E-Participation in the Legislative Process: Procedural and Technological Lessons from Estonia

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Abstract

This paper assesses the success of an innovative national e-participation project in Estonia. To carry out this task, the paper combines quantitative (aggregate user data, content analysis via tagging, traffic sources) and qualitative (individual user survey and interviews with public officials) data analysis. The analysis is conducted with two principal research objectives in mind. Firstly, to explain how e-participation has fared in Estonia, both in terms of citizen mobilization and government responses. The second goal is to evaluate a series of procedural and technological changes for enhancing e-participation. The Estonian case provides ample lessons for ensuring that e-participation in practice can better meet the expectations of users and government officials alike.

Introduction

In 2001, the Estonian State Chancellery launched a web-based e-participation application known as TOM – the acronym for "Today I Decide" in Estonian (https://www.eesti.ee/tom/ideas.py/avaleht). This was a pioneering move[1] since

[1] Estonia, an EU member-state of 1.3 million inhabitants, is also known for its groundbreaking use of internet voting. In 2007 it was the first country to introduce e-voting for national legislative elections (Trechsel, 2007; Breuer and Trechsel, 2006).

TOM enables Estonian citizens to participate in the national legislative process; other e-participation initiatives around the globe have so far been restricted to the municipal, local or sub-national level (Avdic, et al., 2007; Carman, 2007; Seaton, 2005). In continuous operation since 2001, the Estonian TOM platform provides an invaluable data set for understanding the dynamics of e-participation. This paper thus analyses the implementation of TOM and draws certain procedural (how the tool is best used by citizens and government) and technological (functionalities offered to users) lessons about using the internet to facilitate citizen input in legislative decision-making.

According to the OECD conceptual framework for categorizing varieties of e-engagement, the TOM platform perfectly fits the model for using Information and Communication Technologies (ICTs) to promote active citizen participation as opposed to providing information or as a consultation mechanism[2] (OECD, 2001: 15-6). The relationship between citizens and government assumed by the TOM platform is thus one of partnership. The promise of e-participation is precisely the ability to deploy ICTs to establish a partnership between governed and governing, so as both to counteract the declining public confidence in democratic institutions (Schmitter and Trechsel, 2004) and meet new expectations of increased popular participation in governance (Dalton, 2004). E-participation is, therefore, one of the reforms that representative democracies are currently experimenting with in the hope that participation counteracts public disillusionment. It has thus been conceptualized as "advocacy democracy" (Cain et al., 2003) as opposed to representative reform (such as tinkering with the electoral system or candidate selection) or direct democracy reforms. By contrast with direct democracy, advocacy democracy, which includes e-participation initiatives such as TOM, 'seeks to influence the [decision-making] process rather than make outright decisions, as is done with referendums' (*ibid.*, 11). Hence this Estonian case study presents an ideal test for examining what it takes to get the

[2] On consultation see, for instance, the growing literature on "e-rulemaking" in US federal agencies' regulatory rulemaking (Shulman, 2003).

most out of e-participation, meaning the paper straddles the two major axes of e-participation analysis: decriptive, to understand the e-participation phenomenon, and instrumental, to discuss how it can be improved (Rose et al., 2007: 7).

The paper is structured as follows. A first section presents the quantitative analysis of TOM-engendered citizen mobilization. Section two introduces the qualitative usage data and complements this with interviews with government officials to explore the expectations, frustrations and satisfaction of using TOM both from a citizen to government perspective (C2G) and government to citizen (G2C). The third section, signifying the shift from descriptive understanding to instrumental analysis, draws on this data to provide a series of procedural (how the TOM tool is used in context) and technological (the functionalities it offers to users) suggestions for enhancing e-participation with this tool. A concluding section fits this argument into a more theoretical discussion of political participation. In particular, the extent to which e-participation initiatives offer new possibilities for citizens to express "voice", meaning an attempt to improve the relationship between governed and governing by virtue of the former expressing grievances and proposals for reform (Hirschman, 1970).

1. Estonian E-Participation Usage Analysis

First of all, it must be pointed out that the TOM project is more ambitious than an e-petition platform, such as the United Kingdom's (http://petitions.pm.gov.uk/) or Scotland's (http://epetitions.scottish.parliament.uk/).[3] Rather than being a mere medium for collecting signatures, the TOM tool is a forum for citizens to discuss legislative proposals, **within a ten-day period following submission**, and to vote upon them. After an idea has been proposed, the system functions as follows. To allow for discussion between TOM users, authors of legislative proposals have three days to amend them before they are voted upon by users

[3] The literature on e-petitioning initiatives is still in its infancy. For more information on the Scottish case see Carman (2007) and Seaton (2005)

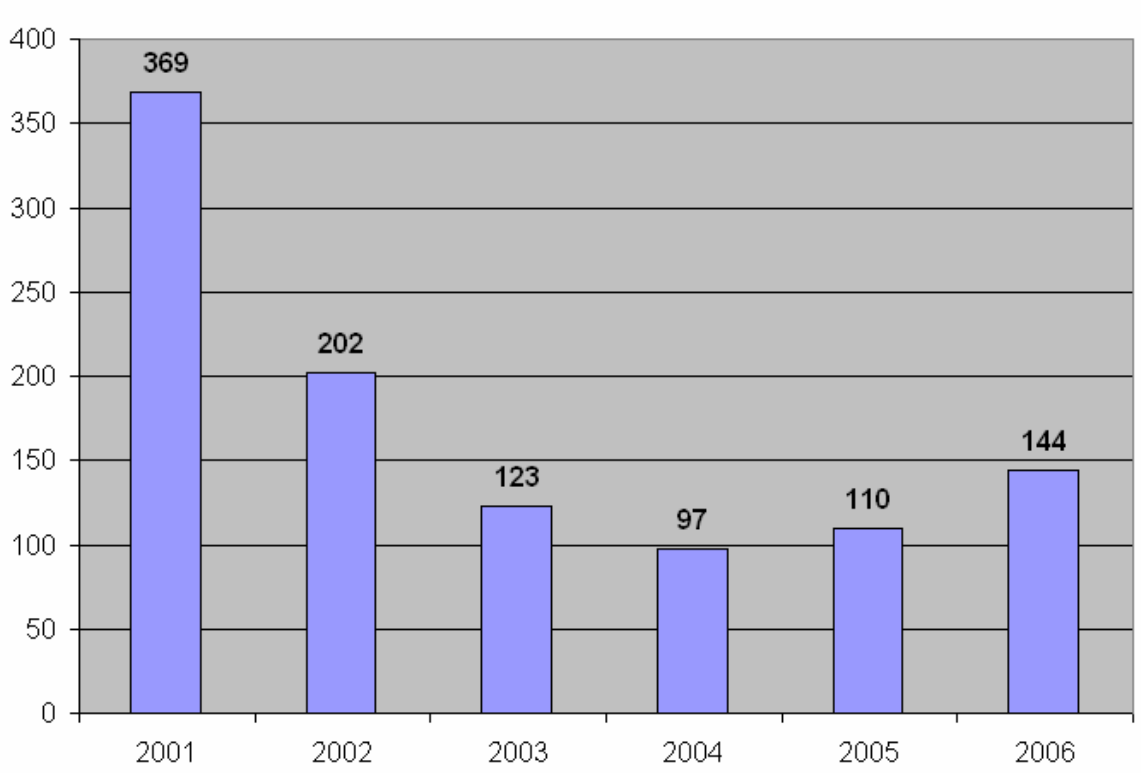
(a simple 50% plus one majority is needed to pass). Once a proposal is backed by a majority, it is forwarded to the relevant government department, which then has a month to respond to the proposal explaining what action was or was not taken and why. This formal government response is then posted on TOM.

The data analysis presented in this section presents the usage statistics – including the number of proposals, their subject matter, their authorship and official government response – and traces trends in usage whilst also identifying the factors explaining variations and patterns in usage. In addition, Google Analytics is used to discover the source of visitors to the TOM platform. Thus we describe the number of ideas proposed, the nature of those ideas, the number of users taking advantage of the TOM system, where internet traffic came from and what the official government response was towards these ideas.

The Number of TOM-Generated Ideas and How they Fared When Voted on by the User Community

Table 1 indicates the yearly number of citizen-generated legislative ideas that were proposed courtesy of TOM from 2001 to the end of 2006; in total, 1045 legislative ideas were put forward using TOM. The first year was the most successful, in terms of the generation of legislative ideas, with the number of TOM legislative proposals dropping from a 2001 peak of 369 to almost a quarter (97) in 2004. Thereafter, the number of ideas climbed to 144 by 2006, still only 40% of the number of TOM-generated ideas in its launch year of 2001. The initial peak of activity can easily be explained by the fact that during its launch year TOM received plentiful media coverage, including a prominent presence on Estonia's most popular portal (delfi.ee).

Figure 1: Yearly Number of TOM-generated legislative ideas



Of these 1045 TOM-generated legislative ideas – at the time of conducting this study, March 2007 – 1025 had completed the TOM e-participation process.[4] Amongst this total of 1025 completed TOM proposals, 654 (or 64%) were voted in by registered users, 371 (34%) were voted out whilst 25 (2%) were stillborn and were not communicated to the government as they attracted no votes before the cut-off point (3 days after first being proposed), as shown in Table 1.

Table 1 Voting on TOM Ideas

	N	Percentage of total ideas
Total TOM-Generated Ideas	1025	100
Ideas Voted In	654	64
Ideas Voted Out	371	34
Ideas Abandoned (no	25	2

[4] Of the twenty that had not, 2 were still under discussion, 5 were yet to be voted on and 13 were still awaiting a government response.

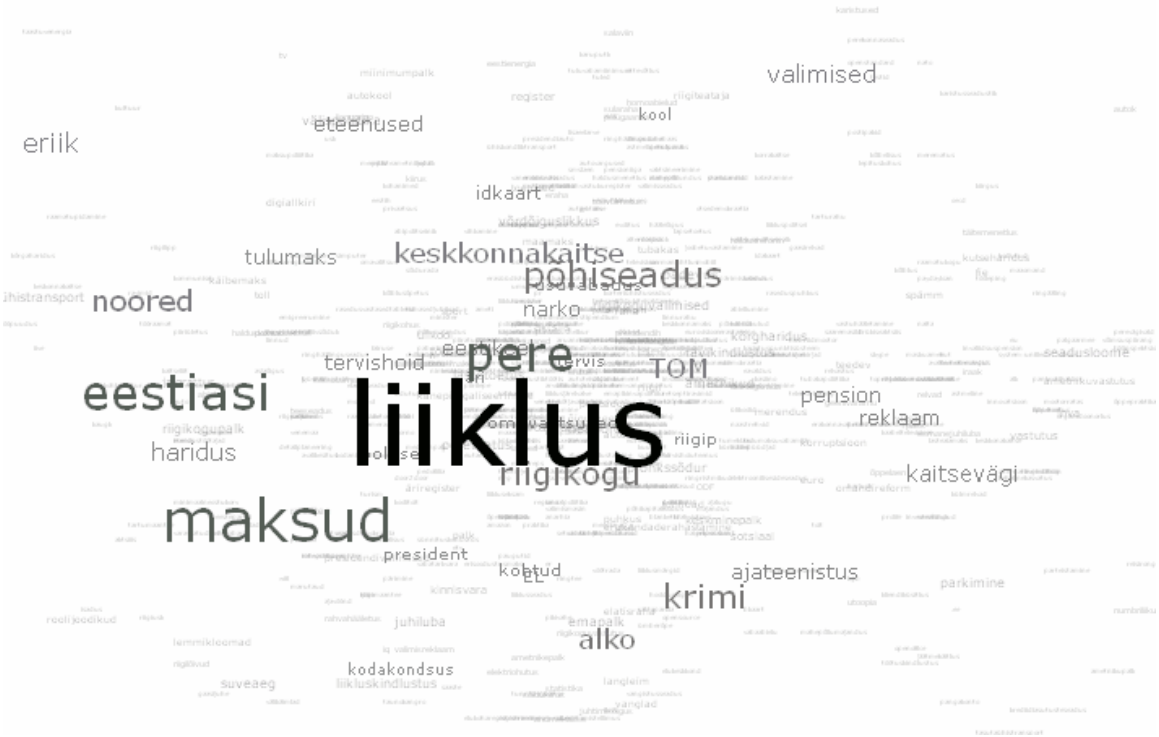
votes)		

The Subject Matter of TOM-Generated Ideas

One of the drawbacks of the current version of TOM is the inability to categorize proposals by subject matter – the platform does not classify ideas according to content but merely lists them in the order in which they are proposed. The absence of subject categorization creates several problems: it impedes citizens' ability to find or track topics that are of interest, leads to a duplication of proposals and hampers the process of learning from already-posted government responses. Hence to track the content of TOM-generated ideas, we tagged all 1045 legislative ideas with a set of keywords and the database thus created was posted to the social bookmarking site del.icio.us.[5] This permitted the creation of a striking visual representation of the most popular subject matter, as can be seen in Figure 2 below

Figure 2: Tagged Content of TOM-Generated Ideas – Most Popular

[5] The full set of tagged ideas can be seen at http://del.icio.us/tom.al.icio.us



Using a more classical representation, Table 2 below shows the top ten most popular subjects for TOM-generated ideas also rendered into English.

Table 2: Top Ten Most Popular Subject Matter for TOM-Generated Ideas

n	Subject (Estonian)	Subject (English)
142	liiklus	Traffic policy
70	maksud	Taxes
59	eestiasi	Estonian nation
59	pere	Family policy
40	põhiseadus	Constitutional affairs
37	riigikogu	Parliament
36	krimi	Crime
32	noored	Youth policy
29	alko	Alcohol policy
29	keskkonnakaitse	Environmental affairs

The Number of TOM Users and Their Level of Activity

In total, the TOM platform attracted 6837 registered users. Visiting the site was possible without registration but registration was required for authoring, commenting and voting on legislative proposals. The intention was to provide a forum for citizens to debate the legislative proposals, precisely in contrast with the passive nature of e-petitioning. However, in practice the platform did not provide a successful medium for connecting the authors of legislative ideas with the wider user community in either the debating or voting phase. This is evident from the data on author participation, which shows that only 40% of authors commented on their own ideas and even fewer, 34%, actually voted on them.

Table 3 Author Participation in Commenting and Voting

	N	Percentage of Total
Total Legislative Ideas	1025	100
At least one comment	911	89
Author commented	411	40
Author voted	350	34
Author commented or voted	570	56

Of the total number of registered citizens (6837), 45% were active users (3081); in total there were 6107 comments and 12502 votes. This in itself is a very high percentage of active users since the phenomenon of lurkers – users who never contribute or participate – is particularly prominent in online communities.[6] Nevertheless, participation inequality is particularly noticeable with regards to authoring TOM-generated ideas: only 9% of registered users have authored a legislative proposal (or 19% of active users). However, 34% of registered users voted on TOM-generated ideas (representing 75% of active users) whilst 19% commented on proposals (41% of active users). The full statistics of active users are shown in Table 4 below:

[6] Jakob Nielson, 'Participation Inequality: Encouraging More Users to Participate', http://www.useit.com/alertbox/participation_inequality.html

Table 4 Statistics of Active Users

	n	% of total	% of active users
Registered Users	6837		
Users authoring 1idea	595	9	19
Users authoring more than 1 idea	134	2	4
Users authoring more than 2 ideas	61	1	2
Average ideas per user	1.78		
Users who voted	2305	34	75
Users voting for more than 1 idea	1072	16	35
Users voting for more than 5 ideas	362	5	12
Average votes per user	5.42		
Users who commented	1267	19	41
Users who commented on more than 1 idea	411	6	13
Users who commented on more than 3 ideas	184	3	6
Average comments per user	3.68		
Users with at least one action	3081	45	100
Users with more than 1 action	1504	22	49
Users with more than 6 actions	428	6	14
Average actions per	6.4		

user			

At first glance this data indicating that a sizeable proportion of active users has performed more than one action could be interpreted as a very positive sign of TOM's ability to attract active users. However, a completely different result emerges when examining the proportion of activities by percentile categories of active users as shown in Table 5.

Table 5 Proportion of TOM Activities Performed by Percentile Category

	Ideas %	Votes %	ComIdeas %[7]	Activity %
Top 1%	18	26	30	32
Top 2%	24	37	40	44
Top 3%	28	45	47	51
Top 4%	31	50	51	56
Top 5%	34	54	55	60
Top 6%	36	57	58	63
Top 7%	38	60	60	65
Top 8%	39	63	62	67
Top 9%	41	65	64	69
Top 10%	43	66	65	71

This table thus demonstrates the highly unequal nature of TOM usage activity, whereby the top 10% of users are responsible for 70% of TOM activity, including more than 40% of ideas and two-thirds of all votes. Moreover, the system is in fact dominated by a single user, who accounts for 10% of all TOM-generated ideas. Indeed, the top two percentile of active users, responsible for the generation of nearly a quarter of TOM legislative ideas consists of only ten users. Although Time magazine's person of the year in 2006 was, thanks to the

[7] Note, ComIdeas is not the total number of comments as counted for total activity but the number of ideas commented upon. Hence multiple comments on one idea only count as a single ComIdea.

proliferation of user-generated web content, “You”, it should be obvious that Web 2.0 is no democratic panacea given – besides the digital divide (Warschauer, 2004) – the extreme inequality in rates of user participation as shown in the TOM data.

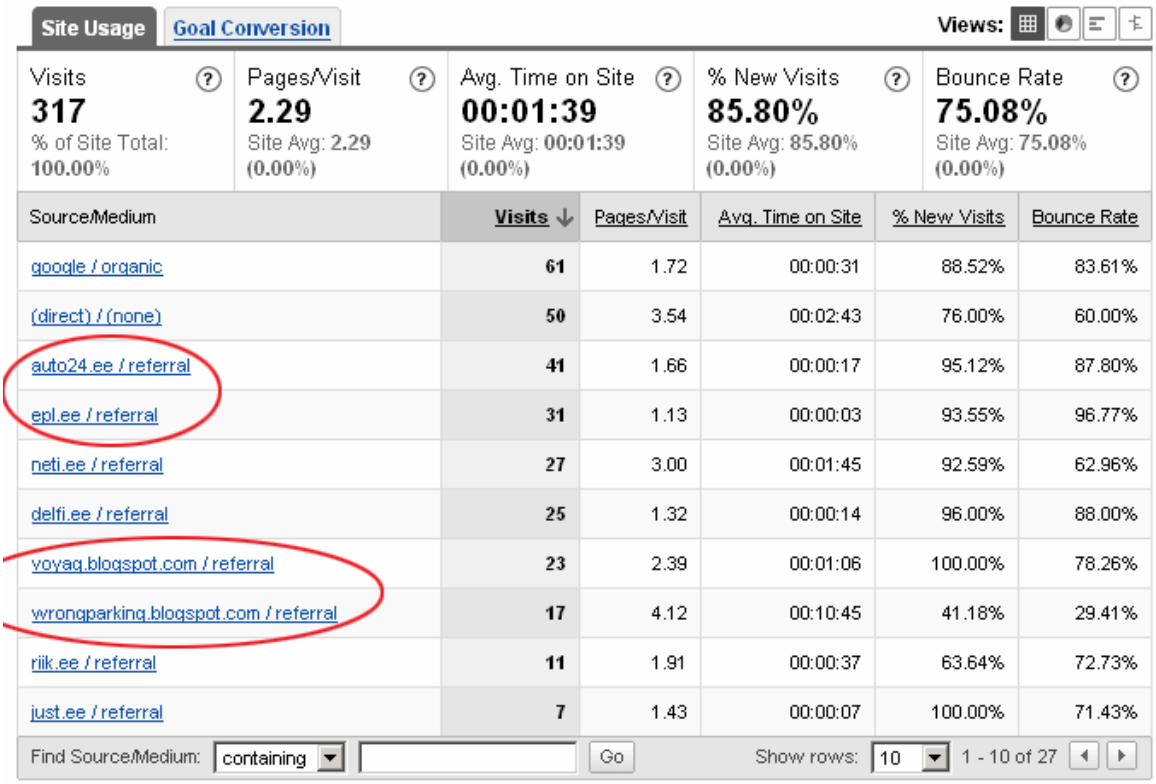
Internet Traffic and Traffic Sources

Over the entire five-year period, the daily number of visits to the TOM site averaged 150-200. This number would peak to around 300 in the case where an author of a TOM idea would post a link to the idea on an online forum or mention it on a weblog. To put this in comparison, in the Estonian context, the number of daily visits is akin to that of a moderately popular weblog or the homepage of a small company. Using the public statistics of an Estonian webtracking site (http://tnsmetrix.emor.ee), the TOM platform ranks alongside the website of the Baltic Business News (a newsagency) or certain public radio stations (r4.ee, the Russian-language channel, and klassikaraadio.ee a classical music station).

Google Analytics, a free service provided by the IT giant Google, provides website statistics, including the source of internet traffic as well as the length and frequency of visits. This service was used to discover more about the peaks in visits to the TOM platform, crucially revealing that all the traffic peaks were the result of a TOM-generated proposal being discussed outside the TOM platform.

For instance, the spike of 9 January 2007, which saw 317 visits to the TOM site, was generated by referrals from a discussion board (auto24.ee), the website of a major newspaper (epl.ee) and two weblogs all four of which referred to a particular TOM idea, as demonstrated in Figure 3, a screenshot from Google Analytics

Figure 3 TOM Traffic Sources on 9 January 2007, Provided by Google Analytics



Site Usage | Goal Conversion | Views:

Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
317 % of Site Total: 100.00%	2.29 Site Avg: 2.29 (0.00%)	00:01:39 Site Avg: 00:01:39 (0.00%)	85.80% Site Avg: 85.80% (0.00%)	75.08% Site Avg: 75.08% (0.00%)

Source/Medium	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
google / organic	61	1.72	00:00:31	88.52%	83.61%
(direct) / (none)	50	3.54	00:02:43	76.00%	60.00%
auto24.ee / referral	41	1.66	00:00:17	95.12%	87.80%
epl.ee / referral	31	1.13	00:00:03	93.55%	96.77%
neti.ee / referral	27	3.00	00:01:45	92.59%	62.96%
delfi.ee / referral	25	1.32	00:00:14	96.00%	88.00%
voyag.blogspot.com / referral	23	2.39	00:01:06	100.00%	78.26%
wrongparking.blogspot.com / referral	17	4.12	00:10:45	41.18%	29.41%
riik.ee / referral	11	1.91	00:00:37	63.64%	72.73%
just.ee / referral	7	1.43	00:00:07	100.00%	71.43%

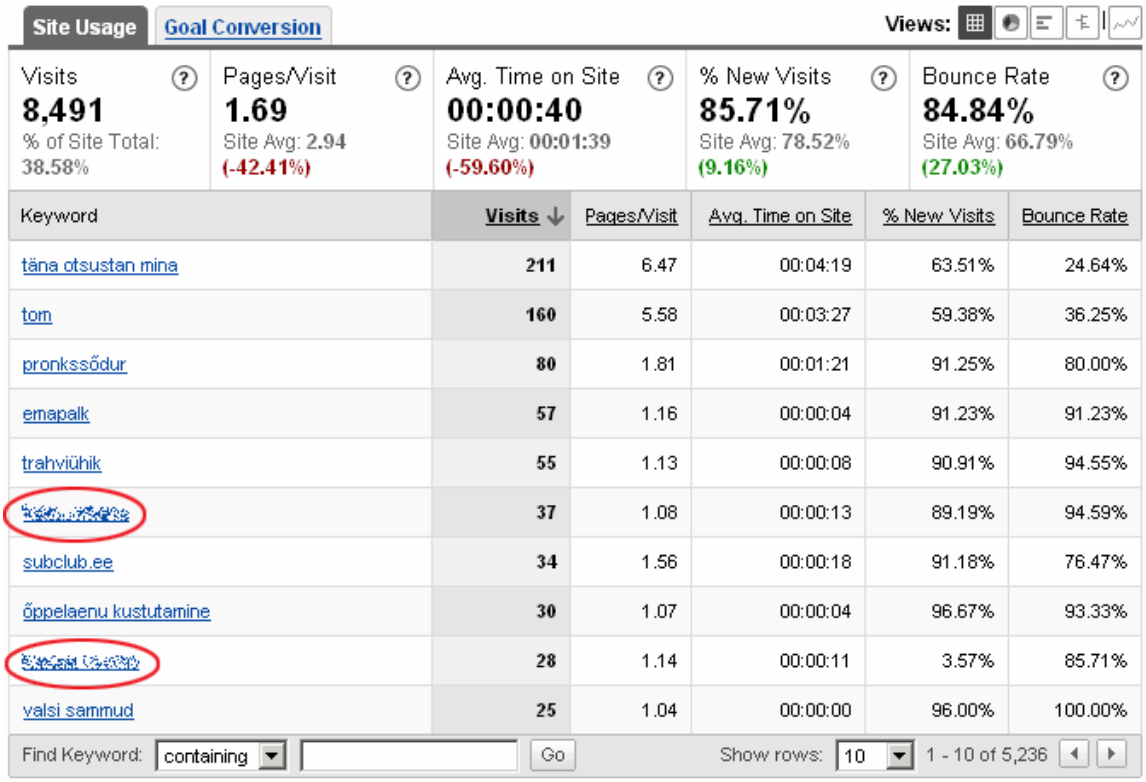
Find Source/Medium: containing | Go | Show rows: 10 | 1 - 10 of 27

At the time of this spike in traffic, the most active TOM-generated legislative proposal was idea number 2050, which dealt with urban parking legislation and which was linked in the four websites mentioned above. The popularity of this subject arises from the fact that in Estonia there is no legislation permitting bad parking to be classed as a traffic or parking violation because of the restrictive nature of constitutional due process applicable for establishing such sanctions. Certain European countries with similar legal hurdles circumvent this constitutional obstacle by having the regime of fines imposed for such traffic violations classed as local taxes raised on parking "mistakes". However, no such legislation has been introduced in Estonia, which prompted TOM-users to ask for such a measure to deal with problem of reckless urban parking. It was precisely this particular TOM proposal that was discussed on a popular forum (auto24.ee), commented upon in a newspaper article (epl.ee) as well as publicized on two weblogs written by the author of the TOM legislative proposal.

Thus by publicizing the policy issue and the TOM-generated remedy across various websites internet traffic directed towards TOM hit a peak. This is a crucial finding, which suggests that public interest in e-participation is greatly dependent on how the tool for citizen participation is publicized among internet users, especially the weblog community.

Google Analytics also tracks the internet search engine keywords that bring people into contact with the TOM platform. As can be seen from the following top-10 list of keywords generating TOM traffic, the hit parade unsurprisingly consists of expressions related to the site's name but there are also two real names of TOM idea authors/voters (blurred here for privacy reasons).

Figure 4 The Top-10 List of Keywords Generating TOM Traffic



Site Usage | Goal Conversion | Views:

Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
8,491	1.69	00:00:40	85.71%	84.84%
% of Site Total: 38.58%	Site Avg: 2.94 (-42.41%)	Site Avg: 00:01:39 (-59.60%)	Site Avg: 78.52% (9.16%)	Site Avg: 66.79% (27.03%)

Keyword	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
täna otsustan mina	211	6.47	00:04:19	63.51%	24.64%
tom	160	5.58	00:03:27	59.38%	36.25%
pronkssõdur	80	1.81	00:01:21	91.25%	80.00%
emapalk	57	1.16	00:00:04	91.23%	91.23%
trahviühik	55	1.13	00:00:08	90.91%	94.55%
[redacted]	37	1.08	00:00:13	89.19%	94.59%
subclub.ee	34	1.56	00:00:18	91.18%	76.47%
õppelaenu kustutamine	30	1.07	00:00:04	96.67%	93.33%
[redacted]	28	1.14	00:00:11	3.57%	85.71%
valsi sammud	25	1.04	00:00:00	96.00%	100.00%

Find Keyword: containing | Go | Show rows: 10 | 1 - 10 of 5,236

When examining search statistics beyond the top-10 traffic-generating keywords, it becomes obvious that a very notable amount of inbound traffic is generated by searches for the names of people who happen to have participated in TOM. However, it is impossible to say whether the searches were conducted because the name searched was known to have authored a proposal on TOM, although *prima facie* this possibility seems highly unlikely. Out of 5435 search phrases 1955 (35%) are names, whilst out of 8783 search instances 3404 (39%) are names.[8] TOM ranks pretty highly in Google searches (often on the 1st or 2nd page) so it is not unusual for a search for a person's real name to bring up in a prominent position the idea they have proposed, voted on or commented upon.

The Eventual Outcome of TOM-Generated Legislative Proposals

Government departments to which TOM legislative ideas were sent for consideration officially had one month to respond to the proposal through a posting on the TOM website. These responses were supposed to comment on the TOM idea as well as explain what action was or was not taken and why. The TOM website actually has misled users about the rate of government response as it displays statistics showing that only 13% of ideas received an answer from the government. In reality, however, the analysis of every single government response reveals that, of the 654 TOM ideas successfully voted in, 580 elicited an official government response – an 89% response rate. Furthermore, each answer was categorized according to the nature of the government response: those explaining how the problem can be addressed using existing legislation; those informing TOM users that the solution to the problem is already in the pipeline as an amendment to current statutes; those expressing a possible implementation of the idea;[9] those generally supportive but with no commitment

[8] A search phrase would be, for instance, a name such as Joe Bloggs. The search could then reveal several TOM-ideas by this one user thus leading to multiple search instances. This explains why there are more search instances than search phrases.

[9] These possibly implemented proposals were either sent by the government to a working group or to a parliamentary commission or else the government explained they would be taken into account seriously when amending existing legislation.

to implement; those that were plainly negative; mealy-mouthed, unclear answers; and, as a separate category, TOM-generated ideas that received positive answers and were implemented at least in part. This categorization is of course partially subjective since lengthy answers could often contain criticism and praise. Thus we categorized answers as positive if at least some element of the proposal was deemed worthy. The distribution of government responses can be seen in Table 5, which shows that nearly half the answers were negative, whilst only 9 ideas (1% of the total) were implemented:

Table 5 The Nature of Government Responses to TOM Legislative Ideas

Type of Answer	N	Percentage of total answers
Negative	276	48
Existing legislation can solve the problem	80	14
Amendment in progress	79	14
Unclear	58	10
Supportive but not implemented	43	7
Possible implementation of TOM idea	35	6
Implemented, at least partly	9	1

2. User Expectations, Frustrations and Evaluations: Interviews with Authors and Government Officials.

The qualitative data analysis presented here is based on three separate yet complementary elements: a survey of TOM users, interviews with authors of TOM ideas and interviews with public officials charged with responding to TOM-generated ideas. In addition to the quantitative data discussed in the previous section, the qualitative data analysis enables us to complete the assessment of how well TOM functioned as a means for enabling e-participation.

The User Survey of TOM Authors

An online survey was conducted among the registered users of TOM between 30 April and 14 May 2007. The questionnaire was sent to 80 persons who had presented ideas via TOM in the period June 2001 - March 2007. The sample consisted of the authors of the ideas with the highest number of votes cast. The survey was completed by 25 respondents (a 31% completion rate). The aim of the survey was to analyze the "lifestory" of the typical TOM-generated idea, focusing on how and why the idea came into being, the efficiency and user-friendliness of the commenting, editing, and voting phase of the portal as well as the eventual outcome. It did so by asking the following six questions: What did you know about TOM before presenting your idea? How and why did your idea come into being and how did it get to TOM? What was your experience of using TOM like (disregarding the quality of comments, voting result, and the eventual government response)? Could you evaluate the comments on your idea, the voting process, and the answer received from the government? What functions should be added to TOM in order to make it more convenient to use and more effective? What should be changed? What could TOM be used for (in addition to its present function)? What would you do with TOM given the possibility?

Only the most salient responses revealing expectations, frustrations and evaluations will be discussed here. Overall, respondents were delighted that TOM existed and found the information presented on the portal explaining how to use the tool and propose ideas clear and sufficient. The instructions concerning voting and commenting were also considered easy and thus no major technical changes to the platform were proposed. Hence the general attitude towards the TOM website is positive, although the visual design of the portal was criticized for being old-fashioned.

The vast majority of those authoring a TOM proposal did so for personal, work- or family-related reasons and, to a lesser degree, because of media coverage of a particular issue. Upon reflection, however, users felt they had not spent sufficient time in formulating the idea as, with the exception of one user who had consulted an outside expert, they were all based purely on individual reflection.

TOM authors also tended to be disappointed that they had not taken advantage of opportunities to advertise their legislative ideas in other fora. In particular, they expressed frustration at not being able to connect with other TOM users who might have comments or vote on their idea. This attitude was closely associated with criticism of the absence of debate among TOM users. Although comments were highly regarded as valuable and insightful, it was acutely felt that there was not enough discussion or interaction amongst users.

In response to these drawbacks, the survey revealed that authors would have preferred the ability to edit their ideas whilst still in the commenting phase. Moreover, users felt that as potential voters and commentators they needed better ways of keeping track of new TOM ideas, through the use of tagging, RSS feeds and email notification, as a means of facilitating debate. However, despite the unmet expectations of inter-user debate, the survey demonstrated that authors nonetheless found the voting procedure fair and legitimate. The significance of this trust in the procedural fairness of the e-participation system must be underscored, since one study of e-petitioning concludes that 'process evaluations far exceed outcome evaluations in influencing petitioner public support' (Carman, 2007: 13). TOM thus meets the criterion of being considered by citizens as 'politically neutral and potentially influential' (*ibid*., 6), which is seen as the *sine qua non* of a successful participatory innovation.

The obstacles to contributing comments on TOM-generated ideas were not perceived as solely a problem of platform design due to the absence of tags, feeds or email notification. Survey respondents repeatedly mentioned how they felt they lacked the relevant knowledge and information necessary in order to be able to post comments and participate in thorough discussions. As most of the TOM-generated ideas concern a very specific policy area and require a certain amount of background information, the number of people commenting on TOM ideas is low and the persons involved in commenting and voting tend to be the same ones. Moreover, the reputation of TOM is considered high, a perception

users referred to as the reason for not posting low-quality or offensive comments that are the norm in many Internet forums.

Besides the lack of discussion, the major criticism – dwarfing in fact the negative comments on the paucity of user debate – of the TOM e-participation initiative was reserved for public officials' answers to the TOM-generated ideas. All the respondents received negative answers (i.e. the presented idea were not to be implemented) and all the answers are described as being too general and mealy-mouthed. This was interpreted by respondents as the sign of an unwillingness on the part of civil servants to contribute to the possible implementation of an idea, which respondents believe is merely seen as extra work by these public officials. Some frustrated respondents ascribed civil servant inability to implement TOM-generated ideas to the latter's low status and lack of higher-level political support. The absence of positive government responses to TOM-generated ideas thus resulted in the respondents' overall pessimism regarding the usefulness of the portal that can be illustrated with the statements like "nothing will change anyway", or "our opinion doesn't count" etc. This finding confirms the real problem of unmet expectations associated with e-participation as also shown by one study of the Scottish e-petitioning experiment revealing that nearly 60% of users felt that online petition failed to develop stronger links between governed and governing (*ibid*. 11).

Interviews with the Authors of TOM Ideas

In addition to the user survey, a smaller number of authors of ideas with a high vote count or ideas the government said had the possibility of implementation were contacted for private interviews. The aim was to discover what changes users wished to see implemented in order to counteract the problems revealed by the user survey. These interviews revealed that authors sought four substantive changes to the TOM platform, concerning *functionality, publicity, information and influence*. Invariably, these proposals all had a complementary

goal, namely, unleashing the full potential of e-participation by increasing the use and impact of TOM.

The first, and perhaps most well-spelled out, demand was for various non-negligible improvements to the functionality of the TOM platform. Authors called for the introduction of a quorum of votes for approving an idea in the hope of improving the quality of ideas submitted to the government. In addition, there is a clear desire to improve the feedback flow throughout the different stages of the TOM process: in the drafting phase, once in the hands of the government and after the formal answer. At the initial stage of devising an idea, authors explained how they required information on whether there had been previous attempts to address similar policy problems via TOM and how these had fared. They also wanted to be kept abreast of how a voted-in idea was progressing through the relevant department – tracking the progress of an idea is a common concern across e-petitioning initiatives (*ibid*.) – and felt even more strongly that it was necessary to introduce a discussion stage after the eventual government response. In the existing system users are not notified of government responses; this demand was also combined with the suggestion of creating the possibility of re-submitting an amended idea following a negative answer. Finally, authors agreed that they were an integral part of the solution for publicizing TOM. Hence they suggested the introduction of a "send to a friend" function as a way of establishing a campaign around TOM-generated ideas.

Closely related to this "send to a friend" function, was the authors' second demand was for the TOM platform to be publicized better in the Estonian public sphere. As shown in the usage analysis, TOM was at its most popular in its debut year when TOM ideas were carried on a major Estonian webportal, a link authors fully supported. Authors felt more creativity was needed in order to generate publicity, for instance by inviting appropriate NGOs to support relevant TOM-generate ideas once they had been voted upon in order to create a lobby effect.

Thirdly, authors repeatedly requested that the TOM platform make more information available in order to assist the development of ideas. In particular, authors want TOM to provide links to documents relevant for devising legislative ideas as well as external discussion forums. This would also be complemented by providing TOM users with information regarding the working plans of government ministries, including legal amendments in process or under consideration. The availability of this information would thus allow users to suggest ideas that would be congruent with current government priorities, thereby ensuring a better positive response rate. Finally, data should also be provided concerning the official responses to TOM ideas received by each government ministry.

Fourthly, it was considered vital to increase the influence of TOM-generated ideas on public policy in Estonia. Besides improving functionality, publicity and information – which should all indirectly, if not directly, increase TOM influence – interviewees thought the potential political impact of TOM ought to be extended beyond merely delivering ideas to government departments. In particular, it was suggested that ideas should also be circulated automatically to the relevant parliamentary committees as well as the coalition council.

Interviews with Public Officials

To provide a balanced and complete picture of Estonia's e-participation initiative, representatives of relevant government ministries handling TOM-generated ideas were also interviewed. The participants were public servants who dealt with the TOM ideas the State Chancellery had forwarded them. Their feedback provides a crucial insight into their perceptions of certain defects in the current TOM system and also reveals the types of changes they are willing to countenance.

The first and most sizeable problem from the civil servants' perspective is the fact that ideas have passed through the system with very few votes as well as often being disproportionately authored by a select few users. Nonetheless, the quality

of TOM-generated ideas was considered higher than the general correspondence from citizens that finds its way into the ministry inbox. Hence there was a willingness to see the TOM system improved as a way of lessening the burden of answering letters from citizens.

A second complaint concerns users' expectations of establishing a policy dialogue with the government courtesy of civil servants' responses to TOM-generated ideas. As with e-petitioning (*ibid*. 10), TOM users expect that the internet provides a unique and hitherto-inexistent means of having their voice heard by government. In practice, this entails burdening civil servants with the task of responding to TOM-generated ideas. Under the terms of the Estonian Public Information Act, Estonian citizens already have a far-reaching right to make public information requests. However, TOM-generated ideas are more difficult and time-consuming to treat because they typically require a more complex answer, one that is taken at a higher administrative level than a public information request.

Consequently, answers to TOM-generated ideas are treated as the official government position. This means the possibilities of citizen to government dialogue using the TOM platform are limited since once a government position has been determined civil servants are obliged in public to defend it. Civil servants thus pointed out that TOM induced unrealistic expectations of civil servants' ability to effect policy change – their function is to execute rather than decide public policy. Nonetheless, the interviewees accepted that TOM would be made more effective by providing users with the working plans of government ministries as well as allowing TOM-generated ideas to be supported by NGOs and other advocacy groups.

3. Enhancing E-Participation: What Technological and Procedural Changes Are Needed?

The above quantitative and qualitative analysis singled out two overarching problems with the current TOM tool: poor citizen mobilization and the low impact of TOM-generated legislative ideas. Both are symptomatic of TOM's limited ability to influence democratic legislative decision-making in Estonia. All modifications to the TOM platform, therefore, have to target ultimately the issue of unmet expectations about e-participation's ability to engender new forms of citizen to government and government to citizen interaction. In this sense, the problem of TOM is one of the burden of expectations, which is also true of most areas of the nascent e-democracy (Schulman, 2003). The value of this paper's in-depth study of Estonia's e-participation experiment is thus precisely the ability to identify the types of changes necessary to help unleash the potential of this new form of democratic interaction.

The study of the TOM data clearly demonstrated that the advent of the technological possibility of enabling citizens to participate in the legislative process was not by itself a sufficient condition for achieving a transformation in democratic practices. This merely confirms the fact that the simple causal interpretation of ICTs as leading to automatic change in social systems – technological determinism (Hansen, 1921; Heilbroner, 1967) – is erroneous (Preston, 2001), just as functionalism is far from always being the most persuasive explanation of particular institutional arrangements (Pierson, 2000). Rather than constituting a sphere separate from social life, it appears that technology is 'constitutive of social life' (Mackenzie and Wajcman, 1999: 23) and the recommendations for improving TOM take account of this fact.

Instead of representing a democratic *deus ex machina* (cf. Sunstein, 2000), therefore, e-participation needs to be embedded in the social and political landscape of a particular polity if it is to fulfil any of its potential for empowering citizens. This is why, on the basis of the data analysis, we suggest a series of procedural changes, *viz* how TOM is used by government, so as to address the problem of embedding e-participation into the public sphere. This type of change requires political will in order to be put into practice. Nevertheless, technology is

by no means neglected, since the analysis also points to the need for certain technological emendations concerning the functionalities[10] the existing TOM platform offers to citizens keen to participate in the legislative process.

Problems with the Existing TOM Tool: The Causes

The intertwined causes behind poor citizen mobilization and the low impact of TOM in the Estonian public sphere can be summarized as follows:

Poor Mobilization:

- Few users
- Dominance of a few mega-users
- Authors disappointed by the lack of user comments
- No linkage between the authoring, commenting and voting phases
- Little discussion of government responses as no user notification of responses
- No possibility of re-submitting revised ideas

Low Impact:

- Public officials contemptuous of low public participation rate
- Answering is a burden on civil servants
- Ideas do not correspond with ministerial priorities
- Civil servants in charge of responding do not make policy decisions - they execute
- TOM-generated ideas are lost once responded to; they drop out of policy debate as civil servants defend official line

Suggested Technological Changes: Improving TOM's User Functionality

Impact is directly related to the number of TOM users, in particular the number of user votes each idea musters. The current TOM tool only requires a simple

[10] Thus the analysis does not dwell on software-related issues.

majority of votes to allow an idea to pass; there is no quorum. This was interpreted by civil servants as a major weakness because it meant that they had to respond to ideas through a formal, cumbersome process on the basis of a mere handful of votes. To avoid this awkward situation, an *adjustable quorum* could be introduced to ensure that the ideas presented to the various government ministries have the backing of a more significant number of users. The quorum would be set in proportion to the total number of registered users so that greater citizen mobilization would be reflected directly in the voting process. As a result, the ideas voted in will have the sanction of a greater number of users, thereby increasing the chances that the government and other interested parties will take them seriously. Consequently, ideas voted in by only a small number of users would not burden civil servants, thereby avoiding removing a major source of their frustration with TOM.

The current TOM tool subdivides the practice of e-participation into different phases once an idea is proposed: discussion, revision followed by voting. As shown in the qualitative analysis, TOM users, authors in particular, expressed dissatisfaction with the linkages between these separate phases. Invariably, users explained that there was no way of keeping track of discussion and revision of TOM-generated ideas, which led to frustration and disengagement with the e-participation process. For instance, authors were disinclined to remain engaged in e-participation in the face of the indifference of other users as indicated by a lack of comments. This flaw can be remedied thanks to the introduction of a *comprehensive system of categorizing TOM-generated ideas*, which would further allow for a search of TOM ideas by tags or categories as well as a notification system for alerting users to new or cognate ideas.

The categorization of legislative ideas is easy to accomplish using a social bookmarking service such as www.del.icio.us, which would assign tags – in essence, keywords – to each idea and relevant comments. The introduction of comprehensive tagging of all legislative ideas and comments on the TOM tool

would have two immediate benefits. Firstly, it would make it much less likely that an existing proposal would simply be duplicated. Secondly, and more importantly, searchable tags would assist authors when proposing new legislative ideas in cognate areas. A searchable database would enable potential authors to make contact with previous authors and those who have commented on relevant previous ideas, thereby making it easier to mobilize a community of e-participation users to support a TOM-generated idea. Furthermore, the knowledge that comments will be stored for future use should also act as a disincentive for users to post *ad hominem* messages (replying to an argument or factual claim by attacking or appealing to the person making the argument or claim, rather than by addressing the substance of the argument or producing evidence against the claim).

Tagging needs to be complemented by the *introduction of a system of email notification or RSS feed* (Really Simple Syndication, an automatic system for alerting subscribers of updated website content without them having to visit the actual website) automatically informing users of new ideas in certain policy areas. In addition, this system could alert authors to comments on their ideas. Likewise, the RSS feed function would also notify commentators if an author amended her legislative proposal. TOM users' suggestion of introducing a "send to a friend" function also represents an optimal solution for increasing awareness of the e-participation platform as well as a way to generate more user discussion.

Authors were particularly disappointed with the lack of information regarding the progress of their TOM idea once successfully voted upon and sent to a government ministry. A remedy for this would be the creation of an automatic system (by email notification or RSS) whereby authors and other users can track the progress of a voted-in idea in the stages leading up to the official government response. This would not only enhance the transparency of the e-participation process, thereby showing that the government takes the fruits of e-participation seriously. It would also enable the user community to mobilize in the crucial

period of government decision-making by allowing users to know the timing of government decisions and thus organize their mobilization accordingly. Indeed, this notification system should also encompass the eventual government response as the interviews with authors indicated that they were particularly dissatisfied by the failure of the existing tool to signal a government response to their idea. Government responses could then also be tagged and added to the searchable TOM database so as to help authors of new ideas to discover previous government responses to ideas similar to theirs. Furthermore, government responses would make an ideal subject for comments, thereby increasing citizen to citizen interaction within the user community, potentially acting as a means for generating improved ideas.

Finally, the existing TOM tool does not allow for the resubmission of rejected ideas – a flaw TOM users, according to the analysis above, want to see rectified. Thus a system for revising and resubmitting ideas would represent a significant improvement of the e-participation tool. Depending on the type of response a TOM-generated idea received from the government, the resubmission facility should allow users to amend the legislative proposal accordingly. It seems only appropriate, however, that a newly-amended proposal for resubmission should also be subject to a new vote by the community of users. Resubmission could thus potentially serve to reflect the intensity of citizens' preferences, adding to the pressure on government for a positive response, especially if the idea was supported by third parties such as NGOs or political actors.

Suggested Procedural Changes: Changing the Way Government Uses E-Participation

Perhaps the Estonian government's biggest shortcoming in its use of e-participation is its failure to publicize the TOM platform. However, this shortcoming seems endemic in e-participation initiatives. A United Nations study of this nascent field of e-democracy recently concluded that 'one of the main

reasons for lack of interest in e-participation stems from the fact that public authorities do not take the trouble to market the initiative or explain the use and advantage of e-participation efforts' (UN, 2007: 123). Figure 1 showed that the launch year, when TOM legislative proposals were carried by Estonia's most popular webportal, saw the most TOM-generated ideas. If the government is serious, therefore, about realizing the full potential of e-participation, it *must take positive steps towards better advertising the existence of the TOM platform*. These steps can vary across different media yet are nevertheless simple to put into effect. For instance, internet portals and online newspapers can be mandated to incorporate permanent links to TID+ in their current affairs coverage. Likewise, traditional print media (newspapers and periodicals) as well as TV and radio coverage, especially public broadcasting, could mention the TOM website, even if only in a byline, as a forum for further public debate or for demanding government action. By itself, the existence of an e-participation platform counts for little unless it is actively promoted as a means to pass new legislation.

Advertising alone is no nostrum for ensuring the success of e-participation. If TOM is to have a greater impact, it seems that *the ideas it generates ought not to be circulated solely to government ministries*. Citizen to government communication has to be understood more broadly, in terms of a public sphere (Habermas, 1989) in which citizens participate and to which government is responsive. Hence TOM-generated ideas can contribute to public debate within the public sphere if these legislative proposals are also communicated directly to decision-making actors such as parliamentary committees or even partisan or advocacy organizations such as political parties and NGOs. In fact, civil servants interviewed for this research approved the notion of allowing interest groups to express their support for TOM-generated ideas during the phase of government consideration. In this way, e-participation can have a greater impact on political decision-making instead of being left in the hands of unelected public officials whose mission is to execute rather than decide public policy.

One of the complaints common to both the authors of TOM ideas and civil servants was the fact that TOM-generated ideas did not match ministerial priorities. Consequently, even ideas that did not require high-level decision-making did not meet with a positive response. To overcome this problem, government needs to provide citizens using the e-participation tool with *detailed information on the current policy priorities of each government ministry*. This would enable potential authors of legislative proposals to tailor their suggestions to current priorities, thereby increasing the chances that ideas generated via e-participation will meet with a positive answer.

The final suggestion aimed at changing the way government uses e-participation concerns the relationship between e-participation and future statute amendments. If the possible impact of e-participation on the legislative process is to be maximized, it seems fruitless to simply lose track of rejected legislative proposals. Thus rejected ideas should be kept on file in the relevant ministries, especially those rejected for their lack of congruence with current government priorities. In this way, subsequent statute amendment or policy priorities that might correspond with or relate better to earlier TOM-generated ideas will not be lost and might well benefit from the input of earlier e-participation debates. Moreover, this promise to safeguard and potentially re-examine the usefulness of TOM-generated ideas will also demonstrate the government's willingness to incorporate citizen input into the legislative process, which as the interviews showed, is a key element of citizens' expectations about e-participation. If this expectation is not met, trust in e-participation as a cornerstone of reforming the democratic process in the twenty-first century is likely to be undermined.

Conclusions: The Importance of Being Earnest About E-Participation

E-participation gives citizens an unprecedented ability to use their "voice" (Hirschman, 1970) in the democratic process. This study has demonstrated,

using data from the Estonian TOM initiative, citizens' trust in the e-participation process. However, the analysis also revealed the extent to which citizens were frustrated by the inability of TOM to meet their expectations about having their voice heard – only one percent of TOM-generated ideas were implemented. This finding only confirms the fact that 'the use of ICT alone cannot accelerate the democratic process because the process itself has to be thought through so that the use of ICT is designed to promote and nurture it' (UN, 2007: 121).

Hence the greatest challenge to e-participation is the threat of unmet expectations. When conceptualized according to Hirschman's model of the interrelation between exit, voice and loyalty, it appears that the addition of a new outlet for voice, in the form of e-participation, is no instant remedy for the problem of public distrust of political institutions. Voice only succeeds in promoting loyalty if the use of voice leads to reform; when voice becomes futile, the result is exit, in the sense of disengagement (Hirschman, 1970). From this perspective, governments seeking to implement e-participation appear not to have the option of doing so half-heartedly. Citizens' willingness to trust the e-participation process can only be sustained if the system has notable effects on the legislative decision-making process.

To a certain extent, as argued in section three, being earnest about e-participation is a product of offering the appropriate functionalities to users. As the Estonian case shows, the lack of certain functionalities hampered both the ability to create inter-citizen debate within the e-participation community and the ease with which citizens could be mobilized to join the community. Yet the evidence also points to the crucial importance of political will in fulfilling the potential of e-participation. The irony is, as revealed by the TOM case, that this novel mechanism for bottom-up political participation cannot rely solely on bottom-up citizen engagement in order to be effective. Rather, top-down coordination by government is required to place e-participation at the heart of

public debate. Only in this way can e-participation begin to meet the expectations it has already engendered.

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