THE 'TIME SEQUENCE OF EVENTS': CONSUMERS' LIVES AND MEDIA ANALYSIS

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Subject Matter: How consumers' spend time with magazines relates to an integrated communication channel plan.

The time consumers spend with magazines and when they spend the time are key components of the self-centric activity of using printed media. It is difficult for more than one person to read a single magazine at one time or a single person to read more than one magazine at the same time. So magazine reading is by definition a personal, consumer centric communication channel for advertising messages.

Studies over the years have attempted to document the relationship between magazines and consumers and time. An array of research methods have been brought to the task, from focus groups to questions in syndicated studies. Results generally indicate that magazines deliver on the promise of a personal time commitment on the part of readers to magazine vehicles.

Syndicated, commercially available research has focused on the time element in several ways, including:

- Time spent on a previous reading occasion.
- Time spent on a yesterday basis.
- Time spent during a diary-monitored day.

Newer, electronic technology such as personal meters may add to the list by measuring time a consumer spends in proximity to a physical [magazine] entity. Grocery UPC code data has been collected, and though rarely processed and made available, may offer an opportunity to capture information on the time sequence in which a reading occasion may occur. Circulation management databases record and track the date and churn of subscriptions.

There are expected research challenges in respondent memory of time related events. For purposes of the following discussion, the veracity of memory based measures of time is accepted and focus is placed on the relationship of time and magazines in the context of integrated communication channel investments, and applications to gauge the accountability of said investments. A bibliography, provided as appendix to the presentation, will serve as historical reference to measurement of reading and time.

The objective here is to consider alternatives for:

- Harmonizing the time element of media usage across communication channels and sources of data.
- Placing value on time measures and integrating them into a media investment analysis.

The challenge: magazine research on the dimension of time is broadly considered to be "qualitative". In the real world, the time dimension is fundamental to scheduling "the buy" and accounting for advertising return on the investment – two distinctly quantitative activities.

"What do you pay for different times?" [Simon Broadbent]

For television, accounting of audiences can be made by seconds, minutes, days, weeks, or months. Units for negotiation tend toward seconds, half-hours, programs, day-parts, or days. Scheduling follows similar timing; generally, half-hours, programs, day-parts, weeks, perhaps, months [especially in order to roll information up into equivalence with magazines]. Accountability is considered in a time frame to match consumer purchase data – hours, days, weeks.

Television research has been on pace calibrating the research currency to advertiser sales timing for years. And, the medium collects the largest share of media revenue, even discounting for the "number" of the "right kind" of potential targets.

Magazines negotiate in "space". [Per capita] Gross body counts of circulation and/or audience are assigned a price in a manner more similar to real estate square footage. It is like buying people per square foot of real estate or per page. Laudable efforts have been made to prove the quality of the real estate. However, print research generally stops in the neighborhood of awareness and exposure value of the real estate [media centric], rather than approaching the issue from the other end of the trail, consumer response [consumer centric].

The MPA and others have made bold steps forward in proving that magazines contribute to sales either through high quality primary research or good old college tries at econometric sales response modeling. The general state of magazine research remains an OTS [opportunity-to-see] in a time frame that is not congruent with the time currency of advertiser sales:

Circulation – copies distributed,

Average issue audience – swirl of people in an average issue period,

Quality of reading -- probability measures [and some non-parametric ones] of time and value from a media centric perspective.

"Ninety percent of the game is half mental" Yogi Bera.

Magazine research has a challenge in the variety of end users who, in turn, have a variety of needs and tastes for data – especially as relates to time and the promise of integrated communication portfolio analysis.

A ROI Modeler Alternative:

Take the magazine budget or circulation or average issue audiences [GRPs] and lay probable exposure events down by day or week according to a magazine accumulation model in order to match magazine performance to television performance in sales response models.

Take any of the above factors, assign them to the month in which daily or weekly sales events occur, and then factor the selected magazine data into daily or weekly measures after the fact as a lagged variable – a case of theme and variation.

The current state-of-the-art is to estimate the magazine contribution to explaining consumer purchases [sales] by means of modeling the "audience number", then modeling from a modeled number. This is not an unknown method. Physicists, doctors, and those engaged in measuring things we can not even see have been working in this manner for years. There is the case in physics of measuring existence of sub-atomic particles by observing "displacement" of measurable variables [water, light] and modeling from that. We can at least see people and we have records of when they buy, even if casually observing their use tends to be limited to public places. This isn't so bad, but modeling modeled data can introduce some degree of uncertainty.

A Planner Alternative:

Create a combined "involvement" or "intensity" or "interaction" or "affinity" index, use it as a weighting factor in assorted decision software [reach/frequency programs, awareness or response calculators] along with other media to evaluate potential:

Issues to buy – should it be the May issue that hits newsstands somewhere in April or the April issue for which reading occurs in May.

Target audience [TRPs] – is it a better TRP because readers spend more time with the magazine or because the readers potentially accumulate in one week vs. eight weeks.

Weighting factors for media planning have been in and out of favor and used or not used for several decades. The basic magazine "qualitative" measures of time generally serve for intra-media planning, magazine vs. magazine. However, it is difficult to find equivalent measurements for other traditional media. The planner is hard pressed to create an integrated communication evaluation and recommendation based on currently available magazine measurements.

A Buyer Alternative:

Get the simplest index possible or expected rate increase based on any of the above from favorite planner or research savant and use as the carrot and stick in negotiations, or disregard entirely, as needed.

A Sales Rep Alternative:

Take them to lunch. Just kidding. Some of the best work on timing comes from publishers.

Much of the really useful data about a magazines' time sequence of events is sequestered in circulation databases – distribution documents for newsstand and subscriber records – or un-tabulated in Nielsen and IRI [US] or other point of sales, electronic collection data warehouses.

"Who was Dagmar? Oh, I used to read that comic strip." [Young media person]

Despite edits and attempts at enhancement, the basic model of media activity receives general agreement:

Vehicle distribution Vehicle exposure Message exposure Communication reception Communication consideration Sales response

This foundation model fits nicely into a time sequence or time series perspective:



It is a wonder that so much effort has been spent in magazine research moving data from the left of this model to the right, rather than the right to the left. Or, is it? Most magazines pages are read left to right. . .hmmm?

"I wish I knew then what I know now, when I was younger" [Rod Stewart]

A great deal of time has been spent testing and debating time as a measured variable in describing magazines. There seems to be general consensus that survey respondents have difficulty responding to questions about time. That said, data are relatively abundant on intra- and inter-mural time relationships for traditional media and major vehicles.

On the magazine intra-mural side, there are years of research and discussion on time related measurements of magazine reading, most of which adopt the media centric approach. Studies on how "long" is the magazine reading event seem to be in the majority -- time spent as actual minutes a magazine is read, % of pages opened, and number of times a magazine is read are prevalent variables. The introduction of time related questions into the major syndicated studies like MRI and NRS have brought these types of measures into mainstream availability. All of these data provide important and interesting results for comparisons between magazines.

There are equivalent amounts of research on challenges and controversies over time related events such as effect of the size of magazines [number of pages – more pages more time], consumers' time available for reading, place of reading, telescoping, replicated vs parallel reading, et cetera. The quality of reading session at the 1981 Worldwide Readership Symposium included an abundance of perspective on these topics.

Inter-media measures of time spent with media are a staple of inter-media comparisons.

Consumers' time spent with media appears to have remained relatively stable for some years. This suggests there is a minimum amount of leisure or business time that is assigned to consumption of media, just as time is allotted to eating, sleeping, working and other such mandatory activities.

A 1981 study[1] found allocation of leisure time spent with media was 45%TV, 35% radio, 20% print.

These results are similar to findings about time allocation in the SRI/Knowledge Network Multi-media mentor study in the US, although print tends toward a lower percentage in this US syndicated study.

A May, 2000 study[2] found average respondents read newspapers on more than five days per week for 43 minutes per day. Magazines are read 3 times per month for 54 minutes per occasion. As a point comparison, the study, also, reported that radio was used on more than five days per week for 3 1/2 hours per day and TV on 6 days per week for 2 hrs 45 minutes per day. It is worth noting the purpose of the study to discover if different survey methods gave different answers about time, which they did.

These measures are interesting, and possibly useful in weighting and making vehicle audience estimates or advertising trends presentations. They are not particularly useful in establishing accountability of an integrated communication program or assisting planners in establishing an optimal time sequence for the buy.

"Who's on first,.... no who is on third, ... then, who's on first..." [Abbott and Costello]

"Turning the table" and measuring time and time sequence of events for magazines from the consumer side might create a perspective that could be more readily integrated with measurements of other media and, as a bonus, coordinate media usage with consumer purchase.

In a rare example of capturing information for magazines for more discrete time units than weeks and months, a 1997 study[3] reported that reading was distributed in a rather balanced fashion across the seven days of the week; time for reading was generally afternoon and evening; 9 of 10 respondents leafed through their magazines upon receiving them; 6 of 10 began reading immediately; 80% took more than a day; on average read on 4 ½ days during 2 hours 25 minutes. Visually heavy content was read less; younger people read more quickly; educated persons read for longer periods of time; 82% read front to back; 12% back to front; and 8 of 10 read all pages; each copy averaged 3.9 additional readers; 7 of 10 persons re-read their magazines; and the magazines saved average 24.8 months.

This rather detailed account is offered as an example of a more consumer centric approach to the question of magazine reading and time [when consumers did what], in summary:

Day of week,

Time of day,

Reading event in time proximity to receiving copy,

Number of days on which reading occurred,

Number of hours/minutes across days during which reading occurred.

Sequence of occasion [front to back/back to front] [not necessarily time related, but relative to exposure]

Number of pages read,

Number of additional readers,

Number of additional reading occasions to same magazine by original reader

Number of months copy is kept.

"Time is that wherein is opportunity, and opportunity is that wherein there is no great time"...[Hippocrates]

The preceding list may begin to approximate adequate data to relate, dare it be said model, a reading occasion to a consumer product purchase occasion and in the context of the multiple channels of communications received by a consumer.

In the Target Group Index studies, a time diary was introduced several years ago that queries a "day-in-the-life" of respondents across a range of activities, thus providing another approach for integrating communication channels and estimating magazine position in the sales equation. There are some challenges in using the data, not the least of which are the Rubenesque size of the definition files required to retrieve the data and the patience required to sort it into a useable form. However, it may provide another piece to the puzzle – which parts of an average day [which times] are most likely to produce reading events.

It may be possible to combine results from time-of-event studies like the Mediamark Research Accumulation Studies measuring consumers use of magazines across time with TGI data measuring consumer use of magazines during an average day to make an estimate of the timing of a reading event. These data, possibly, could be coordinated with TV viewing events and integrated with consumer purchase occasions for an estimate of return on communication investment portfolio. And, an update of the MRI Accumulation Study, before 30 years have elapsed, would be nice.

The shortest route to time oriented measurement may be consideration of UPC electronic recording of magazine newsstand sales and subscriber circulation databases. However, the mention does seem to provoke consternation among publishers.

"There will be no substantive improvement. . .until we understand the time sequence of events" [Timothy Joyce]

Classic AIR measurement assumes that reading occasions are all of equal value. This contradicts magazines' fundamental value proposition – the relationship with readers and when it occurs. While estimates of time dimensions of reading behavior provide substantial intra-mural comparative data, they tend to be uni-directional, media-centric.

Time measurements have a more urgent appeal as candidates to bridge across the disparate measurements of media "audiences". The concept of integrated marketing communications is making another tour of duty through the commercial side of advertising. This time the discussion often occurs in econometric response analysis and attempts to establish accountability of advertising dollars. Magazine research is at a disadvantage, by its nature, to explain which issue is the best to buy or the contribution of print media to consumer sales. The frustration of those who engage in planning and buying magazine space is something of a daily experience for magazine research practitioners.

This paper describes some meager alternatives in evaluating the "time" contribution of magazines to consumer-centric, multi-channel, multi-platform media investment portfolios. This discussion closes with little or no conclusive results. Hopefully, it identifies issues and possibly direction for future research efforts.

Stephen Hawking [4] makes an observation in "A Brief History of Time", on the possibility of a unified theory of the universe, that may be useful to those deciding to pursue magazine research on time:

- "Can there ever be a unified theory? There seem to be three possibilities: . . .
- -- There is a complete theory, and someday we will be smart enough to discover it.
- --There is no ultimate theory just an infinite sequence of theories that describe universe more and more accurately.
- --There is no theory, events cannot be predicted beyond a certain extent but occur in a random arbitrary manner."

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