#### DA Education: How Do They Do That?

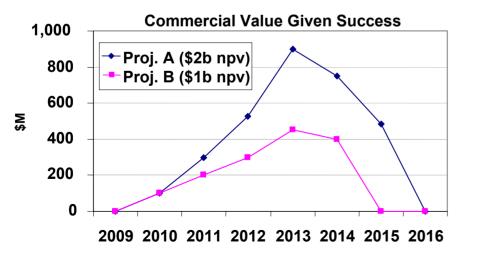
April 21, 2005
Decision Analysis Affinity Group
(DAAG)

# A simple case illustrates the analytic structure (assumptions)

Phase	PoS (Proj. A)	PoS (Proj. B)	Dev Cost	Year
1	50%	70%	3	2005
2a	40%	50%	11	2006
2b	40%	50%	37	2007
3	80%	90%	206	2008
Reg	50%	95%	1.5	2009
<b>Approval</b>	3%	15%	259	2010

Projects A and B are vying for the same budget

- Project A is five times riskier than Project B
- Projects A & B have identical;
  - development cost
  - development timeline
  - launch date

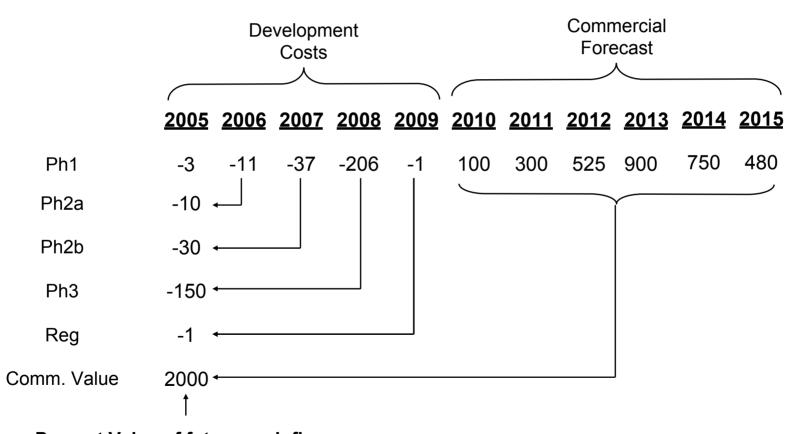


Given success, project A is twice as valuable as project B as measured by NPV

- Project A has higher peak sales
- Project A has longer period of exclusivity

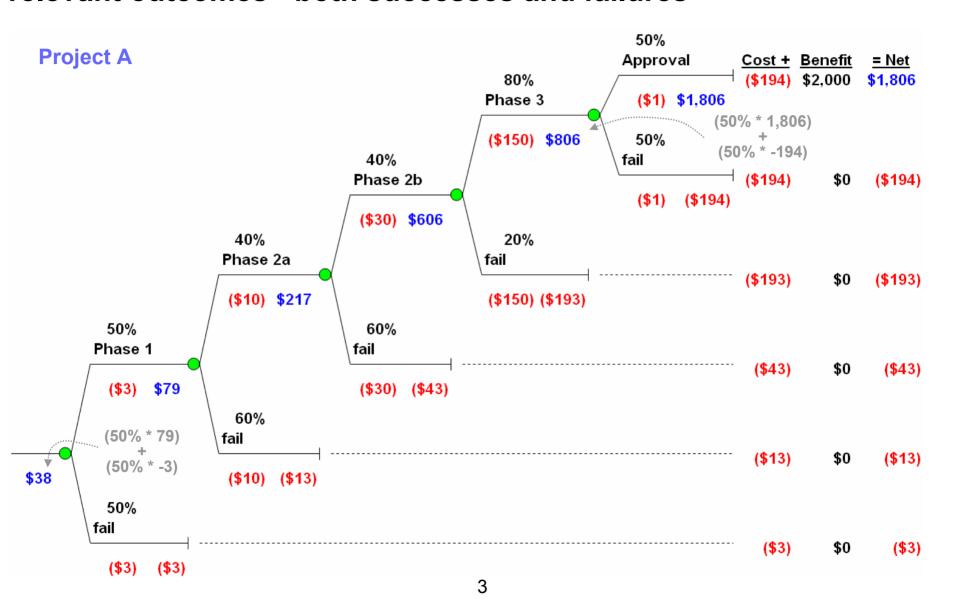
Which project should be funded, A or B?

# Time value of money: Discount future cash flows to their present value to compare investments with different time horizons

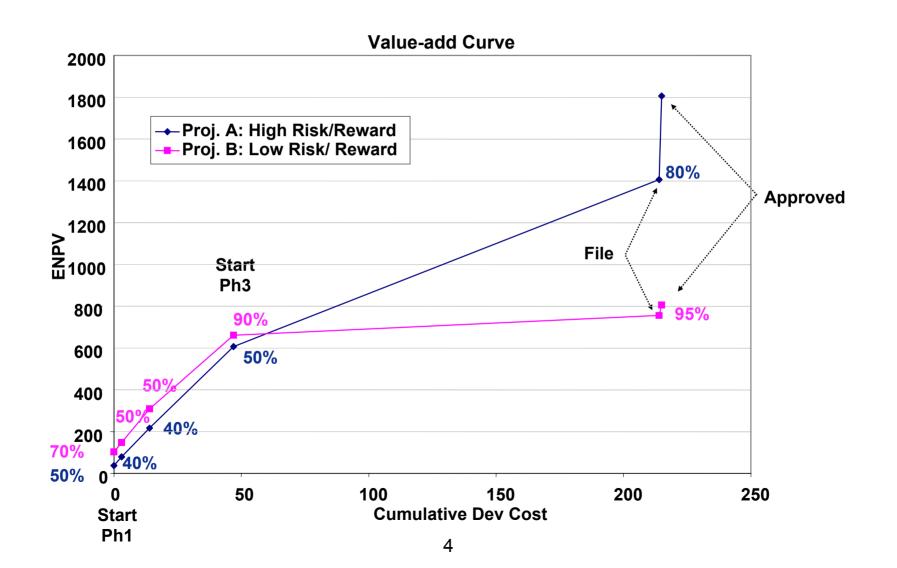


Present Value of future cash flows

## ENPV is the probability-weighted average NPV of all financially relevant outcomes - both successes and failures



## Financial metrics typically improve as R&D investment resolves technical risk



#### Comparing risk resolution profiles can be misleading

