

# *Options Thinking Example: How Options Thinking Can Improve Decisions With No Calculation or Jargon*

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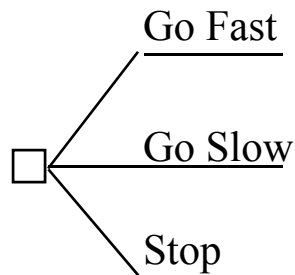
*Options thinking uses ideas from stock market options to decompose decisions over time to reduce risk and increase value.*

- **Option** is right (not obligation) to buy (or sell) an asset under specified terms.
- In decision making, **options thinking** decomposes a decision into a sequence of decisions (or **options**) over time.
- **Reduces risk** by
  - ◆ Delaying resource commitment
  - ◆ Reducing uncertainty
- **Increases value** by
  - ◆ Preserving option to proceed at low cost
  - ◆ Permitting creation of new possibilities
- **Examples:** Invest in
  - ◆ Multiple efforts / technologies
  - ◆ Phases
  - ◆ Reserve capacity
  - ◆ Flexibility
  - ◆ Brand equity
  - ◆ Infrastructure
  - ◆ Ability to switch inputs or outputs

*Options thinking might decompose a new technology implementation decision as follows:*

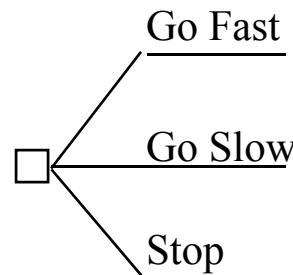
Decision

Technology  
Development



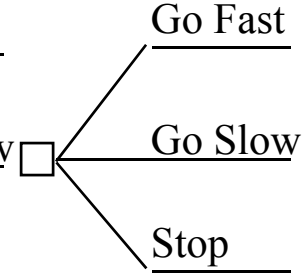
Decision

Commit to  
Learning  
Applications



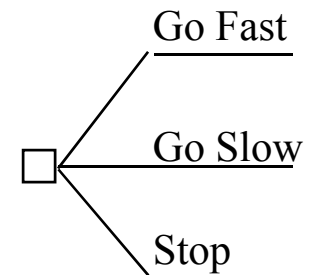
Decision

Proceed with  
Small Scale  
Implementation

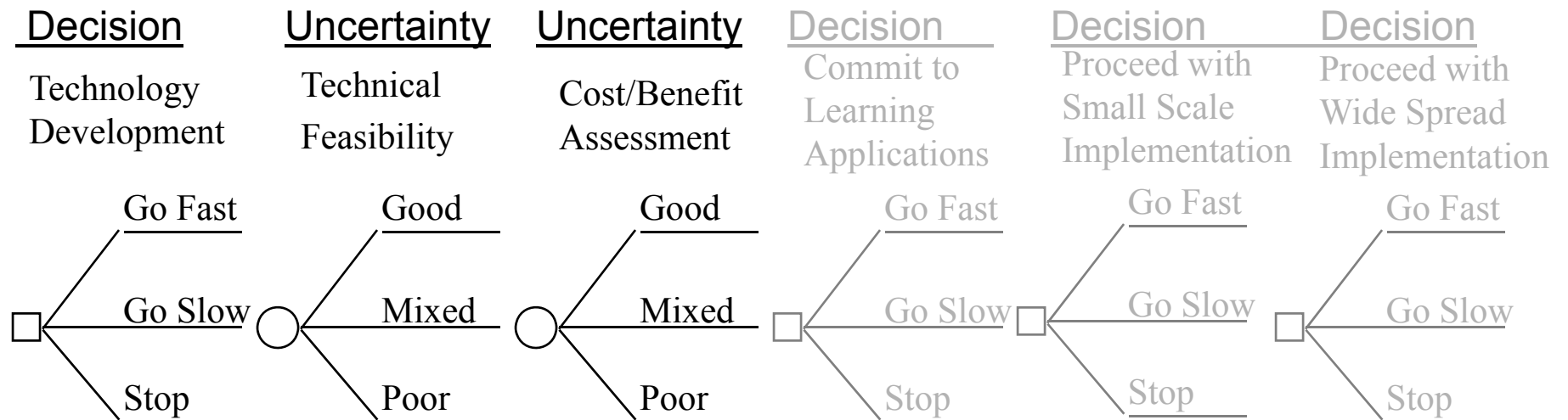


Decision

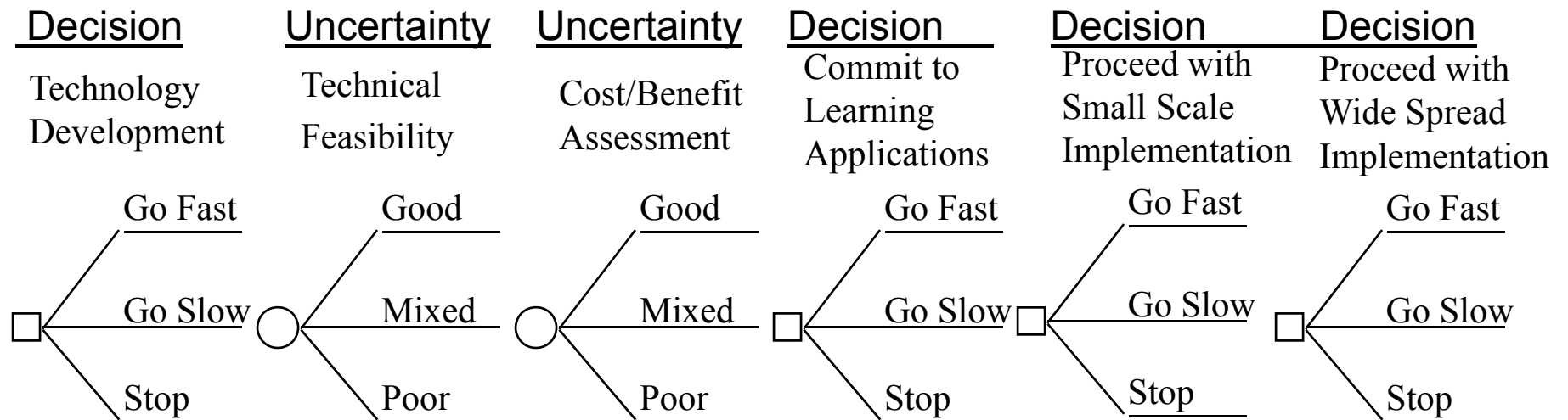
Proceed with  
Wide Spread  
Implementation



*Options thinking might decompose a new technology implementation decision as follows:*



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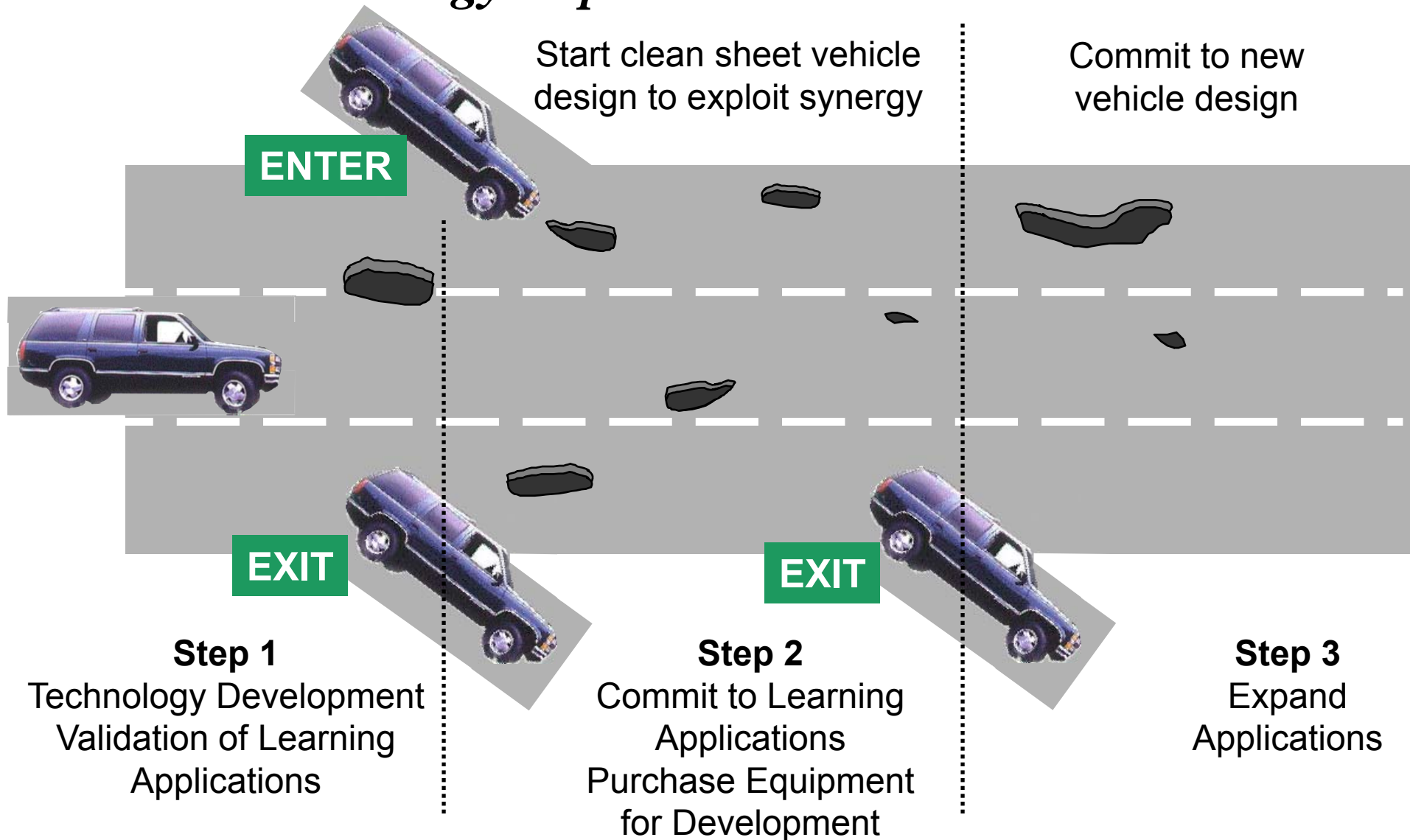


Coarse \$ → Fine \$\$\$\$\$\$

*For this example options thinking changed the decision.*

- Technology assessment
  - ◆ All agreed technology had high potential
  - ◆ But, many skeptical
    - ❖ Large technical and cost uncertainties
    - ❖ Benefits unproven
    - ❖ New technology risks
- Team position initially
  - ◆ Unwilling to commit major resources and alter existing process given risks
  - ◆ Unhappy about missing opportunity
- Options thinking led to realization
  - ◆ Did not need to make technology **implementation** decision now.
  - ◆ Need only make technology **development** decision at low cost.
  - ◆ Later, after resolving uncertainties, can make high cost implementation decisions.
  - ◆ Decided to “**buy**” **option** on technology implementation decision.

# *The New Technology Implementation Road*



**Review Board used this chart - no options terms!**

## ***Summary Points: Apply options thinking to most decisions.***

- Options Thinking: Decomposing a decision into a series of options over time
  - ◆ Applies to virtually all decision problems
  - ◆ Reduces risk and increases value
  - ◆ Requires no calculation
  - ◆ Requires no added time or complexity
- Do not even need options terminology
  - ◆ A picture is worth a 1000 words!