# The Report on Entertainment Server Focus Groups

## For Internet Home Alliance

Internet Home Alliance

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# Disclaimer

Parks Associates has made every reasonable effort to ensure that all information in this report is correct.  We assume no responsibility for any inadvertent errors.

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# 1.0 Executive Summary

Parks Associates completed eight focus groups, four in Dallas, TX, and four in Los Angeles, CA, for the Internet Home Alliance in July 2003. These groups addressed consumer interest and reaction to the concept of home entertainment servers (digital media control points) and gauged consumer reaction to the concept of the entertainment server. Focus groups are qualitative, and results cannot be projected onto the entire market or population with validity. However, these findings point to issues that do require quantitative study and analysis.

Details on background and specific findings, including verbatims, are in the following sections of this report. Below are the top takeaways from these groups of early adopter and early majority consumers.

1. While a majority of our participants found the entertainment server appealing in a variety of ways, there is nervousness surrounding "the all-in-one" convergence device. These participants fear "losing it all" should a failure occur. They also fear obsolescence.
2. While some of these consumers felt using a service provider would mitigate the chances of obsolescence in a new product category and increase the likelihood of quick service for problems, most of these participants also conveyed a deep dislike and distrust of their cable providers.
3. With very few exceptions, our participants stated a fear of crashing entertainment systems when they realized this server would be a computing device. The crash fear refers to software/operating systems crashing and not to equipment failure from hardware providers. Even more specifically, while some of these focus group participants stated a belief that Microsoft should be a partner to any server innovation, some also expressed concern that Microsoft involvement might lead to crashes, viruses, and difficult-to-use interfaces.
4. Tangible, physical storage is important to many of these participants for reasons beyond "losing it all" in a crash. Many expressed that they like to touch their products, share physical media, and in the case of collectors, display their collections.

5. The issue of simplicity (or usability) in the servers' user interface was cited as a critical and even defining issue for the success or failure of entertainment servers by these participants. The home PC appeared to be not the access and control point of choice for any but the true computer-centric individuals. This suggests that a great deal of thought will be required in determining the optimal choices for user interfaces, i.e., screen displays, single remotes, touch screens, etc.
6. The participants expressed a strong preference for reliable wireless connections, suggesting that the lack of reliable wireless technology will cause a slow down in potential adoption rates.
7. In reviewing focus groups tapes, Parks Associates noticed a split between audio-and video-enthusiasts among our participants. In addition, these audio-enthusiasts were also much more likely to be computer-centric and relatively disinterested in movies and TV. This observation merits further testing; if this audio-video split is true among the total early adopter and early majority populations, it has marketing implications.

Based on these observations and focus group findings, Parks Associates posits the following product definition for the ideal entertainment server. All attributes afforded this ideal server require testing before the following is anything but a "hunch."

**A Qualitative Vision for the Ideal Entertainment Server**

The ideal entertainment server is a stand-alone device that can network wirelessly to all applicable consumer entertainment and computing devices within the home. Consumers themselves will determine how many devices and what types of devices that they seek to incorporate within their home network. They will be able to grow their network over time. The server will act as the central storage device for family entertainment and photo content. It allows consumers to access and control their entertainment and photo content from any applicable display or audio system within the home. It offers a choice of user interface devices, with all choices using a standard operational method. Once that method is learned, consumers will be able to translate their knowledge to any other control device options.

The entertainment server stores not only internally housed content but also allows the storage of downloaded content, thus allowing time shifting. The ideal entertainment server allows its owner to back up his or her content in one or more of the following ways: back up to DVDs; a redundant hard drive, or storage on an Internet space. In the case of server failure, all home devices would operate independently just as they did prior to the installation of the server.

The ideal entertainment server is sold and/or distributed by a trusted source. Installation options are available to the user for a fee. The entertainment network incorporates wireless technology for device connections, thus making it possible for many consumers to install the server and its device adapters themselves.

# 2.0 Background

Parks Associates completed eight focus groups about the concept of entertainment home servers for the Internet Home Alliance in July 2003. This project was led by Internet Home Alliance members Hewlett-Packard and Panasonic. Parks Associates developed the Moderator's Guides, with review and input by Panasonic and Hewlett-Packard, and completed all tasks for these groups, including arranging locations, developing screeners, and finally moderating the groups. The informational goals for these groups are below:

1. To understand consumers' views and preferences on having storage and access servers for entertainment content in the following configurations:
    a. server within a multimedia PC environment (PC hub device);
    b. server that is integrated into a cable or satellite set-top box environment (edge device);
    c. server as stand-alone consumer electronics device that can connect with PCs, set-top-boxes, and other entertainment devices;
2. To understand consumer preferences and concerns for each scenario, with regard to each primary form of entertainment content (TV, movies, personally recorded), and why they hold there preferences;
3. To understand consumers' attitudes about tangible versus intangible media storage from both a behavioral perspective (what is done now) and an attitudinal perspective (the importance of "real" product versus untouchable product); and
4. To understand what will cause a consumer to adopt any of the entertainment servers within these scenarios. The goal is to obtain insight as to primary benefit along with inhibiting concerns. Determining consumer views on optimal pricing is not a goal in these groups.

## 2.1 Focus Group Participants

The focus group participants were split between "early adopters" and the "early majority." Between eight and twelve participants were in these groups, and the average participant number per group was ten people. The screeners used by Plaza Research in Dallas and Los Angeles are offered in Appendix A. A list of participants per group as well as their summary information based on the focus group screener is also in Appendix A. All participants met the criteria requested for the group type for which they were recruited. Of note is the low number of participants in any group who owned a PVR. No more than three participants in any group had a TiVo or Replay-type device. With only an estimated 1.5 million of these devices in the market, this result is not shocking. While many participants had heard of TiVo, few really understand what a PVR/DVR device is, pointing to the critical need for further educational and informational campaigns. There were four groups of each of the following type:

- **Early Adopters** — participants have a broadband Internet connection, a home data network and/or a personal video recorder (a TiVo or a Replay-type device);
- **Early Majority —** participants have broadband capability at home and either multiple PCs at home or a home theater, but no network.

## 2.2 Schedule and Outline for Focus Groups

Parks Associates developed two Moderator Guides for these groups. The first version was information gathering only (Type A); the second included illustrations of the placement and functions for the home entertainment server concepts (Type B).

Parks Associates, Panasonic, and Hewlett-Packard determined very quickly that the Moderator's Guide Type B guide was a more effective guide for information extraction; thus, seven of eight groups were moderated using Type B. Both Moderator Guides are offered in Appendix B.

## Overview of Internet Home Alliance Focus Groups
### *The Home Digital Video Experience*

| Group Date | Time | Location | Group Type | Group Subject | Moderator | Note Taker |
|---|---|---|---|---|---|---|
| Wed., 7/9 | 6:00 p.m. | Plaza Research<br>14160 Dallas Pkwy.<br># 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Adopters" (Have broadband, home network and/or PVR) | Type A:<br>Information Gathering | Kurt Scherf | Yuanzhe (Michael) Cai |
| Wed., 7/9 | 8:00 p.m. | Plaza Research<br>14160 Dallas Pkwy.<br># 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Majority" (Have broadband and multiple PCs, and/or home theater) | Type B:<br>Concept | Kurt Scherf | Yuanzhe (Michael) Cai |
| Thur., 7/10 | 6:00 p.m. | Plaza Research<br>14160 Dallas Pkwy.<br># 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Adopters" - ***Note:*** This group also had two children (<18) participating | Type B:<br>Concept | Kurt Scherf | John Barrett |
| Thur., 7/10 | 8:00 p.m. | Plaza Research<br>14160 Dallas Pkwy.<br># 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Majority" | Type A:<br>Information Gathering | Kurt Scherf | John Barrett |

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| Wed., 7/30 | 6:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Adopters"<br>(Have broadband, home network and/or PVR) | Type A:<br>Information Gathering | Kurt Scherf | Tricia Parks |
| Wed., 7/30 | 8:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Majority"<br>(Have broadband and multiple PCs and/or home theater) | Type B:<br>Concept | Kurt Scherf | Tricia Parks |
| Thur., 7/31 | 6:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Adopters" | Type B:<br>Concept | Tricia Parks | Kurt Scherf |
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# 3.0 Summary Findings with Detail from Entertainment Server Groups

These findings are directional and often interpretive. They are based on a review of all the focus group tapes. In *Section 2.1*, Parks Associates lists each original goal for these groups and findings for those goals. Detailed findings for these groups are presented in *Sections 4.0 and 5.0* of this report.

## 3.1 General Findings

The entertainment server concept resonated with a majority of participants, although not all consumers within these groups found the concept of a home entertainment server enticing or desirable.

There was a percentage, approximately one-third of participants, who just didn't see a need or desire for these benefits. For these people, the potential complexity or simply the lack of perceived need for a home server dominated all other viewpoints. The remaining two-thirds of our participants found value in this idea, albeit to varying degrees and for different reasons. Segmenting from focus groups is an inexact science. That caveat noted, the individuals in these groups most likely to demonstrate a lack of interest in a home entertainment of any configuration also had the following characteristics overall:

- Entertainment (video or music) plays a less important role in their daily lives than it does for interested participants; that includes less collecting of content, less listening to music, and less viewing of movies;
- Less active involvement with computers and a corollary sense of insecurity as to any potential complexity in products;
- Time constraints due to lifestyle (young children) or electronics fatigue1 or both create a hesitancy to want any new device that may take the individual's time or go unused;
- Insecurity as to their ability to operate any complex-sounding equipment, which was born of past experiences.

There exist paradoxical findings about home servers within these focus groups. Paradoxes are common in pre-market studies and often remain through early market

[1] Electronics fatigue: a condition of weariness towards any new electronics resulting from having too many products unused or discovered to be difficult-to-use.

stages as consumers sift through their fears about new products to define their own value proposition from newly available benefits. Major paradoxes are below.

- The most excited population segment (computer-centric) is not the largest population segment;
- The small segment of true collectors of video and audio now, a logical first choice for enthusiasm, show attachment to the old ways, that is, the manner in which they have melded their entertainment hobbies to their lives;
- Nearly all individuals show dislike and distrust for their cable providers[2], but they also acknowledged that this provider could help them avoid obsolescence in an early market;
- Everyone has a "crash" issue, born of experience with PCs. This is true even for the computer-centric, but they exhibit more confidence in addressing this issue. Parks dubs this "The Microsoft factor." However, everyone also acknowledged that core computing competence is and will be a key to reliability and success with a server.

No single configuration for a server among the three illustrated stands out as an absolute winner, at least not now in this pre-market stage. The three server configurations illustrated include a Media PC, a Media Hub (stand-alone and can go anywhere), and a Set-top Box Server. However, the Media Hub received the most favorable comments from the most people.

- If the market were more developed, one might say that the Media PC has least overall appeal; however, it is the computer-centric individuals that currently show the highest enthusiasm for the overall server concept, which boosts the overall positive response to the Media PC configuration.
- The Media Hub elicited the highest level of acceptance among these groups. The computer-centric people understand this to be a computer device that is in a physical location non-adjacent to the PC, while the individuals that didn't like the Media PC but liked the overall server concept could accept this device because they see it as something more than just another computer. Fundamental to this preference is the perceived complexity of using a PC versus the relative ease of using a remote or a menu-driven TV guide.
- The Set-top Box Server is attractive to the group of individuals in these groups who are uncomfortable with computers in general and dislike complexity. There are a solid number of these people in these groups, but the caveat is that these individuals were also least enthusiastic about the overall concept of an entertainment server.

[2] These focus groups were hosted in Dallas, TX and Los Angeles. While many of our participants in both states expressed a dislike of their cable providers, this may be regional or even specific to these cities.

There were not large shifts in opinion as to preferred server options based on preferred content types among our participants. Those that value the concept of storage for their videos or their music like that aspect of the server concept, regardless of form and after they understand the content to be accessible from any desired display device. For those that don't like the idea of video storage, configuration, or server type, is not the issue; they are simply not drawn to these devices.

- For personal content, which includes items such as homemade video and digital photos, some participants expressed a fear of losing valuable memories if a product failure occurs. These individuals were quite vocal about this fear of personal content loss once discussions began; however, the issue of loss avoidance was important to everyone and must be addressed up front for any configuration introduced to the market.
- Collectors of music and video in these groups both voiced an unwillingness to "let go" of their content packaging and the ability to showcase their collections. However, the video collectors seemed more adamant.
- NOT ALL ENTERTAINMENT CONTENT COLLECTORS ARE THE SAME. Music collectors in these groups tend to be more computer-centric (or at least computer comfortable) than do video collectors. Conversely, the computer-centric and music aficionados (often the same people) were the least likely to have strong attachments to TV and movie entertainment.

## 3.2 Findings on the Importance of Tangible Physical Storage Media

The majority of participants want to have some physical content such as a CD or DVD available when they want to touch it, share it, or simply showcase it.

- While group music collectors seem comfortable with computing and burning CDs and often with downloading music, many still want the information and packaging tied to CDs and formerly LPs. This issue needs to be addressed by the server developers.
- There is a broad range of behaviors surrounding the storage of content among our participants. These behaviors include the extremes of no storage behavior due to no storage activity to true collectors of any one of the following: movies, music or photos. Most people are more in the middle of that bell curve. Of note, people seem to split into video collectors or audio collectors. This is not to say the music collectors have no videos at all but instead that music people just don't pay the same attention (or money) on video as they do on their audio collections. The reverse held true for video lovers.
- These groups were constituted mostly by individuals in their thirties and forties. We had nearly no input from the teenage crowd. We did have a few people in

their late twenties, and in those cases, they collected either music or video. It may be that households led by twenty-somethings would have more specific storage patterns for entertainment content.

- At least one-half of our participants had downloaded some music illegally. Most seemed nervous about that, but only a few individuals had downloaded a great deal of music illegally (or admitted to it).
- Some participants now buy videos because it ends up being cheaper than paying their Blockbuster fees. This was mentioned more often in LA than in Dallas, leading Parks Associates to wonder whether heavy traffic in LA had something to do with the stated dislike of going to Blockbuster. In Dallas groups, renting movies at Blockbuster or other outlets was popular.
- In these groups, parents of young children buy because their children will watch the same movies repeatedly, and having them "in stock" is convenient for both the parents and the children.

These population segments described above do not qualify as "collectors," however, at least not in Parks Associates' view. They own because of convenience or to avoid a negative, rather than for the pure pleasure received from collecting a valued good.

- Most of the above types of music and video owners didn't have strong opinions about their need for "packaging"; however, our music and video collectors and real enthusiasts all spoke of the pleasure of seeing and touching their collections. Some light owners were annoyed by the space their owned videos and CDs require in their homes or apartments. Extreme collectors also mentioned their pleasure and pride in showcasing large collections.

## 3.3 Findings on Issues of Concern

For those individuals that like the server concept and even for those who preferred specific configurations, the enthusiasm and willingness to adopt will depend on their own comfort about several key concerns.

**The entire server concept resonated more completely with our younger participants.** However, nearly all participants were 30+ years of age, so there is nothing to report about households in their twenties[3] or the opinions of teens. Thus, we had quicker enthusiasm from people in their thirties and early 40s. These people were also more computer-comfortable.

[3] We have a few individuals in their late twenties, but too few to make any generalizations.

While we screened for head-of-household, we did not screen for age, instead using services and equipment as our measure of early adopter and early majority. Since products and services cost money and couples in their twenties generally have little spare money (which translates to lower ownership), they were thus under-represented in these groups. People within these age groups, however, would likely offer some strong opinions in regard to the entertainment server concept.

Below is a list of inhibitors or concerns or both derived from these group discussions:

- **Service and Maintenance**: Virtually all participants mentioned or concurred that they need reassurance this server will a) be as reliable as a typical entertainment equipment or b) have readily available service options. A corollary to this is the overall understanding that this device relates as much or more to computing than it does to entertainment.
- **Usability:** The same feelings towards computing are partially responsible for the very strongly stated requirement that this device must be easy to use by these groups. However, there was a good deal of discussion about the complexity of some entertainment devices and, of course, complaints about multiple remotes. That reality also factors into the strong demand for real usability.
- **Single Remote**: Related to usability is the issue of multiple or difficult to manage remotes. All these groups wanted a standard remote for operation across rooms and devices. These focus groups did not delve into the specific design or types of remotes.
- **Price**: We did not probe for pricing parameters nor did we address queries from groups. However, "How much will this cost?" is a spontaneous response from every group when a concept is introduced. Thus, it is an issue of importance.
- **Backup/Redundancy for Content in case of Crash**: There must be redundancy available for content. The manner of redundancy may not be as specifically critical as its availability. Thus, one solution may be to provide just the warning to back up onto physical on-site storage. While not a great solution, it does at least partially address this need. Personal storage spaces for redundancy, hosted

on the Net, may be another solution. [There was a very favorable reaction to adding a recordable DVD because of the back-up feature.]

- **Fail Safe:** "If the server fails, will I be able to watch my TV and listen to my music as I used to?" was a question from many individuals that requires an answer.
- **Will the network be wireless, or will wiring be a requirement?** This research did not focus on network connections, but every group had individuals who asked, "How will it connect? Will I need to rewire?" For most people, rewiring is a significant inhibitor. Some participants just didn't want the server if new wiring was a requirement. If reliable wireless is possible, that is the way to go. If reliable wireless isn't available for content, the issue of rewiring must be completely and clearly addressed and planned. While this is an important issue, wiring itself is not a show-stopper; people wire for things all the time in their homes. In fact, in 2002, nearly 12% of U.S. existing homes added wire for something. However, the requirement for wiring will slow decisions, and if there is no clear plan for wire with installation reassurance and competence, then wiring will be a very strong inhibitor.
- **Physical information for non-physical storage**: Some people want more than the digital content. They want the information (usually reading information) about the content. Consumers need to understand that they can still have physical storage options and that these will be easy to use.
- **Fear of obsolescence**: Participants repeatedly stated concerns that if they buy an early product, they will be stuck with it while newer and better versions arrive on the market. This fear derived from their previous experiences with PCs.

## 3.4 Key Benefits for Entertainment Servers

These are derived from these groups as opposed to being stated explicitly by the participants. The reality of new products is that most consumers can't explain the key benefit. It is much easier to find concerns. When Parks Associates reviewed tapes, we listened for current problems and annoyances that individuals have with their entertainment systems as well as for positive responses to specific capabilities of the entertainment servers discussed. Below is a list of generally recognized benefits for households with entertainment servers.

- Ability to store everything in digital format, reducing damage and aging effects on storage
- Ability to download at will for time-shifted TV and movie watching;
- Ability to watch all available content from multiple rooms and from multiple devices;
- Filing and organizational opportunities;
- Opportunity to have one standard way of using all entertainment devices, i.e., the one-remote dream;
- Ability to listen to downloaded music wherever there are speakers;
- Opportunity to reduce spatial clutter at home;
- Ability to share music and videos with friends and family more easily than is now possible;
- Ability for different rooms to watch or listen to different content without repetitive purchase of DVD players or expensive multisource audio systems; and
- Reduction or even elimination of "top of TV" clutter. This will become more important as flat screens diffuse.

The three most powerful benefits derived from these eight groups and based on matching current problems to expressed likes of the server are…

- Opportunity to have one standard way of using all entertainment devices, i.e., the one-remote dream;
- Ability to watch all available content from multiple rooms and from multiple devices;
- Ability to download at will for time-shifted TV and movie watching.

These benefits seem all of a piece, that is, to obtain one of the benefits means that you can obtain the others. It is difficult from within this short list to cite just ONE primary benefit.

# 4.0 Results on Acquisition, Storage, and Sharing of Entertainment Content

*Section 4.0* offers the results of focus groups in a format that follows the Type B Moderator's Guide. Parks Associates used the Type B guide for seven out of eight groups, and the key difference between guides was the addition of entertainment server concepts for group discussion. These results are for both types of participants, that is, early adopters and early majority. In these groups, differences between these two segments were slight as related to reaction to the concept of entertainment servers. The major difference for those meeting early-adopter status versus those labeled as early majority was the degree of computer centricity.

Some participants within our early-adopter groups demonstrated a high degree of computer knowledge as well as great savvy about technology in general. However, this difference did not change general reactions regarding the merit and desirability of entertainment servers; instead, the major impact of having computer savvy for these participants was that those participants demonstrated a generally quicker understanding of the server concept. The computer-centric participants demonstrated greater comfort with the idea of a media server than did non-computer centric participants, but even for these individuals, there exist several caveats to their possible adoption of a PC Media Server.

## 4.1 The Warm-up Exercise

Parks Associates began each group with a warm-up exercise. The exercise centered on the following questions: "What was your most recent purchase in electronics?" and "What electronic product do you want to purchase next?" Participant responses varied tremendously in terms of product types and level of innovations purchased and desired. For example, mentions included CD jukeboxes, digital cameras, scanners, new PCs, DVD players, and big-screen TVs, as well as a few mentions for TiVo. While of the lists of past or desired future purchases were varied, a few strong patterns did emerge from these discussions:

- Sony is the most admired brand, with specific positive comments made by nearly every participant. In one group, more than one-half of the participants mentioned Sony as the brand of their most recent or their most desired future purchase. No other brand held much stickiness.
- While everyone had a desired future purchase, another tone arose in discussion, one of electronics fatigue. Many people mentioned that they do not use what they already have and believe that buying more functions will just take more time that they don't have to spend. Others mentioned their frustration with complexity of usage, which affects what buying decisions will occur next.
- Lifestyle and life stage relate to time constraints for entertainment electronics. This was most evident with participants having small to junior-high aged children at home. They repeatedly spoke of "no time" to enjoy the electronics that they already own.
- For the most part, it seems people are filling in the systems that are already within their homes or want products with a well-known function, such as a scanner or a big TV, as opposed to desiring something for an emerging category.
- At least one or two people in nearly every group mentioned a desire for TiVo-like capability, but sometimes this was after a specific query about TiVo/Replay functionality and not a spontaneous, non-prompted desire. This was particularly true in the LA groups. In Dallas, participants engaged in TiVo discussions more spontaneously. Beyond some TiVo mentions, "big TVs" and flat panels were very interesting to these groups.
- A few people mentioned the home computer as an "entertainment" device but not in the sense that the technology industry has portrayed it (i.e., downloading, storing, and listening to audio files). "Entertainment" for these consumers consists of e-mail and playing some games (like Solitaire).

## Verbatims:

- "I just purchased a new big-screen TV. Sony, of course. That is what I always buy for entertainment."
- "I want another CD jukebox to link to my first CD jukebox. I have a very large collection and this helps me keep them organized."
- "I just bought a scanner so that I can put my old pictures with my digital photos. That will let me complete my photo scrap booking efforts."
- "I've got hundreds of VHS movie tapes. As soon as the price drops, I'm going to purchase a VHS–to-DVD recorder so I can move all my tapes to DVD. They'll degrade and be obsolete over time."
- "I think I'll get a TiVo device. My friend has one, and it is really neat. I'd like to watch TV shows on my own schedule."
- "I want a plasma TV. It would free up so much space. It's neat. But the price needs to come down."
- "I want a digital camera. Maybe then, I'll take more pictures."
- "I saw an ad for this neat little digital phone with a camera. I'd sort of like it, but then I had to hit myself. 'Jackass,' I said, 'you don't have time to do anything with all of the stuff you already own.'"

# 4.2 Video Entertainment at Home

Discussion of video entertainment centered on acquiring, displaying, storing, and sharing TV shows and movies. Our participants varied widely in their personal usage of video entertainment; some are light users while others are steady or heavy consumers of TV and movies. Overlaying the comments on specific topics within entertainment is the differing importance of video entertainment to individual participants. Some people care little for video entertainment. It matters little whether the discussion centers on TV shows versus movies. Others care greatly, and their video entertainment at home constitutes an important element of their lifestyle and leisure time. Generally, computer-centric participants cared the least about entertainment video whether it was TV shows or movies. There was a predictable cross-section of specific TV show viewing with news, sports, and the hottest TV shows (*Sex and the City*, *Six Feet Under*, etc.) leading the way. One common pattern in type of content discussion was the prevalence of HBO for hot shows and desired movie watching. TiVo is discussed in its own section, *Section 4.3*.

Very few individuals indicated only one absolute source for their entertainment, with most using combinations of premium services, DVDs (bought or rented), and VHS tapings. Indeed, during discussions on content, at least one individual in most groups mentioned that the multiple sources for his various entertainment sources (music and video) are a pain-in-the-neck, then stated that it would be wonderful to have just one storage source. A few people mentioned without prompting that they would like to be able to access their content from whatever room they happen to be in when they want that content.

- **Acquiring TV content**: Every participant subscribes to either cable or satellite service. The groups were nearly evenly split between cable and satellite service for their entertainment services. Satellite subscribers are more satisfied with their service than are cable subscribers. HBO is the brand most mentioned as having clout and high-value shows and movies. Individuals with small children mentioned the Disney Channel.

  In fact, despite cable companies' efforts to improve customer service in recent years, we heard from any number of respondents about their absolute distaste for their cable provider. These feelings may point to the success (or lack thereof) of a cable company to provide a set-top box with "Media Hub" functionality. If consumers do not trust the cable provider, they are far less likely to be willing to obtain a high-end "all-in-one" set-top box from the Company.
- **Acquiring Movies**: Within the population of participants who care about movies and seek to acquire them in any way, most expressed no pleasure in the process of renting movies from entities such as Blockbuster or Hollywood Video. Some complained about late fees while others stated their abandonment of renting due to the inconvenience of going to the store, the expense of late fees, or both. There were only a few heavy movie renters within these groups.

The movie watchers mentioned premium channels such as HBO and Cinemax as their primary sources for movies. Individuals with small children (even those who don't watch many movies for their own pleasure) spoke of their children watching kiddie-channel movies. Most don't store these TV-sourced movies at all. Their channels of entertainment offered multiple opportunities to see the same movies, so they had no need to store most movies. A few parents of small children mentioned recording classic children's movies. Very few participants stated anything but light usage of pay-per-view movies; the abundance of free movies from their premium channels was apparently enough. A few stated their enjoyment at actually going to the movie theater to see first-run movies. Those few participants with TiVo use it primarily to watch TV shows but occasionally will download a movie with TiVo. Among all groups, eight people subscribe to Netflix. Those that do enjoy it, but it is hardly common at this point. Subscribers enjoy the set fee, convenience, and lack of late charges.

Many of the focus group participants had tried pay-per-view and/or video-on-demand services for movie content. For the most part, these consumers found the services to be a more convenient method for acquiring video content. However, a common complaint from several of the respondents was the fact that such services are largely limited by their inability to pause the movie (for telephone or bathroom interruptions, for example). This could very well be an "Ah-ha!" moment, akin to other respondents almost wistfully proclaiming their desire to be able to network their DVD players to other televisions in the home. Essentially, we definitely found some underlying drivers for such applications as personal video recording and networking; the challenge is how exactly to market the applications.

The volume of movies in an individual's video libraries spanned from none to over 1,000 titles. The bigger an individual's library of videos is, the more likely that the individual buys movies in DVD or VHS format or now buys DVDs and used to purchase VHS tapes. An additional set of movie buyers is the parents of small children, even those who don't care much about movies. They make these purchases because their children demand repeat viewings. One man, who promised he wasn't exaggerating, said that his daughter has watched *Indian in the Cupboard* 400 times. For that type of repetition, commonly stated by parents of young children, buying is the easiest approach to videos. Among this population set, there were several tales of owning up to 50 movies, all of them children's classics or favorites. The desire to showcase one's movie collection, however, is more a factor of age, specifically prevalent in younger individuals. These people display their collections in a video bookcase, and when friends visit, they can quickly see all the individual's movies and choose whatever they want to watch. For those young group participants with very large libraries, their collections were a source of pride and self-image.

**Storing Video:** As noted above, the owners of large libraries of movies enjoy showcasing those libraries. On the flip side, a few women complained about the space taken for their libraries of videos and CDs and their desire to get that space back for other uses. Most people don't have huge libraries; the population set that records TV shows generally reuses a tape after viewing the recorded show. Only a few TV shows rate high in the minds of these consumers to merit physical storage for a library.

**Sharing Video:** In each group, there was at least one individual and frequently two or three who share their videos with friends and family on a nearly routine basis. Since e-mailing movies does not really occur now, it was not an issue in these groups; that is, no one claims to do that.

**Movies on the PC:** The notion of downloading and watching a movie on a home computer is most certainly unappealing. A common reaction to the concept of such services as Movielink and CinemaNow was "Why would I watch a movie on my home computer when I've got my [insert size of television here]-inch television in the living room?" No one is doing this now. Upon querying as to the desire to watch movies on a PC, most declared it undesirable – except when on the road. Few could see any benefit to watching a movie on another screen except in that scenario. The exceptions were individuals who are computer-centric to the extreme. For these people, the PC is the center of everything in their homes, and watching movies on the PC is simply a leisurely break from other PC activities.

## Verbatims:

- "I have at least 1,000 movies on VHS tapes and DVD. They're all showcased so that when my friends come over or I want to watch something, I can just go choose."
- "I have about 40 movies, all children's classics. My kids love to watch movies, and it's just easier to buy them. They watch them over and over and over.
- "I'm just not that interested in TV or movies. There are usually no good ones available."
- "I have lots of videos, and storing them takes way too much space. I'd love to be able to do away with the physical format."
- "To me, if I can't see or touch something, it's not quite real. I want to touch and feel my videos and CDs."
- "I watch lots of movies, and if I like them, I watch those dozens of times. I can quote some scenes."
- "I really don't think there is much to watch on TV, and the pay-per-view movies are usually bad. The one channel really worth watching is HBO."
- "We seem to have lots of gadgets on our TV. In fact, there are so many that I can't watch it because I don't how to operate the stuff. I have to wait until my children are around."
- "I've given up Blockbuster and now buy DVDs. My late fees were so high that it is cheaper to buy."
- "I don't like Blockbuster. I want to be able to choose spontaneously and conveniently. Video-on-demand is for me."
- "You probably think that I'm exaggerating when I say that my four-year-old daughter has watched *Indian in the Cupboard* 400 times. I'm not! I've counted."

## 4.3 Digital Video Recorders – TiVo and Replay

The ownership of a TiVo-like device was one criterion option sought in early-adopter groups. To qualify as an early-adopter household, a household had to have a broadband Internet connection and either a home network or a digital video recorder or, of course, both. Clear evidence of the early stage of digital video recorders is that no more than three individuals in any of the groups had a TiVo or Replay device. In the early-adopter groups, most qualified due to their home network, also an early-stage market. In one group, two people with TiVo acknowledged that they had had TiVo equipment for two or more months but just hadn't "gotten around to setting it up."

There were very few people who mentioned a DVR as a desired future purchase, further evidence of its embryonic state; however, those individuals with TiVo set up in their homes love it. They stated an unwillingness to return to a pre-TiVo existence and praised its ease of use as well as the convenience of at-will time shifting. Most TiVo owners were not heavy consumers of the VCR's recording capability.

Despite low penetration, most group participants are aware of TiVo. However, they are not generally aware of the category PVR (or DVR) and cannot define it easily. Further, upon query, even those that can verbalize a definition don't really understand its power, the power of at-will easy and continuous time shifting with easy-to-use operation.

Among the various reasons for not wanting a PVR/DVR despite awareness of it are the following:

- No perceived difference between it and the VCR as recording device;
- Monthly fees;
- Weariness with new gadgets overall; and
- No real understanding of the product's benefits.

Among those who do want a PVR, the main reason for wanting the product is "at-will" time shifting. Only one or two people, even in this group, had ever experienced TiVo. Instead, they had heard about it from friends or family or via press news.

## Verbatims:

- "I love my TiVo. It's really sort of changed my life. There are some shows I really want to watch, but I can't be bothered with recording them on tape. TiVo is so easy."
- "I've had a TiVo machine for two months but just haven't gotten around to setting it up."
- "What exactly does TiVo do? I've heard of it but am not really sure what it is."
- Question from moderator: "Have you heard of DVR?" Response from group: "Not really." Moderator: "What about PVR?" Response from group: "Not really?" Moderator: "What about TiVo?" General group response: "Oh, yes."
- "I really don't see any reason for TiVo. There's just not that much worth recording."

## 4.4 Audio Entertainment at Home

This section reviews participants' stated methods for acquiring, storing, and sharing traditional audio content as well as acquiring, storing, and sharing audio from the home PC.

One top-level observation throughout these groups is the general separation of videophiles and audiophiles. In every case but one, an individual was either an audio enthusiast or a video (movie) enthusiast, but not both. In addition and as a directional statement only, audio enthusiasts appeared more computer-centric than did video enthusiasts.

It is already known that age matters in terms of both video and audio-consumption, but this is even more accentuated with music. Younger people consume copious amounts of music, and the stereotype of a teenager downloading hundreds of songs and purchasing lots of music is true. Less obvious is the effect of age on an individual's desire for visible media. In these groups, more often than not, individuals desiring physical media, a CD as example, were older than 35 years. However, it also appears that the degree of music's importance to a person plays a role in the desire for physical media. Collectors of music tend to want physical proof of their collections.

**Acquiring Audio (sources):** Among these 70+ people, there was great diversity as to audio sources. Among stated music sources were digital cable or satellite (non-commercial channels), radio, purchased and played CDs, downloaded songs from the Internet, music straight from the Internet, and ripped CDs off of music borrowed from friends. Very few individuals claimed only one source, and most have at least two. Thus the challenge is to determine dominant sources.

This starts again, at a top-line level, with separating non-music people from casual listeners from those for whom music is part of everyday and leisure lifestyle. It seems radio and cable or satellite music channels represent a major source for the casual listener. These people have small CD collections overall and expressed resentment at having to buy an entire CD to get a song, but they also don't take the time to download music or rip CDs. The next level of music lover expressed the same resentment of buying a whole CD for a song but will take the time to download songs and rip CDs from borrowed sources. The real music aficionados themselves fell into three basic groups: the collector with a strong ethical stand against "stealing" art; the collector who both buys and downloads music on a non-fee basis; and the collector who buys CDs and downloads music on a fee basis.

Collection numbers for CDs ranged from a good-sized handful (under 50) to well over a thousand. The high-volume collectors own jukebox CD players and are proud of their collections and their music knowledge.

There were some people in these groups who admitted to downloading a good deal of music illegally. While they stated this somewhat nervously, this appeared to stem from a fear of getting caught and fined rather than from any guilt at the process.

**Storing Music**: Music collectors had attitudes similar to the videophiles regarding their collections. These people view their collections as part of who they are and what they believe. The visibility of their music at home is a "bragging" point to friends and really a hobby rather than simply the desire to listen to music. One could say they cherish their music, which includes the entire package, CD covers, inside info, and all. Age does play into this, but what is unclear is to what degree age affects the desire for the music package.

Several people, across several groups, spoke of the pleasure they receive looking at the words and the jackets and the pictures that often arrive with CDs. Some harkened back to their great enjoyment of this and the posters that arrived with now obsolete LPs. These music collectors show their CD jackets as videophiles show their video collections. They display them in bookshelf scenarios for all to see. For others, this is not so important, and downloading to the PC from the Internet onto disk storage or MP3 players is popular – and adequate.

There were just two iPod owners in these groups, but many declared this to be one of their next desired purchases. Ironically, among the iPod owners, neither had purchased via Apple's iTunes yet, but instead they were using the iPod to get free music. However, the majority of participants felt that the current $0.99 per tune was a reasonable price.

The minority were holding out for even lower pricing but acknowledged that Apple had to start somewhere and that was a good starting point.

**Sharing Audio:** Among the approximately 50% of our participants who care about music and buy or download music, many shared CDs by ripping them for friends or by loaning them to friends for that purpose. In each group, there was at least one person careful to state that personal ethics demanded that he/she only loan CDs to people who would not rip them illegally. For most, it wasn't an issue, most particularly if the original CD owner had purchased the music.

### Verbatims

- "I'm just not into music. I don't really buy much, and I don't really even listen to much."
- "I was a disc jockey and have tons of CDs and even LPs. I'm running out of space."
- "I download from the Net and then burn my own CDs. Not as much as my children, but I do it."
- "There's something about the case – you know, the pictures and the words – which I really like. I don't want to lose that."
- "I absolutely will not download music illegally. What about those artists trying to make a living? I love music."
- "I really want that new iPod. It sounds just great. I think Apple is coming out with a PC version soon."
- "My mother doesn't have a CD burner. So I rip her CDs and bring them as presents."

## 4.5 Digital Photos

At least 50% of the participants in these groups have a digital camera, and many more want one. For those who own digital cameras, their activity ranges from "It was a nice novelty, but I don't use it much," to a time-taking hobbyist approach that includes scrapbooking their digital photos.

The most often mentioned benefits of digital photos are: the ability to keep only good pictures, the ability to have storage and filing systems, and the ability to e-mail pictures to family and friends. Editing was mentioned by a minority, but these people take their digital photography to a hobbyist level and spend good amounts of time taking, editing, and reviewing their pictures.

People split as to making photos of the digital images. Some do it nearly all the time, others do it on occasion, and some don't do it at all. The individuals who do make images into photographs send them out online or take them to a local entity such as Costco.

A few people mentioned a lack of desire for a digital camera, perceiving it as just one more time-taking device that would add to their abundance of time-taking devices.

Nearly everyone uses their PC to show their pictures at this time. Only one person mentioned having a Hewlett-Packard digital media interface that allowed the showing of digital pictures on the TV. When all were queried about showing digital photos on the TV, reaction was mixed across groups. There were a few groups where individuals saw the advantage and that view spread to other participants; on the other hand, there were two groups where an individual quickly asserted something like, "How boring! Back to the days of watching home movies that put us all to sleep!", and then that viewpoint spread to others within the group. In one group, the moderator mentioned using the pictures as wallpaper on the TV like a PC slide show. Participants responded well to that. Parents of children seeking to send those images to their relatives love digital photos. Only two people in these groups mentioned the development of a Website where people can check in to view images at will.

## Verbatims:

**About placing digital photos on the TV:**

- "Oh, that would be exciting! Back to the days of watching home movies during which we all fell asleep."
- "I don't really see a need for that. How boring that is."
- "I think that would be neat as wallpaper on the TV."
- "I think that would be a great thing to do. Then I could e-mail my pictures to my family, and they could see them in big form."

**In general about digital photos:**

- "I take a picture every single month of my four-year-old and store it, plus send it to my parents."
- "The big thing to me is the ability to organize the pictures and file them. We have these shoeboxes of past pictures that will always stay in shoeboxes."

# 5.0 The Entertainment Server

Following the warm-up exercises and a full-blown discussion about video, audio, and still-image content, the moderator asked the group if they could envision a centralized storage system for all their content that would be accessible from any display or speaker devices within the home. In all groups, the highly computer-centric participants were the only people who could fully imagine this scenario. In one or two cases, an individual prompted this discussion by mentioning their desire to create a central storage system. One man had already discussed his desire to purchase an Xbox for the purpose of turning it into a content storage system.

For TiVo owners, the explanation that this would be like a TiVo storage system, but for all content and accessible throughout the home, helped elucidate the concept. For all others, even imagining such as server seemed complex. Some simply had nothing to say, while others quickly mentioned the potential complexity and networking challenges of such a device.

After the server concept was explained, the following topics arose spontaneously from nearly every group:

- How much will it cost?
- Who will fix it when it breaks?
- Is this a Microsoft server?
- Will this be standard?

After this exercise, the moderator went though concept illustrations of three different scenarios for a home server, one at a time. There are three basic concepts for the home server: the media center PC, the media hub, and the set-top box server. Each is illustrated below.

## 5.1 The Media PC

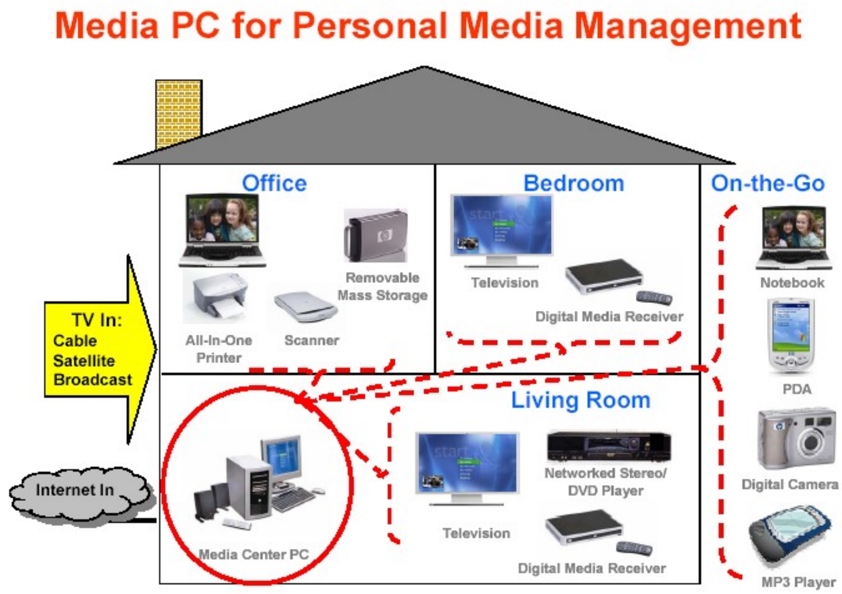


Figure 1 Media PC for Personal Media Management

As the illustration shows, the Media PC has the home server as part and parcel of the PC system. Network connections to entertainment and other PC devices are denoted by dotted lines. Also of note is the yellow arrow indicating that external content from satellite, cable, and the Internet will download and store on this same server. After each group had a minute to absorb the illustration, the moderator explained that the server would store all types of video content, ranging from internal networked sources such as DVDs and CDs to external downloaded content such as TV shows, purchased movies, songs, and still images such as digital photos.

In all the groups, the computer-centric participants "got" the concept immediately and moved to their questions and concerns. For most other people, the concept itself was confusing. They showed skepticism as to how a server in a PC could host entertainment content. They questioned how they would access this and displayed a genuine concern about having to use the PC as control device for entertainment. The computer-centric individuals had already absorbed the image of the remote on the illustration and assumed that was for room-by-room access. One gentleman who clearly sees his PC as the center of his active universe, and had spoken of his recent acquisition of iPod, noted that this was what he had been waiting for and was why he hasn't yet adopted TiVo. Other technically oriented participants thought the server within the PC was a good idea, as they immediately imagined advantages in terms of cataloging and filing their various content options.

The very options that excited PC-centric people (that is, the ability to manipulate and store data) were scary to non-PC individuals. For those people, often entertainment-centric or lighter users of all electronics, part of the pleasure in their TV is its simplicity. One woman almost groaned at the thought of this. She is already enlisting her children's help with her TV watching now that her home has multiple content options; the thought of adding PC skills as an additional requirement distressed her. Some group participants simply don't see the benefit of servers to their lives and the way that they enjoy entertainment.

For everyone, including PC-centric people, questions and concerns arose. These are listed below:

- How will content move from the server to devices in other rooms? Will this demand lots of wiring and installation issues?

This concern spurred conversations about wiring as a messy solution and an inhibitor to interest; by contrast, wireless was seen as a great solution, if it works. There was concern, most particularly from computer-centric individuals, that wireless content distribution would not work for video at this time.

- If this server is on a PC, will it crash as PCs do now?

This concern spurred the conversation that Parks has dubbed "The Microsoft factor." Every participant, but most particularly those with some experience, but not extensive experience, with PCs expressed a concern that with this scenario, their entertainment systems will begin to crash, just as their PCs crash. That crash factor is a significant inhibitor to positive response.

- How expensive will this be?

This focus group did not delve for price but rather for concept reactions. Nonetheless, price raised its head. Various individuals wondered at the comparative cost effectiveness of this server versus simply buying more DVD players and the like. Discussions also centered on gauging the value in reducing the number of black boxes in the house. Some thought of it as an excellent primary benefit; others were not as interested.

- Who will fix it when it breaks, and how do I protect my content if the hard disk fails?

Again, reliability is an issue but not just in regards to the threat of crashing systems. There is also the concern of breakage for any part of the system. If everything is integrated and passed through the server and the network, do all entertainment options go down if anything needs maintenance? From there, discussion centered on "Who does a homeowner call for maintenance?" and "How quickly will repair or maintenance occur?" No one liked the threat of losing all entertainment options due to a malfunction in one component.

Discussion about repair morphed quickly to discussion of content protection in most groups. Everyone expressed a desire for redundancy. Participants discussed various solutions, ranging from keeping back-up physical media to having redundant servers in place.

- Will I still have my DVDs, CDs, /VHS tapes, etc.?

The most negative reactions to the entertainment servers from participants who generally like the idea of servers came from the collectors. These people want physical media to show friends and family and don't see how that would occur in this scenario. Even some non-collectors discussed their pleasure in holding and touching the packages for the content, most particularly for audio where credits to musicians and vocalists (by default) are not available in the actual content.

## Verbatims:

- "This is just the kind of system I've wanted to build."
- "It has to be user friendly, dumb proof. It is hard to start learning all over again."
- "I want one box, one provider, and one source."
- "Too complicated."
- "What about my investment in all other devices?
- "Do I have to wire my house again? I don't want to."
- "Is the PC powerful enough to support all of these functions?"
- "There needs to be a single remote that goes with this that works all devices."
- "I don't want to reboot too much."
- "Make it look nice, not like a regular computer."
- "Oh no, now I won't be able to work my entertainment at all."
- "Will I need a 1-800 number for my entertainment?"
- "Who will install this for me? That's my issue."
- "If this works and I can really store and access everything wherever I want, that will be a great product."

## 5.2 Media Hub

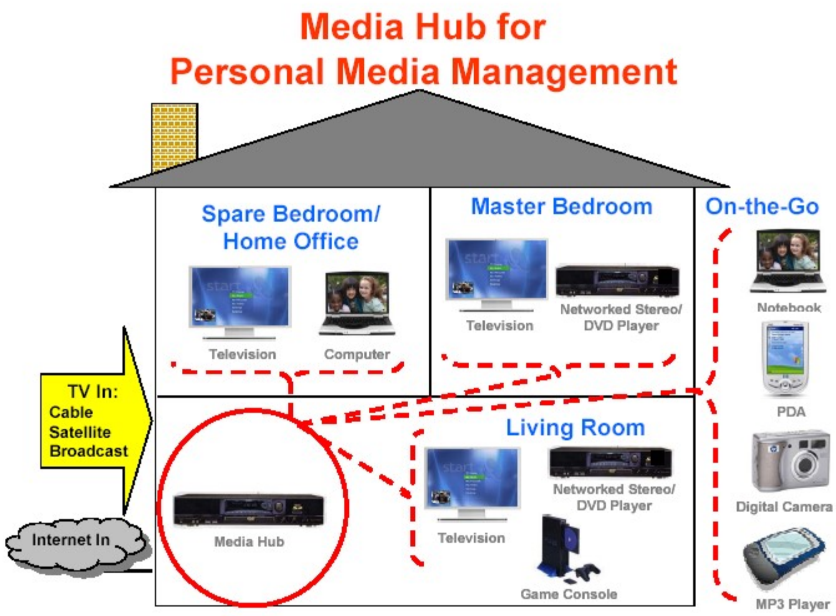


Figure 2 Media Hub for Personal Media Management

The next illustration shown to all participants was the Media Hub as server. The moderator explained this device as *exactly the same as the server for the Media PC* except that it can be a stand-alone device situated anywhere in the home and then connect to all other devices. We explained that this might be placed in a closet or with other entertainment on the rack as an edge device or even next to the PC. The individuals who understood the Media PC also immediately grasped the reality of this situation. Some even simply stated that this is still the server; it's just networked from a further distance.

Despite the apparent fact that this server is just the same as the Media PC server, this scenario pleased some in the highly active entertainment set more than did the Media PC scenario. The computer-centric were also happy with this as they understood that it's just a computer. The participants for whom entertainment at home is not a significant pleasure did not perceive a need for this any more than they had for a Media PC. Collectors warmed more to this scenario than a Media PC, even though the same "collection" issues existed.

The other issues of great concern for the Media PC, such as reliability, installation, service, and redundancy, remained in this discussion but seemed to lighten up for those that enjoyed this scenario.  Somewhat surprisingly, it appears that for some, a rose by any other name is not a rose.  Thus, the crash factor discussions nearly evaporated when this server was physically distanced from the PC.

## Verbatims:

- "This is less scary."
- "This is just the same thing – a computer – moved to a different spot."
- "I like the idea of this being an entertainment product.  They don't crash."
- "This sounds like a product for Sony to make."
- "This will have to be standardized."
- "I'd probably put this in a closet so all the wires won't show."
- "Getting all those devices to connect to this sounds hard."
- "I still want one remote for operation."
- "Maybe this will be easier to use than a PC."
- "What's the real difference?"

## 5.3 Set-top Media Hub

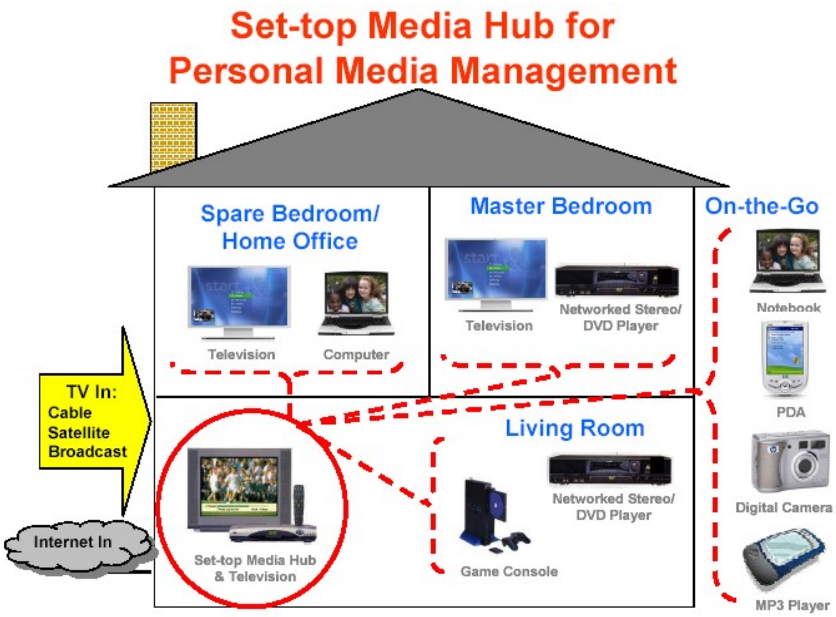


Figure 3 Set-top Media Hub for Personal Media Management

The final scenario shown to participants is above, the Set-top Media Hub. The moderator explained that this is the same server but built-in to a set-top box. In all but one group, it was also explained that the provider of this product would be different than the provider of the other scenarios. The moderator explained that this product would likely be obtained through a content provider such as a cable company or a satellite service company. Another possible provider for this, mentioned in most of the groups, was a telephone company.

For some, most particularly the computer-centric participants and those individuals with a strong dislike of cable companies, this scenario was unattractive. These people doubted the capability of the cable provider, but were more generous in their views towards satellite service providers. In addition, some opined that the last item needed in their home was another black box, or a more complex version of a currently present black box. Finally, some declared an instant distaste for the concept of yet another monthly fee from their current cable or satellite provider. With these complaints stated, the reality remains that some participants viewed this scenario more positively than the other two scenarios.

Why? And who were these individuals? The reasons stated revolved around familiarity with the device and the individuals' comfort level that they would be able to operate this machine because they can now operate a TV with a set-top box. Past experience seemed to be the driver for liking this server version. Further, while some individuals strongly dislike the concept of a higher or additional service fee, others view this as insurance. It the set-top box fails, they know who and where to call for service.

In addition, using a service provider is insurance against obsolescence for some. These individuals know that upgrading this device will fall to the service provider and they won't have to go buy another piece of equipment in case of rapid improvements. Finally, while the computer-centric and even just the sophisticates see no reason to embed a server with a set-top box, it was a good solution for participants who are more insecure about their technical skills and more prone to traditional, moderate patterns of entertainment usage. It helps these people minimize the perception of a server as a computer.

The fear of obsolescence is an important factor for consumers. They understand the mentality that has been engrained in all of us regarding the purchase of new computers every year or so. However, they don't want to be required to have to purchase a new "Media Hub" at the same pace. From the more techie respondents, they were quite eloquent in their desire to have a component-based system that can be easily upgraded.

## Verbatims:

- "I don't like or trust my cable company so I wouldn't want this from it."
- "One thing, though, if this breaks, they have to fix it."
- "If I don't like it, I can stop paying for it and go back."
- "I don't want another black box on my TV."
- "Maybe they can make this easy enough for me to use."
- "I don't even want to use my cable provider for content, but I have little choice. No more money from me to that company."
- "With the risk of obsolescence for new products, at least I know that the cable company …or satellite company…would take care of it."

## 5.4 Who Should Build the Entertainment Server?

Sony was named by nearly all in every group. When queried as to “Why Sony?” responses included brand, quality, entertainment understanding, computer competency, and track record for reliability. Other companies mentioned include the following:

- Partnership between Microsoft and Apple
- Dell
- IBM
- Gateway
- Philips
- Samsung
- Apple
- Panasonic
- Hewlett-Packard.

# Appendix A – Participant Grids

**Plaza Research, Los Angeles**

**ENTERTAINMENT-PARKS ASSOCIATES GROUP 1-EARLY ADOPTER**
**WEDNESDAY, JULY 30**
**6:00PM**

6053 W. Century Blvd. Suite 100
Los Angeles, CA 90045
Phone (310) 645-1700   Fax (310) 645-3008

| | NAME | GENDER | INTERNET ACCESS AT HOME | TWO OR MORE COMPUTERS AT HOME | HOME THEATER SYSTEM | KIDS UNDER 18 YRS | AGE | INCOME |
|---|---|---|---|---|---|---|---|---|
| 2 | THY H. | MALE | YES | YES | YES | 1-5 | 39 | $41-80K |
| 3 | ELIZABETH L. | FEMALE | YES | YES | YES | 2-12,14 | 47 | $80K+ |
| 4 | GERALD J. | MALE | YES | YES | NO | 1-17 | 48 | <$41K |
| 5 | JOAN A. | FEMALE | YES | YES | NO | 1-16 | 46 | $80K+ |
| 6 | BILLY H. | MALE | YES | YES | YES | NONE | 46 | $41-80K |
| 7 | PATRICE G. | FEMALE | YES | YES | YES | 1-6 | 30 | $41-80K |
| 8 | MONIQUE R. | FEMALE | YES | YES | NO | 3-9,13,14 | 35 | $41-80K |

**Plaza Research, Los Angeles**

6053 W. Century Blvd. Suite 100

Los Angeles, CA 90045

Phone (310) 645-1700 Fax (310) 645-3008

**ENTERTAINMENT-PARKS ASSOCIATES**
**GROUP 2-EARLY MAJORITY**
**WEDNESDAY, JULY 30**
**8:00PM**

| | NAME | GENDER | INTERNET ACCESS AT HOME | TWO OR MORE COMPUTERS AT HOME | HOME THEATER SYSTEM | KIDS UNDER 18 YRS | AGE | INCOME |
|---|---|---|---|---|---|---|---|---|
| 1 | JUAN D. | MALE | YES | YES | YES | 3-2,9,15 | 50 | $41-80K |
| 2 | NEAL N. | MALE | YES | YES | YES | 1-3,6,8 | 41 | $80K+ |
| 3 | TERRI C. | FEMALE | YES | YES | YES | 2-11,15 | 45 | $80K+ |
| 4 | NANCY L. | FEMALE | YES | YES | NO | 2-10,10 | 46 | $41-80K |
| 5 | BARBIE L. | FEMALE | YES | YES | YES | 1-17 | 47 | $80K+ |
| 6 | PHYLLIS L. | FEMALE | YES | YES | YES | NONE | 49 | $80K+ |
| 7 | TRACY B. | MALE | YES | YES | YES | 1-5MOS | 37 | $41-80K |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | FRANK M. | MALE | YES | NO | YES | 1-11 | 39 | $41-80K |
| 9 | JODY S. | FEMALE | YES | NO | YES | 1-17 | 36 | <$41K |
| 10 | SAL C. | MALE | YES | YES | NO | NONE | 39 | <$41K |
| 11 | ANGELA G. | FEMALE | YES | YES | YES | 2-1,3 | 33 | $41-80K |
| 12 | CRAIG C. | MALE | YES | YES | NO | 1-10 | 34 | $41-80K |

**Plaza Research, Los Angeles**

6053 W. Century Blvd. Suite 100
Los Angeles, CA 90045
Phone (310) 645-1700 Fax (310) 645-3008

**ENTERTAINMENT-PARKS ASSOCIATES**
**GROUP 3-EARLY ADOPTERS**
**THURSDAY, JULY 31**
**6:00PM**

| | NAME | GENDER | INTERNET ACCESS AT HOME | HOME DATA NETWORK | PERSONAL VIDEO RECORDER | KIDS UNDER 18 YRS | AGE | INCOME |
|---|---|---|---|---|---|---|---|---|
| 1 | JOHN C. | MALE | YES | YES | NO | 2-11,16 | 42 | $80K+ |
| 2 | PEGGY B. | FEMALE | YES | YES | NO | 1-10 | 49 | $41-80K |
| 3 | CECILY R. | FEMALE | YES | YES | NO | 2-4,7 | 37 | $80K+ |
| 4 | ADAM H. | MALE | YES | YES | NO | NONE | 27 | $41-80K |
| 5 | MARVIN F. | MALE | YES | YES | NO | 1-12 | 59 | $41-80K |
| 6 | STEVE A. | MALE | YES | YES | YES | 2-7,9 | 47 | $80K+ |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 7 | HOLLY A. | FEMALE | YES | YES | NO | 1-4 | 38 | $41-80K |
| 8 | LAYLA E. | FEMALE | YES | YES | NO | 1-9,12 | 37 | $80K+ |
| 9 | LINDA B. | FEMALE | YES | YES | NO | 2-4,12 | 41 | $41-80K |
| 10 | BRUCE D. | MALE | YES | YES | YES | 2-8,9 | 39 | $41-80K |
| 11 | JOANNE O. | FEMALE | YES | YES | NO | 1-16 | 48 | $41-80K |
| 12 | DEREK L. | MALE | YES | YES | NO | NONE | 33 | $41-80K |

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**ENTERTAINMENT-PARKS ASSOCIATES**
**GROUP 4-EARLY MAJORITY**

**THURSDAY, JULY 31**
**8:00PM**

| | NAME | GENDER | INTERNET ACCESS AT HOME | TWO OR MORE COMPUTERS AT HOME | HOME THEATER SYSTEM | KIDS UNDER 18 YRS | CHILD COMING TO GROUP | AGE | INCOME |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BILL L. | MALE | YES | YES | NO | 1-10 | NO | 49 | $41-80K |
| 2 | ED L. | MALE | YES | YES | YES | 1-16 | NO | 47 | $80K+ |
| 3 | ROBERT L. | MALE | YES | YES | NO | 1-4 | NO | 47 | $80K+ |
| 4 | BARBARA W. | FEMALE | YES | YES | YES | 0 | NO | 47 | $41-80K |
| 5 | CAMILLE R. | FEMALE | YES | YES | YES | 1-15 | NO | 39 | $41-80K |
| 6 | JIM T. | MALE | YES | YES | NO | 1-16 | YES | 48 | $80K+ |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 7 | MELISSA M. | FEMALE | YES | YES | NO | 1-2 | NO | 34 | $80K+ |
| 8 | CHRIS S. | MALE | YES | YES | YES | NONE | NO | 27 | $41-80K |
| 9 | PAUL S. | MALE | YES | YES | NO | 2-7,16 | YES | 35 | <$41K |
| 10 | PETER S. | MALE | YES | NO | YES | NONE | NO | 37 | <$41K |
| 11 | HYUNJIN J. | FEMALE | YES | YES | YES | NONE | NO | 29 | $41-80K |
| 12 | MARY V. | FEMALE | YES | YES | YES | NONE | NO | 57 | $80K+ |

# Appendix B – Group Screeners

**(Wednesday, July 30, 2003 – 6:00 p.m.**
**EARLY ADOPTERS I – SCREENER**
**Thursday, July 31, 2003 – 6:00 p.m.)**

Guidelines:

1. Two focus groups with "early adopters" will be held. One focus group will be held on Wednesday, July 9 at 6:00 p.m., and the second will be held on Thursday, July 10 at 6:00 p.m.
2. Recruit 12 for each group for 8-12 to show. For the two groups, this will mean total recruiting of 16-24 persons.
3. Each recruit will be paid a $75 incentive fee for their participation.

If there are questions, please call Kurt Scherf of Parks Associates at 972-490-1113. Thank you.

We are seeking consumers who live in households with a broadband connection (approximately 16-18% of all U.S. households) combined with a data network (approximately 10% of all U.S. households) and/or a personal video recorder (also known as a "PVR," these are devices such as TiVo or Replay, and they can be found in approximately 2% of all U.S. households. We would ideally like to have a mix of males and females, but it doesn't have to be exactly 50-50.

For one of these early adopter groups, we would also like to recruit at least two participants who can bring a child with them to participate. This would mean that you would be responsible for recruiting 8-10 adults and two children. The children ***must*** show up!

**************

Hello. My name is ………………… and I'm calling from ……………………….. We are recruiting participants for focus groups to be held on Wednesday/Thursday, July 9/10 at 6:00 p.m., in Dallas. Our client is interested in exploring the attitudes and opinions of consumers regarding their home entertainment experiences.

1. Does your household currently have broadband Internet access? This could either be a cable modem service from a company such as Comcast or DSL service from a company such as SBC.

____ Yes ____ No

If "no," terminate interview with a "Thank you for your time"; if "yes," continue…

2. Do you or does anyone in your household work for a market research company?

___ Yes ____ No

If "yes," terminate interview with a "Thank you for your time"; if "no," continue…

3. Have you participated in a focus group within the past six months?
___ Yes ____ No

**If "yes," terminate interview with a "Thank you for your time"; if "no," continue…**

4. Are you a primary decision-maker in your household when it comes to the purchase of new products such as home computers and entertainment equipment (televisions, stereos, game consoles, and other such equipment)?
____ Yes ____ No

If "no," then ask "Is there a member of the household who is the primary decision-maker in your household when it comes to the acquisition of new computers and Internet services who might be interested in participating in a focus group?"
If "no," terminate interview with a "Thank you for your time"; if "yes," continue…

5. A "home data network" consists of special hardware or software that is typically used to connect two or more computers in a way that allows them to share a single Internet connection, files, and peripherals. In some cases, a home data network can also consist of one PC (a laptop, for example) that is connected wirelessly to an "access point" that gives a user wireless access to a broadband connection. Given this description of a home data network, does your household currently have such a solution?
____ Yes ____ No

**If "yes," please continue to Question #6. If "no," please continue to Question #6 and see the instructions following that question regarding what to do with the respondent.**

6. A "personal video recorder" is a device that is about the size and shape of a VCR or DVD player. It includes a hard drive, such as the type that is found in a typical home computer. These devices, which usually come under the brand name of "TiVo" [pronounced "tee-vo"] or "Replay," allow a user to record, pause, and rewind live TV programs without the use of videotape. Some satellite television set-top boxes also come with PVR capability. Based on this description of a PVR that I have provided, does your household currently use such a device?
____ Yes ____ No

**If "no," to Question #6 but "yes" to Question #5, please recruit the respondent.**
**If "yes" to Question #5 and "yes" to Question #6, please recruit the respondent.**

## If "no" to Question #5 and "no" to Question #6, please terminate interview with "Thank you for your time"

Ideally, we are looking for at least two respondents who have a "PVR" for each focus group.

7. How many children under the age of 18 do you have living at home?
___ None ___ One or More
Please recruit at least one-half of respondents who have at least one child under the age of 18 living at home.

8. Into which age group do you fall?
____18-24 ____25-34 ____35-44 ____45-54 ____55 or older
If between 18-24, terminate interview with a "Thank you for your time"; please recruit respondents between the ages of 25 and 65.
We would like an age range mix for the groups of:
2-3 people 25-34 years of age
7-9 people 35-54 years of age
No more than 1 person age 55 or older

9. In which income category does your household fall?
____Less than $41,000 ____Between $41,000 and $80,000 ____More than $80,000
We would like an income range mix for the groups of:
1-2 people less than $41,000
4-6 people between $41,000 and $80,000
3-4 people more than $80,000

# Early Majority II – Screener

**(Wednesday, July 9, 2003 – 8:00 p.m.
Thursday, July 10, 2003 – 8:00 p.m.)**

Guidelines:

4. Two focus groups with "early majority" respondents will be held. One focus group will be held on Wednesday, July 9 at 8:00 p.m., and the second will be held on Thursday, July 10 at 8:00 p.m.
5. Recruit 12 for each group for 8-12 to show. For the two groups, this will mean total recruiting of 16-24 persons.
6. Each recruit will be paid a $75 incentive fee for their participation.

If there are questions, please call Kurt Scherf of Parks Associates at 972-490-1113. Thank you.

We are seeking consumers who live in households with a broadband connection (approximately 16-18% of all U.S. households) plus ***either*** use of multiple computers at home (any combination of laptops and desktops; approximately 25-30% of all U.S. households are what we consider multiple-PC households) ***or*** home theater ownership (the combination of a television at least 25" in screen size plus external speakers that create a surround-sound environment; approximately 25-28% of all U.S. households have a home theater system). We would ideally like to have a mix of males and females, but it doesn't have to be exactly 50-50.

**************

Hello. My name is ………………… and I'm calling from ……………………….. We are recruiting participants for focus groups to be held on Wednesday/Thursday, July 9/10 at 8:00 p.m., in Dallas. Our client is interested in exploring the attitudes and opinions of consumers regarding their home entertainment experiences.

10. Does your household currently have broadband Internet access? This could either be a cable modem service from a company such as Comcast or DSL service from a company such as SBC.

____ Yes ____ No

If "no," terminate interview with a "Thank you for your time"; if "yes," continue…

11. Do you or does anyone in your household work for a market research company?

___ Yes ____ No

If "yes," terminate interview with a "Thank you for your time"; if "no," continue…

12. Have you participated in a focus group within the past six months?
___ Yes ____ No

**If "yes," terminate interview with a "Thank you for your time"; if "no," continue…**

13. Are you a primary decision-maker in your household when it comes to the purchase of new products such as home computers and entertainment equipment (televisions, stereos, game consoles, and other such equipment?
____ Yes ____ No

If "no," then ask "Is there a member of the household who is the primary decision-maker in your household when it comes to the acquisition of new computers and Internet services who might be interested in participating in a focus group?"
If "no," terminate interview with a "Thank you for your time"; if "yes," continue…

14. Does your household currently use two or more computers at home? These could be both desktop and/or laptop computers, and the laptop computers may be used at the home and other locations, such as an office or school.
____ Yes ____ No

If "yes," please continue to Question #6. If "no," please continue to Question #6 and see the instructions following that question regarding what to do with the respondent.

15. A "home theater system" is defined as a system that includes the following:
    - A television set with a screen size of at least 25" inches;
    - A hi-fi VCR and/or a DVD player;
    - A surround sound decoder, built into products such as an audio receiver or preamplifier/processor; and
    - At least four external speakers (these are separate from the television set and are placed around the room for surround-sound); and

Given the description of a home theater system, does your household currently have such a system?
____ Yes ____ No

**If "no," to Question #6 but "yes" to Question #5, please recruit the respondent.**

**If "yes" to Question #5 *and* "yes" to Question #6, please recruit the respondent.**

## If "no" to Question #5 *and* "no" to Question #6, please terminate interview with "Thank you for your time"

Ideally, we would like the groups split 50/50 between multiple-PC respondents and home theater respondents, but this doesn't have to be exact.

16. How many children under the age of 18 do you have living at home?
___ None ___ One or More
Please recruit at least one-half of respondents who have at least one child under the age of 18 living at home.
**Special Note!**
For Thursday, July 31 at 8:00 p.m., we would like to recruit two children to accompany their parent as a participant in the focus group. We would like to have the child between the ages of 14 and 18. Please ask the following question to recruit two children to accompany their parent to the Thursday, July 10 group.

17. On Thursday, July 31, we would like to include children in your focus group. Do you have a child between the ages of 14 and 18, currently living at home, who would like to participate in this focus group with you?
____ Yes ____ No

Please stop when you have recruited two children for the Thursday, July 31 focus group.

18. Into which age group do you fall?
____18-24 ____25-34 ____35-44 ____45-54 ____55 or older
If between 18-24, terminate interview with a "Thank you for your time"; please recruit respondents between the ages of 25 and 65.
We would like an age range mix for the groups of:
2-3 people 25-34 years of age
7-9 people 35-54 years of age
No more than 1 person age 55 or older

19. In which income category does your household fall?
____Less than $41,000 ____Between $41,000 and $80,000 ____More than $80,000
We would like an income range mix for the groups of:
1-2 people less than $41,000
4-6 people between $41,000 and $80,000
3-4 people more than $80,000

## Appendix C – Moderator's Guide

# *The Home Digital Video Experience*

## Moderator's Guide: Focus Groups

## *Information Gathering*

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# Outline of Work

Parks Associates has been contracted by the Internet Home Alliance to design, lead, and analyze eight focus groups in two cities (Dallas and Los Angeles).

# Goals for Focus Groups

Parks Associates will have succeeded in meeting the information goals of Panasonic and Hewlett-Packard for these focus groups if after they are complete:

1. We understand consumer's views and preferences on having storage and access servers for entertainment content in the following configurations:
    a. server within multi-media PC environment (PC hub device);
    b. server that is integrated into a cable or satellite set-top box environment (edge device);
    c. server as stand-alone consumer electronics device that can connect with a PC, set-top-box and other entertainment devices;
2. We understand consumer preferences and concerns for each scenario and why they hold those preferences for each primary form of video content (TV, movies, personally recorded);
3. We understand consumers' attitudes about tangible versus intangible media storage from both a behavioral perspective (what is done now) and from an attitudinal perspective (the importance of 'real' product versus untouchable product); and
4. We understand what will cause a consumer to adopt any of the entertainment servers within these scenarios. The goal is to obtain insight as to primary benefit along with inhibiting concerns. Determining consumer views on optimal pricing is not a goal in these groups.

# Focus Group Participants

The focus groups will be split between "early adopters" and the "early majority."

- **Early Adopters** participants will have a broadband Internet connection, a home data network and/or a personal video recorder (a TiVo or a Replay-type device);

- **Early Majority** participants will have broadband capability at home and either multiple PCs at home or a home theater.

## Schedule and Outline for Focus Groups

**Overview of Internet Home Alliance Focus Groups**
***The Home Digital Video Experience***

| Group Date | Time | Location | Group Type | Group Subject | Moderator | Note Taker |
|---|---|---|---|---|---|---|
| Wed., 7/9 | 6:00 p.m. | Plaza Research<br>14160 Dallas Pkwy., # 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Adopters" (Have broadband, home network and/or PVR) | Type A:<br>Information Gathering | Kurt Scherf | Yuanzhe (Michael) Cai |
| Wed., 7/9 | 8:00 p.m. | Plaza Research<br>14160 Dallas Pkwy., # 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Majority" (have broadband and multiple PCs, and/or home theater) | Type A:<br>Information Gathering | Kurt Scherf | Yuanzhe (Michael) Cai |
| Thur., 7/10 | 6:00 p.m. | Plaza Research<br>14160 Dallas Pkwy., # 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Adopters" - ***Note:*** This one will have the children (two teenagers along with parent) | Type B:<br>Concept | Kurt Scherf | John Barrett |
| Thur., 7/10 | 8:00 p.m. | Plaza Research<br>14160 Dallas Pkwy., # 602<br>Dallas, TX 75254<br>Phone: 972-392-0100 | "Early Majority" | Type B:<br>Concept | Kurt Scherf | John Barrett |

## Overview of Internet Home Alliance Focus Groups
### *The Home Digital Video Experience*

| Group Date | Time | Location | Group Type | Group Subject | Moderator | Note Taker |
|---|---|---|---|---|---|---|
| Wed., 7/30 | 6:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Adopters" (Have broadband, home network and/or PVR) | Type A: Information Gathering | Kurt Scherf | Tricia Parks |
| Wed., 7/30 | 8:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Majority" (have broadband and multiple PCs and/or home theater) | Type B: Concept | Kurt Scherf | Tricia Parks |
| Thur., 7/31 | 6:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Adopters" | Type B: Concept | Kurt Scherf | Tricia Parks |
| Thur., 7/31 | 8:00 p.m. | Plaza Research<br>6053 W. Century Blvd.<br>Los Angeles, CA 90045<br>Phone: 310-645-1700 | "Early Majority" - ***Note:*** This one will have the children (two teenagers along with parent) | Type A: Information Gathering | Kurt Scherf | Tricia Parks |

# Script for "Type B" Focus Groups

## Introductions and "Ground Rules": 5 minutes

- Introduce myself and my company: "A market research company that looks at how consumers use existing consumer entertainment technologies in the home and studies what new products and services you may want in the near future."
- Audio and Videotaping – only for research purposes
- Colleagues behind the one-way glass
- Absolutely no right or wrong answers … simply interested in learning about your opinions and feelings
- Please try to speak one at a time.

## Warm-up Exercise: 15 minutes

Go around the table and ask each respondent to introduce him or herself. Have them answer the following questions:

- "What is the most recent purchase you made for home entertainment purposes?" and/or
    - **POSSIBLE EARLY PROBE:** "What made you purchase this" … or … "why this particular device/solution?"
- "What would you most like to purchase to update or enhance your home entertainment experience?"
    - **ANOTHER POSSIBLE EARLY PROBE:** "What is driving this purchase need/decision?"
- Additionally: Is there a product or service that you'd really like that isn't currently offered?

## Current Access to Audio/Video/Photo Content: 40 minutes

## Television Content

### Acquiring Television Content

- What do they like best/least about cable/satellite services?
    - **PROBE:** What is one way that you would improve the service?
    - **PROBE:** Are on-screen guides (EPGs) useful? Why or why not?
    - **PROBE:** Are cable/satellite set-top boxes easy to use? In what ***specific*** ways?

### Storing Television Content

- How do they store their video content today?
- How satisfied are they with their VCR? What would they most like to see improved?

**Personal Video Recorders**

- Gauge participants' familiarity, utilization, and satisfaction with Personalized Television Recording (also called PVR - e.g. TiVo)
    - Are they familiar with TiVo and similar services?
    - Does participant feel that he/she is missing good stuff on TV because of schedule (day time TV, late night shows, etc.) or because he doesn't know about it?
- Has anyone looked into purchasing such a device? Why or why not?
    - **PROBE:** What is preventing consumers from buying such solutions at this time?

**DVD Recorders**

- What do they think about a dedicated consumer electronics device that burns DVD's vis-a-vis it going on their PC?
    - **PROBE**: Has anyone seen the Panasonic commercial for the DVD recorder]?
- Do they see an improved value in replacing VHS tapes with recordable DVD's?
- Do they have a preference for burning DVD's on a dedicated consumer electronics device vis-a-vis the PC?

## Movie Content

### Acquiring Movie Content

- To get the conversation started: "Tell me about your movie-viewing habits for the household. How do you decide when to see a movie at the theater versus renting or acquiring a movie for home?
    - **PROBE:** What do you enjoy more about seeing a movie at home vis a vis the theatre? What do you like less about the experience?
        - **PROBE:** Does it have anything to do with the quality of the experience or the equipment at home being sub-par for the viewing/listening experience? Need "better speakers" or a "bigger television"?

**DVD Players**

*Participants with a DVD Player*

- What spurred the decision to purchase a DVD player?
- PROBE: How do they compare their experience with DVD players vss VHS videocassette recorders for watching movies?

- How many DVD's have they purchased? Do they do it more frequently than they did for VHS, and if so why?
- How often do they repeat their watching of any given DVD? Do they actually look at it more than once?
- **PROBE:** Has anyone tried Netflix or any service like it?

*Participants without a DVD Player*

- If respondents haven't yet purchased a DVD player, what has prevented them to this point?

**Pay-Per-View and Video-on-Demand Questions**

- Have respondents tried pay-per-view (where you can watch a selection of videos at various prescribed times)?
  - **PROBE:** For what kind of content?
  - **PROBE:** What did they like about the experience? What didn't they like?
- Have respondents tried anything like full-blown video-on-demand, where you can watch the film ANY time you want and where you can stop or pause the film?
- Would you be willing to pay for a video on demand from a video library?
  - Would you rather pay for videos on a per-use basis or by monthly subscription?
    - If picture quality were slightly less than videocassette quality, would you pay for video on demand services at less than rental prices?

**Video Via the Home Computer**

*Acquiring Video via the Home Computer*

- Have the respondents watched movies or any form of full motion video on the home computer?
  - **PROBE:** What have they liked/disliked about the experience?
- How would you rate your interest in watching video on your home computer vs. on television.
- For what reasons/purposes would you consider it? More precisely, for what services would you consider it most suitable vis a vis cable or satellite service:
  - First run movies on demand
  - Special Interest Video that you couldn't get elsewhere
  - Personal video that you have recorded with your camcorder
- Would you pay to watch video on your computer?
- What would be your interest you pay a subscription fee to download movies from your computer to DVD to view from your TV later?
- Would you rather watch a live stream of video online vs. downloading a video to your computer?

- Would you watch television shows online if the quality were similar to TV? Would you pay a subscription fee for a service that allowed you to watch any television you wanted (old or new) on demand?

*Storing Video via the Home Computer*

- Would you be interested in downloading movies to your PC, and watching them while outside of the home (i.e. airport, in the car, etc.)
  - **PROBE:** What would be the most-preferred method of this? DVD? CD? Memory stick?

*Sharing Video via the Home Computer*

- Can you envision a way in which sharing video files on the home computer could be easier (could be done in such a way that you would do this?)

## Audio

### Audio via "Traditional" Methods

*Acquiring Audio via "Traditional" Methods*

- Where is their audio content coming from (radio, CDs, etc.). Why one particular source over another?

*Storing Audio via "Traditional" Methods*

- Why do they make copies?
- How do they make copies of audio content? What do they like/dislike about how making copies works currently?

*Sharing Audio via "Traditional" Methods*

- Why and when do they share audio?

### Audio via the Home Computer

*Acquiring Audio via the Home Computer*

- Any experience with downloading music files? Where and how are they storing this content? What do they like/dislike about it?
  - **PROBE:** What are viewed as "easy" or "convenient" ways to store audio?
  - **PROBE: Are they getting music from the Internet, or are they getting digital music from another source (ripping CDs)?**
- Does anyone pay (or know of) pay audio services, and have they tried them?

*Storing Audio via the Home Computer*

- Do they own a portable MP3 player? Are they transferring their MP3 music to it? What do they like and dislike?
- In thinking about stored audio files, is it important to have the audio on a tangible media such as a CD? What if the files were only available from the PC or a music service's server?
- In what ways could storing/accessing both music and video files on the home computer be easier?

*Sharing Audio via the Home Computer*

- Why do they share audio files?
- When do they share audio files?

**Still and Video Pictures (Self-Created Images)**

*Acquiring, Viewing, and Storing*

Still Photos

- How do digital camera users currently store and view digital pictures?
    - Do they keep the images on their hard disk?
    - Do they burn them to a CD?
    - Do they print them all out?
- Is the current experience in any way limited by ***where*** the pictures are currently viewed? Is there anything that these consumers would want to see to improve this experience?
- What is the participants' reaction to something like the television as an interface for watching digital picture slideshows?
- Would you be interested in printing from images on your television (i.e. photos that you view on the TV, or images that you can pause & print while viewing)?

Personal Home Videos

- Do they store personal home videos differently than commercial movies?

# The Home Entertainment Server: 40 minutes

## Envisioning the Server

- Now that we've discussed various ways of accessing and storing content in the home, we're ready to discuss a new concept:
- What images come to mind when I say a term "media server"? How about "entertainment hub"?
    - **PROBE:** How would you use it? For what applications today would you use this? How about in the future?

## What Does a Media Server Do?

- What does a media server do? What are key applications? Is this function performed by a single device or several of them?[Keep silent and let the respondents answer it themselves. Perhaps have them write out key applications separately and have them come together to form a "laundry list" of key applications.]
    - **PROBE:** What will it look like? What ***should*** it look like?
        - **PROBE:** Is there any bias toward a platform that looks a certain way?
    - **PROBE:** To what kinds of devices in the home should it connect…and how?
        - TV?
        - Stereo?
        - PC?
        - Handheld devices?

**PROBE:** What room in the house should the device be in, or does it matter?

## Storage Via the Server

- **PROBE:** Can they imagine storing everything in one area? In other words, all audio, video, and photos are stored on the same device?
    - What are the positives and negatives of one storage device given how they use the content today?

## Talking Through Entertainment Server Configurations

*Note*: Moderator is to let this be as free-form as possible.

- Set-top Box
    - What are the advantages of thinking about a set-top box as a media server?
    - What are disadvantages?
        - **PROBE:** Concern over cost of such a platform?
- Media Center PC
    - **PROBE:** Participants' perception of difference between Media PC and 'ordinary' PC
    - **PROBE:** If the question hasn't been satisfactorily addressed in previous discussions, a key question is "What would it take for you to envision the home computer as a media server?"
- A CE Platform with Integrated Media Server Capability (such as a DVD player)
- A standalone and dedicated device
    - **PROBE:** Would you want this in the open or tucked away in a closet? Why?
    - **PROBE:** Any concerns about repair issues?

## Where Does This Product Reside?

- Where does this device reside in the home?

## Product Issues

- Once product scenarios are discussed, discuss where and how to purchase and who installs.
    - Who do they trust?
- Brand ratings/rankings
    - "What company would provide this:
    - How do participants rate various CE/PC vendors for delivering this?
- Where would they buy certain products/services?
- What concerns would prevent them from purchasing?

# Summary Statements and Close: 5 minutes