

# MEDIA CONSUMPTION AND CONSUMER PURCHASING

## CONNECTING THE DOTS ... FINALLY

*Don E. Schultz  
Joseph J. Pilotta  
Martin P. Block*

### BACKGROUND

At the 2004 ESOMAR Worldwide Audience Measurement (WAM) conference, Schultz and Pilotta presented a new type of media planning model based on measures of audience media consumption rather than media and marketer message distribution (Schultz and Pilotta, 2004). Using the proprietary BIGresearch SIMM (Simultaneous Media Usage) database, they argued that in a fragmented media marketplace, in which consumers are increasingly multi-tasking with multiple media forms, how consumers come to or access media is more relevant for media planning than the current media distribution methodology. Their model was based on the amount of time individual consumers spend with each media form and the combinations of those media accessed by day-part.

Four key elements comprised the media consumption model, i.e., (a) the amount of time each person spent with each media form by day-part, (b) the amount of simultaneous media usage (multi-tasking) that occurred, (c) the various media combinations attended to, which allowed the identification of “foreground” and “background” media development, and (d) the impact of the synergy or media interactions at the consumer level, to enhance or decrease consumer response to the media exposures. The media consumption model is shown as figure 1.

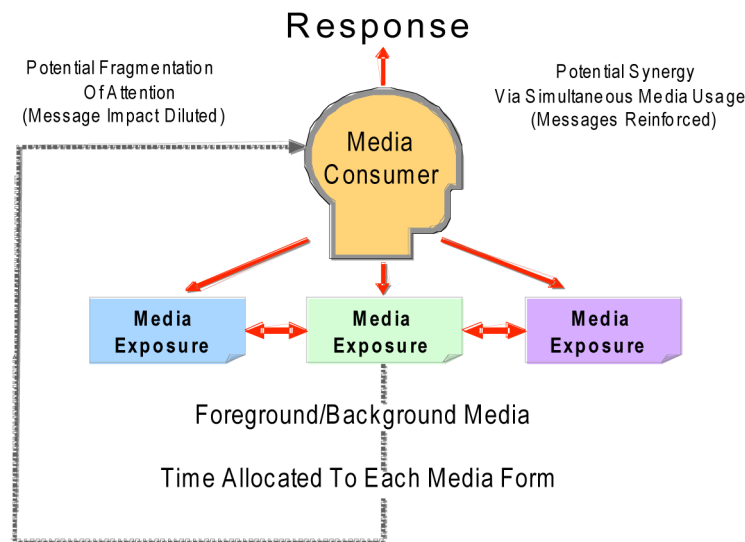
Building on that model, at the 2005 ESOMAR WAM conference Schultz, Pilotta and Block illustrated how

they had been able to populate the media consumption model, again using the on-line gathered consumer data from the SIMM database. In that research, they found four consumer-based media clusters. Those were based on (a) the amount of time spent with the various media forms, (b) the reported occurrence of simultaneous media usage, (c) whether the consumer primarily gives or gets advice on product purchases, and (d) the speed of delivery or the timeliness of the media source, i.e., the internet is considered fast, the newspaper is slow (Schultz, Pilotta and Block, 2005).

This paper extends the populated media consumption model into media planning. Again, using SIMM data, further development of the new media consumption planning model is presented. The model consists of media consumption clusters composed of people who report (a) similar media usage by form and by day-part, (b) similar simultaneous media usage patterns, and (c) similar impact of media forms on purchase decisions as identified by product line and retailer.

The sections that follow address (a) why a shift to a media consumption model is needed, (b) the basic SIMM studies and resulting data on which the media planning model is based, (c) the analytical procedures used to create the media usage and influence clusters, and (d) the study results and implications. A discussion of applications and next steps along with model limitations is also included.

FIGURE 1  
MEDIA CONSUMPTION MODEL



**WHY A SHIFT TO MEDIA CONSUMPTION**

Clearly, new methods and measures of advertising media are needed in today’s fractionalized media marketplace. Traditional methods of planning, developing, implementing and measuring media forms, separately and independently, based primarily on how advertising messages are distributed, i.e., through television, radio, newspaper, outdoor and others, ignore the increasing availability and complexity of the media marketplace<sup>1</sup> and consumer usage of those media forms and types concurrently and over time (Schultz, Pilotta and Block, 2005). With the huge explosion of new media forms, new media technologies and the continuing time constraints of consumers, simultaneous usage or media-multi-tasking is a continuing and growing phenomenon (Klues, 2006). However, our current media planning and measurement methodologies do not account for multiple media or simultaneous media usage and totally ignore any type of inter-media interaction. It seems obvious a new approach is needed.

Here, we present the results of our further exploration of how a media consumption model, based on the Simultaneous Media Usage data, can be used to develop a new media planning and measurement approach that we argue is more relevant to today’s marketers.

The 2005 ESOMAR WAM paper demonstrated that a substantial number of media consumers polychronically (parallel processing) process their exposures to multiple media forms simultaneously (Bluedorn, Kaufman and Lane, 1992 and Kaufman, Felkner, Lane and Lindquist, 1991). We demonstrated that simultaneous media usage is likely driven by the individual’s need to gather information from various media forms over time for current and future use. The model developed demonstrated how media consumption is determined by the individual’s need and desire to access media forms for various reasons. Using the SIMM data, a four-cluster solution was developed. It was based on (a) the amount of time spent with all media forms, (b) the individual’s amount of simultaneous media usage, (c) the individual’s need

### PART 1 / CONSUMERS IN THE SPOTLIGHT

to get or give advice in their personal media network, and (d) the speed of the media source in delivering information, i.e., newspapers are considered a “slow” media information source, the internet is believed to be a “fast” media source.

Using those four variables, a four-cluster solution was found.

- Cluster #1: (about 22% of the US population) were termed “Zeros.” Consumers in this group were not active media consumers, in fact, some individuals report they actively try not to be exposed to any media form.
- Cluster #2: (about 38% of the US population), were identified as “Traditionals” or people who use media in very traditional ways. That is, they sequentially process information (monochronically) and have a tendency to use only one media form at a time.
- Cluster #3: (comprising about 17% of US media consumers) were called “Information Hounds”. These people process information polychronically and are heavy media users. Also, people in this group say they are heavy “information givers”, that is, they gather information so they can distribute it to others.
- Cluster #4, (about 22% of US consumers) were defined as “Network Creators”, people who process information polychronically, as do the “Information Hounds”, but acquire the information primarily for themselves. That is, shown by the fact that they are heavy users of what are primarily slower media forms, i.e., newspapers, magazines and the like.

The four-cluster model suggested that by knowing the cluster to which the individual belongs, a new approach to media planning could be developed. The practicality of the approach was demonstrated by showing that individual media consumption could be captured using the methodology employed by BIGresearch in the SIMM studies.

Further, it was demonstrated that a media consumption model could be populated using that data as well. From that, the argument was made that consumers

could be classified by their media consumption, not just by their demographics. Additionally, it was demonstrated that marketers could begin to identify how various media forms interact at the consumer level. That was based on both simultaneous media consumption and the identification of the various media combinations being used, thus providing the base for a better understanding of media synergy (Schultz, Pilotta and Block, 2005).

At this point, the natural question is: So what?

We believe that question is answered by demonstrating how these clusters and this type of analysis can be used to improve media planning, buying and measurement. In this paper, a more refined form of cluster analysis is presented. This can be used to develop practical applications of the previously cited conceptual models.

In the sections that follow, based on further analysis, we identified eight (8) unique consumer media consumption clusters. Those are based on the thirty-one (31) media forms included in the SIMM on-going studies. The clusters were developed through a factor analysis of three unique media consumption characteristics: (a) experiential time, that is, the individual consumption of media by person by day-parts; (b) simultaneity, that is the multi-tasking/overlapping of media consumption by consumer, i.e., how media forms are consumed and in what combination at the same time; and (c) the media influence, that is the influence consumers report that the individual media form has on their product decisions in each of the measured product categories and also by identification of their preferred retailer.

We start first with a discussion of the SIMM database used in the model, how the data is gathered, how the database is constructed and how the information has been used in this latest iteration.

### THE SIMM DATABASE USED IN THE MODEL

The data used in all of the media consumption modeling and development reported in this paper

PART 1 / CONSUMERS IN THE SPOTLIGHT

was derived from the proprietary BIGresearch database of over 100,000 individual respondents. This data has been gathered over the past four years on a twice-yearly basis. The data used in this report comes from the seventh SIMM study, conducted during fall, 2005.

All responses have been generated on-line from double opt-in email consumer responses. The surveys are anonymous and self-administered. Thus, we believe they are free of interviewer bias.

The questions asked are based on ten (10) basic categories, i.e., demographics, leisure time, media influence on spending, frequency of purchases, website most often shopped, planned purchases in the next 30 days, media behaviors, census region and other factors. The questionnaires are designed to be completed and returned very quickly.

**1. The Respondents** (Sample Base)

BIGresearch data respondents are not paid for their participation. Rather, they participate in a quarterly contest for modest prizes. The data is based on turn-key management, i.e., data updates, profiling the panel, measuring response rates and the recruitment of sample for the panel. Responsiveness is continuously measured and benchmarked against established industry norms.

BIGresearch uses parasocial and synaesthetic techniques to facilitate two-way communication between the researcher and the respondents.

The SIMM panel has an attrition rate of approximately 2% annually based on “opt-outs” by participants in previous survey questionnaires. No panel member is contacted more than once per month or is requested to participate in a BIGresearch survey. BIGresearch does not operate a “force-out” policy, but does maintain a vigilant balance between turnover and responsiveness which is representative of the entire sample.

**2. Analysis of the Data**

BIGresearch uses proprietary software which weights and balances the fourteen (14) age and sex cells used in the U.S. Census “on the fly”. This allows for automatic cross-tabulation and the simultaneous balancing of the sample. Thus, a nationally projectable sample is generated in each SIMM study. The respondent base typically consists of 15,000 or so individual responses for each of the sampled groups. As a result, maximum information can be generated without having to recourse to asking excessive numbers of questions of respondents. SIMM maintains a 75% consistency of questions across all seven survey databases generated to date, thus allowing for in-depth tracking as required.

**3. The Questionnaire**

The questionnaire is quite comprehensive. For example, there are thirteen (13) standard demographic and thirty-five (35) leisure time questions in the SIMM survey instrument. These range from individual and team sports to antique collecting to favorite gambling resort. Respondent use of media is a key element in the SIMM studies. Questions are asked on individual media usage such as watching TV, listening to music, on-line purchases, email, blogging, and so on. Thirty-one (31) different forms of media are covered in the questionnaire.

In addition, substantial amounts of product and service information is also obtained. Thirteen (13) major product categories, consisting of thirty-seven (37) specific products are gathered in each survey. These are related to two-hundred sixty six (266) specific retailer choices along with thirty-nine (39) automotive brands, forty-six (46) cable TV channels, fifteen (15) television formats, five (5) newspaper categories, fifty (50) magazine titles, twelve (12) search engines, thirty-five (35) specific websites, ten (10) video game platforms, twelve (12) disease statistics, twenty-three (23) spend/purchase questions and five (5) day-part media questions.

PART 1 / CONSUMERS IN THE SPOTLIGHT

The key elements of the SIMM database, specifically related to the individual purchase behavior are the following:

- Competitive shopping and customer loyalty trends
- 90 Day purchase outlook and intent to purchase
- Consumer merchandise - purchased or planned
- Shopping Trends
- Cross Shopping Intelligence

All the above are also cross-tabulated with media consumption to provide a better view of customers and prospects.

#### 4. Key Elements in the Media Consumption Study

Of critical importance to the development of the media consumption study are the questions that relate consumer choice of media use to media forms that most influence purchase decisions. Those are eight (8) merchandise categories: groceries, apparel/clothing, electronics, medicine, eating out, telecommunications, car/truck purchases and home improvements. These are the base for the media-influence questions.

The thirty-one (31) media alternatives used in the questionnaire are website, word-of-mouth, television, cable, internet service provider (ISP), search engine use, retail channel shopped, radio, article about product in media form, in-store promotion, newspapers, newspaper inserts, direct mail, television, magazine, internet advertising, outdoor billboards, picture phone, instant messenger, email advertising, yellow pages, satellite radio, text message, MP3 player, web radio, video games, personal digital assistant (PDA), cell phone and TiVO.<sup>2</sup>

Simultaneous media participation is determined by questions requesting information on which media are considered to be “foreground” or primary, that is, when the media is being used, versus that which is “background” or secondary, i.e., available but not with attention focused on the media form and by differing media combinations. Media duration is also determined by regular, occasional, or never,

across the various day-parts. These create a metric of experiential time. These can then be related to frequency of product purchase and planned spending on products over the next six months.

The BIGresearch method is an application of computer-intensive statistics using the latest developments in data mining analysis pioneered by Professor Jerry Friedmann, Department of Statistics, Stanford University. Professor Friedmann provided the third party technical advice on the development of the BIGresearch data gathering and analysis algorithms.

The next section outlines the analytical methods and approaches used to identify the eight media consumption patterns identified and reported in this study.

### ANALYTICAL PROCEDURES AND FINDINGS

The SIMM database provides a rich source to both create media segments and to profile them. The eight (8) media segments were derived using k-means cluster analysis on three measured variable categories: (a) media usage, (b) media influence and (c) simultaneous media usage or networking.

#### 1. Media Usage

Media usage is defined as the average hour across day-parts for weekdays and weekends, expressed as a probability. It could be multiplied by 1440 to estimate overall average usage in minutes. The data were collected to reflect a typical weekday and weekend which were also aggregated on a weighted basis to an overall average. The list of media categories used in this study include:

- Newspaper
- Direct mail
- Magazines
- Radio, including both web and satellite
- Internet, which also includes e-mail and video games
- TV, which also includes cable

PART 1 / CONSUMERS IN THE SPOTLIGHT

The usage probabilities are factored to yield “mass” and “interactive” usage which are both used as defining cluster variables. The factor matrix is shown in figure 2.<sup>3</sup>

**2. Media Influence**

Media influence is the self-reported average for the media category across the eight product categories collected in the SIMM survey. The categories include:

- Electronics
- Apparel and clothing
- Grocery
- Home improvements
- Car and truck
- Medicines
- Telecommunication services
- Eating out.

Media categories, such as word of mouth and reading an article, even though they are generally highly rated in the SIMM studies, were eliminated since they cannot be controlled by the marketer in a media planning situation. Radio is the combined total from radio including web based and satellite. Some categories with low incidence, such as picture phone, instant messaging (IM) and blogs were also eliminated as well. The aggregated usage proportions

were factor analyzed to yield three more defining variables, i.e., mass (influence), (b) promotion, and (c) search. (See figure 3.)

**3. Simultaneous Usage or Networking**

The network variable is the simultaneous usage averaged across all pairs of simultaneous usage (both foreground and background). It is expressed as a proportion. If respondents said they regularly consume media forms simultaneously, that was assumed to be 70% of the time. Occasionally was thus defined as 30% of the time.

The eight cluster definitions are shown in figure 4. Scores have been converted to deciles to make it easier to interpret. For example, the Old School segment is in the top decile on mass influence and near the bottom on search influence (decile 2). It comprises about 8% of the estimated market. The largest segment is Independents at about 38% but which rank below the mean on almost every defining variable. These consumers appear to be attempting to avoid media influence as much as possible. Another interesting segment is the Ravenous group which ranks very high on nearly all variables, especially network (simultaneous usage) and interactive usage. This group comprises an estimated 4% of the market.

**FIGURE 2  
MEDIA USAGE FACTOR ANALYSIS**

Media Categories	1	2
	<u>Mass</u>	<u>Interactive</u>
Newspaper	0.82	
Direct Mail	0.78	
Magazines	0.72	
Radio	0.51	
Internet		0.79
Video Games		0.79
All TV		0.57

PART 1 / CONSUMERS IN THE SPOTLIGHT

FIGURE 3  
MEDIA INFLUENCE FACTOR ANALYSIS

	1	2	3
	<u>Mass</u>	<u>Promotion</u>	<u>Search</u>
Cable	0.81		
TV	0.80		
Radio	0.58		
Magazines	0.46		
Inserts		0.75	
Coupons		0.74	
Direct Mail		0.60	
Newspaper		0.58	
In-store	0.41	0.49	
Internet			0.77
Email			0.77
Outdoor	0.40		0.58
Yellow			0.56

FIGURE 4  
CLUSTERS

*Standard scores converted to probabilities and deciles*

Segments	Network	Mass U	Interactive	Mass I	Promo	Search	Percent
Old School	5	5	6	<b>10</b>	5	<b>2</b>	7.9
Active Explorers	6	6	5	<b>3</b>	<b>8</b>	<b>10</b>	3.4
New Mediacs	5	<b>3</b>	<b>9</b>	<b>4</b>	3	5	14.4
Simultaneous Readers	<b>9</b>	<b>9</b>	5	5	5	5	6.8
Independents	<b>3</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>3</b>	5	37.6
Ravenous	<b>10</b>	<b>9</b>	<b>10</b>	<b>8</b>	7	7	3.9
Persuadables	5	6	6	<b>9</b>	4	<b>9</b>	5.1
Opportunity Minded	<b>4</b>	6	<b>4</b>	<b>4</b>	<b>9</b>	<b>3</b>	20.9
Total	5	5	5	5	5	5	100.0

FIGURE 5  
CLUSTER DEMOGRAPHIC PROFILES

	Pct Male	Age	Income
Old School	53.7	40.8	50,457
Active Explorers	36.6	45.5	48,410
New Mediacs	59.6	36.8	40,462
Simultaneous Readers	43.1	44.5	49,229
Independents	50.6	47.4	45,477
Ravenous	50.2	36.5	43,472
Persuadables	46.8	41.4	48,643
Opportunity Minded	37.1	50.3	53,123
All	48.1	44.9	47,186

PART 1 / CONSUMERS IN THE SPOTLIGHT

FIGURE 6  
ACTIVITY ANALYSIS FACTOR

	<u>Active Fun</u> 1	<u>Home</u> 2	<u>Computer</u> 3	<u>Sports</u> 4	<u>Passive Fun</u> 5	<u>Outdoor</u> 6	<u>Exercise</u> 7
Eating Out	0.68						
Go Shopping	0.59						
Go to Movies	0.52						
Watch TV	0.51						
Rent Videos	0.45		0.37				
Go to Amusement Parks	0.44					0.37	
Travel	0.41		-0.32		0.32		
Socializing with Friends & Neighbors	0.35						
Gardening/Yard Work		0.68					
Home Improvement Projects		0.64					
Family Activities	0.39	0.49					
Cooking		0.48					
Any Hobby/Craft		0.47					
Collectibles/Antiques		0.41					
Play Video Games			0.71				
Surf the Internet			0.59				
E-mail/Instant Messaging/ Blogging			0.49				
Golf			-0.48	0.36			0.38
Go to Sporting Events				0.62			0.38
Tailgating				0.61			
Go to Bar/Night Club				0.53			
Go to Gambling Resorts				0.52			
Playing Cards				0.37			
Read Books					0.63		
Read Magazines/Newspapers					0.52		
Go to Concerts/	0.31			0.33	0.48		
Photography/Take Videos					0.48		
Listen to Music			0.44		0.45		
Boating, Sailing, etc.						0.59	
Camp/Fish/Hike/Hunt						0.59	
Swimming						0.57	
Tennis							0.57
Play Team Sports (e.g. softball, soccer, etc.)			0.31				0.54
Exercise/Jogging, etc.							0.52
Snow Skiing						0.33	0.44

4. Demographics and Lifestyles

The demographic characteristics of the clusters generally show small differences. That is likely because the SIMM sample is continuously weighted to reflect U.S. population age and gender categories. In spite of this balancing, the New Mediacs group tends to be slightly more male and have the lowest income. Opportunity-minded are the oldest, tend to have the highest incomes and are more likely to be female. Active Explorers and Simultaneous Readers are more likely to be female. (See figure 5.)

Lifestyles also show some interesting differences across the eight clusters. As before, SIMM collects data on thirty-five (35) lifestyle or leisure-time descriptors. These have been factored to make them easier to relate to the eight media clusters. With

analysis, the lifestyles reduce to seven factors as shown in the activity factor analysis table (see figure 6). Standard scores were calculated for each factor and then related to the specific media clusters.

The numbers shown in the activity profile table are standard scores. The average scores would be zero, thus, numbers greater than one show more interest in the activity than the average, while numbers less than zero show less interest. The Old School segment is near average on every activity except active fun. Active Explorers are high on home and active fun activities. Simultaneous readers are most oriented toward passive fun. The Ravenous segment is by far the most computer interested. Exercise activity is essentially unrelated to the media segments. (See figure 7.)

PART 1 / CONSUMERS IN THE SPOTLIGHT

FIGURE 7  
ACTIVITY PROFILE

	Active	Home	Computer	Sports	Passive	Outdoor	Exercise
Old School	0.34	0.09	0.09	0.12	0.07	0.03	0.06
Active Explorers	<b>0.44</b>	<b>0.56</b>	0.13	0.10	0.23	0.32	0.00
New Mediacs	-0.07	-0.16	<b>0.49</b>	-0.03	-0.02	0.07	-0.21
Simultaneous Readers	0.29	0.16	-0.02	0.10	0.42	-0.13	-0.07
Independents	-0.10	-0.07	-0.36	-0.11	-0.07	-0.04	-0.06
Ravenous	0.36	0.30	<b>0.70</b>	0.30	0.32	0.25	-0.04
Persuadables	<b>0.40</b>	0.25	0.16	0.19	0.18	0.24	-0.06
Opportunity Minded	0.29	0.32	-0.32	-0.05	0.18	-0.14	-0.10

FIGURE 8  
PURCHASE FACTOR ANALYSIS

	<u>Practical</u> 1	<u>Small</u> 2	<u>Snack</u> 3	<u>Big</u> 4
Oral & Personal Cleansing	0.85			
Personal Care & Hygiene	0.85			
Skin Care & Cosmetics	0.83			
Laundry Detergents/Fabric Care	0.81			
Household Cleaning Products	0.81			
Health & Beauty Aids	0.80			
Hair Care	0.80			
Non Prescription Drugs	0.72			
Food Storage Bags, Wraps and/or Storage Containers	0.69			
Breakfast Cereals	0.56		0.46	
Apparel/Clothing	0.49			
Baby Products				
DVD/VCR		0.68		
Stereo Equipment		0.65		
TV		0.63		
Computer		0.58		
Digital Camera		0.49		
Jewelry/Watch		0.39		
Soft Drinks/Juices	0.45		0.73	
Snack Foods	0.46		0.72	
Frozen Food	0.50		0.62	
Eat at a Fast Food restaurant?			0.61	
Major Home Improvement or Repair				0.68
Vacation Travel				0.58
Furniture		0.31		0.54
Home Appliances				0.53
House				0.37
RV/Boat				0.33

FIGURE 9  
PURCHASE PROFILE

	Practical	Small	Snack	Big
Old School	0.15	0.08	<b>0.28</b>	0.09
Active Explorers	<b>0.45</b>	0.09	-0.02	<b>0.31</b>
New Mediacs	-0.07	0.13	0.17	-0.12
Simul. Readers	<b>0.28</b>	0.11	0.10	0.21
Independents	-0.05	-0.20	-0.22	-0.07
Ravenous	<b>0.38</b>	<b>0.72</b>	0.21	<b>0.32</b>
Persuadables	<b>0.40</b>	<b>0.27</b>	0.19	<b>0.26</b>
Opportunity	0.11	-0.14	0.19	0.10

## 5. Purchasing – Past and Future

Past purchase activity or purchase intention is asked for twenty-eight (28) product categories. Big ticket items, such as appliances and cars, are for purchase intentions. Package goods items, such as oral care and breakfast cereals, are past purchase behaviors. The 28 categories reduce to four factors as shown in the purchase factor analysis table (see figure 8).

There are definite differences in product purchase interest and activity by the eight media segments. The numbers shown in the purchase profile table are standard scores as in the previous activity profile table. The Old School segment is more likely to purchase snack items. The Ravenous segment is high on all items, especially small items (including electronics). It is interesting that the Independents are low (below the mean) in every category. (See figure 9.)

We believe we have only scratched the surface of the analytical knowledge that can be extracted from the SIMM database. This analysis does demonstrate that this type of consumer media consumption data, when combined with historical and intent to purchase material contained in the SIMM database, provide a unique new approach to media planning. The analytical results and the implications for future research and application are reviewed in the next section.

### STUDY RESULTS AND IMPLICATIONS

Based on the above analysis the following clusters of media consumption styles have been identified based on our triangulated analysis of SIMM, i.e., (a) experiential time, (b) influential media, and (c) category of merchandise. The clusters have specific identifiable characteristics that can be used in media planning and selection based on how consumers consume the media without the need for recourse to demographics or geographical location. (See figure 10.)

The discovery of these clusters or styles of media consumption are not based on homogeneity, but on a common form of media use without depending on

demographics, geographics or psychographics. We believe it is the only study over the past five years that measures the use and impact of thirty-one different media in a single-source research base.

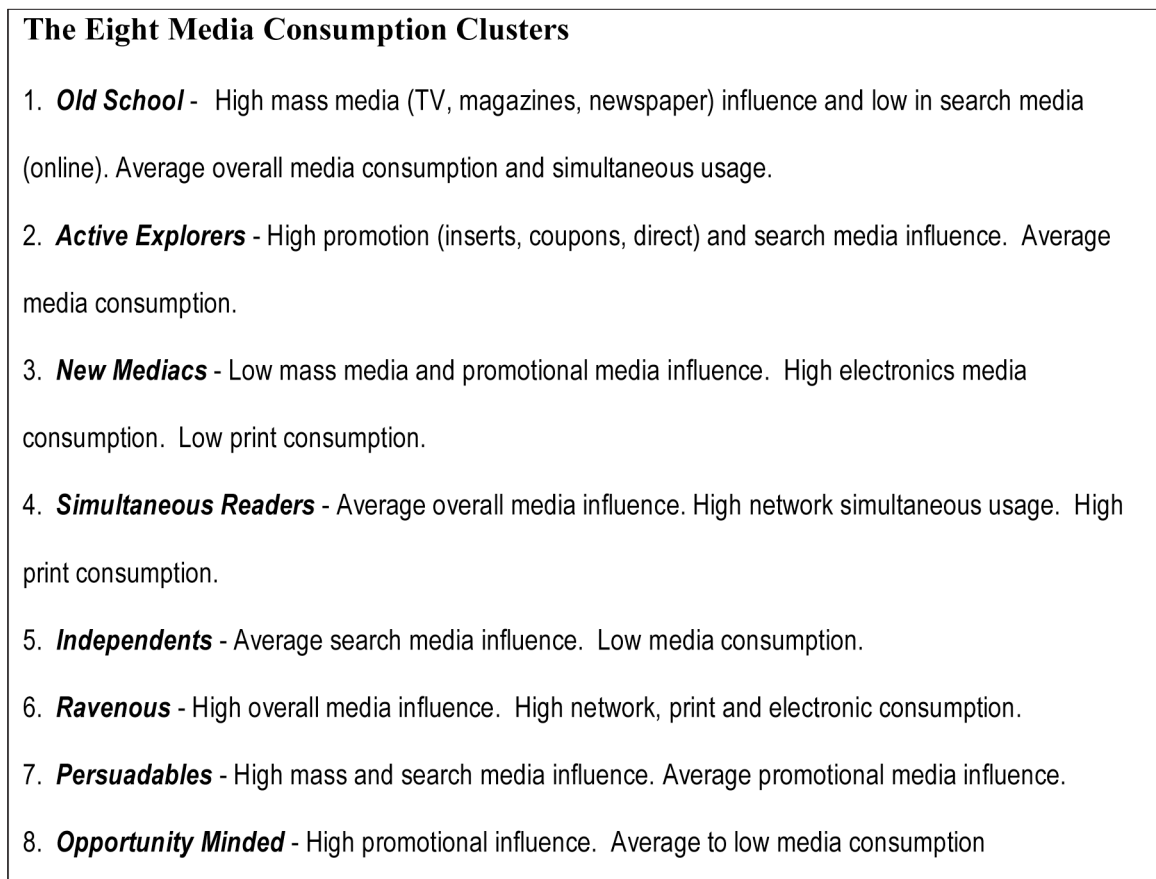
Styles of media consumption demonstrate that usage not only varies across different walks of consumer life, but how the incorporation of print, electronic, and digital media are related to influencing purchase decisions. Moreover, the styles of media consumption are not merely a time spent quanta-metric but a “duration” metric as well, i.e., experiential time over day parts. Often segmentation schemes are created as surrogates for purchasing behavior, such as volume of purchase and demographics. Demographic-based clusters, however, miss both the commonality and the differentiation across socio-economic lines since they ignore true consumption patterns. The clusters derived from the SIMM data are unique since they include purchasing behavior as a consistent feature of the segmentation methodology.

In addition to the identifiable media clusters, thirty-five (35) clusters of lifestyles or leisure-time activities are gathered in the SIMM studies. Those have been connected to well defined product categories of purchasing as illustrated in figure 8 (presented earlier).

The idea of media planning clusters has great intuitive appeal. Most recently, Rashid Tobocowala, “The Collapse of the Marketing Spine” Point (*Advertising Age*, November 2005) has suggested that the ideal media planning tool would be to reverse traditional MRI research data in order to side-step demographic and geographic models since they only serve to fuel the exposure/distribution model of media planning, Targeting the consumer by engagement with media of influence by merchandise category starts to address the need for a consumer centric model of media planning that has long been sought, but, until now, never developed.

Media usage and influence transcend spatial locations as well as demographic properties which may or may not come into play in the selection of media usage.

FIGURE 10  
EIGHT MEDIA CONSUMPTION CLUSTERS



The use of media “influential engagement” is clearly a step toward a consumer-centric media model as it supplies the major missing component in media planning, that is, a direct connection to sales.

### 1. Extensions and Advantages

The new media planning approaches provided by the media cluster analysis provide many advantages. Some of those are:

- Purchase intention by retailer

The clusters developed in this paper can be extended into the following area of SIMM data, i.e., purchase intention by product category as well as preferred retailer. These two areas have been grossly neglected in current media planning approaches.

By including this information, the media cluster approach enables the retailer and/or manufacturer to understand their customer’s media usage behavior, purchase intent and the media motivated sales which result. That would appear to be a major improvement over traditional media-distribution-based models.

- Dynamic planning

One of the primary advantages of the media consumption cluster approach is that it allows the planner to view a large area of the consumer market at a glance. Importantly, the clusters are not static, since they are based on consumption patterns. As the consumption changes, individuals are automatically shifted to another consumption cluster. Thus, the system and process is a dynamic approach

### PART 1 / CONSUMERS IN THE SPOTLIGHT

to media planning, not a static one. Additionally, the clusters themselves can change based on increasing viability of new media, increasing convergence of media or changes in the media consumption tastes of the population.

- Customer-centric

With this media cluster analysis approach, manufacturers are able to become much more consumer-centric and are better able to partner with their retail channel outlets to facilitate product movement across all media as well, thus, connecting external media to in-store promotion. A critical part of the media consumption clusters includes seven (7) types of in-store promotional media, thus providing a holistic media consumption profile of consumers. This should enable manufacturers to create intervention strategies within the various retail channels as needed. For example, the retail channels in the SIMM data can be viewed by region, MSA, DMA and, in some cases, state and city.

- Leisure-time and consumer time

High correlations have been established between leisure time activities and the media consumption clusters reported in this paper. That enables the planner to develop a fascinating relation of overall consumption patterns and collateral purchase behavior within the various retail channels. Leisure-time activities, viewed from a consumer centric-observation, can therefore be combined differently rather than just another “free space” for the marketer to sell into.

Importantly, leisure-time may not be marketing to consumer’s time. When there is a shift from consumer household administrator to time for self, i.e., time to be a father, mother, friend, aunt, uncle, all constitute a different consumer situation. Thus, consumer leisure time activities may or may not be marketing or selling opportunities. Consumer knowledge of leisure time activities does allow for the anticipation of purchases of the products which could or might intensify the leisure time activity. This

is of critical importance to future marketing planning. For example, the trend toward alternative venues for non-traditional advertising may not be considered an alternative by the consumer, much to the chagrin of the marketer.

- Accountability

As noted above, the consumption styles of media are inextricably linked to media selection relative to purchase behavior. These in turn, change the face of media planning and address the call for accountability; i.e., return-on-investment or ROI. The methodologies used in many ROI estimates or calculations have typically neglected the front-end of the process; that is, the planning and anticipation of sales based on verifiable purchase decisions. Negative ROI, regardless of the model employed, is a direct result of the weakness of front end media planning models, which commonly neglect the consumer. For example, current ROI models commonly assume that all humans have fixed tastes and expectations and one person’s behavior has little or no effect on others. These clearly are no longer relevant in a highly fragmented, consumer-driven, media-intensive marketplace.

- Building blocks

The Simultaneous Media Survey (SIMM) has established that media influence by merchandise category, purchase intention, favorite retailer by merchandise category and then correlated to day part time blocks are logical and relevant methods of developing media plans going forward. The data obtained give the requisite formula to predict sales.

- Media synergy

Media planning can also be developed based on the probability of success within the constellation of media used by consumers by day-part. The allocation can also be made based on the synergy operative within the specific day part. For instance, Naik’s forthcoming article in the *Handbook of Advertising* addresses the SIMM model concept of

## PART 1 / CONSUMERS IN THE SPOTLIGHT

foreground/background relationship in simultaneous use as having a catalytic effect, i.e. background reinforcing foreground, (regardless of influence on decision.) Therefore Naik recommends background media should be allocated based on its synergy with the foreground media. SIMM paves the way for this type of media synergy allocation based on a consumer point of view (Naik, forthcoming). Return-on-Customer-Investment – ROCI SIMM data serves the growing need for a return-on-customer-investment (ROCI) metric based on consumer media consumption, not just on marketer message and media distribution. Consumers clearly are not just passive receptacles of pleasure. Instead, they appropriate and make bodily investments of time, money, knowledge, information, trust and taste as key elements of consumption. This is the “work” consumers do.

- Return on Customer Investment - ROCI  
Return on customer investment models must align themselves with this consumption “work.” SIMM data addresses all of the above components. Only by understanding consumer consumption expectations and identifying the shifting tastes and preferences of consumers are more sophisticated media planning models possible. They are certainly lacking in the existing econometric models that are now being used to attempt to determine return on investment through traditional, backward-looking research methods.
- Global implications  
The SIMM database and the analytical models presented in this paper take on greater significance as a media planning/ROI tool when one considers the mandate of The World Federation of Advertisers. In September, 2005, that body issued their *Blueprint for Consumer Centric Holistic Measurement* which outlined their vision, need and objective for a model robust enough to solve the challenges of the “models are broken” problem put forth by Jim Stengel and Gerhard Glock of Proctor & Gamble. Glock’s outline of the problem and the solution was presented at the

WAM conference in 2004 (Glock, 2004). The WFA Blueprint 2005 expands upon the vision laid out by Glock (WFA Website, 2005).

The envisioned WFA model addresses approximately 17 major requirement points. The SIMM model, presented here, is isomorphic in its execution with the Blueprint (except for the stated need for an electronic Passive Mechanism calibrating exposures “more accurately.” Figure 11 compares the WFA “Blueprint” and the media planning model proposed in this paper.

The comparison in figure 11 illustrates the ability of the SIMM model to be used globally. Currently, SIMM data is being gathered in Mexico, Poland, and China with other countries showing interest as well. Thus, while the SIMM data on which this paper is developed is available only in the United States at this time, that need not be a restriction in the future.

### STUDY AND MODEL LIMITATIONS

As with any theoretical model, there are limitations. The three primary challenges to the SIMM media planning model are:

- Limited to the United States: Presently, SIMM data is gathered only in the United States, thus, the current model is country and consumer centric. While we believe other countries where media is well developed and where on-line penetration is extensive such as Japan, the United Kingdom, Canada, Australia and others will be similar, no evidence of that exists at this time. Thus, the model is limited by where the data sources have been developed. There is increasing SIMM activity in other countries as indicated above, but, for the moment, this is a one country media model.
- One time SIMM data: The model developed and presented in this paper is based on only one SIMM observation, i.e., the seventh SIMM study, conducted fall, 2005. It has not been correlated nor compared to the first six SIMM studies. The authors plan on

PART 1 / CONSUMERS IN THE SPOTLIGHT

FIGURE 11  
WFA AND SIMM COMPARISON

<b>Blueprint Categories</b>			<b>BIGresearch Blueprint Specifics</b>
<b>Vision</b>			
Understanding the consumer beyond demographics	X		8 clusters based strictly on consumer media consumption and engagement metric (see below)
Get information in timely manner	X		Sample of 15,000 in 10 days from fielding to delivery
Understand multi-media behavior	X		Media, by day part and simultaneous media behavior
Respect for privacy	X		Opt-in survey, privacy statement, take survey when convenient
Reach target consumer at receptive moments	X		Based on day part usage of media
Deliver relevant content	X		Media chosen based on consumer designated influence on their purchase decisions
Content that serves consumer interest	X		Inventory of interest (concern) regarding future purchase, programming interests, radio, TV, favorite websites; routine shopping interests
<b>Objectives</b>			
Transition audience measurement to accommodate complex media consumption behavior	X		Consumption measures are based on engagement; experiential time of using media, simultaneous usages and media influence on purchase decisions
More accurately anticipate impact and synergistic effects of media	X		Synergistic effects are the collateral media in use during day parts, reinforcing the principal influences
Media options need to be compared and selected with confidence	X		Media options; probability based media consumption habits measured against sales
<b>Needs</b>			
Improved ROI is a necessity for marketers	X		Prediction of sales based on media consumption habits of media in use. Each media is valued by synergistic contribution to the purchase decision (3 <sup>rd</sup> party analysis available)
Retail Channels growth in importance as a media/marketing vehicle must come into the marketing equation	X		180 retail channels monitored based on customer in store media influence and purchasing
Tracking target group holistically and synergetic multi-media behavior. Need sophisticated target group descriptions to measure	X		Dynamic and flexible 8 target segments based on media consumption.

PART 1 / CONSUMERS IN THE SPOTLIGHT

New technologies-fast low cost data collection is not being utilized.	X		Business model based on increase volume decreasing costs. Less than one dollar per response with fully automated data collection weighted and balanced
<b>Process Deliverables</b> Consumer centric holistic_measurement	X		The theoretical philosophical and methodological concepts of a holistic measurement articulated in Consumer centric: New Rules/New Logic (Pilotta, Shultz) white paper
Common metric across media	X		Engagement and Influence as proprietarily defined is used across all media: broadcast, electronic and digital.
Increased Granularity	X		BIGresearch with 1000 Afro Americans and 1000 Hispanics in the sample representing the income level of US population from \$1-100,000 per year per household.
Larger Sample Sizes to measure hard to reach targets to understand their media consumption	X		Currently studies by BIGresearch are from 15,000 respondents with 14 age and sex cells
Target groups of media measurement – single source	X		Have been doing this since 2001
Agile, fast connection to emerging media	X		Tracking picture phones, blogging, cell, text messaging, VOIP, search engines, etc. over past 3 years in single source study
Standard method and process for measuring and integrating media in the store	X		Same methodology as state above.
Consistent sources of multi media behavior between shopping and media usage	X		See SIMM elements above single source consumption survey for media, retail, & products. In store treated with same influence to purchase metrics as all other media.
<b>Who Is It For</b>			
Consumers attention is the most precious commodity	X		SIMM is totally based on what is relevant to the consumer.
Advertisers are the end customer and must drive improvements	X		SIMM has been cited by marketing/research publications and research associations as the new direction in media planning.
Agencies can be more efficient if targets and media options are better understood	X		SIMM has media consumption clusters to efficiently and effectively target media to consumers.

using this SIMM study as the basis for additional analyses going forward but that has not been done as yet. Thus, there may be anomalies in the data used in this example. We believe the law of large numbers, however, will overcome that. Until this work is compared with other SIMM studies or other databases containing similar information, this should be considered a conceptual approach.

- Planning needs practical applications: This study needs real world application. It is currently being Beta

tested with a number of companies from various sectors.

**NEXT STEPS**

The next step in the development of the SIMM media planning methodology is to develop clusters of purchasing activity and connect them to consumer leisure-time activities. Such clustering would allow us to create a stronger profile of media consumption which should be most useful in media planning. By developing

## PART 1 / CONSUMERS IN THE SPOTLIGHT

the above clusters, it should be possible to change the nature of lifestyle segments from a static, sociological class distinction to a temporal distinction per style of media consumption. This should provide substantial texture to media planning which is currently missing.

### Footnotes

1. The SIMM database on which this study is based includes thirty-one (31) media forms ranging from television to iPods to game platforms.
2. ISP, search engine, favorite website, ten video game platforms of choice and magazine titles are write-ins. The one hundred-eighty (180) retailers tracked are write-in by respondent and are based on which retailer is shopped most often for a category of products.
3. An explanation for TV associating with the internet and games may be due to the high level of simultaneous usage with internet and a perceived level of choice control, i.e. channel surfing.

### References

- Bluedorn, Allen C., Carol Felker Kaufman and Paul M. Lane* (1992) "How Many Things Do You Like to Do at Once? An Introduction to Monochronic and Polychronic Time", *Academy of Management Executive*, Volume 6, No. 4.
- Glock, Bernard.* (2004). Holistic Measurement. Proceedings of the ESOMAR/ARF-WAM Conference.
- Klues, Jack.* (2006). Radio-Television Business Report, Volume 23, Issue 3, March.
- Bloom, Jonah.* (2006). Media Agencies in Danger of Becoming Obstacles not Enablers. Siloed Planners and Buyers are Lost in a Platform Neutral World. April 23.
- Kaufman, Carol Felker, Paul M. Lane and Jay D. Lindquist.* (1991). Exploring More Than 24 Hours a Day: A Preliminary Investigation of Polychronic Time Use. *Journal of Consumer Research*, Volume 18 (December) 39-401.
- Naik, Prasad.* (Forthcoming). Integrated Marketing Communication: Provenance, Practice and Principal. *Handbook of Advertising*, pg. 20-22.
- Schultz, Don E. and Joseph J. Pilotta.* (2005). Developing the Foundation for a New Approach to Understanding How Media Advertising Works. 3rd Annual ESOMAR/ARF World Audience Measurement Conference, June 13-18, Geneva.

*Schultz, Don E., Joseph J. Pilotta and Martin P. Block.* (2005). Implementing a Media Consumption Model. 4th Annual ESOMAR/ARF World Audience Measurement Conference, June 22-24, 2005, Montreal.

WFA. Website. Blueprint for Consumer-Centric Holistic Measurement, September 2005.

### The Authors

*Don E. Schultz is Professor Emeritus-in-Service, Department of Integrated Marketing Communications, Medill School of Journalism, Northwestern University; and President, Agora, Inc., United States.*

*Joseph J. Pilotta is Vice President of Research, BIGresearch, United States; and Professor, School of Communication and Journalism, The Ohio State University, United States.*

*Martin P. Block is Professor, Department of Integrated Marketing Communications, Medill School of Journalism, Northwestern University; and President, Block Research, United States.*