Usage Statistics of the Estonian Voting Advice Application
www.valijakompass.ee

A Report

Kristjan Vassil*

March, 2011
Florence, Italy

---

*kristjan.vassil@eui.ee, Department of Political and Social Sciences, European University Institute, Florence, Italy
1 Introduction

Voting Advice Applications (VAA)s are websites offering voters an opportunity to compare their political issue preferences with those of the parties. Based on the party positions that are extracted beforehand from party manifestos and other public documents\textsuperscript{1}, VAA\textsc{s} calculate the percentage of an agreement between the party and the voter. For the voter, policy preferences are presented as statements or questions for which users can express their agreement or disagreement. Based on the overlap on each policy issue an aggregate agreement is calculated which informs users of their congruence with the political offer. The outcome is usually referred to as voting advice that voters may take into consideration when going to the polls.

Voting Advice Applications (VAA) proliferate across Europe and beyond. They are also not new in Estonia. Since the 2005 local elections at least one VAA has been available for each election in Estonia. For the 2009 European Parliament elections at least two VAA\textsc{s} were available and so was the case for the recent 2011 national elections.

Irrespective of their relative popularity, little is known, however, about the usage numbers that VAA\textsc{\textsc{\textsc{s}}} in Estonia have attracted. It has so happened that the two VAA\textsc{\textsc{\textsc{\textsc{s}}} organized for the national elections of 2011 have reported the number of voting advices issued, but retrospectively such information is unavailable. In order disclose the usage numbers of the www.valijakompass.ee - an Estonian VAA designed to cover the 2011 national elections - this report provides descriptive statistics for the record.

When reading this report, one has to maintain that it provides simple descriptive statistics of www.valijakompass.ee usage with no substantial interpretation. If interpreted, one has to keep in mind that the data presented in this report reflect the population of www.valijakompass.ee users - a sample that has self-selected itself into the VAA usage. Therefore, no generalizations upon the electorate can be made on the basis of these data.

2 Purpose of the project

The purpose of the www.valijakompass.ee (a literal translation of electoral compass in Estonian) was to offer voters with an opportunity to compare their issue preferences with the political offer of the parties during the national elections on March 6, 2011.

\textsuperscript{1}Depending on the VAA, party positions can be also inferred from parties’ own self-positioning.
In order to achieve this, a team of sociologists, political scientists, journalists and public opinion experts (the council of Valjakompass) identified 30 salient policy statements. For each of the statements it was possible to take a stance expressing one’s agreement or disagreement with it. Parties were then allowed to position themselves across those 30 issue statements and in parallel to the self-positioning of the parties a team of 5 coders individually identified where parties stand in terms of proposed statements. Each statement was validated via publicly available documents which - additionally to the official party manifestos and election programs - included media texts, interviews, etc. After synchronizing the codes among the five coders the outcome was compared with the parties’ self-positioning results. In case of a disagreement between the coders’ judgement and parties self-assessment, parties were asked for publicly available sources that would disconfirm coders’ decision. If such evidence was provided, party’s self-assessment prevailed, if not, the one of the coders’ prevailed.

The application was funded by the Open Society Foundation, developed in collaboration with Estonian National Broadcasters and E-Governance Academy and made available on January 24, 2011. For the detailed overview of the team involved in the development process as well as the employed methodology please refer to the www.valijakompass.ee.

3 Statistics

Three types of data will be reported in the subsequent sections of the report. First, aggregate statistics on the general usage patterns will be reported. These data come from Google Analytics that monitored the traffic on the website since January 25 - that is, one day after the official launch of the service. Second, we report which parties were most frequently advised to the users. Third, aggregate statistics on the registered users will be provided. The two latter groups of data are retrieved from the log files of the application.

3.1 Aggregate usage statistics

Total number of advices issued

The total number of voting advices issued between the launch day on January 24 and the Election Day on March 6 was 111 535. To be sure, it is a number of voting advices issued, not the number of visitors. In other words, www.valijakompass.ee delivered a voting advice 111 535 times.

Furthermore, this number contains only those users who stayed on the web-
site for longer than 2 minutes. That is, the time between starting the process (clicking on the start button) and obtaining the vote advice (seeing the first page of results) had to be at least 2 minutes before we logged the advice as actually being delivered.

By imposing a 2 minute time constraint we omit non-serious responses and gain at least some certainty that those advices were issued to voters genuinely interested in the outcome. As a point of reference, the total number of visitors was 163,715. However, it is advisable to rely on a more conservative measure reported above.

**Average time of usage and traffic sources**

Our 2 minute time constraint appears to be overly modest as the average time spent on the website (reported by Google Analytics) was 11 minutes and 20 seconds. Table 1 reveals the top traffic sources accounting for the 86 per cent of the total traffic. It also includes the corresponding averages of time spent on the website. Perhaps the most staggering finding in this respect is that those coming through Facebook spend only half of the time on the website as compared to all other sources.

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency</th>
<th>Average time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>41.9%</td>
<td>00:11:50</td>
</tr>
<tr>
<td><a href="http://www.google.com">www.google.com</a></td>
<td>17.7%</td>
<td>00:12:26</td>
</tr>
<tr>
<td><a href="http://www.facebook.com">www.facebook.com</a></td>
<td>12.2%</td>
<td>00:06:39</td>
</tr>
<tr>
<td><a href="http://www.neti.ee">www.neti.ee</a></td>
<td>8.3%</td>
<td>00:13:52</td>
</tr>
<tr>
<td>valimised.err.ee</td>
<td>4.6%</td>
<td>00:12:03</td>
</tr>
<tr>
<td>uudised.err.ee</td>
<td>1.0%</td>
<td>00:11:35</td>
</tr>
</tbody>
</table>

**Number of advices issued over time**

Figure 1 demonstrates the frequencies at which advices were issued on the daily basis during the period between the launch day and the Election Day. It is immediately apparent that the VAA received greatest interest on the very first day, whereas the number of advices leveled off after the fourth day. An average number of advices issued per day was 2,656.
Number of unique users

On might clearly wonder, what was the number of unique advices withdrawn. For this measure we lack reliable data. However, we can infer an approximation through Google Analytics that reports a percentage of unique visitors, i.e. those who only came once to the website of www.valijakompass.ee. The proportion of unique visitors amounts to 72 per cent. Assuming that the ratio between unique and returning visitors remains constant throughout the six week period, we can calculate an approximate proportion of unique advices and those that are being delivered more than once per user.

It follows that 80 305 advices were issued to unique users (corresponding to 72 per cent of a total of 111 535 advices issued) and the remaining 31 230 were issued for those returning to the website more than once. Again, there is no absolute certainty with regard to unique advices issued, but it would be extremely unlikely that the true results would be considerably different from these approximations. If this holds, then www.valijakompass.ee issued a voting advice to 8.8 percent of the electorate.

Language and countries

One of the goals of the www.valijakompass.ee was to be available also for the Russian-speaking minority. For these purposes the entire application was trans-
lated into Russian and the users could choose the language one the front page of the VAA. However, only 1 625 advices were delivered in Russian - far too little considering the size of the Russian-speaking population in Estonia.

As regards the visitors from outside Estonia, Google Analytics reports that queries to the Valijakompass website were made from 70 countries across the globe.

3.2 Voting advices by parties

Which party was most frequently advised to the users of Valijakompass? Table 2 provides an answer to this question by displaying an unweighted and weighted advices by the distribution of parties. In either case, the most frequently advised parties were the Greens and Pro Patria & Res Publica Union followed by Reform Party and Christian Democrats. The frequency at which Social Democrats, Centre Party or People’s union was suggested remained below 10 per cent. It must be stressed that these findings only demonstrate the highest overlap between the Valijakompass users and a given political party.

<table>
<thead>
<tr>
<th>Party name</th>
<th>Weights omitted</th>
<th>Weights included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Party</td>
<td>37.3%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Pro Patria &amp; Res Publica</td>
<td>22.8%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Reform Party</td>
<td>12.6%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Christian Democrats</td>
<td>11.9%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Social Democrats</td>
<td>6.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>People’s Union</td>
<td>5.1%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Centre Party</td>
<td>4.2%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

3.3 Statistics on registered users

www.valijakompass.ee offered its users to save their political profile. In order to do so, one had to register with the VAA. During the process of registration we asked the respondent to provide us with four demographic variables: age, gender, education and place of residence. In total 3 582 respondents registered. This section displays statistics with regard to these four demographic variables across the population of registered users.

Again, as registration was not mandatory this subsample of the entire universe of users may considerably differ in both observed and unobserved charac-
teristics. Therefore, no inferences can be made with regard to the overall Valijakompass user base on the basis of registered users.

Age and gender

The age distribution of the registered users is displayed in Figure 2. As one might have expected age is skewed toward the young (indicated by the long tail on the right hand-side), but the mean age of 47 years clearly shows that registering with Valijakompass also attracted users beyond the young cohorts - those who are often associated with the usage of internet applications.

Also notice 18 year olds - those who are eligible for voting at first time - peaking at 4 per cent of total users. Again, there is no certainty to expect the self-selected population of registered users to be representative of the entire population of Valijakompass users, but if at all, then it is probable that the entire population would have an even higher mean age and therefore also more equal age distribution across users.

Figure 2: Registered users by age (in per cents)

As regards gender, the population of registered users almost equally represents both males and females (Table 3).
Table 3: Registered users by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1725</td>
<td>48.3</td>
</tr>
<tr>
<td>Female</td>
<td>1846</td>
<td>51.7</td>
</tr>
</tbody>
</table>

Education

Table 4 demonstrates that those with higher education are clearly overrepresented in the sample of registered VAA users. However, there is a notable presence of those with secondary and even elementary education.

Table 4: Registered users by education

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>36</td>
<td>1.0</td>
</tr>
<tr>
<td>Elementary</td>
<td>208</td>
<td>5.8</td>
</tr>
<tr>
<td>Secondary</td>
<td>1323</td>
<td>37.1</td>
</tr>
<tr>
<td>Higher</td>
<td>2004</td>
<td>56.1</td>
</tr>
</tbody>
</table>

Place of residence

As regards the place of residence the majority of registered users come from Tallinn or Harju county (which surrounds the capital) and Tartu.
Figure 3: Registered users across electoral districts and cities (in per cents)
4 Concluding remarks

A number of studies have shown that VAAs interfere with the political behavior of their users (Boogers, 2006; Kleinnijenhuis and van Hoof, 2008; Ladner et al., 2008; Marschall, 2005, 2009; Ruusuvirta and Rosema, 2009). To some they function as a form of intellectual entertainment, to others as additional information sources leading to changes in voting preferences and possibly in political behavior.

It has so happened insofar that VAAs - in Estonia and elsewhere - have emerged mostly from either scholarly or non-partisan interest, thereby providing at least from the outset a decent level of credibility. Yet, there is no certainty that these applications will not be used for partisan purposes. In other words, VAAs can be effectively used in electioneering as campaign tools in providing anything but non-biased vote advice to their users. In fact, Ramonaite (2010) provides evidence under which conditions Lithuanian parties can acquire such incentives. The normative implications of such events are immense.

However, there is and always will be a degree of bias in every VAA that is offered. Intentional or not, full objectivity cannot be achieved. What can be achieved, though, is a full transparency of the methods and procedures employed by the VAA in order to achieve highest neutrality possible. These can be then questioned and validated in order to arrive at improved techniques containing even lower degrees of bias in the final results. For precisely these reasons www.valijakompass.ee has remained fully open to external critique by disclosing its procedural and methodological core. This report aimed at taking the level of transparency even further and provided the statistics with regard to the usage patterns for future record.
References


