The speed of life

Consumer intelligence series

Storing Entertainment Content in the Cloud

Series overview

PwC's Entertainment, Media and Communications practice has been conducting a continuing series of consumer research for the past five years. Recently, we explored *Digital Rights and Cloud Storage*, with a focus on consumers' awareness, interest and engagement with the next generation of digital video content storage, including their willingness to pay for content storage. This is a reprise and update of the same topic explored qualitatively in March 2010.

This report includes both quantitative findings from an online survey conducted among a geographically dispersed sample of 502 men and women aged 18-59 in October 2011, as well as qualitative discoveries gleaned from focus groups conducted in November 2011 in Los Angeles among mixed groups of men and women aged 21-49.

1 This survey size provided a 95% to 99% degree of confidence.

I. Executive Summary

The increasing number of music and video storage options and digital locker providers has enabled consumers to explore new and innovative ways to purchase, archive and retrieve their content. Companies now offer digital rights/cloud storage libraries that allow greater flexibility with how and where consumers watch their purchased content.

Last year, the concept of storing content in digital lockers was still a new idea to many consumers. Awareness of such services was minimal, and even fewer consumers understood the benefits of digital lockers.

Now, amid the recent launch of music, photo, and video content services, consumers appear to be more informed about digital lockers, and many seem keenly interested in learning more about video content storage and delivery-- especially as it related to the rights they are obtaining. In a recent PwC survey, two-thirds of the consumers reported they now feel confident about their awareness and understanding of the concepts of both “digital storage” and “cloud storage.”

The growing interest in digital lockers appears to be fuelled by consumers' desire for mobile access to content, especially the ability to stream and download and share content on multiple devices. In particular, consumers are interested in storing and sharing existing personal content. Storing and accessing film and TV content is not yet as appealing based on historical physical rental and sell-through models.

While awareness has increased, consumers still lack a strong understanding of the benefits of video content digital lockers or the rights that come with ownership. They also appear unwilling to pay for such services, though their desire to ubiquitously share content may present future revenue generating opportunities. Ultimately, the success of digital lockers will depend on whether companies can match the benefits with consumers' desires -- and ensuring consumers fully understand the value of digital lockers for all types of content.

II. Implications to your business

1. **Awareness of the concept of cloud digital storage appears to be increasing. However, many consumers still lack a specific understanding of the true benefits and value proposition of such services, as the personal value of digital locker ownership has not been communicated.** Companies that are part of the digital locker value chain should focus on delivering benefit-driven messages, and ensuring the benefits of such services match what consumers want.

2. **Consumers do not know enough about the concept of rights ownership and management.** Companies should work toward educating consumers about the rights and associated benefits that come with digital locker ownership, especially as many are used to sharing material with people outside their homes, with little regard as to whether or not they are infringing on copyright violations.

3. **Opportunities for more focused marketing exist:**

   a. Given the increased interest by the older age demographic, digital locker services should increase initial marketing spend and focus on this group.

   b. A significant number of younger consumers -- higher than in previous studies -- expressed a desire to download or stream content to game consoles. Focus on communicating the benefits of digital locker delivery through these devices should be placed on the younger demographic.

4. **Because music and photo sharing are the most frequent activities among file-sharing participants, companies may have an opportunity to draw consumers toward using digital lockers by promoting these options along with video content storage.** Meanwhile, as consumers are less interested in sharing film and TV content, companies may be able to make inroads there by discovering what factors make consumers want to share a movie or TV content.

5. **Storing existing personal content should be a highlighted benefit, and can potentially be used as a catalyst for introducing a fee.** Consider pricing models attached to this content as a cost of entry to using the service.

6. Until there is mass consumer adoption of digital lockers, it is **critical that digital locker offerings remain free**. Consumers are currently averse to paying for digital locker storage/access, and attempts to implement costs will likely be met by consumer backlash.

7. Consumers aren't particularly interested in the benefit of sharing access to content with other members of their households, as they are more likely to share content with people outside their homes. **Companies need to clearly defining a household member and ability to share with family and friends.** There may be an opportunity to increase interest in digital rights locker “ownership,” including willingness to pay, if content sharing ability is a clear benefit.

III. Key findings

1. **Nearly two-thirds of the consumers surveyed said they feel confident about their awareness and understanding of the concepts of both "digital storage" (66%) and "cloud storage" (61%).** There is however a discrepancy between the consumer perceived vs. actual knowledge.

   - Those who currently engage in file sharing seem to be more confident than those who don't which supports the notions that those engaging in file-sharing have a better understanding of digital lockers.

   - In the focus groups, the respondents who claimed to be aware of the concepts of "digital" and "cloud" storage could sometimes, but not always, articulate the difference between the two. This discrepancy is demonstrated by 21-35 year old consumers stating:

     – "A locker sounds like you have absolute security over it and it…sounds like a cloud doesn't."

     – "I thought cloud storage is where it's maybe a combination of things. Like Apple cloud is where you can store it and then access it from multiple devices and it syncs up."

     – "So, I'm not 100%. I don't know exactly what the cloud is…but what I think it is…it's just this website, or some sort of thing on the web, I don't know if it's physically anything, but a place you can just upload all of your media, your photos, videos, music. It's basically an access point, universally, so you can access it from anywhere, from your computer, from your iPhone. Well, the Apple cloud, I believe, is free, but I don't know how you pay for it."

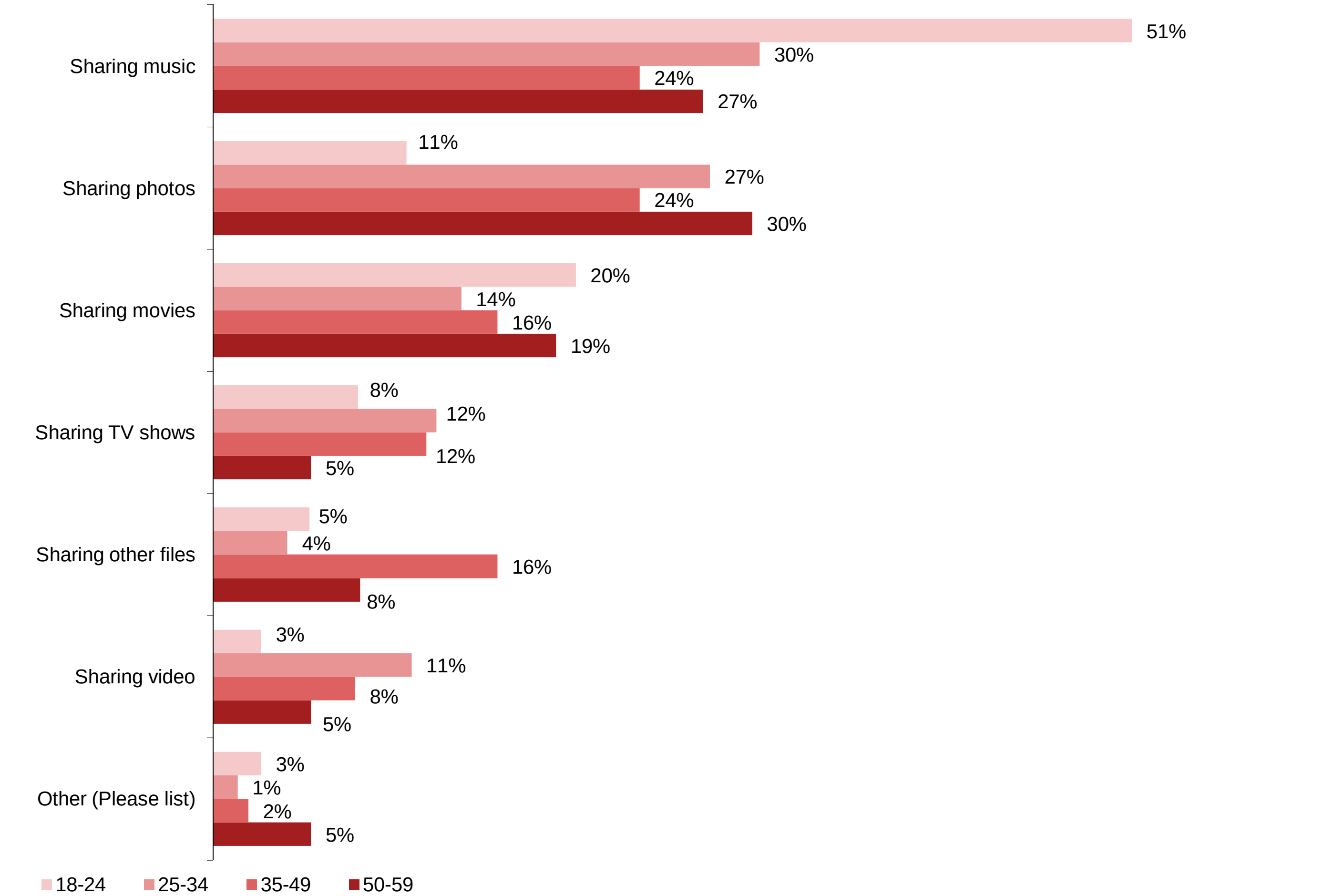
2. **Nearly half the 502 people surveyed (47%) said they currently access file sharing software.** Of those, music sharing is used the most often, followed by photo sharing and then movie sharing. Television shows, videos, and other files are shared less frequently. Refer to Chart 1 for types of files currently being shared.

   - Surveyed consumers across age groups reported engaging in TV/video sharing significantly less. Focus group participants said they are less interested in sharing TV/videos because they generally see them as less share-worthy than music or photos.

     – "It's just TV, so I'm not going to share every hour I watch of the boob tube, like 'This is what I just watched,' though I have posted on Facebook -- like the season premier from Walking Dead, that was great and I did mention that. But I won't do it for every show because there's so much stuff out there. If I'm going to post something, it's going to be really, really quality, in my mind, like a great piece of television or a great film. I'm not going to post everything. It's going to be the best of the best." (Consumer, 36-49)

Chart 1: Current file-sharing activity

Which of the following activities do you use file sharing software for most often?

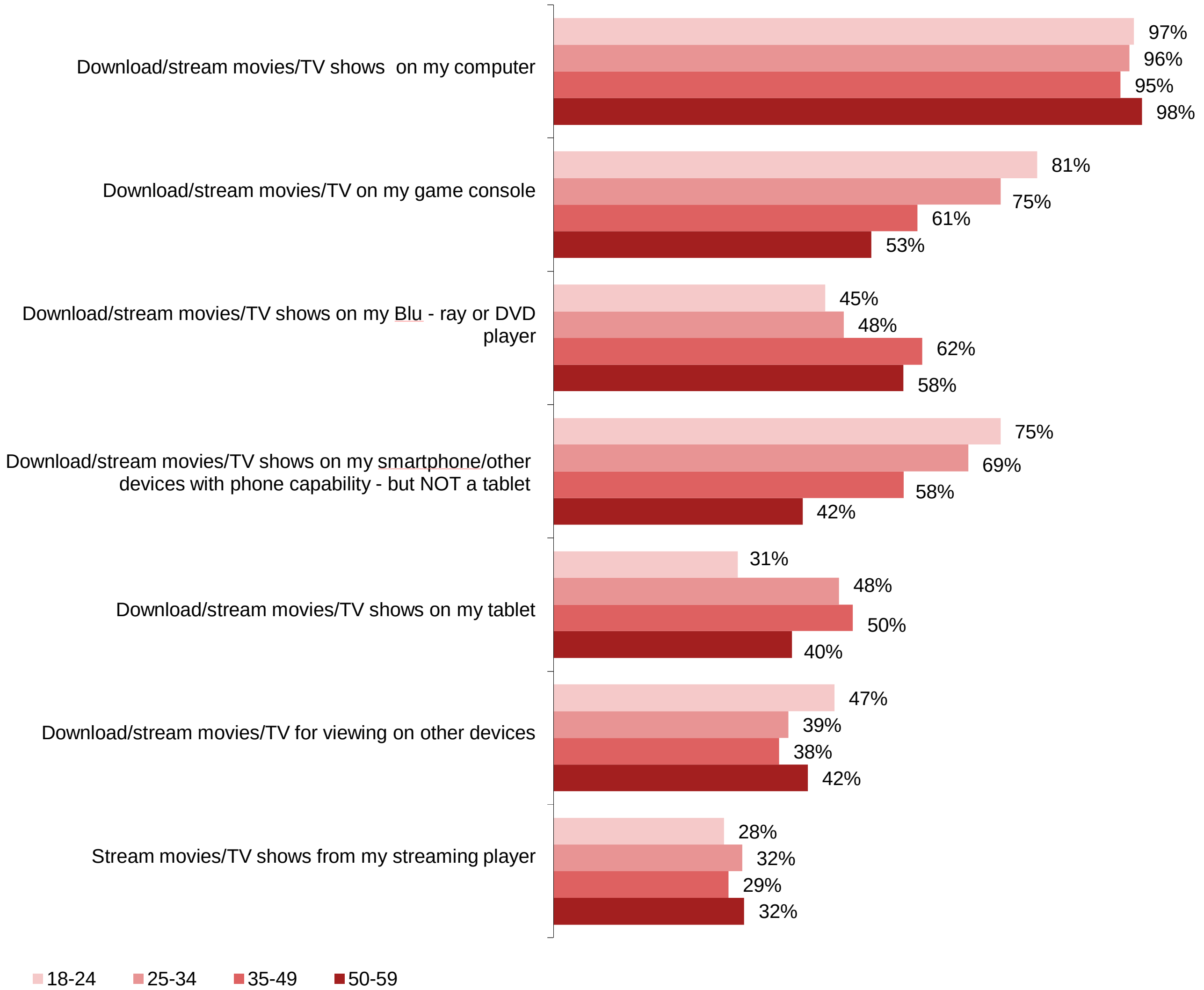


3. **Consumers across age groups continue to be heavily engaged in downloading and streaming movies/TV shows at least once per month or more.**

    - The top three device types downloaded/streamed to once per month or more are: Computers (96%), Game Consoles (68%), and Smartphones (or other device with phone capability) – 62%.
    - Downloading/streaming to computers is universal behavior, engaged in relatively equally across age groups.

Chart 2: Online media usage

Frequency of using online media by age (at least once per month)



- There is a skew among the two younger age groups (18-24; 25-34) to downloading/streaming to game consoles

- Both younger age groups engage significantly more with downloading/streaming to this device than the two older age groups

- The youngest age group also generally skews significantly higher than the two older age groups and drives the overall incidence for downloading/streaming content to their smartphones.

- Furthermore, those who use file sharing software engage in this activity significantly more than those who don't (across age groups)

- Both older groups engage in downloading/streaming to a BluRay or DVD player significantly more than the 18-24 age group.

- The 25-49 group is more engaged in downloading/streaming content to their tablet – significantly more so than the 18-24 age group - a finding that may be attributed to the fact that the younger consumers are less likely to own a tablet than those in the 25-49 group)

- In the focus groups, consumers also expressed a consistent desire to be able to stream directly to their automobile devices (such as stereos or video screens) and to have access from their car stereo. This was particularly true among the older group.

  – "Right now ... I plug my iPhone into the AV jacks and I can stream videos for my kids in the backseat off of the Netflix queue. But if their favorites aren't there, I have to burn them or I have to get them onto my iPhone so they can watch them or stream them into my car." (Consumer, 36-49)

  – "I spend a lot of time with my nephew. He's 10 and I have the entertainment system for him in the back of the truck, but I have to throw a DVD in for him to watch something, and I'd rather just hit a button like I do with my Netflix or anything like that and scan through and he can pick out something. If he doesn't like it, he can go to the next one and keep going until he finds something." (Male, 36-49)

- Some of the focus group respondents expressed a desire to access content on multiple devices.

  – "So if you wanted to watch something on your TV, you could have that on your TiVo and then also have it to your computer, your iPhone, your game console, Xbox, Playstation." (Consumer, 21-35)

  – "I would like to be able to access my stuff everywhere. I want to be able to access it on a plane because I fly quite a bit, and I want to be able to not only access it when it's convenient for my company." (Female, 36-49)

4. **We provided consumers a digital locker example, with the following explanation:**

Your locker is an online personal library that gives you greater flexibility with how and where you watch the movies and TV shows that you purchase. Once you purchase a movie or TV show and add it to your Library, you will have options to stream it over the Internet, download it for offline viewing, or play it back on a disc. Because the Library offers so many viewing choices, you have greater freedom to choose where you want to watch - whether it's on a mobile device, computer, television, game console, etc. In its current introductory phase, this is a free service.

5. **Only a very small percentage (18%) of survey respondents currently use a digital locker for video storage. Of this group, there is a slight skew to the 35-49 age group.**

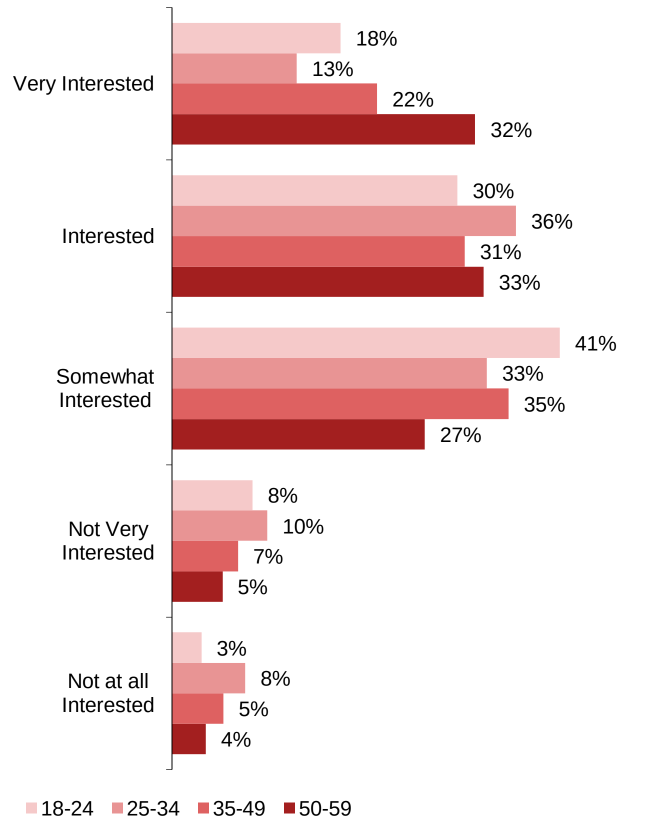
   - Among focus group respondents, those who use a digital locker do so primarily for photos or music, but decidedly not video content.

6. **The idea of storing and accessing content from a digital library is interesting to consumers. Nearly 90% of survey respondents are "somewhat" to "very interested" in the concept.**

   - Among those (20%) who are "very interested," the oldest age group (50-59) expressed significantly more interest than the younger two (18-24; 25-34) age groups.

Chart 3: Interest in accessing video content through a locker/library

Based on this description, how interested would you be in accessing your video content from this digital library/locker?



- In the focus group discussions, both age groups were more interested in accessing content from a digital locker when **rentals** were available in the locker. As confirmed in previous PwC studies on video consumption behavior and preferences, the idea of having to purchase a movie – unless it is "collectable" – is simply not as appealing to own.

  – "Because I don't see any point to store a movie. I watch the movie whenever I feel like. So, I like to watch a movie now. I can stream it then. Why should I keep it? How many times do I want to see that movie?" (Consumer, 36-49)

  – "I honestly feel like I'm not going to go and watch a movie multiple times. That's the beauty with renting. You watch a movie and you get it over with and you move on. You're not going to go and see what movies you've already watched and say – okay, I want to watch that again." (Consumer, 21-35)

  – "I don't see any reason because when you are renting, it's much less than when you are purchasing and what's the point of purchasing, having a library there of the movies that you have already watched and you can have access to that? I don't get it. I don't see any reason why should I do that, unless you are really, really interested in collecting the movies." (Female, 36-49)

- **Consumers had many questions relative to content they could or would store, as well as pricing.**

- Consumers were interested in the ability to digitally store their current content (family movies, photos, videos, etc.)

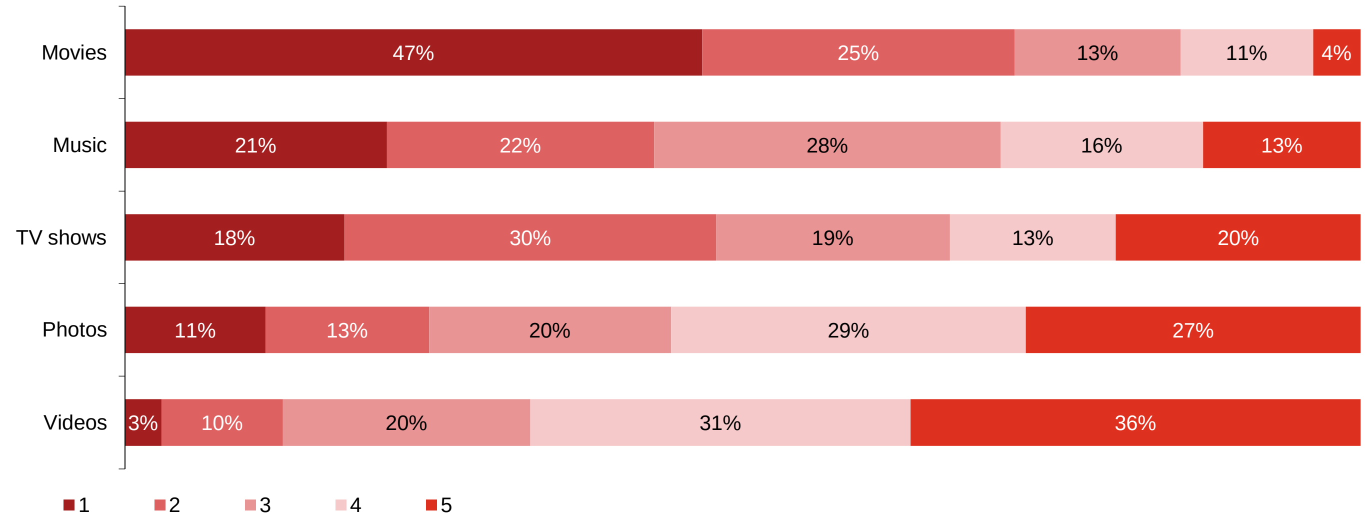
  – "Is the digital library only available for things that you purchase or can you also upload to the digital library? So, if I didn't want to buy any movies, but I just wanted to use the service and I just keep uploading stuff that I have, I don't have to pay anything?" (Male, 36-49)

7. **Of the five types of content the focus group respondents considered, movies and TV shows were ranked as the top two most likely to be stored in a hypothetical digital library/locker.**

- 72% of survey respondents supported “movies” as their #1 or #2 ranked content format most likely to be stored in a digital locker. This was driven by the 50-59 age group.
- 48% ranked TV shows as #1 or #2
- 43% ranked music as #1 or #2. This is significantly skewed by the 18-24 age group
- Focus group respondents showed less interest in storing TV shows, since the intent for future or repeated viewing was minimal and a perception that TV content is readily available.
  - "Especially for the TV shows, I think is very personal, too. And what’s the point of sharing that with the people when they have access to that? It’s easy for everyone to have access to that.” (Consumer, 36-49)

Chart 4: Likelihood to store content in a locker/library

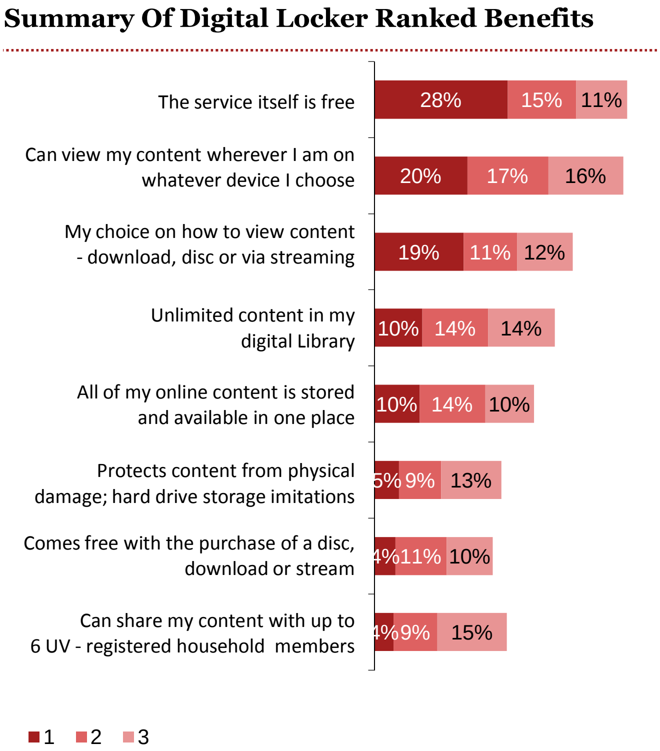
Please rank the following five types of content in priority order with #1 being most likely to be stored in your digital library/locker.



8. **The premise that only purchased content can be stored in a digital locker/library had some impact on survey respondents' intent to change their current rental/purchase behavior.** 28% reported they would purchase more and rent less.

9. **Based on the digital locker description provided in the survey, respondents ranked eight potential benefits and were asked to rank them by importance:**

Chart 5: Digital locker benefits



- **The benefit of getting the digital locker for free is the top-ranked benefit. This was significantly more important to those who are not currently engaged in file-sharing than those who are and who are likely more familiar with paying for such a service.**

- In general, this underscores consumers' current unwillingness to pay anything at all to get the service

- Focus group respondents expressed a bit of apathy and cynicism, which was reflected in their willingness to pay based on their being unclear about the extent of the benefits.
  - "I don't necessarily need to own it. All I care about is if I can stream it when I want to and watch it. I don't need to physically have it. And this is like you're paying to own it, basically." (Consumer, 21-35)
  - "You're paying for it in the upfront fee of buying the movie, so it's not free. Nothing is for free." (Consumer, 36-49)
  - "Honestly, if the DVD was a little bit cheaper than the tangible CD, I think it would actually destroy out there. You would honestly beat out Netflix because you go on Apple TV and I want to rent a new movie and it's $4.99. I think that's pretty steep because it's only for 24 hours. So, if you were to sell your movie for $8.99, I feel like that would be such a benefit because it's yours for free for $8.99. But if you're charging $12.00... These things can get up to like $20.00, $22.00. It's like – do I really want to spend that kind of money?" (Male, 21-35)

- Consumers rated the second most important benefit of digital storage as the **"ability to view content wherever I am on whatever device I choose."** This was significantly more important to the 25-34 age group than other groups.

- **Focus group respondents confirmed the surveyed consumers' primary interest in on-demand access.** Consumers were asked to envision the future of storing and accessing video content.

- In many instances, their "future" was very similar to the concept of digital lockers, in that there was the desire to access and view content on-demand, at their convenience, whenever, wherever and on whatever device they choose.

- Some said they already have the ability to access digital content but were still unfamiliar with how to do it.

  – "In the near future I think it will be a lot easier to have access to all of your media content directly at your fingertips (literally) from any device you are using to listen, view, or create and capture your media from. In the future I believe the devices themselves might not have or need large amounts of internal storage inside of them but instead will have really fast internet connectivity so that they can stream and synchronize the data with storage servers that are located elsewhere. " (Male, 21-35)

  – "Accessing my content anywhere, anytime, especially like if I'm back home, say with the family... The best thing about this and the iPad I have is we're not carrying around a lot of information anymore. We're traveling very light. I can go back to the East coast on vacation for an extended period of time and not have to worry about bringing books or music. It's all there through this virtual storage unit." (Male, 36-49)

  – "I imagine that in the future, all media will be stored in the digital "cloud", as Apple and Amazon have begun to do. The outdated ways of hard drive storage seem to be coming to an end. I am most likely going to be using this online storage to prevent my own personal hard drive from getting clogged up. It is also very convenient in terms of remote and easy access of digital content. Also sharing will be simpler." (Female; 21-35)

  – "I envision the very near future for photos, videos and music to be stored in the cloud. For myself, that would be the iCloud. This cloud will allow me to place all of my content in one place to be accessed anywhere at anytime with complete ease." (Female, 36-49)

- **Least important attributes of cloud based storage:**

  - The concept of being able to share content with multiple registered household members did not resonate with consumers. The lack of interest in sharing with other household members may imply that more sharing behavior is done with people outside the household than within it. Focus group participants explained that they would want to share it with members outside their home – for free.

  - Furthermore, they were confused about how "household users" are defined verified, and could not determine the benefit of the ability to share content with members of the same household, since their primary motivation was for their own enjoyment.

  - There was a perception that the number of registered users may affect the pricing -- most consumers did not have six people in their household, and wondered if they would not be receiving the full benefit of the service if they did not have six people living with them.

    – "I think people don't see it as a benefit because what you're paying for is something for yourself. I'm not necessarily like saying – I want to pay for this and I want to make sure that everyone in my household can watch this. That's not a requirement for me. If I'm buying it, as long as I get to see it, that's all that really matters, in terms of what I'm putting my money towards. If I can share it, that's a nice added benefit, but that's not something that I need." (Consumer, 21-35)

    – "I don't know how you could quantify registered household users. How do you know who's watching it? If I turn it on in this room and go to the other room, I'm still the registered user. I'm watching something else in that room and I come back to this room, I'm watching 2 shows at the same time, and

I'm the same registered user. The kids are in the other room. I'm still the same registered user. You can't tell me who a registered user is, just the number of devices you have turned on." (Consumer, 36-49)

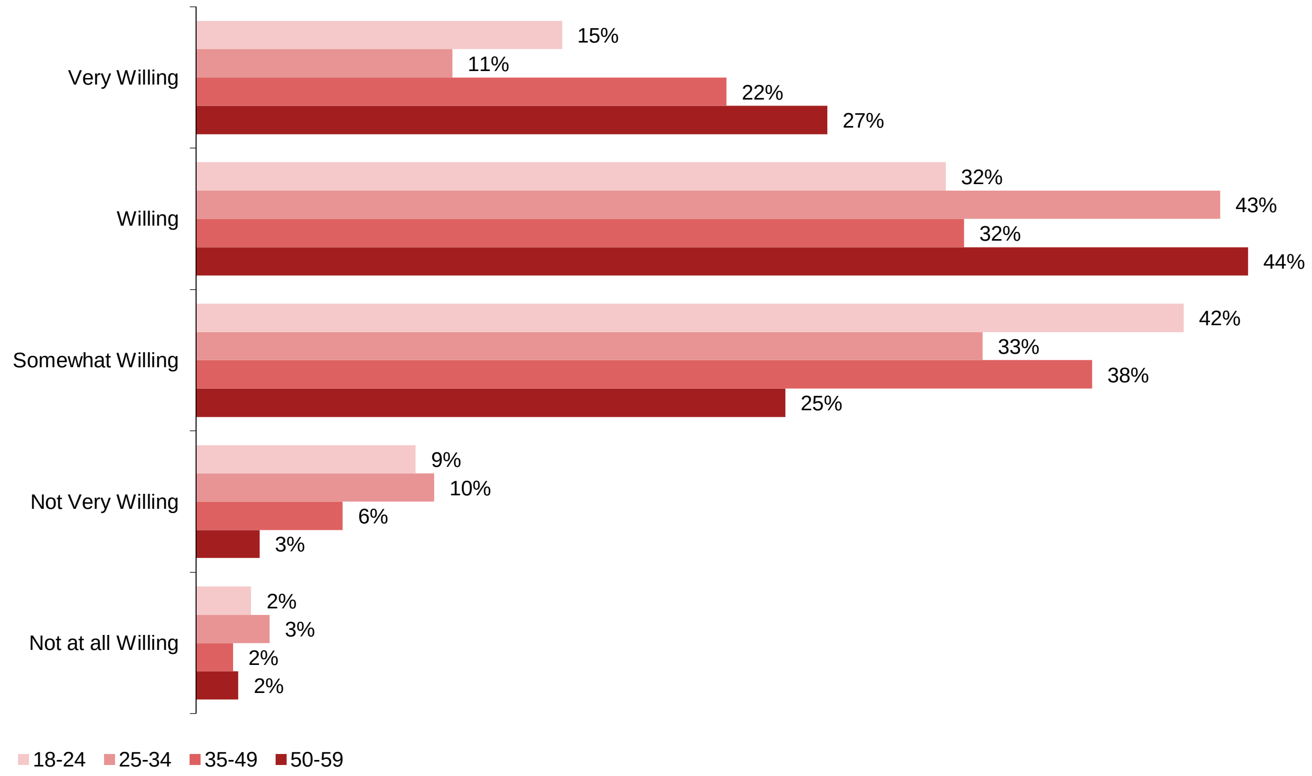
– "It depends on how many people you're living with. If it's just me and my boyfriend, I'm not going to pay for four more people." (Female, 36-49)

10. **Based on the description, more than half of survey respondents express a willingness to actually use a digital storage library/locker. This is driven primarily by the 50-59 age group.**

11. **The 35-49 age demographic seems to be more interested in the concept of digital lockers than the younger age groups.**

Chart 6: Willingness to use a digital library

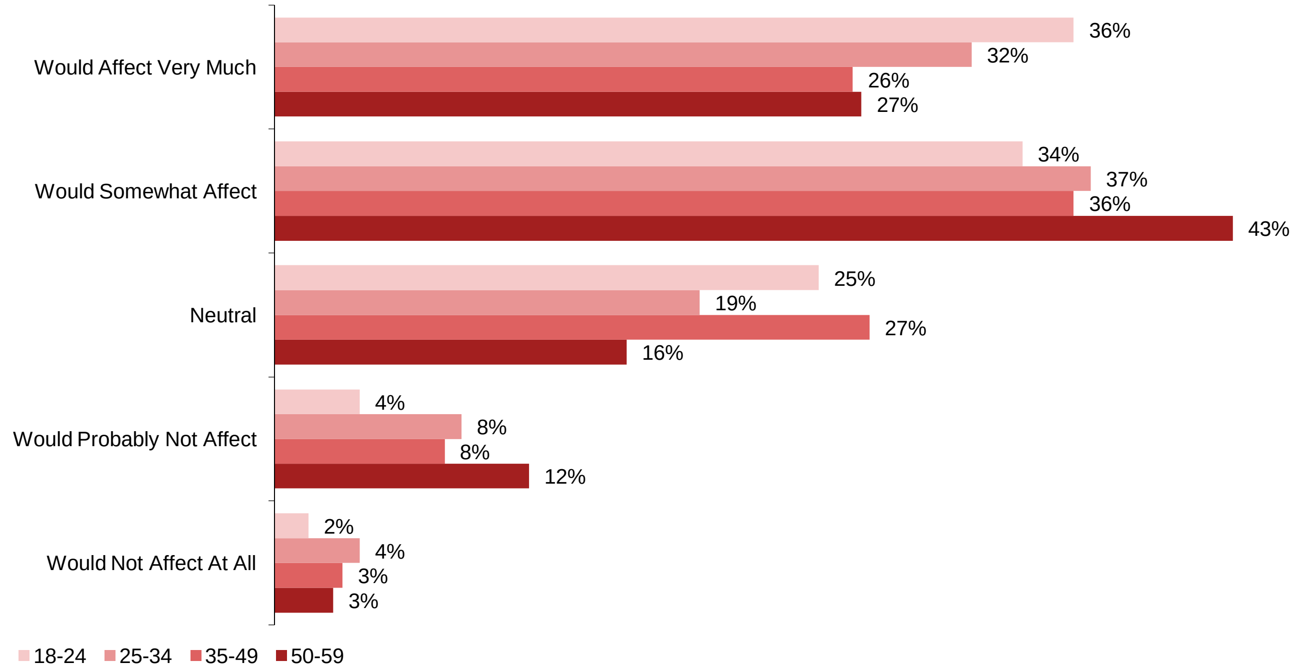
Based on the description, how willing would you be to actually use a digital library?



12. **However, when presented with a possible fee for access and maintenance (e.g., $25-$99 per year), most survey respondents (68%) say their willingness to use a digital storage library/locker, would be "somewhat" to "very much" affected, while 22% express neutrality on the issue.**

Chart 7: Impact of price on willingness to use

Assuming at some point in the future there would be a fee (from $25-$99 per year depending on amount of storage needed/used) to maintain and access your digital locker, how would that affect your willingness to use one?



- Focus group participants offered some options on how a palatable pricing structure might work, including based on number of users, charging a flat fee, charging based on content type (such as photos vs. video), or charging based on the amount of storage required or used.
  - "Based on the number of users would probably be a good way to structure it. If I only had Mom and Dad living at home and there's only two of them and they watch one movie a night, they don't watch that much." (Consumer, 21-34)
  - "$5-$6 because I would use that only for family movies and pictures, not for downloading or keeping some of the movies." (Consumer, 36-49)
  - "....or a flat fee. Let's say you just want your photos..." (Consumer, 36-49)
  - "I pay $16 a month for my Sirius satellite radio and I listen to it on the way to work and on the way home and that's it. Forty minutes a day." (Male, 36-49)
- Furthermore, there was concern about the potential that any of the current studios associated with digital lockers could end their participation in the service. Consumers were worried about the impact that could have on their digitally-stored content.
  - "What if someone backs out? What if Warner Bros. decides in a few years that they don't want to be in this contract or alliance anymore? What happens then? Do

you lose your movies that you paid for with them?" (Female, 21-34)

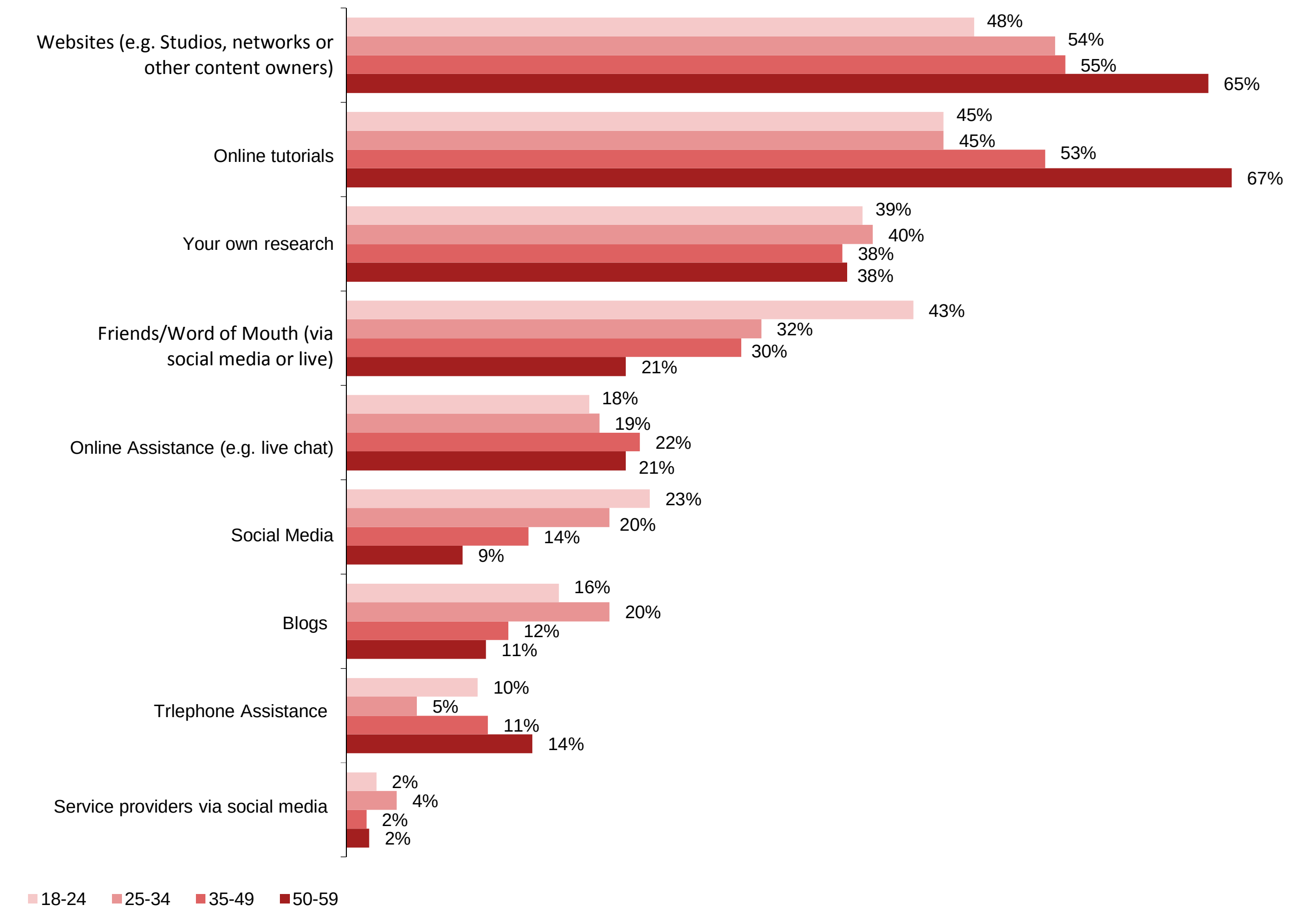
– "For me, this digital streaming thing has changed so much, but I feel I'm not going to pay for something that in a few years, someone, Warner Bros. would be like – oh, I'm going to start my own company, my own streaming thing." (Female, 21-34)

13. **Of nine potential ways to learn more about the benefits of digital storage, most survey respondents said they would turn to websites and online tutorials.**

- Both websites and tutorials were significantly more interesting to the oldest age group versus the youngest.
- Younger age groups would more likely tap into their social networks – either live or online media.
- This implies a desire for education – especially among the oldest age groups. And for the younger groups, underscores the importance of "friends" as information resource.

Chart 8: Interest in learning about digital lockers

What would be the best methods for you to learn more about the benefits of Digital Lockers?



Conclusion

Consumers are interested in learning more about video content storage and delivery based on their desire for ubiquitous access to content on multiple devices. However, consumers still lack a strong understanding of the benefits of video content digital lockers or the rights that come with ownership, and they appear unwilling to pay for such services. The success of video content digital lockers will depend on whether companies can develop profitable offerings that match consumers' preferences, and create focused marketing highlighting the value and benefits.

For more information on this research, the PwC Consumer Intelligence Series, or how digital transformation is shaping the entertainment and media industries, please contact one of our specialists:

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