PRINT IN A TRUE SINGLE SOURCE MARKETING PANEL

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This paper presents preliminary results from a proof of concept test of a single-source National Marketing Panel that uses Arbitron's Portable People Meter. The panel collects media audiences, marketing information and retail store traffic from a single sample. This paper will share the methodology and basic findings from the print portion of the panel as well as explore some of the early types of analysis possible using this database.

Background on the PPM

The Portable People Meter (PPM) is a research technology that enables multiple media to be measured electronically, passively and simultaneously from the same survey respondent. The PPM detects an inaudible code that is embedded in the audio stream of audio and video programming, including television programming, radio programming, cable network programming, cinema advertising and Internet streamed audio. Similarly, an inaudible code can be placed in the audio component of the audio and/or video content that is broadcast by retailers (such as grocery chains) in their stores.

The PPM system is mailed to panelists, self-installed, and works with existing household wiring. Survey participants carry a portable meter, which is a pager-sized device that senses the codes as survey participants are exposed to media and visit retailers that encode. Participants are asked to carry the meter with them while they are awake and return the meter to a docking station to recharge it when they go to bed. The codes are transmitted daily to an Arbitron central processing system for tabulation.

Beyond Media Measurement: the National Marketing Panel

The PPM Marketing Panel Pilot Study is being conducted in the Philadelphia DMA® for a period of roughly nine months starting in April 2003. The purpose of this pilot is to assess the feasibility of combining basic PPM radio and television multimedia audience measurement with the collection of other valuable media and marketing information from a "single source" panel of consumers. Data to be initially collected from the PPM Marketing Panel include:

Passive Panelist Activities

- Television viewing, both in and out of home
- Radio listening, both in and out of home
- Internet – Streamed and site patterns
- Visiting select retail chains
- Viewing selected commercials
- Data integration of "rich" sales databases

Active Panelist Activities

- Print readership (magazines, national and local newspapers and FSI's)
- Other shopping behavior

Going forward there is also the potential to add product scanning data to the overall mix of information collected from the panel. The single-source media exposure and store visit data is combined into one data base for various marketing analyses, including studies of media plan optimization and advertising effectiveness.

Sampling

The sample size for the PPM Marketing Panel (PPM/MP) was 500 persons age 6 and older in roughly 250 households. As of July, there were 509 persons 6+ intab. Panel homes for the pilot were selected at random from the existing panel homes in the 1,500 person PPM demonstration panel installed in the Philadelphia DMA®. Sub-samples from the existing panel were selected in three random sample replicates using stratification controls based on county, race/ethnicity, and employment status. The result is a panel that is projectable to the Philadelphia DMA® universe. The following graphs compare the initial panel to the PPM 1,500 panel and the Philadelphia DMA®.

Chart A: Marketing Panel Composition vs. PPM vs. DMA Universe By Age and Gender

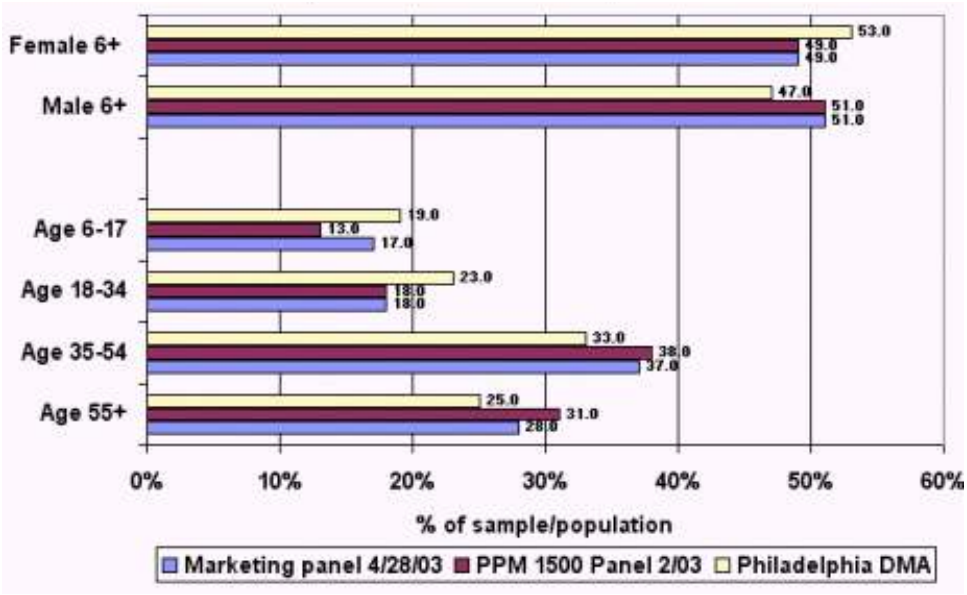
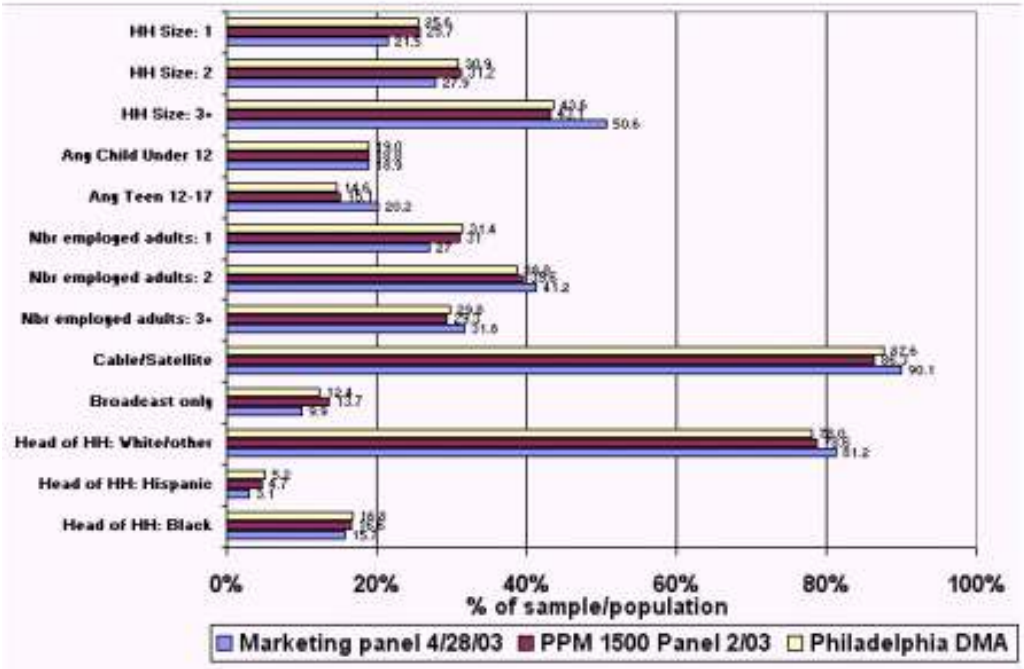


Chart B: Marketing Panel Composition vs. PPM vs. DMA Universe By HH Characteristics



Recruitment

The selected PPM households were notified by mail and telephone and invited to join the new PPM/MP panel. Arbitron Panel Relations Specialists handled these recruitment calls. Each sampled home also received a written description of the new research tasks and objectives for the PPM/MP and what would be asked of them if they chose to join the new panel.

Data Collection

Radio, Local TV, Cable

TV viewing and radio listening data continues to come from the PPM system. The radio and TV data are continuous, not limited to current ratings periods or "sweeps." [Should we also say minute by minute for commercial exposure.]

Print

Readership data was collected through a self-completed questionnaire for all panelists age 12+. The initial print questionnaire was completed in May. It surveyed over 100 national and local magazine titles plus local and national daily and Sunday newspapers as well as Sunday supplements and FSI's. A follow-up print questionnaire will be fielded in September. Findings from that questionnaire will be shared in the presentation at the WWR Symposium but were not available for this paper.

Visits to Retail Stores

In-store audio broadcasts of participating retailers have been encoded using the same type of inaudible code used for the media outlets. Encoding takes place at a central site, such as the satellite uplink. It is not necessary for individual stores to encode their audio systems. When panelists visit a store with encoded audio the retailer's code is detected and the store visit is automatically logged in the PPM database. The PPM device is able to identify the number of store visits, the time of the visits, and their duration. Identification of specific retail locations is theoretically [should we use the term technically] possible, but is not part of the test at this time.

Other Shopping Behavior

Other shopping behavior of the panelists was collected via a modified Scarborough questionnaire for all panelists 12+. The 12-page booklet focused on retail, financial, automotive and other key categories.

Incentives

Each panelist receives a basic monthly cash incentive for participating. There are also bonus incentives in the form of weekly prize drawings for larger cash awards.

Informed Consent

All households joining the PPM/MP have been informed, both verbally and in writing, about the specific procedures, research objectives and respondent tasks involved. All participating households receive a detailed "Privacy Pledge" outlining the steps Arbitron takes to protect the confidentiality of information collected for the pilot. They are also informed of the incentive plan, including the requirements for earning bonus incentives and the opportunities of winning larger cash prizes.

Determining the Effect of Gathering Marketing Data on Compliance

The first objective of the study was to determine if compliance changed when Arbitron began tracking retail store visits, print exposure, and other variables. The following table compares, by demographic, the average number of hours undocked and in motion for January and May 2003. These data before and after imposition of the additional requirements of the marketing study are compared in Chart C. The difference is negligible.

Chart C: Comparison of Hours Undocked and In Motion Pre and Post Additional Requirements

	Avg Hours Out of Dock			Avg Hours in Motion		
	Jan-03	May-03	% Diff	Jan-03	May-03	% Diff
Persons 6+ intab compliance						
Total Week	16:01	16:12	1%	15:26	15:39	1%
Compliance by age						
Kids 6-11	14:08	14:39	4%	13:39	14:14	4%
Teens 12-17	15:29	15:46	2%	14:24	15:01	4%
Adults 18-24	15:54	15:49	-1%	14:45	14:51	1%
Adults 25-34	15:41	15:52	1%	15:12	15:27	2%
Adults 35-44	16:00	16:09	1%	15:33	15:48	2%
Adults 45-54	16:11	16:26	2%	15:36	15:55	2%
Adults 55-64	16:24	16:49	3%	15:56	16:21	3%
Adults 65+	16:30	16:57	3%	15:57	16:15	2%
Compliance by gender						
Males 6+	16:00	16:11	1%	15:28	15:44	2%
Females 6+	16:04	16:14	1%	15:26	15:36	1%

Print Audiences

The ultimate goal for print measurement in this panel is to measure audiences to issues using passive technology so that the audience measurement of all media is directly comparable. Since that technology is not currently available, a mail survey was used. The design was meant not to create a new methodology, but rather to use generally accepted industry questions and methods.

It is important to remember that this is a concept test. The sample is small and only in Philadelphia. The figures presented should not be used to make any decisions beyond the viability of the methodology and the value of such a panel.

Read to Screen Ratios

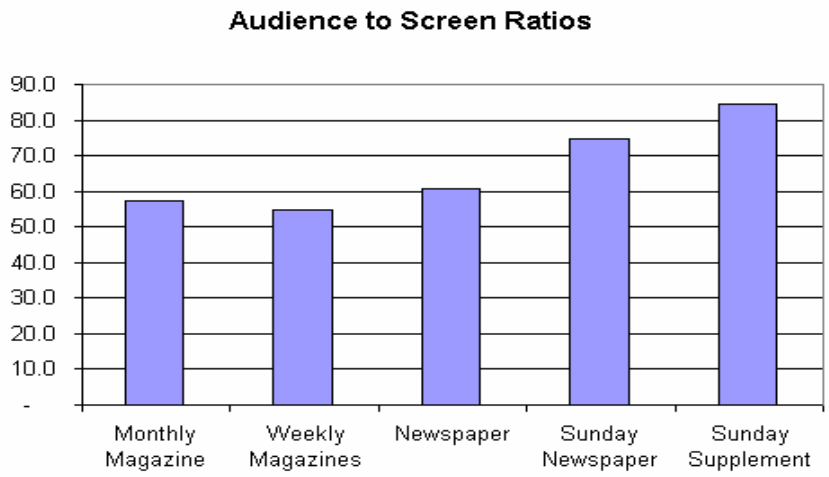
The standard screen of six months was used for all print vehicles. The read questions were:

- Magazines: “How many of the last 4 issues did you read or look into?”
- Newspapers: “How many of the last 5 issues did you read or look into?”
- Sunday Newspapers: “How many of the last 4 issues did you read or look into?”
- Sunday Supplements: “Did you read or look into any issue of this magazine in the Sunday paper anytime in the past seven days?”

Both the ratios for monthlies and weeklies are consistent with previously reported levels for recent reading: 57.3% vs. 63%[1] for monthlies and 54.3% vs. 49%[1] for weeklies, although there is not as large a difference between these in this panel as reported in other surveys. Scarborough in Philadelphia has 77% of the screens for newspapers being readers based on reading 5 out of the last 5 issues and 85% of Sunday newspaper screens being readers based on reading 4 out of the last 4 issues. These are comparable to the ratios found here.

We did not ask the same type of frequency question for the Sunday Supplements. It had been suggested that we ask the read question. Each supplement was shown with all of the Sunday newspapers it might have been in. The read to screen ratios and the absolute number of readers for the Sunday supplements were considerably larger than the Sunday newspapers they were carried in. We are currently exploring the possibility of asking a similar frequency of reading question for Sunday supplements to keep all of the print audience GRPs comparable.

Chart D: Comparison of Read to Screen Ratios By Print Type



A comparison of reader-per-copies will be available for both surveys at the time of the presentation.

Examples of What is Possible with the PPM National Marketing Panel

A Day In A Life

By taping the wealth of data available from the PPM/MP we can focus on a single (anonymous) household and track its activities hour-by-hour. We develop a true "Day In The Life" picture that profiles our panelists in the context of their home characteristics, multimedia usage, and consequent retail behavior. The following charts show the activities and media exposure of a 42 year-old man, his (assumed) wife, aged 41 and daughter age 11 on July 3rd, 2003. We will depict their media usage along with their exposure to advertising from a national retail chain (Retailer A.)

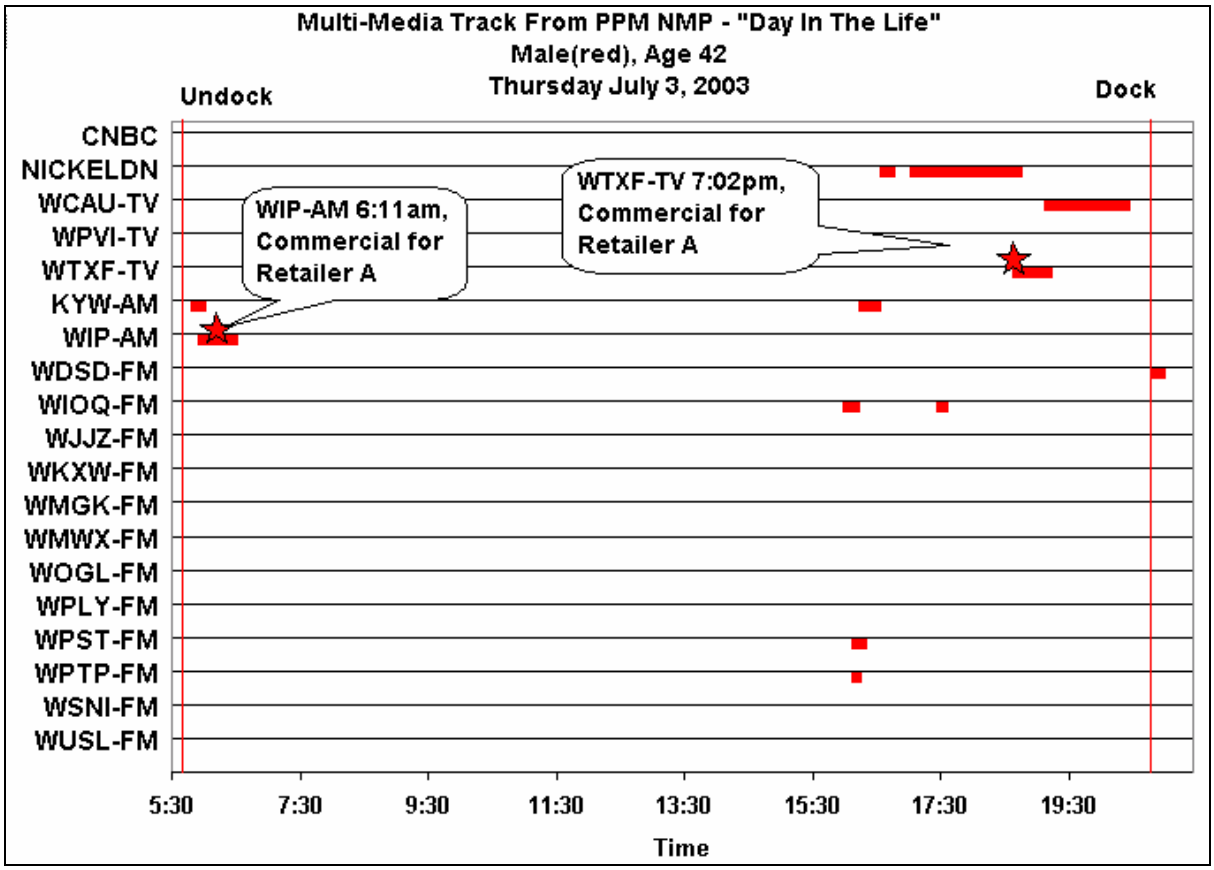
Exhibit A tracks the man's core PPM media exposure hour-by-hour. He wakes up and undocks the PPM at 5:41am. He listens to KYW-AM, a news formatted station, then switches to WIP-AM, a sports formatted station. He listens to the radio in the late afternoon, perhaps on the drive home, turns on the TV in the early evening, and continues to watch until bedtime. Note the extended viewing of CNBC and WTXF (FOX) in the early evening and then Nickelodeon in primetime. Also note there is relatively little channel surfing.

Listening to WDSD-FM, a news/talk formatted station, after docking reflects the fact that the PPM continues to record media exposure even while in the docking station.

From TNS/CMR we know the time and date of each Retailer A on air commercial and the date for every print ad. From this we know that he was exposed to a commercial for Retailer A by radio in the morning and by TV in the evening.

[1] Source: Media Magazine Dimensions 2002

Exhibit A: Male's PPM Media Usage Minute by Minute

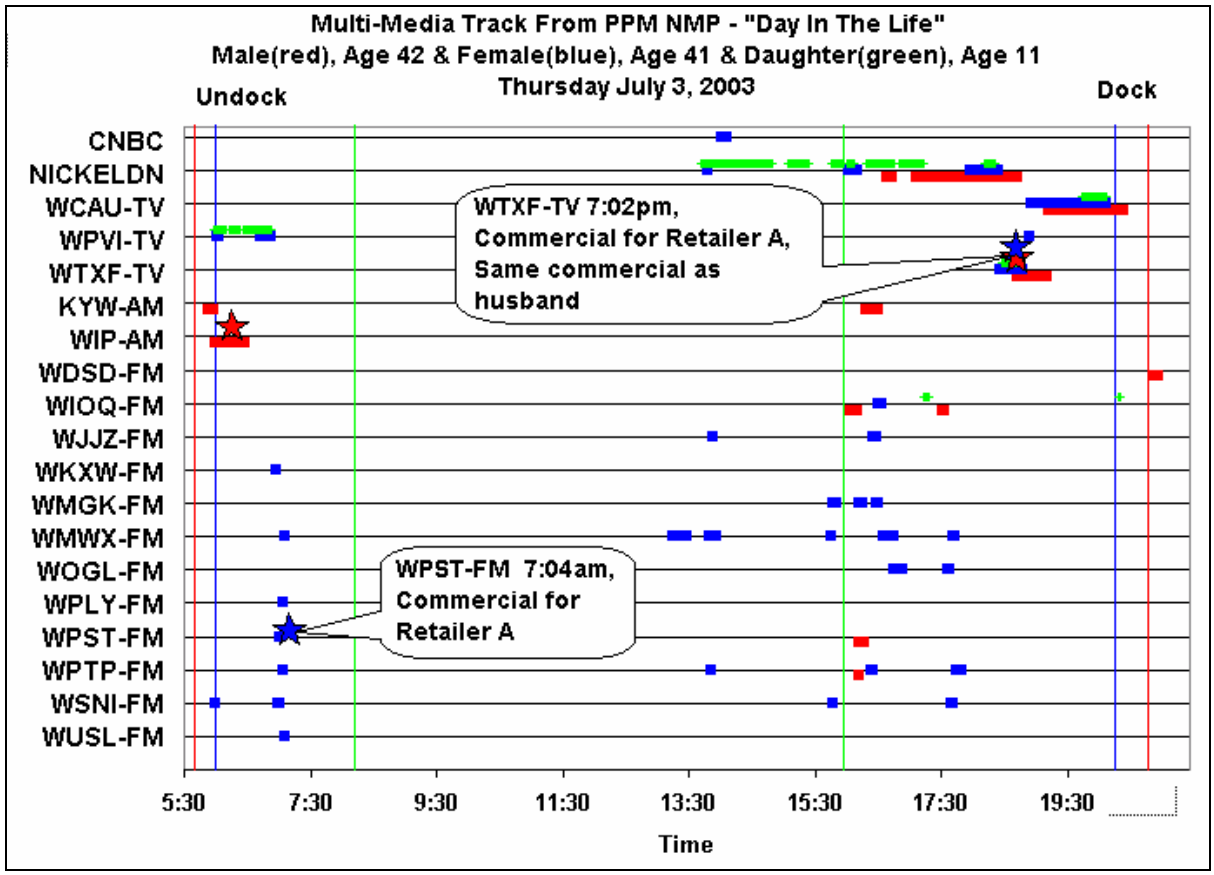


Since husband, wife and daughter each carry their own PPM device, we can track the whole family's media exposure. In Exhibit B we see that the woman undocks at 6:01am. She visits her daughter's room twice while her daughter is watching WCAU-TV in the morning. The daughter's behavior is in light green, which in black and white translates to light gray bars at the top of the graph for WCAU-TV and Nickelodeon. The wife then appears to get into her car and begin radio station hopping. All late afternoon and evening she listens to the radio, frequently changing stations and then watches TV for bits and pieces with her husband and daughter. The daughter is home all afternoon watching Nickelodeon.

Note that while most of the viewing is the same, the PPM device does pick up when one of them leaves the room while the other is still there.

The wife hears the morning radio commercial on a different station than her husband, and does see the TV commercial in the evening, although the daughter was not in the room so she did not see the commercial.

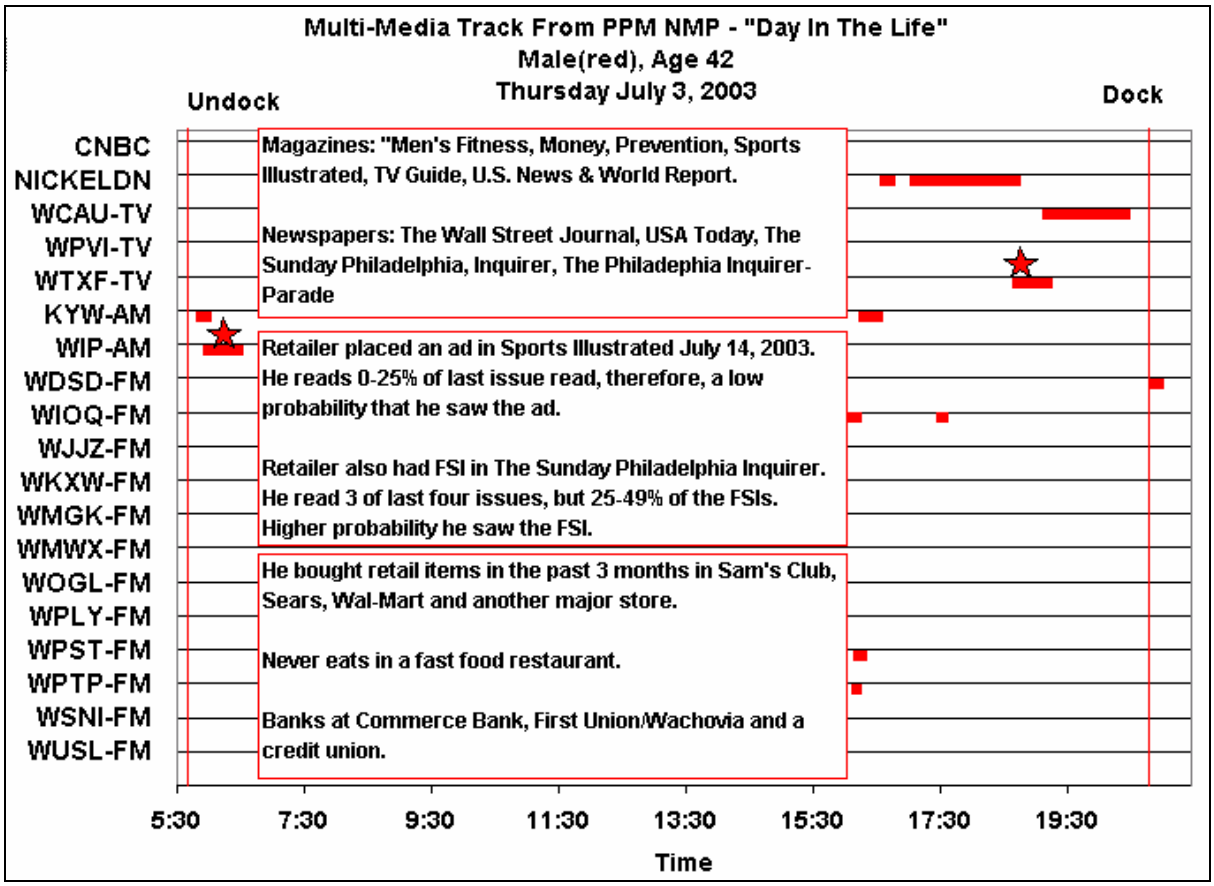
Exhibit B: Female's and Daughter's PPM Media Usage Minute By Minute Added to Male's



Since these tables are originally in color, and are being printed in black and white, for each station line, the bottom line is the red, the middle, blue and the top green. There is no way we could find to distinguish between the respondents since each activity is minute by minute and so small patterns were not detectable.

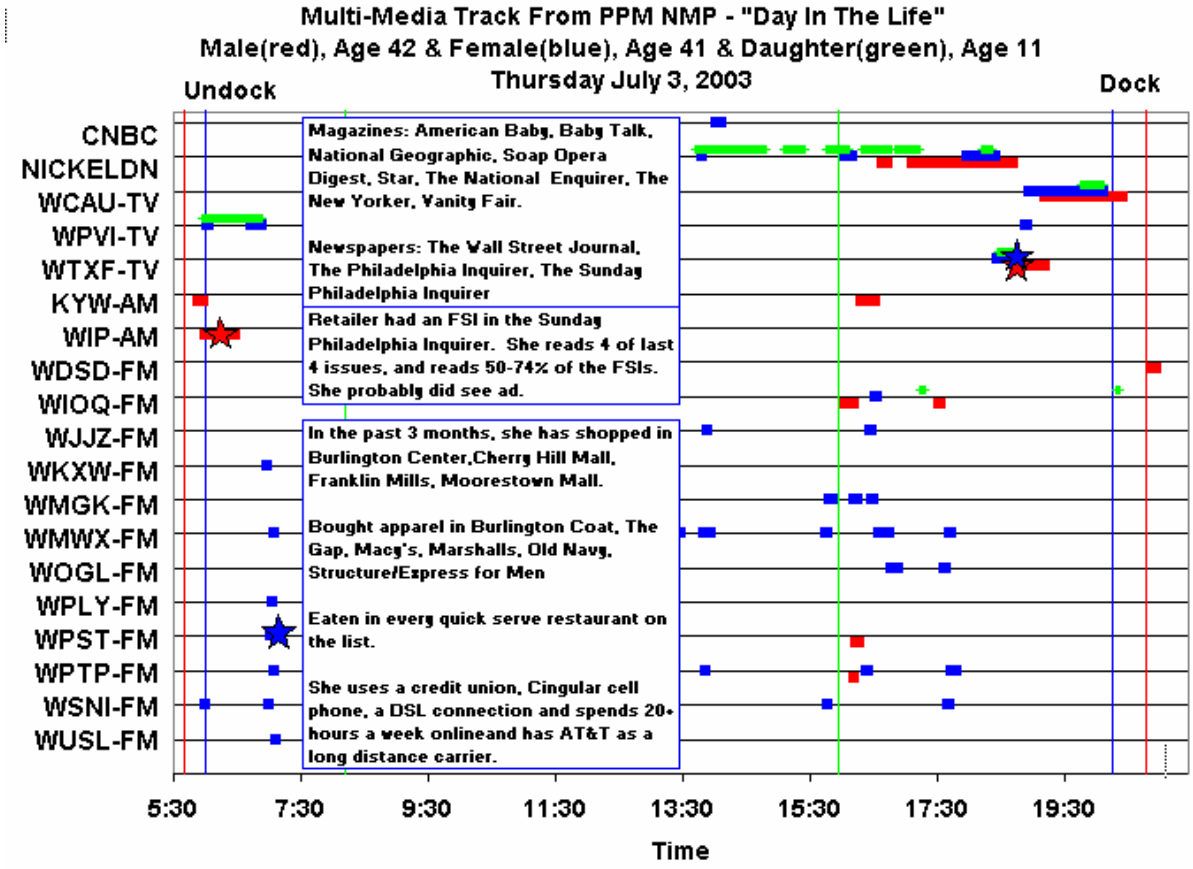
From TNS/CMR we learn the date, time and station that Retailer A ran television commercials. By noting that this man or woman was watching those stations at that minute, we infer exposure to the commercial. We also know this retailer ran an ad in Sports Illustrated on July 14th. Since this man reads 0-25% of the last issue read, and read 3 of the last four issues, there is a chance that he saw the ad for this retailer. The retailer also ran an FSI in the Sunday, July 13 issue of the Sunday Philadelphia Inquirer. There is a higher probability that he saw this ad, since he reads 25-49% of all FSIs.

Exhibit C: Male's Print Readership, Retailer A Print Ad Exposure and Retail Shopping Patterns



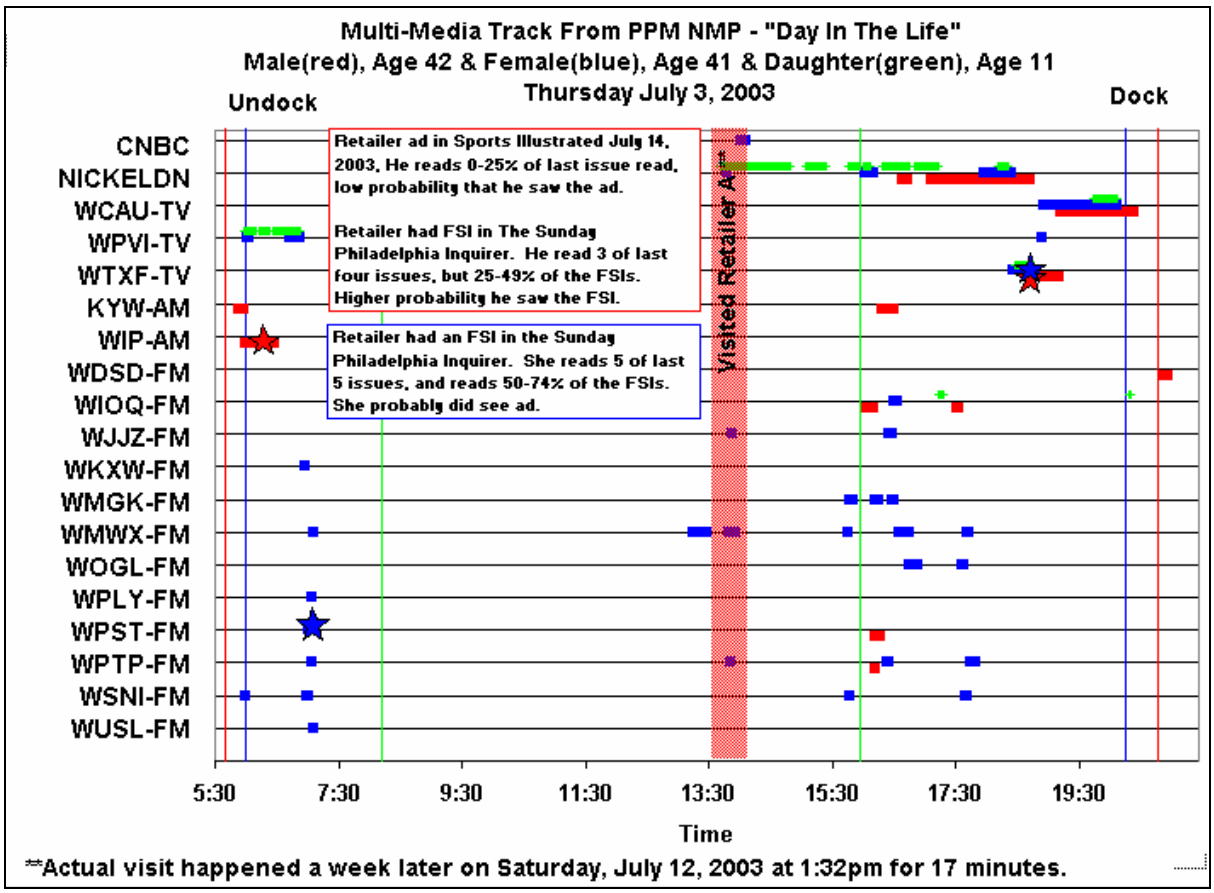
Since this woman reports she read 4 of the last 4 daily issues of The Sunday Philadelphia Inquirer and reads 51 – 75% of the pages and reads the advertising supplement, we infer there was an opportunity to see this Retailer's print ad in that FSI. Remember, the wife was also exposed to a radio and a television ad for this retailer this day.

Exhibit D: Female's Print Readership, Retailer A Print Ad Exposure and Retail Shopping Patterns



Retailer A is participating in the concept test of the PPM/MP. They have the background music in their stores encoded. Our female panelist saw one of the radio ads and one television ad, and likely also saw the newspaper FSI. She then visited the store on Saturday afternoon, the week after our "Day-in-the-life". She spent almost 17 minutes there. This example, based on one household in the panel, shows the depth and breath of the information that can be mined using the PPM/MP. For the first time, print can be integrated on a common basis with other media at both the micro and macro level.

Exhibit E: Cumulative Media, Ad Exposure, Shopping and Retail Visit for Family



Cross Media Reports

One of the core values of this panel is in the level of detail available for all measured media. In the following reports, we have begun to tap into the wealth of information possible through this PPM/MP.

Exhibit F shows real cross media terciles. We have used terciles since the sample is small, but broad usage quintiles and quintiles for a specific target are also available. Exhibit F is broadcast television as compared to magazines. Interestingly, heavy TV indexes well against heavy magazines. Light TV indexes well against medium magazines and light magazines indexes well against medium TV. This pattern will have to be verified with a larger sample. This analysis can be done for any type of target – demographic as well as retail visitor, brand purchaser or retail shopper.

Exhibit F: Cross Media Tercile of Broadcast TV and Magazines

NATIONAL MARKETING PANEL

ARBITRON

Broadcast TV, Magazine Media Tercile

Geography: DMA		Intab Projected Population		Start Date	End Date
Demographic: P18+	Avg Daily PPM Media:	310 5,701,800	PPM Media Time Period:	7/1/2003	7/31/2003

Projected Pop
Index
% col % row

Magazine	Broadcast TV: Total	Heavy	Medium	Light	None
Total	5,701,800 100 100.0% 100.0%	2,034,134 100 100.0% 35.7%	1,966,305 100 100.0% 34.5%	1,677,584 100 100.0% 29.4%	23,777 100 100.0% 0.4%
Heavy	1,668,214 100 29.3% 100.0%	695,409 117 34.2% 41.7%	521,536 91 26.5% 31.3%	437,902 89 26.4% 26.2%	13,368 192 56.2% 0.8%
Medium	1,627,233 100 28.5% 100.0%	519,443 89 25.5% 31.9%	498,873 89 25.4% 30.7%	608,108 127 36.2% 37.4%	809 12 3.4% 0.0%
Light	1,689,839 100 29.6% 100.0%	537,992 89 26.4% 31.8%	693,487 119 35.3% 41.0%	448,759 90 26.8% 26.6%	9,600 136 40.4% 0.6%
None	716,514 100 12.6% 100.0%	281,291 110 13.8% 39.3%	252,409 102 12.8% 35.2%	182,815 87 10.9% 25.5%	

Exhibit G examines one group of people who fall in the cell of the light broadcast TV and medium magazine cell from Exhibit F above (circled) that has an index of 127. The Print Terciles below in Exhibit G include newspapers, Sunday newspapers and Sunday supplements. This cell's other media habits include high levels of the medium tercile radio and light tercile cable.

Exhibit G: Demographic Profile of Light Broadcast TV – Medium Magazine Tercile Cell

NATIONAL MARKETING PANEL

ARBITRON

Instant Demo Profile

Light TV-Med Mag

Geography: DMA		Intab Projected Population		Start Date	End Date
Demographic: People 18+	Avg Daily PPM Media:	310 5,701,800	PPM Media Time Period:	7/1/2003	7/31/2003

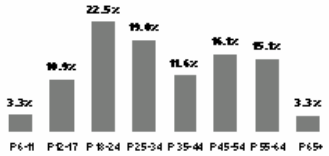
Sex

51.8% % Male | 48.2% % Female

Race

Other:	78.8%
Black:	14.5%
Hispanic	6.7%

Demographic Breakout



Employment Status

Employed Full-Time	60.9%
Employed Part-Time:	13.7%
Not Employed:	25.4%

Household Size

One person	3.8%
Two people	17.5%
Three or more people	78.7%

Households with Children or Teens

None	37.2%
Children 12 or under, no teens	34.7%
Children and Teens	28.1%

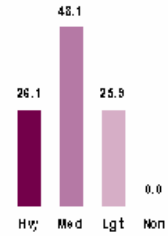
Location

Metro:	39.4%
Outside Metro	60.6%

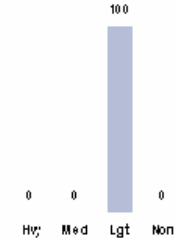
Cable Satellite Service

No Cable:	10.9%
Cable Basic:	45.8%
Cable Premium:	36.0%
Satellite:	2.5%
Both Cable/Satellite	4.8%

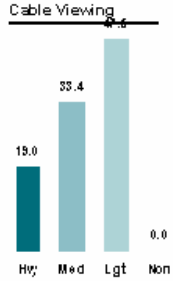
Radio Listening



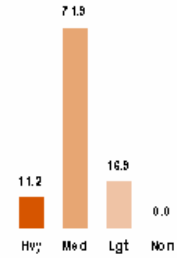
Television Viewing



Cable Viewing



Print Readership



This paper highlights the unique attributes of the PPM/MP. Of course, in addition, all of the traditional ways of using media data are available. Exhibits H – O below are some other interesting ways of looking at this data that take advantage of its granularity.

As an example, let's say you are promoting your Jazz radio station. Which magazines should you advertise in? Exhibit H lists the magazines with their percent composition and index. Only magazines with audiences larger than .5 and indexes over 125 were included in these analyses since the sample is small.

Exhibit H: Magazine Readership of Listeners to Jazz Station WJJZ-FM

Listeners to WJJZ-FM
P 18+

Classification	Print Name	Audience GRPs	Percent Comp	Index
Art/Music	VIBE	2.1	37.7	167
Business/Finance	BLACK ENTERPRISE	1.4	58.9	261
General Editorial	AARP THE MAGAZINE	5.5	28.8	128
	EBONY	7.4	49.1	217
	STAR	2.9	29.2	129
	THE NATIONAL ENQUIRER	1.9	29.8	132
Health	PREVENTION	2.7	34.0	150
Home Service	COUNTRY LIVING	1.0	28.6	127
	FOOD AND WINE	1.2	61.6	273
	HOUSE AND GARDEN	1.8	29.8	132
Men	ESQUIRE	1.0	38.7	171
	GQ	0.6	30.3	134
News - Weekly	JET	5.2	51.0	226
	NEW YORK	0.6	65.3	289
	TIME	4.1	29.9	132
	U.S. NEWS & WORLD REPORT	1.7	29.2	129
Parenthood	Scholastic PARENT & CHILD	0.6	28.6	127
Science/Technology	DISCOVER	1.0	29.5	131
Sports	GOLF DIGEST	1.3	31.2	138
	GOLF MAGAZINE	1.1	49.0	217
Travel	Conde Nast TRAVELER	1.5	48.9	216
Women	COOKING LIGHT	2.3	37.1	164
	ESSENCE	4.5	56.3	249
	REAL SIMPLE	0.9	56.0	248
	WOMAN'S DAY	4.0	28.3	125

* Only magazines with Indexes over 125 and audiences equal to or larger than .5 GRPs included

As another example, imagine you are trying to promote a product that is being sponsored on Comedy Central. Which magazines would deliver people likely to watch Comedy Central? Or, you are using Comedy Central in your media plan and you want to increase the synergistic effect. Which magazines should you use?

These exhibits for the first time use a television show, cable network or time period, radio station, program or daypart as a target and see which magazines those people read.

Exhibit I: Magazine Readership By Heavy Viewers of Comedy Central

Comedy Central - Heavy Viewers
People 18+

Classification	Print Name	Audience GRPs	Percent Comp	Index
Art/Music	ROLLING STONE	3.7	58.0	180
	VIBE	2.4	44.6	139
Business/Finance	BARRON'S	0.7	40.2	125
	ENTREPRENEUR	0.7	56.0	174
General Editorial	THE NATIONAL I	2.8	43.6	136
Health	MUSCLE & FITN	1.4	46.9	146
Men	ESQUIRE	1.4	53.9	168
	MAXIM	3.1	55.9	174
	OUTSIDE	1.3	71.4	222
	STUFF	2.1	41.2	128
News - Weekly	US WEEKLY	1.9	51.0	159
Parenthood	AMERICAN BABY	1.4	44.6	139
	BABY TALK	2.7	64.7	201
	SCHOLASTIC PA	0.9	41.0	127
Women	ELLE	0.5	43.6	136
	SOAP OPERA DI	3.3	48.8	152
	VOGUE	1.5	50.4	157
	YM	1.8	40.5	126

* Only magazines with Indexes over 125 and audiences equal to or larger than .5 GRPs included

Now imagine you want to see which dayparts for broadcasters, cable networks and radio stations deliver a particular type of magazine audience.

Exhibit J, K and L are examples based on the readers of a group of parenting magazines: Family Fun, Child, American Baby, Parenting, Parents, Baby Talk and Scholastic Parent & Child. These are the indexes hour by hour of each station where the average rating was larger than a 0.1 and the index was higher than 125. Rather than try to see each number, the key is to look for patterns. Almost imagine this is a graph. There are clear patterns of stations and dayparts that deliver this group of "Parent-Focused" readers. The yellow (light gray) networks have more than 8 hours with high indexes against a real rating.

Exhibit J: Cable Networks Hour By Hour for Parenting Magazines

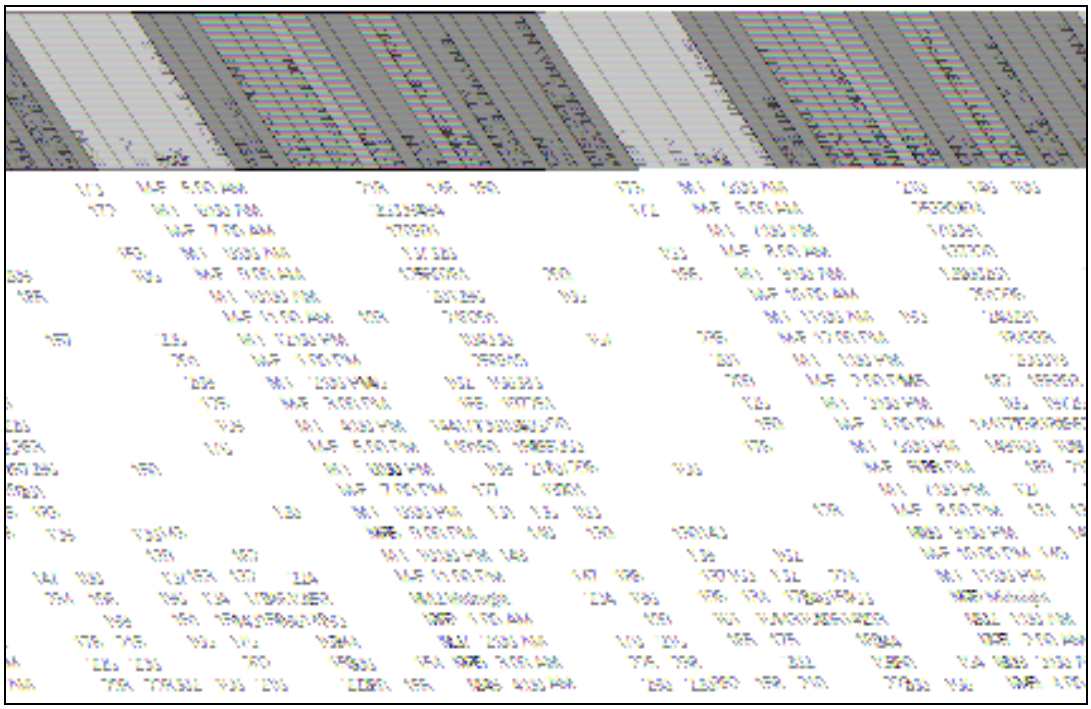
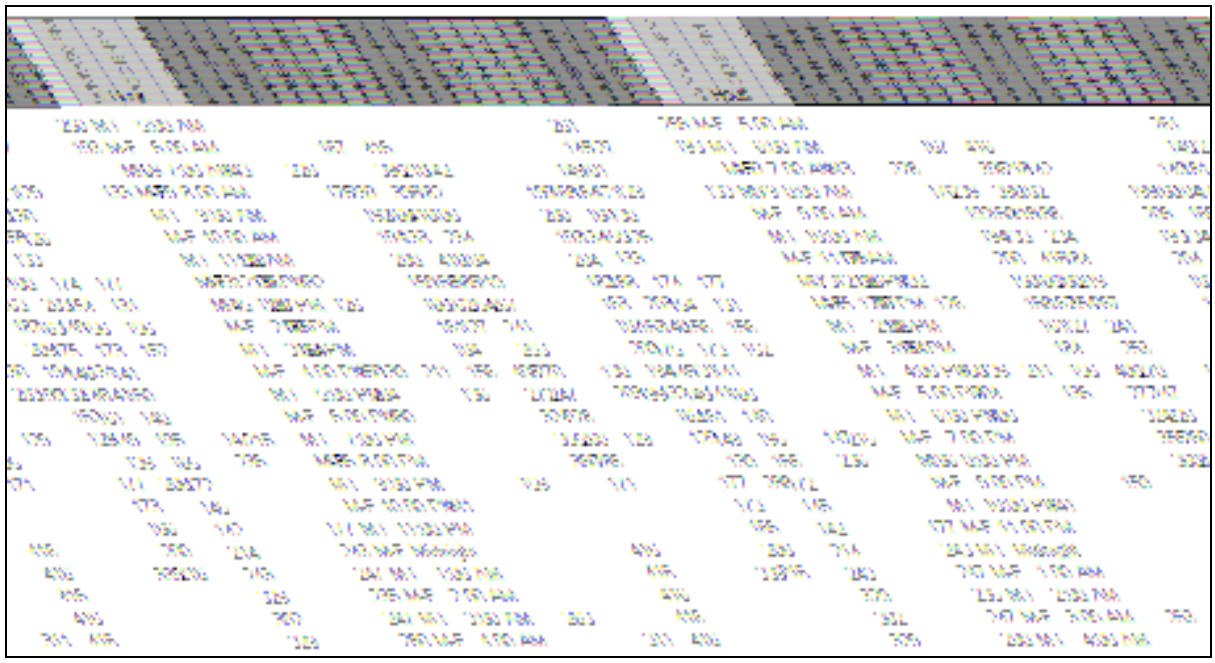


Exhibit K: Broadcast Stations Hour By Hour for Parenting Magazines

Hour	KYW-TV	WCAU-TV	WHYY-TV	WPHL-TV	WPSG-TV	WPVI-TV	WTXF-TV
M-F 5:00 AM							
M-F 6:00 AM							
M-F 7:00 AM			182				
M-F 8:00 AM			997	397		150	128
M-F 9:00 AM		159	1,124	570		229	370
M-F 10:00 AM	327			976		189	374
M-F 11:00 AM	918	173	905	1,275	127	162	248
M-F 12:00 PM	939	204		1,259		212	
M-F 1:00 PM	754						
M-F 2:00 PM	370						
M-F 3:00 PM	323		201				
M-F 4:00 PM	143		201		190		
M-F 5:00 PM					241		169
M-F 6:00 PM					171	216	166
M-F 7:00 PM		180			279	126	423
M-F 8:00 PM		260			224		602
M-F 9:00 PM		412			538		370
M-F 10:00 PM		514			666		
M-F 11:00 PM		266		145	420		
M-F Midnight							
M-F 1:00 AM							
M-F 2:00 AM							
M-F 3:00 AM							
M-F 4:00 AM							

Exhibit L: Radio Stations Hour By Hour for Parenting Magazines



Exhibits M, N and O are the same analysis for a group of fashion magazines. These produce different stations and time periods that over-perform for fashion magazine readers. For cable the best bets are BET, CNBC and Court TV, which have long stretches that over deliver, and Nickelodeon, TBS, TLC and TNT with many scattered hours of strong delivery.

Exhibit M: Cable Networks Hour by Hour for Fashion Magazines

Hour	ANIMAL PLANET	BET	CN8	CNBC	CNN	COURT TV	DISCOVERY	ESPN2	ETV	FX	GOLF CHANNEL	HEADLINE NEWS	LIFETIME	MSNBC	MTV	NICKELODEON	TBS	TLC	TNN	TNT	VH1	WEATHER CHANNEL
M-F 5:00 AM					148											205				137		
M-F 6:00 AM				428												127						
M-F 7:00 AM				408																		
M-F 8:00 AM				272													134					130
M-F 9:00 AM		204		216												153	171		242			129
M-F 10:00 AM		156	148	298												142	237	334	168			
M-F 11:00 AM		141		275											226		227	340				
M-F 12:00 PM				302			130	126									162	284	168			
M-F 1:00 PM				271					131				141			154	134	165	162		157	
M-F 2:00 PM				362						136		240				208		230				
M-F 3:00 PM		169		274											210	140		184				
M-F 4:00 PM		208		231									171		149	136		136				
M-F 5:00 PM	125	219		326		159							182		227					193		
M-F 6:00 PM		198		292			173						220	131	144				159	167	159	
M-F 7:00 PM		172	161			137							244		138	129				145		
M-F 8:00 PM		154				180					266		195		165							
M-F 9:00 PM		147				237		178									143					
M-F 10:00 PM	166	147				241		178					131					147		133	133	
M-F 11:00 PM	143				169	129												156		142		
M-F Midnight	137	174			192	144														136		
M-F 1:00 AM		184			185	169		153	197							127		164	146	148		
M-F 2:00 AM		161			190	162										160		144		198		
M-F 3:00 AM		139				195										198		362		217		
M-F 4:00 AM				479		187										198	158			206		180

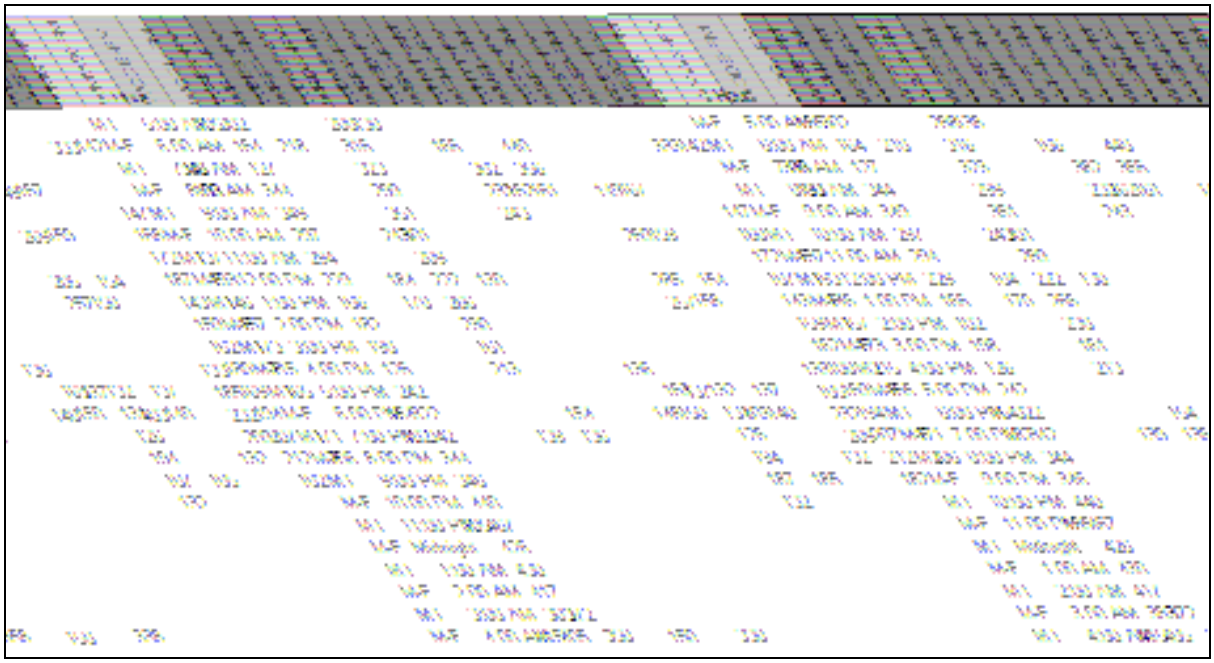
Early morning for WHYY and WPHL are very strong as well as in late afternoon for several stations and late night for WPVI all deliver strongly the fashion magazine readers.

Exhibit N: Broadcast Stations Hour By Hour for Fashion Magazines

	Hour	KYW-TV	WGTW-TV	WHYY-TV	WPHL-TV	WPPX-TV	WPSG-TV	WPVI-TV	WTXF-TV
M-F	5:00 AM							137	173
M-F	6:00 AM							140	
M-F	7:00 AM				227				
M-F	8:00 AM			149	188				
M-F	9:00 AM	208		144	130				136
M-F	10:00 AM			129	132				146
M-F	11:00 AM								
M-F	12:00 PM	129							
M-F	1:00 PM								
M-F	2:00 PM							141	
M-F	3:00 PM		193		153				
M-F	4:00 PM		206				133		132
M-F	5:00 PM								
M-F	6:00 PM					132			
M-F	7:00 PM			137					
M-F	8:00 PM								
M-F	9:00 PM								
M-F	10:00 PM								
M-F	11:00 PM								
M-F	Midnight								
M-F	1:00 AM							152	140
M-F	2:00 AM							163	
M-F	3:00 AM	138						163	
M-F	4:00 AM							152	149

Exhibit O shows that radio has the highest indexes for long stretches. In particular, WAEB a top 40's/Hit station, WMGK, a classic rock station, WMWX, a hot adult contemporary station and WRDX, another classic rock station perform well.

Exhibit O: Radio Stations Hour By Hour for Fashion Magazines



The future

We are just beginning to explore the possibilities of this new research. Additional media are being added to this concept test to provide a media planning universe that is year round, 24/7 and highly granular. Data from a single-source multi-media panel has the potential to go beyond currently existing modeling, fusion and individually-measured media to create a direct and continuous link between a customer's media exposure and his or her resulting shopping behavior.

Conclusion

The PPM/MP offers a wealth of new information about print exposure interaction with other media. New information can be gleaned as shown in the Day In A Life example. This data can also be used to explore cross media patterns and effects from a print-centric perspective. These analyses have only begun to scratch the surface of what is possible using this revolutionary new measurement panel.