# ELECTRONIC MEASUREMENT OF PRINT - IT IS 1995. WHERE IS IT?

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My thanks to the program chairman for the opportunity to chair this exciting session on technology. It will be an exciting, interesting segment of the program covering developments from around the world with CASI, CAPI, etc. The program committee thought it would be appropriate to briefly (in five minutes) update the Symposium on the "Blue Sky" subject of Electronic Measurement of Print. Hence the title. In that sprite, I turn over control of the New Orleans Bell to Julian Baim of MRI who will make sure his chairman is on time.

Mediacheck has successfully developed an audio code for the use in measuring television and radio. Simmons has dropped Through the Book. Many publishers and broadcasters are seeking ways to measure interactive media. This paper will:

- Review the current state of electronic print measurement
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- Review the status of broadcast measurement via an audio code and how it can be used to measure
  interactive media in print (Time magazine on line for example);
- Review the next steps for electronic print measurement alone or in conjunction with broadcast and interactive media.

The media are beginning to blur. We are assuming the symposium will have a paper on the definition of interactive print.

Basically, the best way to measure magazines is to rely on electronic measurement of the reading behavior, not rely on human recall of events up to sixty days old.

### **Current State of Electronic Print Measurement**

From 1985 to the present, Lee Weinblatt and Steve Douglas have developed and studied several approaches to electronically measure print as new technical advances occurred. Some of these technical improvements include:

- Production of a wafer thin battery that could power itself from inside a magazine.
- A wristwatch with the necessary memory, antenna and casing was produced by Sony and Motorola.
- Development of chips so small they could be hidden in the spine of a book.
- Special ink which could print chips on paper.
- Chemically treated paper that could act as batteries.

From 1988 to the present, print has taken a back seat to broadcast. In the late 1980's and early 90's many approaches were being developed for improving the electronic measurement of television and radio. AGB and Nielsen had developed push button passive meters in the early 1980's. Percy and others, including ourselves, have suggested and developed other techniques. Print measurement stabilized into a battle between TTB Simmons and MRI Recent Reading. The market did not perceive a need for a new method.

At the start of this year, there now seems to be demand. This was driven by:

- A small but significant number of publishers were upset by the demise of Through-the-Book.
- Relationships are different for the same targets on Recent Reading and Frequency of Reading studies.
- Publishers are moving to develop interactive media, which will have to be measured in a more broadcast style environment.
- Some publishers remain concerned over the increasing share of advertising dollars going to television.

Electronic measurement holds promise of documenting larger and more reactive audiences than any other form of print measurement. These are the reasons we thought we should review where we stood with the broadcast measurement system using audio codes.

#### The Status of Broadcast Measurement via an Audio Code

Magazine publishers need only look as far as broadcasting to survey electronic technologies that are currently being used to measure audiences. The Mediacheck system utilizes a non intrusive audio code that can be detected by a nearby meter. Briefly, here's how the system works:

A simple machine, half the size of a shoe box, embeds the code on the audio signal of the medium. (Smaller meters, about the size of a book, were introduced this year to measure cable systems.) A set meter is placed close to the TV is activated when it received the audio code and sends out a signal to check for persons in the room.

The person meter is a ultra small, lightweight, wearable device with a transponder which responds to the set meter every time it receives a signal. This device requires less interaction than is currently required of respondents and shuts off automatically when no movement is detected. At scheduled intervals, the set meter dials the Mediacheck computer and downloads the data.

The audio signal is encoded and carried via a telephone/utility line or television or cable system. The channel, programming, commercials, video movies, games and even on-line services - everything that is measured has its own unique code and is captured. VCR playback as well as time-shift programs can also be measured. The program code increases the accuracy of an AMOL TYPE system. All this was previously impossible technologically . . . until now.

This technology also permits us to gather radio information for in-home and in-car listening. Data from the car can be downloaded in a home docking unit.

Advantages of this meter system are:

- A system that measures actual media usage at a lower research cost while sustaining higher cooperation rates than exist with current systems.
- No complicated technologies for respondents to fumble with a "reminder" is built in.
- Can be used for children and out-of-home viewing.
- Tiny TV sets and dishes will not have to be bypassed.
- Large storage capacity will accommodate second-by-second data, if needed for set tunings, persons
  in the room, and other audio codes.
- English language skills are not required.
- Wide selection of wearable devices; battery life of six months.

The installation cost is lower than with current meters because more households will cooperate since it is simpler to install.

Currently, we are conducting numerous test determining how well the audio codes perform in the real world of signal compression, digitalization, satellite transmission, etc. Many tests have been conducted during 1995. Of greatest importance, six of the largest advertisers in North American ran tests with encoded commercials this summer. None of them were Roger Godbeer's.

Nielsen has also quietly announced that they also are working on an audio code. The court case over the Weinblatt Patents is scheduled for trial in late October. (I am writing this in August). If it is a big smile we will have enforced our patents if not we will probably have had a delay in the courts.

## Next Steps for Electronic Measurement in Print

With all of our efforts concentrated on broadcast we have not made the final push to complete the print system. To do this would require an investment of \$50,000 US from interested publishers who are willing to stay the course. The \$50,000 would cover the costs of a complete feasibility study. We cannot take on that project until the legal issues are settled.

The complete feasibility study is needed because, although we believe major elements of electronic print measurement exist, we don't know the exact parameters and costs. Therefore, a study would focus on the west coast and in several foreign countries, including France and Taiwan. Results should cover the following:

- A complete review of the latest technology.
- A list of capable vendors who can produce the watch, chips and other hardware.
- Production timetable and roll-out plan.
- Cost estimates for a one city test and larger roll-out (economies of scale could be enjoyed if television and radio were measured as well).

We are two years away whenever someone wants to "pull the trigger" (give the go ahead). Well enough of the Blue Sky. Now, to technological developments that are here and now. Lets hear from the speakers.