RFID – NON-INVASIVE MEASURING OF MAGAZINE USAGE

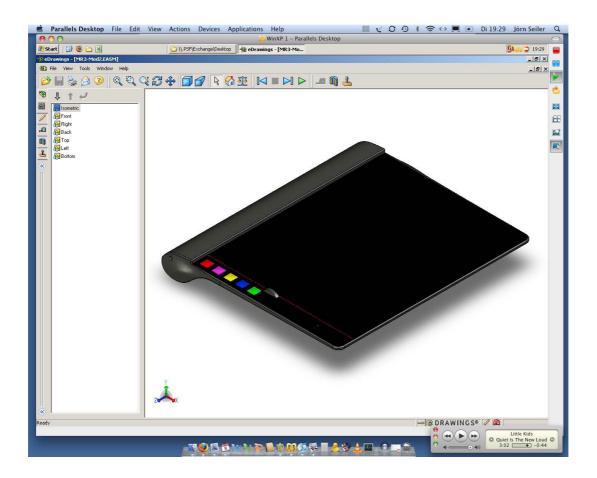
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To date, there is no exhaustive and satisfying answer as to how many contacts a magazine page containing advertising actually produces. This is bothersome to both advertisers and the suppliers of advertising space. The 'readership of an advertising page in an average issue' (German: LpwS) was established as a measure in the German Media Analysis after long debates and much research. Yet even this measure isn't transparent for many planners; for magazines it constitutes a substantial limitation of their promotional performance. The average LpwS for a magazine in the MA lies 24% below the value for Readers per Issue, which means that every fourth ad-containing page goes unnoticed.

For TV and online, it has been possible to enhance usage and exposure data with technical measurements. This way, users' memories aren't strained; instead, usage behavior is measured non-invasively in the background. For print media, there has been no equivalent adequate way of passive, technical measurement. The RFID technology at last offers a method to passively measure readership behavior.

RFID stands for "Radio Frequency Identification". Radio waves transmitting a behavior-related usage signal (i.e. opening or turning a page) are triggered, transmitted and electronically measured. The system contains three components. The first is a passive transponder (the so-called "RFID tag"). The second is an active reading device ("Reader") that supplies the tag with energy via radio waves, thus initiating the emission of a code. The third is the hard- and software for the data transmission and processing. This way, the collection of data on magazine usage can be carried out non-invasively. Forgetting rates – like the viewing of certain pages – are thus eliminated.

To **measure the performance of a specific issue**, tags containing a receiving antenna are placed on every double-page of the issue to be tested. That way, measuring the usage of a certain issue becomes independent of time and place.



The Reader (see figure 1) serves as a case in which the issue of the magazine to be tested is placed. It activates the tags that are placed in the middle of each double page, so that the usage of this double page can be registered automatically.

The equipment and technology used were developed in the name of FOCUS Magazin Verlag by the enterprises Magellan Technologies and RF-IT Solutions. The cover is 330 x 290 mm in size. The "handle" on the left hand side is 55 mm thick. The equipment used is interference-free in regards to European radio frequency (RF) and the electromagnetic compatibility (EMC) emission norms.

In a first test using only 20 Readers, it could be shown that the concept of a passive, technical measurement of reading behavior works. It was also shown that a double-page receives more than one exposure by readers on average. Answers to the following questions could be generated:

- How often is an issue read?
- How long is the reading?
- How often and how long are pages read?
- Is an issue read beyond its actual publication interval?
- How many people in one household read the issue in which order?
- Is a magazine read consecutively from front to back, or is the reading order more chaotic, following the current interests of readers?

In a second step, the experiment was extended to 100 Readers in 100 households with subscriptions to the German magazine FOCUS. The sample was created using quotas for demographic characteristics and frequency classes. Quotas were based on the MA 2009/I. All household members age 14+ were determined. The period under observation began the day the test issue was published and ended the day before the next issue was due. Directly afterwards, all members of test households were subjected to a Copytest (a face-to-face interview, standardized questionnaire).

How can the finding be explained that contact to advertisements could be proven, but respondents definitely couldn't remember the creation? Magazines as an advertising medium clearly fulfilled their task of establishing contact with the readers. However, mere exposure didn't automatically lead to readers recalling the advertisement.

General conclusion of the second experiment:

- Here, too, could multiple exposures to all double-pages be documented in the sample issue.
- Advertising recall isn't a direct result of the time the reader spends with the magazine. Rather, the number of repeated contacts seems to be decisive for advertising recall.

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