

Dave Beaudoin
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Online Video Game Networks: A Web 2.0 Centered Examination

The video game industry has made remarkable progress in both sales and general acceptance as a viable entertainment medium. As console use increases, so do the stakes between the major players in the market. Unlike the personal computer market, which grows at a steady rate as technology advances, the console market grows by generations of whole system products. While previous generations have been defined by a doubling of system capabilities (from 8 to 16 to 32 to 64 bit), the current generation has not experienced the same magnitude of improvement and improvement, nor have graphic improvements been as appreciable. Instead, the latest “round” of this competition has been defined by networked competitive and cooperative play. The major players in the market, Nintendo, Microsoft, and Sony are in a race to establish the best methods of monetizing the process of buying and selling online gaming using three distinct approaches. All three networks offer full game downloads, game content add-ons, and other media (system themes, music videos, movies, etc.) via their online systems however it is the differences in the online interaction and pricing models which differentiate the competitors. By examining the relative successes in terms of monetary returns and user base, leaders and losers in the race are established. Examining the different affordances of each network toward establishing a cohesive online social gaming offering will shed light on what factors are related to network success and what traditional theories can be applied to explain the demonstrated effects.

Microsoft

Microsoft's online offering is called Xbox LIVE and is a paid service costing \$50 per year for a “Gold” membership. A free “Silver” membership is also available but online interaction is limited and

some content is unavailable or requires payment. Payment on Xbox Live is handled via Xbox Live points which can be purchased on the console or xbox.com website with a credit card or in brick and mortar stores by purchasing points cards, which have codes that are exchanged on Xbox Live for points. Points exchange to dollars at a rate of 80 points per dollar. Game prices range from 800 to 1600 points per title, and game add-ons and other content may cost from 40 to 400 points or more. This type of exchange mechanism seems to be fairly effective and all three of the console providers use some permutation of it.

Microsoft has introduced the New Xbox Experience, or NXE, in the past year. This system boasts improved graphics, player avatars, and increased friend interaction above and beyond the traditional friend lists. Players are now able to start “parties” with other users and jump in and out of games while maintaining persistent audio chat. In addition to providing more robust friend interaction, NXE also provides improved access to game and media content via an improved console and online store interface as well as through sections of the user interface dedicated to special events, sales, and games. Along with the launch of NXE, Microsoft also relaunched their Xbox web portal at xbox.com. Updates to the web site allowed users to purchase content online, which is then placed in a queue to download to the console the next time the user logs into the system.

Microsoft states that there are currently over 17 million active users of the Xbox Live service and over 28 million consoles have been purchased worldwide, giving Microsoft an attach rate for the Xbox Live service of roughly 61% for online service per console (Microsoft, 2009). In addition to this better than average attach rate, the Xbox Live service registered over 1.5 million concurrent users during the week between Christmas and New Years Day, 2008. Also according to Microsoft, in the 5.5 years since its inception, users have spent more than one billion dollars on Xbox Live. It is not clear from the data released by the company whether this is on game content or includes the access fees associated with the system.

Nintendo

The Nintendo Wii console is currently the undisputed champion of console hardware sales with 601,000 units sold in March as compared to the Xbox360 (its next closest competitor), which had 330,000 units for the same month (Bond, 2009). This is part of a continuing trend in which the Wii is increasingly the gaming console for a more mainstream audience with extensive market penetration and acceptance by consumers who are not traditionally gamers. This broad appeal is a direct result of the family friendly marketing and design choices that Nintendo has made both with the Wii and with past consoles. Part of their dedication to a family friendly gaming experience manifests itself in the way the Wii's online and offline components interact. Xbox Live and the Playstation Network utilize unique nicknames for gamers, and both have sites on which friend lists can be viewed and, to varying degrees, manipulated. In an effort to protect user identity and make online gaming safer for all ages, the Wii uses Friend Codes, unique sixteen digit numbers which identify the console, but are ultimately harder to remember than usernames. In addition, to add someone as a friend to your Wii console, both parties must have exchanged and added the other players console number into their Wii. Only after server side verification of both parties respective numbers does the console let users communicate with each other. While it clearly provides an added level of security for users, the system can be cumbersome and requires more out of channel communication than the Xbox 360 or PS3 online offerings.

In addition to the increased barriers to network participation that exist within the Nintendo network, Wii does not feature an internal storage device. Both the Xbox360 and PS3 support hard disks for game and data storage as well as for storage of downloadable content. The Wii does allow users to store downloaded data on removable SD storage cards but this is a more cumbersome integration of downloadable content as a feature and requires an additional purchase. This factor limits the ability to determine any specific relationship between install base and the subsequent network effect on the purchase of downloadable content. Research does show however that barriers to entry for networked

gaming may have an appreciable result on system preference. A recent poll by the NPD Market Research Group showed that while 50% of respondents used the Xbox 360 to play online games, online usage of the Wii jumped from 18% to 29% from 2007 to 2008 (NPD, 2009). Notable is the fact that the Nintendo Wii has shipped far more units worldwide than the Xbox360. As of December 31, 2008 the Wii had shipped nearly 49 million units, and the Xbox360 had shipped just under 28 million (VGChartz, 2009).

Due to the large difference between the design and use of the XboxLive and the Nintendo Wii, networks direct comparison is probably inappropriate. Limited use of the Nintendo online offering may also be due to factors such as game software design or end user attitudes toward online play. These types of examination fall outside the scope of this investigation however but could provide an excellent topic for further research.

Sony

The Playstation3 was the second console to launch in the current generation and contains the most technically advanced hardware of the three main consoles. Its advanced technology also makes it the most expensive console currently on the market. Though very similar in approach to XboxLive, the Playstation Network (PSN) does have several major differences. The primary difference between the PSN and XboxLive is that the Playstation Network is free to the end user. When players purchase games with online capabilities a portion of the game revenue is used to subsidize the network, either through payments from the publisher to Sony or as in internal transaction (for example, in the case of Sony published titles). User transactions on the system are handled via actual monetary values as opposed to points, and users can either add credit via the PSN website or by purchasing PSN cards at brick and mortar shops in order to add credit to their PSN account.

In addition to a different economic approach, the Playstation Network also offers console owners the chance to download the beta version of the Playstation Home Service at no additional cost. Playstation Home is a lobby and matchmaking service in the guise of a Second Life-like virtual world.

Each player has a personal room and access to shared public space within the virtual world. Players can purchase items for their personal rooms and the system has had more than \$1 million in micro transaction sales in its first three months of availability (Takahashi, 2009). Publically, Sony considers the fact that five million Playstation3 users have downloaded the Home Beta a success, however the number of active users of the Home system is unavailable. While the Playstation Network and Home include a more visually immersive experience for players, basic communication types like voice or text chat outside of specific games are missing from the system. In addition to some of the shortcomings of the communication affordances of the on-console side of the Playstation3 network offering, the Playstation Network website also lacks several important tools which could support a more robust social network. The site does not show real time friend statistics or allow users to add or remove players from their friend lists. These tasks must be done on the console. Players also are unable to make purchases on the web that download to the console.

The Playstation3 and the online web portal playstation.com do not demonstrate the same level of connectivity between the different segments of the digital supply chain that are apparent between the Xbox360 console and the xbox.com website. Despite these shortcomings the model seems to be working at least in a limited fashion. Sony has claimed \$180 million in gross profit since the inception of the service two and half years ago (Sony, 2009). This figure includes game add ons, full game downloads, and Home merchandise purchases. Sony also lists a figure of 14 million active accounts as of September 17, 2008 (Koller, 2008), a date marking the second anniversary of the launch of the Playstation Network.

Comparison of Systems

To compare the various services, several concessions must be made, and several assumptions about the nature of networks must be addressed. Sony has fewer active accounts, however they have

also been in the networked console gaming business for three years less than Microsoft. Additionally, the NXE interface should be considered a second generation offering since it was a major update to the existing XboxLive service (a service which actually predates the Xbox360). There are other inequalities in the services that could have an effect on the overall success of the systems. Factors like the integration of the web and console based distribution channels and how much those two modes of content delivery intersect and overlap could make one service more appealing than the other.

Another point to consider is the idea of network effect (Metcalfe, 1976) which would lead one to reason that the largest install base would make for the most valuable network. This is not the case, since the Wii network sees far less traffic than XboxLive. Continuing with this line of examination, we can look at how much money has been made by each network (for which there are appropriate data), and see other instances of network effects in action. Sony's 14 million users have purchased 180 million dollars worth of goods in two and a half years, or 72 million dollars per year. On the other hand, the 17 million active XboxLive users have purchased over 1.1 billion dollars worth of content in five and a half years, or 200 million dollars per year. Because content offered on both networks is fairly similar, it is fair to say that XboxLive holds a distinct advantage in this arena. The difference in revenue between XboxLive and the Playstation Network favors XboxLive nearly three to one while the difference between the number of users on the two systems favors XboxLive by a factor of 1.2, explicitly highlighting this advantage.

Examining the factors that add value to the disparate networks may allow a more meaningful conclusion to be reached. XboxLive offers persistent voice and limited video chat as well as texting for P2P communication. The ability to form parties of several players also increases the value of the network in terms of social utility. Finally, robust friend list management and tracking, both in console and on line provide additional means to socialize via the system. The Playstation Network only recently added text chat, and does not support persistent voice chat or video chat. Friend lists can only be manipulated on the console and metrics for friend comparison are still in their infancy. The Friend

Codes utilized by the Wii for friend list management, as well as the lack of voice, video, or text chat severely limit the utility of the Wii as a networked social experience. While all three have experienced growth in the number of players who participate in console based online gaming, the results point toward some interesting conclusions. In a survey of 20,000 gamers, 50% preferred XboxLive for gaming; the Wii was second of the three with 29% user preference. The PS3 was listed as third, although no exact percentage was given (Riley, 2009). Despite the obvious install base advantage held by the Wii, the Xbox360 still captures a significant share of online console gaming.

Analysis

While it appears that network effect should not be entirely discredited in the online gaming market, it is far from the only factor at play. If network effect was the only thing accounting for online network success, the Wii would be the clear winner by sheer force of numbers. Since this is not the case, there must be other causes. The success of the XboxLive system suggests that the strength of the network is improved by the ability of its players to form and maintain weak ties. XboxLive has advanced features that do not exist in the other networks. Robust friend list management, persistent voice chat, video chat, and text chat enable the formation of more robust communication networks in general and social networks specifically. This system holds an advantage over the Nintendo system because of the ability of the individual to send and manage friend requests, as well as coordinate game purchases and play sessions without any offline contact. Because of its improved ability to form and maintain weak ties (Granovetter, 1973), XboxLive increases the value of its network disproportionately to the other networks. This is perhaps the most compelling single argument that can be made for the success of XboxLive when compared to the other systems in the marketplace but is still only a single factor in what can really only be called marketplace domination.

Examining the holistic nature of the features offered by the Microsoft system with respect to the ability of users to form meaningful and wide-reaching relationships it becomes clear that Xbox Live presents a more robust package to the user and when contrasted with Sony's Playstation Network and

Nintendo's Wii network. Most importantly, the robustness of this offering demonstrates a better understanding of the idea of the online gaming arena as a “third place” (Oldenburg, 1989).

Traditionally a “third place” is characterized by any location where the goal is socialization, regardless of the activities inherent to the physical locale such as bars, churches, and social clubs. As early as the first generation of online capable consoles, the Playstation2 and the Xbox, users were already able to enumerate what they were looking for in the online gaming market and those wants compared almost directly to the same needs which can be seen in any traditional “third place” (Wadley, Gibbs, Hew, Graham, 2003). On XboxLive Microsoft provides more robust communication channels by offering a system which accommodates numerous rich forms of communication. Supporting a variety of player types and addressing desires for both cooperative and competitive play thought sensible implementation of communication channels has added the incentive for players to utilize the communication methods provided by Microsoft to more fully exploit the social aspects of a networks online gaming system. Sony and Nintendo do not offer the same rich feature set and despite their impressive network and hardware penetration within the market, XboxLive remains the most viable “third place” option because it adequately supports the formation of social networks. The establishment of good networking and communication tools within the XboxLive system has had more to do with its than network effects, product strength, or any other single factor.

References

- Bond, D. (2009, April 17). NPD Sales Results for March 2009. Retrieved April 19, 2009, from <http://www.examiner.com/x-5349-Wichita-Video-Game-Examiner~y2009m4d17-NPD-Sales-Results-for-March-2009>
- Granovetter, M.S. (1973). The Strength of Weak Ties. *The American Journal of Sociology*, 78(6), 1360-1380.
- Koller, J. (2008, November 17). Happy Birthday, PS3! Retrieved April 19, 2009, from <http://blog.us.playstation.com/2008/11/17/happy-birthday-ps3/>
- Metcalfe, R.M. (1976). Ethernet: distributed packet switching for local computer networks. *Communications of the ACM*, 19(7), 395-404.
- Microsoft. Xbox 360 Records its Biggest Year Ever. (2009, January 5). Retrieved April 19, 2009, from <http://www.microsoft.com/presspass/press/2009/jan09/01-05XBoxBigYearPR.msp>
- Oldenburg, Ray. (1989). *The Great Good Place: Cafes, Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts, and How They Get You Through the Day*. New York: Paragon House.
- Riley, D. (2009, March 10). Video Games Experience Significant Growth in Online Gaming Activities. Retrieved April 19, 2009, from http://www.npd.com/press/releases/press_090310a.html
- Sony online profit numbers. (n.d.) Retrieved April 19, 2009 from www.playstation.com
- Takahashi, D. (2009, January 8). Live blogging CES: Sony CEO Howard Stringer pals with Tom Hanks. Retrieved April 19, 2009, from <http://venturebeat.com/2009/01/08/live-blogging-ces-sony-ceo-howard-stringer/>
- VG Chartz Console Numbers. (n.d.). Retrieved April 19, 2009, from <http://www.vgchartz.com/>
- Wadley, G., Gibbs, M. Hew, K., Graham, C. (2003). Computer Supported Cooperative Play, "Third Places" and Online Videogames. In S. Viller and P. Wyeth (Eds.), *Proceedings of the Thirteenth Australian Conference on Computer Human Interaction (OxChi 03)*. (pp. 238-241). University of Queensland.

