

**MIRA**<sup>TM</sup>  
PERSONAL MEDIA METER



# The New Instrument For Market Research



## MIRA

**Mira is a new generation audience measuring device, forming part of the automatic media monitoring platform developed by Knowmark, already in use by S.I.A.E. (the Italian society for media data collection) and AGCOM (the Italian Authority for communication).**

**Mira was created as an interactive device for measuring radio audiences. It has now evolved into a modern and complete system for the ever-growing needs of market research.**

From left to right, the evolution of MIRA.

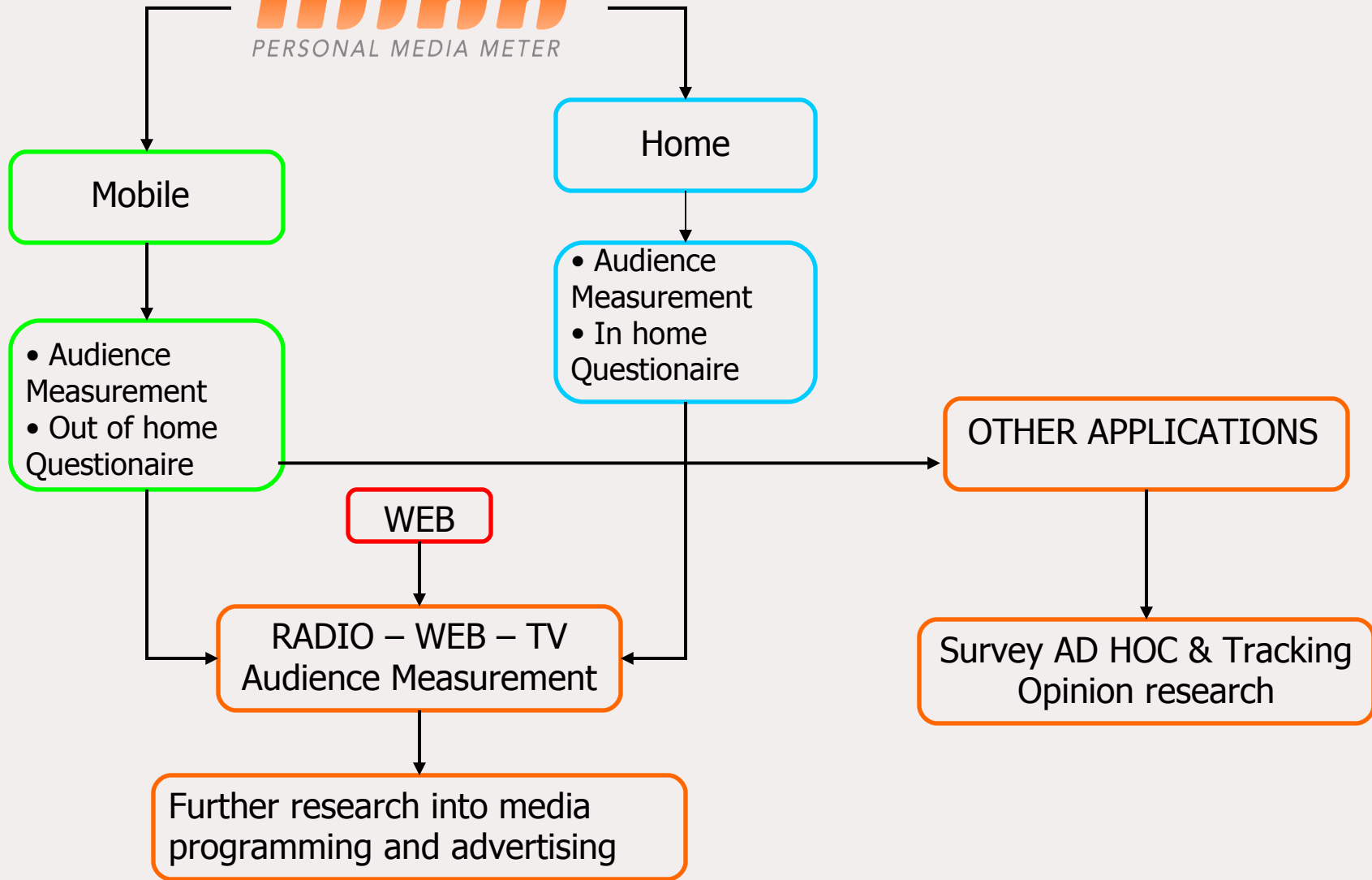
**MIRA 1.0** prototype, providing frequency and RDS code information from radio transmission.

**MIRA 1.1** evolution of prototype, integrating telephonic services.

**MIRA 1.2** transference of architecture for smartphone integration (inc. NOKIA 5230)



**MIRA**<sup>TM</sup>  
PERSONAL MEDIA METER



MIRA is the first technological platform for market research able to:

- register consumer behaviour,
- understand consumer motivation.

MIRA is innovative technology, crossing the digital divide and integrating into our daily lives.

**The first meter for home and mobile use, operating in both “passive” and “active” modes.**



The heart of the MIRA platform is the smartphone handset, which offers the user voice and data traffic, automatically records media content, shows GPS positioning, and registers consumer behaviour and prompts for feedback in real time.

For home use, there is an integrated docking station to monitor media indoors (MIRA Tractor).



**MIRA** is a user-friendly device, offering a rich selection of services and functions, incorporating touchscreen technology.

Voice and data traffic included, giving motivation to the user.

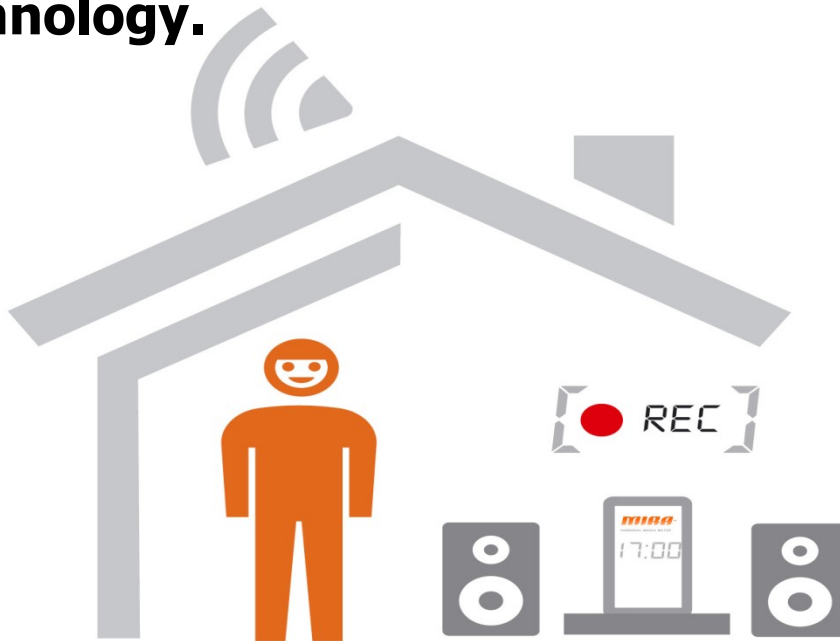
Services are structured to facilitate usage from the moment the panelist wakes up.



Both the MIRA device and the Mira tractor (docking station) can also register and recognize audio in the environment using acoustic fingerprinting technology (respect for privacy is always maintained).

Audio is processed and identified using our 24/7 media monitoring platform (BAS).

**In home media can be recorded simultaneously from different sources (e.g. from a second radio/tv) using Media Tractor wireless technology.**



**MIRA has a built-in GPS navigator, following and tracking the movements of the panelist.**

**The collection of data is direct from the source in real time, avoiding any mediation or filtration.**

**Consumer behaviour can be linked with georeference.**



The MIRA platform includes a barcode reader, able to scan traditional barcodes as well as the new generation codes that offer further information (images, weblinks, etc.).

**Data collection is unequivocally linked to the individual user through voice recognition technology.**



## Further research with MIRA

Panelists complete questionnaires with information on their motivation and behaviour. The information is sent directly from the user without third-party intervention.

Questionnaires can be provided regularly or on an ad-hoc basis. Panelists can also submit and receive photos and video as support to the survey.

MIRA is unique in offering these functions on a mobile system.



**MIRA is also an instrument to measure WEB activity on both mobile phones and computers.**

**MIRA's services integrated with the BAS platform (24/7) provide a detailed and complete monitoring of the user's media consumption.**





the first personal media meter

**MIRA answers the informational needs of the third millennium**

- Benchmarking multimedia audiences
- Wider research through digital questionnaires
- Pre and post testing in real time
- Preferences, opinion, direction and commitment.

**MIRA is the perfect solution for the 5 main markets:**

- Advertising
- Publishing
- Relationship management
- Mobility
- Socio-political opinion



## **The media monitoring platform BAS**

BAS integrates two types of information technology to automatically recognize media content:

- Knowmark Acoustic Fingerprinting
- Knowmark Speech Discriminator

**The system automatically and precisely recognizes TV and radio ads, along with the lyrics and music associated with the product or service being monitored.**

The system guarantees objective information by recording content directly, without the involvement of the broadcaster during transmission.



## AREAS OF APPLICATION

The BAS platform can certify all types of media content originating from DTT, SAT, WEB:

- radio and tv programmes
- advertisements
- promotion and sponsorship
- pre-recorded transmissions





## AVAILABLE INFORMATION

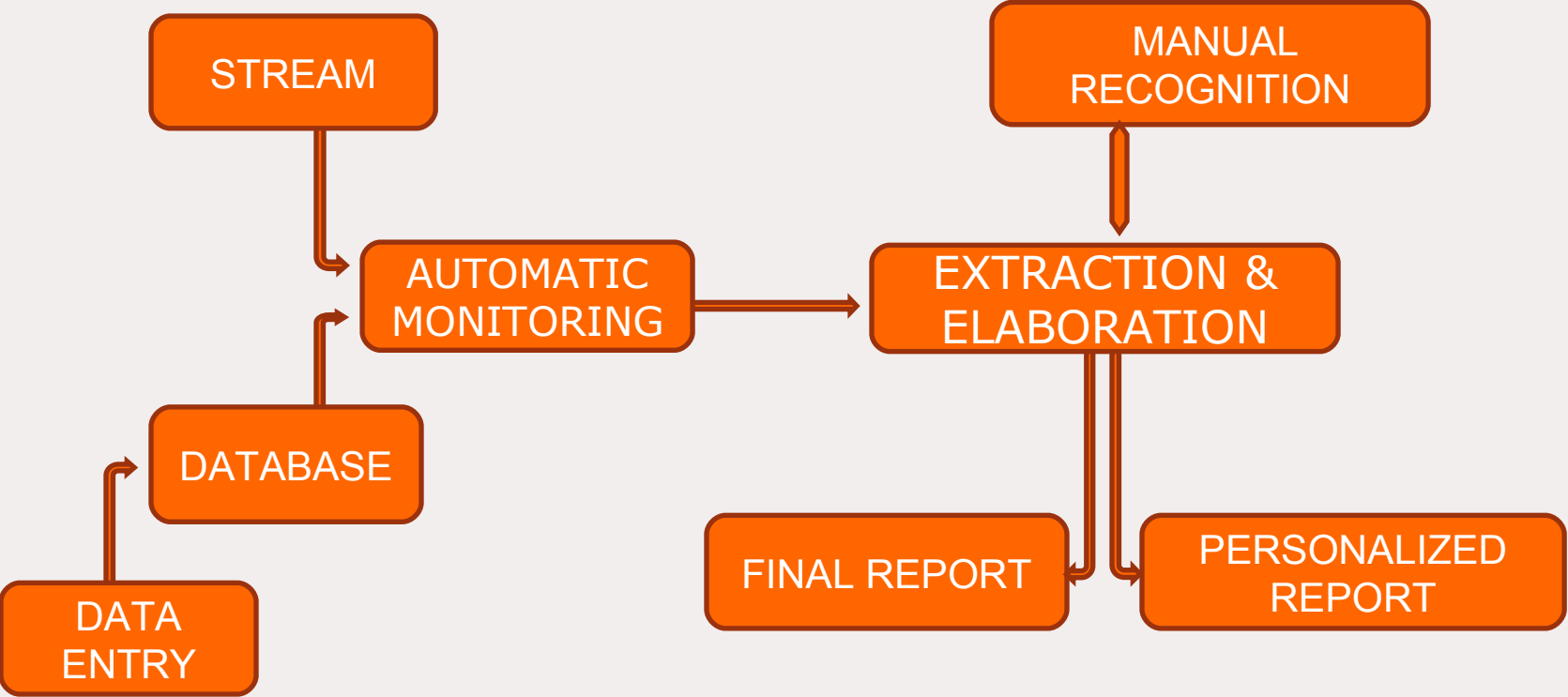
All media information collected can be reported in the following ways:

- total daily emitted content
- origin of source (single broadcasters/media groups)
- time and duration of transmission
- precise reel position

In addition to certification, other information can be gathered such as brand comparison and positioning.



# The flow of services

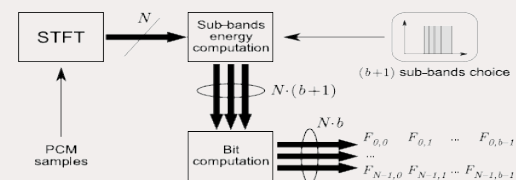


# The evolution of Knowmark technology



**MIRA™**  
PERSONAL MEDIA METER **1.1.**

**Algorithm for automatic recognition  
of audio content  
Speech Discriminator Solution**



**Platform for automatic media monitoring**

**MIRA™**  
PERSONAL MEDIA METER **1.2 for smartphone**





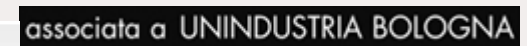
## Main Clients

- AGCOM Italian Authority for communication
- SIAE Italian society for media data collection



## Partners and collaborations:

- Esomar
- Università di Ferrara
- Loquendo
- CINECA
- Unindustria Bologna



# THE WORLD HAS CHANGED!

