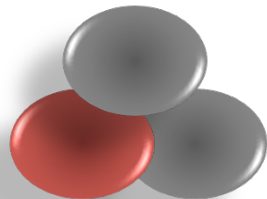




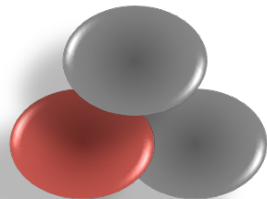
Profiting from Innovation: Using Business Models to Capture Value

Pablo GarciaTello, Markus Nordberg, Jim Sonnett



Learning Objectives

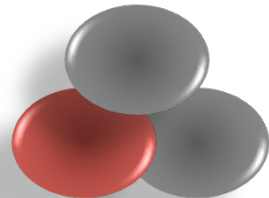
- Today's main ideas
 - Explore how a firm may capture value from an innovation that does not “fit” with its mainstream business.
 - Note the challenges of managing innovation (inside or outside a firm).



Synopsis



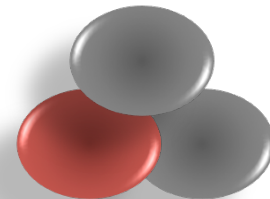
- This case describes the decision by Xerox to create a separate company, Inxight, to commercialize promising internet / software technologies.
- In early 1997, Mohan Trikha has taken over a collection of s/w innovations grouped into an incubator called Xsoft.
- Mr. Trikha is attempting to commercialize innovations based on visualization and a linguistics technologies that have been developed at Xerox research facilities over 20+ years.
- A decision point is offered regarding the form of the business plan Mr. Trikha should submit (exhibit 2).



What are the limiting cases (extremes) for XNE?

“Xerox established XNE to manage promising ... that did not fit well inside the normal corporate structure, but were potentially too critical to ... long term strategy to spin out entirely. ... the best of both worlds...” (p. 2)

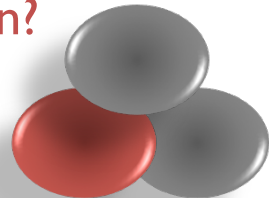
- Hybrid – combination of two different species to produce a desired outcome
- Mutant – combination of two different species to produce an undesired outcome



What are some of Xerox's reasons for creating XNE?

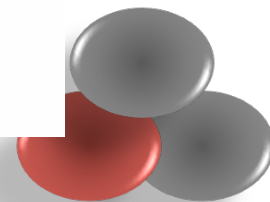
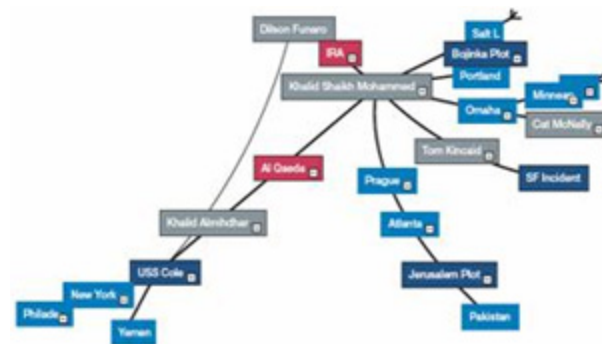
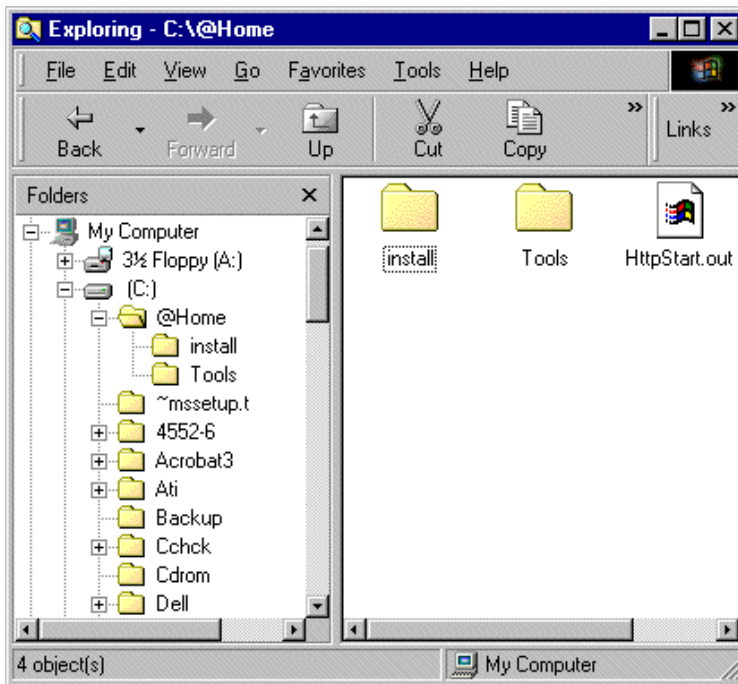
- _____
- _____
- _____
- _____

- History of “fumbling” the future
 - But, Xerox is not looking for the spinouts to generate short term profits (Mark Myers opening quote).
- “Speed up” the innovation clock (John Seeley Brown, p 3.)
- “Provide an outlet” for innovations the businesses do not want
- “Forcing function” for the business units (John Seeley Brown, p 3.)
- Establish a different culture (e.g. much less time “managing up”)
- **What do these phrases mean?**

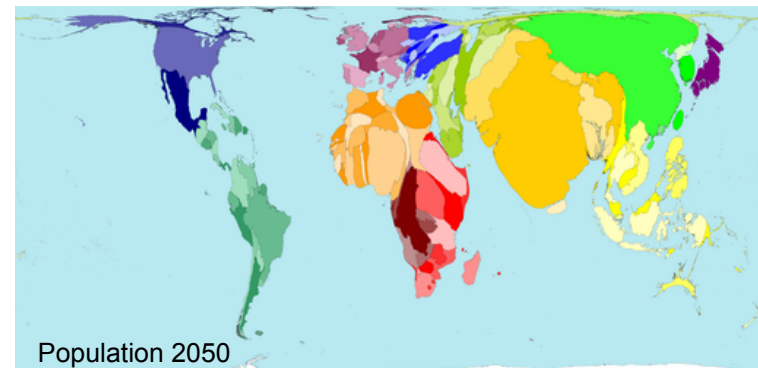
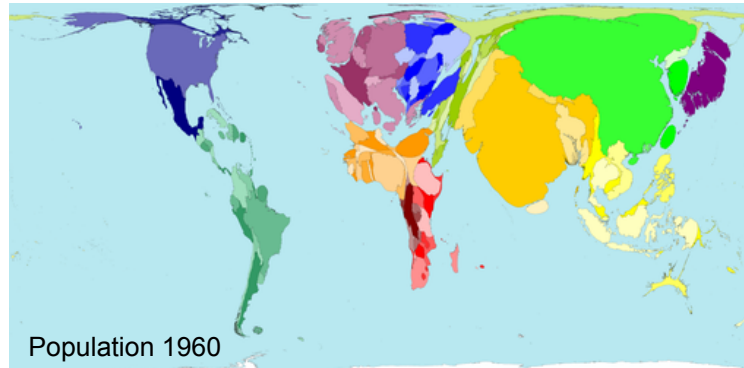
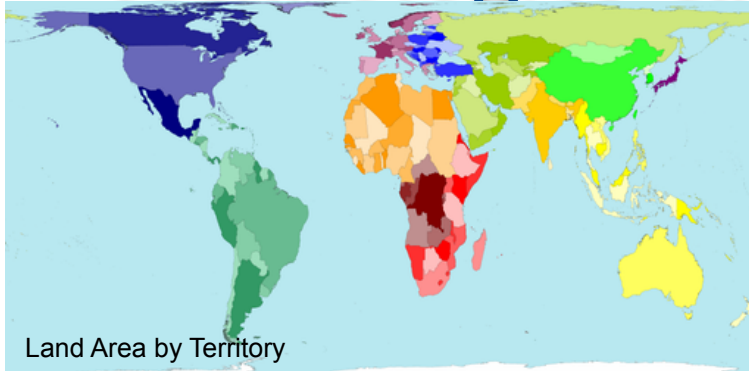


Inxight's hyperbolic tree provides a dynamic 2D representation of data

- What Rao calls WIMP Technology (pg. 5)
- Inxight's alternative dynamic hyperbolic tree

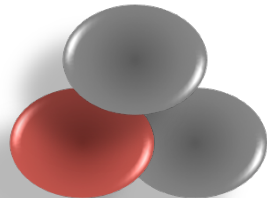


These types of visualization technologies can be interactive



A Successful Plan:

- Demonstrates the ability to convert research into business results
- Develops and exploits synergies with Xerox's core businesses (appropriability mechanisms??)
- Gains outside customers to build revenues and creditability
- Is profitable by year 3

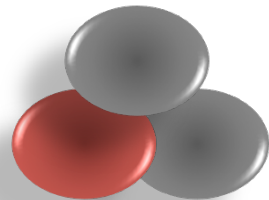


Do you believe Trikha should modify his plan to commercialize these visualization and linguistics technologies?

	1996 (actual)	1997 (estimated)	1998 (projected)	1999 (projected)	2000 (projected)
Revenue (\$M)	0.8	6.2	15.9	31.1	46.8
Gross Profit	0.8	5.6	13.7	26.4	39.8
Profit before Tax	(2.2)	(0.7)	1.2	3.5	7.0
Cash Generation	(3.0)	(2.0)	(1.5)	0	2.3
Headcount	28	32	55	77	108
New Contracts	10	35	78	117	173

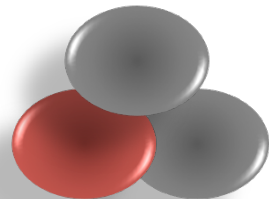
Source: case exhibit 2

It may be more interesting for us to discuss why it is often difficult for an established firm to capture value from its innovation and how internal “incubators” may mitigate these challenges.



This case raises some interesting broader issues

- Implications of operating parallel business models
- Positioning start – ups for success
- Decision making and governance in corporate venturing - contrast with traditional Venture Capital?
- Options for staffing start-ups
 - Incentives – at all levels of Inxight and Xerox
- Continental differences - North America vs EU?



Some Versions of Corporate Venturing (An Oxymoron??)

	XNE	Battelle gen 1	Battelle gen 2
Size of fund / LP			
Investment committee			
Funding intervals			
Company CEO			
Co-Investors			
Parent corporate strategic connection			
Other motivations			
CEO & corporate services			
Start-up Team			
Return objectives			
Results			

Inxight

...the “dark” side of the Moon

Pablo Garcia Tello (CERN)

CBI Transatlantic 2016



Objective

Provide you with some food for thought that may help you in analyzing this case or in your future jobs.

Presentation

❑ Thoughts about how to spin-out and what happens/matters.

❑ Thoughts about keeping afloat a spin-out and what happens/matters.

How to spin-out (1)

ZEN wisdom

Knock on the sky and
listen to the sound

Mundane wisdom

Figure out why they spin
you out

Do they want to get rid of
you?

Or do they consider you
as a nice baby?

Food for thought

The reason why for the
spinning-out influence the
fate of the spin-out.

Can you infer why for
Inxight?



How to spin-out (2)

ZEN wisdom

Sit, walk, or run,
but don't wobble

Mundane wisdom

If you do it, do it as
fast as possible.

Food for thought

The more as a manager you
take to decide the worst
morale you will find.

Take too long and you will
have no team behind the spin-
out...people will simply quit for
a better future.

Any hints on the Inxight case?



How to spin-out (3)

ZEN wisdom

Better to see the face
than to hear the name

Mundane wisdom

Communicate!!!!

Food for thought

If waiting time is unavoidable
(i.e. negotiating IP ownership, unions,
etc)

do offer daily, honest and transparent
information to employees...

...please don't use emails,
...employees are not robots

Any hints on the Inxight case?



Just to finish this part

ZEN wisdom

It takes a wise man to learn from his mistakes, but an even wiser man to learn from others.

Mundane wisdom

Spinning-out is about people, not forecast.



Questions

Keeping afloat (1)

ZEN wisdom

The obstacle is the path.

Mundane wisdom

If you are a spin-out,
don't plan like if you
are a Large
Corporation

Food for thought

(Emergency) planning: include
everyone!

The janitor is as important for your
small business as you are!

And he cares too about his future!

Any hints on the Inxight case?



Keeping afloat (2)

ZEN wisdom

The journey of a thousand miles must begin with a single step.

Mundane wisdom

It takes a heck of a lot of time to have the first client, the first contract signed and the first payment in your account.

Time = Money

Food for thought

Two things people think that come for free...

Business development time
Time from contract to payment

MONITOR THEM!

Any hints on the forecast in the Inxight case?



Keeping afloat (3)

ZEN wisdom

When walking, walk.
When eating, eat.

Mundane wisdom

One thing people miscalculate...

What is your capacity to deliver

Food for thought

Remember: while delivering a contract is difficult if not impossible to do business development (normally future clients sleep at night)

Any hints on the forecast in the Inxight case?



"The consultant said I was wearing too many hats."

Keeping afloat (4)

ZEN wisdom

The pig's tail will never make a good arrow.

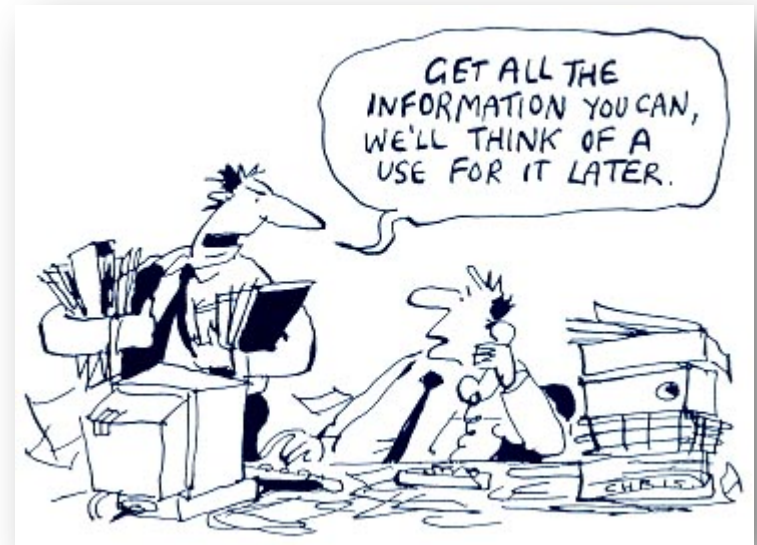
Mundane wisdom

The most important client is not the one to be made but the one that will pay your bills now.

Food for thought

Don't pursue business volume at expenses of quality...you will lose recurring clients.

Any hints on the forecast in the Inxight case?



Just to finish this part

If the time comes in which you have to cut expenses in coffee...perhaps you should close down and start again.

(a real situation I was involved in...)

A final Zen advice to do that

Let go over a cliff, die completely, and then come back to life -- after that you cannot be deceived.

Thanks

Any more Questions



Problem Solving and Options Creation in an Innovative Environment such as CERN

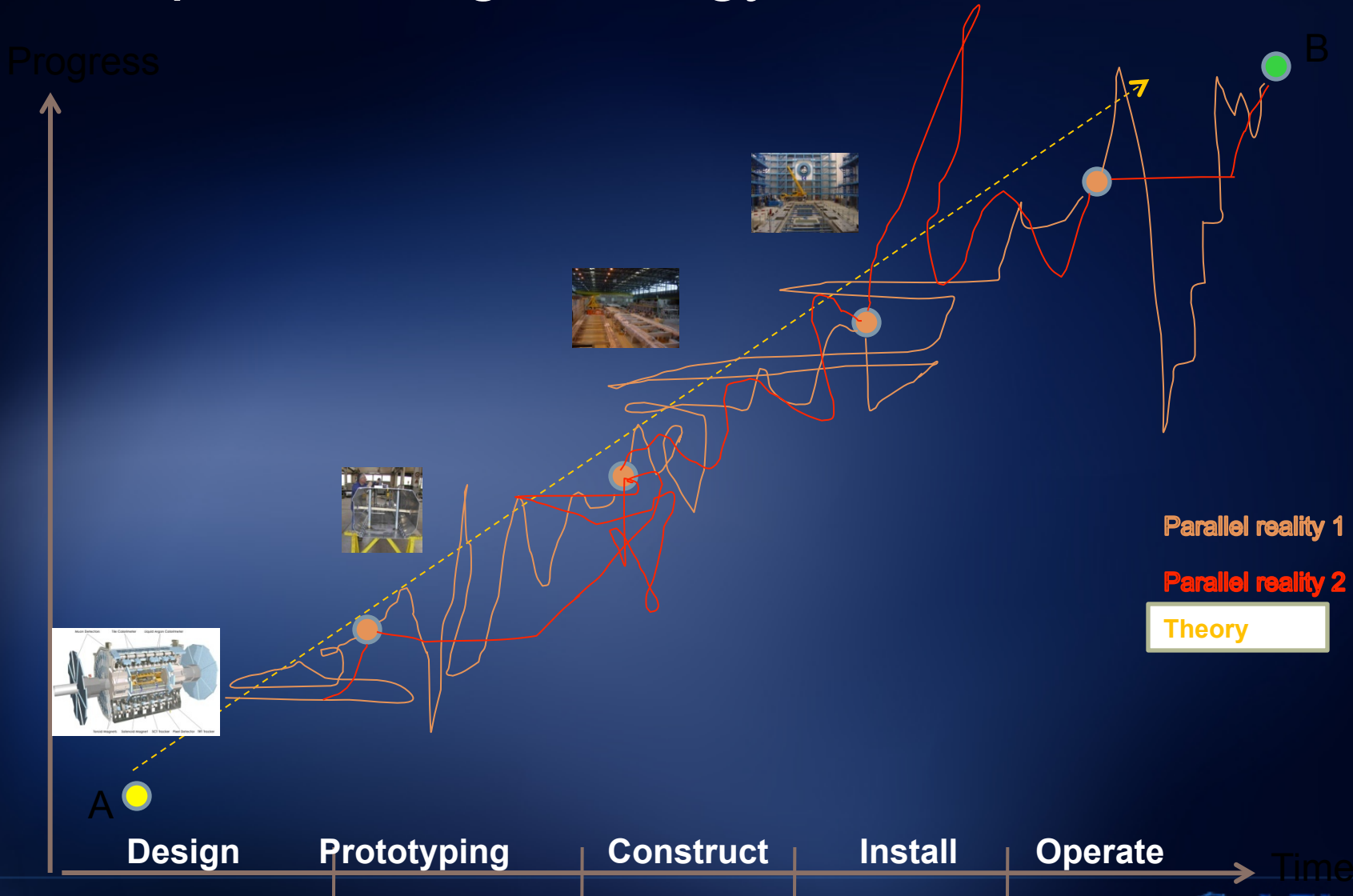
– Personal Reflections

OSU@Transatlantic at IdeaSquare May 18, 2016

Markus Nordberg (CERN),



Implementing Strategy is Not Linear

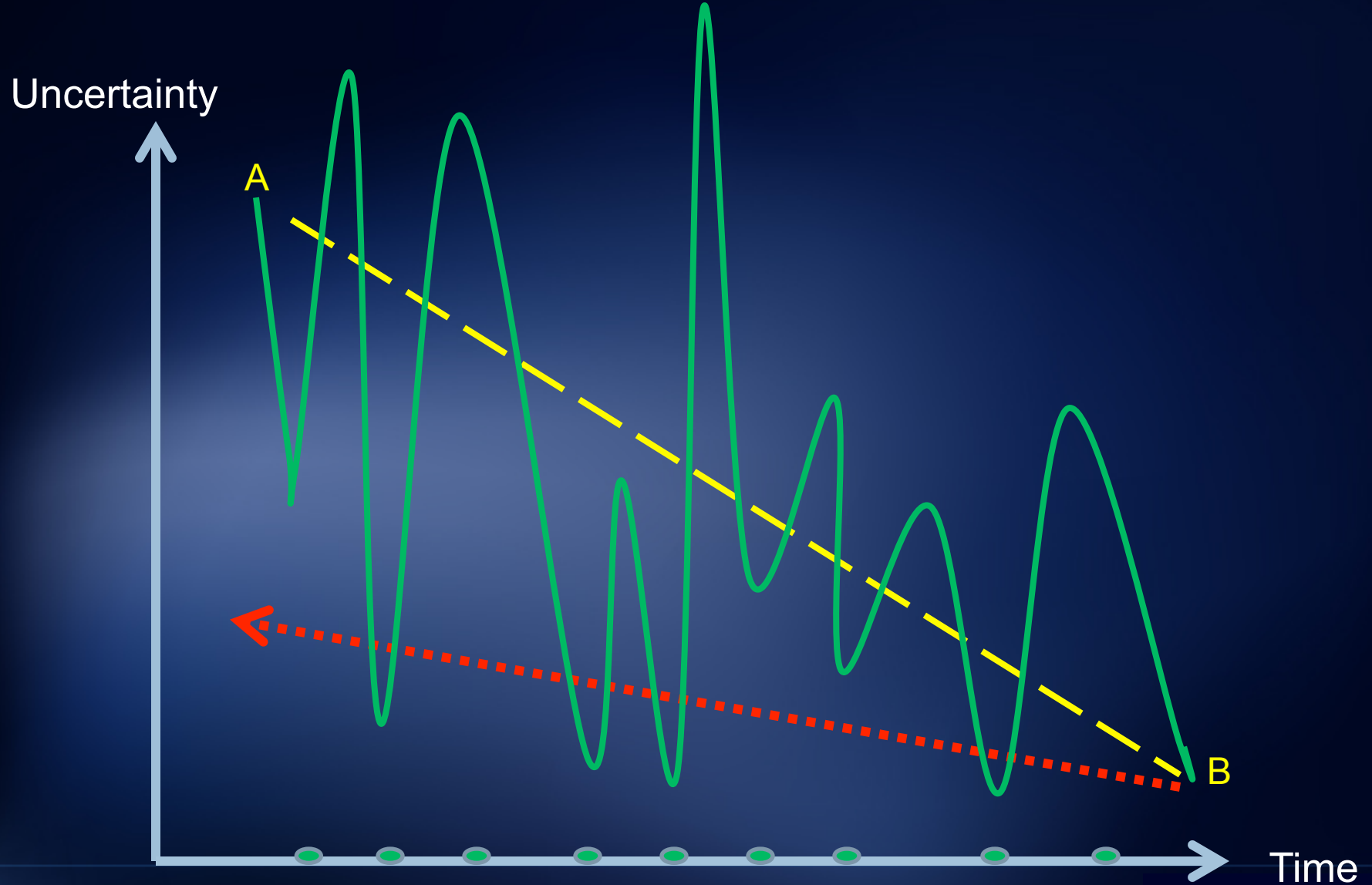


Parallel reality 1

Parallel reality 2

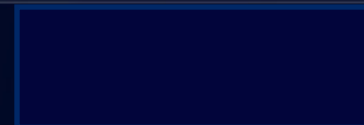
Theory

Absorbing vs. Reducing Uncertainty



So What to do with Options?

- Concentrate on those that solve the problem (create high, immediate value)
- Maintain marginal R&D effort on (future) potential opportunities
- Just let other creation options die...
- ... or, perhaps (openly) experiment?



Open Science, Open Innovation



Experimentation with Strong Student Involvement, Inspired by Design Thinking

(Re)defining the problem

Understanding project goals
What are we solving?

Technology review

Technology specifications, need assessment
What (CERN) technologies can we use to fulfill the needs?

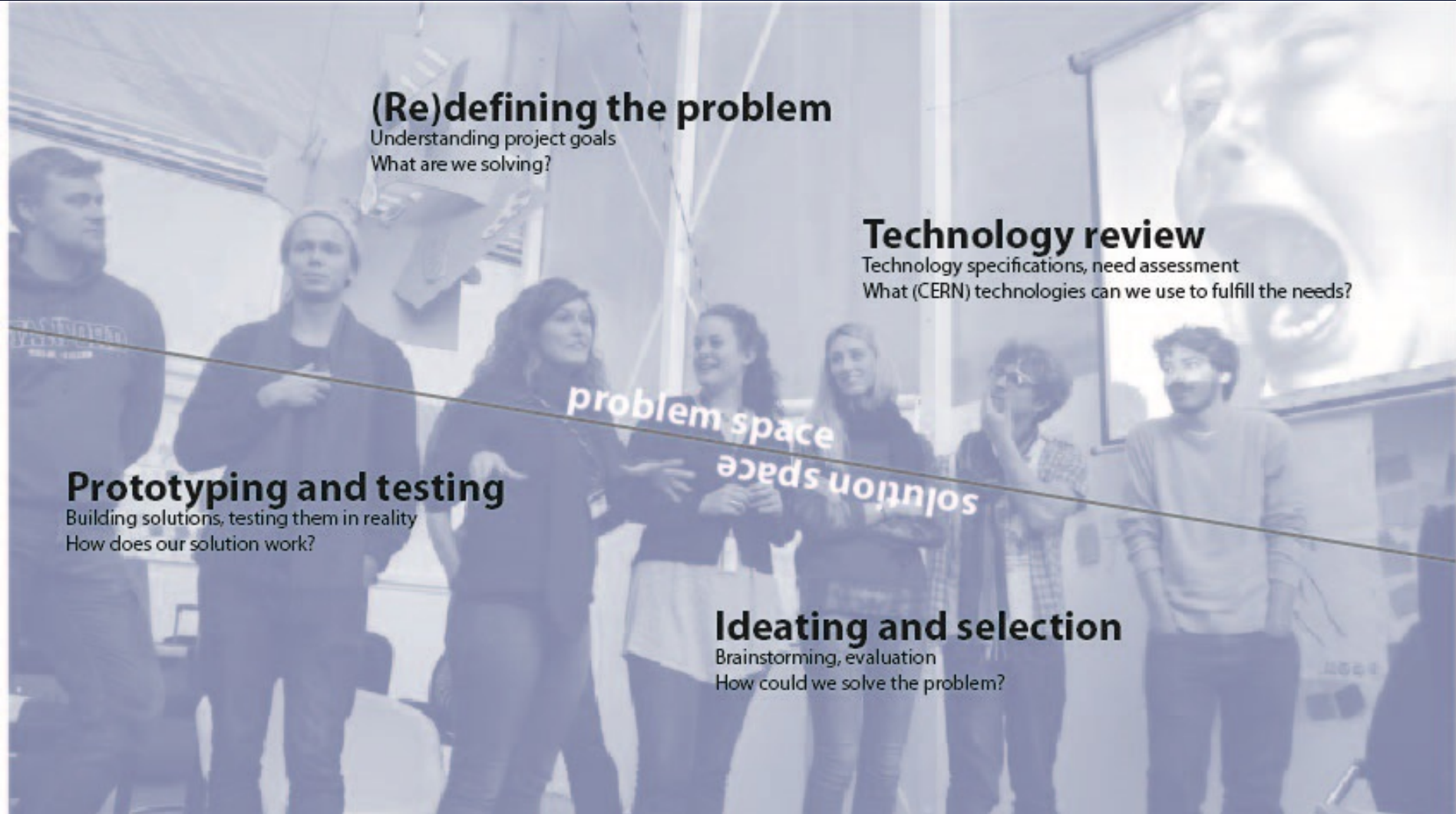
problem space
solution space

Prototyping and testing

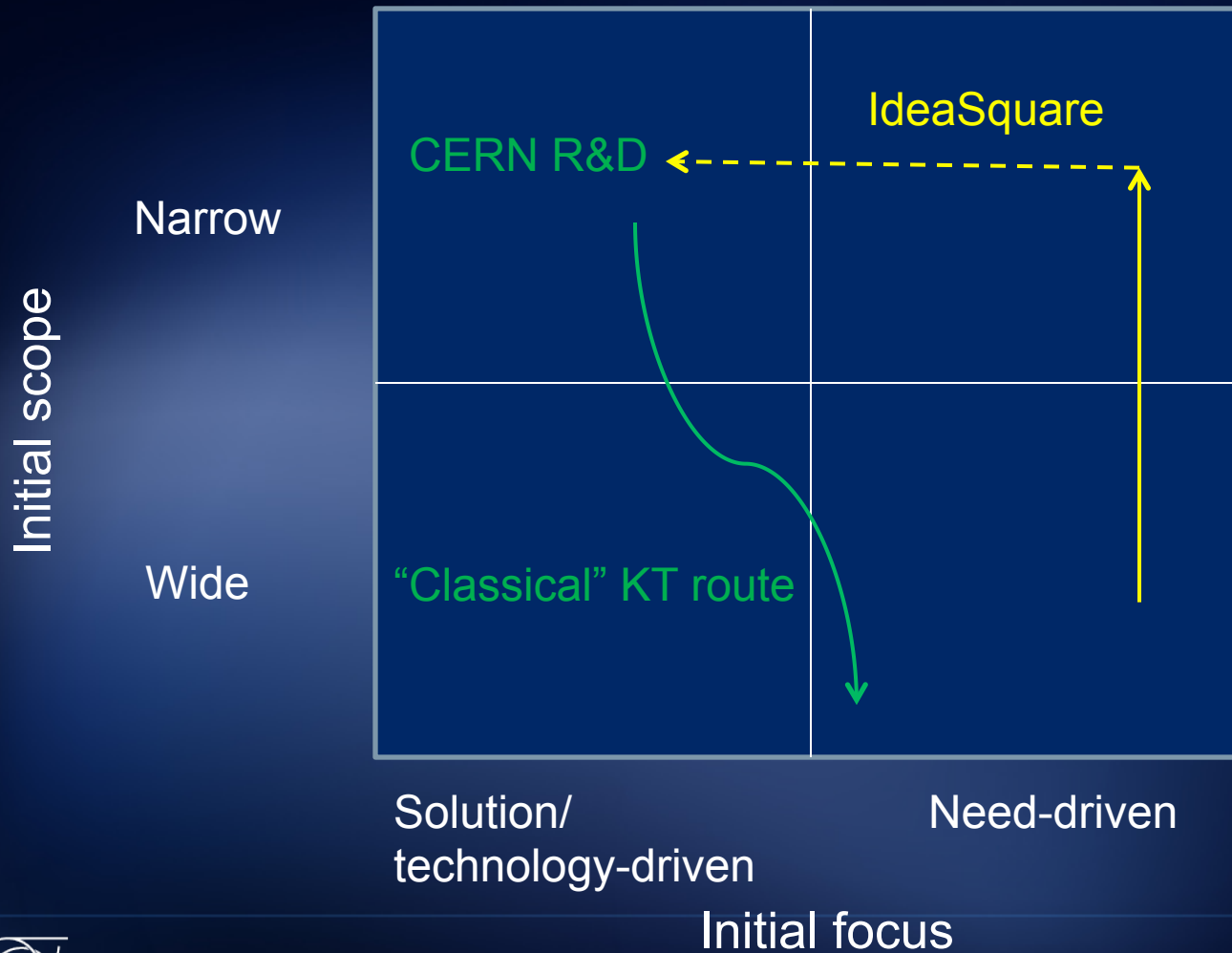
Building solutions, testing them in reality
How does our solution work?

Ideating and selection

Brainstorming, evaluation
How could we solve the problem?

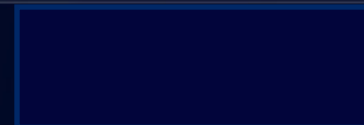


Experimenting at IdeaSquare@CERN



Now it works, now it does not ...

- End-result (prototype) very hard to see ex-ante
 - Original inventors rarely get it
- Biggest contributing factor is self-discovery
 - ... but how to measure and capture that?
- No pain, no gain
- ... try out the Hugging Point



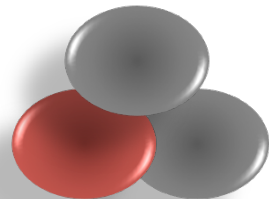
Thank you



What does all this mean for Trikha's decision? Should he modify his plan?

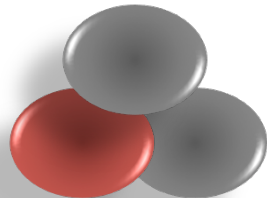
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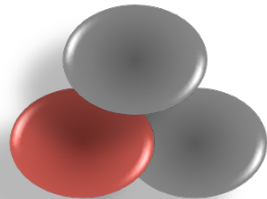


Update: Inxight

- Trikha proceeded with the plan in Exhibit 2.
- A valuation pegged the value of the firm at \$33M, w/ employees retaining 20% of the equity.
- The company hit its 1997 targets, but missed them in 1998.
 - OEM component model required extensive s/w customization for each account.
- Trikha resigned as president at the end of 1998.
- A new, outside CEO came on in February 1999 and shifted to a service provider model.
- Inxight Software, Inc. was bought by Business Objects in 2007; Business Objects was in turn acquired by SAP AG in 2008.

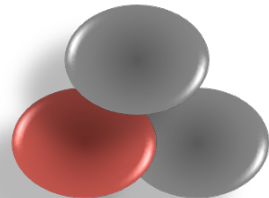
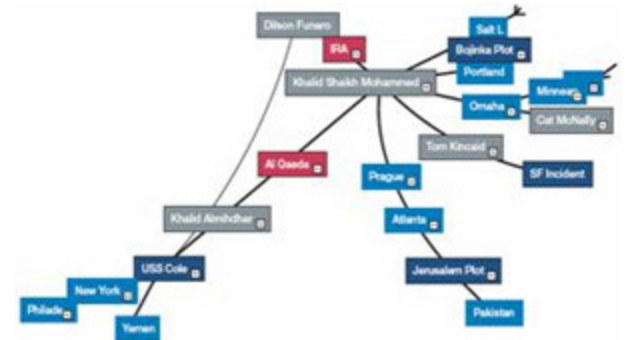


Back up slides



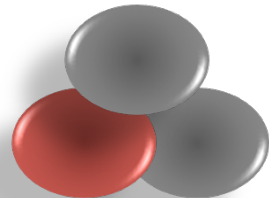
Inxight's hyperbolic tree provides a dynamic 2D representation of data

- StarTree allows users to navigate & explore relationships & drill-down to information of interest.
- Network models can handle data in a variety of ways, including ordering of nodes in multiple contexts or via non-hierarchical cross links.



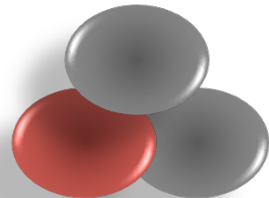
Why isn't the xfer mechanism between PARC & Xerox business working effectively?

- The business managers are reluctant to assume budgetary responsibility.
 - They may see long-term value in the innovations, but ...
- The challenge is reinforced by organization structure:
 - Research labs such as PARC are cost centers managed by adherence to their budgets.
 - Business units such as those at Xerox are profit centers managed by P&L.
 - There is a tension regarding who takes on risk and when.
- Note the implication for the quotes from Mark Myers (CTO) & John Seely Brown (PARC director)
 - The businesses want to reduce risk by getting others to pay for the research as long as possible.
 - The research labs prefer to hand the technology over earlier– and to get onto the next opportunity.



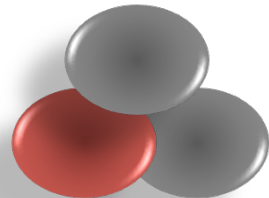
So, how does XNE function?

- Where do the \$\$\$ come from?
- Where do the people come from?
- Where does the leadership (CEO) come from?
- Where does the Inxight board come from?
- Where does XNE report (within Xerox)?



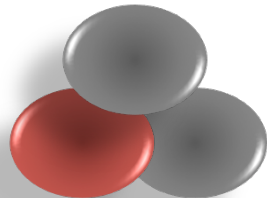
So, how does XNE function?

- Where do the \$\$\$ come from?
- Where do the people come from?
- Where does the leadership (CEO) come from?
- Where does the board come from?
- Where does XNE report (within Xerox)?
- \$\$\$ come from Xerox' annual budget (pg. 4)
- In theory, from outside. Team leaders are from Xsoft or PARC, however.
- Trikha hails from Xerox.
- All XNE presidents sit on 1 or 2 boards; others are Xerox personnel (pg. 11).
- To the CFO, Barry Romeril (pg. 2).



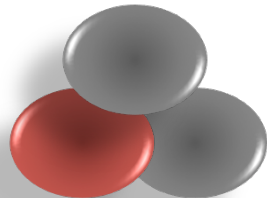
What motivates the key players? Are they aligned?

- Business Unit Heads
- Mark Myers (CTO)
John Seely Brown
(PARC Director)
- Barry Romeril (CFO)
- Mohan Trikha (Inxight
CEO)
- Stu Card (Xerox
Research Fellow)
- Ramana Rao (Viz
researcher)



What do these relationships imply about Xerox' approach to commercialization?

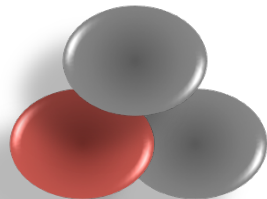
- Is the structure designed to ensure close coordination w/ Xerox's strategy?
- Should the structure ensure close coordination? Why or why not?
- Where do you think XNE should report?
 - Should XNE be a corporate staff function (e.g., strategy, business development) or a line function (e.g., engineering, research, marketing)?



New Slide - What would you do

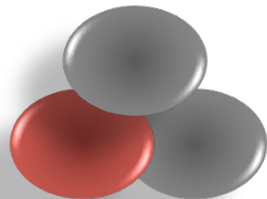
to ..

- 'Fix' PARC
- 'Fix' the businesses
- 'Fix' the relationship between PARC and the businesses



What does this all mean for the Inxight opportunity? Do you think it will succeed in XNE?

- The model seems designed to commercialize a “modular” (“plug & play”) technology.
- Are the visualization & linguistic technologies “modular”?
- Note that aspects of modularity are missing:
 - There are no immediate interfaces between visualization / linguistic technology & user experience.
 - There is no well-defined market for user interface technologies.
 - The visualization market remains pre “dominant design” despite a history dating back to Apple Macintosh.



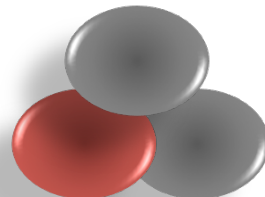
How might a venture capitalist approach the Inxight opportunity?

Xerox

- Budget
 - \$\$\$ from Xerox' annual budget
- People
 - Team Leaders: Are from Xsoft or PARC.
 - CEO: Trikha hails from Xerox.
 - Board: XNE presidents sit on 1 or 2 boards; others are Xerox personnel.
 - Quarterly meetings
- Reporting
 - Venture reports to XNE;
 - XNE reports to CFO, Barry Romeril;
 - CFO reports to CEO;
 - CEO reports to Board

Venture Capitalist

- _____
- _____
- _____



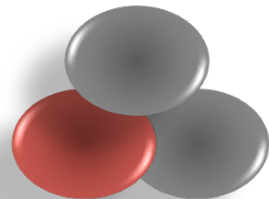
How might a venture capitalist approach the Inxight opportunity?

Xerox

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 - Board: XNE presidents sit on 1 or 2 boards; others are Xerox personnel.
 - Quarterly meetings
- Reporting
 - Venture reports to XNE;
 - XNE reports to CFO, Barry Romeril;
 - CFO reports to CEO;
 - CEO reports to Xerox Board

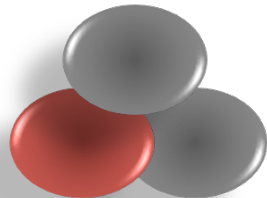
Venture Capitalist

- Budget
 - \$\$\$ comes in stages & no connection to operating business.
 - Aligns incentives & breaks Xerox dependence.
- People
 - Outside personnel w/ direct experience in relevant market
 - CEO is an industry veteran
 - Board is external investors
 - Monthly meetings
- Reporting
 - Directly to the board



When is each model superior?

- Xerox model is good at supporting “systemic” innovations that foster & extend existing Xerox abilities and markets ...
- Venture capitalist model is good at supporting “modular” innovations that “plug and play” with existing abilities & markets ...



Xerox New Enterprise (XNE) seems like a cumbersome way to xfer technology to market

- But, the context is important
- Individuals at PARC have historically disdained technology transfer ...
- ... the business units at Xerox have shown little interest in technology.
 - Visualization technology under development @ PARC since 1970's (pg. 5) ...
 - Linguistics technology has resulted in over 40 patents since the late 1970s ...

