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D 1.4: Updated project vision

MARCONI will enable interactive and personalised radio experiences



The deliverable D.1.4. describes the updated general concept of MARCONI on the basis of the five objectives that originally drove the vision, concept and approach of the MARCONI consortium pursues in order to implement and validate the overall goal of MARCONI. The updated general concept contains the deviations, adapted and actually performed use cases and pilots, the used methodology and an updated vision of the envisioned MARCONI system.

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Executive Summary

The overall objective of MARCONI was to enable fully interactive and personalised experiences, through integrating 'live' broadcast radio with digital platforms and social media, enabling better convergence around radio experiences.

To realize this vision there were **five specific objectives** formulated at the start of the project [see D1.1]. These objectives drove the vision, concept and approach the MARCONI consortium pursued in order to implement and validate the overall goal of MARCONI.

The following five objectives were central to this concept:

1. Enable the listeners to interact with radio in a personalized way through their preferred (social) channel and remain connected;
2. Optimise tools and platforms for the radio editorial team to give them a better overview of interaction in order to engage more and better with their audience;
3. Build innovative services and platforms to enable automation of user interaction;
4. Validate the MARCONI concept by running large scale pilots;
5. Develop innovative new business models around personalised and automated interaction within the radio community.

Now 24 months, several use cases and pilots later we present an updated project vision. Some deviations were necessary but nevertheless the overall Marconi objective kept its relevancy.

Therefore, we turned the overall objective into **'MARCONI is to enable interactive and personalised experiences, through integrating 'live' broadcast radio with digital platforms enabling better convergence around radio experiences'**.

Compared to the original formulation of the overall MARCONI objective, we left out 'fully' because this seemed to be too broad and therefore unrealistic to achieve. We also removed the term 'social media' as we learned that radio stations prefer to communicate with listeners via their own channels (i.e. dedicated smartphone apps) whereas Social Media is often approached by radio stations as pure marketing channel (i.e. for PR purposes). As a result, the two objectives (1) 'Marconi enables interaction with radio in a personalized way through the user's preferred communication channel' and (2) 'The Marconi platform will integrate at least 5 different communication channels' are not completely realised.

In this document we will further describe the original objectives and deviations, the realised pilots. In addition, we will give a quick overview of the work that still needs to be done and is in progress.



Table of Content

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Executive Summary	4
Table of Content	5
List of Figures	6
Abbreviations	7
1. MARCONI Updated General concept	8
1.1. <i>Introduction</i>	8
1.2 <i>Workshop “Towards and Updated Project Vision”</i>	8
1.2.1 <i>Methodology</i>	8
1.2.2 <i>Results</i>	10
1.3. <i>Objectives</i>	12
1.4 <i>HRadio</i>	14
2. MARCONI Use Cases	14
3. MARCONI Methodology	15
3.1. <i>User-driven approach & continuous validation</i>	15
3.2. <i>Agile approach</i>	15
3.3. <i>Loosely coupled design</i>	16
3.4. <i>Legal assessment and privacy validation</i>	16
4. MARCONI Pilots	17
4.1 <i>Pilots NPO</i>	17
4.2 <i>Pilots VRT</i>	19
5. <i>Stakeholder management</i>	21
6. MARCONI Next steps	22



List of Figures

<i>Fig. 1. Twitter post of the workshop Towards and Updated Project Vision.....</i>	<i>.p.10</i>
<i>Fig. 2. Example of suggested automatic replies.....</i>	<i>p.13</i>
<i>Fig. 3. Eric Ries Lean Startup feedback loop.....</i>	<i>p.16</i>
<i>Fig. 4. Chatbot NPO Radio 5.....</i>	<i>p.18</i>
<i>Fig. 5. Studio Messenger NPO Radio 2.....</i>	<i>p.18</i>
<i>Fig. 6. Audio-to-go app NPO Radio 1.....</i>	<i>p.19</i>
<i>Fig. 7. Trello board with the future Marconi features.....</i>	<i>p.20</i>



Abbreviations

API	Application programming interface
CRM	Customer relationship management
FOMO	Fear of missing out
GUI	Graphical user interface
H2020	European Union's Horizon 2020 research and innovation programme
HRadio	Hybrid Radio focuses on radio service innovations enabled by convergence
MARCONI	Multimedia and Augmented Radio Creation: Online, iNteractive, Individual
OTT	Over the top, a media distribution practice
PaaS	Platform-as-a-service
SaaS	Software-as-a-service
SMS	Short message service
StuBru	VRT Studio Brussel



1. MARCONI | Updated General concept

1.1. Introduction

The overall objective of MARCONI is to bring radio experiences to the next level and making it ready to remain as strong as it currently is over the next decades and enabling new ways of radio making.

As stated in the summary the overall objective is adjusted a little bit but still highly relevant:

'MARCONI is to enable interactive and personalised experiences, through integrating 'live' broadcast radio with digital platforms enabling better convergence around radio experiences'.

We left out 'fully' because this seemed to be too broad and therefore unrealistic to achieve. We also removed the term 'social media' as we learned that radio stations prefer to communicate with listeners via their own channels (i.e. dedicated smartphone apps) whereas Social Media is often approached by radio stations as pure marketing channel (i.e. for PR purposes). As a result, the two objectives (1) 'Marconi enables interaction with radio in a personalized way through the user's preferred communication channel' and (2) 'The Marconi platform will integrate at least 5 different communication channels' are not completely realised. However, the Marconi platform enables also the integration of social media but until now we focused mainly on the use of the apps.

This high-level vision update is informed by two years of hands-on MARCONI development and is supported by the lower-level findings of an intra-consortium workshop that was organized at the plenary meeting in Brussels on May 28th, 2019. Section 1.2 will describe the methodology and the results of this workshop, after which Section 1.3 will describe the five original MARCONI objectives (as listed in D1.1) and the deviations that have occurred.

1.2 Workshop “Towards and Updated Project Vision”

1.2.1 METHODOLOGY

To uncover evolutionary changes to the MARCONI vision (compared to the initial vision as communicated in D1.1), an internal workshop was conducted in which every consortium member except for UNIVIE participated. The workshop was prepared by critically reviewing D1.1 to extract from it all covered MARCONI objectives and concepts. This review yielded a total of 41 atomic objectives and vision statements (6 high-level ones and 35 lower-level ones), which were exploited to populate an interactive questionnaire (deployed using the [Socrative](#) tool). For each of these 41 statements, participants needed to select one of the following 5 pre-defined answers:



D 1.4.: Update project vision (V 0.3) | Public

- Yes, this fits the project vision and is implemented fully
- Yes, this fits the project vision and is implemented partially
- Yes, this fits the project vision, but is not currently implemented
- No, this is no longer relevant
- I don't know

The interactive questionnaire was run in a plenary fashion, with a moderator pacing the presentation of the 41 questions.

Once all questions of the interactive questionnaire had been answered, the next phase of the workshop commenced, where participants were divided into three small groups with different consortium members mixed together with different roles. These groups were asked to think about amendments or additions to the project vision, hereby bearing in mind the 41 vision-related questions they had just answered. In particular, this phase commenced with each member of each group individually thinking about potential project vision updates (time slot of approximately 5 minutes). Then, an intra-group discussion ensued (time slot of 10 minutes) where the group had to reach consensus about project vision updates proposed by each group member.

In the third and final part of the workshop, the three groups reconvened so that each group could plenary present its results and ideas with respect to an updated project vision.



Fig. 1. Twitter post of the workshop Towards and Updated Project Vision



1.2.2 RESULTS

1.2.2.1 INTERACTIVE QUESTIONNAIRE

The quantitative results from the interactive questionnaire are to be found in Appendix A. Instead of exploring and discussing the entire data set, we will instead focus our discussion on the most important findings and noticeable results.

First of all, the quantitative results confirm strong consortium consensus about the sustained relevance of the high-level MARCONI objectives that are reported in D1.1. Only one “No, this is no longer relevant” answer and two “I don't know” answers were given out of a total of 66 responses to the six high-level questions. This result shows that the original high-level MARCONI concepts still hold anno 2019. With respect to the implementation status of these high-level concepts, the “implemented partially” option received the bulk of the votes. This finding indicates that, at M21 of the project lifecycle, the majority of the consortium acknowledged that there was still work to be done (which is in line with the planned work package timeline as depicted in the Gantt chart of the project).

The lower-level MARCONI concepts that were contested most by the consortium were related to supporting multiple communication channels. As an example, the statement “MARCONI enables interaction with radio in a personalized way through the user's preferred communication channel” received four “No, this is no longer relevant” votes. Complementary to these “No, this is no longer relevant” votes, the statements pertaining to supporting multiple communication channels also received a substantial quantity of “Yes, this fits the project vision, but is not currently implemented” votes. For instance, the statement “MARCONI allows radio producers to keep track of the interaction / communication history with a specific listener across all channels” received five such votes. As such, the workshop helped to indirectly clarify that the MARCONI media partners want to maximally attract people to their dedicated smartphone app and see social media platforms as a PR tool rather than a medium to directly interact with individual listeners.

Another lower-level D1.1 concept that was clearly questioned by the consortium was “MARCONI can connect with voice assistants such as Amazon Alexa”, which received six No, this is no longer relevant” and two “I don't know” votes. This shows that, while deemed an interesting idea at the start of the project lifecycle, voice input was no longer considered as a core feature of the MARCONI platform approximately 18 months later.

The interactive questionnaire also revealed important implementation hiatuses for lower-level D1.1 concepts. In particular, 14 statements received a “Yes, this fits the project vision, but is not currently implemented” vote from at least one third of the respondents. MARCONI topics that were deemed to still required substantial implementation work at the time of the workshop pertained to listener interaction filtering, personalizing automated interactions, incentivising listener contributions, innovative business modelling, supporting polls and contests, and supporting push messaging.

1.2.2.2 GROUP DISCUSSION

Group 1 mainly looked at what was missing in D1.1 and thought about important intra-consortium focus shifts since the start of the research project. This exercise led to the following four suggestions with respect to project vision:



- Informed by the MARCONI internal pilots, members of Group 1 inferred that **Social Media is no longer that important** and relevant in MARCONI.
- MARCONI's development **focus has been more on editorial user interfaces (UIs) and user experience (UX)** rather than on listener UIs and UX, so it might be worthwhile to reflect this in MARCONI's project vision. To enable a rich experience for listeners, we need to provide radio editors tools that allow to build such experiences.
- Group 1 also launched a proposition for a new MARCONI mission statement, namely that MARCONI is able to **provide radio stations with insights into their strategy and can provide them with learnings**; thanks to offered analytics and measurement tools, MARCONI allows radio stations to learn from failures or, conversely, success stories.
- MARCONI **makes the work more efficient for radio makers** and as such adds value to the radio production process.

Similarly to Group 1, Group 2 primarily looked at extending the project vision as communicated in D1.1:

- MARCONI could **invest in listener profiling based on the listener's interactions** with the radio station (e.g., in terms of submitted messages, attended radio- or music-related events, ...) and leverage the resulting listener profiles to **personalize the listener communication**. The example given in the context of personalized listener communication was that of sending out **targeted messages to only a subset of listeners**.
- The link to **visual radio** needs to be strengthened in the project vision.
- Invest more in **Instagram stories** as an efficient means to tell radio-related stories on Social Media.
- Given that, in the internal MARCONI pilots, the majority of chatbot interactions pertain to the radio playlist (i.e., what song is currently on air), it would make sense to allow for the song that the listener is inquiring about to be automatically added to his or her Spotify playlist. Similarly, MARCONI could leverage such playlist-related interactions to direct the listener to specific playback positions in archived radio shows (i.e., **promote on-demand consumption of radio content**). Finally, song-related interactions could be followed up by an automatic question asking whether the listener actually likes the song in question; this information could then be added to the listener's profile.
- The MARCONI consortium should reflect on **community building and engagement opportunities**. For example, it would make sense to allow listeners to easily share the content that they co-create together with the radio station (i.e., share with other listeners with similar interests, or share with the listener's friends via Social Media).
- MARCONI should think about facilitating not only "live" radio production but also **on-demand radio programming**.
- **Analysis of audio quality** (i.e., of user-generated content) could be an interesting feature for MARCONI.

Group 2 also explicitly agreed with Group 1 that integrating interaction across multiple Social Media channels is no longer that relevant (except for perhaps Twitter and Facebook Messenger).

Finally, Group 3 took a very low-level approach and focused on re-phrasing specific D1.1 concepts:

- Drop the word "fully" in the D1.1 statement that "MARCONI enables fully interactive and personalized radio experiences", to prevent this MARCONI objective from being too broad and therefore unrealistic to achieve.



- Re-write “MARCONI provides an integrated way of handling interactions across different channels” as “MARCONI provides means for listeners to interact across different communication channels”, given that there appeared to be a lot of implementation work still to be done in terms of integrating interaction across multiple channels.
- Drop “highly functional interaction” in the D1.1 statement that “MARCONI offers highly functional interaction dashboards for the editorial team”, **because these dashboards could serve purposes other than listener interaction support** (e.g., a KPI dashboard for the sales department).
- Replace the word “agents” with “micro-services” in D1.1 that “MARCONI enables the integration of intelligent agents in radio production”, to make the statement more consistent with MARCONI terminology adopted in WP2 and WP3.
- Re-formulate “MARCONI's chatbots filter out the most relevant listener contributions” as “MARCONI filters out the most relevant listener contributions”, given that it is not the chatbot that does this filtering in the MARCONI implementation.
- In the D1.1 statement that “MARCONI implements privacy-enhancing technologies”, replace the word “privacy-enhancing” with “privacy-aware”.

1.3. Objectives

ORIGINAL OBJECTIVE 1: INTERACT IN A PERSONALISED WAY

MARCONI will enable every listener in the radio community (audience) to interact with their favourite radio brands in a personalised way through their favourite communication channels. Moreover, MARCONI will ensure that people in the radio community remain connected to and can engage with the radio brand, even if they are not currently listening to 'live' radio; all in a way that respects user privacy.

VRT integrated social media channels initially in Radio Manager and later in the actual radio producer platform. As a result, the listener is able to interact via its familiar communication channel. However within the Marconi platform, we focused on the interaction through dedicated apps of the radio stations, like 'App the studio' (NPO) and 'De Warmste Week' app (VRT). The explanation can be found in the introduction 1.1.

MARCONI enables the listener audience not only to keep in touch with their radio brand, but also to actively engage with it. Through the distribution of push notifications, the radio brand can even keep non-listeners informed about the events happening as part of a particular radio show and can even attempt to sway passive consumers into becoming active live listeners. Users are able to include media assets in their digital conversation with the radio station (e.g., pictures, videos, audio snippets).

We also ensured possible privacy issues by using PriVaults, a storage service that focuses on Privacy by Default and Privacy by Design and especially developed within the Marconi project. It has a single sign on authentication service and offers tools for users to request their deletion and or see what data of them is stored. PriVaults tries to be GDPR compliant in every way while keeping development easy.

ORIGINAL OBJECTIVE 2: OPTIMISE TOOLS AND PLATFORMS FOR THE RADIO EDITORIAL TEAM TO ENGAGE MORE AND BETTER WITH THEIR AUDIENCE

MARCONI will enable the radio presenter and/or editorial team to get a comprehensive,



dynamic overview of what is happening in terms of listener interaction; to get insight into trending topics; to get insight into knowledge about individual listeners; to engage in interactions with individuals and to engage with its audience even if they are not actively listening to 'live' radio; by building innovative tools and platforms to enable this.

We developed the Studio Messenger Board where the radio presenter /editorial team gets a quick overview of all incoming messages and trending topics. We can build profiles of listeners and get an overview of their history (earlier conversations). Radio editors can search for messages containing certain keywords and get live suggestions of other related terms.

ORIGINAL OBJECTIVE 3: BUILD INNOVATIVE SERVICES AND PLATFORMS TO ENABLE AUTOMATION OF USER INTERACTION

MARCONI will build innovative services and platforms which enable automation of the user interaction with the radio channel for incoming text, audio, picture or video content. MARCONI will also provide the tools to radio organisations to easily manage such automated interactions themselves, integrated with their radio production system. The goal is to provide every interaction with an individual response within a reasonable amount of time.

NPO and VRT both experimented with a chatbot to test automatic replies. As a result, the MARCONI platform integrates chat functionality in the Studio Messenger Board. Also the lanes, bulk messages and suggested replies in a way contribute to be able to quickly respond to the user.

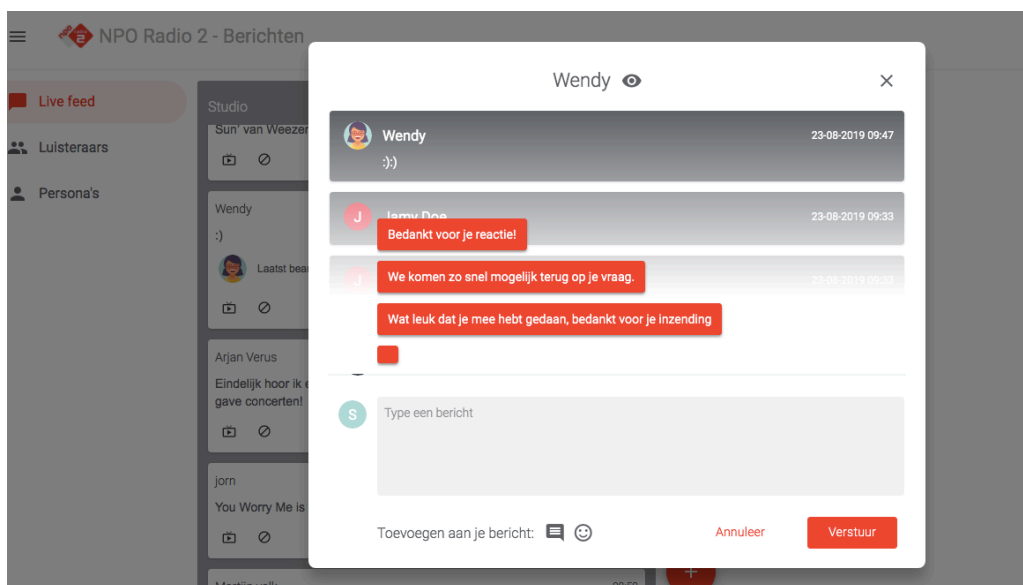


Fig 2. Example of suggested automatic replies

ORIGINAL OBJECTIVE 4: VALIDATE THE CONCEPT BY RUNNING LARGE SCALE PILOTS

MARCONI will validate the concepts, platforms and interactive services by running several large scale piloting activities in several countries.

NPO and VRT executed several large-scale pilots in the Netherlands and Belgium.



Unfortunately, due to the early departure of the radio station Stadtfilter, we didn't execute any pilot in Switzerland. In Chapter 4 we will give a quick overview of the pilots already executed and the ones who are still running.

Other radio stations will be attracted through open piloting activities in the final stage of the project.

ORIGINAL OBJECTIVE 5: DEVELOP INNOVATIVE NEW BUSINESS MODELS AROUND PERSONALISED AND AUTOMATED INTERACTION WITHIN THE RADIO COMMUNITY

MARCONI will generate two sets of business models, targeting for the exploitation of the platform as well as business models for radio stations with the platform.

An initial outline of the business model that MARCONI will use for entering the market has been prepared and discussed with the consortium during the last consortium meetings. The concept behind is to sell solutions to stations, rather than “software”, starting with the low-hanging fruit (i.e. small steps that can create the most impact for a station), with MARCONI being the flexible platform containing an open source ecosystem of modular components that enable these solutions. The chosen business model approach is that of a private SaaS and the details of it will be available in D5.4 “Business Plan”.

1.4 HRadio

As described previously in D5.2, MARCONI is collaborating closely with the H2020-funded HRADIO and FuturePulse projects, which have both audio as a general theme. Focusing on hybrid radio, the complementarity of nature of the HRADIO project resulted in our two projects working very closely together, both on dissemination and communication activities as well as technical issues, where HRADIO project members have become part of the weekly technical stand-up meeting of MARCONI. We are further exploring with HRADIO the possibilities that this collaboration can enable when it comes to exploitation (since the main target stakeholders are overlapping), for extending the MARCONI open source ecosystem and enabling solutions that can package components of both projects.

2. MARCONI | Use Cases

As a first step in the project we developed several use cases and requirements. For an extensive description we refer to Deliverable 1.2. Chapter 2.

The first use case 2.1. 'Facilitating relevant feedback', both for the editorial team and for the listener, have been executed in the different pilots and the development of the Messenger Board and chatbot.

The second use case 2.2. Co-creating content has been partially developed. As stated before we didn't create interaction via different communication and social channels yet but we created user profiles and made it possible to filter and search incoming messages on keywords. Also on the planning is the idea to group users on specific interests and profiles.

The third use case 2.3. 'Allowing personal services' has been shaped in the audio-to-go app where listeners could create their own personalised playlist. There has been a large pilot with around 300 listeners who used a beta-application for around 6 weeks. The pilot description and results can be found in Deliverable D.3.4.



The last use case 2.4 'Providing content on demand' focussed on voice services like Alexa and Google home. We didn't manage to develop a pilot with voice due to lack of time and other priorities. However, the bot dialogues that have been developed for the chatbot could be easily re-used in use cases and pilots for voice. This could be an interesting next step in 2020.

3. MARCONI | Methodology

3.1. User-driven approach & continuous validation

Requirements and use cases have been established, mock-ups and functional prototypes have been developed and evaluated by respective target audiences to assess to what extent they addressed the identified requirements and how well they did match with stakeholder expectations.

Though the various pilots Marconi collected real life feedback (by means of user data, questionnaires, observations and interviews) from end-users as well as professional users. When we continue to develop, this user feedback will be used to improve and sharpen the final Marconi 'micro-services'.

3.2. Agile approach

MARCONI adopted an agile design and development approach that is sufficiently lenient to cope with volatile end user requirements or longer-term market evolutions. Prototyping and piloting tasks were conducted throughout the lifetime of the project to collect feedback from the different stakeholder groups targeted by the MARCONI concept. The resulting insights are fed back into MARCONI's design and implementation, this way giving rise to an iterative development process that maximally leans on, and is able to adapt to, prospective customer feedback. As a specific driver for the envisioned feedback loop, the consortium uses the deployment of an always-on prototype, accessible to (a subset of) MARCONI's radio stations (VRT, NPO), with a bi-weekly software update cycle.



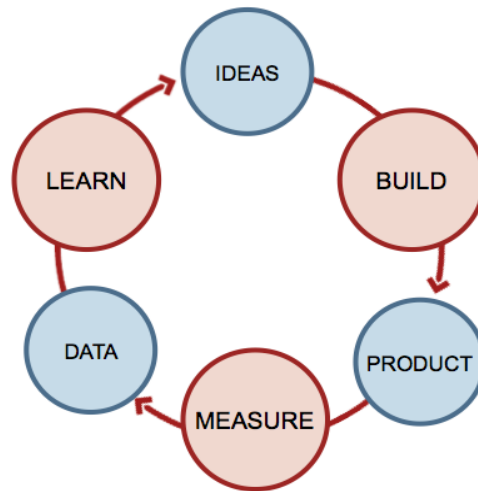


Fig. 3. Eric Ries' Lean Startup feedback loop

We work with SCRUM development cycles, each lasting one or 2 months, leading to a stable version of the platform useful for large scale piloting activities. In between the SCRUM cycles, large scale piloting activities will take place around big events in which the radio stations participate.

3.3. Loosely coupled design

The innovations offered by the MARCONI concept are compartmentalized in the form of 'micro-services'. These services offer customer-facing functionality or act as building blocks that can be integrated to yield more multi-faceted, composited services.

3.4. Legal assessment and privacy validation

The MARCONI backend has been developed according to the in D1.1 and D1.3 envisaged concepts of privacy frameworks. As such, PRIVAULTS already enables radio stations in the piloting phases to process personal data in a GDPR compliant fashion by the means of consent of the data subject. Such has been achieved by various strategies, most importantly through a framework of gaining informed consent for the separate purposes of an application ("Service") which, according to its specified needs, is only allowed to access data containers linked to a user profile in order to perform the necessary processing operations.

Thus, the platform is following the data protection principles of:

- Data Minimisation
- Purpose Limitation
- Storage Limitation
- Privacy by Default
- Privacy by Design



In addition to D4.2, UNIVIE has drafted a document (“Privacy Storytelling”) including core information on privacy related issues and how such have been tackled by the consortium in order to outline and represent the approach to interested parties.

Furthermore UNIVIE has performed work on the feedback of the commission regarding the issue of disinformation. UNIVIE has concluded that, for the following reasons, the threat as outlined by the HLEG on fake news and disinformation¹ imposed by the implementation of the MARCONI platform is minimal. Users will be able to self select which field of news and not which kind of news they will consume which ensures that no “information bubble” will be created. Furthermore sent in media items as well as user broadcasts will be handled by the platform but never be directly distributed to consumers but rather clustered and indexed in order for an editorial team to better analyse trends. However, UNIVIE finds that the third pillar of the multi-dimensional approach of the HLEG (“tools to empower users and journalists to tackle disinformation”) in order to inform the editorial team of possible trolling or coordinated disinformation attempts may already be easily employable through the existing tagging system.

4. MARCONI | Pilots

The ideas of the general concept have been validated in several pilots executed by VRT and NPO the past year.

4.1 Pilots NPO

Chatbot NPO Radio 5

NPO implemented a chatbot for the radio channel NPO 5 with automatically answered frequently asked questions (FAQ), a poll & profile functionality. Main goal of the use of the chatbot is to involve the listeners in the program and engage them more through better service with more personal information and updates by building profiles. Another goal of the chatbot is to reduce the editor’s work through automatically answered questions. The chatbot is one of the concrete results of the use case 2.1. Facilitating relevant feedback.

¹ *High level Group on fake news and online disinformation (HLEG)*, A multi-dimensional approach to disinformation, <https://ec.europa.eu/digital-single-market/en/news/final-report-high-level-expert-group-fake-news-and-online-disinformation>, accessed 22.5.2019.





Fig. 4. Chatbot NPO Radio 5

Studio Messenger app

NPO and VRT are developing a studio messenger board for editors and DJ's to easier interact and communicate with their audience. It's possible to drag and drop messages in different lanes, to filter messages, to search on keywords and to send automatic replies. This pilot is also an elaboration of the use case 2.1. Facilitating relevant feedback.

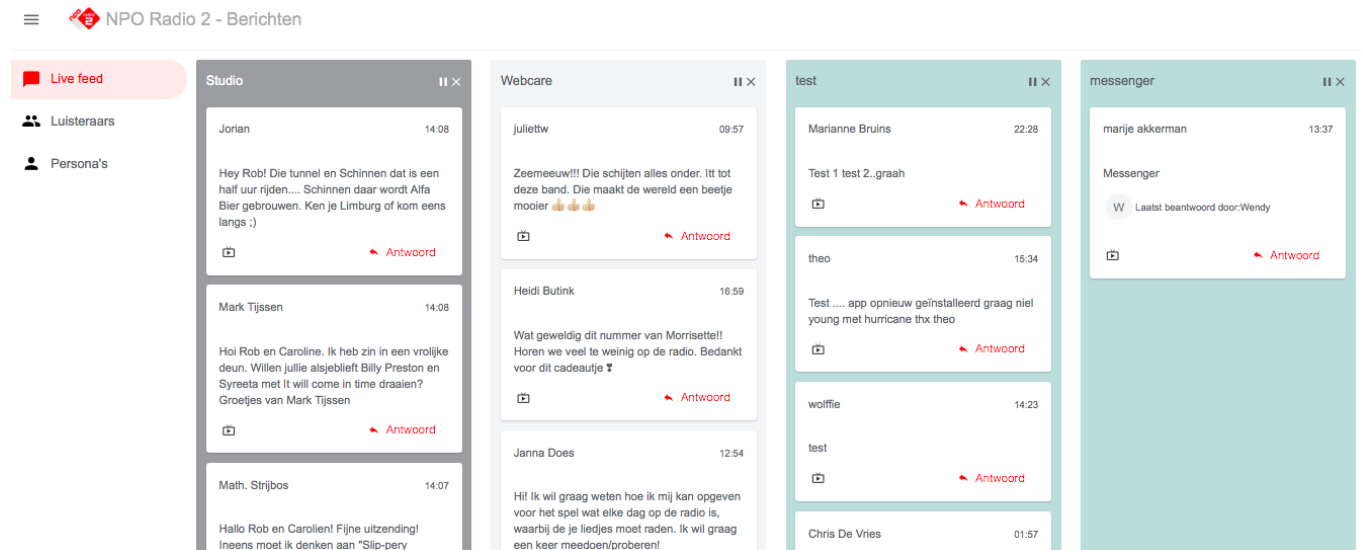


Fig. 5. Studio Messenger NPO Radio 2



Audio-to-go app

NPO developed a pilot app for iOS where users could create a personalised playlist based on their available listening time and preferred subjects (for instance sports, arts and culture, politics). With the Audio to Go App from NPO a listener could decide when to listen to their own chosen subjects of his or her particular interest. The personalised playlist updated twice a day and always started with the latest news bulletin. NPO recruited around 200 listeners who installed the beta-app on their device and tested the app for a period of 6 weeks. This pilot is consistent with the use case 2.3. Allowing personal services.

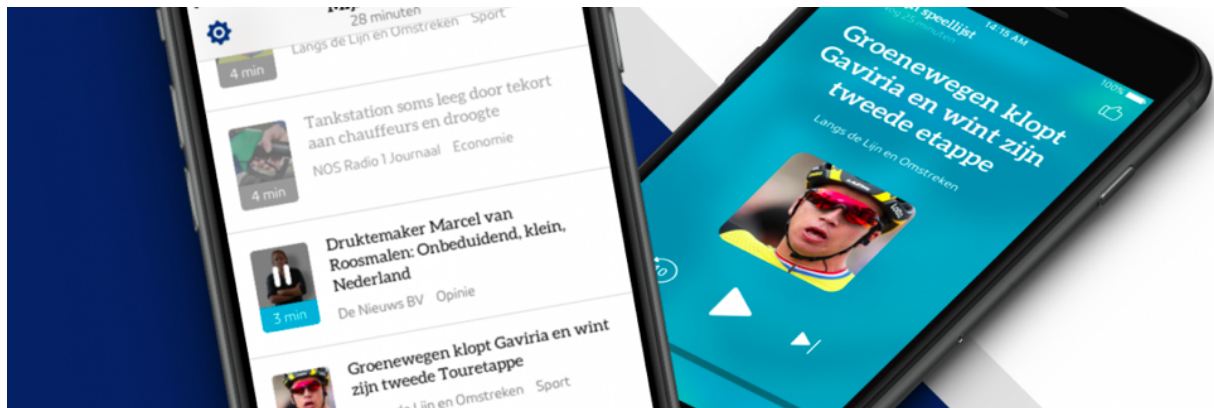


Fig.6. Audio-to-go app NPO Radio 1

4.2 Pilots VRT

Search tool

Radio teams at VRT use Switchboard, a tool designed to handle user interactions of the app via a simplified Conversation Interface. In this tool the ability to search through incoming messages was missing. From January to March 2019, we allowed several radio hosts and editors of radio station Studio Brussel and MNM to deploy feedback on this Search prototype for Switchboard. In short, this prototype enables them to search within the incoming messages and filter on keywords. During this period, they were regularly consulted by a user researcher, and were also able to ask questions and give direct feedback to the development team.

Chatbots for Answering Common Questions

For the charity event 'Music for Life' ²organised by radio station Studio Brussel, people can sign up to host an event to collect money for a good cause. Often, those people have a lot of questions, which would take a lot of work to answer manually. In most cases, a chatbot would be an ideal solution to reduce manual labour, which resulted in 'Flammie' (see D4.2).

² Info charity event Music For Life: <https://stubru.be/musicforlife> <https://dewarmsteweek.stubru.be/>



User-generated storytelling

Previously, in Deliverable 4.2 Piloting activities and evaluations (v.1.0), VRT reported on a pilot 'Interactive Storytelling via Radio for Elections', which included a text analysis service (provided by FAKTION) and a word cloud dashboard to provide radio editors insight in the topics of incoming text messages during the Belgian (local) elections of May 2018. At the Warmste Week 2018 (in December 2018), VRT also explored how radio editors can curate incoming user generated visual content in an easy and fast way (see Fig. 7).

Lively Environment

At the Warmste Week 2018, we created a studio environment in which user generated visuals (i.e., photos, videos) are presented on the studio displays. Results of this study are presented in D4.2.

The pilots of VRT fit in the use cases 2.1. Facilitating relevant feedback and 2.2. Co-creating content. For an extensive description of these pilots we refer to Deliverable 4.3. Piloting activities and evaluations.

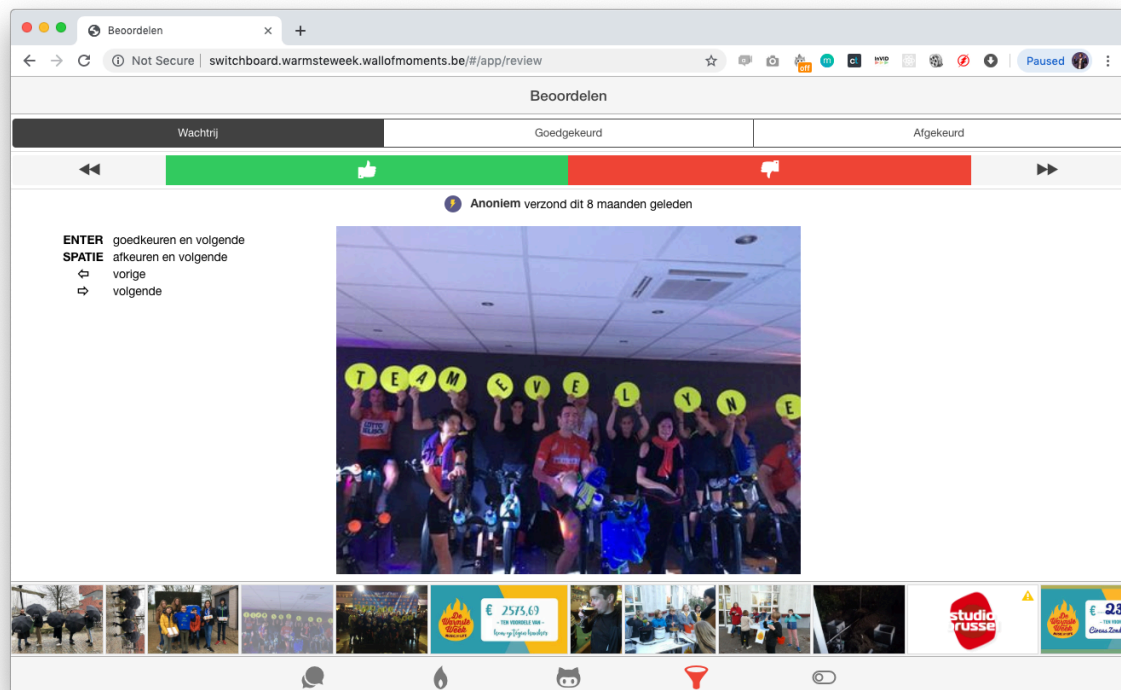


Fig. 7 Screenshot of curation tool to label user generated photos and videos as 'accepted' (thumbs up in green) or 'rejected' (thumbs down in red).

5. Stakeholder management

MARCONI has managed a wide range of stakeholders:

- Radio stations and radio makers (incl. public, commercial, and independent broadcasters)
- SMEs, radio solution resellers and integrators
- Industry, researchers, technology developers
- policymakers, EC
- Press, broader (media) Industry
- General public

For each set of stakeholders, we have identified the channels where they can be reached and the key messages that we want to transmit. As the project progressed, we have adjusted the key messages in accordance, especially in the current phase of the project where the focus has shifted on the acquisition of radio stations for the open pilots:

- For non-commercial radio stations:
 - Engage listeners, based on their interests
 - Stay relevant
 - GDPR compliant
- For commercial radio stations:
 - Clear overview on KPI's (interaction dashboard)
 - Automate tasks and allow more time for creativity & innovation
 - No privacy issues
 - Advertising opportunities
- For IT department:
 - Customisable interaction tools
 - One interface, integratable & customisable
- For DJs:
 - Keep on track with the interest of your audience
 - Create the right content & maintain/grow your audience
- For a buyer or salesperson:
 - Clear overview on costs
 - New advertising opportunities
 - Clear profile of listeners to convince clients
 - Better target your listeners

The website of the project has also evolved during the project lifetime, now focusing on the Open Pilots as well, providing prospective open pilot radio stations with key selling points and social proof in the form of MARCONI stories from the pilots that were carried out already by NPO and VRT.

The strategy used for engaging new radio stations in the open piloting phase has 4 steps:



More details on the communication strategy can be found in D5.2 “Dissemination and exploitation report”. A formal Stakeholder Board of the project is also maintained as part of the WP5 activities.



6. MARCONI | Next steps

The Consortium is working on next steps and has formulated a number of milestones in the last Consortium meeting in Brussels (end of May) to complete until the end of the Year.

The features that have been defined are in the following areas:

- Conversation Interface
- Search Interface
- Automation Interface
- Location Based services
- Chatbot Crypto & Chatbot Serious Request
- Curation Interface
- Poll Interface

For this a Trello board has been set-up. There are monthly scrum-cycles and every week there is a stand-up to discuss the progress.

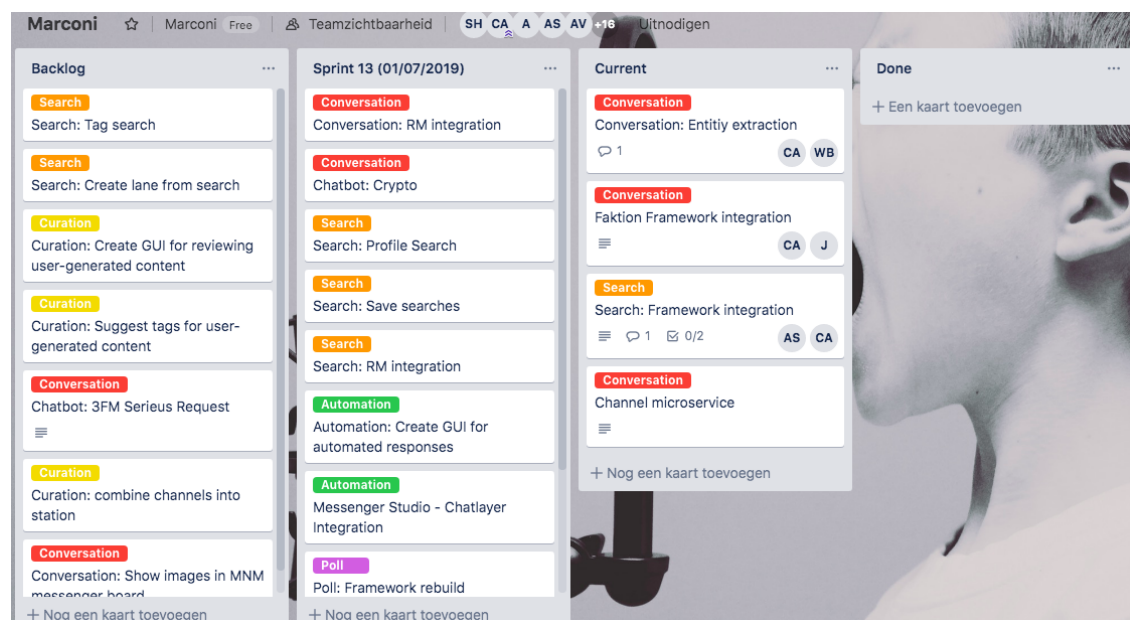


Fig. 7. Trello board with the future Marconi features

From September until the end of the project we are planning open pilots with several partners outside the consortium team. A booth on IBC and different promotional materials such as flyers newsletters, articles and a video on LinkedIn are used to attract pilot partners.



Appendix A

A1: Full set of quantitative results from the interactive questionnaire part of the “Towards and Updated Project Vision” workshop

This appendix communicates the anonymized distribution of the votes, issued by 11 respondents, for each of the 41 statements in the interactive questionnaire part of the “Towards and Updated Project Vision” intra-consortium workshop.

1. MARCONI enables fully interactive and personalized radio experiences

1/11 A Yes, this fits the project vision and is implemented fully
8/11 B Yes, this fits the project vision and is implemented partially
2/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

2. MARCONI integrates "live" broadcast with digital platforms and social media

3/11 A Yes, this fits the project vision and is implemented fully
8/11 B Yes, this fits the project vision and is implemented partially
0/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

3. MARCONI makes the border between radio program content and user interactions more permeable

2/11 A Yes, this fits the project vision and is implemented fully
8/11 B Yes, this fits the project vision and is implemented partially
1/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

4. MARCONI helps radio production teams in creating more engaging content

2/11 A Yes, this fits the project vision and is implemented fully
7/11 B Yes, this fits the project vision and is implemented partially
2/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

5. MARCONI allows for the delivery of participatory stories developed collaboratively by respectively the radio production team and the audience

2/11 A Yes, this fits the project vision and is implemented fully
4/11 B Yes, this fits the project vision and is implemented partially
3/11 C Yes, this fits the project vision, but is not currently implemented
1/11 D No, this is no longer relevant
2/11 E I don't know

6. MARCONI facilitates novel, innovative ways of radio making

4/11 A Yes, this fits the project vision and is implemented fully
5/11 B Yes, this fits the project vision and is implemented partially
2/11 C Yes, this fits the project vision, but is not currently implemented



0/11 D No, this is no longer relevant
0/11 E I don't know

7. MARCONI enables interaction with radio in a personalized way through the user's preferred communication channel

1/11 A Yes, this fits the project vision and is implemented fully
2/11 B Yes, this fits the project vision and is implemented partially
5/11 C Yes, this fits the project vision, but is not currently implemented
4/11 D No, this is no longer relevant
0/11 E I don't know

8. MARCONI allows listeners to remain connected to the radio station (and incites them to engage with it), even if they are not currently listening to "live" radio

2/11 A Yes, this fits the project vision and is implemented fully
5/11 B Yes, this fits the project vision and is implemented partially
3/11 C Yes, this fits the project vision, but is not currently implemented
1/11 D No, this is no longer relevant
0/11 E I don't know

9. Listeners are rewarded for their contributions

1/11 A Yes, this fits the project vision and is implemented fully
1/11 B Yes, this fits the project vision and is implemented partially
6/11 C Yes, this fits the project vision, but is not currently implemented
2/11 D No, this is no longer relevant
1/11 E I don't know

10. MARCONI optimizes tools for the radio editorial team so that they can engage their audience more and in a better way

3/11 A Yes, this fits the project vision and is implemented fully
8/11 B Yes, this fits the project vision and is implemented partially
1/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

11. MARCONI provides an integrated way of handling interactions across different channels

2/11 A Yes, this fits the project vision and is implemented fully
4/11 B Yes, this fits the project vision and is implemented partially
4/11 C Yes, this fits the project vision, but is not currently implemented
2/11 D No, this is no longer relevant
0/11 E I don't know

12. MARCONI allows radio producers to keep track of the interaction / communication history with a specific listener across all channels

1/11 A Yes, this fits the project vision and is implemented fully
4/11 B Yes, this fits the project vision and is implemented partially
5/11 C Yes, this fits the project vision, but is not currently implemented
1/11 D No, this is no longer relevant
0/11 E I don't know

13. MARCONI offers adequate support for organizing and handling polls and contests

3/11 A Yes, this fits the project vision and is implemented fully
3/11 B Yes, this fits the project vision and is implemented partially
5/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant



0/11 E I don't know

14. MARCONI helps in overcoming technical and editorial challenges such as scalability issues associated with personalised interactions

4/11 A Yes, this fits the project vision and is implemented fully

5/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

0/11 D No, this is no longer relevant

0/11 E I don't know

15. MARCONI offers highly functional interaction dashboards for the editorial team

0/11 A Yes, this fits the project vision and is implemented fully

7/11 B Yes, this fits the project vision and is implemented partially

4/11 C Yes, this fits the project vision, but is not currently implemented

0/11 D No, this is no longer relevant

0/11 E I don't know

16. MARCONI offers integrated solutions for radio presenters to be active on several digital platforms and social media simultaneously

1/11 A Yes, this fits the project vision and is implemented fully

6/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

2/11 D No, this is no longer relevant

0/11 E I don't know

17. MARCONI offers integration of CRM and radio production management

2/11 A Yes, this fits the project vision and is implemented fully

5/11 B Yes, this fits the project vision and is implemented partially

3/11 C Yes, this fits the project vision, but is not currently implemented

0/11 D No, this is no longer relevant

1/11 E I don't know

18. MARCONI enables the integration of intelligent agents in radio production

1/11 A Yes, this fits the project vision and is implemented fully

6/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

1/11 D No, this is no longer relevant

1/11 E I don't know

19. MARCONI chatbots produce first-line automated responses to incoming listener interactions

5/11 A Yes, this fits the project vision and is implemented fully

3/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

0/11 D No, this is no longer relevant

0/11 E I don't know

20. MARCONI's chatbots filter out the most relevant listener contributions

0/11 A Yes, this fits the project vision and is implemented fully

2/11 B Yes, this fits the project vision and is implemented partially

9/11 C Yes, this fits the project vision, but is not currently implemented

0/11 D No, this is no longer relevant

0/11 E I don't know

21. MARCONI's chatbots are fully customizable (e.g., per radio station or even per



individual radio show)

5/11 A Yes, this fits the project vision and is implemented fully

2/11 B Yes, this fits the project vision and is implemented partially

1/11 C Yes, this fits the project vision, but is not currently implemented

1/11 D No, this is no longer relevant

2/11 E I don't know

22. MARCONI's chatbots exploit contextual information about the involved listener to generate personalized responses

0/11 A Yes, this fits the project vision and is implemented fully

1/11 B Yes, this fits the project vision and is implemented partially

7/11 C Yes, this fits the project vision, but is not currently implemented

2/11 D No, this is no longer relevant

2/11 E I don't know

23. MARCONI enables automatic categorization and sentiment analysis of listener input

0/11 A Yes, this fits the project vision and is implemented fully

3/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

3/11 D No, this is no longer relevant

3/11 E I don't know

24. MARCONI allows to develop innovative business models around personalized and automated interaction within the radio community

0/11 A Yes, this fits the project vision and is implemented fully

5/11 B Yes, this fits the project vision and is implemented partially

6/11 C Yes, this fits the project vision, but is not currently implemented

0/11 D No, this is no longer relevant

0/11 E I don't know

25. The MARCONI platform is hybrid radio ready

1/11 A Yes, this fits the project vision and is implemented fully

4/11 B Yes, this fits the project vision and is implemented partially

1/11 C Yes, this fits the project vision, but is not currently implemented

2/11 D No, this is no longer relevant

3/11 E I don't know

26. The MARCONI platform is integrated with at least 5 different communication channels

1/11 A Yes, this fits the project vision and is implemented fully

5/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

3/11 D No, this is no longer relevant

0/11 E I don't know

27. MARCONI leverages a Platform-as-a-Service (PaaS) approach

3/11 A Yes, this fits the project vision and is implemented fully

5/11 B Yes, this fits the project vision and is implemented partially

2/11 C Yes, this fits the project vision, but is not currently implemented

2/11 D No, this is no longer relevant

1/11 E I don't know

28. MARCONI supports push messaging (e.g., listener gets adequate, personalized notifications)

4/11 A Yes, this fits the project vision and is implemented fully



3/11 B Yes, this fits the project vision and is implemented partially
4/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

29. MARCONI allows listeners to include multimedia assets in their digital conversation with the radio station
4/11 A Yes, this fits the project vision and is implemented fully
8/11 B Yes, this fits the project vision and is implemented partially
1/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

30. MARCONI supports at least two professional radio production interfaces, targeting different profiles within the editorial team (i.e., "live view" versus "interaction view")
5/11 A Yes, this fits the project vision and is implemented fully
3/11 B Yes, this fits the project vision and is implemented partially
1/11 C Yes, this fits the project vision, but is not currently implemented
1/11 D No, this is no longer relevant
1/11 E I don't know

31. It is possible to customize MARCONI's "live view" per radio show depending on the show's needs and objectives
3/11 A Yes, this fits the project vision and is implemented fully
3/11 B Yes, this fits the project vision and is implemented partially
3/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
2/11 E I don't know

32. The MARCONI back-end automatically analyzes messages in order to filter and cluster them
1/11 A Yes, this fits the project vision and is implemented fully
4/11 B Yes, this fits the project vision and is implemented partially
5/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
1/11 E I don't know

33. MARCONI facilitates location-based services (e.g., listener interactions are often location-based)
0/11 A Yes, this fits the project vision and is implemented fully
4/11 B Yes, this fits the project vision and is implemented partially
7/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

34. MARCONI's implementation leverages a modular design that is centered around loosely coupled services
6/11 A Yes, this fits the project vision and is implemented fully
5/11 B Yes, this fits the project vision and is implemented partially
0/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

35. MARCONI can connect with voice assistants such as Amazon Alexa
1/11 A Yes, this fits the project vision and is implemented fully



0/11 B Yes, this fits the project vision and is implemented partially
2/11 C Yes, this fits the project vision, but is not currently implemented
6/11 D No, this is no longer relevant
2/11 E I don't know

36. Privacy and data protection are core aspects in MARCONI
11/11 A Yes, this fits the project vision and is implemented fully
1/11 B Yes, this fits the project vision and is implemented partially
0/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

37. It is possible for the listener to review his/her cross-medium interaction history
0/11 A Yes, this fits the project vision and is implemented fully
0/11 B Yes, this fits the project vision and is implemented partially
7/11 C Yes, this fits the project vision, but is not currently implemented
2/11 D No, this is no longer relevant
3/11 E I don't know

38. MARCONI implements privacy-enhancing technologies
6/11 A Yes, this fits the project vision and is implemented fully
3/11 B Yes, this fits the project vision and is implemented partially
1/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
1/11 E I don't know

39. MARCONI's validation will happen through involvement of at least 5 radio stations inside the consortium
3/11 A Yes, this fits the project vision and is implemented fully
4/11 B Yes, this fits the project vision and is implemented partially
2/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
2/11 E I don't know

40. At least five external radio stations will be attracted through open piloting activities
1/11 A Yes, this fits the project vision and is implemented fully
2/11 B Yes, this fits the project vision and is implemented partially
8/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
0/11 E I don't know

41. MARCONI's listener engagement potential has been validated via qualitative assessment studies
2/11 A Yes, this fits the project vision and is implemented fully
5/11 B Yes, this fits the project vision and is implemented partially
2/11 C Yes, this fits the project vision, but is not currently implemented
0/11 D No, this is no longer relevant
2/11 E I don't know

