



Challenges and Opportunities in New Space Financing

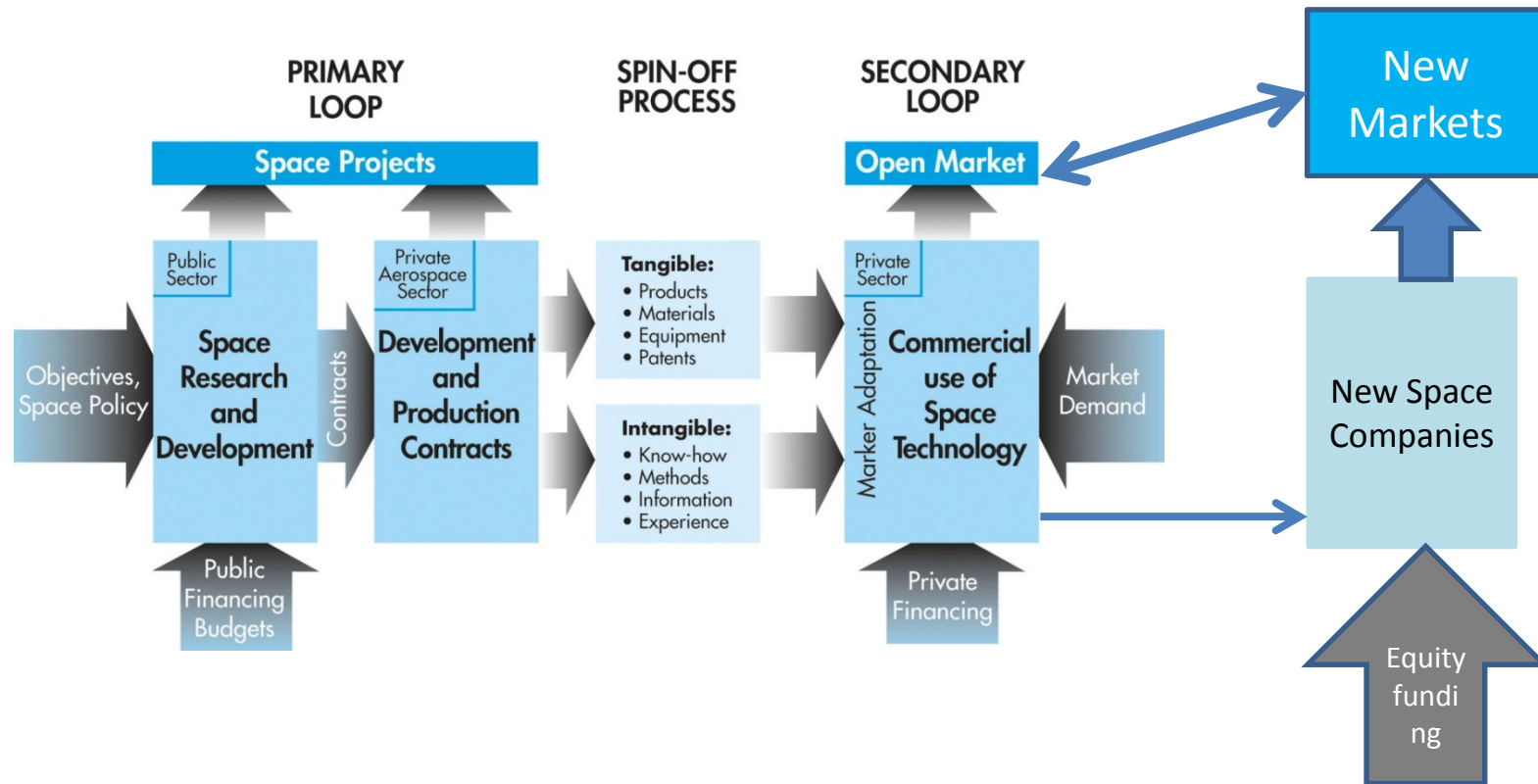
Sirius Workshop
Toulouse

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New Space Effect



“New Space”

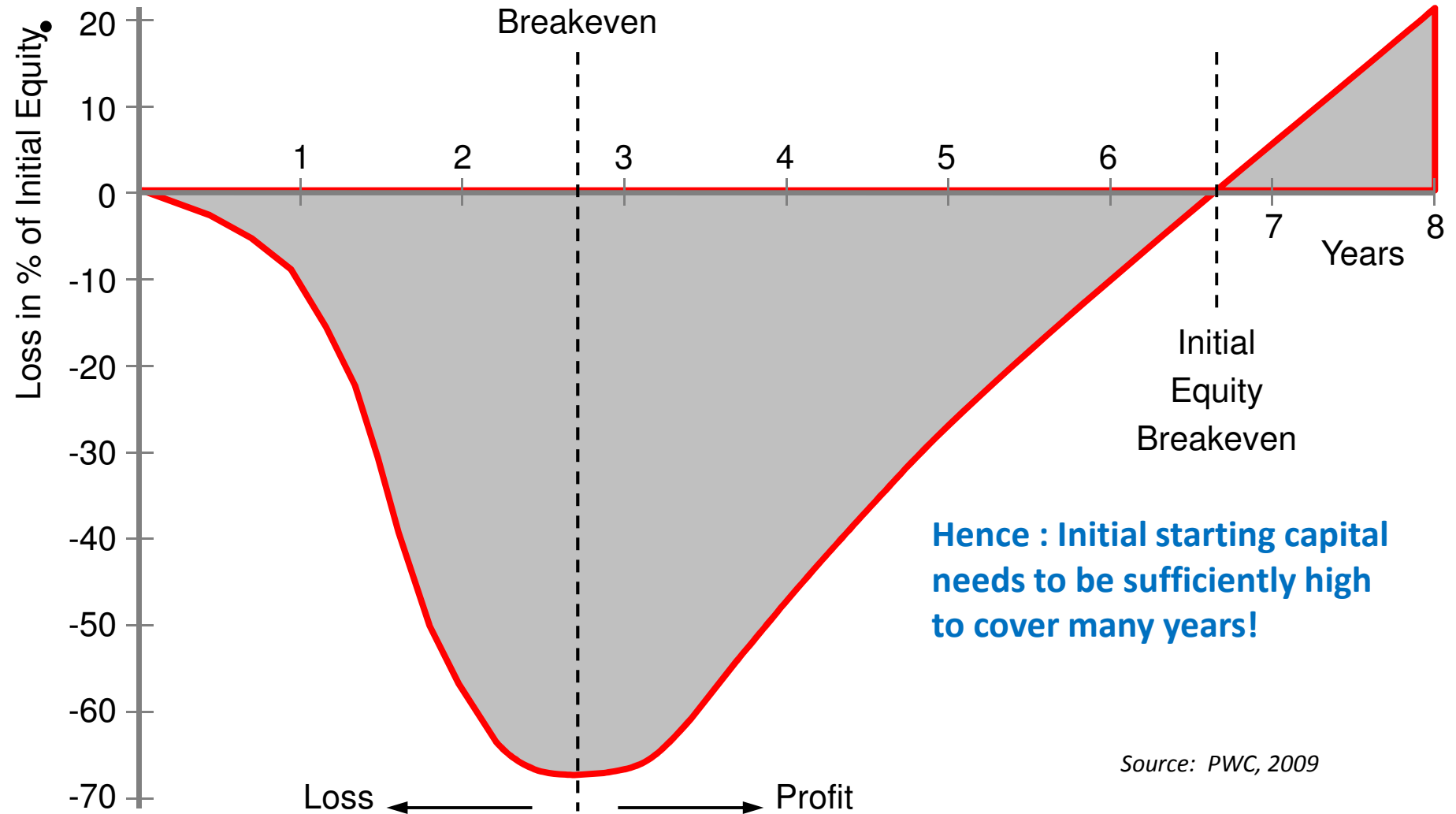
Proposed Definition:

Private companies which are independent of governmental space policies and funding, promoting cheaper access to space and affordable space applications

Equity and Debt

Equity	Debt
Provided by investor	Provided by banks
Involves ownership	No ownership
No collateral needed	Requires collateral
Seeks capital Gains	Interest and repayments
Dividend payments, performance based	Interest payments, regardless performance

Reaching Equity Breakeven

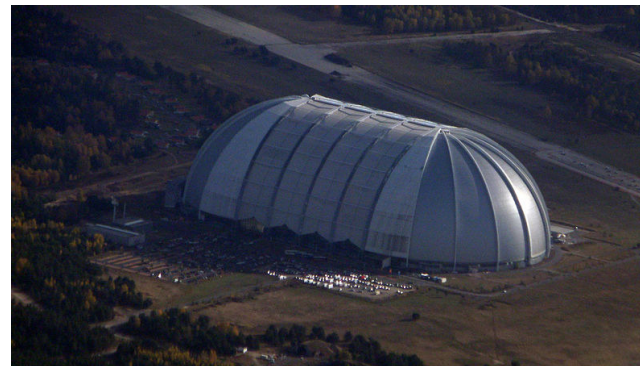


Example of TTM/Financing problem

- Start in 1996
- Transport of up to 160 tonnes via cargo airship
- Business model based on extra-heavy parts (3000 Km)
- Estimated starting capital 320 M€ equity quickly found
- Big construction hangar in 1999 (66000 sqm !)
- 1999 first test flights
- 1999 : **Enterprise of the year**
- End 2000 : operational flights promised to investors
- End 2000 : shares dropped
- 2001 : Cost-to-completion estimated at 720 M€
- 2001 : 50 m€ debt bridge loan refused
- **2002 : Bankruptcy**
- Now : Holiday park in hangar...



Status 2002



Equity Financing Sources

Investor	Motivation	Criteria
Founders , friends, family (FFF)	<ul style="list-style-type: none"> • Vision • Return 	<ul style="list-style-type: none"> • Confidence
Private , Business Angels, BAN's	<ul style="list-style-type: none"> • Idealism • Return 	<ul style="list-style-type: none"> • Opportunity
Financial , Venture capitalists, Private Equity	<ul style="list-style-type: none"> • Return 	<ul style="list-style-type: none"> • IRR • Product • Management
Crowd Funding	<ul style="list-style-type: none"> • Charity based • Small symbolic reward 	<ul style="list-style-type: none"> • Appealing to public

Notes: *HNWI= High Net-Worth Individuals* *IRR : Internal Rate of Return*

Crowd funding

2015 : 34 B\$ (VC : 30 B\$;

Business Angels 20B\$)

Equity crowd funding

only small portion (2.6B\$) :

Only accredited investors...


Kickstarter

- Arkyd (1.5 M\$)
- Lunar Mission One

All reward based...

MODEL
Of the Statue of

"LIBERTY ENLIGHTENING THE WORLD,"
Issued by the American Committee
IN AID OF THE PEDESTAL FUND.



THE American Committee in charge of the construction of the Base and Pedestal of this great work of art, in order to raise funds for completing their work, have prepared a *miniature statuette six inches in height*—The statue bronzed; pedestal nickel-silvered,—which they are now delivering free of expense to subscribers throughout the United States, at

ONE DOLLAR EACH.

This attractive souvenir and Mantel or Desk ornament is a *perfect fac-simile* of the model furnished by the artist.

The Statuette in same metal, *twelve inches high*, at

FIVE DOLLARS EACH,
delivered.

The designs of Statue and Pedestal are protected by U. S. Patents, granted to A. BARTHOLDI in 1878-79, and the models can *only* be furnished by *this Committee*.

The people of France donated the money to build the Statue and presented it to the United States of America.

Every American citizen should feel proud to donate to the *Pedestal Fund* and own a *Model* in token of their subscription and proof of title to ownership in this great work.

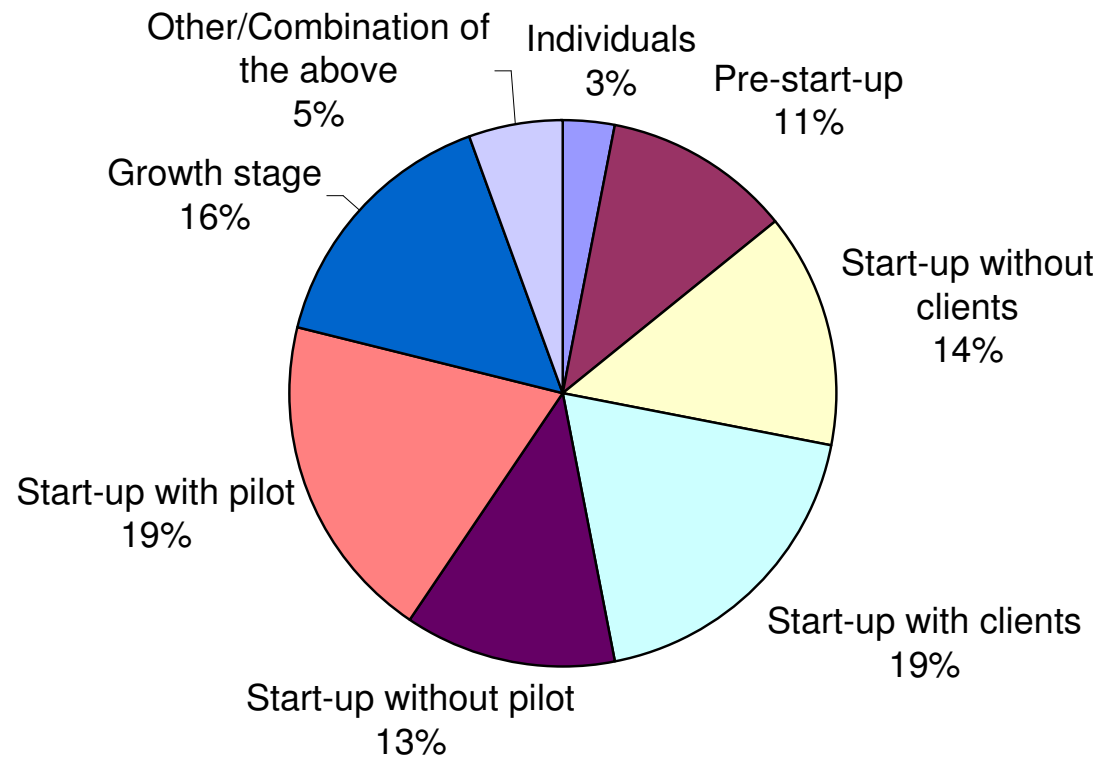
Address with remittance,

RICHARD BUTLER, Sect'y,
American Committee of the Statue of Liberty,
33 Mercer St., New York.

Orders Received Here.

VC Financing hints

At which stage do VC's prefer to finance?




Source: Financespace/ISU_2007

Venture Capitalists Exit Expectations

Category	Return	Percentage
High Flyers	> 10	10%
On Target	3-7	40%
Living Death	1	30%
Lemons	Written off	20%

Source : JKIC (2009)

Example : One page teaser for VC



Company Name: NVGame Studio
URL: www.traingame.net (sample only)
Industry: Digital Media
Employees: 1
Founded: July 2009

Contact:
 Lord Muck
Muck@traingame.net (sample only)
 Phone: +61 4 99 11 1213 (sample only)

Management:
 Lord Muck, Founder and CEO
 Dave Gamer, CTO and Game Developer
 Gun Oppenmanger, Engineer and Gamer

Financial Information: (Sample Only)
Funding Stage: Prototype Ready
Previous Capital Raised: \$50,000
Monthly Burn Rate: \$12,000
Pre-Money Valuation: \$500,000
Capital Seeking: \$500,000
Additional Information: Previous capital includes grants of \$10,000. Capital required to complete and launch product and for cash flow until breakeven.
 Planned exit is trade-sale 6 to 12-months after break even to existing businesses in this space.
Investors:
 My Angel Company Pty Ltd

(Sample Only for Training Purposes)

Financials AUD\$'000	2009	2010	2011	2012	2013
Revenues	0	250	450	900	1200
Expenditures	200	400	300	450	500
Net	(200)	(150)	150	450	700

Potential partners/acquirers: Microsoft Games, Electronic Arts, Sony Entertainment (sample only – haven't completed market research)
Sales/Marketing Strategy: A large scale on-line and social networking sales and marketing strategy will be implemented. Sales/marketing is focused on individual gamers and through gamer recommendation websites. Player gets player, and advertising through existing MMORPG game forums will be an important player acquisition strategy. Converting Players to Customers through in-game promotions will optimise revenues. One common problem is server lag which tends to affect all users at peak load times. A main incentive of becoming a Customer (with game credit) will be to increase the priority of server requests reducing game server lag.
Business Model: The game is free to download and play from web based browsers. Mobile Apps will attract a modest ~\$5 charge. Main revenue stream is generated at the TrainGameStore through the sale of game credits that enables players to purchase game aids and rewards that may assist their advancement in the game. Costs are in SEO and other on-line and viral marketing campaigns, operations (one server per 100,000 users), system security maintenance and development.
Competitors: There are thousands of competitors in the online game space. Most do not have a sense of community, are either too simple, too violent, or too complex.
Competitive Advantage: Priority Game Queue to reduce server lag for Customers vs Players (Free). Scales to many hundreds of servers. Each server can support 100,000 players.

One Line Pitch: NVGameStudio builds non-violent MMORPGs (Massive Multiplayer Online Role Playing Games). The first game under development, TrainGame, fills a gap in the space for an addictive, sophisticated and fun role playing game based on building simulated markets, railways, industries, towns and cities.

Business Summary: TrainGame is the first of a series of game titles NVGameStudio. Our exit in less than 4 years will be as a cash trade-sale of TrainGame and the intellectual property in future games (not disclosed at this time) to a large on-line entertainment company. NVGameStudios builds games with a scalable low cost structure where incremental costs are tied to the number of users. NVGameStudios is forecast to be cash-flow positive in less than 12 months after launch of TrainGame.

Customer Problem: There is a lack of engaging non-violent games targeting the 18-80 age group. TrainGame takes the established genre of market simulation games to the MMORPG community. Customers generally don't want to buy games until they try them out. Players can play TrainGame for free through a simple email/password registration however the opportunity to register to become a customer and purchase TrainGameDollars provides the opportunity to advance in the game and experience increased game play options.

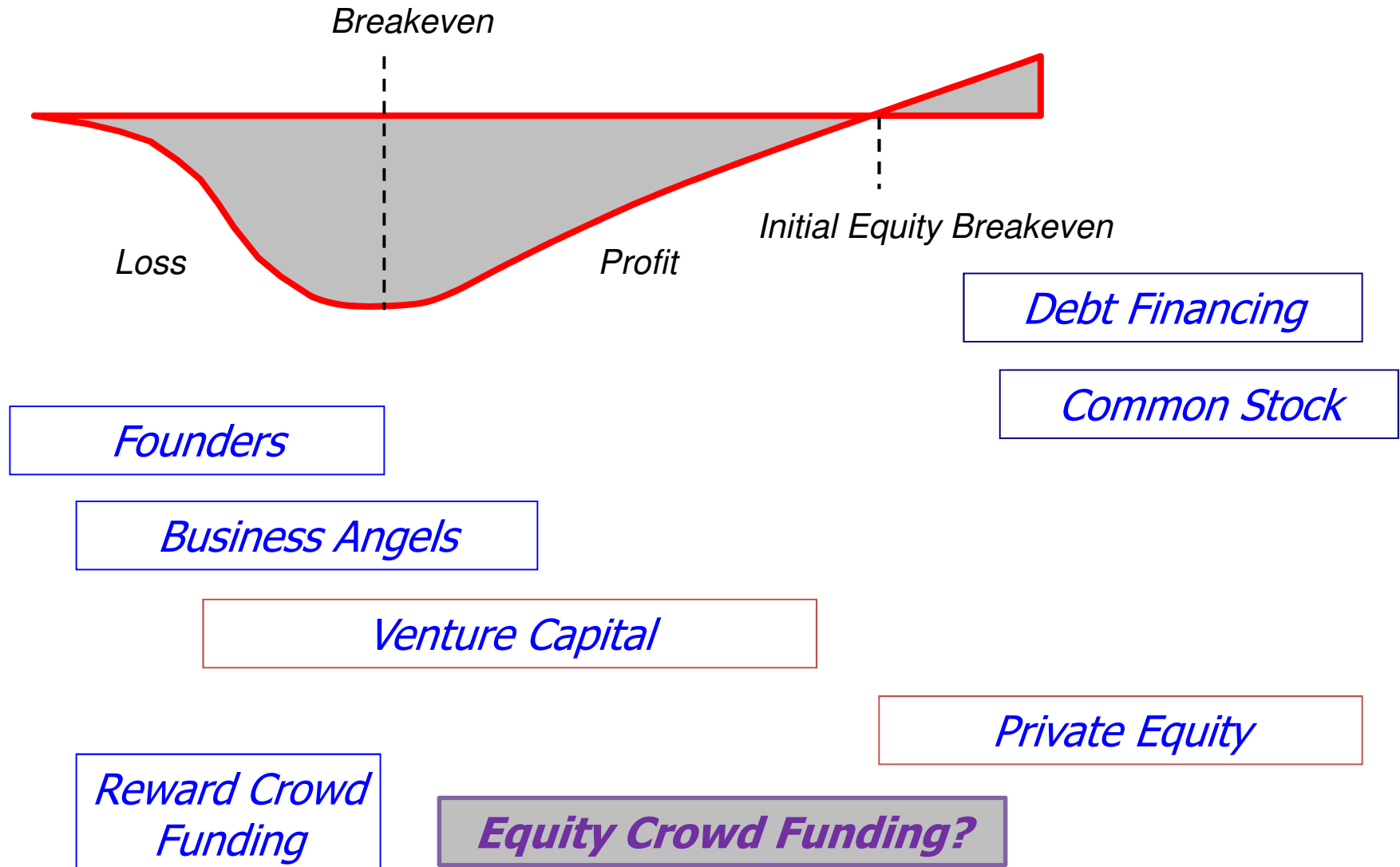
Product/Services: NVGameStudios games are web based MMORPG. Consisting of a thin web-based flash client (~3MB download) and mobile (iPhone, Symbian and Android from app stores) thin clients for continual game play. The TrainGame servers host communities of players that can either play individually or as part of a Community. Increased game play, trade and building capabilities and teamwork can be achieved through these communities. Every element of the game is directed to (a) maintaining the interest of the player and (b) giving the player the ability to advance more quickly by becoming a customer of the TrainGameStore.

Target Market: 18-80 Age Group. Both Males and Females will be targeted with online roles not having any age or sexual bias. Especially targeting non-violent gamers that would like to build a community, an industry, a town, city or an empire.

And just in case you haven't got the message yet:
 SAMPLE ONLY FOR TRAINING PURPOSES

Investors over Time

Loss in % of Initial Equity



Discussion points

- **In New Space activities a usual/traditional financing flow:**
 - Start with own/family money (FFF)
 - First financing round via a Business Angel (Network)
 - Attract Venture Capitalists with good Business Plan (leaving 4-6 yrs)
 - Finance operations with Equity Investor, stocks or debt financing
- **Crowdfunding** can be a good alternative start for space projects, but mainly still reward based (<30K)
- **Equity based crowd funding** could be an interesting gap filler
 - Regulations need to be adapted
 - How to determine shares?
 - Dividend mechanisms?
 - New rules to be created!