

Terms, Calculations, and Considerations

Defining Key Media Terms

Just as computer programmers talk about bits, bytes, and RAM, and car enthusiasts dwell on RPM, jerk, and lateral acceleration, so do media specialists converse in their own language. Before moving on to the actual media plan development, it will be helpful to review some of these definitions.

Understanding Ratings

Most of you are probably already familiar with the weekly release of the Nielsen ratings that show which are the most popular television programs. The size of the audience is usually given in two ways—in absolute terms (i.e., millions of people), and as a percentage of the population. It is this latter figure, known as the *rating*, that is used as the baseline measure for all media concepts.

Rating Point

One rating point equals one percent of a particular target group. That audience can be defined in various ways—by household, by geographic market, or by a given demographic group, such as men 18 to 49 or women 25 to 54, or by product usage or ownership, such as people who own a digital camera. The television program *CSI* might receive a household rating of 11.3 in Memphis, which means that 11.3 percent of homes in that city watched the show. The magazine *Entertainment Weekly* might get a rating of 9.6 among females ages 18 to 34, meaning that 9.6 percent of all women in that age group read that particular issue of the magazine. More recently, Nielsen began releasing ratings that represent “Live” only (watched at the time of airing) and “Live + 7 days,” which includes programs recorded and watched within one week of airing. The company also calculates average commercial ratings that include the Live audience

together with up to three days of delayed (timeshifted) viewership. That metric is called the C3 rating.

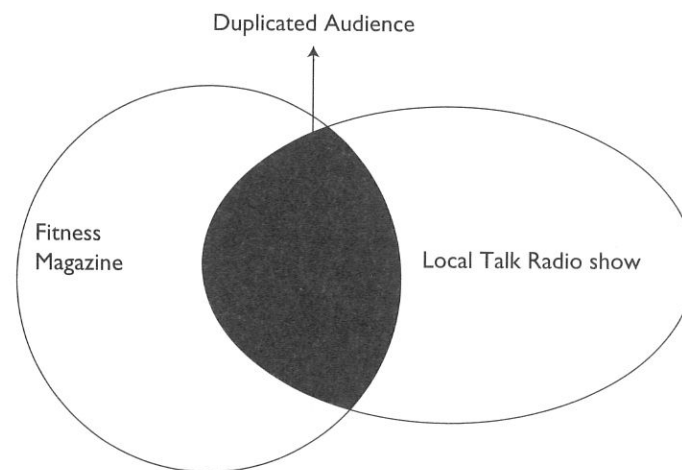
Gross Rating Points

By adding up all the rating points we wish to achieve, we end up with a concept known as gross rating points, or GRPs. For media planning purposes, we set as our goal a given number of total, or “gross,” rating points to achieve and then figure out which vehicles to use to obtain that number. We might want our plan to have a total of 100 gross rating points each week against our target of working women. These could come from any media.

The reason these rating points are considered “gross” is that they do not take into account any duplication of exposure. That is, there are probably many people within our target who see our ad for Special K cereal in *Fitness* and also hear the same message on the local morning talk show. So while our total number of rating points placed in the media each week is set at 100, each person will be exposed to a different number of them and in different vehicles. This is shown in Exhibit 6.1.

In today’s complex media world, where our targets are becoming more and more narrowly defined, the term GRP is often altered to TRP, or “target rating point.” This makes explicit the fact that we are planning our ratings against a specific *target*, rather than the whole world. The concept is the same, however.

Exhibit 6.1 Diagram of GRPs and Duplication



Gross Impressions

This term simply converts the gross rating points into a number by dividing the number of rating points by 100 and multiplying that figure by the size of the target audience. So if our plan calls for obtaining 200 GRPs against a target audience of 500,000 people, then we are aiming to achieve 1,000,000 gross impressions ($200/100 \times 500,000$).

Reach and Frequency

Although many would argue that advertising is more art than science, we still need some way to assess whether the messages we place in the media are having any impact. It is not enough to know how many impressions are made with one ad, or what percentage of the target audience is exposed to a given program or magazine. As media specialists, we also need an estimate of the cumulative effect of our media plan. That is provided by the concepts of reach and frequency.

Reach

Reach refers to the number or percentage of people in the target audience who will be exposed to the medium where the message appears. You should note that we can only estimate exposure to the *media vehicle*, not to the ad itself. If you think about your own media habits, there are many intervening variables that easily prevent you from seeing or hearing an ad. You might deliberately ignore it, turning the page of the magazine or changing the TV channel or avoiding the web pop-up when it appears. You could watch the TV ad via a DVR and fast-forward to skip all the commercials. You could be doing something else at the same time, such as talking to a friend or cooking dinner, and not pay attention to the message. Or you could find the ad boring, irrelevant, or uninteresting, and see or hear it but not really absorb the contents. So when we talk about the reach of a plan, we are really talking about the opportunity-for-exposure (sometimes called opportunity-to-see, or OTS).

And of course we should also emphasize that reach, like all media terms, is merely an estimate. We will never know exactly how many people were reached, or how they reacted. Even with the more precise metrics of the Internet, where we can “know” how many computers clicked on an ad, we still don’t know how that message was received. Perhaps they clicked by accident and just ignored the message. But if we are trying to reach women 25 to 54 to persuade them to try our new brand of body wash, then using syndicated data sources, we can find out how many women of that age watch *The View*, or read *Redbook*. To reach a target audience of men 18 to 49 to increase the number of inquiries for Fidelity

Investment’s pamphlet on investing wisely, we can learn how many men of that age read a daily newspaper, or watch CNN.

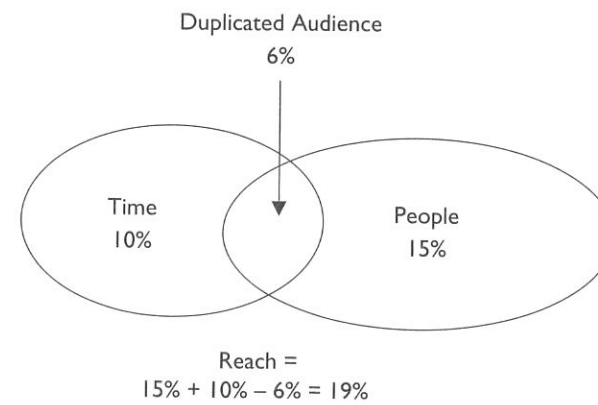
The difference between reach and GRPs is that reach concerns the number of *different* people in the audience you are trying to communicate with through advertising. For media schedules that try to maximize reach, you would place ads in several different media vehicles to reach different people through each one. Complicated formulas are used to calculate the numbers, requiring the speed and power of computers. Here, we look at a simple example.

If the rating for *People* against our target of 18 to 49 year olds is 15 and for *Time* magazine it is 10, then one ad placed in each magazine will deliver a total of 25 GRPs ($15 + 10$). However, if we know from research that 6 percent of the target audience will see both ads (the duplicated audience) then the reach, or *unduplicated* audience for this schedule is 25 minus 6, or 19 percent. That is, 19 percent of our target of adults 18 to 49 will be exposed to our ad in *People* and/or our ad in *Time*. Even if they see both ads they will only be counted in our audience one time. Exhibit 6.2. depicts this situation. So reach = GRPs minus duplication.

Frequency

It is not enough to know who our media plan is intended to reach. We must also set goals of *how many times* we wish to reach them with our message. As with the concept of reach, the notion of frequency, while it ultimately refers to *message* frequency, in reality is based on the frequency of exposure to the *media vehicle* rather than to the advertisement. A media plan will typically establish the desired number of times that the audience should be exposed to the message, based on past experience,

Exhibit 6.2 Example of Duplication.



judgment, or previous research into how long it takes for the audience to comprehend and remember the message.

A simple way to back in to the frequency number is from the following equation:

$$\text{Reach} \times \text{Frequency} = \text{Gross Rating Points}$$

So if you know your reach goal, and you have established the number of GRPs you will be buying, then it only requires simple mathematical division (GRPs/Reach) to figure out how many times, on average, the target will be exposed to the media vehicle(s).

Random Duplication

One of the questions that media specialists are often asked is what the reach will be of a complete media plan. The answer today is typically calculated by computers. But there is a very basic formula that can give you a rough estimate to guide you. It is known as the random duplication formula and makes the assumption that the probability of reaching the audience in one medium (or media vehicle) is independent of the likelihood of reaching them in a different one. In reality, that is not generally the case. For example, if your media plan includes food magazines and cooking shows on The Food Network, the odds are probably greater than average that your target is going to be exposed to both.

The random duplication formula assumes, however, that the reach of two media is the reach of one added to the reach of the other, minus the product of the two. All figures are calculated as decimals. That is:

$$\text{Combined Reach} = \text{Reach A} + \text{Reach B} - (\text{Reach A} \times \text{Reach B})$$

As an example, if your TV schedule has a total reach of 65 percent and your print schedule has a reach of 25 percent, then the combined reach will be:

$$0.65 + 0.25 - (0.65 \times 0.25) = 0.90 - 0.1625 = 0.7375 \\ = 73.75 \text{ percent}$$

If there are more than two media involved, then you simply take that initial product, and use it as your first medium in the formula to combine with the third medium's reach number.

Beyond Reach and Frequency

If you think about the commercials that you can remember, the ones that are most likely to come to mind are those that you have seen or heard more than once. That is, for a message to be truly *effective* in terms of communicating with the target audience, it generally has to be conveyed more than one time. Now of course this is not a hard-and-fast rule. If your bathroom drain gets blocked up, then you only need one exposure to an ad for Drano drain cleaner at the right moment in time, and that message will be extremely effective. But for the most part, given the limited attention we pay to commercial messages, we need to see or hear them several times before the information is properly absorbed. And even then, it is most likely filed away somewhere in memory for use on a future occasion.

Effective Frequency

The key here is to determine *how many times* an ad has to be received for it to be deemed effective. What we mean by effective is that the target receives the desired communication message. A considerable amount of research was done on this topic during the 1970s and 1980s, following a landmark study by Colin MacDonald, a British researcher. After looking at the relationship between opportunities to see ads for laundry detergent and sales of the product, he concluded that the optimal number of exposure opportunities was three. This was later explained by breaking down what happens with each exposure. The first time someone sees an ad, his reaction is "What is it?" On the second exposure, he asks "What of it?" or "So what?" It is only on the third occasion that the person will start to process the information and decide if the message is relevant and interesting or not.¹

Since those research studies were first published, there has been much controversy over their accuracy. Many have argued that it is impossible to set an arbitrary number for effective frequency. Some believe that rather than having a single figure, the most effective frequency lies within a range, typically set between three and ten. And others claim that only one exposure is needed, as long as it is placed at the right time (see below). The answer, probably, is "it depends." As with the drain cleaner example above, sometimes a single exposure is sufficient. On the other hand, you might need to see an ad for a breakfast cereal 15 times before it has any real impact. What it ultimately depends on is the relevancy and impact of the message.²

The key point to remember here is that when establishing your media objectives and deciding on the strategy to fulfill them, you must keep in mind that your message should probably be heard, read, or viewed several times in order for it to have an effect on the audience.

Exposure Distribution

Most media plans involve placing multiple ads in many different media vehicles so it is important to know how many people are reached how many times (once, twice, three times, and so on). We find this by creating an *exposure distribution*, which shows the percentage of the target exposed to a given schedule at each level of frequency. The method used to calculate it is fairly complex, based on mathematical theories of probability, and today it is done by computer. At a basic level, a media model estimates the likelihood of being exposed to a given number of ads together with the number of different ways you can be exposed to those messages.

For example, if you placed one ad in *Time* and one in *People*, the reader might see anywhere from zero to two ads total—they might not see either ad, or they could see one of the two, or they might see both. Looking at Exhibit 6.2, we already know the percentage of the target exposed two times (the duplication figure) is 6 percent. In addition, we can easily figure out those not exposed at all (the total, or 100 percent, minus those exposed one or more times)— $100 - 19 = 81$ percent. So to estimate what percentage is reached exactly once you subtract the duplication figure from the number reached one or more times (*reach 1+*)— $19 - 6 = 13$. You should notice that the final exposure distribution must account for everyone in the target audience and therefore sum to 100 percent. The final exposure distribution is shown in Exhibit 6.3.

Frequency Planning

In the late 1990s, research evidence became available that suggested that reach was a more important determinant of media effectiveness than frequency. Based largely on the work of John Philip Jones and Erwin Ephron, the analysis of sales and TV viewing data from the same households suggested that short-term advertising sales were driven largely by exposure to a TV commercial within seven days prior to purchase. Since we as media specialists never know precisely when that sale might occur, this suggests that it is more important to maintain a lower level of media weight across more weeks than to place sporadic, albeit

Exhibit 6.3 Exposure Distribution

Frequency (f)	Percent reached (%)
0	81
1	13
2	6
Total	100

larger flights of advertising throughout the year.³ We revisit this in Chapter 8.⁴

Calculating Costs

It is highly unlikely that you will have *carte blanche* to spend however much money you want or need. You will have to provide some kind of financial explanation of how efficiently your plan will spend your client's money. And since there are many different media types and vehicles that could, potentially, be included in the plan, it is up to the media specialist to rationalize and explain the financial reasoning behind selections.

Cost per Thousand (CPM)

Since different media are bought in different ways—a 30-second spot on radio or TV, or a one-page ad in a magazine, or a 30-sheet poster for a billboard—we need some way to compare media in terms of cost. To do so, media specialists turn to the cost per thousand, or CPM. This shows the cost of reaching 1,000 of the target audience either with an individual media vehicle or the complete media schedule. It puts all media on a level playing field and is calculated as follows:

$$\text{CPM} = \text{Total Schedule Cost} / \text{Gross Impressions (000)}$$

Let's use an example of 133,000,000 adults 18 to 49, and assume that an ad in *US Weekly* costs \$130,000, while one in *People* costs \$250,000. A total of 39,900,000 impressions would be generated ($30 \text{ TRPs}/100 \times 133$ million adults). At a total cost of \$380,000, the cost per thousand would be \$9.52. This means it costs \$9.52 to reach 1,000 adults age 18 to 49 with one ad in *US Weekly* and one in *People* in a given week. By using this formula, you can compare the cost efficiency of one vehicle, media category, or schedule against another.

Cost per Point (CPP)

Another useful media tool is the cost per rating point (CPP), which offers a different way of comparing media schedules. Here, you find the cost of one rating point for each media vehicle against your target by dividing the total schedule cost by gross rating points:

$$\text{CPP} = \text{Total Schedule Cost} / \text{Gross Rating Points}$$

With our total cost of \$380,000 and total rating points of 30, the cost per point comes out to be \$12,667. It therefore costs \$12,667 to obtain one

rating point against adults 18 to 49 using one ad in *US Weekly* and one in *People*. If you know the cost per point against a particular target group and the approximate number of rating points you wish to buy, you can then calculate an approximate total schedule cost, using the same formula.

Note that the CPM and CPP are interrelated. That is, if you know the size of your target audience, you can calculate a CPP from a CPM, or vice-versa.

$$\text{CPM} = (\text{CPP}/1\% \text{ of target audience}) \times 1,000$$

$$\text{CPP} = (\text{CPM}/1,000) \times 1\% \text{ of target audience}$$

Gross vs. Net

One of the historical traditions of the media business that remains in place today is the use of gross versus net costs. This was how agencies traditionally made money—they bought the media time or space at one price and charged their advertiser clients a 15% margin (gross up) on the cost. Today, many agencies and clients have different cost structures in place. They may have a flat fee arrangement, so the agency will pay net costs to media companies and charge that same amount to the advertiser, but it is important as a media specialist to understand the relationship between gross and net.

Using the example, above, of a one-page ad in *People* where the gross cost is \$250,000, you simply multiply that gross cost by 0.85:

$$\$250,000 \times 0.85 = \$212,500$$

This would be the net amount charged to the advertiser.

Category-Specific Criteria

In addition to knowing the general terms that are used in media planning, it is helpful to be familiar with some of the other criteria that are used in selecting each major media category. The rest of this chapter will outline these considerations.

Considerations for Television Advertising

The chief currency for a television plan is the program rating. Historically, there was no measurement of audience exposure to the actual *commercials*, relying instead on the surrogate number of how many people watched the *program* in which it ran. Starting in 2008, we began to look at commercial ratings averaged across a commercial break, or pod. All of

the data are available from Nielsen Media Research, for both national and local markets. Both types of ratings are collected on a minute-by-minute basis, but reported for programs based on the audience size at the mid-minute of the quarter hour and for commercials based on the average of all commercial minutes viewed where more than half of the minute was commercial rather than program time. Outside of the U.S., viewing data is usually collected every second, and reported for each minute. The U.S. viewing data is starting to be gathered and reported at this level of detail too, since digital set-top boxes are capturing that anyway.

The U.S. TV marketplace operates based on the laws of supply and demand. The more people who watch a particular show, the more expensive it is to advertise within it. The ranges are enormous. You might pay \$500,000 or more for a 30-second commercial on network television during prime time, but only a few hundred dollars to have your ad appear on your local TV station during the night. That cost will correspond to the number of people exposed to your ad—millions, versus a few hundred.

An important measure for television is the *share*. That is, of all those watching television at a given time, what percentage are tuned to the program of interest? The share can be looked at as a percentage of all households using TV (or HUT), or more commonly, as a percent of all of your desired target group (persons using TV, or PUT).

And in today's marketplace, where one-third or more of homes have DVRs, the issue of timeshifted viewing has become critical. As noted earlier in this chapter, Nielsen now provides ratings that include the *Live+3* national ratings and *Live+7* local market ratings, which include the audience (to commercial break for national or to program for local) at the time of airing (live), plus any audience for that same program who viewed it within 72 hours (+3) nationally or within 7 days (+7) locally. The data help account for viewers who recorded a program for later viewing, and therefore watched the commercials after their initial airtime.

In addition to the costs and ratings, it can be helpful to look at the Viewers per Viewing (or Tuning) Household, or VPVH numbers (sometimes called VPTH). This figure provides you with an assessment of the concentration of a given demographic group in a program's audience, showing how many people in every thousand viewers fall into that particular category. If the VPVH among women 25 to 54 for *The Bachelor* is 535, and for the *Masters Golf Championship* it is 155, that indicates you will reach more than three times as many women 25 to 54 with an ad placed in the reality show than you will with the golf tournament.

One way that the VPVH can usefully be applied is in the conversion of household rating points to target audience ratings. This is done by creating a *conversion factor* that is then applied to the household rating. For example, if you know that there are 420 viewers per viewing household

for your men 18 to 49 target watching *CSI* and the total population size of that group is 66,000,000, while the total number of households is 110,000,000, then your steps would be as follows:

$$(675 \times 110,000,000) / 66,000,000 = 0.7 = \text{Conversion Factor (CF)}$$

$$14.3 \text{ household rating} \times 0.70 \text{ CF} = 10.01 \text{ M18-49 rating}$$

What you should be most interested in, as a media specialist, is finding which programs are going to best reach your target audience. As we noted in Chapter 3, although you may have a fairly detailed description of your customer, when it comes to getting data on TV audiences you will end up looking primarily at age and gender. Since those have traditionally been believed to be powerful determinants of product purchase and behavior, for many goods and services those numbers will suffice. Newer data that combines household-level set top box data (passively collected) with frequent shopper card data is starting to suggest, however, that looking at viewing behavior based on category or brand consumption may well be a better way to demonstrate how TV advertising works. But until the industry finds an affordable, large-scale, and reliable way of measuring TV viewing according to product usage patterns, it is likely that program ratings among broad demographic groups will remain the primary benchmark.

One other way to analyze TV viewing behavior in a more in-depth manner is by combining the TV ratings data with lifestyle and other media use information from another source. This process, known as *data fusion*, has been successfully used in many countries. It is now being utilized in the U.S. What the process involves is “matching” respondents from two different databases, linking them on a number of common variables (gender, age, geographic location, ethnicity, etc.) known as “hooks,” and then “fusing” the data so that the information that is unique to one dataset can be used to describe or explain the behavior of all the respondents in both datasets. It is a complex and intricate process, however, requiring statistical expertise and understanding.

In selecting your TV programs, you should keep in mind that the list may be changed when the commercial time is bought. The plan is just that—a *plan* of which media vehicles are desired. When negotiations take place, it may be that other programs are included, or some of your recommendations rejected, based on other considerations such as cost and availability. What you should emphasize, however, is the *daypart* that you wish your ads to appear in, for although people do tend to watch individual programs rather than time periods, there is more similarity in the kinds of programs watched within time periods than across them. Alternatively, you may wish to specify the *program type*, or genre so that the buy focuses on comedies, for example, or news programming, regardless of when it airs.

The criteria you use to evaluate which programs to use for television do not vary whether you are planning to use network, spot, syndication, or cable. If you are planning on a local level, however, there is additional work to be done. You must select the markets to advertise in (if you have not done so already) and, more particularly, the stations within those markets that you want to use. That will depend in part on the negotiations that are done by the media buyer. That process is explained more fully in Chapter 9.

For cable TV, you may have to rely on broad network information rather than specific programs. Most individual cable shows tend to have much smaller audiences (ratings) than do shows on network or spot TV. But those audiences may be more finely targeted due to the nature of this form of television (see Chapter 4). Often, cable networks are airing programs multiple times, and offering an aggregated rating to advertisers, so that across all showings of an episode of *Biography* on A&E, for example, you will reach 3 percent of the viewing audience even if that audience is spread across three different airings.

Another consideration for cable is the distribution of the network. That is, some of the newer or smaller networks are not available for viewing in all U.S. households, which often leads the networks themselves to try to sell their audiences based on a *coverage-area rating* (a national rating that has been adjusted for the area covered by the distribution). For instance, if Cable Network X is only available in half of the country, its 2.0 nationally reported rating is really a 4.0 since only half of the population is watching it (2.0/50%). Many buyers do not like to adjust for the coverage, since it makes it harder to draw apples-to-apples comparisons.

Considerations for Radio Advertising

Radio uses the same principal term as television for planning and buying purposes. That is, you purchase time based on audience ratings. The main difference here is that the rating is based on a time period, rather than on a program. For the most part, you plan radio by dayparts (listed in Chapter 4), although it is possible, for an additional cost, to specify selected, narrower time periods. For example, if you operate a number of McDonald's franchises and only want to advertise in the hour before lunch (which technically falls in Morning Drive), you could request the noon to 1:00 p.m. hour, and most stations will sell that time to you, though perhaps at a premium.

Radio audiences are measured by the Arbitron Company, and reported on a quarter-hour basis, so you can look at the Average Quarter Hour (AQH) rating for each station in a market. This is the average number of people listening to an individual station for at least five minutes within the quarter-hour period, expressed as a percentage. In many larger

advertising agencies, the media planner only specifies the markets to be used, leaving it up to the media buyer to choose the actual stations, based on his or her own knowledge of those markets.

The radio market can be defined (and measured) in several ways. The largest geography is called the Designated Market Area, or DMA. It is defined as the viewing or listening area in which the counties that have the stations of the originating market get the largest share of household viewing or listening. Every county in the U.S. is assigned to just one DMA.

A smaller geography for radio is the Total Survey Area, which consists of the metropolitan area, plus outlying additional counties that listen to the major metro stations. In Chicago, the Total Survey Area would not only include the Chicago metropolitan area, but also the rest of Cook, Lake, and DuPage counties, which can also receive Chicago radio station signals. The most narrowly defined measure is the Metro Survey Area. This is defined by government and includes the city and surrounding counties which are closely linked economically to the central city area.

The total radio listening figure is provided in the Persons Using Radio (PUR) measure, which is equivalent to TV's Persons Using Television, or PUT number. This tells you what percentage of a given audience listens to radio at a particular time.

If you are purchasing radio time yourself, a measure that is worth considering is the Time Spent Listening, or TSL. This gives an indication of how much time people are spending with an individual station in a daypart, day, or week. The calculation is as follows:

$$\text{TSL} = \frac{\text{Number of quarter-hours in daypart} \times \text{AQH}}{\text{Total Listening (Audience)}}$$

The more time people spend listening to that particular station, the greater the chance of reaching them with your message. On the other hand, if your goal is to reach as many *different* people as possible, then the TSL may be of less concern.

The media specialist should also consider the *cume rating*, which is the total number of people listening to a particular daypart, expressed as a percentage. And finally, to find out how quickly a station's audience changes, you can calculate or ask for the audience *turnover* figure, which is the ratio of total number of people listening to a particular station in a daypart to the average number listening to that station in a quarter-hour. If the turnover is high, meaning that people don't listen to the station for very long at any one time, then that would suggest you would need to air your ad fairly frequently in order to reach more people.

An increasingly important area of consideration for radio is merchandising and promotion. Many stations are very willing to organize special

contests or announcements or "added value" events if you buy time from them. If you own a Baskin-Robbins ice cream store, for instance, perhaps you could arrange for the station to hold a contest, with the prize being an ice cream party for the winner and his family. For a local Comcast cable operator, a radio station could agree to air additional announcements and public service messages, in return for being mentioned on the local access cable channel. A Toyota car dealership might provide the perfect venue for the radio station to send some of its disk jockeys on the road for an afternoon, airing the program from the actual showroom. All of these "extras" can be negotiated for little or no additional cost, yet they provide valuable "free" advertising for you and your company. Moreover, because they are organized on a local basis, they help to enhance your firm's place in the community, offering you some image-building public relations, too.

For network radio, the terms used are the same, but here you must consider which of the networks to include in the plan. At larger agencies this is often left up to the buyer (where planning and buying are separate functions), based on demographic or format specifications.

Radio audience measurement, which currently relies on samples of people in each market to complete a seven-day listening diary, is moving forward to develop and commercialize a passive means of collecting radio listening activity. Arbitron's Portable People Meter, or PPM was launched in the past few years and is the measurement in more than thirty markets. The PPM is a pager-size device worn by a sample of people wherever they go during the day. The meter passively picks up inaudible codes that have been inserted at the radio station. These codes are used to identify which station was being listened to, by whom, and for how long. In effect, the PPM measures *listening* activity, and does so with far greater accuracy for radio than the listening diary, which requires people to actively remember and write down everything they were tuned to. The technology is able to collect codes from anywhere, including television, sports stadia, or retail stores. Arbitron is using these meters to measure radio listening in 15 different countries outside of the U.S. Arbitron is hoping it will become the new currency measurement for radio and, potentially, for other media too.

Considerations for Magazine Advertising

Some of the criteria to consider when planning for magazines include coverage, composition, circulation, subscription, rate base, readership, positioning, and discounts.

Coverage

Just as for the other media forms, the coverage tells you the proportion of a given target group that saw (were “covered” by) the publication in the past month, or whatever is the relevant publication period. The magazine’s coverage is similar to a rating in the electronic media.

Composition

This number will show you how concentrated a magazine’s audience is with a particular target group. It can be useful in providing the media specialist with some idea of how well the publication will reach your particular audience. If you are advertising baby formula to new mothers, it would be important to know what proportion of the readers of *Baby Talk* and *Parents* have a newborn. While the one-page cost or the CPM may be cheaper in *Parents* than in *Baby Talk*, you may reach more new mothers in *Baby Talk*, making the cost of reaching one thousand of *those* individuals less expensive.

Circulation

It is important to look at how many copies of the magazine are distributed for each issue. This information is either provided by the magazine itself in an audit report or can be obtained from the Audit Bureau of Circulation, the premier source for circulation data. New or very small magazines may not be audited by this independent organization; if that is the case, be wary of relying on the estimates the publisher provides as they cannot be verified. When looking at circulation, the media specialist should also find out what proportion of that figure is *controlled*—distributed free of charge to potentially interested parties. They are usually not the main target audience for the publication and, therefore, would be less interested in seeing the ads that appear. In addition, you should look at the *net paid* circulation figure, which gives you the number of copies sold at no less than half of the basic newsstand or subscription price. Circulation is usually broken out by geographic area, which can be very helpful, particularly for products that have regional skews.

Subscription or Single Copy

Another valuable number is the percentage of copies that are sold by subscription versus on the newsstand (single copies). If people are getting their copies sent to them every month, that might suggest they are particularly keen to keep receiving and reading the magazine; on the other hand, the argument could be made that the single copy reader renews her

commitment to the publication every time she purchases an issue. Whichever side you believe, it is worth finding out how the subscriptions are sold, and at what price. Publishers used to be able to discount subscriptions very heavily (up to 50 percent) and still consider them a full subscription. Beginning in 2002, magazines had to report the net average subscription price paid by consumers, and reveal the proportion of subscriptions sold at 35 percent less than that average. This is to counter the belief that, when the price is very low or there are enticing premiums offered to those who buy a year’s worth of the magazine, the subscriber is more interested in receiving the accompanying free gifts than in looking at your ads.

Rate Base

Finally, you should find out how many times in the past six months or one year the publisher has not met his guaranteed audience size, or rate base. This is the number of copies that he promises the advertiser he will sell. Although the advertiser does not get anything back if that number is not reached, a magazine that consistently fails to meet its rate base is probably one you should avoid. This information is provided by companies such as the Audit Bureau of Circulation that measure circulation on a regular basis. The magazine publisher should also release that data upon request.

Readership

For those who have access to syndicated services, there is a wealth of additional information available on reading habits for individual consumer magazines. This includes factors such as the average number of days a title is read, the average number of minutes spent with the publication, where it is read, what actions were taken after reading it, and how many readers saw each copy. These qualitative data are summarized in Exhibit 6.4. They may be provided by the individual publication.

Exhibit 6.4 Qualitative magazine data

Where read
Bought versus obtained
Days spent reading
Time spent reading
Actions taken (e.g., clipped coupon, called toll free number)
Rating of publication
Interest in advertising
Attitudes toward advertising in specific publication
One of my favorites

Armed with all of this information, the media specialist can then compile a list of preferred magazines to use in the plan. Clearly, the cost of the ad page will also be a crucial factor in determining which individual titles are selected.

Positioning

There is conflicting evidence concerning where it is best for your ad to be in a magazine. Some studies have shown a clear advantage for being at the front of the issue or on the cover page, while others suggest there is little difference in terms of likelihood of being seen. Positioning will also depend on the publication. For some magazines, such as *Cosmopolitan* or *Newsweek*, most of the feature articles appear in the first two-thirds of the book. But for more specialized magazines, such as *Network Computing* or *Info World*, readers may also be extremely interested in the smaller ads at the back of the issue which feature products or services for the computer enthusiast.

Discounts

Ten or more years ago, all magazine ads were bought off a rate card that specified exactly how much an ad would cost per issue. While discounts were given for placing ads in several issues, there was little room for any negotiation. In today's highly fragmented media world, magazines have been forced to become more competitive, both between titles and against other media. One positive result of this, for the advertiser, is that magazines are far more willing to negotiate discounts or special deals now than they were previously. An advertiser who places a large *volume* of ads (and, therefore, dollars) in a magazine will get a special deal, as will advertisers who build up frequency or continuity with the publication. There is also a slight discount for cash payments. It is always worth checking with the magazine's representative to find out if there are ways to lower the unit cost.

Considerations for Newspaper Advertising

If newspapers are to be included in the media plan, the first consideration is which markets are to be used. The list of markets can be developed based on population or household size, on sales data of the product, or on CDIs and BDIs. A list created according to population may be a simple ranking of the markets (top 10, top 20, and so on), or it could be a ranking based on the target audience (top 10 markets where the target is located). Market lists that are based on sales data will tend to emphasize those places where current sales are occurring, while one

derived from CDI or BDI figures will also factor in potential sales opportunities.

In looking at the individual markets, the media specialist needs to have a clear understanding of the product's distribution within those areas. Is it available primarily within certain parts of the market, or DMA? Is it found more in the metro area or the suburbs? Are there any major ethnic areas of the market that could play a role in product or media usage?

Once you have determined which markets to use, there are three main criteria to consider for newspaper planning: circulation, coverage, and readership.

Circulation

As with magazines, the newspaper circulation figure tells you the number of actual copies that are distributed. This figure is used to compare one paper with another, as well as give some idea of how many coupons might potentially be distributed. Circulation is often broken out into counties or city zones, depending on the size of the market. While one newspaper might have a larger overall circulation, another might deliver more readers in the particular zone where your retail outlet is located and therefore be a more appropriate vehicle to use.

Coverage

The coverage number, also called the newspaper penetration, is the print equivalent of a TV rating. That is, it shows the percentage of households reached by a given newspaper. As with the circulation figure, the numbers might look different depending on how the coverage is defined. Taking Boston as an example, if you only consider the overall market, or DMA household penetration, you might choose the *Boston Globe*, but if you are interested in reaching singles, or African-Americans, the *Boston Herald* has greater coverage.

Readership

Newspaper readership figures provide more detailed information about the paper's readers according to standard demographic breaks or, where available, product usage data. Using these numbers, the media specialist can find out what proportion of the readership is 18 to 49, for example, or how many readers are working women. One newspaper may reach more men than women, or more younger adults than older ones.

The media specialist can use all three criteria to compare different newspapers both within and between markets, as well as help determine which individual papers will do the best job of reaching the given target

audience. In markets where there is more than one newspaper available, it is also important to find out how much duplication there is of readers to both vehicles. It could be that one is aimed primarily at the city and the other is read mostly in the suburbs, or that Paper A reaches the northern section and Paper B is preferred in the south. Your selection of individual or multiple newspapers will depend to a large degree on the geographic areas that you wish to cover.

Digital

An increasingly important consideration for newspaper advertisers is to look at what proportion of readership occurs online. For as more and more consumers get their news in digital form, newspapers are adapting to that reality and promoting their online readership in conjunction with their print audiences.

Considerations for Outdoor Advertising

As with newspapers, the main decision to be made when including outdoor boards in a media plan is which markets to select. Once that is known, the media specialist must determine which kind of outdoor board to use—poster panels, or bulletins. In either case, the unit of sale is the *showing*. It is typically sold as a 25, 50, 75, or 100 GRP showing. The number refers to how many panels or boards are required to reach that proportion of the market. A 50 GRP showing, for example, means that your ad will appear on enough boards to reach 50 percent of the total population daily. This is completely market specific. Generally, the outdoor company will provide you with the information on how many boards make up each showing size.

Audience delivery estimates are usually also made available by the company that owns the boards, or can be obtained from the Traffic Audit Bureau, which conducts the independent measurement of traffic past those sites. Outdoor billboard measurement in the U.S. has been greatly enhanced through the development of the “Eyes On” research initiative whereby estimates have been made to calculate the audience of the ads rather than simply traffic counts. The method, discussed in Chapter 4, starts with those counts, but applies “visibility adjustments” based on ongoing research to move from circulation to ad exposure.

Considerations for Internet Advertising

Advertising on the Internet is still being standardized, so the considerations a media specialist needs to be aware of today may well have changed by tomorrow. But several of the basic considerations are comparable to those of other media.

Position

When Internet advertising was first developed, it didn’t matter too much where your ad appeared. It was assumed that it would be enticing and involving enough to attract attention anywhere on the site. Soon, however, advertisers realized that position was as important on the Web as in any other medium. Today, advertisers not only have to select the type of ad to use (banners, buttons, pop-ups, etc.) but also when and where those ads will appear. The cheapest form is Run of Site (ROS), but most advertisers prefer to pay for a fixed position on a specific page within the site, to have greater control over who will be exposed to that ad message and, increasingly, differentiation is being made over whether or not the placement is “above the fold” (on the top part of the screen that appears first before the user has to scroll down).

Type of ad

Initially, the most popular kind of ad on the Internet was the banner. This appeared as a rectangle at the top or bottom of the screen or web page. Over time, however, sites introduced a wide variety of alternatives, including the “skyscraper” (going down the left or right hand side of the screen), the button, a small icon or message that links to the advertiser’s own site, or an interstitial, a mini-site that appears when the user clicks on the ad. An increasingly powerful form of Internet advertising is search. Here, on websites such as Google or Yahoo Search, consumers type in what they are looking for on the Internet, and a list of possibilities comes up. Advertisers can pay the site to have their product or service appear as a *sponsored link*. Research has shown that, as long as the link is relevant to what the consumer is looking for, he or she will generally not object to the fact that the search result has been paid for.

Metric

Because the Internet is a more “measurable” medium than any other (except direct response), the metric used can vary. Advertisers can pay for their web ads based on a simple cost per thousand (CPM), or can be more specific and agree to a contract that allows them to pay on a cost-per-click or even cost-per-sale basis. Indeed, although the traditional terms of reach and frequency are employed for online campaigns, their meaning differs from other media. Unlike TV or magazines, for example, where the number or percent of the target reached is based on the content in which an ad appears, for online the viewers’ exposure to a web page is not necessarily equivalent to their exposure to the ad on that page. The ads are served when the viewer requests a page, so the more frequently he

or she does so the more opportunities there are for ad exposure. At the same time, the reach of some online advertising may be more precise and accurate. With search ads on Google or other search engines, people are directly requesting information (including ads) and when they click on the ad, the site knows precisely how many computers (households) were reached, and how many times.

Considerations for Beyond Traditional Communications

For the media forms which were covered in Chapter 5, the considerations for a planner focus on two key areas: traffic and cost relative to value.

Traffic

For sponsorships, sporting events, or other location-based opportunities, the planner should try to estimate, in advance, how many people will be in attendance. Even for skywriting above a popular beach, the vendor is likely to know approximately how many sunbathers typically come there on a weekend, for example. Attendance to sports stadiums is easy to capture, as are the number of people at a rock concert or movie theater, if your product is the concert sponsor or is being given away as samples in the theater lobby. While not a substitute for actual impact, traffic measures at least give an indication of how many people, in theory, will have the opportunity for exposure. For word-of-mouth efforts, the number to determine is how many people could potentially be influenced by the viral efforts.

Cost/Value

Given that it is not enough for marketers to have their name placed in front of hundreds, or thousands of warm, but disinterested bodies, the planner should also try to assess the value of those expected impressions relative to the cost of obtaining them. Here, it is probably good to consider the contextual relevance of the impact. That is, it might make good sense to have Adidas be a featured sponsor at sports stadiums when soccer matches are played, but less so for a prescription drug such as Paxil to be present at those same events. For other less traditional forms, such as mobile marketing or word of mouth, the costs may be relatively low, but the impact may also be small depending on the scope of the campaign.

Summary

In this chapter, we covered some of the basic terms and features of media planning. In order to understand media, it is essential that the media

specialist be familiar with the concepts of reach, frequency, gross rating points, and gross impressions. Beyond these, it is also helpful to understand the notion of effective frequency, which assumes that in order for an ad to be effective, the target audience has to be exposed to it more than one time. Frequency planning forces you to think about exposure within the purchase cycle. An exposure distribution lets you know the number of people who are exposed a given number of times to an individual vehicle or a complete media schedule. Media costs are accounted for by calculating the cost per thousand (CPM) and cost per rating point (CPP).

The remainder of the chapter looked at various considerations for each major media category. For television, this includes the program rating, audience composition, viewers per viewing household (VPVH). Radio plans need to examine the time spent listening, cumulative rating, and audience turnover. When magazines or newspapers are included in a media plan, it is important to know the publication's circulation, rate base, and actual readership. The main consideration for outdoor is planning the appropriate showing level to reach a given proportion of the target audience with the correct number of billboards, along with the newer "eyes on" measure of likely ad exposure. For Internet advertising, the specialist should consider position, type of ad, and measurement metric. Finally, for beyond traditional media forms, planners should assess the potential traffic for an event or location, as well as the cost relative to the value of the spending.

Checklist—Terms, Calculations, and Considerations

1. Have you figured out how many gross rating points your schedule will deliver?
2. What is the reach, effective reach, and average frequency of that schedule?
3. If you plan to include television in the schedule, have you looked at both program ratings and viewers per thousand viewing household (VPVH)?
4. If you plan to include radio in the schedule, have you looked at the average quarter-hour (AQH) ratings, cume audience, time spent listening and turnover for each station?
5. If you plan to include magazines in the schedule, have you looked at the coverage, composition, circulation, rate base, ad positions, and discounts?
6. If you plan to include newspapers in the schedule, have you looked at the coverage, circulation, and audience composition figures for each paper?

7. If you plan to include outdoor billboards in the schedule, have you looked at the GRPs available in each market being considered?
8. If you plan to include the Internet in the schedule, have you thought about the ad type, position, and measurement metric you want?
9. If you plan to incorporate beyond traditional communications in the schedule, have you thought about the traffic to be generated, and the cost of the efforts relative to their impact?