



AU CENTER FOR ENTREPRENØRSKAB OG INNOVATION

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Uncertainty - different approaches

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AGENDA

- › Entrepreneurial uncertainty (McMullen & Shepherd, 2006)
 - › Perceived uncertainty – can't be measured objectively
 - › The willingness to bear uncertainty also plays a role
- › Projects and uncertainty (Christensen & Kreiner, 1991)
- › Different levels of uncertainty and how to handle them (Tidd & Bessant, 2013)

McMULLEN & SHEPHERD (2006)

Focus on:

- › entrepreneurial **action** (understood as an identified opportunity which is worth pursuing) and the elements that enhance and hinder individuals from acting entrepreneurially

UNCERTAINTY CAN'T BE ELIMINATED:

- › Action takes place over time
- › The future is unknowable
- › The novelty intrinsic to entrepreneurial action enhances the uncertainty further



TWO COMPETING VIEWS:

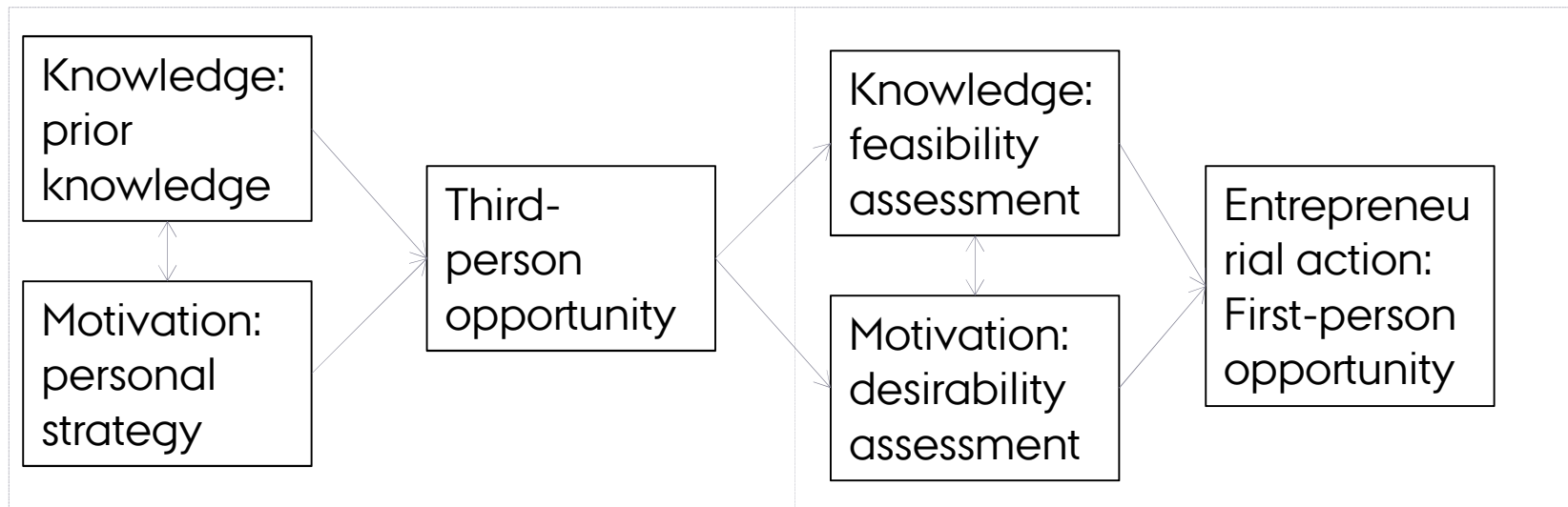
- › Level of "perceived uncertainty" is what determines if people decides to perform an entrepreneurial action or not. It is about **different levels of knowledge**
- › Whether or not an entrepreneur pursues an entrepreneurial action has primarily something to do with willingness to bear uncertainty which typically is about **motivation**

... ARE JOINED

- › An individual needs to act in an entrepreneurial way in order to become an entrepreneur
- › Action involves new **knowledge** and **motivation**
- › Entrepreneurial action defined as a result of the **willingness to bear perceived uncertainty**

Attention stage: radical uncertainty (ignorance)

Evaluation stage: action-specific uncertainty



McMullen & Shepherd, 2006

EVERYBODY CAN IN PRINCIPLE ACT ENTREPRENEURIALLY

- › “Thus it seems that, to act entrepreneurially, people need **not** have a high tolerance for uncertainty if they believe that they know what they are doing”
 - › McMullen & Shepherd, 2006

PROJECTS ARE HERE FOR GOOD

- › In the permanent turbulence which organizations som organisationer befinder sig i



CHARACTERISTICS OF PROJECTS:

- › Unique tasks/jobs
- › Complex tasks/jobs
- › Temporary organizational measures
- › Goal oriented, situational decision about establishing the project.
 - › The objective has been analyzed, negotiated and decided
- › Organizational prototypes – not especially reliable, elegant or effective – everything needs to be negotiated/decided – you cannot just follow routines

THE RATIONALE OF THE PROJECT

- › Create solutions for problems and tasks which the host organization cannot create solutions for routinely
- › Focus on the result – not the way the result was reached or the resources spend
- › Do the right things vs. do it correctly



4 PHASES

1. Deciding on aim and objectives
2. Planning
3. Execution
4. Evaluation

› Logically shouldn't the order always be like this, but officially it can be necessary
There will always be uncertainty

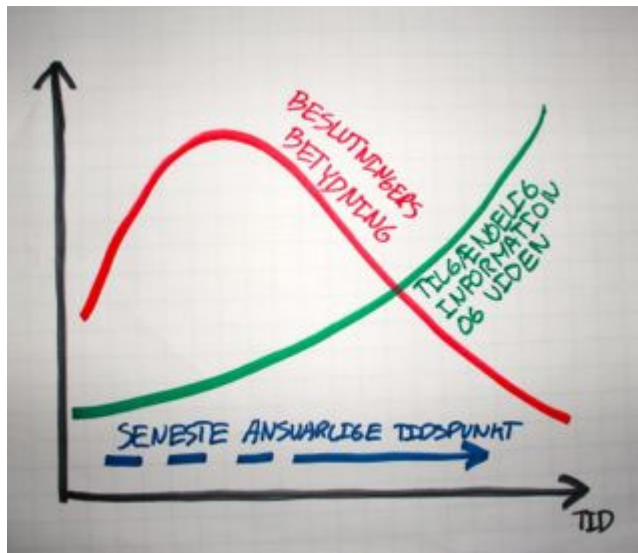
2 TYPES OF UNCERTAINTY

- › **Operational uncertainty:** Painless effective execution of a given project task, will be reduced as the project proceeds
- › **Contextual uncertainty:** Is the result useful, effectual and meaningful? Grows as the project proceeds

YOU CAN'T ELIMINATE BOTH:

- › If you try to bring down the operation uncertainty the project will tend to isolate it self
- › If you focus on understanding the surroundings of the project in order to eliminate the contextual uncertainty the project might never reach the mile stones and objectives.
- › Balance the two
- › In entrepreneurial and innovative projects the contextual uncertainty might need most of your attention

CONTEXTUAL UNCERTAINTY



Red: The importance of decisions
Green: Available knowledge
Blue: Latest responsible time for making a decision

UNCERTAINTY ACCORDING TO TIDD OG BESSANT (2013)

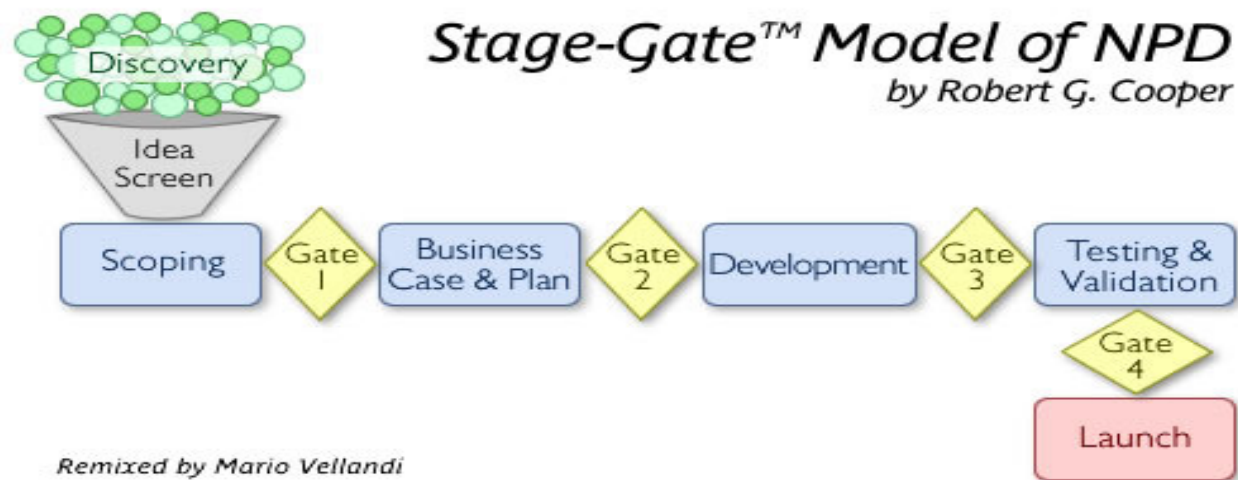
- › Focused on limiting it
- › Setting: Huge organizations where there is a need for choose between alternative solutions and minimizing losses on unsuccessful projects.
- › The type of/degree of uncertainty ~ the innovation type

INCREMENTEL INNOVATION

- › Easy to minimize uncertainty (Stage-gate®)
- › Business case
- › Build coalitions (network)
- › Spread the risk by portfolio management



PRODUCT DEVELOPMENT WITH STAGE-GATE

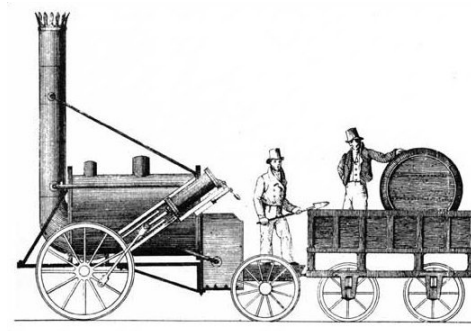


BASIC PRINCIPLES OF STAGE-GATE

- › Only 1 out of 4 development projects will become a winner
- › The purpose is to increase this "hitrate" and get the products faster to the market
- › The stages gets more and more expensive through the model. The aim is to find the problems as early in the process as possible.
- › Gates are managed by the top-level management team.
- › The project manager drives the project from gate to gate
- › Make you focus more on the market(s) and not only technology

RADICAL INNOVATION

- › Difficult to lower the uncertainty
- › Need for reframing



disruptive
breakthrough
discontinuous
non-linear
paradigm-shifting
and
radical

TO SUM UP

- › Uncertainty is subjective
- › You need to bear some uncertainty
- › Different types of uncertainty: Operational. Vs. Contextual
- › You can't eliminate both
- › Postpone some decisions until you know more
- › You have to have different approaches towards uncertainty depending on your purpose.
- › **MOST IMPORTANT: YOU CANNOT AND SHOULD NOT ELIMINATE UNCERTAINTY TOTALLY**

WHEN HAVE YOU EXPERIENCED UNCERTAINTY RESULTING IN POSITIVE OUTCOMES?

- › Discuss with one or two neighbors

Sarasvathy	McMullen & Shepherd	Christensen & Kreiner
Leverage of contingencies	You can't eliminate uncertainty – it is more about how you perceive it	Don't eliminate the uncertainty – it represents opportunities
Partnerships (crazy quilt)	More focused on how the individual makes a choice	Focus on context, surroundings etc.
Don't spend too much time on business plans – it is too difficult to foresee the future	The future is unknowable	Plans tend to focus on lowering the operational uncertainty – difficult to foresee the future, and it can isolate the project
We need a blurred picture of where we are heading		Utilize visions