



EPFL alumni start-up support club

Entrepreneurial finance course, March 27 2009

<http://www.epfl.ch/a3/angels>
<http://wiki.epfl.ch/a3-angels>

Agenda

- A³ Angels objectives
- Comparing with US experience
- Who are A³ Angels ?
- Contributions to startups
- Project history and status
- About investments



The opportunity to support technology startups with alumni of EPF-Lausanne

Objective

- Attract qualified A3 members using reasonable selection criteria
- Invest in projects having growth potential within EPFL environment
 - Pooled or individual investment models
 - Significant contributions for early stage : seed money + networking
 - Facilitate access to other financing by Angel clubs and VCs
- Attract senior mentors to complement existing coaches .
 - Free consulting
 - Project improvement, reserve force
- Build sustainable organization
 - Appoint officers
 - Attract investors and mentors A3
 - Evaluate and improve (metrics and feedback)
 - Complement A3 services (young alumni award, 0% loans)

A³ Angels within EPFL environment

250 Laboratories



Coaching

Education

>10'000 on campus

>25'000 with University

Incubator

90→150 on site

Networking

>14'000 alumni in 110 countries

- Sections : CH, F, USA, P, China...

Events

- Alumni day (Mondial)
- Innovation days

~60 alumni in synergy with other players
Alumni bring different skills and experiences

Source : PSE, A3



Can **US experience** be adapted by **alumni** of EPF-Lausanne ?

MIT Entrepreneurial Ecosystem



Entrepreneurship Society



MIT
Entrepreneurship
CENTER



MIT Entrepreneurial impact

- 25,800 active companies founded by MIT alumni
- Employ about 3.3 million people
- Generate annual world sales of \$2 trillion
- Equivalent of the 11th-largest economy in the world.

Jobs	Percent of Companies	Median Employees	Median Sales (Millions)	Estimated Total Employees	Estimated Total Sales (Millions)
More than 10,000	0.3%	15,000	1,523	1,339,361	1,389,075
1,000–10,000	1.8%	1,927	308	1,043,932	235,532
Others (Employment known)	97.9%	39	11	900,001	226,671
Total	100.0%	155	3	3,283,294	1,851,278

Source : Edward B. Roberts and Charles Eesley, MIT Sloan , February 2009

MIT Venture Mentoring Service Goals



- VMS is based on the belief that:
a venture is more likely to thrive when an idea, a good business plan and an entrepreneur are matched with proven skills and experience.
- Highly qualified mentors find it compelling and rewarding.
- Both mentors and entrepreneurs benefit.
- Mentoring works best when un-biased and no strings attached.

Jerome Smith, Co-Director, vmsoutreach@mit.edu

MIT Venture Mentoring Service Expectations



- Mentors
 - 1-2 days of mentoring each month (minimum)
 - Attend Monthly Review Meetings
 - Discretion and confidentiality
 - Adherence to guidelines
 - Role
 - Listen
 - Advise
 - Suggest
 - Anticipate
 - Troubleshoot
 - Supply Contacts
 - Role Model
- Entrepreneurs
 - Serious about learning, making progress
 - Prepared – do homework and submit agenda + materials
 - Keep in regular communication – be responsive
 - Give us the whole story
 - Don't come to us purely for \$\$\$ or connections

Jerome Smith, Co-Director, vmsoutreach@mit.edu

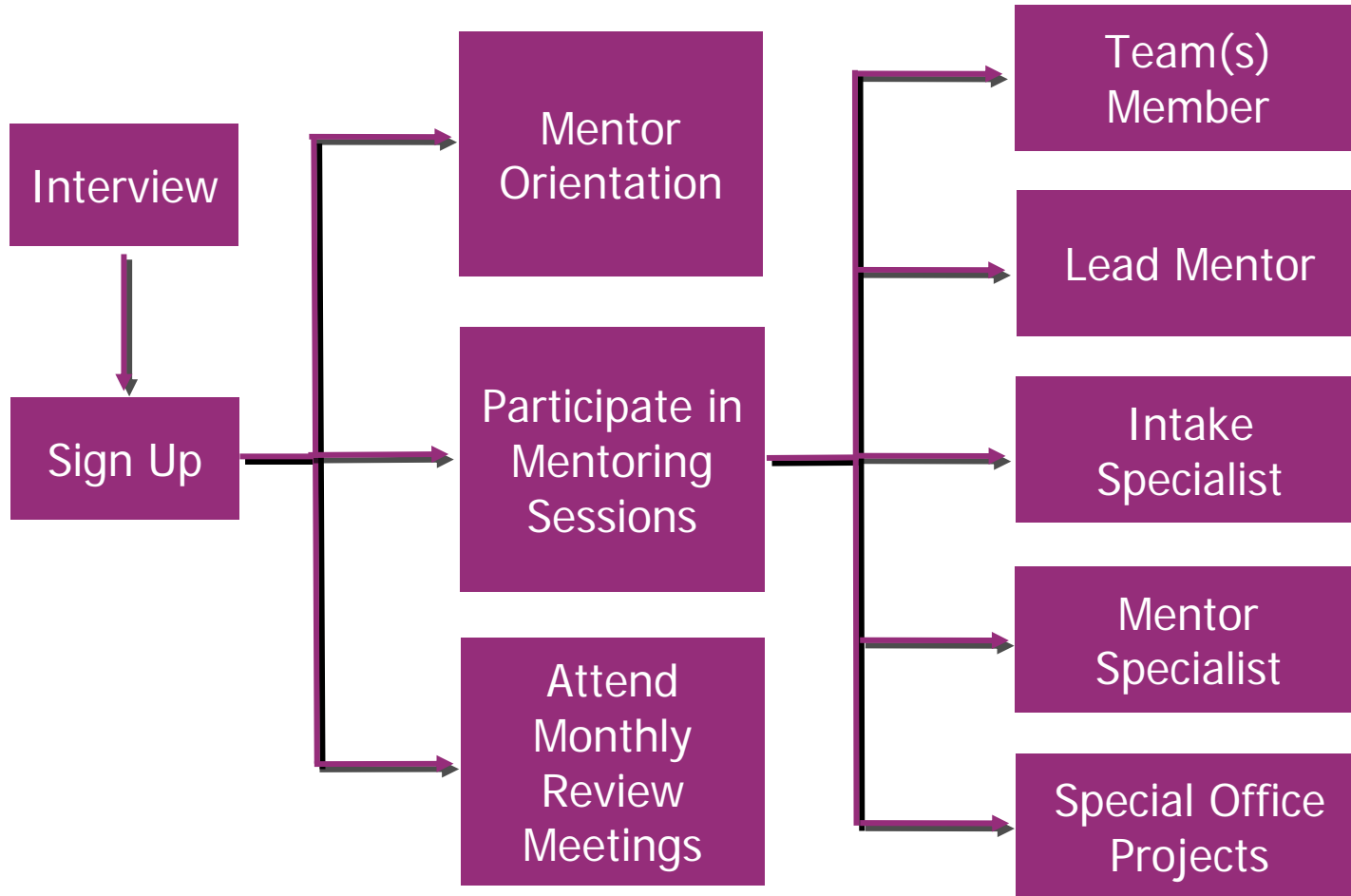
MIT Venture Mentoring Service Results



- 133 mentors of record
- 107 mentors
- 56% with an MIT background
- Most with startup experience
- Broad range of:
 - backgrounds
 - motivations
 - technical + industry expertise
 - business expertise
- 238 ventures of record
- 98 active ventures
- 50 launched/executing
- 6 liquidity events
- Various stages of funding - over \$520M raised
- Every field imaginable

Jerome Smith, Co-Director, vmsoutreach@mit.edu

MIT Venture Mentoring Service Process

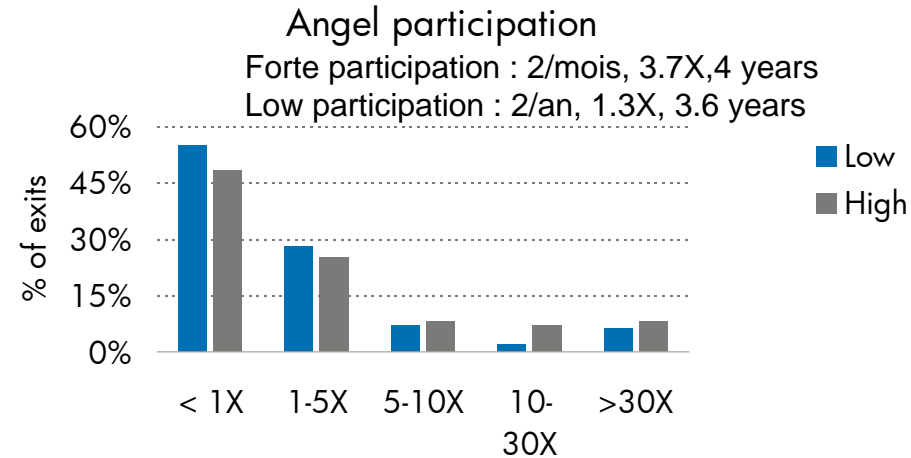
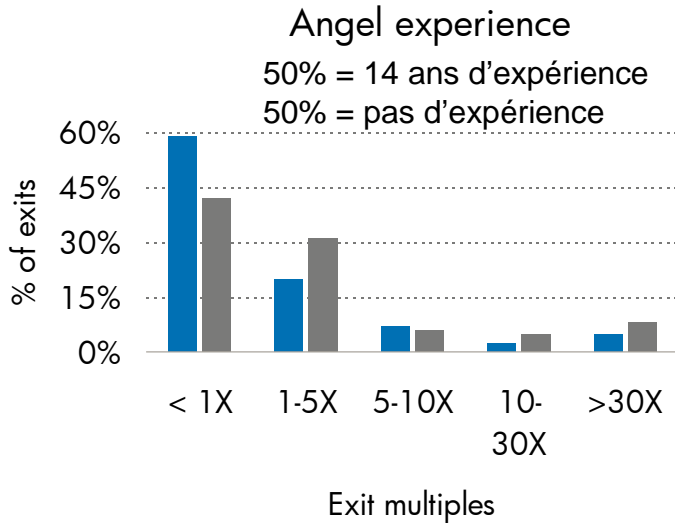


Venture Financing : USA / Europe

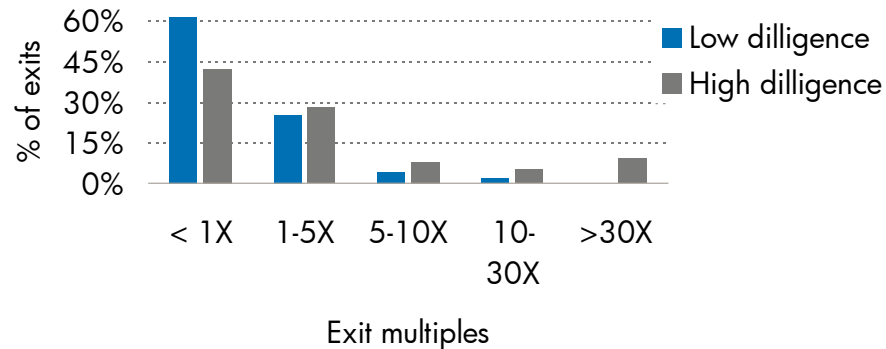
	USA	Europe
Angel groups	<ul style="list-style-type: none"> ✓ 245 established ✓ 324 in formation ✓ 12'000 angels 	<ul style="list-style-type: none"> ✓ 297 established ✓ 16'500 angels
Angel Investment	<ul style="list-style-type: none"> ✓ 26'000 M USD/year ✓ 265 K USD/round ✓ 57'100 angel backed companies 	<ul style="list-style-type: none"> ✓ 184 M €/an ✓ 165 K €/deal ✓ 1100 deals
VC Investment	<ul style="list-style-type: none"> ✓ 30'500 M USD/year ✓ 3912 deals 	<ul style="list-style-type: none"> ✓ 184 M €/an ✓ 264 K €/deal ✓ 690 deals

Source : EBAN statistics 2008; NVCA and PWC Center for Venture Research, www.nvca.org

Impact of Angel investors



Diligence average : 20 heures, 26% >40 heures



Source : Kauffman Foundation
Nov 2007, N= 86 angel groups =
539 individual angel investors.

A man with grey hair, wearing a light blue button-down shirt, is shown from the chest up in the foreground. He has a thoughtful expression, with his hand resting on his chin. The background is a large-scale construction site at night, featuring a multi-story building's steel framework illuminated by warm construction lights. The sky is dark, and the overall scene conveys a sense of industrial activity and contemplation.

Who are
A³ Angels ?

Who are A³ Angels ?

Members	A ³ Senior Angel	A ³ Micro Angel
Profile	<ul style="list-style-type: none"> ✓ < 20 Successful entrepreneurs ✓ Senior managers active or retired 	<ul style="list-style-type: none"> ✓ >30 members ✓ 40+ years old ✓ Active professionals>
Contribution	<ul style="list-style-type: none"> ✓ Mentoring ✓ Individual investments > 50KCHF ✓ Sweat 	<ul style="list-style-type: none"> ✓ > 20 CHF x 3 year pooled seed ✓ Reserve employees ✓ Active business development network
Motivation	<ul style="list-style-type: none"> ✓ Mentoring ✓ Relationships ✓ Technologies ✓ Interest in region 	<ul style="list-style-type: none"> ✓ Sharing expertise ✓ Long-term money ✓ Entrepreneurs interest ✓ Interest in technology

Who are A³ alumni : role models

ventureideas

The I&C GSA Entrepreneurship Pizza Talk series
Interested in Start-ups: join us to learn from successful entrepreneurs
EPFL – INM202 at 12h
Pizza will be served starting at 12h

Friday October, 3rd
 **Jochen Mundinger**, founder and CEO Routerank
Selling your start-up idea

Friday October, 10th
 **Vincent Schickel**, founder and CEO Predigio
The day of a start-up CEO

Friday October, 24th: Panel on Entrepreneurship
Life after PhD: the entrepreneurial career

ventureideas@EPFL
 Can a world-class high tech start-up be built in Europe? Learn from the most successful entrepreneurs.

With
 **Aart de Geus**
 Chairman of the Board and CEO of Synovate
 Building a world leader in EDA

 **Pierre Fazan**
 Co-founder and CTO of Innovative Silicon
 Developing the next revolution in memory

 **Oscar Buset**
 President of Kimotion

March 30th, 2006
from 13h30 to 17h00, SG1
 Registrations: www.venturelab.ch/fr/v

ventureideas

The I&C GSA Entrepreneurship pizza talk series
Interested in Start-ups: join us to learn from successful entrepreneurs
EPFL – INM202 at 12h

Wednesday November, 29th
 **Mark Bürki**, co-founder of Swissquote
 **Paolo Buzzi**, co-founder of Swissquote
 How engineers built the future of tomorrow, the story of Swissquote

Wednesday December, 6th
 **Pedro Bados**, founder and CTO Nextthink
 From my EPFL diploma: the way and experiences to build a company

December 8th: Entrepreneurship workshop
Your turn
 Do the first steps to launch your project
 Learn how to pitch and get feedback

ventureideas@EPFL
 Participez à l'innovation en marche, découvrez les idées du futur.

Avec
 **Pierre Chappaz**
 Fondateur de Kelkoo
 vendue à Yahoo, \$500M

 **Eric Favre**
 Inventeur de Nespresso
 Fondateur et CEO de Monodor
 et de nombreux innovateurs, inventeurs

Le 24 novembre 2005 de 14h à 18h
Auditoire SG1, EPFL
 Inscriptions: www.venturelab.ch/fr/ideas.asp

L'Innovation Network • Le Collège du Management de la Technologie
 Venturelab, une initiative de la CTI, Agence pour la promotion de l'innovation

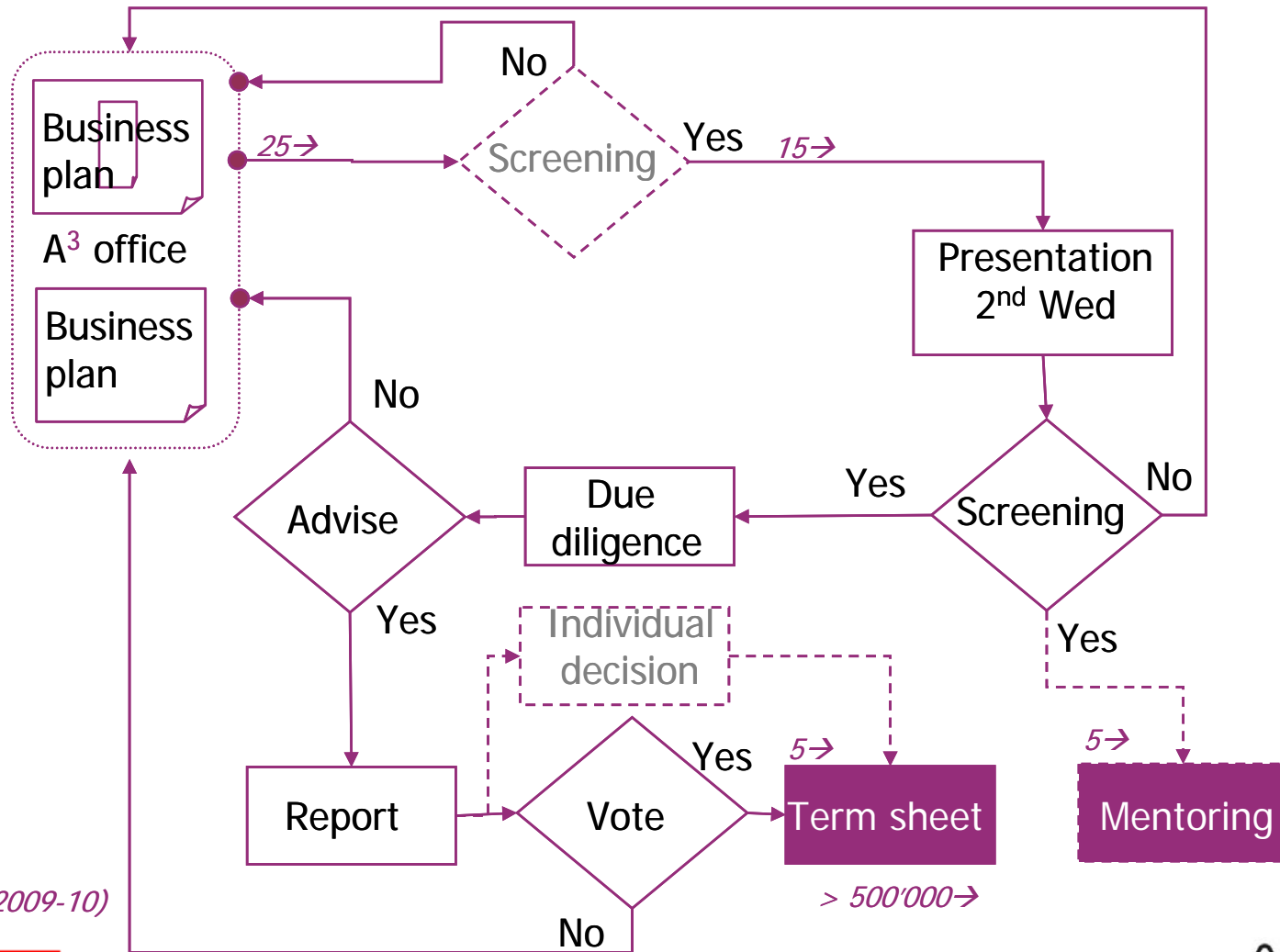
L'Innovation Network de l'EPFL
 Le Collège du Management de la Technologie
 Venturelab, une initiative de la CTI, Agence pour la promotion de l'innovation

Source : Herve Le Bret, EPFL



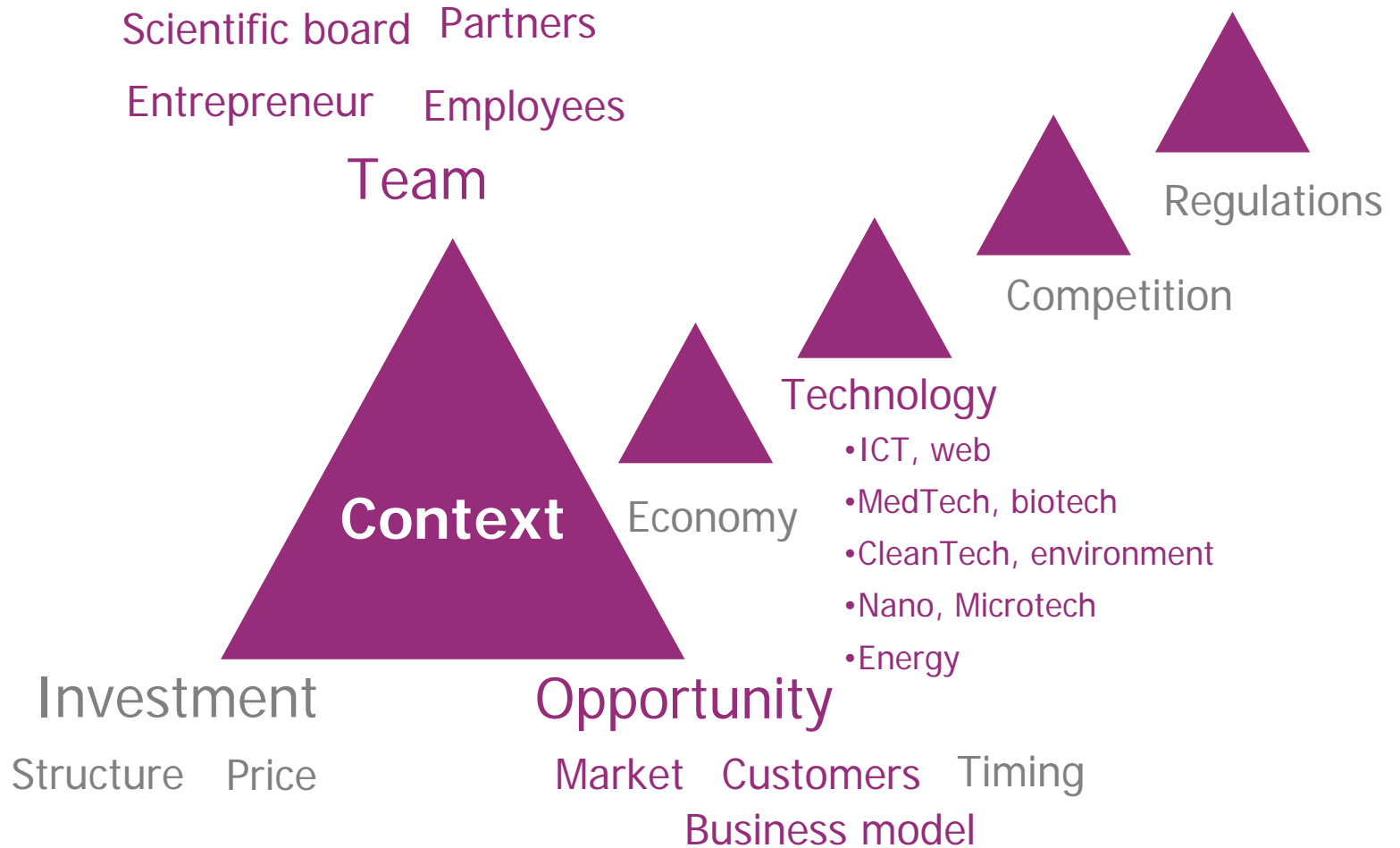
Contribute pieces to the **coaching**
and financing programs

A³ Angels decision process



(→ objective 2009-10)

A³ Angels decision process



Source : William Sahlman, Harvard Business School

100 good questions

1. Business model ?
 2. Why would customers buy ?
 3. Are gross margins sufficient ?
 4. Market size ?
 5. Key challenges ?
 6. Unique points : cost, technology, product features, marketing, financing, team
 7. Key bets ?
- ...

Source : The start-up process, HBS, case 394-067 John van Slyke et al.

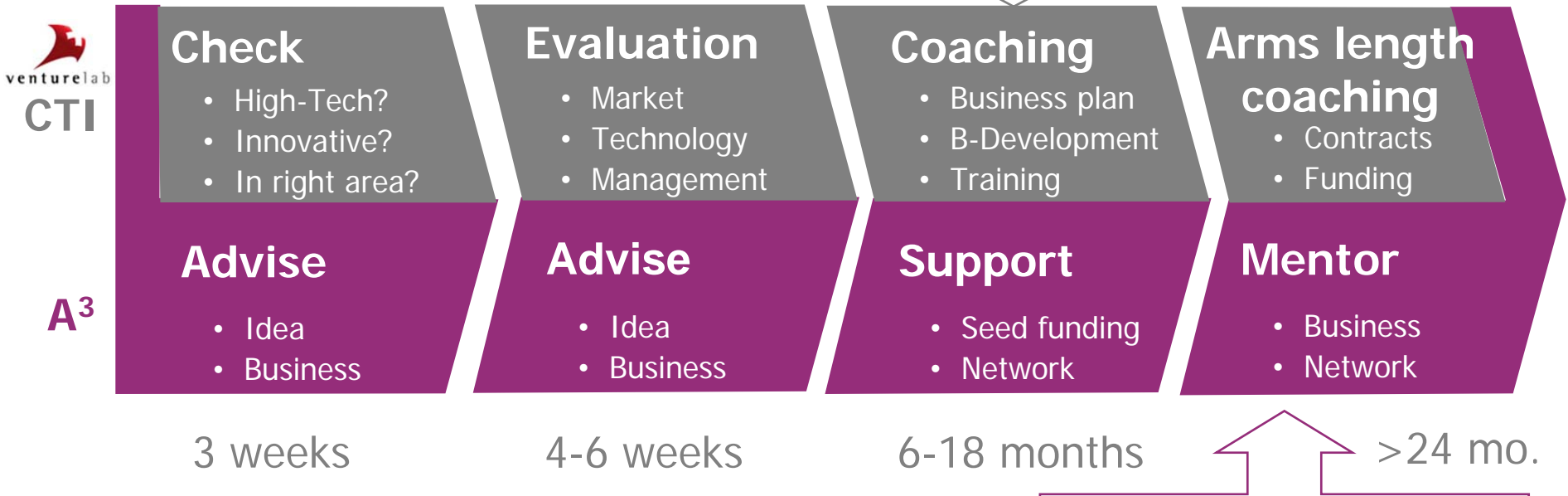
A3 Angels mentors : early-stage focus

Product development	Customer acquisition	Customer development
<ul style="list-style-type: none"> ✓ Market research ✓ Standards ✓ Engineering talent ✓ Alpha, Beta, GA ✓ QA 	<ul style="list-style-type: none"> ✓ Value proposal ✓ Competitive position ✓ Lead generation ✓ Pipeline ✓ Sales & channels 	<ul style="list-style-type: none"> ✓ Field operations ✓ Customer service ✓ Customer satisfaction ✓ Lifetime value
Team building	Finance & Admin	
<ul style="list-style-type: none"> ✓ Interview ✓ Recruit ✓ Manage ✓ Compensate ✓ Evaluate ✓ Develop ✓ Integrate 	<ul style="list-style-type: none"> ✓ Business models ✓ Controls ✓ Financing ✓ Plans and budgets ✓ Cash management ✓ Monitor and report ✓ Prospective 	

Source : Valhalla Partners

A3 Angels mentors : work with CTI coaches

> 40 CTI professional coaches with entrepreneurial experience



A3 volunteer mentors with professional experience

Source : CTI + A3

How did we start A³ Angels at EPFL ?



Project history

- June 6, 2008 : proposal during A³ alumni event
- August – September : market research A³ , startups, CH, UK & USA. Encouragements from EPFL, CTI, IMD, PSE.
- November 12, 2008 : project approved by A³ GA
- December 17, 2008 : 1st monthly meeting
- January-March 2009 : ~ 60 A³ attendees, 9 start-ups
- June 5, 2009 : group meeting



prediggo®

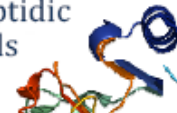


routeRANK

Novel Peptidic
Biologicals



koobal



Sample analysis of requirements

(~70 face to face interviews)

	Aleva	Clicmobil
A. Parrainage et personnel intérimaire		
A.1. CEO Intérimaire, aide au recrutement	✓	⊖
A.2. Fourniture d'expertise sectorielle	⊖	⊖
A.3. Encadrement fonctionnel intérimaire		✓
A.3.1 Business development		
A.3.2 Direction production / engineering		
A.3.3 Assistance financière et administrative	✓	
A.3.4 Assistance marketing et vente		
A.3.5 Ressources humaine et aide au recrutement		
B. Conseil en stratégie marche		
B.1. Validation niche et possibilité de croissance	✓	
B.2. Amélioration business plan et stratégies		
B.3. Aide à l'identification de la croissance		
B.4. Identification de besoins immédiats		
B.5. Amélioration de la proposition de valeur		
D. Conseil en gestion de Produit / Service		
D.1. Structure, produits, prix, procédés		⊖
D.2. Evaluation de la compétition	✓	
D.3. Analyse des barrières d'entrée		
D.4. Analyse du dynamique temps		
D.5. Identification d'alliances stratégiques		
F. Financement complémentaire	✓	
F.1. Financement stages initiaux	✓	
F.2. Conseil pour le pitch VC	⊖	⊖

Minutes des réunions préparatoires – Statut 29/09/2008



Minutes des réunions préparatoires

Le but de ces réunions préparatoires est l'investigation d'un club d'investisseurs/angels A3. L'idée a été suggérée pendant la réunion Back to the campus en Juin 2008. Ces entretiens sont prévus pendant le 3eme trimestre 2008 pour permettre les décisions et l'établissement d'un programme approprié.

- **Reunions membres A3** : Quelles seraient les prestations et la structure préférée par des membres de l'A3 ?
- **A3 rencontres** : Sandra Guselo (GC00), Mark Menloradt (MT90), Olivier Trancart (EL83), Pascal Brosset (EL83), Allen Ugnat (EL80), Jean Bailod (EL82), Pedro Patva, Philippe Gugliemetti (T788), Mario El-Khoury (EL87), Carlos Da Silva Barolo (EL79), Marc Saint-Denis (Mark 86), Robert Swieik (SC94), Pierre Tasso (EL),
- **Informations A3** : Jean-Claude Mouly (EL61), Jean Galais (ME83), Hubert Gauvain (EL74), Roland Melis (EL84), Olivier Gouin (ME80), Sauro Nicli (PH85), Jacques Essinger (PH85, 86), Olivier Broto (GC87), Damien Tassy, (MT95),
- **Reunions start-ups** : Quels sont les besoins des entrepreneurs et leur attentes face à un tel service ? Sociétés rencontrées : Kicoba, Clicmobil, Aleva, Scanlight, Guagliariello, (ME83), Olivier Broto (GC87), Chantal Hauser, (PH 67) Francois Gabela
- **Reunions structures corporates** : Quelles sont les complémentarités avec les structures existantes : CTI, VentureLab, PSE, contacts VCA (EndeavourVision, Oct Gestion) et clubs de business angels (BAS, go Beyond) suisses ?
- **Informations sur des expériences similaires** : Cambridge, MIT, Stanford, Bibliographie et références (étude en cours)

Les conclusions et décisions à prendre :

- Un évènement start-up annuel peut être organisé, avec les étudiants et les prix de type Venture lab de manière très similaire aux programmes d'autres campus. La recommandation est d'impliquer l'Agepoly et les jeunes alumni.
- Plusieurs alumni se disent intéressés à des programmes de coaching, sans nécessairement faire intervenir de financement. Un programme de sélection et d'encadrement professionnel serait nécessaire pour répondre aux besoins des start-ups. Le modèle MIT VMIS est un bon exemple. Il nécessite un secrétariat permanent. Il existe un besoin de code conduite éthique et juridique.
- Au moins une dizaine d'alumni sont intéressés à fournir de l'investissement early-stage de type Angel. Les expériences réussies demandent un encadrement professionnel et donc un budget annuel d'au moins 20 KCHF (an et donc un sponsoring. Les modèles de départ tels que la fondation Kautzman, Go Beyond sont nombreux. Deux options existent : micro-investissement (10-20KCHF/Fin) ou mini-investissement (50KCHF, plus efficace) permettrait à des alumni de participer. Il existe un besoin de code conduite éthique et juridique.



Claude Florin, EL 82 claud.florin@a3.epfl.ch



Analyze and meet international ecosystems

- MIT venture capital & private equity club
 - [MIT Venture Capital Conference](#)
 - [MIT Venture Competition](#) (100K\$)
 - MIT VENTURE mentoring service
- Cambridge University technology and enterprise club
 - Where Angels Dare
 - CUE business plan competition (£15,000)
 - Technology Ventures conference
 - i-Teams



Work plan

3 Angels
ASSOCIATION DES DIPLÔMÉS DE L'EPFL

Activités de gestion prévues en 2009

Commentaires	Responsabilités			
	Membres	Comité	Conseil	Secrétariat
Administration				
Réunions des membres				
Agenda			(P)	X
Invitations				X
Suivi inscriptions			(P)	X
Logistique			(P)	X
Préparation documents				X
Minutes et votes				X
Autres réunions				X
Calendrier				X
Agenda				X
Invitations				X
Confirmations				X
Suivi des actions				X
Divers				X
Documents de travail				X
Annuaire				X
Rapports				X

S.E.C.A.
Société Privée SpA à Capital Financé Association
Société Privée à Capital Financé Association
Société Privée à Capital Financé Association

Term Sheet

Finanzierungsplan: Serie (100) Vorkapital

Gesellschaft
Investitionsbeitrag
Investition
Art der Aktien
Annahmefrist
Preis pro Aktie
Bewertung

Angelsoft | Investors | Entrepreneurs | Industry | LOGIN »

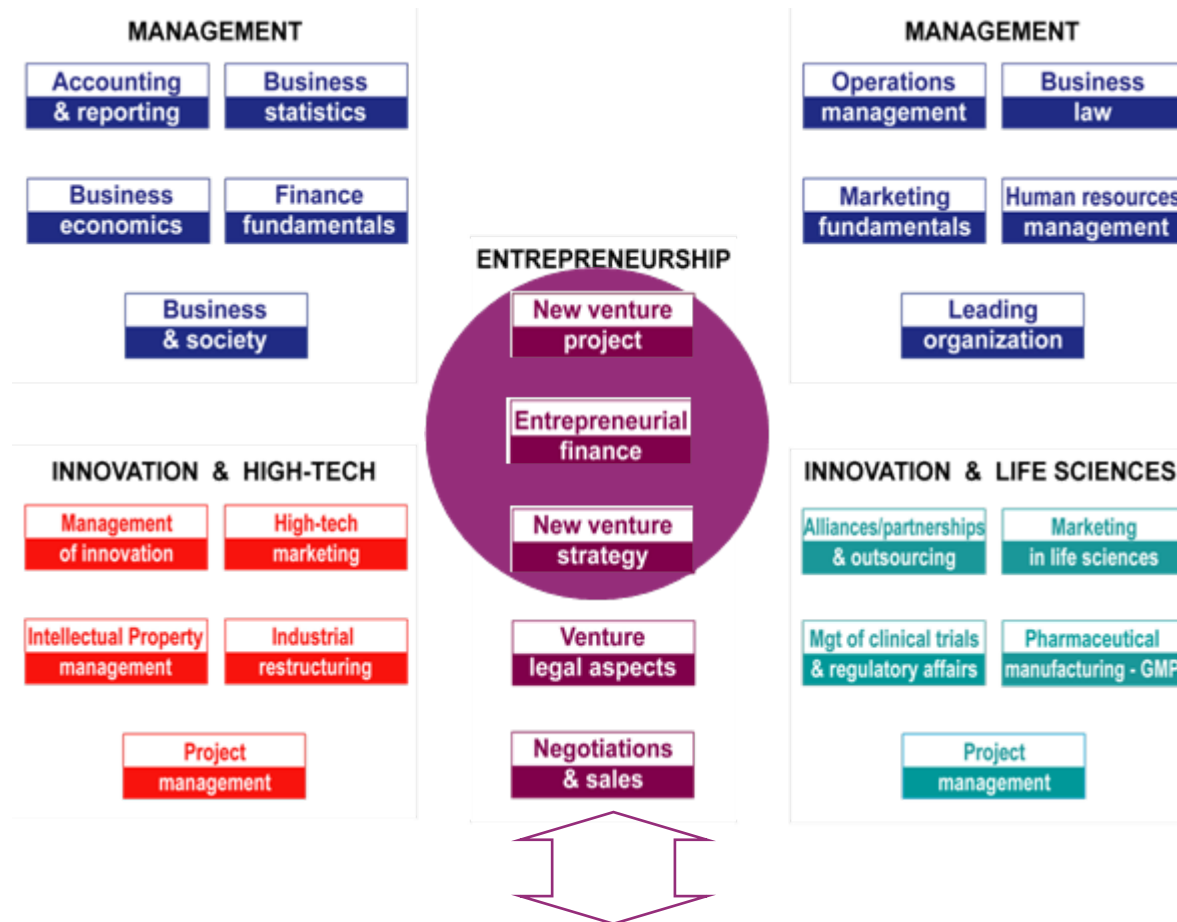
Investors: Group Tools

OPENdeals

GROUP DEALS | GROUP DOCUMENTS | GROUP MESSAGES | GROUP EVENTS | GROUP MEMBERS

- Administration
- Investment (Term sheet and trust admin)
- Members
- Mentoring service
- IT (deal collaborative platform of www.angelsoft.net)

A3 Angels and EPFL collaboration



Source : Prof. Jean Micol, MoT

A³ Angels members and EPFL students support each other

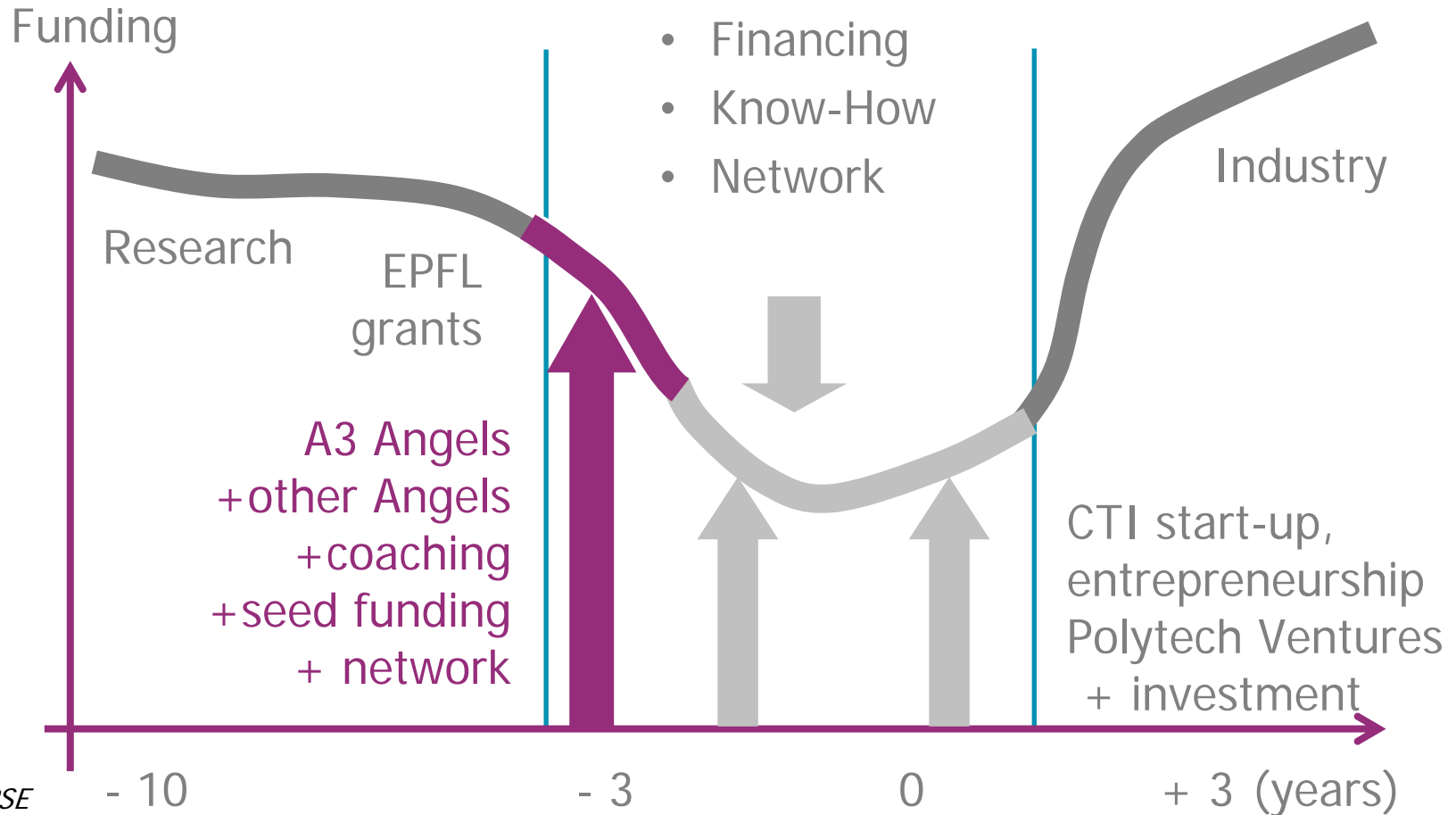
A³ Angels calendar

- Monthly A³ Angels dinner
 - Target 2009 >1MF > 5 start-ups
 - PhD alumni 0% interest loans by A³ foundation
- Monthly meeting
 - Mentoring brokering lunch
 - Advisory committee
- Annual Alumni day
 - Young entrepreneurial alumni award
 - A³ Angels training
- Launched November 2008

How can we **finance** projects ?



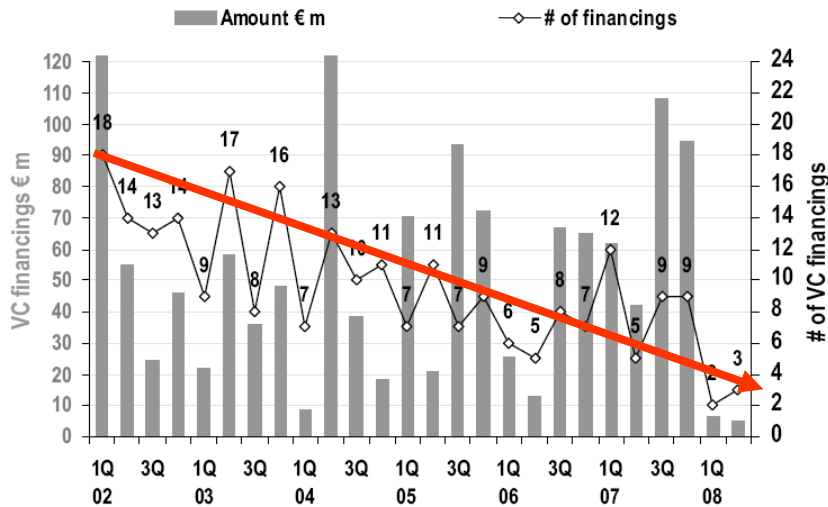
A3 Angels investment and mentoring value



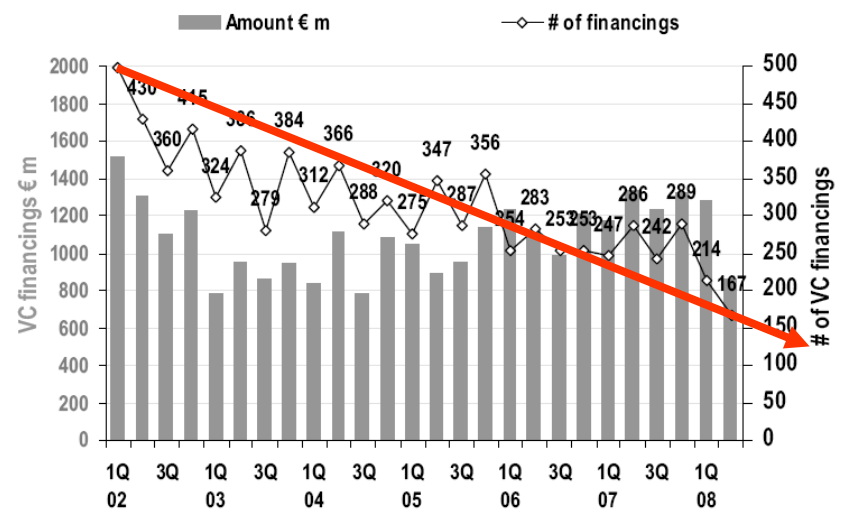
Source : PSE

Why : European VC financing is down

Suisse



Europe



Source : HBM Partners

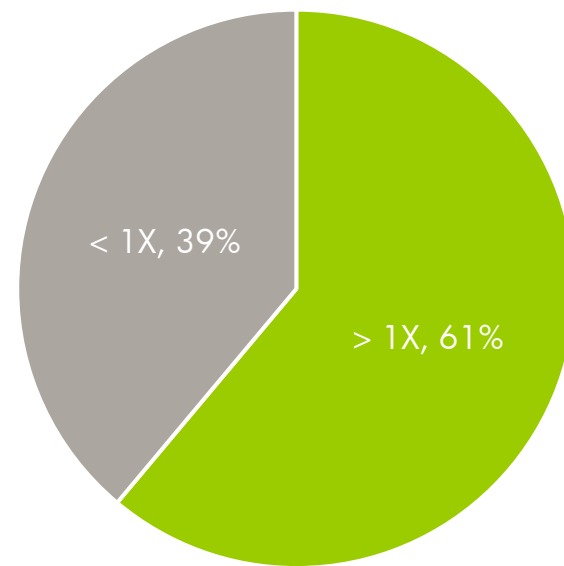
For investors : balance investments

- Balance your portfolio with ultra-safe investments
 - Stock market : - 25-50% in 2008-2009
 - Real-estate : CH +20% in 10 years – expenses
- Angel investments +5-10% in 5 years
 - Don't do this to make money because you probably won't
 - Assume your investments are lost on the day you make them

Type of investment	1 year	3 years	5 years	10 years
Early stage seed	10.6%	4.9%	4.8%	34.0%
Balanced VC	8.8%	13.1%	12.7%	14.8%
Later stage VC	30.4%	13.1%	11.1%	8.6%
NASDAQ	-5.5%	4.3%	11.0%	2.2%
S&P 500	-6.4%	3.8%	9.1%	1.8%

For investors : spread 40%-60% risks

Projects	Category	Probability
1-2	Highflier (IPO) Star (trade sale) Successful exit	10-20%
3-4	Lifestyle company Survival mode	30-40%
5-6	Bankruptcy Failure Winding down	50-60%



Source : JP Vuilleumier / CTI Invest 2008

Source : Kauffman Foundation Nov 2007, N= 86
angel groups = 539 individual angel investors.

Sample investment portfolio return

Portfolio Co.	Multiple	5-Year IRR
1	0.0	0%
2	0.0	0%
3	0.0	0%
4		
5		

Portfolio Co.	Multiple	5-Year IRR
6		
7		
8		
9		
10		

Source: *Becoming an investor-ready entrepreneur* - <http://www.sbtcd.org>
Troy Knauss, Piedmont Angel Network, tknauss@panfunds.com

Sample investment portfolio return

Portfolio Co.	Multiple	5-Year IRR
1	0.0	0%
2	0.0	0%
3	0.0	0%
4	1.3	5%
5	1.3	5%

Portfolio Co.	Multiple	5-Year IRR
6		
7		
8		
9		
10		

Source: *Becoming an investor-ready entrepreneur* - <http://www.sbtcd.org>
Troy Knauss, Piedmont Angel Network, tknauss@panfunds.com

Sample investment portfolio return

Portfolio Co.	Multiple	5-Year IRR
1	0.0	0%
2	0.0	0%
3	0.0	0%
4	1.3	5%
5	1.3	5%

Portfolio Co.	Multiple	5-Year IRR
6	1.6	10%
7	1.6	10%
8		
9		
10		

Source: *Becoming an investor-ready entrepreneur* - <http://www.sbtcd.org>
Troy Knauss, Piedmont Angel Network, tknauss@panfunds.com

Sample investment portfolio return

Portfolio Co.	Multiple	5-Year IRR
1	0.0	0%
2	0.0	0%
3	0.0	0%
4	1.3	5%
5	1.3	5%

Portfolio Co.	Multiple	5-Year IRR
6	1.6	10%
7	1.6	10%
8	7.6	50%
9		
10		

Source: *Becoming an investor-ready entrepreneur* - <http://www.sbtcd.org>
 Troy Knauss, Piedmont Angel Network, tknauss@panfunds.com

Sample investment portfolio return

Portfolio Co.	Multiple	5-Year IRR
1	0.0	0%
2	0.0	0%
3	0.0	0%
4	1.3	5%
5	1.3	5%

Portfolio Co.	Multiple	5-Year IRR
6	1.6	10%
7	1.6	10%
8	7.6	50%
9	20.0	82%
10		

Source: *Becoming an investor-ready entrepreneur* - <http://www.sbtcd.org>
Troy Knauss, Piedmont Angel Network, tknauss@panfunds.com

Return on investments (1-9) is 3.7X (26% IRR over 5 Years)

Portfolio Co.	Multiple	5-Year IRR
1	0.0	0%
2	0.0	0%
3	0.0	0%
4	1.3	5%
5	1.3	5%

Portfolio Co.	Multiple	5-Year IRR
6	1.6	10%
7	1.6	10%
8	7.6	50%
9	20.0	82%
10	Unknown	Unknown

Source: *Becoming an investor-ready entrepreneur* - <http://www.sbtcd.org>
Troy Knauss, Piedmont Angel Network, tknauss@panfunds.com

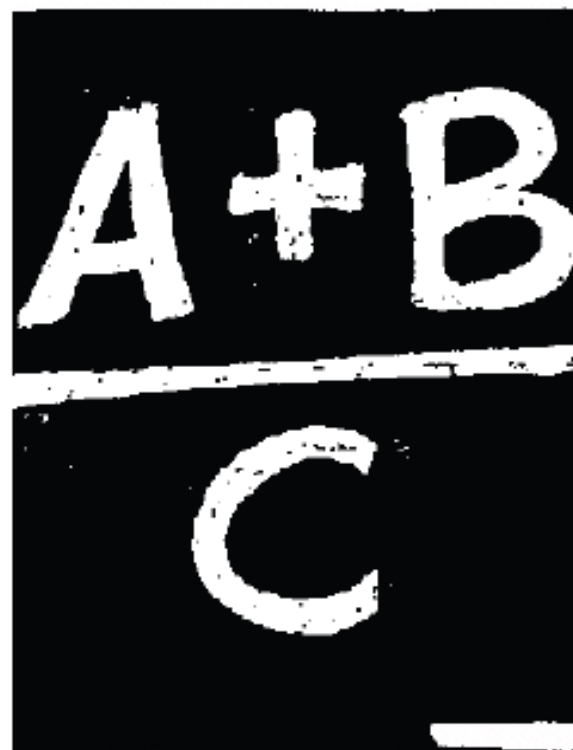
Saying No

- Try to add value at every meeting
- Don't use more than 2-3 hours of the entrepreneur's time or 2 weeks of yours
- Say no fast, over email before you meet
- Say no at the meeting; when in doubt, say no
- Only invest in people you're excited about
- Swings you don't make don't count against you

Source : Naval Ravikant twitter.com/venturehacks- entrepreneur (Epinions, Vast) investor (Twitter)

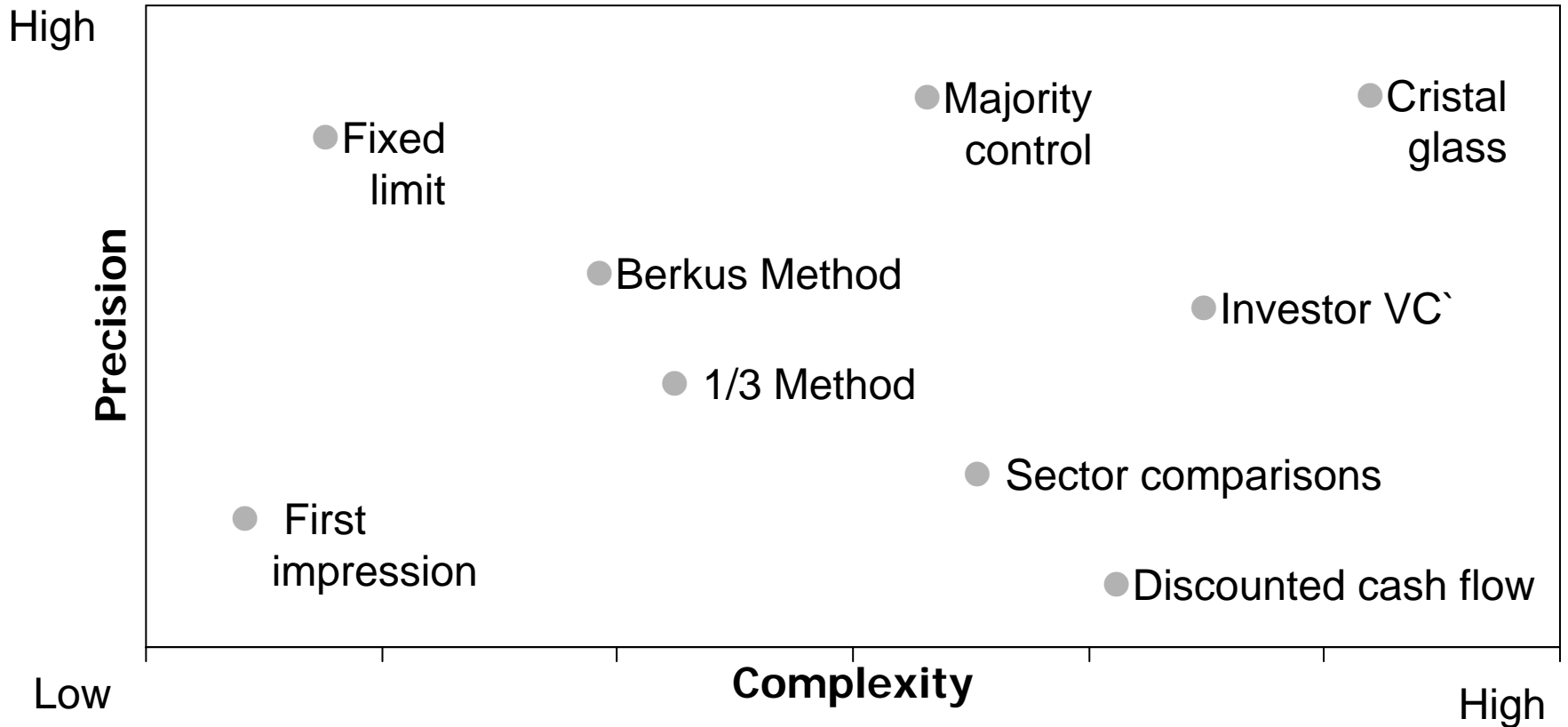
Saying yes : valuation and dilution

- Post-money (4m)
 - = Pre-money (3m)
 - + Investment (1m)
- Post-money (4m)
 - = Pre-money (2m)
 - + Investment (1m)
 - + 25% stock-options
- Typical :
 - seed investors initially own > 20%
 - after VC rounds, founders share is 5-15%



Source : Shari Loessberg, MIT Sloan

Valuation methods



Source : *Winning Angels*, David Amis

Advanced valuation

- Academic
 - Comparatives (P/E Ratio),
 - Discounted (cash flow + FV)
- Institutional Investor (VC)
 1. Future value prediction
 2. Present value derived from expected return (IRR)

$$\frac{\partial u}{\partial y} + w \frac{\partial u}{\partial z} = \frac{\mu \frac{\partial u}{\partial x} + \lambda \nabla \cdot \mathbf{V}}{\frac{\partial v}{\partial y} + w \frac{\partial v}{\partial z}} + \frac{\partial}{\partial y} \left[\mu \left(\frac{\partial u}{\partial y} + \frac{\partial v}{\partial x} \right) \right] + \frac{\partial}{\partial z} \left[\mu \left(\frac{\partial v}{\partial z} + \frac{\partial w}{\partial y} \right) \right] + \frac{\partial}{\partial x} \left[\mu \left(\frac{\partial w}{\partial x} + \frac{\partial u}{\partial z} \right) \right] + \dots$$

Source : *Winning Angels*, David Amis

Saying yes : terms, contracts, shares

S • E • C • A
Swiss Private Equity & Corporate Finance Association
Schweizerische Vereinigung für Unternehmensfinanzierung

Term Sheet

[Gesellschaft]

Finanzierungsrunde Serie [xxx] Vorzugsaktien
[Datum]

Gesellschaft **[Name der Gesellschaft]**
Investitionsbetrag **[Betrag]**
Investoren **[Investoren]**
Art der Aktien **[Numeraktien / Vorzugsaktien]**
Anzahl Aktien **[Zahl]**
Preis pro Aktie **[Preis]**
Bewertung **[Bewertung] (pre money)**
Kapitalisierungstabelle **[siehe Beilage 1]**



Readings

- Mark Van Osnabrugge, Robert Robinson, Harvard Business School : Angel Investing, 2000
- David Amis, Howard Stevenson, Winning Angels: The 7 Fundamentals of Early Stage Investing, Financial Times Series
- Guy Kawasaki: The Art of the Start, 2004
- Herve Lebet: What we may still learn from Silicon Valley, 2007



Let's **team-up** to **win** together