Improving Adoption of AI Impact Assessment in the Media Sector

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Abstract. We present an evaluation of tools for assessing the impact of AI in the Dutch media sector. Our evaluation of the ECP AIIA tool shows the need for clear guidelines in the adoption of various AI applications within Dutch media organisations. We conclude that the adoption of impact assessment tools, such as the ECP AIIA, is not held back by common media practice, but rather by commercial considerations.

1 Introduction

Artificial Intelligence (AI) can be a valuable tool for media applications, and media companies have shown a growing interest in the responsible application of it. AI is increasingly used in, for example, content personalisation, automatic subtitling, and labeling of archive content [3,10]. However, applying AI responsibly is challenging and media organisations struggle with this task.

Previous research has shown that available tools or guidelines to support the design of responsible AI are not used by the participating media organisations. Reasons for this are that tools and guidelines are perceived to be not sufficiently tailored to their needs, it is not clear which of the tools fits best, and in what phase of a project which tools should be used [8]. Many media organisations also mentioned that most considerations around ethics are done implicitly and that ethical criteria and risks concerning AI are not documented [8].

Within other domains, e.g., information privacy, the use of governance methodologies for assessing and mitigating the impact of new technologies is already more established [2,9]. Within these fields, impact assessments are used to consider complex social and technical questions combining values from the public, outside experts, and policymakers. Many different impact assessment frameworks for AI exist (see, e.g., [9] for an overview). A number of well-known assessment frameworks in the Netherlands are the Data Ethics Decision Aid (DEDA) [11], Electronic Commerce Platform Netherlands (ECP) AI impact assessment (AIIA) [5], and the AI impact assessment of the Dutch Government [6]. Other well-known international impact assessments include ALTAI [1] and IEEE 7010 [4]. Of these, the AIIA appears to be the most straightforward tool to use for Dutch media organisations due to its compact format compared

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to the DEDA. As mentioned above, media organisations currently do not use these impact assessments as they are deemed impractical. Media organisations suggest that impact assessments should be particularly tailored towards media organisations which leads to the following research question:

> *Which adaptations to an AI impact assessment like the ECP AI Impact Assessment are necessary to make it applicable and practical within the context of media companies?*

In the remainder of this paper we first briefly describe the intent of AI Impact self-assessment tools, in general, and ECP AIIA, in particular. Next, in Sect. 3 we describe our approach to finding the answer to our research question and the results. Finally, in Sect. 4 we reflect on the results and discuss potentials for future research.

2 AI Impact Self-assessment

Within the media sector there is a growing recognition of the importance of the responsible application of Artificial Intelligence. With the ever increasing improvements in usable AI applications for media purposes (e.g., Generative AI for content creation, tools for filtering, automatic subtitling, and automatic trailer generation), the media sector realises the importance the responsible use of such tools. The declaration of intent for the responsible use of AI in the media sector [7], is a clear example that shows how serious this is for the media sector. The declaration of intent has been signed already by some of the largest media companies in the Netherlands, including NPO, RTL, and Talpa, which together cover more than 75% of the Dutch Television market.

Although the intentions are clear, the processes to achieve the responsible use of AI tools was not. As mentioned in the introduction, a previous research among media companies showed that the available tools or guidelines to support the responsible use of AI are not used.

There are several self-assessment tools available, including DEDA [11] and ECP AI Assessment Tool [5]. Ethical self-assessments are tools, usually in the form of a structured questionnaire, to be used by a company to predict the impact of their intended use of AI-systems. These questionnaires evaluate the use of AI on ethical and legal aspects in a structured manner. By performing an ethical AI assessment, it should warn companies for (negative) side-effects of the implementation of AI.

The ECP AI Assessment (AIIA) consists of three phases; **1.** necessity phase (step 1); **2.** description phase (steps 2–5); **3.** decision and reporting phase (steps 6–8) (also see Fig. 1). The first phase, the first step, consists of eight questions that are meant to ascertain whether there is a necessity for executing an AIIA assessment. If only one of these first eight questions is answered with “yes”, ECP advises to perform a full assessment.

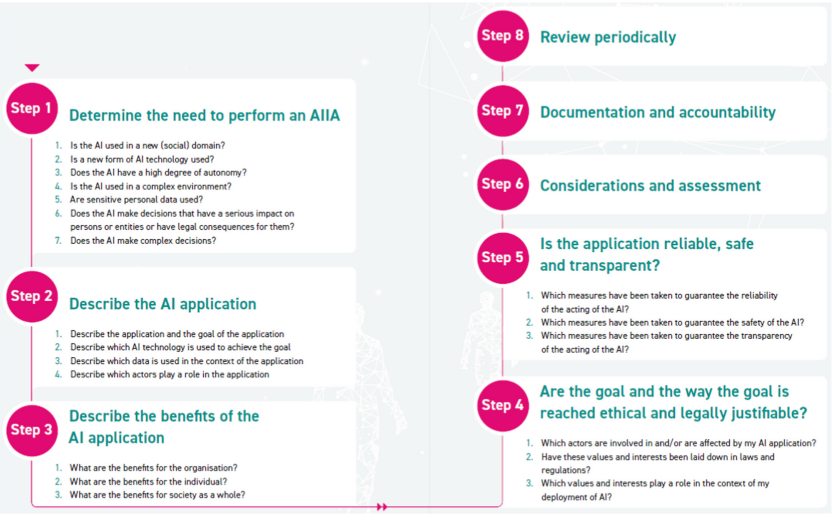

Fig. 1. A schematic overview of the first steps of the ECP AI Impact Assessment tool. Details per question are provided in the documentation, see [5].

The next phase, consisting of steps two to five (see Fig. 1, consists of the description of the application, the description of the gains, the analysis of the ethical and legal responsibilities, and the analysis of the reliability, safety and transparency of the application. Each of these steps contain a number of questions, some further detailed in sub-questions.

The last phase, consisting of steps six to eight (see Fig. 1), details the questions to help make a decision, the documenting of the decision, and the periodic evaluation. In this research we have focused on the first two phases (steps 1–5), as these match closely with the need of the media companies.

3 Method and Results

To answer the research question presented above, we used a qualitative, mixed-methods methodology.

The research was performed as a case study at a large Dutch media company. First, we investigated the working processes and ethical awareness of the media company through an unstructured, participatory observation of the data science team in their day-to-day activities during an AI development project to decide on how and where the AIIA could be used in their current processes. During the evaluation period of three months the researcher did not observe planned, as in during meetings, or unplanned moments where ethical implications or considerations of the examined project or other projects of the company were discussed. Ethical consideration seem to be made based on intuition or common sense and not documented, as acknowledge by the data science manager. As AI projects

become more complex and autonomous, finding aid through an assessment such as the AIIA could make such common sense intuitions more structured and explicit.

Next, an exploratory interview was held with the project managers to assess challenges with the AI impact assessment. For each step of the AIIA Table 1 shows the questions that were asked to the participants that did the AIIA. After finishing all the steps of the AIIA, we asked several more questions which can be found in Table 2.

Table 1. Questions asked after doing a step of the AIIA

1	*Do these questions make you evaluate the project in a useful way?*
2	*Were there any questions that were not relevant or useful?*
3	*If so: would any of these questions be relevant or useful for other project?*
4	*What were the important insights gained in this step?*

Table 2. Questions asked after completing the AIIA

1	*What were the substantive insights gained during this assessment?*
2	*What are the insights gained about the usage of ECP AI Assessments?*
3	*Was any step particularly useful?*
4	*Was any step not useful?*
5	*Would you consider doing ECP AI Assessments for new projects?*
6	*If not: Why not?*
7	*What is needed to make doing an assessment worthwhile?*
8	*If so: Why? What is important about doing an assessment?*

We conclude that the company mostly deemed the time investment of 2.5 hours to fill in the AIIA as too much, and that the expected value of executing an AIIA differs largely between parts of the assessment. For instance, step **4** ("Are the goal and the way the goal is reached ethically and legally justifiable?", see Fig. 1) was seen as most interesting, whereas steps **1**–**3** were deemed of no or little use. Based on the outcomes of the interview, the following adaptations were suggested:

– Step **1** through **3** of the AIIA contain steps to analyze if an assessment is necessary and describing the AI project and its benefits. These three steps took 1 h and 20 min to document, however the description, actors and benefits of projects at the media company were already documented internally for each project. These three steps felt as obsolete to the participants, and we therefore

propose step **1**–**3** to be highly shortened by time boxing or to be left out of the AIIA completely, if the project is documented well in advance.
- Step **4** felt as the most valuable part of the assessment to the participants. The participants suggested to include the company's values in this step.
- To better integrate the AIIA within company processes, participants who take part frequently are advised to read the documentation of the AIIA. Incidental participants are advised to read page 68 and 69, while recurring participants should additionally read pages 70–80, to gain more in-depth knowledge of the AIIA and ethical considerations.
- Create a company-wide template for the documentation of the AIIA, including all questions and existing documentation.
- Projects at this media company were often continuations of previous projects. If the risk profile and ethical implications overlap between projects, the same findings can be copied or it can be evaluated if a new assessments needs to be performed.

Following these adaptations we except the duration to be minimized from 2, 5 to 1 h for well-documented projects, while ethical and juridical analyses remain covered.

Finally, a structured, non-participating observation was used to assess the functioning of the adapted AIIA within the organisation. Data scientists were observed during application of the improved assessment. Attention was paid to the time required to perform the various steps of the assessment, and the results were qualitatively evaluated with the data scientists. Overall, the participants were positive about the adapted assessment, and stated that they are interested in implementing it into their work processes. The reduction in time required to perform the assessment was key in lowering the threshold to use the assessment.

4 Discussion

Adapting and applying the AIIA contributed to creating an awareness in the media organisation about the importance of reflecting on ethical aspects in the development and deployment of AI. Next to the fear of a large time investment, which could be solved with some minor adaptations, it seems that the main reason why impact assessments were not used is because of unfamiliarity and ignorance about the value and application of such assessments. We expect that impact assessments, like AIIA, are relevant for other media organisations, and will look further into this in future research.

Moreover, it appears that the media organisation's original assumption, which we shared initially, that impact assessments should be adapted towards the media practice does not hold. The main issues found in the adoption were not because of particular requirements from media practice, but from commercial considerations (i.e., time investment versus pertained value).

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