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# Microsoft TV

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## *Marketing Plan*

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## Marketing Plan

### Situation Analysis

Microsoft has enjoyed significant success over the past 35 years based on its' position as the industry standard for personal computer (PC) operating systems. We currently hold more than a 90% share of this market and even Apple, the only significant challenger on the desktop, now has Windows available on their platform as well. This leading position, along with growth in demand for Internet servers and more cost-effective data center applications, has allowed Windows to dominate the server market as well with a market share of 74% (IDC: 2010). Based on our leading position in these markets we are also able to sell significant amounts of additional productivity software (e.g. Office, SharePoint, Exchange, ...) as well; plus we have also been able to extend our platform to wide range of other devices.

Even with that level of success Microsoft does face several significant challenges. First, the computing landscape is rapidly changing with new devices such as the smart phone becoming the focal point for communication and Internet access for an increasing segment of the population. We offer a mobile operating system, yet Windows Phone 7 currently has less than 5% market share in 2010, down from almost 9% in 2009 (Gartner: Feb 2010). Our recent agreement with Nokia, the leading provider in the industry, has the potential to turn this around. However, the Android operating system from Google has now passed Apple and Research in Motion (Blackberry) to become the number 2 mobile operating system and its' market share is still growing rapidly.

The ubiquitous nature of Internet access has provided easy access to a wealth of free applications. In fact, applications such as Mozilla Firefox and Google Chrome are chipping away at the market share of Internet Explorer. Google has also launched free versions of productivity tools such as Google Docs and Gmail that threaten our Office franchise.

Finally, convergence between broadcast television, Internet, and phone service threatens to usurp the PC as the primary tool for Internet access, entertainment, and productivity applications in the home. Competitors such as Google, Apple, Boxee, Roku, and others are beginning to offer appliances and technology that will allow consumers to reach Internet content directly from their television. This has the potential to siphon away significant home PC sales over time.

We must establish and maintain a dominant position in the living room to protect and expand our Windows franchise. The good news is that we are also one of the leading providers of online gaming and online applications today. We can leverage these strengths to assure our continued success.

### Where's the Pain?

#### Consumer

The consumer today is faced with a bewildering array of choices for news and entertainment in their home today. While having many choices can be good – it can also present a substantial challenge.

PC penetration and Internet access in the home hovers around 77% according to the ITU. The vast majority of consumers (86%) access Internet using a high-speed connection which opens up the range of services that we can provide to households. This type of access provides users with applications on the PC platform and on the Internet, but not broadcast content. Access to the telephone network can be gained by using a service like Skype for additional cost (PC to PC communication is free).

Smart phone penetration is currently greater than 20% of the entire US population and is growing at a clip of 60% annually. The smart phone provides another way to access the Internet and is quickly taking over as the primary tool for online communication among younger users. However, the device is often slower, provides a smaller viewing surface, and access to limited applications/entertainment.

There are also several choices for Internet TV, including viewing on the PC, or purchasing one of the systems offered by Apple, Google, Boxee, Roku, or others. However, these are still Internet-only offerings that require the consumer to subscribe separately to broadcast services from their cable operator – or equivalent service provider. Voice communication services are available from telephone carriers, cable operators, or even through the Internet. The latter choice provides the option of free telephone service when the called end-point is also online.

This end-result is a confusing array of entertainment and access options without a seamless and consistent choice. It requires an array of different devices, remotes, and service plans. It also does not allow for a single source for customer service and support. The customer must have multiple points of contact that may/may not have solutions for their technical problems.

This not ideal for a country where many people still can't set the clock on their DVD player.

#### Cable Industry

The cable industry has struggled with negative growth in the total number of subscribers over the last five years as outlined in Table 1 – although they have seen rapid growth in digital video services, high speed Internet, and phone service. They continue to battle it out with local exchange carriers (e.g. Qwest, SBC, BellSouth ...) for high speed Internet and local telephone customers. In addition, they have seen rapid growth of services such as Netflix and Hulu that threaten to cut into (on-demand) digital video service revenue. There are also a number of companies (e.g. Apple, Google, Boxee ...) that are offering Internet television services that will bring Internet content, and services like Netflix, directly to the television rather than the PC.

In order to thrive, the cable industry needs to be able to deliver a unified communication platform that provides broadcast television content, Internet content, and telephone services. In addition, cable operators need to be able to deliver additional value add and services such as online gaming, interaction with other online users, and high-powered Internet applications. They already own access to 93% of the homes in America – now they need the services to assure that every one of them is connected and the amount of content (and billing) continues to grow for each customer.

If competitors such as Apple and Google redirect end-users to the Internet instead of broadcast content cable operators also face the prospect of losing ad revenues. By controlling the entire entertainment experience end-to-end the cable operator can maintain and even grow these revenues.

## Solution

Microsoft TV is the solution to the end-users need for an “integrated” platform that delivers broadcast content (television and video on demand), high speed Internet with access to online content, and voice (PSTN) services directly from their television. Unlike traditional set-top boxes that only provide access to broadcast content, and stand-alone Internet television platforms such as those from Google and Apple, this is a fully integrated platform that will provide seamless access to all three channels. This, in turn, will allow cable operators to offer a richer and more complete entertainment experience, while growing both their service and ad revenue. This will also give Microsoft the opportunity to secure the position as the dominant platform for home computing and entertainment for the next 30 years.

The Microsoft TV solution consists of two pieces (Figure 1):

**Windows ST** – This is an embedded operating system that is designed to run on next generation set-top boxes that provides access to existing entertainment channels along with access to Internet applications and telephony services. Unlike existing set-top boxes Windows ST also comes with a development environment so that additional applications can be developed and deployed. These can be customized versions of existing applications such as DVR or channel tuning functions; or they can be completely new third party applications allowing significant expansion of the application eco-system. The ability to allow third parties to develop and deploy applications can grow customer value even more rapidly without any additional expense for the cable operator.



Figure 1: Windows TV Solution

The Windows ST operating system also comes with a Windows based cross-compiler and development tool suite. Applications can be created and debugged in any .NET language. Every Windows ST license comes with the ability to download unlimited copies of the cross-development tools for free. .Net tools are available through standard channels and are not covered here.

Along with the operating system and development environment Microsoft will also provide a basic set of game software that operates on the Windows ST platform. These basic games assure that end-users get more value from their set-top right out of the box. In addition, these games will wet their appetite to purchase more sophisticated games online through the Xbox Live network. Microsoft will enter into a revenue sharing agreement with cable operators for any additional Xbox Live revenue providing yet another source of incremental revenue for cable operators.

Windows ST also comes with additional intellectual property in the form of reference designs for set-top implementation, the right/requirement to use the Windows ST logo on the set-top (one of the top three most powerful brands in the world), and technical specifications of Kinect – Kinect is a Microsoft break through that provides both motion and voice controls for the set-top. The final piece of the Windows ST package is the specification for a high-speed gaming interface. This interface is required on every box that runs Windows ST to provide access to an even more powerful gaming experience.

**Xbox Pro** – The second element in the Windows TV solution is the Xbox Pro next generation gaming system. The free games included with Windows ST will create an initial interest with then end-user; however, Xbox Pro will allow serious gamers to take gaming experience to the next level. The Xbox Pro will have an advanced local processor, accelerated graphics processor, and expanded local memory for lightning fast game response. The high-speed interface available on “every” Windows ST set-top will also allow gamers to tap directly into Kinect and the power of the set-top.

Game developers can also add applications on the set-top that further enhance the gaming experience. By leveraging the Kinect capability and resources included with the set-top will also allow us to offer this superior gaming experience at a much lower price than anything else in the market. Once Windows ST dominates the set-top market, Xbox will have a lock on the game marketplace based on its ability to tightly integrate with Windows ST and leverage the high-speed interface.

## Market Dynamics: Cable Industry

As shown in Table 1, based on figures from the National Cable and Telecommunications Association, the number of homes served by cable grew slightly (1% or less) from 1998 to 2001, remained essentially flat from 2002 to 2004, and actually declined slightly from 2005 to 2010. At the same time the number of homes passed by cable services and high speed Internet continued to grow steadily. In 2010 the number of homes passed stood at 122.8 million; a number that represents 93% of all US households. In addition, among cable TV subscribers we have seen a much more rapid migration from basic video services to digital video services. The number of subscribers with digital video services increased from 1.4 million representing only 2% of subscribers to 44.4 million approaching 74% of the installed base.

There has been an even more rapid growth in the number of subscribers with high speed Internet services. This population has increased from just half a million in 1998 to almost 44 million in 2010 – a figure that represents 99% of all digital video households. Expanding this analysis to look at phone



service over cable this has also experienced rapid growth. In 2010 the number of homes with cable phone service stood at 23.5 million – more than half of all digital video subscribers.

Based on this analysis we can see that while the penetration rate of cable remains flat to negative, the cable companies have been very successful upgrading customers to digital video from basic video, and selling them additional services such as high speed Internet and phone service. Thus, the average number of services and monthly revenue per customer has seen a steady increase. The industry needs to do a better job of increasing penetration – less than half of homes passed are actually subscribers to cable services. In addition, the industry needs to find additional ways to grow the average revenue and number of services associated with every cable subscriber.

## Target Audience

### Microsoft Windows ST

The target users of Windows ST are cable subscribers with broadband Internet access. Windows ST will be pre-installed on set-top boxes and delivered through set-top makers, so that the direct customers of Windows ST are the original equipment manufacturers (OEM). Meanwhile, Microsoft will align with top cable providers who serve as our indirect second-level customer and manage the needs of subscribers.

As discussed earlier, less than half of households (49%) currently subscribe to cable service, yet most of the population (93%) has access to cable. The number of subscribers with digital video service is 74% of the installed base; and almost all of these subscribers (99%) also have high-speed Internet. The number of cable households with broad band Internet access plays a key role in determining Windows ST Market capacity. From a survey conducted by Cisco, more than 50% of the U.S. pay-TV customers have interest in Internet content, online video services, and social networking applications on the television. When it comes to survey participants ages 25 to 35, the percentage is even higher.

Target OEM set-top makers include the largest players in the industry: Motorola, ADB, Coship, Jiuzhou, Panasonic, Cisco Systems and others. Windows ST will be sold to the OEM makers and built into their set-top boxes. Second level customers are the cable service providers including: Comcast, Timer Warner Cable, Cox Communications, Charter Communications, and others. They provide broadcast content and provide set-tops to millions of households. We will research which vendors the cable providers prefer by working directly with providers, and then pursuing those OEMs using that priority order. The cable providers selecting OEM vendors will also be influenced by the partnership between Microsoft and OEMs. This is how Microsoft, cable service providers, and OEM set-top makers will work together to service households that receive cable content.

### Xbox Pro

The target audience of Xbox Pro is serious gamers who show interest in using applications for online gaming, video on demand, social networking and other multimedia entertainment. Research (Parks Associates: 2006) groups gamers into six categories: power gamers, social gamers, leisure gamers, dormant gamers, incidental gamers and occasional gamers.

Within those groups, social gamers, who enjoy gaming as a way to interact with friends, represent 11% of the total; and power gamers, who are serious about their gaming prowess, comprise 11% of the population. The latter group accounts for 30% of all video game expenditures online and offline. These two groups show the most promise for Xbox Pro; although we will reach out to the others as well.

In addition, there is research available that shows demographics by age and sex. The existing Xbox Product appeals most to males age 12-17; and females age 24 to 34. We believe that we can reach an even broader demographic with an enhanced gaming experience, but we will start by taking aim at this core constituency and then expanding from there.

## **SWOT Analysis on Microsoft**

### **Strengths**

Microsoft is a worldwide leading global brand with brand equity up to \$60,895 million. Windows operation system and Microsoft Office software almost monopolizes the market and its revenue and profitability factor rising at a stable pace, which convert into a steady research and development strength in the growing product such as Xbox series.

Microsoft has a diversified product portfolio. It dominates desktop platform and has strong enterprise computing line-up and persuasive Internet presence in products such as MSN, Bing and Zune, which turn out to be the competitive advantages to the convergent entertainment platform, Windows ST.

Microsoft has strong industry partnerships with PC manufacturers such as Intel, Dell, HP, which makes it readily accepted by the OEMs. The relationship with all the existing set-top providers paves the way to pre-install the Windows ST to the set-tops. Microsoft also has polished customer support in automated product updates and global support network.

### **Weaknesses**

Microsoft did not recognize some of the growth opportunities of the Internet; therefore, Google was able to dominate paid search, Facebook dominates social media, and MSN lost early to AOL. Microsoft misses Internet opportunity which resulted in "follower" reputation in the online services. In addition, Microsoft is insignificantly presented in the wireless market and mobile offerings. Quite a few products regarding the Internet applications, and it failed to anticipate sever key opportunities on the Internet and acting flexibly in the early years. As a result, the investor returns are stagnant.

Another weakness lays in compatibility with Installed base. For example, users are struggling with multiple versions of Windows, and the newest releases of browser and enterprise products. Products having single use and do not focus well on how it will work on upcoming products. These problems should be avoided in the Windows ST and Xbox Pro.

On the organizational level, the organization structure is not satisfactory which indicates a leadership drain of top management and technical talent.

### **Opportunities**

Microsoft is expanding into the video game market by producing items such as the Xbox. It is an opportunity for Microsoft to invest in the gaming console, since the online gaming adoption is going up quickly. In addition, through domestic smart phone adoption, mobile phone applications show a great potential regarding the future. With the surge in mobile platform, home entertainment, and converged communications, the emerging market in consumer convergence shows the opportunity in launching multimedia platform and that is where Windows ST is targeted.

As the growth in desktop platform, enterprise applications, mobile solutions and internet, the global market expansion makes global touch using Internet much cheaper to devise its applications, especially in the new markets. Microsoft needs to leverage its deep software domain expertise to assure superior performance in the long-term.

### **Threats**

Microsoft has legal challenges to its desktop monopoly and there is weak copyright protection in the emerging markets which consumes resources and threatens the revenue stream from licenses.

There is a growing number of lower priced alternatives, such as Linux operating system, open source applications and Google applications. Linux being an open source could threaten the position that MS has in the market including the desktop market. What's more, there are several new desktop substitutes coming out such as mobile platform, tablet platform, and television, which do not require the Windows operating system. They are encroaching on the Microsoft's conventional market.

Microsoft faces strong competitors in multiple markets. PCs, cell phones, and many other entertainment oriented hardware devices do not require Windows. Apple is a great threat with its hardware as well as Mac OS, which is threatening the Microsoft market domination. In the Internet arena, it encounters the fierce competition with Google, Facebook, and Amazon. In the mobile market, Microsoft is threatened by Apple's iOS, Google's Android, and RIM.

### **Competition**

Currently, there is no company that offers a product that provides total home entertainment solution, which includes Internet streaming content, web browsing, cable content and on demand content as well as gaming experience. Windows ST software and Xbox Pro will be the first products to enter this new market. However, this doesn't mean that Microsoft won't face competition or the competition will be an easy win. There are already millions of customers who have installed different devices to get the value that Microsoft products will provide. But what is unique about Microsoft offering is the simplicity in design, implementation and user interface that will make many customers switch to the offering. In order to accurately analyze and understand the competition environment, we will have to examine direct, indirect, and substitute competitors.



**1. Direct competitors**

On the Internet streaming section, Microsoft will be face to face to its regular competitors such as Apple and Google. Apple has its famous Apple TV product that is already in the market. Also Google has been working so hard to introduce its software platform (Google TV) to home electronics companies such as Sony and Logitech. In addition to Google and Apple, D-link, the famous networking devices company, has introduced Boxee that is both a software platform and a device. Another famous product in this section is Roku which has been able to provide more features than Apple and Google TV while maintaining low price (\$99). On the gaming section, Xbox Pro will be competing with Sony (PlayStation 3) and Nintendo (Wii). These players are summarized in Table 5.

**2. Indirect Competitors**

We can consider any cable company that decides not to use Windows ST set-tops as indirect competitors. Computers (laptops, desktops and mobile devices) can also be considered as indirect competitors to Microsoft in the gaming section. There are many users who prefer to use their personal computing machines for games instead of buying a gaming console.

**3. Substitute competitors**

One of the major substitutes is again personal computers. Users who already have cable TV at home are using their personal computers for streaming internet content on their TVs and for browsing the web. Thus, if Microsoft offering won't be providing a significant improvement over the current substitutes, customers won't be willing to buy the new offering.

**Competitor Strengths and Weaknesses**Strengths:

- The experience that some competitors have (such as Google) on developing software platform for other hardware manufactures.
- The brand image that some companies have such as Google, Apple, and Sony.
- The pricing model that some of the competitors adapt is a real challenge. For instance, Google offers many services for free and depend on advertisement as a revenue model.
- Many of the competitors have already large customer base and many of those customer are loyal to those brands a good example is Apple brand.

Weaknesses:

- No competitor is providing a product that bundle Internet TV and browsing, cable content and games in one product.
- Some competitors have no products in the gaming section such as Apple and Google.
- All competitors' products force users to install different product together in order to get Windows ST offering which cause a lot of complications to end users.
- Some products are facing technical issues such as Google TV.
- Most of the competitors offering compete with giant cable companies which made some of the content providers ban competitors from accessing their content.

**Barriers to Entry**

Small and medium business will find it very difficult to enter total home entertainment industry. In order to compete in this new market, companies have to have tight and strong relations with hardware and home electronics manufacturing companies. In addition, the success of product offering in this new market depends on the relations that companies have with Internet and cable content providers. Also, the capital required for the first few years to launch a product will make it extremely difficult and may be even impossible for some companies to enter this market. Microsoft is in a position to invest early with limited returns to enjoy higher returns and market dominance in the longer term.

Even very large companies that have access to the above mentioned resources, it is still hard to enter this new market. Let's take Google as an example, even though Google already has an Internet TV product called Google TV, the company didn't start with the right strategy. Google has not paid close attention to the fact that by introducing Google TV it will be competing directly with cable providers who actually own the pipe for internet connection and most of cable content. This strategy caused so many problems for Google TV. On the other hand, Microsoft Windows ST won't be competing with any of the cable providers. Microsoft will be working side by side with cable companies (all the major cable companies if possible) by providing them a software platform and gave those companies the ability to control the content. Moreover, Microsoft will be benefiting from them as they will manage billing, payments, and provide first line of customer support.

**Ways to Overcome the Threat of Substitute Goods**

The key element for Microsoft to overcome the threat of substitute products, such as laptops and desktops, is to provide a very simple and compelling user interface. In home entertainment, most of the customer pain comes from the complex, and often frustrating, interfaces that the users have deal with. Nowadays, for customers to bundle, for instance, Internet streaming and cable, they have to deal with more than one remote controller as well as different connections and setup menus. With Windows ST, the user might not even need a remote controller (with the use of XBox Kinect). With hand gestures (or voice commands), the user will be able to control and navigate through different options. On the setup side, all what the customer has to do is to connect the cable and an Internet connection and they are done. Thus, for Microsoft to overcome some of the available substitutes it has to invest in the simplicity of using Windows ST and creating an amazing overall customer experience.

## Value Proposition

### Windows ST

The value proposition of Windows ST Software is aimed for OEM set-top makers, as our direct customers, who will be serving network providers that will be serving the end user (indirect customers). We provide Windows ST Platform for our direct customers that are looking for offering convergence for service providers. Many service providers are looking for such a product to overcome the threat of losing their customers who are looking for different ways to access media and web content from different resources. Our product is a complete platform including operating system, reference design, development tools, applications (productivity and entertainment), and an interactive online community.

Window ST Offers a powerful yet inexpensive platform that sits in the network and will serve as the foundation for advanced services that span the Internet, PSTN, and broadcast network. This solution will provide customers with the benefits of having all content in a single pipe and avoid the complexity of having many different products that deals with different networks. Unlike our competitors such as Google, Apple, Roku, and Boxee who focus on providing products that are stand-alone boxes which live outside the network and bridge only the Internet to the television. Customers that buy our competitors' products have to buy several different products and handle setup and interfaces complexity to get a less valuable service. As more customers will by switching to our product, our offering will provides additional revenue opportunities that create foundation for service providers to offer more powerful and lucrative communication and entertainment experience for their customers.

### Xbox Pro

Our famous and widely used Xbox console is getting even more powerful. Xbox Pro is mainly aimed for power games who are hard core gamers that looking for ultimate gaming experience as well as for social gamers who like to make connections and being able to access other entertainment resources. We offer them Xbox Pro which is an advanced gaming system that interacts with the broadcast network and the world's largest online gaming community. Xbox live is the biggest online community in the world that provides social, interactive, and online gaming and entertainment experience to over 30 million active users around the globe.

Our product gives power and social gamers the extra horsepower that they need to challenge the fiercest competitors online. When compared to Nintendo Wii and Sony PS3 who provide gaming systems that live outside the network and provide a less complete (mostly offline) gaming experience, Xbox Pro provides an advanced gaming system that integrates directly into the network and connects with an active online community. So users will be able to use their gaming console to access Internet streaming content, cable content as well as browsing the web while still experiencing the improved gaming experience that Xbox Pro provides. As a results, our product delivers a more complete and competitive online gaming experience that no other product provides.

## Pricing

### Windows ST

Windows ST will be licensed to set-top providers at \$.99 per set-top box – this includes the first year of maintenance and support. Once deployed, Microsoft will charge \$.49 per year per set-top for software updates and maintenance. This revenue is not a profit center for Microsoft, our goal is to cover costs, the real upside comes from selling Xbox Live and additional online services – plus owning the platform from a strategic perspective. Microsoft will not charge for basic games/content that will be distributed with Windows ST. However, Microsoft will provide a revenue share (90/10) with the cable operator for any Xbox Live pull-through revenue.

### Xbox Pro

In order to determine pricing for Xbox Pro we will consider three elements: value to end-user, cost of goods sold, and competitive offerings. Two of these elements can be seen by using the natural selection model (Zehr: 2009) with competitive offerings plotted against both price and overall completeness of the solution. The result of this analysis can be seen in Figure 2.

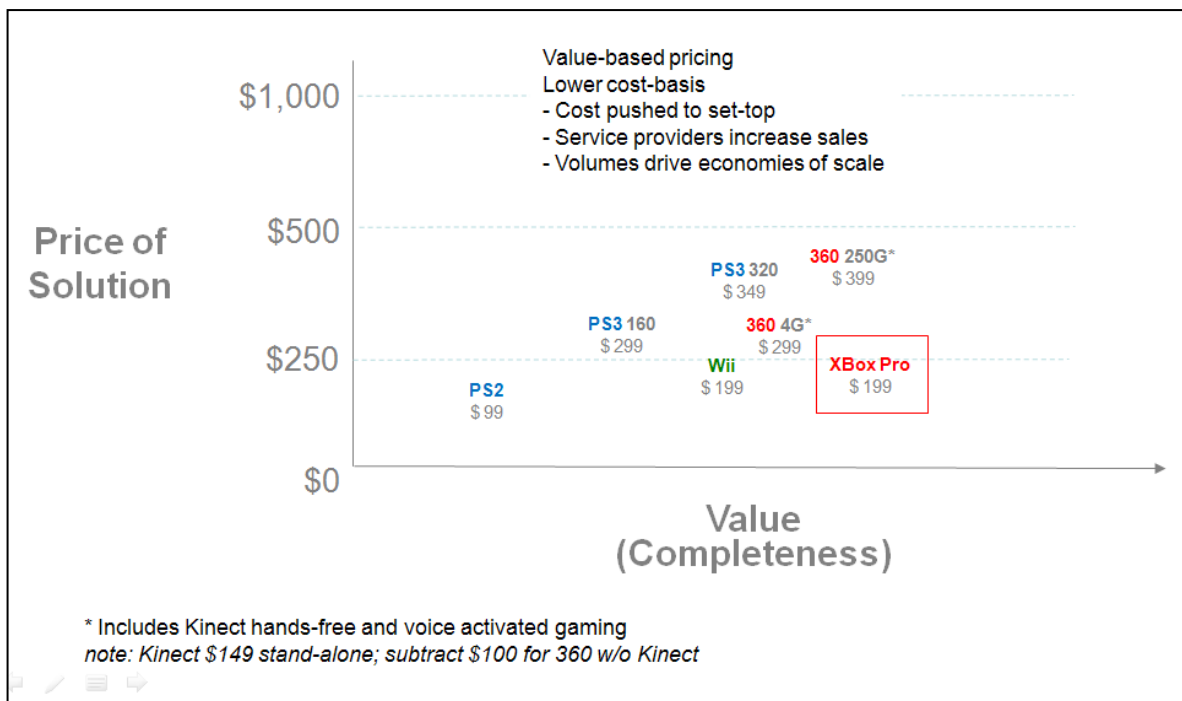


Figure 2: Natural Selection Model - Xbox Pro

When placing competitors on this chart we can see that the price of competitive solutions ranges from \$99 for a low-end Sony Play Station 2 to \$399 for an Xbox 360 with Kinect (\$299 without Kinect). The low-end of the range for a competitive system (less game titles, no Kinect) is the Nintendo Wii at \$199. Since the Xbox 360 is already successfully selling at \$399 today (Microsoft sold over 6 million, 50% more than forecast, in Q4 alone) we know that market value for this solution is at least at that level.

Based on the fact that we will leverage components in the set-top via the required high-speed connection our cost of goods sold is less than \$50. In this case, rather than premium pricing (skimming the cream) and matching the \$299, or even \$399 (with Kinect), we can parity price with the Wii and deliver significantly more value. This essentially eliminates the market for the Wii and Play Station 2/3 since we can offer better performance at a lower price and they will not have access to the high-speed interface to gain similar cost reductions and competitive footing.

## Channels

### Windows ST

We will sell Windows ST directly to the leading set-top providers through a direct sales force. This will be an overlay of Sales Development (Account Executives – AE) specialists with knowledge of the cable industry, industry structure, and buying habits. Sales Development experts will be paired with Sales Engineers (SE) with a deep technical knowledge in set-top boxes, cable networks, and embedded systems. They will assist the AE with answer technical questions from customers, doing product demo's, proof of concept projects, and answering technical RFPs. The goal here is to secure design wins so that set-top makers will design Windows ST into their set-top box offerings.

In addition to working directly with set-top box makers, Microsoft will also work with cable operators to help them understand the full potential and the benefits of a Windows ST solution. We will build these relationships through the Global Strategic Alliances organization. This organization will also provide technical support and development assistance for cable operators who deploy Windows ST set-tops. In addition, Strategic Alliances will work closely with cable operators to jointly promote Xbox Live, more advanced gaming applications, and additional online services.

Finally, through the existing Microsoft Developer Network (MSDN) we will provide tools and support for independent software vendors (ISV's) and encourage them to develop additional applications that will be offered through the cable operator/set-top. This promises to be another source of revenue for the cable operators and will add even more value to their subscribers.

### Xbox Pro

Xbox Pro will be offered through our existing (and very successful) retail sales organization. In particular, we will offer Xbox Pro through big box retailers such as Best Buy and Target, specialty retailers such as GameStop, and other retail outlets. Since we are appealing to an online audience with high speed Internet access we will also offer Xbox Pro online through our own online store; as well as online retailers such as Amazon and Circuitcity.com.

The one new addition to our existing retail sales channels will be the cable operators. Once a home is provisioned with a Windows ST set-top Microsoft and the cable operator will pro-actively sell Xbox Pro to those subscribers. We will up-sell based on the existing free games included with Windows ST to offer an even more powerful gaming experience. Through the cable operators we can also advertise directly to this audience to sell Xbox Pro, Xbox Live, and third-party games.

## Promotion

For the Microsoft Windows ST the promotions will be conducted in several areas. The first task will be building good public relations in the target market. The purpose of the public relations campaign is to represent the company in the media and to communicate the company's achievements to the outside world. To achieve this goal the company will undertake several programs. First, the company will work directly with industry analysts to build a strong level of support among "independent" trusted experts. Second, the company will use press releases as a communication tool between company and the media. For an example, news sites such as Yahoo! News and Google News would be effectively used as a direct to consumer communication tool. Third, industry articles will be used to inform set-top manufacturers about the new Microsoft product and associated benefits. Fourth, application notes will also be used to give more details about the product, its features, and its specifications to the set-top manufacturers.

In addition, Microsoft will provide Developer Forums for users to communicate effectively with other users as well as to develop and share their own applications for Windows ST.

Finally, Microsoft consultants will work directly with leading set-top makers to promote Windows ST. They will illustrate how the product works and the advantages both companies can gain by adopting the Windows ST platform

### Xbox Pro

To promote the Xbox Pro gaming console the company will extensively use advertising campaigns. Company will use electronic media, paper media, press conferences, TV, radio, articles and outdoor gatherings. Microsoft will also focus on creating good public relations by releasing product related articles to the media.

Social media such as Facebook and YouTube will also be used to reach to the target audience by posting articles, writing reviews, posting product videos in order to increase the customer awareness towards new gaming console.

To promote the gaming console, company will use retail promotions. Retail promotions will include in-store marketing promotions, game bundles, Xbox Pro upgrades, and contests.

Providing free games will be another way of promoting the Xbox Pro. We will give away basic games for free with set-tops, provide 30 day free Xbox Online trials, and "up-sell" into paid services.

Service provider joint marketing will be used to promote the products for existing customers. Service providers can distribute brochures for existing customers with new product details and give special coupons or discounts for new customer to attract their interest towards Xbox Pro.



## Financial Projections

As shown in Table 1, based on figures from the National Cable and Telecommunications Association, the number of homes served by cable grew slightly (1% or less) from 1998 to 2001, remained essentially flat from 2002 to 2004, and actually declined slightly from 2005 to 2010. At the same time the number of homes passed by cable services and high speed Internet continued to grow steadily. In 2010 the number of homes passed stood at 122.8 million; a number that represents 93% of all US households. In addition, among cable TV subscribers we have seen a much more rapid migration from basic video services to digital video services. The number of subscribers with digital video services increased from 1.4 million representing only 2% of subscribers to 44.4 million approaching 74% of the installed base.

At the same time there has been an even more rapid growth in the number of subscribers with high speed Internet services. This population has increased from just half a million in 1998 to almost 44 million in 2010 – a figure that represents 99% of all digital video households. Expanding this analysis to look at phone service over cable this has also experienced rapid growth. In 2010 the number of homes with cable phone service stood at 23.5 million – more than half of all digital video subscribers.

Based on this analysis we can see that while the penetration rate of cable remains flat to negative, the cable companies have been very successful upgrading customers to digital video from basic video, and selling them additional services such as high speed Internet and phone service. Thus, the average number of services and monthly revenue per customer has seen a steady increase. The industry needs to do a better job of increasing penetration – less than half of homes passed are actually subscribers to cable services. In addition, the industry needs to find additional ways to grow the average revenue and number of services associated with every cable subscriber.

In order to evaluate the attractiveness of the Microsoft TV opportunity we also need to estimate the future growth potential for cable services. There are a number of formal forecasts available that cost anywhere from \$3,500 to tens of thousands of dollars. Since we did not have access to those materials for this analysis we started with the existing numbers (Table 1) and then made several assumptions to create growth estimates for the industry.

First, we assumed that the industry could begin to increase penetration at a rate of 5% per year with pricing and other incentives. This is conservative based on the fact that we are serving less than 50% of households passed today.

Second, we assume that penetration of digital video will be 90% of cable households by 2015. In a 2005 report from PricewaterhouseCoopers (PwC) they estimate that the percentage of digital video will never exceed 86%. However, we are more optimistic based on a stream of additional features and services.

Finally, we assume that the penetration rate of high speed Internet will be 95% of digital video homes. The current rate sits at 99% today so this is a much more conservative assumption.

The results of this analysis can be seen in Table 2. We show the number of subscribers increasing from the current level of 60.4 million in 2010 to 77.1 million in 2015. With the penetration rate climbing to 90% for digital video we show 69.4 million in 2015 – 95% of those subscribers, or 65.9 million, will also

have high-speed Internet. This is the target audience for Microsoft TV. Even with this forecast growth this still only represents a 63% penetration of passed homes so there is plenty of additional upside.

Based on this analysis we are now in a position to forecast sales and earnings for Windows TV. Table 3 outlines sales growth for Windows ST, Xbox Pro, and Xbox live. We start with an estimate of the new set-top boxes that are placed in the network. This consists of two elements: set-top boxes for new subscribers and upgrades of equipment for existing subscribers. The volume of new subscribers comes directly from our industry forecast in Table 2. To estimate the number of upgrades we assume 5% of the equipment is updated every year – this is an ongoing process as faulty equipment is replaced and new technology is introduced to the market.

To estimate the volume of equipment that runs Windows ST we have started with a conservative forecast of 5% of new set-top boxes deployed in 2011 and climb to 25% in 2015. In practice, with just a couple major design wins our share of these sales could be much higher. Building on this we forecast that 50% of subscribers that receive a new set-top will also want to subscribe to Xbox Live which will give them the ability to interact online and access services such as Netflix. In addition, we estimate that 25% of those who receive a new set-top will purchase Xbox Pro which is consistent with estimates that put hard core gamers at ~25% of online gamers – all subscribers will receive a basic game package with their Windows ST based set-top box.

Pushing forward to revenue and expense forecasts (Table 4) we assume a \$.99 charge for Windows ST on every new desktop and \$.49/year per box maintenance fee. The later charge includes updates and periodic feature enhancements – both occur automatically over the network.

We've also assumed \$50 per subscriber, per year, for Xbox Live. The current list price for Xbox Live is \$60/year, but we have factored in discounts based on the plans currently available online. In addition, we have used a price of \$199 per game system for Xbox Pro as outlined in the pricing section. Beyond that, we have also forecast another 10% for accessories, Microsoft points, and additional online services that are still to be created. This is extremely conservative – we plan to double or triple this number based on new online services over the next couple of years.

On the expense side, consistent with this type of project, we are only looking at “incremental” costs that are associated with this business initiative. We forecast an initial \$10 million for the development of Windows ST, with ongoing maintenance charges of \$2 million per year. In addition, we've also built in an additional \$10 million for the development of Xbox Pro and a cost of goods sold (COGS) for each Xbox Pro device of 25% of sales. There are no additional expenses associated with Xbox Live since this service already operates smoothly with over 30 million subscribers (worldwide).

Based on these revenue and expense forecasts we are showing incremental net loss of \$7.4 million in 2011 (our heaviest year of investment) and then rebounding to a positive \$56 million in 2012, \$106 million in 2013, \$173 million in 2014, and \$260 million in 2015. To get to operating income we also add in an allocation for General and Administrative (G&A) expense and Sales and Marketing (S&M) expense. We've assumed a 6% (of sales) allocation for G&A expense based on the actual ratio recorded in 2010 (this ratio was also 6% in 2009). In addition, we are going to assume an additional incremental expense

of 5% for S&M. The actual number averages ~22% for Microsoft; however, this project will leverage existing program which will limit the level of additional S&M expense required.

When we roll this together we can see that this project will produce a loss of \$10 million in 2011, and then more into the black to show results of \$49 million in 2012, \$93 million in 2013, \$152 million in 2014, and \$228 million in 2015. This represents a total return on investment of over 1,700% in just five years and unlimited upside from there. With these growth rates this could easily be a \$1 billion dollar business for Microsoft in less than 10 years. In addition, this provides a platform for new service opportunities that offer significant additional upside.

## Conclusion

Microsoft faces a number of serious threats to its market dominance in the consumer computing market. One significant threat is the emergence of smart phones as a preferred Internet access device. In addition, providers such as Apple, Google, Roku, Boxee, and others, are offering Internet TV devices that will allow consumers to connect directly to Internet content without a PC. When combined with the slowly eroding market share of Internet Explorer, these factors create a significant threat to our Windows franchise in the consumer (home) market.

On the plus side, we have a leading global brand, strong industry partnerships, and an extremely deep base of technical knowledge and technology experts. In addition, we have well established distribution channels and well-oiled development, operating, and support organizations in place.

We will work with set-top providers and cable operators to establish Windows ST as the dominant set-top platform in the United States. The design of Windows ST puts us “in the network” where we can offer a platform that delivers on the promised of convergence: broadcast content, Internet, and phone services. No other provider in the market can deliver on this promise.

In addition, we will use our dominance in the set-top market to own the market for serious gamers as well with Xbox Pro. We will prime the appetite of the home audience by giving away simple games for free. This will also undercut less powerful systems that try to sell basic games. Then we will use our presence in the set-top, and the high-speed interface designed into every Windows ST set-top, to deliver an unmatched gaming experience at a fraction of the price.

This plan addresses our most pressing strategic concerns regarding the consumer (home) market and also allows us to generate significant returns right away. With a \$20 million dollar investment we can produce a return on investment of over 1,700% in just five years and unlimited upside from there. With these growth rates this could easily be a \$1 billion dollar business for Microsoft in less than 10 years. In addition, this provides a platform for new service opportunities that offer significant additional upside.

Windows TV (Windows ST and Xbox Pro) provides the opportunity to “own the home” for decades to come. We are well positioned to win this market space. The living room is ours!

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
<b>Subscribers</b>													
<b>Basic Video</b>	65.1	65.9	66.6	66.9	66.1	66.1	66.0	65.4	65.4	64.9	63.7	62.1	60.4
growth rate	na	1%	1%	0%	-1%	0%	0%	-1%	0%	-1%	-2%	-3%	-3%
<b>Digital Video</b>	1.4	4.9	8.5	14.5	19.3	22.5	25.4	28.5	32.6	37.1	40.4	42.6	44.4
growth rate	na	250%	73%	71%	33%	17%	13%	12%	14%	14%	9%	5%	4%
% basic video	2%	7%	13%	22%	29%	34%	38%	44%	50%	57%	63%	69%	74%
<b>Internet</b>	0.5	1.5	4	7.3	11.6	16.5	21	25.4	28.9	35.7	39.3	41.8	43.8
growth rate	na	200%	167%	83%	59%	42%	27%	21%	14%	24%	10%	6%	5%
ratio/dv	36%	31%	47%	50%	60%	73%	83%	89%	89%	96%	97%	98%	99%
<b>Phone</b>	0.1	0.3	1	1.5	2.5	3	3.8	5.9	9.5	14.9	19.6	22.2	23.5
growth rate	na	200%	233%	50%	67%	20%	27%	55%	61%	57%	32%	13%	6%
ratio/dv	7%	6%	12%	10%	13%	13%	15%	21%	29%	40%	49%	52%	53%
<b>High Speed Internet: Homes Passed</b>						90.6	108	112.5	115.2	117.7	119.6	121.2	122.8
% served high speed Internet						18%	19%	23%	25%	30%	33%	34%	36%
% served digital video						25%	24%	25%	28%	32%	34%	35%	36%

source: NCTA (<http://www.ncta.com/Statistics.aspx>)

93% US Households

Table 1: Cable Industry Historical Performance 1998-2010

		2011e	2012e	2013e	2014e	2015e
<b>Subscribers</b>						
<b>Basic Video</b>		63.4	66.6	69.9	73.4	77.1
growth rate	5%	5%	5%	5%	5%	5%
<b>Digital Video</b>		48.7	53.3	58.3	63.7	69.4
growth rate		3%	3%	3%	3%	3%
% basic video		77%	80%	83%	87%	90%
2015 target	90%					
<b>Internet</b>		46.3	50.7	55.4	60.5	65.9
growth rate		6%	10%	9%	9%	9%
ratio/dv	95%	95%	95%	95%	95%	95%
<b>Phone</b>		27.4	31.9	36.8	42.4	48.6
growth rate		3%	3%	3%	3%	3%
ratio/dv		56%	60%	63%	67%	70%
2015 target	70%					
<b>High Speed Internet: Homes Passed</b>						122.8
% served high speed Internet						54%
% served digital video						56%

Table 2: Cable Industry Forecast 2011 - 2015

		2011e	2012e	2013e	2014e	2015e
New Equipment		4.3	4.6	5.0	5.3	5.7
Upgrades	5%	2.2	2.4	2.7	2.9	3.2
Total		6.5	7.1	7.6	8.3	8.9
Windows ST		0.3	0.7	1.1	1.7	2.2
Market Share	25%	5%	10%	15%	20%	25%
Installed Base		0.3	1.0	2.2	3.8	6.1
XBox Live	50%	0.2	0.5	1.1	1.9	3.0
XBox Pro	24%	0.1	0.2	0.3	0.4	0.5

Table 3: Windows TV (Windows ST, Xbox Pro, Xbox Live) Sales Forecast

<b>Revenue</b>		2011e	2012e	2013e	2014e	2015e
Windows ST (initial)	0.99	\$ 0.32	\$ 0.70	\$ 1.13	\$ 1.63	\$ 2.20
Windows ST (maintenance)	0.49	\$ -	\$ 0.16	\$ 0.51	\$ 1.07	\$ 1.88
Xbox Live	50.00	\$ 8.16	\$ 25.83	\$ 54.48	\$ 95.75	\$ 151.42
Xbox Pro	199.00	\$ 15.60	\$ 33.75	\$ 54.74	\$ 78.83	\$ 106.36
Other	10%	\$ 2.41	\$ 6.04	\$ 11.09	\$ 17.73	\$ 26.19
Total Revenue		\$ 26.49	\$ 66.49	\$ 121.95	\$ 195.01	\$ 288.05
<b>Incremental Costs</b>						
Windows ST		20.00	2.00	2.00	2.00	2.00
Xbox Live	-	-	-	-	-	-
Xbox Pro	25%	\$ 13.90	\$ 8.44	\$ 13.68	\$ 19.71	\$ 26.59
Total COGS		\$ 33.90	\$ 10.44	\$ 15.68	\$ 21.71	\$ 28.59
Net Sales		\$ (7.41)	\$ 56.05	\$ 106.26	\$ 173.30	\$ 259.46
Operating Expenses	6%	\$ 1.59	\$ 3.99	\$ 7.32	\$ 11.70	\$ 17.28
Sales & Marketing	5%	\$ 1.32	\$ 3.32	\$ 6.10	\$ 9.75	\$ 14.40
Operating Income		\$ (10.32)	\$ 48.74	\$ 92.85	\$ 151.85	\$ 227.77
Return on Investment	30	-34%	128%	438%	944%	1703%

Table 4: Windows TV Financial Forecast 2011 - 2015

**Company Info**

	Microsoft	Google	Boxee (D-Link)	Roku	Apple
Established	1975	1998	1986		1976
Number of Emp.	88,414	20,000+	500		49,000+
Profit	6.66 billion	8.5 billion	1.7 Billion		14.01 Billion

**Cable Content**

	Microsoft TV	Google TV	Boxee	Roku	Apple TV
Com cast	Y	N	N	N	N
ESPN 360	Y	N	N	N	N

**Steaming Content**

	Microsoft TV	Google TV	Boxee	Roku	Apple TV
Hulu Plus	Y	Pending	Pending	Y	-
Amazon VOD	Y	Y	Y	Y	Y (Via PC)
Netflix	Y	Y	Y	Y	Y
iTunes	-	-	N	Y	Y
You Tube	Y	Y	Y	Y (Via Private Channel)	Y
Music	Zune	Pandora, standard music streaming service	Pandora, standard music streaming service	Pandora, standard music streaming service	iTunes Library

**Internet Content**

	Microsoft TV	Google TV	Boxee	Roku	Apple TV
Full web Browsing	Y	Y	Y	N	Y (Via aTV Flash App)
Search	Bing	Integrated online search	Local sources and TV shows	N	-
Apps	Microsoft TV Market (Windows 7 Mobile)	Android Market	Boxee app list	Avid development community	App Store

**Social Networking**

	Microsoft TV	Google TV	Boxee	Roku	Apple TV
Video Calling	Y	-	N	N	FaceTime
Facebook	Y	Y	Y	Just Photos	-
Twitter	Y	Y	Y	3 <sup>rd</sup> party	-
Email	Y	Y	N	N	N

**Other Content and pricing**

	Microsoft TV	Google TV	Boxee	Roku	Apple TV
Picture Viewing	Y	Y (Picasa compatible, Flickr)	Y (Picasa compatible, Flickr)	Y	Y (Via iTunes)
	Y	Y (Via web and Android Market)	Y	Y	-
Games	\$199 (Xbox add-on) \$ 0.99/ST + 0.49 Annual Support Fee (Set-tops)	\$249-\$300 (Logitech)	\$199	\$99.99 (XD/S)	\$99
Price					

Table 5: Competitive Analysis



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