Name: Vivek Vakil		College/Scho	ol: Commerce	Year: 3rd
Important Company Financial Data				
Current Stock Price	\$10.02	10-Day AVG. Volume	10.7 Million	
Market Cap	\$1.2 Billion	52 Week High	\$18.93	
P/E	N/A	52 Week Low	6.92%	
Revenue (TTM)	\$219 Million	Dividend	N/A	
EPS	(\$0.74)	Share Outstanding	119.2 Million	

(\$84.2) Million

(\$65) Million

Thesis / Key Points: TiVo is a Viable Short Investment

209 Million EBITDA (TTM)

0 Free Cash Flow (TTM)

Total Cash

Total Debt

1. <u>TiVo has failed to differentiate itself from competitors leading to increased competition and decreasing sales</u>

TiVo advertises that its product differs from the typical DVRs that Cable and Satellite TV companies offer, as seen in Exhibit 2. However, these differences are either a misperception or irrelevant. TiVo compares its product to its competitors' older or inferior models, when in reality those competitors offer DVR systems that include additional features, such as Cisco's new Explorer 8550HDC DVR. In order to create a perception of their superiority, TiVo instead compares itself to an older model made by Cisco. Additionally, some of TiVo's features are irrelevant, such as the ability to stream YouTube or Netflix videos, because TVs now come equipped with those features. When TiVo's features are compared to new models from competitors, coupled with the fact that new televisions and services Cable/Satellite providers offer many of those features regardless, TiVo is not a differentiated product. For example, one of TiVo's new growth aspects is their ability to provide On Demand services. However, they are behind the curve on this technology, as Cable/Satellite service providers already offer customers this service at little to no extra price. Finally, conducting value added research by speaking with TiVo's competitors and Cable/Satellite television providers shows that TiVo offers either the same or inferior product. Since TiVo cannot provide television service, customers must first contact service providers about DVR systems, and VAR (exhibit 1) has demonstrated that service providers easily sway customers to choose their DVR version over what TiVo offers.

2. Expected subscription growth will come from a base that has low average revenues per user, resulting in lower sales

For TiVo's latest fiscal year, 56% of subscribers were TiVo-Owned customers. The TiVo-Owned subscription base has decreased from 1.7 million people in 2007 to only 1.26 million in 2011. TiVo has consistently been losing TiVo-Owned subscriptions, as there is no longer a need for a standalone DVR system. Cable and satellite TV providers bundle DVR into their packages at a much cheaper price than the purchase of a standalone TiVo system. Additionally, looking forward, many analysts and TiVo management are predicting growth to come through MSOs/Broadcasters subscriptions. The issue going forward with this is that the average monthly revenue per user for TiVo-Owned subscriptions is \$7.63, while for MSOs/Broadcasters it is only \$1.27. Even if TiVo does gain customers from MSOs/Broadcasters, they will not be able to stop the loss of total sales due to the loss from TiVo-Owned subscriptions because the ARPU for MSOs is so much lower. Analysts are also too optimistic about TiVo's ability to sell to MSOs/Broadcasters. Companies such as Verizon, AT&T, Dish Network, and Cox Communications have begun manufacturing their own products in order to better control costs on their DVRs. One huge advantage service providers have over TiVo is that they can manufacture one box, containing both the cable/satellite receiver as well as the DVR system, providing customers with less clutter in their house and more convenience. In order for TiVo to do this, customers must purchase a Cable card from their service providers to insert into their TiVo system, which often comes with additional fees from service providers, making TiVo's product further unattractive. Lastly, TiVo has damaged relations with major cable and satellite providers through lawsuits, and VAR has demonstrated that many major providers refuse to offer TiVo.

3. <u>TiVo has been losing subscribers at a significant rate, resulting in very poor financial performance in recent years</u>

Revenues have declined from \$259 million in 2007 to \$219 million in 2011. TiVo has also suffered a year-to-year decrease in revenues from its 2010 fiscal year to the 2011 fiscal year, demonstrating that the drop in sales is not due to the economy. On top of negative revenue growth, TiVo also lacks the ability to earn positive income, having had only one positive earnings year in the past 5 years. In TiVo's latest fiscal year, net income was negative \$85 million. TiVo also faces cash flow problems, with over \$60 million in negative free cash flow in its latest year. Even though TiVo has a strong cash position for a company its size, TiVo will burn through its cash position in the coming years due to the inability to generate positive cash flow. TiVo's poor financial performance has stemmed from its inability to maintain and gain new customers. In total, TiVo had over 4,400 subscribers in 2007, but that has declined to 2,000 subscribers in 2011, representing over a 50% decline in its subscription base in the past 5 years (Exhibit 3). Their subscription base declined before the U.S. economy declined, and has continued to drop even after the economy has recovered, again reiterating that TiVo's poor performance is independent of the economy. Specifically, TiVo-Owned subscriptions have declined 26%, and MSOs/Broadcasters subscriptions have declined over 70% (Exhibit 4). The strong fall in MSOs/Broadcasters subscriptions shows how TiVo does not have a strong moat or competitive advantage, as service providers build their own DVRs or purchase competitors'. Despite TiVo's poor performance, its stock remains overvalued in comparison to its competitors. Exhibit 6 shows additional information about comparable ratios, as well as implied stock prices.

4. <u>TiVo cannot compete on price, setting the company up for failure since they don't offer a differentiated product</u> TiVo currently charges \$19.99 a month for its basic subscription and requires a \$100 fee for the box itself. This price is significantly higher

than what competitors charge. Many cable/satellite service providers offer DVR service for free in the first year and only charge \$7 dollars a month after, with the highest priced competitor charging \$15 dollars a month. Additionally, none of them require customers to pay a fee for the box itself, since service providers can package the DVR box into the cable/satellite receiver. TiVo's expensive price drives customers away because they can get the same product from a cable/satellite service provider for a cheaper price. Furthermore, service providers are at a better competitive advantage because they can afford to sell DVR services at a loss in order to attract customers to their other products. TiVo cannot do this because their sole product is the DVR.

5. Significant substitutes to DVRs have emerged in recent years and are eating away at TiVo's Sales

Products such as Hulu, Google TV, and Apple TV have made it easy to access shows online that you missed live. Similarly, video game console manufacturers like Sony and Microsoft have begun streaming television shows to their game consoles. Also, a recent increase in the use of On Demand services is a significant blow to TiVo's industry. Many service providers, such as Verizon FIOS, are bundling in On Demand services for very cheap or even free. An increase in the selection of television shows that are now available On Demand has significantly decreased the reliance on traditional DVRs. TiVo has been successful in the past because it was an innovator of the original DVR; however, it has failed to create new products since, and thus substitutes and competing products have emerged to take market share from TiVo. TiVo is no longer an innovator, Exhibit 7 shows how TiVo hasn't unable to generate new revenues from new products.

6. <u>TiVo's biggest headwind, its on going lawsuit with Dish Network/EchoStar is out of the way, creating an attractive entry point</u>

TiVo recently won a settlement against EchoStar and Dish Network for patent infringement. This caused its share price to skyrocket, in essence removing one of the biggest headwinds for shorting TiVo. The increase in TiVo's share price provides a nice entry opportunity for shorting the stock. Additionally, both EchoStar and Dish Network are appealing the court's decision, implying the share price could drop if the appeals court overturns the decision. There is no advantage to the lawsuit besides a fine, since the technology TiVo is suing for is becoming obsolete. TiVo has been involved in this lawsuit since 2004, and while media outlets are reporting that the lawsuit could result in Dish Network replacing the old DVRs with TiVo's, Dish Network in reality is replacing them with their own new DVR model. This means that TiVo will not gain any revenues by selling Dish Network their DVR system.

7. <u>TiVo is drastically overvalued compared to its peers</u>

TiVo is expected to continue to lose money in the future, with Wall Street Analysts calling for another full year of negative earnings (Exhibit 5). Moreover, management believes that subscriptions will continue to decrease due to competition. With no bright future in sight, TiVo trades at a huge premium to its identified competitors on an EV/Sales and Price to Book basis. More traditional comparables could not be used because TiVo generates negative earnings, negative EBITDA, and negative cash flow. See Exhibit 6 & 7.

Misperception

- 1. Dish Network will purchase TiVo DVRs due to the lawsuit: This is incorrect. Rather than using TiVo DVRs, Dish Network will upgrade customers who are currently using the old DVRs that TiVo sued for with newer, better products.
- 2. TiVo provides more capabilities than competing DVRs: TiVo compares itself to old models of DVRs and does not account for the fact that Cable/Satellite providers bundle services that provide a full suite of capabilities.
- **3.** Wall Street analysts put too much value on TiVo's user interface: Products developed by Verizon FIOS and other competitors offer equally easy to use controls for consumers, and TiVo does not have brand loyalty as seen with loss of consumers due to price.
- 4. Wall Street analysts still believe TiVo is an innovative company: TiVo has failed to produce a new DVR that is worth paying a premium for, and TiVo's newest DVR still does not offer more capabilities than competitors. TiVo isn't an innovative company and should not trade as such.

5. TiVo has a strong cash position: TiVo cannot generate positive free cash flow and has been burning through their cash, Exhibit 7.

VAR: Please see exhibit 3

How It Plays Out

- 1. TiVo will miss earnings when they report their first quarter results for their fiscal year 2012.
- 2. They will continue to lose subscriptions from TiVo-Owned and MSOs/Broadcasting consumers.
- 3. Overly bullish analysts will downgrade TiVo shares as the company continues to lose sales and cannot return to profitability.
- 4. TiVo's margins will fall, as the company will have to start cutting prices in order to compete with other companies.
- 5. TiVo's ongoing lawsuits will ruin future chances with partnering with MSOs/Broadcasters.

Risks / What Signs Would Indicate We Are Wrong?

Macro trends may favor all consumer discretionary stocks, TiVo could file and win additional lawsuits, and TiVo could be a takeover target because it has no long-term debt and a substantial cash position.

AAA

>	TiVo unit sales	TiVo produces mainly one line of Digital Video Recorders (DVRs). It sells
>	Average Revenue per User for MBOs/Broadcasters	its DVRs directly to consumers as well as to Multiple System Operators
>	Cash on Hand as well as free cash flow	(MSOs) and Broadcasters, such as Comcast, Verizon, and Dish
>	State of lawsuits	Network. TiVo generates revenues by charging customers a monthly
		fee as well as the sale of the DVR box itself

Company Description

(Page of Exhibit/s)

Exhibit 1: VAR through calling several major service providers to see what sales representatives had to say about their DVR service vs. TiVo, the costs of competition's DVRs, and to see how service providers pushed their DVR over TiVo.

Service Provider	Do you offer TiVo?	Are there any differences between your DVR and TiVo Service?	Price?	One time fee?
Verizon FIOS	No	No, has the same capabilites and more	1st year free \$15 after	No
AT&T U-Verse	No	No, has the same capabilites and more	Most packages offer it free, else \$15 a month	No
Dish Network	No	Same capabilities except for TiVo's patented search capabaility	\$6 per month	No
Direct TV	No	We have the most advanced DVR better than TiVo's	Mostly free, else \$7 a month	No
Cox Communications	No	No major differences	\$11.5 a month	No
Comcast Cable	No	No major differences	\$15.95 a month	No
TiVo			\$19.99 a month	Yes, \$99 or 299

Exhibit 2: TiVo comparing itself to the competitors

	Cable DVR***	TiVo Premiere	TiVo Premiere XL
TV			
Record live TV in HD	0	0	0
Enjoy advanced DVR features	×	0	0
Search across TV, cable DVR, & web	×	0	0
Movies			
 Instantly watch Netflix movies & shows 	×	0	0
On-demand movie services	0	0	0
 Supports full 1080p resolution 	×	0	0
THX certified	×	×	0
Music			
 Access streaming music services 	×	0	0
Listen to cable music channels	0	0	0
Play your PC/Mac music library	×	0	0
Web			
Watch YouTube™ videos on your TV	×	0	0
	×	0	0
Online/mobile scheduling of recordings	Some providers	0	0

Compare TiVo Premiere to a cable DVR

Exhibit 3: Revenues and Total Subscriptions



(Page of Exhibit/s)

Exhibit 4:





Exhibit 5: Analyst Earnings projections



Exhibit 6: Comparables

Company	EV/Sales	Price/Book
Dish Network	0.97	N/A
Direct TV	1.72	N/A
Comcast	2.28	1.58
Time Warner	1.79	2.82
Verizon	1.93	2.68
AT&T	1.96	1.6
Microsoft	3.04	4.42
Motorola	0.42	1.37
Cisco	2.14	2.06
Arris	0.86	1.53
Industry Average	1.71	2.2575
TiVo	4.44	7.07
Results from Bloom	oerg	

Implied TiVo Share Price Based on Multiples		
Based on EV/Sales Ratio		
Revenue	\$21	9 Million
Enterprise Value (M)	\$	374.49
Implied Market Value (M)	\$	583.49
Implied Share Price	\$	4.90
% Return from current share price		51%
Based on Price/Book Ratio		
Book Value (M)	\$	168.70
Book Value Per Share		\$1.42
Implied Share Price		\$3.19
% Return from current share price		68%

Exhibit 7:

Revenue Growth has been close to 0% for the past few years



Negative cash flow has resulted in a cash burn



Prices to sales above historic levels



Gross Margins have been falling







Ideas for the Club

- 1. Limit presentation times so there are more slots for people to pitch stocks each semester. It will also keep the members more engaged during meetings if presentations aren't dragging on and they can see a more variety of stocks.
- 2. Conduct more social events during the semester to help members meet each other and get to better know each other.
- 3. Reinstate the sector head program to help managers keep track of different sectors within the economy and to help maintain a balanced portfolio. Sector heads would be regular members which would make them more active and interested in MII. They would submit memos about recommendations in their sector helping members who are not comfortable presenting in front of the entire club to voice their opinions.