would think about what the Eduskunta might be like in 2015 – how its administration is organised, how the activities of MPs are structured and how this is supported – is a good one. This could provide a fine experimental field in which to see if, for example, the chairpersons of political groupings might achieve something that could steer the life and development of the parliamentary institution?"

The predictability of matters and fixed schedules were viewed as positive. They enable MPs to plan their life for a month in advance. This would improve the overall quality of their lives:

– "A desirable target for 2015 is a situation in which you know your schedule for the upcoming month and can tell, for example, your family about it. Basic tasks are given their own stable schedule slots, which are not changed later. Small changes can occur, but these are not capable of swinging the totality. When the schedule holds, it is possible to plan your own actions more effectively than is now the case."

The expectation was that the share of distance work would increase, with possibly up to half of all work being performed at home or from the MP's constituency. There was an assumption that technology would develop further and "the single gadget principle", a vision presented during the interview, won support:

- The idea behind the vision for the future is that MPs can begin their days wherever and using whatever device is available. In less than 10 minutes, the device they are using will give them a general picture of the current situation and of what's happening – not just about schedules, but also with respect to the contents of matters being deliberated and with regard to the overall situation. Technical questions such as what device to use and where to do our work will no longer be relevant."
- "A single body of information is available through all device types. It should not matter what instrument, which avenue, I choose to use when accessing this information; of relevance is that we maintain this one uniform reservoir of information and that it is accessible with all different device types."
- "Semantic maps could be the tools used to search for information suited to the user's personal profile as well as an instrument with which to independently discover fresh areas of interest. I sometimes manage to surprise even myself with what I find interesting."

The basic structure of information systems was considered good and implemented development projects were seen to have been successful. Competence and ease of use were topics of concern:

- "We have progressed into the information society at such high speed that it might be 2015 before we are at a point where we have learned to master these tools and have learned to use them sensibly. There are so many tools now that new ones will hardly be developed. Legislative work as such will not change, the greatest change took place in 1995 when the Internet services were launched."

Working practices have been streamlined. MPs can focus on the actual matter, and they also utilise this opportunity. Idling has been cut down:

- "Reports are a good tool for dealing with more extensive totalities. It is possible to stake out possible future policies with them. Reports also provide a good medium for expressing the will of the Eduskunta. In the future, the Eduskunta will be more active in the drafting of consultation documents."
- "Electronic services can be utilised as part of parliamentary work."

It is likewise possible to focus on the essential at plenary sessions, as superfluous speeches have been done away with:

- "Plenary sessions can focus on relevant issues. The existing practice, where a lot of time is spent on speeches, does not belong in an effective work community."

Changes in Parliamentary Committee work are also hoped for. Simple matters should be dealt with unceremoniously and expert hearings could be streamlined:

- "As the Eduskunta's power of decision may be minimal with respect to the handling of legislative proposals put forward by the Government, there is no need to spend an excessive amount of time hearing expert opinions if the end result will be that very little will change; at most, some sentences providing

> grounds for decisions may be added to the submission. Simple matters should be dealt with in a more streamlined manner."
> – "Expert hearings will be arranged also as group hearings, instead of having the same expert going to several different committees to be heard."
> – "Expert submissions and Parliamentary Committee minutes published online."
> – "Committee meetings have been focused, with one meeting lasting 4-5 hours including breaks, matters move forward and one meeting may hear from several experts during a single day. The practice of dealing with several matters concurrently has been relinquished."

Respondents noted that the Eduskunta lacked a system for managing its projects. The Eduskunta and its MPs are unable to monitor the attainment of important objectives. Such a system would make work easier and contribute to the oversight of the realisation of the Government Programme. It would make the implementation of the Eduskunta's decisions visible:

> – "We lack a project management system, which could be used to set objectives and establish projects as well as monitor their realisation. It's a pity and a shame that we are not able to monitor how key result targets are progressing and being realised (e.g. employment developments, balancing of State finances). Now, we're bouncing around on the basis of tabloid coverage; this week we focus on one matter and the next week interest shifts to some fresh issue or detail, while some major totality goes unnoticed at the same time."
> – "[In the future,] the display will show, at the same time, certain key objectives and specific projects, their scale (indicated with, e.g., the size of the icon) and information on the realisation of the target schedule (with colour coding, for example). Symbols and colours help identify focal points and how matters are progressing, enabling the MP to know where to focus his or her political attention with respect to the monitoring of matters or upcoming decisions. In other countries, the public sector and businesses can avail of such monitoring systems. The Eduskunta cannot however, plan and realise such a system alone; what's needed is cooperation between it, the Council of State (Government) and the different ministries. The Government Programme and strategy portfolio contain information, which should be updated and made available in the abovementioned manner, providing as comprehensive a picture of the overall situation as possible."
> – "When it comes to legislative work, Finland is the best in detailing what will be achieved through specific measures as well as what will be happening in 5-10 years time. But once these ten years have passed, information on what has happened is very difficult to find anywhere."

9.3 Summary of the effects of ICT

ICT is of great significance to the work of MPs and the Eduskunta. When compared to the initial situation 20 years ago, the change that has taken place is very substantial. ICT is a part of almost all of the task fields, roles and interaction environments of an MP. The Eduskunta has for its part been able to follow the evolution of society into an information society. In some areas, such as document-production solutions and www services, the Eduskunta has even managed to act as a pioneer.

The ICT services on offer to MPs and the Eduskunta are useful and even indispensable in today's world. Without these services, operations would run into great difficulties. The

usefulness of the services is indicated by their large daily use amounts; MPs and their assistants avail of them for several hours each day. If the services were not useful and necessary, they would not be used. In spite of their usefulness, the services are not necessarily easy to use nor do they inevitably support the completion of tasks in the desired manner. On the other hand, it must be noted that technology alone cannot solve the highlighted problems, which relate to the management of, for example, time, contents, information and tasks. On top of technology, operations themselves must also be developed alongside increases to competence; technological progress must be coupled closely with the development of parliament's actual core activities. With respect to time management, for example, it appears necessary to substantially change the existing practices of the Eduskunta.

So, change has been substantial, but fresh changes are needed constantly. The objects for development and change brought up by MPs and their assistants in surveys and interviews form a breath-takingly long list. A considerable share is non-ICT development objectives, but there's plenty of room for improvement in ICT services as well. Worth noting is that a substantial part of the desired functions can no longer be realised by providing a uniform set of standard services to all users. What's needed is more tailoring of services to the needs of specific user groups or even individual users – profiling and personalisation. This will probably call for a corresponding change also in the methods and working practices of development work as such.

The interviews brought up the heterogeneity of MPs, an issue that has been observed earlier as well in, for example, implemented knowledge management projects or the specifications of the electronic work table. This has been one of the reasons behind the decision to start developing profiled, even personalised services to replace the provision of standard services to all users. On the other hand, this is also one reason why the services are utilised so little: the democratic approach of providing all users with the same services will lead to a situation where many users will not take advantage of them, no matter how well they are graded under objective scrutiny. A similar observation can be made of other services as well; this "excess supply" is not limited to electronic services alone. The study identified a wealth of development opportunities with regard to user competence. The significance of communications, guidance, training and support cannot be overestimated in this – downright marketing, "a hard sell", is called for. Repetition of facts is significant when ensuring that the message gets across: once is not enough, the message must be repeated over and over in different forms and using many different channels. This poses a whole new set of competence requirements to people who work at the Eduskunta – especially to ICT-oriented "computer or information service specialists". It is essential that these professionals are trained also in the area of "human relation technique" – otherwise, their provision of instruction in the use of ICT risks staying at the superficial level of showing users which buttons to press; the risk here is that the actual benefits on offer fail to be achieved because of the inadequate skills and knowledge of those working in training positions.[11] The development of competence is a central issue for the drive towards a learning organisation and the utilisation of new working practices and tools.

---

[11] All in all, this is a major problem, as it is estimated that the insufficient competence of ICT users is the primary cause for losses of up to 2700 million euros in Finland each year. (TTL 2003)

10 Summary and conclusions of the study

The best way to predict the future is to create it.
―Peter Drucker

10.1 Need for fresh solutions

Two new concepts, e-democracy and e-parliament, are emphasised on top of the traditional advantages that ICT yields for the work of the Eduskunta. It is clear, however, that the new modes of working and participation, which come with e-democracy and e-parliament, will require new types of solutions both in ICT-derived tools as well as with regard to the operating practices of MPs and the Eduskunta. Providing citizens with more opportunities for participation in the preparation of legislation through various engagement systems and developing the working practices of the Eduskunta in a more electronic-oriented direction will probably not be achieved smoothly if existing ICT solutions are relied on; instead, fresh innovation and, perhaps first and foremost, new modes of thought will be needed. For the Eduskunta and other national assemblies, this is an important development area, which could even have an impact on their future status.

MPs use their existing ICT tools actively, even though these tools are in many respects lacking and the user skills of MPs some times could do with improvement. The potential advantages new, next-generation ICT tools offer for the management of, among other things, time, information and communications, could probably be realised quickly, immediately after such new instruments are offered for use. Changes to working practices and processes, on the other hand, are slowly realised and their achievement calls for strong, result-oriented support from the management of an organisation. It takes time to transform an organisation, and for the organisation to change. Some MPs said that a generational transition would have to take place before the activities of MPs would change substantially. In my opinion, the same could be said of the civil servants who work at the Eduskunta.

New intriguing management-related techniques include the use of agents to filter information from the Internet, self-organising maps (SOM), support systems for decision-making and the semantic web. It may be easy to take an individual tool into use, but forming a functional totality out of different tools is very challenging. The demanding nature of this task is emphasised further in a networked environment. It is not enough to develop solutions only for the Eduskunta because the entire network has to be taken into consideration. Getting all the organisations, which participate in the preparation of legislation, to use shared solutions (in this case, common meta-information and compatible content management systems). The results and achieved benefits would, however, be considerably greater than if there were no collaboration.

From typewriter to electronic work table

New solutions are usually developed and taken into use evolutionarily, one step at a time. A "great leap" occurs only quite rarely. It would, however, be good if such transitional points could be identified. At first, the Eduskunta viewed the personal computer (PC) as no more than an efficient typewriter, a word processing device. The fresh opportunities it provided in information management and communications were only availed of later. This was partly due to the immaturity of the available technology, but also quite clearly by a difficulty to identify the significance of new possibilities. "It is very difficult to perceive the importance of that which does not yet exist."[12] On the other hand, the effectiveness of organisational activities will not benefit from gazing constantly into the future; it is crucial to function effectively in the present. The electronic work table itself is an indicator of a fairly substantial shift in thought patterns: the multi-purpose machine of the early stages, the PC, which served as an effective replacement for typewriters and calculators, has evolved into a device that is used to manage network-based information and work processes. Furthermore, this change is continuing, making it essential that we discover tools with which such change can be managed. How to attain a suitable balance between supply and demand? Demand can be boosted with the aid of competence and marketing: the more people know about the opportunities ICT offers, the more they demand to get them into use. Commercial marketing can, however, steer demand towards the "flavour of the day" in ICT, new products that are very visible over the short-term, but which can, from the perspective of the totality, even have an eroding effect on operational effectiveness. It is important that users comprehend work processes and how significant ICT is to them as a whole. This would enable them to assess the need for new ICT solutions.

What meaning can such apparently small development steps have? Knowledge workers spend a large portion of their working time searching for the information they need – according to some estimates, they can spend even more than two-thirds of their work hours on information gathering. If new tools and work practices were able to bring about average daily savings of a mere ten minutes, this would translate to individual time savings of more than a week per year and, on the part of the Eduskunta as a whole, of tens of person-years per annum. The problem, however, is the realisation of these potential benefits. It is worthwhile to also take small steps in conjunction with major development leaps because they are, in the final analysis, of surprisingly great significance. Competence and learning affect this very much, so the development of learning within the organisation forms one extensive development target.

Information management strategy

The directing of information management and the provision of related services at the Eduskunta have adhered to a policy of fairly strict and centralised guidance. The same basic services have been offered to all users and users have not had the possibility to independently take into use individual services, which they themselves deem necessary. In a sense, this is justified and the policy has enabled the upkeep of infrastructure with reasonable resources. Of even greater importance is that these shared and commonly used solutions have made it possible to develop communal information reservoirs, the collective memory of the Eduskunta.

The situation has changed, however. The provision of uniform services is no longer a satisfactory solution from the perspective of different users and user groups. The needs of

---

[12] One respondent's comment to a survey related to the development of electronic-desktop services.

MPs vary according to their respective missions and roles, and civil servants also often have unalike needs because of their divergent responsibilities. New operating models must therefore be discovered for managing information management in order to help steer the provision of services towards a more individual-oriented direction. A serious concern is how to keep the amount of maintenance work required by these solutions on a reasonable level.

Information management and the basic function are still too often viewed as being divorced from one another. The potential advantages of developing operational practices risk being lost if the development of information management services is considered solely a technological matter. Managing and developing information management must be coupled with the management and development of the Eduskunta's activities more closely than is now the case.

Utilisation of ICT by MPs

Members of Parliament must independently decide their main mission and principal focus of interest; no-one else can make such a decision on behalf of an MP. They must themselves manage and steer their work and select the tools needed to perform this task – but shouldn't this be true also of the ICT tools that MPs utilise? What would this mean in practice? How would things change from the present?

The work of an MP involves many different roles and tasks; these receive different emphasis on the basis of, for example, the Member's party background, "civilian profession" or personal interests. This emphasis is perhaps most clearly evident in the personal statements of Members that detail what their primary goals at the Eduskunta are. It is important to discover a way with which to include this diverse and extensive array of tasks as a whole into the development of ICT services.

The research subject is formed by the ICT utilisation of MPs and its development. However, it looks obvious that, at least on some level, it will be necessary to examine also a broader totality, which covers the array of tasks performed by MPs in full. In addition to ICT tools, the other factors that affect an MP's work and their development must be examined. On one hand, this feels natural because MPs have, in association with ICT-related interviews and surveys, many a time pointed out problems and development targets in other areas as well. ICT-related development projects often by nature more closely focus on the development of organisational activities than on the technological upgrading of ICT systems. In such cases, the developer should have the ability to reconcile the often-unclear wishes of users with the opportunities provided by ICT.

The guidelines and strategies of information management bring an organisation's "big" ICT-related policy decisions and targets of development to the fore. In addition to this, an appropriate procedure is required for drafting and maintaining the personal-development objectives and strategies of MPs and also of civil servants that include, among other things, matters aimed at the development of competence. It is difficult to see how, in what form and on what schedule this can be realised. The staking out of such personal "development paths" can be considered a part of modern personnel development and this means that the Eduskunta will also adopt the practice at some stage. Methods, which are flexible, enable experimentation or even improvisation and are considerably faster than the years-long projects that are based on traditional sequential design process models, need to be developed to stand alongside the detailed advance planning of major projects. For example, the development of the Eduskunta's electronic work table would, in my view, call for such an approach to development.

Competence also affects how the fresh opportunities offered by ICT are received. It was observed that the ICT competence and associated experience of MPs was of greater

explanatory significance with respect to their attitudes towards the utilisation of new ICT-derived opportunities for promoting democracy than were more traditional background variables such as gender, age or political party (Hoff 2004a; 2004b). Coleman (2006) identified that the same applies to civil servants stationed at national assemblies. This means that the ICT learning and competence of MPs and civil servants should be developed actively if we want to develop and adopt ICT solutions associated with e-democracy.

The conventional theory of organisational change is based on the renewal of mass – change projects focus on mobilising mass. This requires lots of resources and time. It is easier to bring about change by focusing attention on the extremes, on such people, actions and functions that have an exceptionally large impact on results. In this way, masses can be mobilised with even quite small investments (Kim & Mauborgne 2005, 200)

Development efforts should focus on a few pioneers, the early adopters of technology because these people pull the masses behind them. There are only a few early adopters of technology at the European Parliament, but they are of great significance as they set the direction of development by shaping trends (Hoff 2004b). One or two MPs started using word processing software in the 1980s, distance connections in the 1990s and blogs or wiki in the 2000s, and the other Members followed them. At national assemblies, developments are brought forward with the aid of a few early adopter Members of Parliament (Coleman & Nathanson 2006). The Eduskunta should similarly identify such trendsetters and supply them with suitable services, which might later be provided to all. The democratic approach of offering all Members equal access to services is a nice thought, but in my opinion it often leads to wasted resources in practice.

Major development targets, which could even be termed matters of principle, focus on the development of the Eduskunta's decision-making support systems and information management, the future realisation of profiled services alongside the standard supply and the development of the Eduskunta's citizen-oriented services – the creation of e-democracy services. On top of these major objectives, smaller development targets, which can have an unpredictably great impact on the totality, must not be forgotten.

10.2 Research findings

The focal point in the development of ICT tools and services has, to an ever-greater extent, shifted away from technical development towards the development of operations with the aid of, for example, electronic content management solutions. User needs and competence vary, so different-level solutions must still be developed and maintained. Standard services are no longer sufficient to the achievement of a high-level of service, and services need to be profiled and personalised according to user needs instead. Among other things, this means that surveys and analyses of the development needs of users must move towards studies of even an individual user's need to be supplied with, for example, automated network information services. This calls for, quite paradoxically, well standardised and strict information management activities in order to enable the maintenance of services that are adapted to individual users.

So, new solutions are needed for use both by MPs and the Eduskunta because they could boost the effectiveness of parliamentary work substantially. An essential issue for the future is the adoption of new ICT tools that can enhance the interaction between the Eduskunta, MPs and the citizenry. These solutions are significant also for the determination of the status and importance of the Eduskunta.

10.2.1 Research questions and their answers

1. **What ICT tools are and have been available for the work of MPs and the Eduskunta?**

   The aim was to find out what kinds of ICT tools have been available for use in an MP's work since the beginning of the computerised era of the Eduskunta, starting from 1985. The key characteristics of the Eduskunta and its activities, the work, roles and professional problem points of MPs were studied to facilitate this, in addition to which the Eduskunta's information management strategies of the period in question were analysed.

   The different characteristics of the political and civil service organisations form an interesting source of tension within the organisation of the Eduskunta. Civil servants and politicians act differently; their roles are the opposite of each other. This is evident also in the development of ICT solutions, which is focused on the construction of bureaucratic information systems for the needs of civil servants. The tools needed by politicians have been realised when other development activities have allowed it.

   The development of the Eduskunta's ICT services and tools has been based on its information management strategies and has thus progressed systematically. Over the years, ICT has become essential for the functioning of the Eduskunta. The problem has been that in the other departments of the Eduskunta, such strategic approaches have not been very common. Development has also often come up against resistance to change. The development of the ICT tools of MPs has, however, at no stage been a focal area of these information management strategies. Apparently, the idea has been that the systems and basic infrastructure that have been developed for the Eduskunta are sufficient to service the needs of MPs as well.

   The Eduskunta has been a pioneer in some of its ICT projects. For example, the 1985 decision to take into use personal computers instead of the more usual terminals was quite bold for its time. The Eduskunta has similarly been well involved in the development of www services; the high quality and extensiveness of the material available through these services have been the focus of special praise. However, the most significant venture has perhaps been the RASKE project, which focused on the development of standards for structured documents. Among other things, it led to a complete renewal of the Eduskunta's document production practices, achieved substantial savings and prompted the Ministry of Finance, which had participated in the project, to adopt the same standard for its preparation of the State budget. Even the creation of the up-to-date collection of Finnish acts, decrees and other legislation that can be viewed through the Finlex portal can be considered one of the goals and outcomes of RASKE. "This is without question the State administration's most significant document-management development project of all time." (Kuronen 1998).

   The organisation of information management has, through a sort of federated model, attempted to attain the benefits of both a centralised and a decentralised management model. In practice, information management has followed a very centralised model. The services it offers have been realised as uniform, standard services for all users. Easy manageability and maintenance have been the goals; however, this has led to a situation where the services on offer are inadequate for demanding knowledge work tasks. Even the basic solutions have been realised

unsystematically, as the Eduskunta's central information management systems have been tailor-made according to manual operational processes. This has often led to expensive realisations and high upkeep costs. Further problems have been the adoption of very formal operating practices, a unit-centred approach to activities, uneven division of labour, overlapping work and inadequate utilisation of electronic materials.

The complicated and multidimensional nature of the legislative drafting process as a whole forms its own problem. Numerous quite independent organisations and actors as well as tens of at least partially incompatible information systems are involved in the process, and various parties can have very different objectives. This has caused and is still causing shortcomings in the legislative drafting process that erode the quality of work and drain resources unnecessarily. This study analyses the situation from the perspective of the Eduskunta. A positive aspect of the situation is that quite substantial results can be achieved even with relatively minor measures aimed at developing cooperation. An example of this is the development of the process for handling the written questions of MPs in cooperation with the Council of State (Government).

Time management and the management of information are problem points in the work of MPs. The meetings MPs and especially minister-MPs must attend eat up a majority of their working hours. Often, there is no time to read up on matters. The flood of information creates difficulties of its own. An MP has many different work environments, interaction frameworks and plays many different roles. Good ICT-derived support and services are needed for all of these. A problem here is, as already pointed out in the foregoing, the provision of standard services for all user groups and in all situations. The services should be, with respect to information management, for example, profiled or even personalised.

The development of e-democracy poses new demands for the Eduskunta. It has been said that it could even determine the fate of national parliaments. In this area, Finland lags far behind the frontrunners in international comparisons. The information society has made people accustomed to networked services that function around the clock and in all locations. The Eduskunta must also be an active provider and developer of these kinds of services. The Eduskunta should be Finland's most significant provider of democracy services.

In summary, I could say that the Eduskunta now has at its disposal a fairly unremarkable set of ICT tools: systems developed for content management and document management, network information systems and www services. The various systems have been developed at different times according to the needs of different units, making the resulting totality complicated as well as difficult to manage and maintain. The infrastructure is typical of today: networked PCs, lots of servers and the option of distance and mobile utilisation. For the user, the sum service this creates is difficult because its development never aimed for, or in any case achieved, an easy-to-use totality. This aspect must be the focus of greater attention in the future.

From the perspective of an MP's work, the ICT services cover chiefly the essential basics, which include basic office system tools, e-mail and a web browser for information searches. The development of special solutions that support the work of MPs has not been emphasised in very many strategies. This, too, should be the focus of greater attention in the future.

The Eduskunta still fares well in international comparisons of ICT services, at least with respect to www services, document management, basic office tools and mobile utilisation. However, the Eduskunta has clearly fallen behind in the development and adoption of solutions associated with e-democracy that, for example, provide greater opportunities for citizen participation. On the part of e-democracy, the overall strategy of the Eduskunta should define objectives, which could then be strived for with the aid of ICT.

2. What has the ICT utilisation of MPs been like and what have they used ICT for?

The ICT utilisation of MPs was studied primarily through a questionnaire survey of Members and their assistants as well as with the aid of MP interviews. Shortcomings in user competence were one of the identified basic problems for the utilisation of ICT. User skills can be severely lacking, even though most of the survey's respondents had been using ICT for many years. It would appear that the majority of MPs try to pragmatically expend the least possible effort on mastering ICT and that only a few Members had been able to harness the competitive advantages that ICT offers.

MPs use ICT tools (e-mail, electronic documents, telephone, word processing and Internet/intranet) quite a lot, over five hours a day on average. This may feel like a fairly large amount, but other studies indicate that knowledge workers utilise corresponding devices substantially more than this. Almost half of this use occurred in conjunction with the basic tasks of an MP (plenary sessions and Parliamentary Committee meetings, parliamentary group meetings), a quarter in association with regional activities mostly in the Member's own constituency and a little under a fifth involved communicating with the media.

Use of the key components of the Eduskunta intranet (Fakta) that are associated with parliamentary work was worryingly low: almost half of all respondents used these functions occasionally at most. On the basis of this, it can be said that the intranet does not appear to have become a central tool for the parliamentary work of Members. When drawing conclusions it should, however, be borne in mind that the Eduskunta typically tends to produce the same services through a variety of means. Documents and information on proceedings are available on the intranet, but the same information is distributed to MPs in printed form or as copied handouts – many times over, no less. This naturally affects the use amounts of electronic services. Furthermore, some Members interface with electronic services through their personal assistants.

Apart from news feeds and online newspapers and magazines, use of the intranet's information services is almost non-existent. Profiled services could be more useful than generic services. The marketing of available services could also be more active; some respondents said that they first heard about certain available services through the questionnaire form. Internet search engines are used actively. MPs also readily utilise other information search methods, such as e-mailing or phoning a question to the Information Service. In addition, personal assistants make information searches on behalf of MPs.

The ICT tools most used by MPs are e-mail and the telephone. Attention is drawn to the relatively small amount of use received by laptop PCs, even though each MP has been given one to use at home. It would appear that the majority of these laptops are used by MPs only on weekends. It is worth considering whether it would be more appropriate to adopt a single-computer use model, where MPs

would be given just one laptop for their personal use. This laptop would enable them to connect with services available in different interaction environments.

The personal www pages of MPs indicate how passive they are about using new tools. It is obvious that they have not yet grasped the nature and potential of new Internet tools, with most MPs viewing them more like a necessary evil.

On average, the personal assistants of MPs use ICT tools one hour more daily than Members do. The amount of Internet/intranet usage and the utilisation of electronic documents accounts for most of this difference. The assistants mostly use these tools to search for and compile information. The same trend applies to information services on the intranet and Internet: assistant use available services more than the MPs, but many services are nevertheless not utilised much.

3. What impact has the use of ICT tools had?

The substantial usage that ICT tools receive justifies the conclusion that such tools are useful. MPs themselves reckon that e-mail, Internet/intranet, electronic documents and (mobile) telephones have made their work much easier. On the other hand, I estimate that the ICT tools now in use are so primitive that no substantial benefits can probably be achieved by developing them.

However, it must be pointed out that, according to the replies received, ICT tools have usually been of only little benefit to time management, communications and information management and in smoothing the proceedings of various working groups. This finding appears to be in line with studies on the ICT tool usage of managers. Furthermore, it should be borne in mind that in some locations, which are of central importance to the decision-making of MPs, the use of ICT tools can be completely prohibited (e.g. the plenary session hall) or their use has not been promoted in any way (Parliamentary Committee meetings, for example). ICT would appear to have had its most significant impact on the cooperation between MPs and their assistants, where it has provided clear benefits.

ICT has created an electronic alternative for many traditional working aids such as post, calendars and documents. How do these new electronic tools rate in comparison to their forbearers? Almost 90% of MPs considered e-mail better in spite of the often-raised problem of message flooding. Electronic parliamentary documents were more pleasing to some 40% of respondents and electronic calendars won support in around 40% of all responses. Substantial changes must be made to the work processes of the Eduskunta if truly substantial benefits are to be derived from electronic solutions. At present, electronic services are often seen only as corresponding alternatives to older services and tools. A comment made by one MP provides food for though in relation to this matter: "If only electronic versions of documents are made available, we have to get used to them quickly." There were some differences between attitudes held towards electronic tools by Members of different parliamentary groups.

The assistants of MPs felt that they derived greater benefit from ICT tools than the Members did. The assistants also considered electronic formats clearly better than the traditional alternatives; in the case of post and parliamentary documents, the electronic option was favoured by more than 90% of respondents.

Competence and its development

"Companies often cannot afford to wait for individual people to recognise their own development needs and to start bettering themselves in this respect." (Viitala 2005, 257). The Eduskunta often shuns efforts to introduce the thought models of the corporate world to its organisation because it feels that the nature of its operations and objectives are so different from the set of values held by commercial companies. But let's see if Viitala's proposition fits the Eduskunta: "The Eduskunta often cannot afford to wait for individual people to recognise their own development needs and to start bettering themselves in this respect." That does not feel like a strange thing to say in the least. Let's go one step further and emphasise the development of MPs in particular: "The Eduskunta often cannot afford to wait for individual Members of Parliament to recognise their own development needs and to start bettering themselves in this respect." This feels quite appropriate as well. Of course, it can be asked whether the development of MPs should be steered in a similar manner as the corporate world steers the development of its managers and employees. In my view, this is possible and there is more and more reason to think so in the modern age. MPs are knowledge workers, who must constantly work to maintain their professional competence. Without sufficient professional competence, an MP cannot perform his or her task independently – in the final analysis, this would be bad for the whole of representative democracy and consequently all of society. The first findings on studies of programmes drafted to develop the professional competence of parliamentarians have already been reported (e.g. Coghill, Holland, Donohue, Rozzoli & Grant 2008). The results indicate that MPs view these development programmes very positively and took part in them actively.

The findings of the MP interviews indicated that they would want to receive training for the entire duration of their term in office. In their view, the familiarisation training provided at the beginning of a term and aimed primarily at new MPs was, as such, good and necessary, but not sufficient. Training should be offered actively on a constant basis and it should preferably be tailored to all of the special needs that the work of an MP entails. At present, the education on offer consists mainly of language training and course-based ICT education. MPs raised questions related to the management of information as one of the biggest problems. It is necessary to arrange training, which is customised to the specific needs of each individual MP, within this area.

10.3 Summary of findings

The study includes parts, which are not directly related to the research questions, but help position the findings into their appropriate frame of reference. Such parts examine the crisis in democracy, the nature of MP work, the interaction environments of MPs, the mission of MPs, the management of work, time and information as well as the achievement of change and the realisation of desired visions.
Based on the evaluation presented in the foregoing, there is an obvious need for better ICT tools to support the work of MPs and the Eduskunta than are now available. Even though the existing ICT tools are used a lot, they are quite inadequate in many respects.
Pilot programmes on information and knowledge management indicated that the development and piloting of partial solutions are effective ways to achieve progress. The usefulness of solutions was quickly verifiable and good ideas could be rapidly spread to all users after piloting. Users were fast to commit to using new tools and services that were beneficial to them. They rapidly became dependent on using these services. MPs were eager participants in the development of partial solutions.

The findings of the study have been summarised in the table below:

Table 5. Research result and conclusions

Area of research	Research result	Conclusion
ICT tools (research question 1)	The ICT tools on offer to MPs are quite unremarkable basic devices and services. No specific tools have been developed to assist MPs in their work. Shortcomings are found particularly in solutions related to participation opportunities. The tools do not form an easy-to-use and integrated totality.	The design of ICT services and tools for MPs must be more oriented towards the needs of MPs. Solutions that promote participation demand special attention. The ICT solutions of the Eduskunta rate well in international comparisons.
Use of ICT (research question 2)	MPs use basic ICT tools quite a lot, on average several hours per day. Low utilisation of the services available on the intranet and Internet is quite worrying. Use of laptop computers is low. Problems in the use of ICT are encountered fairly often.	Developing the ICT competence of MPs is in need of greater attention than it now receives. Existing network services and the benefits they offer must be brought to the fore more clearly. Services should be profiled according to user needs.
Impact of using ICT (research question 3)	Clear benefits are derived from the use of ICT, but the services on offer could be utilised even more. Cooperation between MPs and their assistants has become considerably easier. Substantial benefits could be derived from certain new ICT solutions. The electronic alternatives to documents, post, etc. are beginning to become more popular than the traditional formats. Maintenance of parallel services is a source of inefficiency.	Services, network services in particular, must be marketed more actively than at present. Special attention must be focused on early adopters. The Eduskunta should embrace electronic services and stop providing parallel traditional formats.
Democracy	A more coherent picture of work at the Eduskunta and its problems has been created. Some kind of crisis in democracy would appear to exist, at least in some form. This crisis is evidenced first and foremost by low citizen participation in political activity and low confidence in political institutions, such as the Eduskunta. The ways in which the Eduskunta and MPs appear in publicity are prompting questions.	Providing citizens with more opportunities for participation with the aid of, for example, ICT is one alternative for achieving positive results.
Democracy	Based on their www pages, MPs employ fairly primitive methods of online influencing. There's plenty of development potential in this respect. The election engines [voting advice applications] on offer at election time are good examples of how rapidly online influencing is developing.	MPs and the Eduskunta must decide whether they are going to be passive observers or if they will actively strive to develop new solutions themselves. The Eduskunta should be a lively actor in the development of democracy services.
E-democracy	E-democracy and e-parliament, the buzzwords of the day, emphasise the broad utilisation of ICT. It is probable that the "e" prefix will be dropped in the next few years, but ICT will still be utilised broadly. It will no longer have to be emphasised separately because, in future, it will be an automatic ingredient of the concepts in question as well as of other corresponding notions.	Opportunities for citizen participation must be enhanced with the aid of electronic tools. The working practices of Parliamentary Committees must be modernised.

Area of research	Research result	Conclusion
Work of the Eduskunta	The increased workload of the Eduskunta and the extensiveness of the matters it deliberates have caused a flood of information that cannot be controlled very well with existing tools.	Electronic content management and electronic documents are needed. Opportunities for observing legislative proceedings need to be improved from present.
Work of the Eduskunta	The Eduskunta's working practices are in need of modernisation.	The weaknesses of existing working practices will not be erased with ICT. A substantial modernisation of activities is instead required.
Legislative preparation	Many problem points, which affect the quality of preparations, were identified in legislative proceedings. The incompatibility of technical solutions causes substantial expenses and the Council of State (Government) has been developing incompatible solutions for quite some time.	There are examples of good cooperation as well: the information systems the Eduskunta and the Ministry of Finance have in place for handling the State budget have been communicating with each other without glitches for many years already. The Eduskunta's own document production has also demonstrated an ability to achieve considerable cost savings while raising the level of quality significantly at the same time. A common content and document management system needs to be developed for the whole legislative process.
Monitoring and oversight of governance	Monitoring and oversight of governance is largely based on annual reports and other similar documents. This means that matters come before the Eduskunta only at a fairly late hour. Opportunities for monitoring the realisation of the Government Programme are inadequate.	An up-to-date monitoring system, which tracks the progress of major projects, is needed. A similar system is needed to enable the monitoring of the Government Programme's realisation.
MP work	The workload of an MP is heavy, even with respect to so-called mandatory meetings alone. In practice, such meetings can eat up the majority of working hours. The situation is even more difficult for an MP serving as a Minister. A part-time position of trust has evolved into year-round expert work. The Eduskunta and the Council of State provide a different set of tools.	The tools required for expert work, knowledge work, are demanded for MP work as well. The tools of an MP and a Minister should be similar and compatible. The same set of tools should be sufficient for handling the tasks of either position. The basic structures of MP work at the Eduskunta should be modernised.
MP work	The tasks and work of an MP, the different roles and interaction environments they involve, have proved to be very versatile and extensive.	The ICT tool of MPs must support activities in many different environments.
Electronic services	MPs and their assistants take a very positive view of the utilisation of electronic services. The majority of them consider electronic services better than their traditional alternatives. E-mail, electronic documents and content management as well as electronic information management are services, whose utilisation they wish to expand and develop further.	The utilisation of electronic content management, processing and documents should be promoted. The electronic format should become the official alternative. Old services must be phased out as new ones are taken into use.
Competence	There are major shortcomings in ICT user competence. Existing tools are utilised only partly. The competence of ICT professionals is inadequate with respect to some key activities.	Competence must be enhanced through continuous training. The development of competence should be a strategic focal area.

Area of research	Research result	Conclusion
Strategies of information management	The development of information management has been steered by strategies since 1985. The objectives of these strategies have been achieved quite well. The problem has been that the strategies of the Eduskunta and of the Parliamentary Office have not been available for use.	The Eduskunta and its Parliamentary Office should have a clear overall strategy that would incorporate an information management strategy. The key activity and information management should merge with one other over time.
Development of information systems	Development of information management services has often been prompted by the unit-specific needs of the Parliamentary Office. Information systems have often been realised to support existing work practices as they are, making the systems complicated and thus difficult to integrate and maintain. Furthermore, the systems do not form a clear totality, preventing ease of use, a characteristic that users value highly, from being realised very well. From the point of view of the MPs, this is a fairly poor result because their need for ICT tools and related development has not usually been seen as a central issue in development decisions. This means that the service totality on offer has, for them, been formed at least in part quite randomly.	Unit-specific solutions on content management, etc., should be replaced with the realisation of solutions that are shared by all of the Eduskunta. Common systems for the Eduskunta and the Council of State are possible at least in matters related to legislative proceedings. Development should start with the design of new work processes and only then should ICT solutions be applied. Otherwise, new ICT solutions will only cement old processes into place. The ICT tools of MPs should be designed as a dedicated independent totality.
Information systems	The 1995 realisation of the Eduskunta's internal and public www service, with its extensive information content and innovative technical design, was one significant project. Likewise, launching production of structured SGML-based documentation towards the end of the 1990s has served widely as a good model for Government administration. Substantial improvements to productivity have been achieved.	Information management should continue to offer new, innovative solutions to aid the work of the Eduskunta.
Management of information and knowledge	Information management is of central importance to the work of MPs and the Eduskunta. It is important to improve from present the harnessing also of uncodified, tacit knowledge to serve the operations of the organisation alongside explicit knowledge.	The development of information management should be one focal point in the development of MP work practices. Solutions related to the filtering of information (profiling, personalisation) and the presentation of information are of central importance.
Use of information services	The electronic services on the intranet and Internet are utilised quite little.	Monitoring of service utilisation (also other than information services) must be developed and unnecessary services pruned. Services can be utilised more than at present with the aid of profiling.
E-mail	Users feel that the existing e-mail (office system) is inadequate.	Adopt a new office system that offers the services, which users expect.
Model for depicting use of ICT	One problem for studies of the ICT utilisation of MPs and the Eduskunta is formed by the absence of a model to depict these activities. One of the outcomes of this study is the drafting of a general-level model.	A model would enable analyses of the steering and effects of development. This study has begun to sketch the outlines of such a model. It provided an aid to understanding the totality already while the study was ongoing.

The foregoing contains an examination of what has been and what is now, how services have been utilised and how they are used now and what the impact of all this has been. In the following table, table 6. I attempt to examine the future: what ICT tools should be made available and what effects these might have. The sights have been set on the year 2015. On one hand, this is far enough for changes to actually emerge, but, on the other hand, it is close enough for changes to be identifiable.

The central hopes presented by MPs in conjunction both with this study and with earlier surveys have been taken into consideration as part of the analysis of the future. I have also tried to estimate what new solutions the development of ICT will offer. My aim with the below table has been to depict the desired state as realistically as possible. It appears to me that achievement of the desired state will not call for greater resources in information management than now − a realistic utopia!

10.4 Achieving change

Achieving change requires personal commitment, necessity, which takes energy. If things are all right, there is a risk of complacency. What is needed is enthusiasm and the desire to experiment, the courage to try new things. Parliament should set an example in developing the information society.

Nowadays MPs actively use information technology tools, and tools are considered useful and indispensable. The benefit potential offered by the next generation of information technology tools, for example in managing time, information and communications, could probably be realized quickly as soon as new tools are made available. On the other hand, changes in working methods and processes are not generally implemented rapidly and achieving them requires strong objective-oriented support from an organization's management.

In my opinion an essential change compared to the past is that users' role in knowledge management policy should receive more emphasis. Alongside basic services offered to everyone, it is necessary to create individual, profiled and personalized services. In practice this can influence policy work considerably, since in addition to a common strategy one must in some way formulate several group or personal development strategies. This requires a big change in the way of thinking in Parliament.

In this strategy work it is useful to describe a few typical users, such as MPs in leading positions in Parliament, ministers, veteran politicians, new MPs, people who use information technology extensively, people who are averse to information technology, different official roles, citizen roles etc. On the basis of these type descriptions we can create different service packages. In addition users should be able to create a profile related to knowledge management and if necessary personalize their user interface and service selection as they like.

Major areas of development are the development of support systems for decision-making in Parliament, the development of knowledge management, the production of profiled services alongside standard services and the development of services aimed at citizens - the creation of e-democracy services. In addition to these major areas, one should also remember small things, which can have an immensely large significance for the whole. Examples are improvements that influence ease of use, the marketing of services and the development of expertise that is based more on users' needs.

Table 6. Information systems and their use in the work of MPs in 2015

Tasks of an MP / ICT services	General ICT services (e.g. Fakta intranet, Internet, document management, e-mail, chat, video conferencing and the office system)	Information systems and ICT services in use alongside the general services	Utilisation and demand	Impact of information systems on the activities of MPs and the Eduskunta	Notes
Plenary session work	- ICT tools used at plenary sessions - management system for parliamentary documents (shared with the Government) - electronic official documents (XML)	- plenary session information systems (introduced in 2008) - direct video broadcasts of sessions	- at all plenary sessions - essential	- plenary session work expands from speech delivery to more diverse knowledge work - paper documents no longer in use - data on voting, etc., transferred to www services –video archive replaces text archive in part	Move over to electronic proceedings is a major transition. Number of plenary session speeches has decreased as Parliamentary Committee work has become increasingly public.
Parliamentary Committee work	- ICT tools used at meetings - management system for parliamentary matters (shared with the Government) - electronic official documents (XML)	- electronic workspaces for Parliamentary Committees (public and restricted) - profiled information services for Parliamentary Committees - shared system with Government for deliberating the State budget (up-to-date budget info)	- at all meetings - essential	- Parliamentary Committee work based on electronic processes - paper documents no longer in use - possibility to debate with experts and citizens in the electronic workspace	Committee work has become more open, "no more closed doors". Use of video conferencing has increased Tools that enable citizen participation are in use. E-democracy is being promoted.
Monitoring and oversight of the State administration	- available	- system for monitoring Government projects - monitoring system for finances - monitoring of the realisation of the Government Programme	- annual reports replaced with up-to-date monitoring - essential	- working and debates become more topical - up-to-date picture of situation in State administration is available	Monitoring and oversight at Parliamentary Committees and the plenary session. Role of Audit Committee taking shape.

Tasks of an MP	ICT services	General ICT services (e.g. Fakta intranet, Internet, document management, e-mail, chat, video conferencing and the office system)	Information systems and ICT services in use alongside the general services	Utilisation and demand	Impact of information systems on the activities of MPs and the Eduskunta	Notes
Parliamentary group activities		- available	- electronic workspaces for parliamentary groups (public and restricted)	- in group activities and for preparation of meetings - somewhat essential	- parliamentary group work based on electronic processes	Parliamentary groups may employ their own solutions if they so desire.
Work at the personal office of an MP		- available	- own www pages - social web tools - own electronic workspace - profiles according to mission	- in almost all activities - essential	- promote maintenance of contact with citizenry - promote the MPs parliamentary activities - dampens information flood - more effective communications	Development of ICT aims to equip MPs with a well-functioning totality of ICT tools instead of separate services.
Distance work (EU, other international cooperation, State administration, constituency, maintaining contact with citizens and the media)		- available	- distance desktop - mobile services	- in almost all activities - essential	- possible to use ICT services in any location	Mobile services comprise, in practice, the same set of services as are on offer in the office of an MP at the Eduskunta. Video conferencing has become more common.

Services associated with e-democracy widely at the disposal of the Eduskunta. The Eduskunta can be referred to as an e-parliament.

11 Epilogue

All will be different in the autumn.

In closing, it is good to attempt a broader examination of the direction the development of the ICT solutions of the Eduskunta and its MPs might take in the near future. What will the workday of an MP look like in a few years time? What difficulties will come with changes, is the situation essentially different now from, say, ten years ago? What developments will make up the ICT star moments of the Eduskunta in the future?

Description of the work of an MP in 2015 by Member of Parliament Jouni J. Särkijärvi

On my request, MP Särkijärvi drafted a description in 2005 of his vision of what the work of an MP would be like in 2015 (Särkijärvi 2005). It is written in the form of a narrative, in which an MP shows off the Eduskunta's ICT services to a group of veteran MPs visiting in 2015. Särkijärvi's description contains a lot of the same aspects that were brought up in the interviews and questionnaire survey of MPs, but it also included a host of new, interesting ideas. Some proposals would necessitate substantial changes to the existing operating practices of the Eduskunta, but at the same time they would help remove certain problems in the work of the Eduskunta that were highlighted in the study. The following quotes are some of the key points included in MP Särkijärvi's vision for 2015:

> The work of an MP in 2015:
>
> - In the mornings, we receive several briefs that have been produced by a variety of parties and are stored on the Eduskunta's server. They are a kind of short news video that we can view from our personal workstations or mobile devices. The Parliamentary Office informs us of the day's key events and the parliamentary group office tells us what we should think about these events.
> - Information congestion is a constant problem. However, we can avail of search and processing robots that help us achieve some degree of order. They have the ability to learn; this means that the more you use them, the better they adjust to you personal work profile.
> - Each of us has a camera-equipped workstation, so we are able to send our personal messages in either video or plain text format… By the way, local newspapers prefer to receive brief video clips from MPs for their website than just written pieces. This is by no means a bad thing, even though you have to make these videos yourself, unlike the newspaper articles that are written by assistants.
> - The order in which matters are deliberated has remained largely the same, while technology has changed. If we wish to speak about some matter, we must submit a request for speaking time by noon. During a session, only brief turns for a personal statement can be allocated. The maximum duration is five minutes if you speak without notes and two minutes if you read from notes and don't ad-lib. … Proposed amendments and requests must also be

- submitted under the same schedule. If no proposals or speaking time requests are made in relation to a matter, it will be considered approved as originally proposed by default.
- The budget is one area where change has been substantial. … No reasonably-run company has for quite some time observed a financial plan that is set for one calendar year at a time, as it is always necessary to consider the future for roughly an equal amount of time. When the State moved over to rolling budgeting, the budget deliberation process had to be completely overhauled.
- Another substantial budget-related modernisation dealt with the roles of MPs and the Eduskunta. At first, a simulation budget was drafted and every MP and citizen was allowed to toy around with it. More and more connections and information reserves were added to this on a constant basis, allowing users to see all of the effects that decisions would have. A logical consequence was that MPs also wanted to wield more influence. As more money could not be conjured out of thin air, debate shifted to questioning whether actions were being realised in an appropriate manner and whether we were doing the appropriate things in the first place. This opened direct connections between the Eduskunta and officials at Government ministries because it was not possible to handle such a great volume of information exchange through ministers and their deputies. The Eduskunta had got itself a preparatory apparatus, which could directly influence what was going on – without the need for cumbersome legislation-focused efforts.
- Parliamentary Committee work remains important. Enough technology has been added to it to make real-time summaries of submissions and the comments made on them constantly available. Furthermore, Committee members are allowed to write their amendment proposals inside the text in a manner that resembles the drafting of international treaties.
- Earlier, the Eduskunta was by nature only reactive. When a new organ [Committee on the Future], which, without being obligated by anyone, took questions it considered important onto its agenda, was added to the mix, a fresh operating model was created. Lately, all the different Committees have started to predict changes within their respective fields and are drafting necessary solution alternatives to respond to them.

Jouni J. Särkijärvi

Star ICT moments in the future of the Eduskunta

At the annual joint planning meeting held between the Information Management Office of the Eduskunta and Tieto Ltd, a key supplier of information systems, I asked what the star ICT moments of the Eduskunta's future might be. I received replies from 14 people. The following is a summary of these replies:

Future ICT star moments for the Eduskunta

Broad, principled changes
- first non-location-dependent plenary session
- mobile voting
- citizen participation via the Internet/mobile devices
- direct referendums
- citizen participation in question time
- interactive citizen participation in Parliamentary Committee work

ICT-related improvements
- terminal-device-independent, profiled mobile services

- virtual group work tools
- personalised web user interface
- system integration solution
- new plenary session hall system (paper documents no longer distributed in plenary sessions)
- XML-based document management solution (instead od SGML)
- electronic services
- desktop Linux

Other targets
- well-functioning work processes
- ease of use
- competent users

The ICT-related improvements are to a large extent being realised in the near future and some of the mentioned issues have been covered in the information management consultation document. It does not look like the broad, principled changes will be realised at least in the next few years. These would include the ingredients for future star moments.

Development projects focusing on the operations of the Parliamentary Office have pointed out that the productivity and quality targets associated with operations can only be attained through more extensive utilisation of ICT. A transition to electronic content management and official electronic documents is needed; without these modernisations, set targets cannot be realised. The Eduskunta and the Council of State need to increase their cooperation in the utilisation of ICT.

The objective is clear, but do all of the mentioned measures work towards its achievement? Might some measures cause the objective to escape further? It would be good if I were able to state that change resistance had disappeared and operations were being developed with enthusiasm and innovation. Unfortunately, I think that the situation remains the same as it has been throughout the era of ICT utilisation. Changes face resistance just like before, old operating practices are clinged to like earlier and there is a tendency to fit the tools and solutions of ICT to old work processes – precisely as in the past.

But this may not be such an unusual situation for an organisation undergoing change (e.g. Robey 1997; Sauer & Yetton 1997). Resisting change resistance will, however, only lead to even greater resistance. The force that resists change has to in some way be turned around. An uncertain and unnerving future needs to be made more familiar and, correspondingly, something old has to be forgotten and left behind. This is an important and interesting subject, but I shall not elaborate on it any further in this conjunction.

A lot remains to be done.

Development work never ends.

All will be different in the autumn.

Sources

Airaksinen, T. (2003). Tekniikan suuret kertomukset, Filosofinen raportti. Helsinki, Otava.

Aula, M. K. (2003). Eduskunta Suomen poliittisessa järjestelmässä. In: P. Saukkonen (P. Saukkonen, ed) Suomen poliittinen järjestelmä verkko-oppikirja. Helsinki, University of Helsinki.

Berndtson, E. (2008). Politiikka tieteenä, Johdatus valtio-opilliseen ajatteluun. Helsinki, Edita.

Butler-Group (2005). DRM in the Public Sector, Addressing Regulations, Delivering Service. Hull, Butler Group

Butler-Group (2006). Document Collaboration, Linking People, Process, and Content. Hull, Butler Group

Büchi, R., N. Braun& B. Kaufmann (2008). Opas suoraan demokratiaan. Helsinki, Like Kustannus.

Coghill, K., P. Holland, R. Donohue, K. Rozzoli& G. Grant (2008). "Professional Development Programmes for Members of Parliament." Parliamentary Affairs **61**(1): 73-98.

Coleman, S. (2003a). A Tale of Two Houses, The House of Commons, the Big Brother House and the people at home. London, Hansard Society.

Coleman, S. (2003b). Use of ICT in European Parliaments. ECPRD: Parli@ments on the Net-conference. Bucharest

Coleman, S. (2006). "Parliamentary communication on an age of digital interactivity." New Information Perspectives **58**(5): 371-388.

Coleman, S.& B. Nathanson (2006). Learning to live with the Internet - How European parliamentarians are adapting to the digital age, EPRI Knowledge project (prepared by Polpit Ltd) http://epri.org/epriknowledge/contents/Studies.php

Dator, J. (2006). Muuttuuko Amerikka koskaan demokratiaksi? In: P. Tiihonen (P. Tiihonen, ed) Demokratia ja tulevaisuudet. Helsinki, Eduskunnan tulevaisuusvaliokunta.

Dijk, J. v. (1999). The Network Society, Social Aspects of New Media. London, SAGE Publications.

Drucker, P. F. (1999). Management Challenges for the 21st Century. Oxford, Butterworth-Heinemann.

Drucker, P. F. (2002). Druckerin parhaat, Peter Druckerin keskeiset ajatukset -60 vuotta johtamistutkimusta ja -tietoa. Helsinki, WSOY.

Gummesson, E. (2000). Qualitative Methods in Management Research. Thousands Oaks, CA, Sage.

Haukio, J.& M. Suojanen (2004). "Vaalikone poliittisena mediana." Politiikka **46**(2).

Hoff, J. (2004a). "The democratic potentials of information technology: Attitudes of European MPs towards new technology." Information Polity **9**(1-2): 55-66.

Hoff, J. (2004b). "Members of parliaments' use of ICT in a comparative European perspective." Information Polity **9**(1-2): 5-16.

Keskinen, A.& T. Kuosa (2004). "Uusi aikakausi vaatii uudenlaista demokratiaa." FUTURA(2/2004).

Kim, W. C.& R. Mauborgne (2005). Sinisen meren strategia. Helsinki, Talentum.

Koivunen, H. (1997). Hiljainen tieto. Helsinki, Otava.

Korkiakoski, J. (2005). Kuuleminen ja osallistuminen tietoverkoissa. Helsinki, Valtiovarainministeriö

Kuronen, T. (1998). Tietovarantojen hyödyntäminen ja demokratia. Helsinki, Sitran julkaisu 174.

Kuronen, T. (2000). Kansalaiskeskustelun edellytykset ja mahdollisuudet tietoverkkojen aikakaudella. Väitöskirja. Tampereen yliopisto.

Küster, U. (2004). eLegislation in the German Parliament, Problems and Solutions. Stockholm, 7th European Conference of Members of National Parliaments on Information and Communication Technologies (EPRI) http://www.epri.org/epriknowledge/contents/7thconference_mat/20041109_UweKuester_presentation.pdf

Laudon, K. C.& J. P. Laudon (2006). Management Information Systems, Managing the Digital Firm. Upper Saddle River, New Jersey, Pearson Prentice Hall.

Leston-Bandeira, C. (2007). "The Impact of the Internet on Parliaments: a Legislative Studies Framework." Parliamentary Affairs **60**(4): 655-674.

Mannermaa, M. (2006). Demokratia tulevaisuuden myllerryksessä, yhteiskunnallinen vaikuttaminen uudessa viitekehyksessä. Helsinki, Eduskunnan tulevaisuusvaliokunta.

Markus, M. L. (2000). "Conceptual Challenges in Contemporary IS Research." Communications of AIS **3**(article 4).

McHugh, D. (2006). "Wanting to be heard but not wanting to act? Addressing Political Disengagement." Parliamentary Affairs **59**(3): 546-552.

Mintzberg, H. (1991). Managerial Work: Forty Years Later. In: S. Carlson (S. Carlson, ed) Executive Behaviour. Uppsala, Acta Universitatis Upsaliensis, Studia Oeconomiae Negotiorum 32.

Nousiainen, J. (1992). Suomen poliittinen järjestelmä. Helsinki, WSOY.

Oikeusministeriö (2006). Sähköisen kuulemisen kehittäminen valtionhallinnossa. Helsinki, Oikeusministeriö, 6/2006

Oikeusministeriö (2008). Sähköisen kuulemisen kehittäminen valtionhallinnossa, II vaihe. Helsinki, Oikeusministeriö, 8/2008

Pulliainen, E. (2006). Kansanedustajan valta ja vastuu. Helsinki, Ochre Chronicles.

Robey, D. (1997). The Paradoxes of Transformation. In: P. W. Yetton (P. W. Yetton, ed) Steps to the Future, Fresh Thinking on the Management of IT-Based Organizational Transformation. San Francisco, Jossey-Bass**:** 209-229.

Sauer, C.& P. W. Yetton (1997). The Right Stuff: An Introduction to New Thinking About IT Management. In: P. W. Yetton (P. W. Yetton, ed) Steps to the Future, Fresh Thinking on the Management of IT-Based Organizational Transformation. San Francisco, Jossey-Bass**:** 1-22.

Strandberg, K. (2006). Parties, Candidates and Citizens On-Line. Dissertation. Åbo Akademi University.

Särkijärvi, J. J. (2005). Kansanedustajan työstä vuonna 2015, (julkaisematon muistio 31.3.2005)

Taipale, K. (2001). Vuorovaikutus: puhua, kuulla, kuunnella vai käydä keskustelua? Julkisen keskustelun vaikeudesta. In: M. Kärkkäinen (M. Kärkkäinen, ed) Puhutaan kaupungista -Talking about the City. Helsinki, Suomen rakennustaiteen museo.

TTL (2003). Tietotekniikan käytön ongelmat suomalaisilla työpaikoilla. Helsinki, TTL ja Cap Gemini Ernst & Young

Turban, E., J. Aronson, T.-P. Liang& R. Sharda (2007). Decision support systems and business intelligence systems. New Jersey, Prentice-Hall.

TuV (2007). Tulevaisuusvaliokunnan lausunto 2/2007 vp hallituksen toimenpidekertomuksesta vuodelta 2006, Eduskunta

Viitala, R. (2005). johda osaamista. Helsinki, Inforviestintä Oy.

Zittel, T. (2004). MPs and Internet, Between the Rock of Technology and the Hard Place of Politics? 7th European Conference of Members of National Parliaments on Information and Communication Technologies (EPRI), Stockholm. http://epri.org/epriknowledge/contents/7thconference_mat/presentation_stockholm03_Zittel.ppt

Figures

Graphs

Tables