



## Workshop 3: Due Diligence II

2019 Utah Venture Capital Case Competition



## Agenda

- Welcome
- Management Team
- Financials & Projections
- Returns
- Crafting An Investment Deck
- Review Deadlines and Deliverables
- Team Workshop w/UGF Associates
- Close



## Update to Deliverables

- 10–15 slide presentation that covers
  - The Offering
  - Description of the Business and Strategy
  - Management Assessment
  - Market Analysis
  - Competitive Landscape
  - Historical and Financial Projections
  - Exit Strategy & Projected Returns
  - Investment Thesis
- 10–12 minutes to present, 8–10 minutes of Q&A



# The Offering

- What security are you buying?
  - Equity or Debt

	Equity	Convertible Debt	Debt
Valuation	Pre/Post-Money	Valuation Cap	N/A
Downside Protection	Liquidation Preference	First Lien	First Lien
Interest	N/A	PIK Interest	Interest
Other	Buy backs, etc.	Conversion Discount	Term



# Management



GETTY IMAGES

# Management



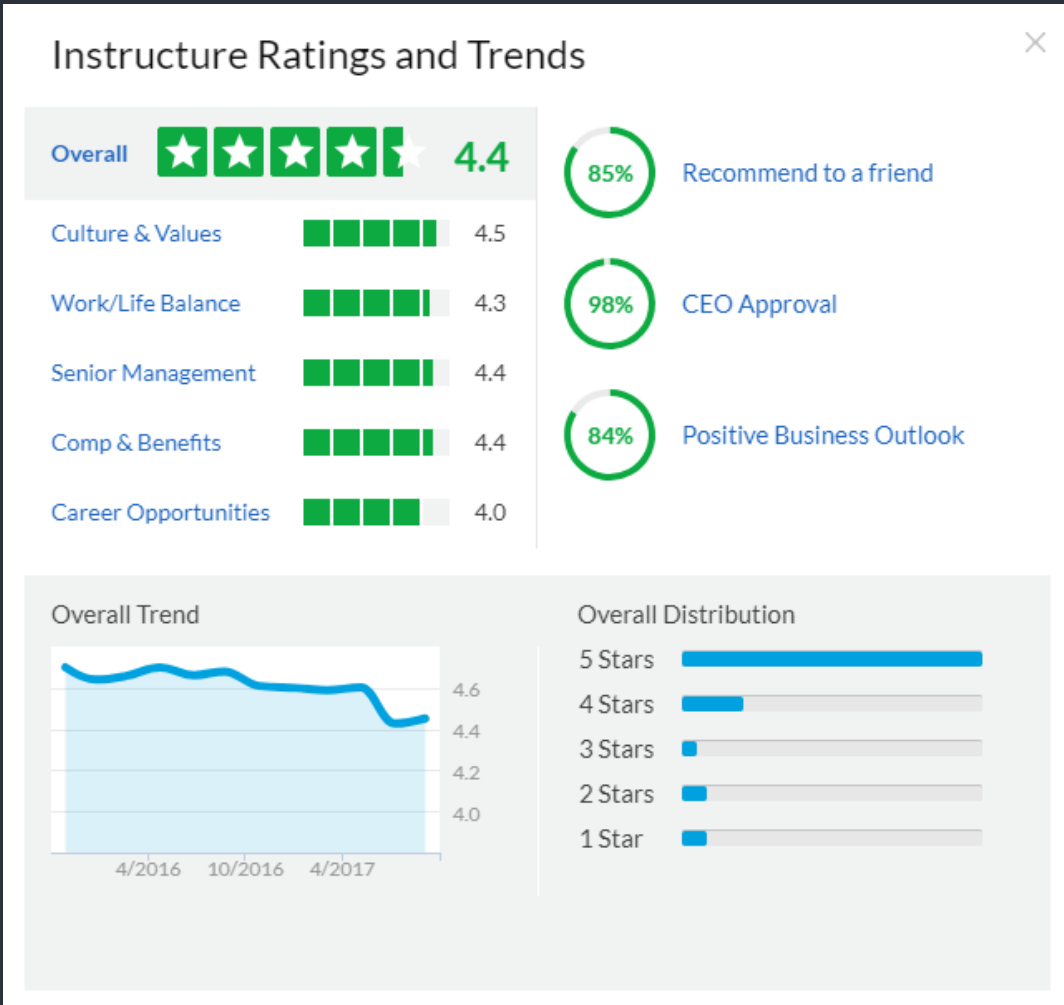
Given the industry and key risks, do they have the Right People?

Do they have the right people given the size?

Team-Market Fit?



# Management



## Glassdoor!

To do:

- Read good and bad reviews
- Look for info regarding management, direction of the company, culture, etc.
- Look for signs of turnover



## Financials: Income Statement

<b>Revenue</b>	<b>\$100</b>
<b>Cost of Goods</b>	<b>\$25</b>
<hr/>	
<b>Gross Profit</b>	<b>\$75</b>
<b><i>Gross Margin</i></b>	<b><i>75%</i></b>
<b>Operating Expenses:</b>	
<hr/>	
<b>Sales, General, Admin</b>	<b>\$30</b>
<b>Marketing Expense</b>	<b>\$20</b>
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<b>EBITDA</b>	<b>\$25</b>
<b>Interest, Depreciation</b>	<b>\$5</b>
<b>Taxes</b>	<b>\$5</b>
<hr/>	
<b>Net Income</b>	<b>\$15</b>
<b><i>Profit Margin</i></b>	<b><i>15%</i></b>





## Historical Financials

- How have they grown historically?
  - What have they figured out vs. proven?
  - Are they growing quarter over quarter, year over year?
  - Look for at least 100% YoY growth
- Understand the unit economics and key drivers of the business
  - Understand their business model and what drives revenue: marketing \$, sales reps, partners, users, transactions, etc.
  - Does the growth make sense? Companies usually growth at declining growth rates. Be sure to step back and think about it!!!



## Unit Economics

<b>Revenue from 1 Unit</b>	<b>\$100</b>
<b>Cost of Goods</b>	<b>\$50</b>
<b>Gross Profit</b>	<b>\$50</b>
<hr/>	
<b><i>Gross Margin</i></b>	<b><i>50%</i></b>
<b>Cost to Acquire</b>	<b>\$20</b>
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<b>Contribution</b>	<b>\$30</b>
<b><i>Contribution Margin</i></b>	<b><i>30%</i></b>



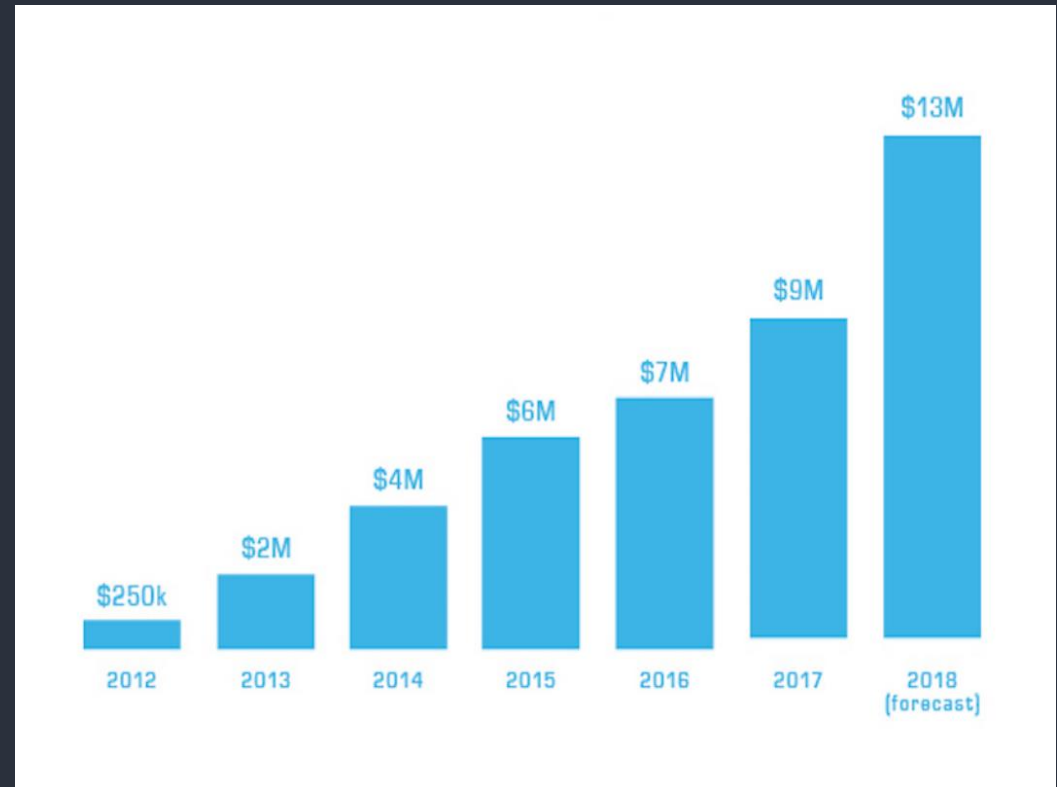
## Unit Economics

<b>Lifetime Value</b>	<b>\$1,000</b>
<b>Cost to Acquire</b>	<b>\$300</b>
<hr/>	
<b><i>LTV to CAC</i></b>	<b><i>3.3x</i></b>
<b>Cost of Goods Sold</b>	<b>\$200</b>
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<b>Contribution</b>	<b>\$500</b>
<b><i>Contribution Margin</i></b>	<b><i>50%</i></b>
<b>Revenue per Year</b>	<b>\$100</b>
<b>Payback Period</b>	<b>3 years</b>



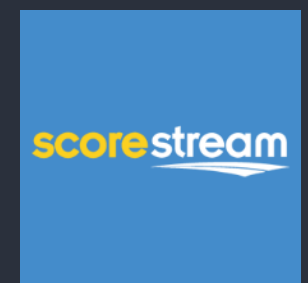
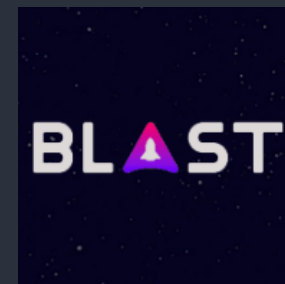
## Financial Projections

- Understand the key drivers of your model!
  - Marketing spend → Revenue
  - Increase number of customers OR get customers to buy more!
  - Be able to defend either case



## Exit Strategy & Projected Returns

- Venture Capital requires liquidity events:
  - M&A: who would buy them and why?
  - IPO: can they generate \$100M+ in revenue?
  - Bankruptcy (hopefully not!)





## Exit Strategy & Projected Returns: Comparables Analysis?

The process of using market-driven valuations of similar companies to derive or estimate the target company's value.

- Valuation is HARD!: so many factors come into play. If valuation was easy, there would be no money in it and stock prices wouldn't fluctuate as much.
- Comparables analysis leverages the expertise and actions of thousands of investors.





## Real Estate


- Think about how houses are priced:
  - Beds, baths, location, finishing, garages, HVAC system, amenities, school district, safety, color, maintenance, market timing, etc.
- The ideal comp is the house right next to yours that is exactly the same and just sold.
- This is the same idea to use with companies.





# Exit Strategy & Projected Returns: Comparables Analysis

- Enterprise Value
- Multiples:
  - EV/Rev
  - EV/EBITDA
- Things to look at:
  - Revenue Growth
  - Margins

					
<b>Year Founded</b>	2004	1961	2001	1997	2002
<b>Headquarters</b>	Santa Clara, CA	San Jose, CA	San Jose, CA	Los Gatos, CA	Woburn, MA
<b>Description</b>	Develops video compression and image processing chips for photo and video equipment.	Develops analog, mixed signal, and optoelectronic chips for fiber optics, LED, and microwave systems.	Fabless semiconductor company that builds chipsets for routers, video, and storage devices.	Fabless semiconductor company that develops analog and mixed-signal chipsets.	Develops chips such as power amplifiers and front-end modules for radiofrequency mobile devices.

The revenue multiples of Quantenna comparables cluster in a relatively narrow range from 5.7x – 8.8x, whereas EBITDA values range from 28.76x - 54.07x.

	EV	LFY Rev	LFY EBITDA	EV / Rev	EV / EBITDA	1 Yr Rev	5 Yr Rev
<u>Ambarella Inc.</u>	1,498	218	52	6.86x	28.86x	38.49%	30.25%
Avago Technologies Ltd.	29,298	4,269	852	6.86x	34.39x	69.40%	35.80%
Cavium Inc.	3,281	373	-6	8.80x	N/A	22.69%	29.03%
Monolithic Power Systems Inc.	1,833	283	34	6.49x	54.07x	18.67%	8.62%
Skyworks Solutions Inc.	12,940	2,292	450	5.65x	28.76x	27.87%	28.04%

	TEV (millions)	Sales LFY (millions)	TEV/Revenue	1 Year Rev Growth	5 Year Rev Growth
High	29,298	4,269	8.80x	69.40%	35.80%
75th Percentile	12940	2291.5	6.86x	38.49%	30.25%
Mean	9770	1,487	6.93x	35.43%	26.35%
Median	3281	373	6.86x	27.87%	29.03%
25th Percentile	1833	282.535	6.49x	22.69%	28.04%
Low	1,498	218	5.65x	18.67%	8.62%





# Exit Strategy & Projected Returns

1. Forecast financials
2. Find comparables and multiple range
3. Apply multiple to forecasted revenue
4. Determine ownership and implied exit value
5. Generate IRRs based on investment amount and exit value

<b>Financials</b>					
	Actual		Forecast		
<i>In USD \$M</i>	2014	2015	2016	2017	2018
Revenue	\$ 1,000,000	\$ 2,000,000	\$ 4,000,000	\$ 5,000,000	\$ 8,000,000
Rev Growth		100%	100%	25%	60%
Gross Profit	\$ 200,000	\$ 350,000	\$ 950,000	\$ 1,200,000	\$ 2,000,000
Gross Margin	20%	18%	24%	24%	25%
Op Ex	\$ 1,000,000	\$ 1,500,000	\$ 1,750,000	\$ 2,000,000	\$ 2,000,000
Net Income	\$ (800,000)	\$ (1,150,000)	\$ (800,000)	\$ (800,000)	\$ -

<b>Comparables</b>			
Company	EV	Rev	EV/Rev
Pandora	\$2.29B	\$1.20B	1.9x
LiveNation	\$4.65B	\$7.20B	0.6x
Netflix	\$39.70B	\$6.80B	5.8x
Other	\$3.00B	\$1.00B	3.0x
Average			2.8x

<b>Investment Details</b>			
<i>Post-money Valuation</i>	UGF Investment	UGF Ownership	
\$ 3,000,000	\$100,000	3.3%	

<b>Returns Analysis</b>			<b>IRR Table</b>	
	2017	2018	Date	Cashflows
Company Valuation	\$ 14,125,000	\$ 22,600,000	1/1/2016	(\$100,000)
			12/31/2017	\$ 470,833
Cash Return:	\$ 470,833	\$ 753,333	1/1/2016	(\$100,000)
Multiple:	4.7x	7.5x	12/31/2018	\$ 753,333
IRR	117.0%	96.0%		



## Investment Thesis

- Summary of the investment opportunity
  - What the company does
  - Market size and trends
  - Why the company will win
  - Historical traction/performance
  - Potential returns and why it fits fund
  - Recommended investment amount
- Description of Key Risks and mitigating factors



# Deal Screen Write Up

## Business Model & Strategy

- What is the pain point, who is the customer, and how does the company solve the pain point?
- How does the company monetize?

## Market Size

- How big is the market? TAM, SAM, SOM?
- How quickly is it growing? What is driving that growth?

## Competition

- Who are the top competitors?
- How is your company positioned against them?
- What are your company's sources of competitive advantage?



# Deal Screen Write Up

## Offering

- What is the security you are buying and what are the key terms?

## Management

- Who are the key managers and why are they the right team to achieve success?

## Historical Financials & Financial Projections

- How has the company performed historically?
- What are the key drivers of the business?
- Base and Upside forecasted financials – what is the potential of the business?

## Exit Strategy & Projected Returns

- How do you anticipate exiting the investment (M&A or IPO) and why?
- What range of returns do you anticipate? (Base and Upside cases at least)
- Why do these returns fit for our \$50M fund?



# UT VC Competition: Dates to Remember

Date	Where	What
Oct 23 <sup>rd</sup>	USU	Workshop 2: Deal Sourcing and Screening
Oct 23 <sup>rd</sup>		Signup closes, Team Submission Deadline
Oct 24 <sup>th</sup>		Teams Announced
Oct 30 <sup>th</sup>	Westminster	Workshop 3: Due Diligence I
Oct 30 <sup>th</sup>		Selection and Description of 3 Companies Due
Nov 13 <sup>th</sup>	UVU	Workshop 4: Due Diligence II and Presentation
Nov 16 <sup>th</sup>		Investment Analysis Due
Nov 21 <sup>st</sup>		Top 5 Teams Announced and Paired with Mentors
Dec 3 <sup>rd</sup>		Final Presentation Due
Dec 4 <sup>th</sup>	BYU	Final Event + Winning Team Dinner



## Final Event:

December 4, 5PM – 7PM

## Assignments:

Investment Memorandum

**Due:** November 16

Finalists will be notified and paired with a mentor  
November 21.