The Internet and Consumer Choice:

Online Americans use different search and purchase strategies for different goods

- The internet helps music buyers connect with artists and learn more about music, but it doesn’t strongly influence what or how they buy
- The internet is an influential source of information and options for those purchasing feature-rich items such as cell phones
- The internet is an efficiency-enhancer in searching for new housing
- Few internet users bother to rate or comment on their purchase, even for a digital good such as music

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John B. Horrigan, Associate Director
The internet is a valuable research tool for online shoppers and at times provides information that is critically important in purchase decisions. Yet, more often than not, purchases are consummated offline and post-purchase online commentary is only a small part of a typical shopper’s activities. This is the role of the internet across three different products.

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* Represents those who used at least one of six online music searching activities.
For cell phone and real estate, respondents were asked simply if they used the internet in their product research.

Additionally, the internet is generally not the source people are most likely to use in the pre-purchase information gathering for these three products.

- Among music buyers:
  - 83% find out about music from the radio, TV, or in a movie;
  - 64% find out about music from family, friends, or co-workers.

- For cell phone purchasers:
  - 59% ask an expert or salesperson for advice;
Summary of Findings

- 46% go to one or more cell phone stores.

For people looking for a place to live:
- 49% look at ads in the newspaper;
- 47% ask a real estate agent for advice.

In this report, respondents were asked whether they had bought any of the three goods listed above in the past year, and then directed to one of three question modules that probed their decision-making process. This enables analysis of consumer choice for the three products along four dimensions:

- **Search:** How much people rely on the internet in product research and to what extent online information smooths the path to a purchase decision.
- **Influence:** Where the internet’s influence is great (or not) in consumer’s decisions.
- **Participation:** Whether internet users get involved in online chatter or take other steps after purchase to engage with what they bought.
- **Disintermediation:** Whether the internet serves as a way to go around traditional means (e.g., going to retail stores) to buy products.

Following discussion of findings in these four areas, the summary will go through the data on the three products that serve as the basis for the findings.

**Search:** Online information can make product research more efficient and it can be particularly useful for a feature-rich product. But it is not the only tool buyers use to gather information.

Information gathering is one of the most basic uses of the web and often the first step in consumer decision-making. It manifests itself in different ways for each of the products studied. Cell phone buyers face a wide range of choices among devices and service plans. Many of these choices are relevant to buyers, but at the same time it can be a challenge to sort through them. Thus, cell phone buyers rely on different types of input – salespeople, websites of vendors, blogs, and review sites online – to help structure their decision. The need for information is great in winnowing down the range of options, and the contractual commitment in many cell phone purchases adds to the demand for information.

For those looking for a place to live, the internet helps buyers focus their search. Real estate searchers face a lot of choices, but not all of them may be relevant to their needs. The internet helps shoppers reduce the number of properties that require a trip to check out, as well as learn more about a transaction that has a high level of financial commitment.

The story for music is a bit different because it is an experience good – the kind of product whose quality is discernable only after it has been consumed. This means that
search has a lot to do with sampling. Internet users who are music buyers do this in a variety of ways – streaming songs to their computer, going to artists’ websites, or watching music videos online. Because an experience good requires a lot of information-gathering to assure the potential buyer the purchase will be worth the cost, music buyers don’t rely exclusively on the internet in their search. In fact, they are more likely to rely on mainstream media or recommendations from family and friends for inspiration for music purchases.

Influence: Online information is generally modest in its impact on decisions, but looms larger when a purchase requires a big commitment.

No more than one-tenth of buyers in each product category said that online information had a major impact on their purchasing decision. In conjunction with the finding that people use multiple sources, this suggests that the internet is part of a competitive information environment in product research. Because people are willing to use other sources for product research, this suggests online providers of product information have incentives to be reliable as they reach out to consumers.

When the product in question requires a large commitment by a buyer, the internet’s influence on the choice is greater. The cell phone, which often requires a contractual commitment, and real estate, which typically requires a large financial commitment, demonstrate this. Some 10% of cell buyers (or 27% of those who used the internet specifically for research on their cell purchase) and 11% of home buyers or renters (or 23% of those who used the internet for research on their real estate decision) said online information had a major impact on their purchasing decision. Before making the purchase, internet users conduct extensive online research and, for many, it makes a difference in their final decision.

For a good such as music – which involves less commitment but more difficulty in determining quality before purchase – online information competes with other sources as buyers search widely prior to buying. This lessens its influence on purchasing relative to the other products; just 7% of music buyers (or 12% of those who used the internet to find out about music) said it had a major impact on their choice.

Participation: Rating products after purchase is surprisingly rare, but music buyers make direct connections with artists after they have bought their tunes.

For each of the three products studied, few said they had rated the product they had purchased. Among internet users in each product category, 6% of music buyers, 4% of cell buyers, and 4% of those who looked for a place to live posted commentary about

1 Because more real estate searchers used online resources in their research than did cell phone buyers (by a 49% to 39% margin), the lower figure for online real estate searchers’ impact translates into a higher figure when focusing on major impact as a share of all respondents to questions about a product. That is, 27% of 39% for cell buyers equals 10%, and 23% of 49% for real estate searchers equals 11%.
their experience on websites or blogs. Far larger percentages of online users in each category (about a quarter of music buyers, half of cell buyers, and a quarter of real estate shoppers) consult these sources in doing their search.

The large gaps between contributors and readers are understandable; not all consumers are interested in lending their voice and many may be content to free ride on the efforts of others. However, with the growth of broadband adoption at home and the buzz about online participation in a Web 2.0 world, widespread activity in this arena might be expected. Yet the data in this report do not show this; there is clearly a distance between the numbers of those who contribute and those who lurk.

Music is somewhat different. Liner notes in albums used to be the most immediate way to learn something about a newly purchased album – potentially a conversation starter with a nearby friend. Now “digital liner notes” add a dynamic element to users’ voices as they can create or monitor a variety of conversations about music. For music buyers, this often takes the form of reaching out directly to artists’ websites (39% of online music buyers do this) or to like-minded fans at blogs. Even though few music buyers rate or comment on purchases, online resources such as MySpace constitute an active participatory space online, especially for young adults.

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**Disintermediation:** When it comes time to make the transaction, it is still an offline world. But fewer barriers between buyers and sellers can help consumers get better deals.

The early visions of e-commerce – the “friction free capitalism” once touted by Bill Gates – saw producers and consumers transacting seamlessly. Cutting out the middleman would mean lower prices for consumers. But few buyers of music or cell phones execute the transaction online; most rely on traditional retail stores.

While disintermediation clearly is not upon us, the report’s findings suggest that fewer communication barriers, both among buyers and between buyers and sellers, may benefit consumers. Sizable numbers of those who use the internet in product research for each of the three products report that they believe online information helped them get better deals. Among those who used the internet in product research:

- 42% of music buyers said online information helped them save money on music purchases.
- 41% of cell buyers said they spend less as a result of information they got online.
- 29% of those who used the internet in researching a new place to live said it helped get them a better price.

These figures suggest that, for some buyers, online information effectively improves their bargaining positions as they shop. There is, however, another side to the coin; people say online information can prompt more spending than might otherwise be the case. Among
music buyers who use the internet to find out about music, 37% said the internet led them to buy more music than they otherwise might have. For cell buyers using the internet for product research, 43% said online information led them to get a phone with more features than they otherwise would have.

Online resources augment the shopping experience in tactical ways for users.

As useful as online information might be in the shopping journey, users’ reliance on multiple sources indicates that buyers use the internet in tactical ways.

A music fan hears a song in a movie. That might prompt an online search to sample it, learn more about the artist, or check out what others think of the song. Perhaps that results in a purchase of the song or the entire album; if so, that’s likely to mean a trip to the store. Even for young adult music buyers, whose purchasing path is more reliant on the internet, this basic pattern holds.

A real estate searcher might see an ad for a place in the paper or learn about it from a real estate agent. That might spur an online search to learn more about it, and quite possibly save a trip across town when the searcher finds the house or apartment isn’t for him. Or the online search might reveal a similar place nearby, but offered at a lower price.

A cell phone buyer may see an attractive new device in a store and ask some questions of a salesperson. Further online research might show the phone has features the buyer may not use, but direct the search to a more appropriate (and maybe cheaper) device. Online information may make the difference in the final choice, but in conjunction with offline queries.

In these examples, online information shapes the choice, perhaps even in important ways. As the data show, however, the internet is not usually the major factor that influences the final decision. This may be partly attributable to some internet users concerns about online security in shopping, which discourages the use of online resources to shop. Nonetheless, the relatively small influence of online information on shopping decisions also has much to do with people using multiple sources in their buying journey.

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The music-purchasing experience: Digital resources play an important role that allows consumers to engage with music after it is bought, but online resources do not play a large role in the music people choose or how they consume it.

Music buyers seek out a wide range of resources as they think through the music they may want to purchase, but offline sources dominate. People are more likely to find out about music from traditional media or families, friends, or co-workers than from the internet.

- 83% of music buyers say they find out about music from hearing a song on the radio, the television, or in a movie.
- 64% say they find out about music from friends, family members, or co-workers.
- 56% say they find out about music through various online tools, such as going to a band’s or artist’s website or streaming samples of songs to their computers.

Music buyers report that offline sources are more influential than the internet in shaping their choice of music purchases. When internet-using music buyers who used the internet for research were asked to think about the impact online resources had on their most recent music purchase:

- 51% said online information had no impact at all.
- 37% said online information had a minor impact.
- 12% said online information had a major impact.3

In general, 62% of music buyers who used the internet to learn about music say an offline source mattered most compared to 32% who said something on the internet made the most difference.

Music purchasing still generally means buying a CD and buying in a store.

- 82% of music buyers say that all (62%) or most (20%) of the music they buy is CDs.
- 15% say at least half their purchases were individual digital files.

Even for young adult music buyers (defined as those under age 36), music purchasing still is dominated by CDs (69% buy most or all of their music on CDs), with 27% purchasing digital music files at least half the time.

As to point-of-purchase:

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3 The 12% figure represents major impact as a share of the 56% of music buyers who used online resources in their search. When represented as a share of all respondents who bought music in the prior year, 7% of respondents said online information had a major impact on their purchase.
Summary of Findings

- 74% of music buyers say their most recent purchase was at a store, while 22% said it was done online (either ordering a CD or a paid download).

Once people buy music, they are most likely to cite an offline means as a way that they share the experience, as 77% of music buyers say they talk about a music purchase with family or friends. Various media resources also play key roles in how people engage with music after they buy it:

- 56% of music buyers say they watch a music video of the song or artist, some of which may be online videos.
- 44% of music buyers transfer the music to a CD, computer, or MP3 player.
- 44% of music buyers have done at least one online activity relating to their music purchase, such as going to an artist’s or band’s website or reading blogs about the artist or band.

Internet-using music buyers use the internet post-purchase to connect directly with artists.

- 39% go to the artist’s or band’s website.
- 28% look online for live performances by the artist.
- 13% either post their music to a social networking site such as Facebook or post their own reviews of the music they purchase.

Post-purchase online activity can encourage additional buying. Overall, 26% of internet users who bought music in the past year said online resources led them to buy more music. Among internet users who bought music in the past and who did at least one post-purchase activity online, 40% said online resources led them to buy more music.

The cell phone-purchasing experience: Online information is influential for cell phone buyers as they do comparison shopping. In addition to consulting websites of vendors, they also go to stores and consult salespeople as they sort through options.

Among those who have purchased a cell phone in the prior year, here is how they did their research before the purchase:

- 59% asked an expert or salesperson for advice.
- 46% go to one or more cell phone stores.
- 39% use the internet.

Among the two-fifths (39%) of people who use the internet for their background research on a cell phone purchase:

- 76% go to website of cell phone manufacturers or cell phones.
- 59% use websites that compare cell phone features and prices.
50% consult reviews of cell phones on websites or blogs.
7% post queries in chat rooms or on listservs seeking information on cell phones.

When asked to think about the impact online resources had on their cell phone purchase, here is what cell buyers who used the internet in their research said:

- 46% said online information had a minor impact.
- 27% said online information had a major impact.\(^4\)
- 27% said online information had no impact at all.

In general, 49% of cell phone buyers who used the internet in their research say an online source mattered most compared to 46% who said something found offline made the most difference. Even with the importance of online information, actual purchasing is an offline affair:

- 78% of cell phone buyers purchased their device in a store.
- 12% of cell phone buyers bought their device online.

For cell phone buyers who use the internet for research, it had a variety of impacts. Among the 39% of cell phone buyers who use the internet for their background research:

- 48% said it changed the model or brand of cell phone they bought.
- 43% said online information led them to get a phone with more features than otherwise would have been the case.
- 41% said online information helped them spend less on their cell phone.

On balance, users are generally satisfied with the cell phones they buy. Three-quarters (78%) of cell buyers said they felt they had the right amount of information in considering their purchase and 87% are either somewhat or very satisfied with the cell phone they bought. After people buy their cell phone, post-purchase online chatter is minimal, as only 11% look online for information on how to use their phone and 4% post a rating of their new device online.

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**Hunting for housing: Online information reduces search costs for people looking for a new place to live, but online resources supplement buyers’ toolkits. They don’t substitute for offline resources.**

People looking for a new place to live – especially those moving to a new city – rely very much on the internet for their real estate searching, but not to the exclusion of other means. Although half of real estate searchers start out by using the internet to get information, roughly the same share uses the newspaper or real estate agents. For those

\(^4\) The 27% figure represents major impact as a share of the 39% of music buyers who used online resources in their search. When represented as a share of all respondents who bought a cell phone in the prior year, 10% of respondents said online information had a major impact on their purchase.
moving to new cities, the internet is more heavily relied upon than it is for in-town movers, but so too is a real estate agent. Here are the means people use when beginning the process of finding a new place to live:

- 49% use the internet.
- 49% look through ads in the newspaper.
- 47% ask a real estate agent for advice.
- 31% ask friends, family members, or co-workers.
- 15% consult TV or radio.

For those who move to a new city (53% of those in the sample looking for a new place to live), the internet is more heavily relied upon (60%), but so is a real estate agent (55%).

Among those who moved in the prior year and who used the internet in their housing research:

- 58% say the information they got online helped introduce them to their new community.
- 57% say it reduced the number of places they looked at.
- 29% say they thought online information helped them save money on the house they bought or apartment they rented.

Most internet users who use online resources in their housing search say that search has some influence the choice they eventually make.

- 23% say it had a major impact on their housing decision.\(^5\)
- 36% say it had a minor impact.
- 42% say it had no impact at all.

After they have moved, the internet is not widely used as a means to get acquainted with a new place:

- 5% discuss their new place or neighborhood in an online forum or community.
- 4% post comments or ratings online about real estate agents and others they dealt with in finding a place to live.
- 4% post comments about their new place or neighborhood on a website or blog.
- 3% join a neighborhood listserv.

\(^5\) The 23% figure represents major impact as a share of the 49% of real estate buyers who used online resources in their search. When represented as a share of all respondents who bought or rented a home in the prior year, 11% of respondents said online information had a major impact on their purchase.
The Internet and Consumer Decisions:

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Acknowledgements

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About the Pew Internet & American Life Project: The Pew Internet Project is an initiative of the Pew Research Center, a nonprofit “fact tank” that provides information on the issues, attitudes and trends shaping America and the world. Pew Internet explores the impact of the internet on children, families, communities, the work place, schools, health care and civic/political life. The Project is nonpartisan and takes no position on policy issues. Support for the project is provided by The Pew Charitable Trusts. The Project's Web site: http://www.pewinternet.org
Buying goods and services is at once simpler and more demanding in the digital age. A few years ago, the act of buying something usually meant going to a store and seeing whether what you wanted was available or whether a close substitute would suffice. Perhaps a customer came to the store armed with information — maybe with a consumer magazine in hand, or with an advertisement in mind, or with a friend in tow. Lacking these, a customer might rely on a salesperson to get through a transaction.

Today, the process of buying something — research, comparison shopping, and executing the transaction — can take place easily at home using the internet. Notwithstanding the convenience of this, online shopping can also create new information demands on consumers. Amazon.com recommended an artist I might like when I last bought music online, but should I take that at face value? Who or what should I consult to verify that recommendation? Where is the right place for information on cell phones and which cell phone plan is right for me? For some people, the proliferating number of choices may be daunting.6

Networked information gives consumers ready access to resources that can provide clues about product quality, terms of service, and other features. This report examines the process by which people come to purchase three types of products that, in different ways, are likely to be influenced by online information.

**Three products in the digital economy**

**Music**

Music is an experience good, that is, one whose quality is difficult to determine before the purchase.7 This means that a consumer faces an inherent uncertainty about its true value in advance of buying it. Since the judgment on quality comes after purchase, the buying decision relies heavily on information — advertising, word-of-mouth, or sampling. The music industry has traditionally combined sampling and bundling of its products to draw users to music without giving away the goods. Listeners could assess the quality of music for free by listening to songs on the radio, but, after the demise of the single 45rpm record (in which the consumer still paid for the obscure B-side), they had to buy a

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collection of songs. Buyers hoped the quality of the collection matched that of the song or songs they had sampled.

This model relied a great deal on intermediaries, such as record companies and radio stations, to bridge the gap between musician and consumer. These intermediaries served as quality filters that reduced the uncertainty over whether a musical offering was consistent with consumers’ tastes and thus worth purchasing.

This model has been under challenge in the past several years in the music industry. Consumers can sample a wide variety of songs repeatedly and at their leisure by streaming them to computers. They can also learn about music from musicians themselves or other fans. Music lovers can purchase as few or as many songs as they like, perhaps directly from the artists. Intermediaries are a much less necessary part of the bargain.

Another dimension to music in the digital age is how people consume it. Music, by tradition, is often enjoyed communally, which influences how people assess whether it is any good or not. Alexander Graham Bell was the first to see that communication technology might change the communal nature of listening to music, as he thought the telephone would be used to let people gather to listen to concerts happening in other places. The internet turns Bell’s vision on its head – people can listen to music wherever they want, on a variety of devices, and virtually gather in cyberspace to talk about it.

The deep reach of digital technology into music production and consumption means one would expect the internet to have impacts all along the way in people’s purchasing patterns:

- For pre-purchase research, online sampling should be pervasive and influential as users try to assess whether buying music suits their tastes.
- Post-purchase online chatter is also likely to be significant, as consumers check in with others about the quality of the music and to share in the enjoyment of it.

**Cell phones**

The cell phone is a type of information good whose value is dependent on the information embedded in it or facilitated by it, and which depends on a network to realize its full value. As an information good, the cell phone shares some characteristics of an experience good, in that some of its features may be sampled ahead of time, but the device’s value becomes clear once the consumer has begun to use it. The fact that the cell phone gives access to a networked service adds another layer of consumer uncertainty. These include how many others are connected to the network (a determinant of a

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network’s value) and how well the network functions technically in connecting users to one another. Neither is easy to determine with confidence before purchase.

These two layers of consumer uncertainty give users strong incentives to switch if either the cell phone device or service is not up to par. As a consequence, sellers of cell phones and services use a variety of strategies to lock customers into the product. Cell phones and their service plans typically come with strings attached, such as early termination fees, which make it costly to switch service. The devices themselves, in the United States at least, usually cannot be used on other providers’ networks because of technical modifications made by the manufacturer at the behest of the service provider.

Another consequence of the cell phone and related services is product differentiation. If carriers worry about people fleeing their service, they will take steps to distinguish their products from others to raise the cost of switching. Thus, carriers will have different service plans and prices, and will tout the virtue of their networks as opposed to those of other carriers.

These seller strategies, all designed to make it costly for people to switch services, give consumers strong incentives to gather a lot of information prior to purchase. It is also likely that consumers will think that this research pays off in better deals on the kinds of phones they purchase – and it may well. Consumers with an internet connection would be expected to heavily rely on online resources for purchasing decisions for a cell phone.

**Real Estate**

Exploring the process of buying a home or renting an apartment offers the opportunity to explore a product less embedded in digital culture than the others. Real estate is a classic search good in which the quality of the good can be easily discerned before the purchase is made – in other words, the opposite of an experience good. Any product whose rallying cry is “location, location, location” is a fairly open book when it comes to its characteristics.

This places a large informational burden on the buyer to sort through a range of attributes. With the internet offering the opportunity of remote inspection of properties, one would expect the internet to help reduce search costs by eliminating places that otherwise would require physical inspection. Therefore, one would expect that real estate buyers would rely heavily upon online information and, possibly, use it to substitute for traditional means of finding out about a place to live, such as a newspaper or a real estate agent. Not unlike music purchasing, renters or buyers of real estate might use online resources as a substitute for traditional intermediaries in the transaction.

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The Sample

The September 2007 survey asked respondents whether they had, in the previous year, made one of the following purchases:

- **Music**: 53% of respondents said they had purchased music in the prior year.
- **A cell phone**: 39% of respondents said they had gotten a new cell phone last year.
- **A place to live**: 17% of respondents said they moved to a new house, apartment, or condominium in the prior year, some of these buying and others renting.

In order to have an appropriate distribution of respondents in each module, not all respondents who reported doing a transaction in the previous year were directed to questions on the topic. As a result, the number of respondents receiving questions on each topic unfolded as follows:

- 26% of the sample, or 638 respondents, received questions about a **music purchase**.
- 26% of the sample, or 630 respondents, received questions about a **cell phone** purchase.
- 16% of the sample, or 314 respondents, received questions about how they went about finding a **place to live**.

The modules asked detailed questions about the resources – offline and online – that respondents consulted in making buying choices and the way they eventually made the purchase. The questions also inquired about the online resources they may use after the purchase to learn more about what they bought. Some 31% of the sample did not receive questions on one of the three topical modules since that portion of the sample said they had done none of the three transactions in the previous year.
Few industries have been disrupted by the digital revolution to the extent music has. In the not-too-distant past, people bought music by going to a store and buying a compact disc. With the advent of the internet and peer-to-peer file sharing, change has been sharp. Shipments of CDs peaked at 942.5 million units in 2000 and fell by 25% to 705 million units in 2005. Figures released earlier this year show that album sales fell by 9.5% in 2007, even though digital sales grew by 45% in this period. This decline in album sales is attributed not only to online file-sharing, but also to leisure dollars competing with other forms of entertainment such as DVDs and video games.\textsuperscript{10}

Some 27% of internet users say they have downloaded music from the internet, according to our March 2006 survey. Given lawsuits over illegal downloading of copyright protected music, not all downloaders may admit to this behavior. Whatever the prevalence of this behavior, downloading music files has challenged the traditional means by which music is marketed and sold.

In this survey, half of respondents (53%) said they had purchased music in the past year, and 26% of respondents were directed to the module with detailed questions about music purchasing. Although online resources greatly influence the music-buying experience, they are by no means dominant and, in fact, music shopping and purchasing maintains a strong offline flavor.

Respondents who were directed to the music module are not representative of the general population. They are more likely to be internet users 83% and to have broadband at home (59% do), which compares to 73% and 50% respectively in the general population. They are also slightly younger, with a median age among adults of 43 compared with 45 in the general adult internet population.

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\textbf{The music buyers use the internet to find out about music, but rely on offline means more.}

When asked how they learn about music that they might want to buy or listen to, the old-fashioned ways dominate:

- Most music buyers (83%) say that they find out about music from hearing a song on the radio, on TV, or in a movie.

64% of music buyers say they find out about music from friends, family, or co-workers.

36% say they get copies of songs from a friend

35% say they find out about music by visiting an offline music store.

34% say that going to a concert is the way they have learned about music they may want to buy.

Among people who have bought music in the prior year, 94% said that at least one of these offline means of learning about music had something to do with how they became acquainted with the music they purchased. For internet users in this module who bought music in the prior year, 96% said they learned about music from at least one of these offline means.

When asked more specifically about online ways in which they learned about music, internet users who had bought music in the prior year cited a variety of different things. The table below shows where internet-using music buyers have found out about music.

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<th>How internet users who have bought music in the past year use online resources to learn about music</th>
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</tr>
<tr>
<td>Reading online reviews or blogs about songs and artists</td>
</tr>
<tr>
<td>Watching music videos online</td>
</tr>
<tr>
<td>Going to a MySpace profile of an artist, band, or record label</td>
</tr>
<tr>
<td>Receiving an email from a band, artist, or record company</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey, September 2007, n=510 for internet users in music module; margin of error is ±5%.

All told, 56% of those in the music module used at least one of the online means listed above to find out about music they might want to buy. Since not all respondents in the music module are internet users, expressing that number as a share of internet users in the music module means that 68% of internet users used at least one of these eight online resources to find out about music, with 53% using two or more of them.
Those with high-speed internet at home are a bit more likely to use any of these online resources for discovering music – 71% have – but they are also more likely to use offline means for music. Some 85% of broadband users in the music module find out about music from radio, TV, or movies, and 69% rely on family, friends, or co-workers.

The internet's impact is surprisingly muted in how people think about their music purchasing decisions.

When asked to think about the most important sources of information people consult in the course of a music purchasing decision, nearly two-thirds of internet users who used the internet to find out about music they bought (62%) cite something they found offline with 32% saying it was something they found on the internet.

When queried about specific ways the internet influenced their music buying decisions, here is what internet users who bought music in the previous year said:

- 68% said it helped them learn more about bands or artists they were interested in.
- 57% said it introduced them to new artists they had not heard about before.
- 42% said it helped them save money in buying music.
- 37% said online information led them to buy more music than they otherwise would have.
- 30% said online information changed the specific songs or album they had in mind.

What, where, and how they buy music

Even with the potential to buy music online via digital downloads to a personal computer, most music buying is done the old-fashioned way – by going to a store and buying a compact disc. When asked about all the music bought in the past year, here is how the numbers break down for respondents who received the module of questions on music purchasing:

- 62% of respondents in the music module said all of the music they buy are CDs.
- 20% said most are CDs.
- 7% said most of their purchases are individual digital files.
- 5% said all of their purchases were digital files.
- 3% said their purchases were equally split between CDs and digital files.

When asked where they most recently purchased music, the vast majority (74%) of music buyers say they went to a store, while 22% say they bought music online. Even among those who use the internet to find out about music, one-third (33%) said their most recent purchase was executed online.
For the most part, those who said their most recent music purchase was in a store were doing this by choice. Some 56% of those who bought music most recently said they could have made the purchase online, while 37% said they could not have.

Among the 22% of music purchasers who bought most recently online, most (61%) could have bought their music in a store, with 35% saying they could not have done that. Just 7% of online music purchasers said they visited a store to sample music or ask for some help before getting their music online.

As to the nature of the music purchase – CD or digital download – some 41% of online buyers of music ordered a compact disc and 58% downloaded digital files. Put differently, 13% of music buyers say their most recent music purchase was a digital download of music files.

Although most respondents, when thinking of their most recent purchase of music, say they bought at a store, it is possible that information they found online influenced their decision. After all, half of music purchasers said they learn about music using at least two online means. Nonetheless, online information has a modest impact on music purchases. When asked whether information found online had a major impact, minor impact, or no impact at all, here is what music buyers who used the internet in their research said:

- 51% said online information had no impact at all.
- 37% said it had a minor impact.
- 12% said it had a major impact.

The internet plays a critical role in how online users engage with music after they have bought it.

The enjoyment of music is often a group experience, not only through live performances but also by sharing with others thoughts about the new tunes recently purchased. We asked music purchasers what kinds of things they do after they buy music that may extend the music-listening experience.
As is the case with finding out about music, the post-purchase chatter is centered around family and friends. Even sharing music is done mostly outside the bounds of cyberspace. When asked how they share music, 73% of those who said they had shared music with others said they gave someone a CD, while 2% said they did this online; some 7% did both while 18% could not recall. With 44% of music buyers transferring music to a CD, computer, or MP3 player, it is possible that some of this sharing through giving a CD to someone involves digital transformation of the music content.

Even though online resources have small impacts on pre-purchase decisions, they play a significant role after the purchase as tools to help music buyers learn more about music.

<table>
<thead>
<tr>
<th>Sharing content, buzz, or fun after buying music</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk with friends or family about the music</td>
<td>77%</td>
</tr>
<tr>
<td>Share the music with others</td>
<td>62</td>
</tr>
<tr>
<td>Watch a music video of the song or artist</td>
<td>56</td>
</tr>
<tr>
<td>Go to see the artist or band perform at a concert</td>
<td>47</td>
</tr>
<tr>
<td>Transfer the music to a CD, computer, or MP3 player</td>
<td>44</td>
</tr>
<tr>
<td>Buy other merchandise, such as t-shirts from the same artist</td>
<td>20</td>
</tr>
<tr>
<td>Remix the music into your own creation</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey, September 2007, n=638 for all respondents in music module; margin of error is ±4%.

<table>
<thead>
<tr>
<th>Using the internet after buying music (among online users who have bought music in the past year)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to the artist’s or band’s website</td>
<td>39%</td>
</tr>
<tr>
<td>Look online for live performances by that artist</td>
<td>28</td>
</tr>
<tr>
<td>Read websites or blogs about the music</td>
<td>26</td>
</tr>
<tr>
<td>Post the music to your page on MySpace, Facebook, or another website</td>
<td>8</td>
</tr>
<tr>
<td>Post your own reviews, ratings, or comments online about the music</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey, September 2007, n=510 for internet users in music module; margin of error is ±5%.
Some 13% of internet-using music buyers either post their music to a social networking site such as Facebook or post their own reviews of the music they purchase.

Overall, 53% of online music purchasers have done at least one of the five things listed above after they have bought music. This comes to 44% of music buyers (since not all are internet users) who have done at least one of these things connected to after-purchase music activity.

That's right, young people are more online-oriented than older folks

It is not a surprise that, in the adult population, younger people are more involved in chatter relating to music. To conduct an analysis of music buying decision by age, we divide the adult population into three groups: ages 18 to 35, 36 to 50, and over 51.\footnote{This yields enough respondents in each age group to draw statistical inferences across the three groups.} When asked generally about how they learn about music they may want to purchase, here is what respondents said across three age categories.

<table>
<thead>
<tr>
<th>How people learn about music they may want to buy</th>
<th>Ages 18-35</th>
<th>Ages 36-50</th>
<th>Age 51+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing a song on the radio, on TV, or in a movie</td>
<td>90%</td>
<td>85%</td>
<td>76%</td>
</tr>
<tr>
<td>From friends, family members, or co-workers</td>
<td>72</td>
<td>70</td>
<td>51</td>
</tr>
<tr>
<td>Getting copies of songs from friends</td>
<td>53</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td>Visiting an offline music store</td>
<td>43</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>Going to a concert given by an artist</td>
<td>35</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Number of cases (all respondents)</td>
<td>148</td>
<td>186</td>
<td>286</td>
</tr>
</tbody>
</table>


Younger adults are generally more likely to use each of the means listed to learn about music they may want to purchase.
Younger adults are more likely to do each of the online music searching activities than older ones, as well as a wider scope of things. The large differences across age groups are evident when it comes to listening to free music samples online, downloading music to a computer, and using MySpace. As the table shows, the median number of places young music purchasers turn to online is 3 – more than the middle and older age groups.

Some 78% of online adults under 36 use at least one of the listed online means to learn about music they may want to buy. The corresponding figures for those in the 36 to 50 and age 51 and over cohorts are 66% and 59% respectively. Put differently (since not all respondents are internet users), 70% of adults age 35 and under turn to the internet to find out about music they may want to buy, while 55% of those between 36 and 50 do, and 32% of those over age 50 do.

Similar patterns emerge when examining after-purchase behavior. Younger music buyers are more active in these behaviors, especially when it comes to posting music to their page at MySpace or Facebook or posting their own reviews of the music they have bought.

### Using the internet to find out about music

<table>
<thead>
<tr>
<th>Activity</th>
<th>Ages 18-35</th>
<th>Ages 36-50</th>
<th>Age 51+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to the website of an artist, band, or record label</td>
<td>41%</td>
<td>38%</td>
<td>30%</td>
</tr>
<tr>
<td>Listening to free streaming samples of songs online</td>
<td>46%</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Visiting an online store that sells music</td>
<td>42%</td>
<td>32%</td>
<td>26%</td>
</tr>
<tr>
<td>Downloading music files to your computer</td>
<td>42%</td>
<td>24%</td>
<td>14%</td>
</tr>
<tr>
<td>Listening to an internet radio station</td>
<td>29%</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Reading online reviews or blogs about songs and artists</td>
<td>28%</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Watching music videos online</td>
<td>34%</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Going to a MySpace profile of an artist, band, or record label</td>
<td>31%</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>Receiving an email from a band, artist, or record company</td>
<td>15%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Median number of online music-seeking activities</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Number of cases (internet users)</td>
<td>133</td>
<td>171</td>
<td>190</td>
</tr>
</tbody>
</table>

These generational differences in pre- and post-purchase online music behavior do not translate into profound differences in purchasing behavior. For adults under age 35:

- 29% say their most recent music purchase has been online and 70% say they went to a store.
  - This compares to 18% of those over 35 who bought online and 75% of this group who bought at a store.

- 27% of the “under age 36” group of music-buying adults say information found online was the most important source for their purchase.
  - This compares with 21% of over 35 music buying adults who say this.

There are, however, large differences in the composition of music purchases across age groups.
It is notable that, for the “under 36” group of adults, 27% are reasonably active purchasers of music in digital files, more than twice the rate of those over the age of 35.

<table>
<thead>
<tr>
<th>Media type for music buying</th>
<th>Ages 18-35</th>
<th>Ages 36-50</th>
<th>Age 51+</th>
</tr>
</thead>
<tbody>
<tr>
<td>All CDs</td>
<td>43%</td>
<td>65%</td>
<td>77%</td>
</tr>
<tr>
<td>Most are CDs</td>
<td>26</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Most are digital files</td>
<td>12</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>All are digital files</td>
<td>11</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>About half and half</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Number of cases (all respondents)</td>
<td>148</td>
<td>186</td>
<td>286</td>
</tr>
</tbody>
</table>


If only a minority of music buyers use online resources in the purchase process, why all the fuss in the music industry?

In one respect, it is possible to look at the data and wonder why the music industry has been so shaken by the internet. After all, only 12% of music buyers report that they purchase digital music files, just 23% of internet-using music buyers say online resources were most important to their decision, and 63% say online information had no impact on their most recent purchase.

It is important to note that the industry evolved in the last century with an infrastructure oriented to delivering music in stores, on CDs, and with most of the inventory consisting of albums from artists signed to labels. Even 10% of buyers seeking an alternative path (e.g., downloading digital files) can have large impacts on the model. When 23% of younger internet-using buyers, arguably the most active and attractive customers, purchase mostly or entirely digital files, the disruption is consequential.

Finally, and not least, is illegal downloading of music online. This activity unquestionably occurs, although its scope and impact on music sales is far from a settled issue. Nonetheless, even some level of this activity, in conjunction with people turning to paid downloading sites such as iTunes for music, understandably upsets the established models for marketing music.

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Part 3.

Buying a cell phone and online resources

Cell phones have become a staple for many Americans, with 78% of adults now having one, up from 21% in 1996. With many cell phone allowing users to have free or low-cost upgrades of phones every 24 months, decisions on new cell phone purchases periodically face users.

In this survey, 39% of adults said that they had bought a cell phone in the previous year. Some 26% of adults were directed to the cell phone module of questions in the survey that asked about the decision-making process in buying a new cell phone. A range of reasons were cited as to why people bought a new phone.

- 27% said their old cell phone failed or broke.
- 14% simply wanted a new phone.
- 13% wanted a better phone, or one with more features.
- 13% said they were offered a good deal, got a free or low-cost upgrade, or got a new service plan.

Remaining responses, all in the low single digits of incidence, included people getting their first phone, losing their old one, or buying a phone for someone else.

Survey respondents who received the cell phone questions differ from the general population in several respects. They are more likely to be internet users than average (86% to 73%) and more likely to have broadband at home (62% to 50%). And they are slightly younger than the sample of the general population: the median age is 44 for respondents in the cell phone sample versus 45 in the general population. The racial composition of the cell phone module recipients is about the same as the general population.

As noted in the Methodology section at the end of this report, the sample for this survey included cell phone numbers. Some 129 respondents in the sample of 2,400 were cell phone users, with about half of respondents reached by cell phone reporting they use only a cell phone for telephone communication and do not have a landline phone at home. In the cell phone module, one-third of respondents were contacted on their cell phone and 6% identified themselves as “cell phone only” users.
A salesperson and a visit to a store take the prize as to how people gather information about a cell phone.

The information-gathering process involved with buying a cell phone has a number of steps and stops:

- 59% ask an expert or a salesperson for advice.
- 46% go to one or more cell phone stores.
- 39% use the internet.
- 37% ask friends, family, or co-workers.
- 19% consult newspapers, magazines, or books.
- 19% use the television and radio.
- 10% use a source not mentioned.

Nearly all (93%) of cell phone shoppers sought out one of the people or sources listed above, two-thirds consulted at least two, and 41% at least three.

The 39% of those who consulted the internet before buying a cell phone took advantage of several different kinds of online resources.

<table>
<thead>
<tr>
<th>How those who have bought a new cell phone in the past year use online resources to learn about the product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to websites of cell phone manufacturers or phone companies</td>
</tr>
<tr>
<td>Use websites that compare cell phone features and prices</td>
</tr>
<tr>
<td>Read reviews of cell phones on websites or blogs</td>
</tr>
<tr>
<td>Post queries in chat rooms, listservs or other online forums asking for information</td>
</tr>
</tbody>
</table>

*Source: Pew Internet & American Life Project Survey, September 2007, n=216 for those who use the internet before buying a cell phone; margin of error is ±7%.*

Some 88% of those who used the internet to investigate a cell phone purchased used at least one of the resources in the table above, and the median number of sources explored was 2.
Online information influences the brand cell buyers choose, the money they spend, and the features they choose.

Online information has meaningful impacts on purchasing decisions of those who use the internet for background research. Among the 39% of respondents in the cell phone module who use the internet for research on their cell phone buying decision:

- 27% said that online information had a major impact on their decision.
- 46% said it has a minor impact.
- 27% said it had no impact at all.

When asked to focus on the importance of online versus offline sources of information in the cell phone purchase, half (49%) of this same set of online users said that online information was most important, with 46% saying something found offline was most important.

The specific impacts of online information pre-purchase unfold as follows among those who have availed themselves of the internet for their cell phone research:

- 48% said it changed the model or brand of cell phone they bought.
- 43% said online information led them to get a phone with more features than otherwise would have been the case.
- 41% said online information helped them spend less on their cell phone.
- 31% said it changed the cell phone service plan they intended to purchase.
- 14% said it changed the phone company they planned to use.

Point of purchase

The overwhelming majority of cell phone buyers make the purchase in a store – some 78% do, with 12% buying online and 9% by some other means. Among the narrower set of those who use the internet in their cell phone research, 26% bought their device online.

Three-quarters of those who bought online could have bought their phone in a store if they had wanted. Likewise, most (61%) who bought their phone in a store could have bought online, though nearly one-third (30%) said they could not have done that.

With the sizable influence online information exerts on 39% of cell phone purchasers, it is understandable that this group is more likely to buy their phones online. Some 26% of this group bought a cell phone online, although 70% still go down to the store.
Satisfaction

All in all, people who have bought a cell phone in the past year come away satisfied. Fully 78% say they had the right amount of information in making their choice, with just 7% saying they had too little information and 11% too much. And 87% are satisfied with their phone and their service – 52% describing themselves as “very satisfied” and 35% as “somewhat satisfied.” About half (46%) say they have recommended to others that they buy the phone they purchased, with most of the rest (44%) saying they have offered no advice to others on whether or not to get the particular phone they bought.

Those who consult the internet before purchasing report the same levels of satisfaction with their purchase compared to those who do not. A modest difference emerges when focusing on those who say they are “very satisfied” with the cell phone they bought. Some 56% of those who used the internet to do pre-purchase research were “very satisfied” with their choice and 51% who did not use the internet were “very satisfied” with their cell phone.

After they buy a phone, few internet users turn to the internet for troubleshooting, posting a rating, or sharing experiences.

Cell phones are feature-rich and reasonably complex electronic devices that often require a user to spend time with a new device to figure it out and, perhaps, to troubleshoot kinks encountered. Most people (68%) take to the owner’s manual to figure out the new device. Some people will go further, especially if they meet a problem that they can’t address themselves. Here is what cell phone buyers said they did when they encountered problems with their cell phone:

- 23% visited a cell phone store.
- 18% called their phone carrier.
- 9% called the cell phone manufacturer.
- 7% (of internet users) went online for information or help.
- 4% discussed the cell phone in an online forum or community.

In terms of sharing general opinions about a new cell phone, most people (60%) say they have talked about a new device with friends, family, or co-workers.

The internet, however, does not play a large role in after-purchase chatter or inquiry:

- 11% of internet users in the cell phone module looked online for information on how to use the phone.
7% looked online for others’ experiences with the same phone.

4% posted a rating or review of the cell phone on a website or blog.

Some 13% of internet users who got a new cell phone in the past year did at least one of the three after-purchase online chatter activities. When including post-purchase online activity relating to troubleshooting (i.e., going online for help or consulting an online forum), some 19% of internet users who bought a phone in the prior year turned to the internet after their purchase regarding something relating to it.
The Internet and Finding Place to Live

The basics of looking for a place to live have been changed by the internet. Whereas once looking in the newspaper and calling a realtor were the places to start in finding out where to look and what to look for, today the internet offers another portal for home buyers or renters.

In this portion of the report, we examine use of the internet among the 17% of respondents who said they found a new place to live in the previous year. One-third (32%) bought a house, condominium, or co-op, while 61% rented. Half (53%) of those who found a new place to live moved to a new city.

Respondents who were directed to questions on searching for a place to live are the youngest and most ethnically diverse of any of the three topic-specific modules. The median age is 32, 18% are English-speaking Hispanics, and 16% are African Americans. Internet usage levels are above average, with 80% being internet users and 61% having broadband at home.

The internet is front and center when people start to look for a new place to live.

When asked about the things they did to get going with their housing search, respondents cast their nets widely. They were equally likely to say they used the internet, newspaper ads, or a real estate agent.

<table>
<thead>
<tr>
<th>What people do when they start the process of looking for a place to live</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the internet</td>
</tr>
<tr>
<td>Look through newspapers for ads and articles</td>
</tr>
<tr>
<td>Ask a real estate agent for advice</td>
</tr>
<tr>
<td>Ask friends, family members, or co-workers</td>
</tr>
<tr>
<td>Use another source not mentioned already</td>
</tr>
<tr>
<td>Use television and radio</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey, September 2007, n=314 for those who found a new place to live in prior year; margin of error is ±6%.
Two-thirds of respondents used at least one of the listed ways to find out information on places to live, and one-third used two or more. Broken out by buyers versus renters:

- 60% of buyers consulted the internet during their search, compared to 43% of renters who did this.
- 60% of buyers consulted friends, family, or co-workers, compared to 16% of renters who did this.
- 49% of buyers used a real estate agent, while 48% of renters did.
- 39% of buyers used the newspaper in their search, while 57% of renters did.
- 19% of buyers cited a source not mentioned, while 18% of renters did.
- 12% of buyers consulted the radio or TV in their search, compared to 17% of renters.

When those who had used the internet to get some information on where to search for an apartment or house were asked specifically what they did, here is what they said.

<table>
<thead>
<tr>
<th>Online tools used by those who use the internet in their search for a place to live</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Take a video tour or virtual tour of a house, apartment, or neighborhood</td>
<td>54%</td>
</tr>
<tr>
<td>Find information online about the quality of life in a community</td>
<td>51</td>
</tr>
<tr>
<td>Search websites of real estate companies and agents</td>
<td>50</td>
</tr>
<tr>
<td>Search newspaper ads online</td>
<td>42</td>
</tr>
<tr>
<td>Search online ad sites such as Craig’s list</td>
<td>32</td>
</tr>
<tr>
<td>Read blogs about the community</td>
<td>24</td>
</tr>
<tr>
<td>Post or read messages in chat rooms, listservs, or other online forums</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey, September 2007, n=152 for those who used the internet in their research into finding a new place to live; margin of error is ±9%.

Three-quarters (76%) of those who had used the internet for their housing search took advantage of at least two the means listed above, 57% did at least three of them, and 31% tried at least four. The typical housing searcher who used the internet in his research tried 3 of them.

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**Online information economizes on search costs when house or apartment shopping.**

Those who use the internet in their housing search see payoffs mainly in lower search costs and in getting a feel for the places they may live. Fully 58% say that information found online gave them a good introduction to their new community, and 57% said it reduced the number of houses or apartments they looked at. Overall, 76% of respondents
say that online information helped them in one of these two key ways in structuring their real estate search. Additionally, 27% say that online information actually changed the neighborhood in which they were planning to live.

Online information also helps in the pocketbook for some people. Among those who used the internet to do research on a place to live, 29% said they believe online information helped them get a better price on their house or apartment. Some 35% of buyers thought online resources helped them get a better price, while 28% of renters said this.

In general, when asked to assess the impact online information had on their housing decision:

- 23% of those who used the internet in their research said it had a major impact.
- 36% said it had a minor impact.
- 42% said it had no impact at all.

Only a few (15%) said that their online searches produced poor or misleading information.

For all those who found a new place to live in the prior year, most (79%) feel they got the right amount of information in the process. One in seven (14%) say they had too little information and 5% too much.

**Settling in**

Most people who moved in the past year are satisfied with the choice they eventually made. Three-fifths (60%) say they are “very satisfied” and 28% are at least “somewhat satisfied.” Just 10% are either “somewhat” or “very” unsatisfied.

At that point, moving furniture and painting walls seem to seize the attention of people, not posting to the internet something about their new neighborhood or moving experience. Among internet users who found a place to live:

- 5% discussed their new place or neighborhood in an online forum or community.
- 4% posted comments or ratings online about real estate agents and others they dealt with in finding a place to live.
- 4% posted comments about their new place or neighborhood on a website or blog.
- 3% joined a neighborhood listserv.

This comes to just 13% of internet users who moved in the prior year doing at least one of these activities.
The internet plays a bigger role for those moving to another city.

Most of the respondents who received questions on the process by which they conducted a change of address moved to another city; 53% say they did. The remaining respondents (45%) did not move to a new city or town. These two groups had substantially different search patterns, with the “distance killing” aspect of the internet coming into play for those moving some distance.

<table>
<thead>
<tr>
<th>What people do when they start the process of looking for a place to live</th>
<th>Moved to new city or town (n=166)</th>
<th>Did not move to new city or town (n=141)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the internet</td>
<td>60%</td>
<td>36%</td>
</tr>
<tr>
<td>Look through newspapers for ads and articles</td>
<td>47</td>
<td>54</td>
</tr>
<tr>
<td>Ask a real estate agent for advice</td>
<td>55</td>
<td>41</td>
</tr>
<tr>
<td>Ask friends, family members, or co-workers</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td>Use another source not mentioned already</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Use television and radio</td>
<td>21</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Pew Internet & American Life Project Survey, September 2007, n=314 for those who found a new place to live in prior year; margin of error is ±6%.

The internet plays a noticeable role in introducing people who have changed cities to their new community. Some 63% of those who moved to a new city say the internet helped give them a good introduction to their new community compared to 46% of in-town movers who said this.
Conclusion

The role of online information in how people buy products is not always consistent with expectations. This concluding section discusses how online resources fit, or don’t fit, into people’s shopping patterns.

The internet plays a central role for enjoying music after purchase, but it plays a lesser role in the music people choose and how they consume it.

With the need to find out a lot about music before a purchase, it is not surprising that people use a range of sources for research. However, the internet is just one among several popular ways to learn of music, trailing by a wide margin hearing a song on the radio, on television, or in a movie, and also behind learning about music by word-of-mouth from family, friends, or co-workers. Even for music-buying adults under the age of 36, traditional means of finding out about music outpace online resources (by a 90% to 70% margin), although the internet clearly plays an important role.

Music buyers are active users of cyberspace after they have purchased music, with half of online music buyers having done something online to find out more about music they have bought. Given the communal nature of enjoying music, this post-purchase online engagement is to be expected. What is interesting, particularly for young adults, is the direct route people take to the artist. Some 45% of “under 36” adult music buyers say they have gone to the website of the artist after purchase, more than the share that read blogs about the artist (33%). In general, there are not large numbers of posting reviews of music or posting music to social networking sites, but these figures are somewhat larger for adult music buyers under the age of 36. Some 16% of “under 36” adult music buyers post their music to a social networking sites and 10% of this group post reviews or ratings of music they buy.

These young adult music buyers are also taking a direct online route to artists before buying music. Nearly half (46%) of music-buying internet users between the ages of 18 and 35 listen to free online samples of music and 41% go to the website of the artist, band, or record label. And one-third (31%) go to the MySpace profile of the artist, band, or record label.

Even though music buyers take advantage of direct online routes to artists, they consult other voices as well, such as friends and traditional media, and they report that non-online sources are more influential in their purchase decisions. This suggests that the traditional gatekeepers of the music-buying experience face stiff competition for the attention of customers. The complete unbundling of music buying is not happening, at least on a
widespread basis, as 69% of young adult music-buyers say they buy most or all of their music on CDs, while 23% say their purchases are mostly or entirely digital downloads.

This is not to say that the internet is not disruptive to the music industry. In a business accustomed to selling its product in stores on compact disks, even 12% of all music buyers switching to mostly or entirely digital purchasing is a significant change.

Nonetheless, the persistence of offline means for learning about and discussing music is a surprising finding of this study. The relatively large impact of online resources post-purchase shows that the participatory internet plays a critical role in sharing the music experience.

Online information is influential for cell phone buyers as they do comparison shopping. In addition to consulting websites of vendors, they also go to stores and consult salespeople as they sort through options.

The cell phone largely conforms to expectations about how online information would influence buyers’ decisions. People take advantage of the internet to explore their options (39% do) and within this group, many report that something they found online influenced the choice they made.

At the same time, perhaps because a cell phone has a plethora of technical features, people are drawn to expertise associated with traditional gatekeepers. More people consult a salesperson (59%) or go to a cell phone store (46%) than use the internet (39%) when considering a cell phone purchase. Among those using the internet to gather information, three-quarters (76%) go to websites of cell phone manufacturers or phone companies. Even post-purchase activity has a traditional feel. Among those who need to troubleshoot a phone once they’ve bought it, most use the owner’s manual (68%). Just 11% of online users consult the internet to address the problem and 7% look for experiences of others that might be posted online.

Nonetheless, cell phone buyers carefully scrutinize their choice even as they rely on traditional sources of expertise. Some 59% of those who use the internet to get information use websites to compare features of cell phones and half read reviews of cell phones on websites or blogs.

On balance, cell phone buyers are satisfied with their devices. Three-quarters (78%) of cell buyers say they felt they had the right amount of information in considering their purchase and 87% are either somewhat or very satisfied with the cell phone they bought. Notably, there is not a lot of chatter online for cell phone users once they buy their device. Just 4% say they post a review about their phone and 7% look online for others’ experience with the phone.
In sum, getting expert advice before a cell phone purchase is a priority for consumers. Much of that advice comes from salespeople and websites of vendors. At the same time, cell phone buyers reach out to other sources for reviews and product comparisons.

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**Online information reduces search costs for people looking for a new place to live, but online resources supplement buyers’ toolkit. They don’t substitute for offline resources.**

People looking for a new place to live – especially those moving to a new city – rely very much on the internet for their real estate searching, but not to the exclusion of other means. Although half of real estate searchers start out by using the internet to get information, roughly the same share uses the newspaper or real estate agents. For those moving to new cities, the internet is more heavily relied upon than it is for in-town movers, but so too is a real estate agent.

As expected, the internet helps with reducing search costs; some 57% of real estate searchers say online information reduced the number of homes they looked at during their quest for a new place to live.

Overall, the internet plays an important supplementary role in how people find a place to live. This comes across clearly when people are moving to a new city, when uncertainty is likely to be at its highest. People strongly rely on the internet for their search (60% do), but they also use real estate agents to guide them through the process (55% do). The internet is not replacing traditional means to find a place to live, just giving real estate searchers another tool.

After they move to their new place, the internet is not widely used as a means to get acquainted with a new place; just 13% of people who moved in the previous year joined a neighborhood listserv, posted comments about the neighborhood to a website, discussed their new place at an online community, or commented on those with whom they dealt in getting their new place to live.

For real estate, people do not use online resources to circumvent traditional means of finding a place to live, but they do use the internet to conduct their search more efficiently.
The results in this report are based on data from telephone interviews conducted by Princeton Survey Research Associates International between August 3 to September 5, 2007, among a sample of 2,400 adults, 18 and older. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling is plus or minus 2.3 percentage points. For results based Internet users (n=1,684), the margin of sampling error is plus or minus 2.7 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

Interviews were conducted using a dual-frame sample design. Both landline and cellular random-digit dial (RDD) samples were used. A total of 2,271 interviews were conducted from RDD landline sample and the remaining 129 interviews were conducted by calling RDD cellular sample.

The landline sample for this survey is a list-assisted random digit sample of telephone numbers selected from landline telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid “listing” bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

The cell phone sample is also RDD and is drawn from dedicated cellular exchanges based on the most recently available Telcordia TPM (Terminating Point Master) Data file. Since there is no source or list of assigned cellular telephone numbers, the cell phone sample is not list assisted.

In each contacted landline household, interviewers asked to speak with the youngest male adult currently at home. If no male was available, interviewers asked to speak with the youngest female adult at home. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender.

For the cell phone sample, interviews were conducted with whoever answered the cell phone as long as they were an adult. Voicemail messages were left only one time giving some information about the study and providing a toll-free number that people could call to conduct an interview at their convenience.

Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample. At least 10 attempts were made to complete an interview for each sampled phone number. Calls were staggered.
over times of day and days of the week to maximize the chance of making contact with potential respondents. Each sampled phone number received at least one daytime call in an attempt to make contact with a respondent.

The data was weighted to help correct for potential bias that might be introduced due to non-response and to account for the dual-frame sample design. The demographic weighting parameters are derived from a special analysis of the Census Bureau’s March 2006 Annual Social and Economic Supplement Survey. This analysis produces population parameters for the demographic characteristics of adults age 18 or older living in the continental United States. One weighting parameter – phone use – was taken from the 2005 U.S. Consumer Expenditure Survey. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters. Table 1 compares unweighted and weighted sample distributions to population parameters.
### Table 1: Sample Demographics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unweighted</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>48.2</td>
<td>45.6</td>
</tr>
<tr>
<td>Female</td>
<td>51.8</td>
<td>54.4</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>12.4</td>
<td>8.6</td>
</tr>
<tr>
<td>25-34</td>
<td>17.6</td>
<td>12.1</td>
</tr>
<tr>
<td>35-44</td>
<td>19.7</td>
<td>14.4</td>
</tr>
<tr>
<td>45-54</td>
<td>19.7</td>
<td>19.5</td>
</tr>
<tr>
<td>55-64</td>
<td>14.3</td>
<td>18.0</td>
</tr>
<tr>
<td>65+</td>
<td>16.3</td>
<td>27.4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than HS Grad.</td>
<td>14.5</td>
<td>9.4</td>
</tr>
<tr>
<td>HS Grad.</td>
<td>35.7</td>
<td>34.7</td>
</tr>
<tr>
<td>Some College</td>
<td>23.6</td>
<td>23.9</td>
</tr>
<tr>
<td>College Grad.</td>
<td>26.2</td>
<td>32.0</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>18.6</td>
<td>17.9</td>
</tr>
<tr>
<td>Midwest</td>
<td>23.3</td>
<td>27.4</td>
</tr>
<tr>
<td>South</td>
<td>36.2</td>
<td>36.4</td>
</tr>
<tr>
<td>West</td>
<td>21.9</td>
<td>18.3</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/not Hispanic</td>
<td>70.8</td>
<td>79.9</td>
</tr>
<tr>
<td>Black/not Hispanic</td>
<td>10.9</td>
<td>8.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Other/not Hispanic</td>
<td>5.9</td>
<td>4.9</td>
</tr>
<tr>
<td><strong>Population Density</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - Lowest</td>
<td>20.1</td>
<td>24.3</td>
</tr>
<tr>
<td>2</td>
<td>20.0</td>
<td>22.6</td>
</tr>
<tr>
<td>3</td>
<td>20.1</td>
<td>22.2</td>
</tr>
<tr>
<td>4</td>
<td>20.2</td>
<td>17.8</td>
</tr>
<tr>
<td>5 - Highest</td>
<td>19.6</td>
<td>13.1</td>
</tr>
<tr>
<td><strong>Telephone Usage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Cell Phone only</td>
<td>92.2</td>
<td>97.2</td>
</tr>
<tr>
<td>Cell Phone only</td>
<td>7.8</td>
<td>2.8</td>
</tr>
</tbody>
</table>
Following is the full disposition of all sampled telephone numbers:

<table>
<thead>
<tr>
<th>Landline Sample</th>
<th>Cell Phone Sample</th>
<th>Total</th>
<th>Landline</th>
<th>Cell Phone</th>
<th>Sample Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>29191</td>
<td>2500</td>
<td>31691 Total Numbers Dialed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>47</td>
<td>2065 Business/Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1771</td>
<td>9</td>
<td>1780 Fax/Modem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>13</td>
<td>46 Not landline/ not cell phone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10333</td>
<td>852</td>
<td>11185 Other Not-Working</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1721</td>
<td>84</td>
<td>1805 Additional projected Not-Working</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13315</td>
<td>1495</td>
<td>14810 Working numbers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45.6%</td>
<td>59.8%</td>
<td>46.7% Working Rate</td>
</tr>
<tr>
<td>502</td>
<td>21</td>
<td>522 No Answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>8</td>
<td>80 Busy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>344</td>
<td>2368 Answering Machine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>10 Non-Contacts after determined eligible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>179</td>
<td>28</td>
<td>207 Other Non-Contacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10528</td>
<td>1095</td>
<td>11623 Contacted numbers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>79.1%</td>
<td>73.2%</td>
<td>78.5% Contact Rate</td>
</tr>
<tr>
<td>656</td>
<td>159</td>
<td>815 Callbacks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6863</td>
<td>678</td>
<td>7541 Refusal before eligibility status is known</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3009</td>
<td>258</td>
<td>3267 Cooperating numbers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28.6%</td>
<td>23.6%</td>
<td>28.1% Cooperation Rate</td>
</tr>
<tr>
<td>534</td>
<td>57</td>
<td>591 Language Barrier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2475</td>
<td>201</td>
<td>2676 Eligible numbers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>82.3%</td>
<td>77.9%</td>
<td>81.9% Eligibility Rate</td>
</tr>
<tr>
<td>204</td>
<td>72</td>
<td>276 Interrupted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2271</td>
<td>129</td>
<td>2400 Completes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>91.8%</td>
<td>64.2%</td>
<td>89.7% Completion Rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20.7%</td>
<td>11.1%</td>
<td>19.8% Response Rate</td>
</tr>
</tbody>
</table>

PSRAI calculates a response rate as the product of three individual rates: the contact rate, the cooperation rate, and the completion rate. Of the working phone numbers in the combined sample (landline plus cell phone), 78 percent were contacted by an interviewer and 28 percent agreed to participate in the survey. Eighty-two percent were found eligible for the interview. Furthermore, 90 percent of eligible respondents completed the interview. Therefore, the final response rate is 20 percent.