



Valuation in a Digital World

Does It Matters?



Valuation in a Digital World

The Issues

Digital World and Innovation

Innovation and Valuation

Valuation models

Example: Snap Inc.



Valuation in a Digital World

Digital Matters



Valuation in a Digital World

World is changing



Valuation in a Digital World

Everybody is looking for Business Ideas which include Innovation

What Innovation?



Valuation in a Digital World

What Innovation?

Incremental Innovation:

- Proved Existing Technology
- New Products
- Existing Markets

Enterprise Automation; Augmented Reality



Valuation in a Digital World

What Innovation?

Breakthrough Innovation:

- Proved Existing Technology
- Existing Products
- New Markets

Insuretech; Healthtech; Blockchain.



Valuation in a Digital World

What Innovation?

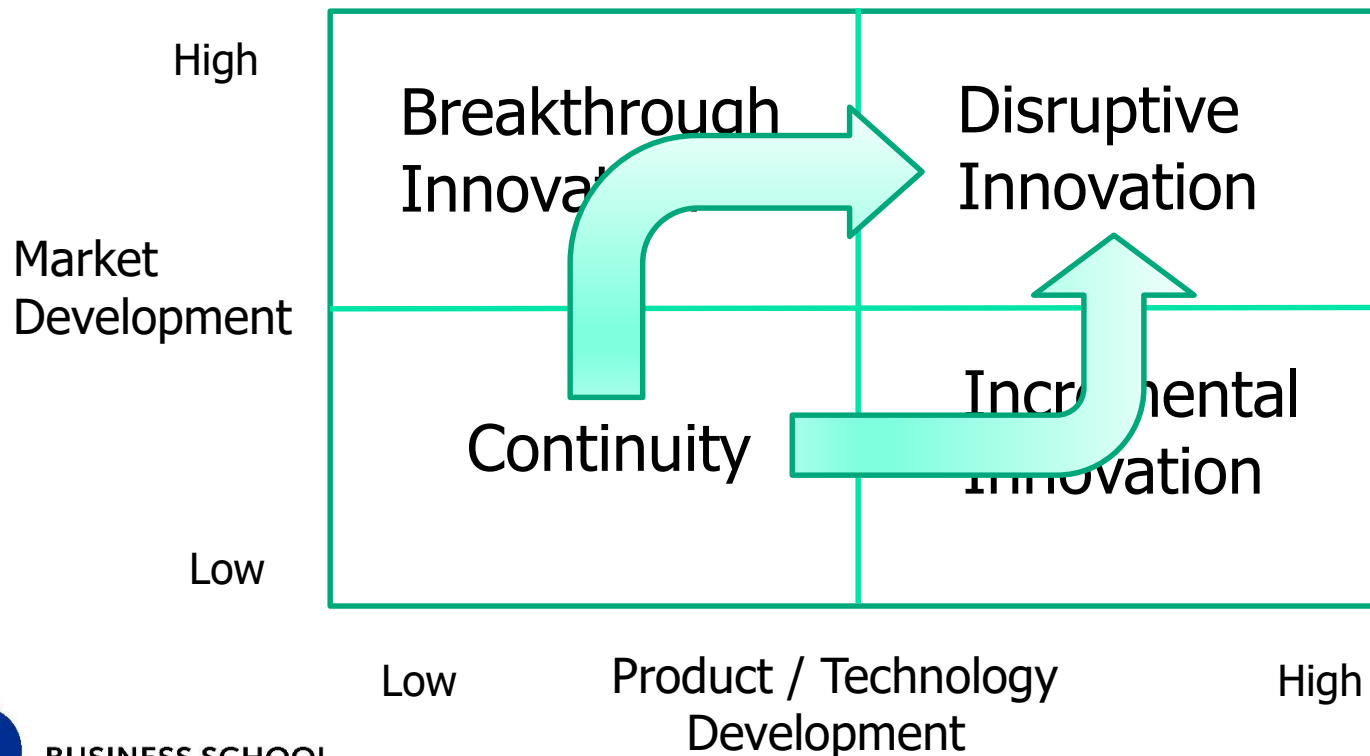
Disruptive Innovation:

- Non Proved Non Existing Technology
- New Products
- New Markets

Quantum Technology; Virtual Reality;
Robotics

Valuation in a Digital World

Innovation/Business Ideas





Valuation in a Digital World

To Innovate:

Develop new Products

new Services

new Markets

Internally: In-House

Externally: Acquisitions



Valuation in a Digital World

Valuation Matters



Valuation in a Digital World

Valuation Approaches:

Extrinsic: Market Value/Relative Value

Intrinsic: Fundamental Value/Base Value



Valuation in a Digital World

Extrinsic Valuation:

Do we have comparables?

Are we really facing a totally new situation?



Valuation in a Digital World

Intrinsic Valuation:

**Main limit of traditional DCF approach:
It does not measure the importance of
operational flexibility.**

**Operational Flexibility: In Amounts
 In Timing**



Valuation in a Digital World

In a Digital World, Operational Flexibility does have an important economic value.

I want to be there!!!



Valuation in a Digital World

How to Introduce Operational Flexibility in our Intrinsic Valuation Method?

In Amounts: Expected FCF
Probabilistic Sens. An.
MonteCarlo Simulation



Valuation in a Digital World

How to Introduce Operational Flexibility in our Intrinsic Valuation Method?

In Timing: Open Options
 Real options



Valuation in a Digital World

Measuring Intrinsic Economic Value:

1. Traditional DCF : No OF in timing.
Reduced OF in Amounts
2. Traditional DCF + Probabilistic SA:
No OF in timing
More OF in Amounts



Valuation in a Digital World

Measuring Intrinsic Economic Value:

3. Probabilistic DCF, using MonteCarlo simulations:

No OF in timing

Max OF in Amounts

4. Value of a Real Option:

Some/Max OF in timing

Max OF in Amounts

Valuation in a Digital World

Innovation/Business Ideas/Valuation

High	Breakthrough Innovation Probabilistic DCF	Disruptive Innovation Real Options
Market Development		
Low	Continuity Traditional DCF Probab. Sen. Anal.	Incremental Innovation Probabilistic DCF
	Low	High
	Product / Technology Development	



Valuation in a Digital World

Understanding the business idea /model

Understanding the valuation model

Matching Market Value with Fundamental Value: Reverse Engineering



Valuation in a Digital World

Some Acquisitions

<u>Buyer</u>	<u>Seller</u>	<u>Amount (billionUS\$)</u>	<u>Date</u>	<u>Reason</u>
Google	Motorola	12.5	Aug 2011	Defensive
Microsoft	Skype	8.5	May 2011	Defensive
Microsoft	Nokia	7.2	Sept 2013	Defensive
Google	DoubleClick	3.1	Mar 2008	Expansion (publicity)
Google	You Tube	1.6	Nov 2006	Expansion (video)
Facebook	Instagram	1.0	Apr 2012	Expansion (pictures)



Valuation in a Digital World

Some Acquisitions

<u>Buyer</u>	<u>Seller</u>	<u>Amount (billionUS\$)</u>	<u>Date</u>	<u>Reason</u>
Google	Nest	3.2	Jan 2014	New Market (Internet of things)
Facebook	Oculus	2.0	Mar 2014	New Market (virtual reality)
Facebook	WhatsApp	19.0	Feb 2014	New Markets



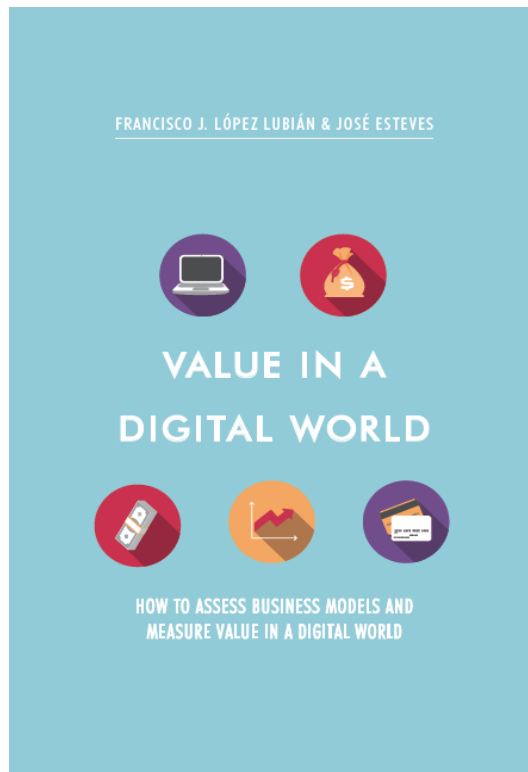
Valuation in a Digital World

How is this possible?

Institutional Investors: hedging
Portfolio Management

Profile of founders

Valuation in a Digital World

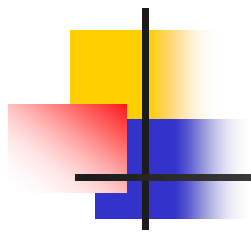


Linking:

Innovation models

Business models

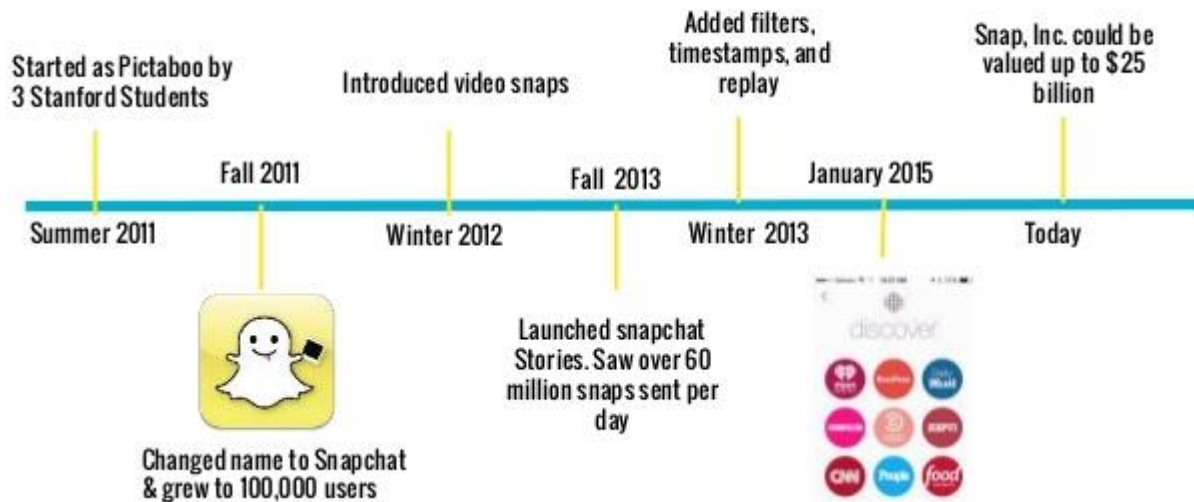
Valuation approaches



Snap Inc IPO (March 2017)

Snap Inc IPO (March 2017)

Background



Snap Inc IPO (March 2017)

Some Financial Facts (in thousands of US\$)

Assets			2015	2016
Cash & Equivalents			640.810	987.368
Other Curr Assets			51.754	192.617
Other Current Liabilities			174.791	343.936
Total Net Current assets			517.773	836.049
Net Fixed asassets			246.372	542.807
Total Net Assets			764.145	1.378.856
Debt			0	47.134
Equity			764.145	1.331.722
D + E			764.145	1.378.856

Snap Inc IPO (March 2017)

Some Financial Facts

Years			2015	2016
Revenues			58.663	404.482
CGS			-182.341	-451.660
Gross Margin			-123.678	-47.178
Opex			-258.051	-477.775
EBIT			-381.881	-524.953
Interest Inc			1.399	4.654
Interest exp			0	-1.424
EBT			-380.482	-521.723
Taxes			7.589	7.080
Net Earnings			-372.893	-514.643

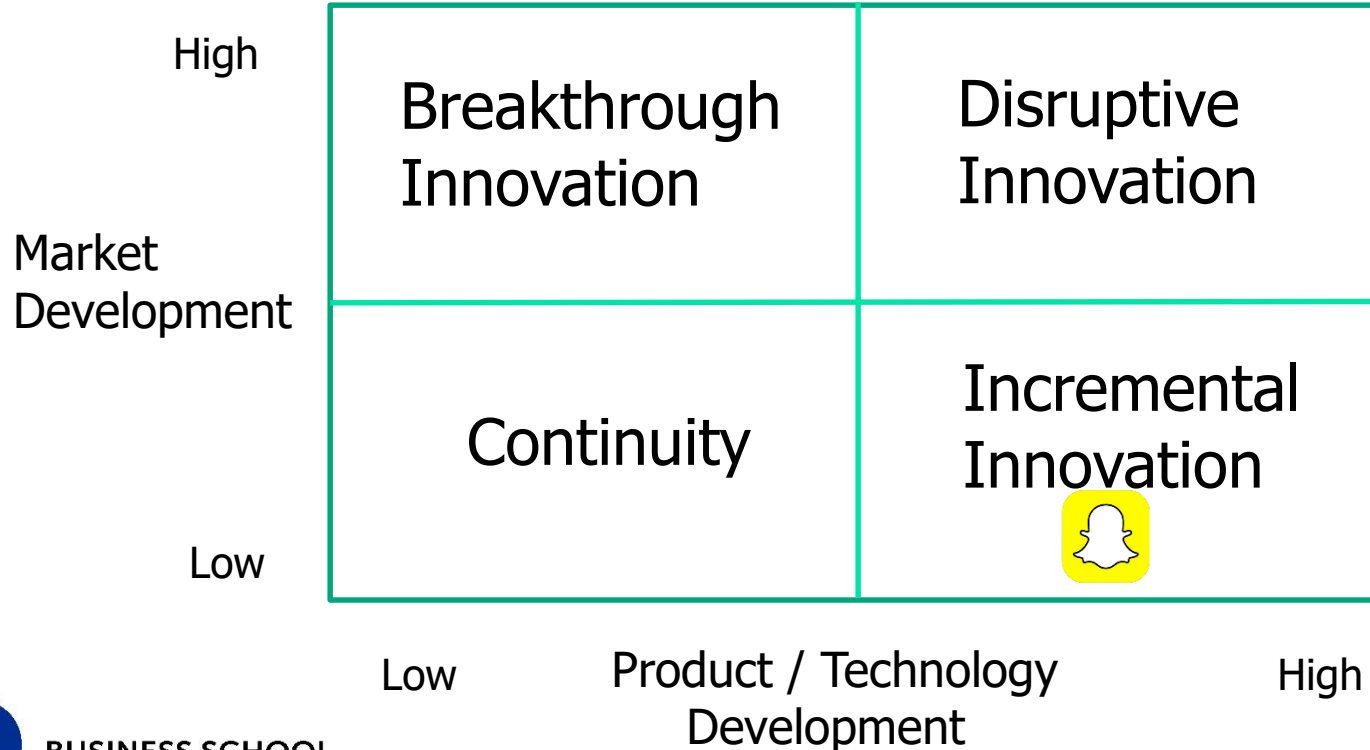
Snap Inc IPO (March 2017)

Some Financial Facts

FCF				2016
EBIT				-524.953
Taxes				7.080
EBIaT				-517.873
Deprec & Amor				29.115
FCF from Oper				-488.758
FCF from Ope WC				-318.276
Capex				-325.550
FCF				-1.132.584

Valuation in a Digital World

Where is SnapChat?





Snap Inc IPO (March 2017)

IPO at 2nd, March, 2017

Does Snap worth 20 billions?

Or 28 billions?

Accounting value = 1, 3 billions



Snap Inc IPO (March 2017)

IPO at 2nd, March, 2017

It started at 24 \$/share

It went to 29 \$/share next day

Now in 15 \$/share

From 20b to 12.5b

Volume from 217m to 13 m



Snap Inc IPO (March 2017)

Intrinsic value:

Part from FCF

Part from Real Option

What FCF and what type of Option?

Snap Inc IPO (March 2017)

Assumptions	1	2	3	4	5	6
Revenue	100%	100%	80%	70%	60%	50%
CGS	100%	90%	80%	70%	70%	70%
Opex						
R&D	40%	25%	5%	5%	5%	5%
Sales&Mark	25%	20%	20%	15%	15%	15%
Admin	40%	20%	10%	5%	5%	5%
Total	105%	65%	35%	25%	25%	25%
Other CA	150	120	90	80	70	60 days of sales
Other CL	200	150	100	90	90	90 days of CGS
Capex	50.000	51.500	53.045	54.636	56.275	57.964



Snap Inc IPO (March 2017)

With 20D/80E capital structure
And TV with implicit ROCE of 45,8%

EV = 14.4 billions

With ROCE at 10%

EV = 2.6 billions



Snap Inc IPO (March 2017)

As a Real Option,

Call Option would worth 20,000 only if

Future Price of 40,000

Volatility = 100%

$t = 5$ years



Snap Inc IPO (March 2017)

As a reference:

Call Option would worth 10,570 when

Future Price of 30,000

Volatility = 50%

$t = 5$ years



Snap Inc IPO (March 2017)

In Summary:

EV of Snap Inc coming from FCF: 2.6

EV of Snap Inc coming from RO: 7.2

Total EV of Snap Inc 9.8

Estimated Price: 11.8



Snap Inc IPO (March 2017)

What happened?

- 1) Instagram's reaction: copied features
- 2) Snapchat users going down:
who dominates the market?
- 3) Dark side of IPOs
Price: 18-29 Currently around 15



Valuation in a Digital World

Some Lessons:

1. Focus the valuation.
2. Understand the business idea/model.
3. Do not value as if it would become the only survivor.



Valuation in a Digital World

Some Lessons:

4. Analyze market value in terms of intrinsic value.

5. Use the appropriate intrinsic valuation methodology



Valuation in a Digital World

Some Lessons:

6. Understand the initial reasons.
7. Understand technical aspects
8. How to monetize the business model?
 - Microsoft and Skype: features of WhatsApp
 - Be careful with fashions/trends



Valuation in a Digital World

What is Digital World?

Digital world is not only
digital savvy.

Digital transformation



Valuation in a Digital World

Thank you!