



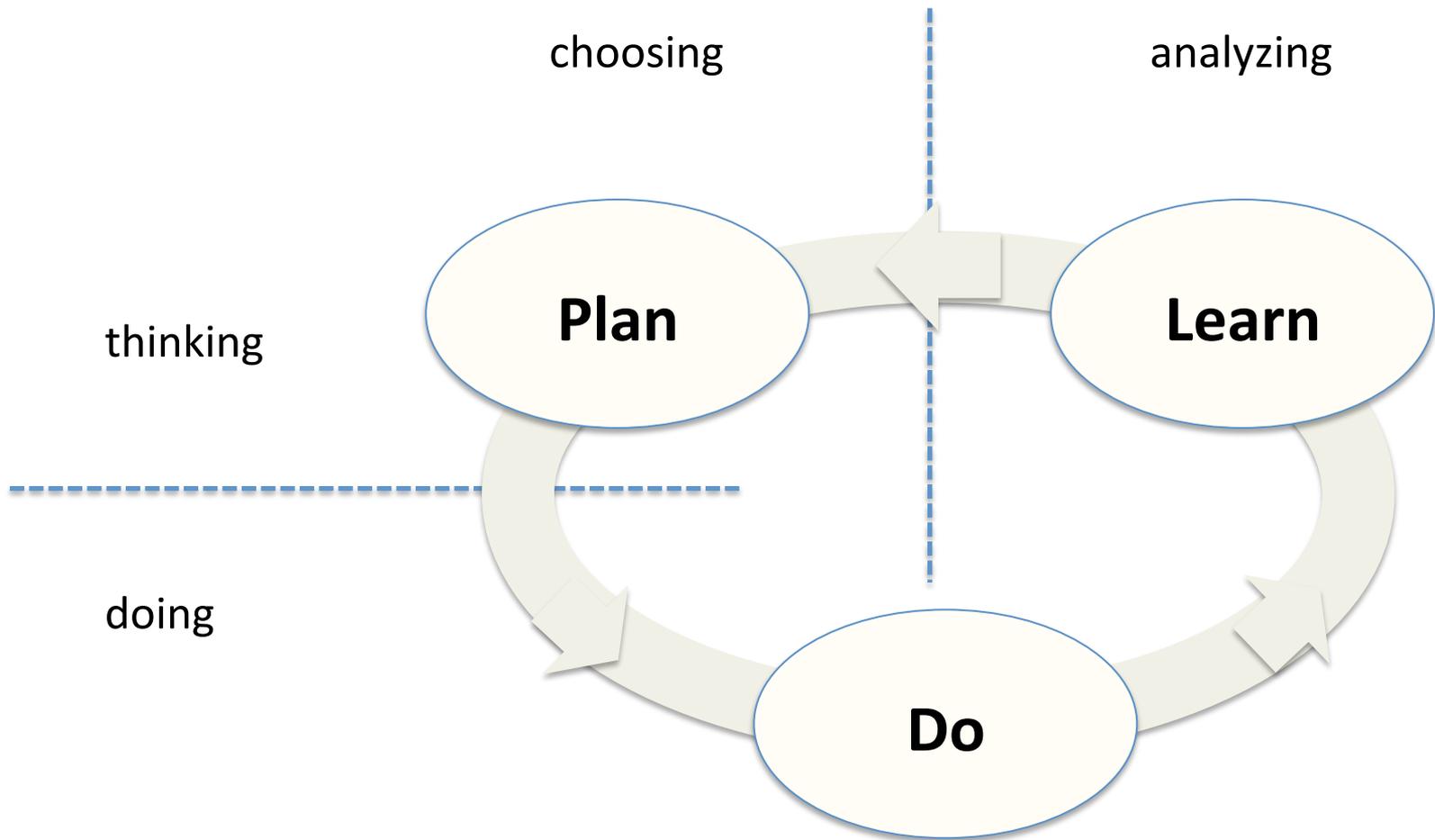
P4E New Ventures 1 Kick-Off

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Jon Fjeld, Howie Rhee
Center for Entrepreneurship and
Innovation



The basics



Evaluation of an opportunity

1. Is there a sufficiently attractive **market opportunity** (need or problem)?
2. Is the proposed **solution** feasible, both from a market perspective and a technology perspective?
3. Do we have an **team** that can effectively capitalize of this opportunity?
4. Can we **compete** (over a sufficiently interesting time horizon)?
5. What is the profile **risk and return** of this opportunity?

Core elements of a business plan document

Investment prospectus:

- Need/problem
- Solution
- Competitive advantage
- Team
- Risk / return

Planning

1. Strategy

- Target customers
- Business model
- Position / sustainable competitive advantage
- Milestones

2. Operating plan

- Plan for each functional area
- Budget

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Company's plan:

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Framework for analysis

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Company's plan:

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Execution:

- Market Research
- Strategy development
- Marketing
- Business development
- Sales planning
- R&D Management
- Operations management
- Process and infrastructure management
- Budgeting
- Financing
- People management

Entrepreneurial opportunity

- Problem currently not solved
- Potential for change in consumption

Requires:

- Innovation
- Capability to exploit the innovation

Not every idea is an opportunity

Sources of opportunity

Society

- Changing demographics
- Changing tastes & interests
- Fears & hopes
- Regulation

Technology

- Innovation: new combinations
- New technologies
- New knowledge

Markets

- Change in regulation
- Supply chain disruption
- Inefficiencies

Order effects

First order: Substitution - faster, better cheaper

Second order: More of the underlying task or capability

Third order: Creation of new structure, institutions, organizations, etc.

Entrepreneurial opportunities exist at all levels and for those who can solve new problems created by new structures, etc.

With thanks to John McCann

P4E history

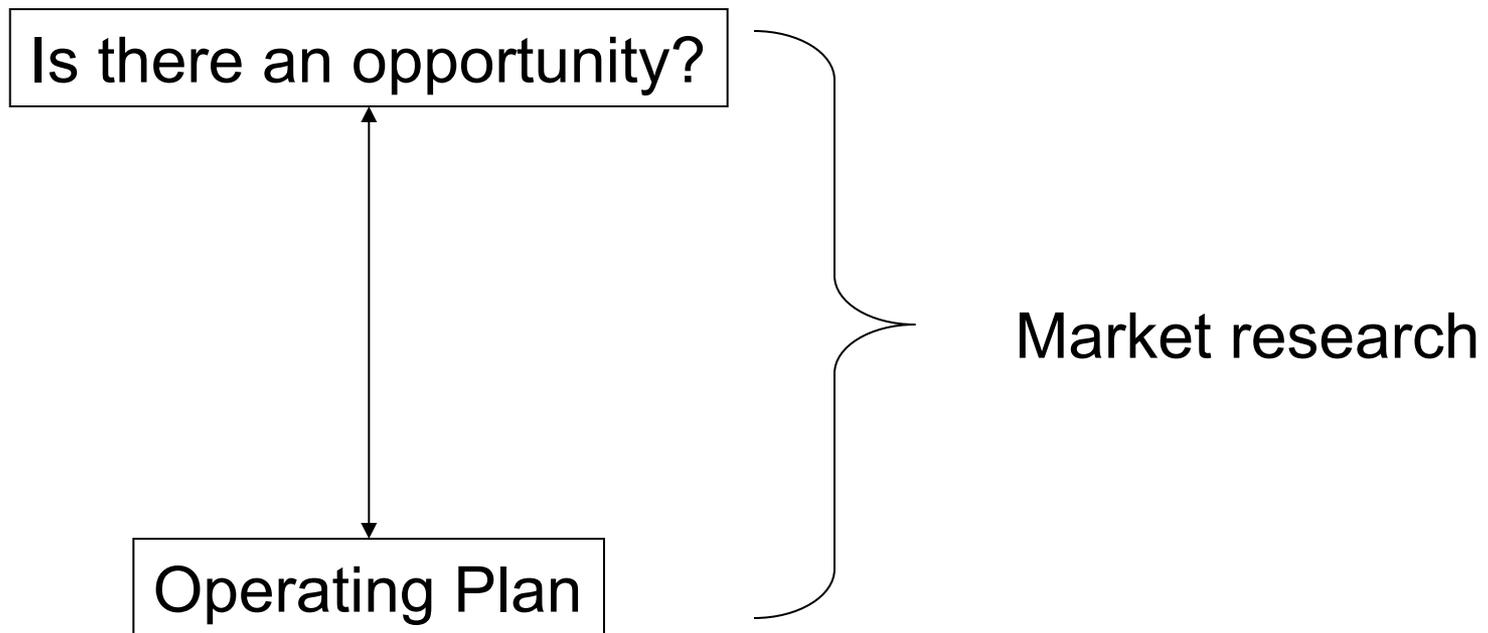
	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
Selection	30 ideas 8 students* *Handpicked students	70 ideas 68 students * • Used an application	80 ideas 90 students	50 ideas 100 students	71 ideas* 104 students* *Matchmaker Directory	108 ideas 112 students	N/A ideas 110 students	N/A ideas 105 students
NV1 Opp.Eval.	8 projects	13 projects 48 students	11 projects 37 students	17 projects 53 students	11 projects 38 students	11 projects ~39 students	12 projects 34 students	13 projects 40+ students
NV2 Strategy	4 projects	10 projects 32 students	7 projects 22 students	9 projects 25 students	6 projects 16 students	4 projects 14 students	5 projects 20 students	13 projects 25 students
NV3 Plan	3 projects 14 students	4 projects 20 students	3 projects 14 students	1 project 2 students	5 projects 17 students	2 new projects 9 students	1.5 projects 7 students / 3 students	4 projects 20 students
Launch	EntoGenetics	Investors Mosaic Hootli Medici	K Kane AlPatents	Jobbertunity	CrowdTunes Broota All9s Jobbertunity HowIDidIt KOI	Physao		

P4E outcomes to date

- > 100 projects over 8 years
- 15 launched
- Most failures to launch (^90%) due to absence of market
- Most common reason for promising companies not to launch: student debt

Class	Projects	Type				Launch	Fail			Survive
		IT	Life science	Energy	Consumer other		Market	Tech.	Other	
2010	9	3	3	3		4	5			3
2011	16	7	4	2	3	5	11			4
2012	12	4	2	1	5	2	9	1		2
2013	17	10	2		5	3	11		3	3
2014	13	8		1	4	6	5		2	6
2015	(11)									
Totals	67	32	11	7	17	20	41	1	5	18

Market research

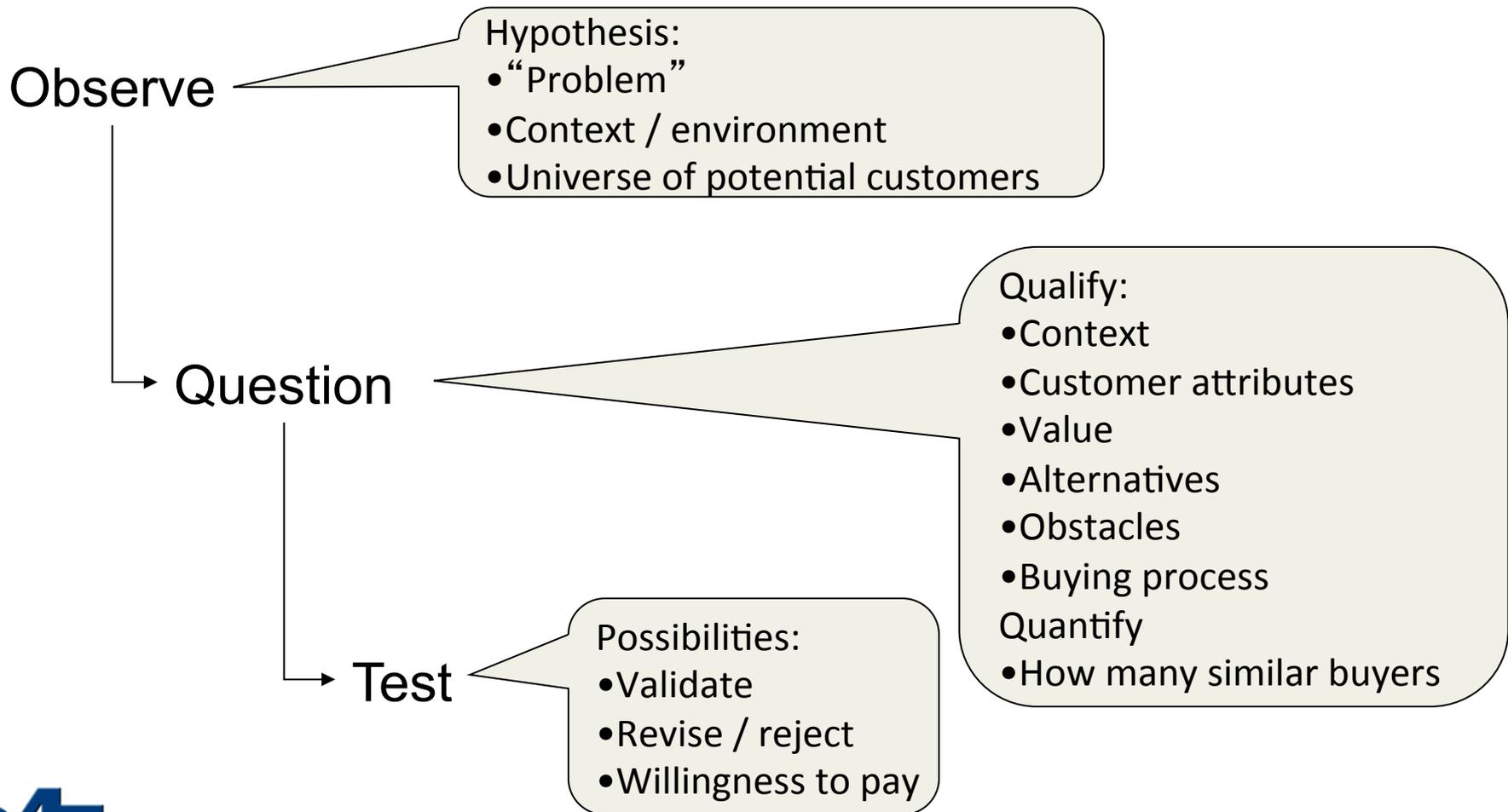


How do you start?

“You can observe a lot by just watching.”

(Paraphrase of a famous philosopher)

Method



A simple model

- Goal of every new venture: find the match

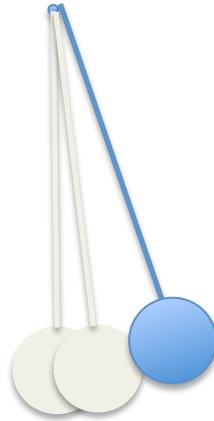
Market + Product

- This is hard to discover by asking people (traditional market research often doesn't work in a new venture).
- So just launch the product and see what happens.
- But what can you conclude from failure? By itself a failure tell you nothing. It does not guide the next step.
- Learning requires specific objectives and a roadmap

Efficient learning: integrated analysis and execution

Business plan heavy entrepreneurship:

- Too much planning and analysis
- Too many unknowns



“Just do it” entrepreneurship:

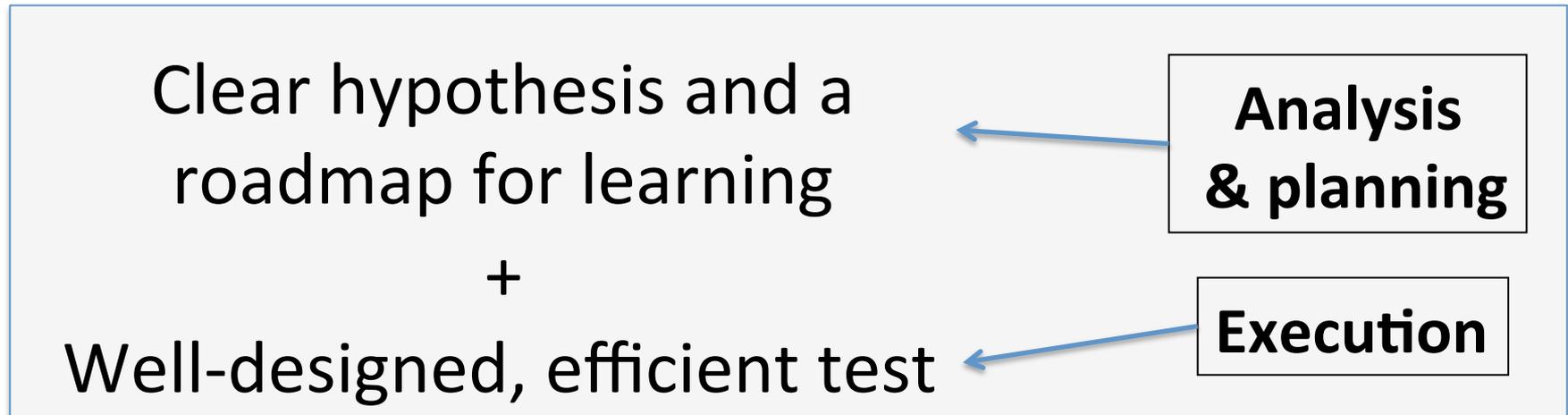
- Not enough thought given to what are critical unknowns
- Inefficient learning

“Efficient learning” entrepreneurship:

- Well formulated hypothesis
- Integrated analysis and execution
- Every action has a learning objective
- Efficient use of resources

Summary

Begin execution as soon as possible by performing **experiments**.



And always begin by validating the need.

How to proceed

- Your idea is probably wrong — you have made assumptions that will not turn out to be true.
- Can you find a good idea before you run out of resources — time and money?
 - Time is money.
 - Early money is more expensive than later money
- When you find a “good idea,” how efficiently you use capital determines your share, overall return, and possibly even success or failure.

Your “theory”

- If your assumptions are correct, your venture will be worth a lot of money.
- There are three kinds of statements in your theory:
 - Drivers of value (expressions of the need)
 - Drivers of cost
 - Drivers of sustainability (especially sustainable competitive advantage)
- Intelligent experimentation involves:
 - Decomposition: as simple as possible but no simpler (to paraphrase Einstein)

– Sequencing

Many unknowns

Market

+

Product

- Value / willingness to pay
- Constraints / parameters of solution
- Necessary complements
- Alternatives
- Inhibitors
- Influencers
- Customer acquisition
- Etc.

- Features
- Business model / price
- Competitive position
- Distribution
- Etc.

In the beginning

Opportunity evaluation

Fact gathering, analysis, basis
for decision making

Need / problem

Feasible solution

Team

Possibility of comp.
advantage

Risk reward

The need is the primary
question

Whether a solution is
possible is usually second

These are important but
can't really be addressed
until the first two are
somewhat settled

Keys to success

1. Organize: divide responsibilities / plan / track your progress.
2. Get started early - pace yourselves – stick to your plan.
3. **Get started early on the primary market research** – this will always take longer than you think.
4. Decide what is critical to making a go/no go decision and focus on that
5. Decide how you will make decisions in advance – don't wait for an issue to arise.
6. Be open and flexible – your specific idea may not be the ultimate idea.

Resources

Guidelines for the entrepreneur:

<http://www.dukeven.com/>

Program for Entrepreneurs:

<http://www.dukep4e.org>