



ACTION & INFLUENCE

# AGILE FINANCIAL MODELS

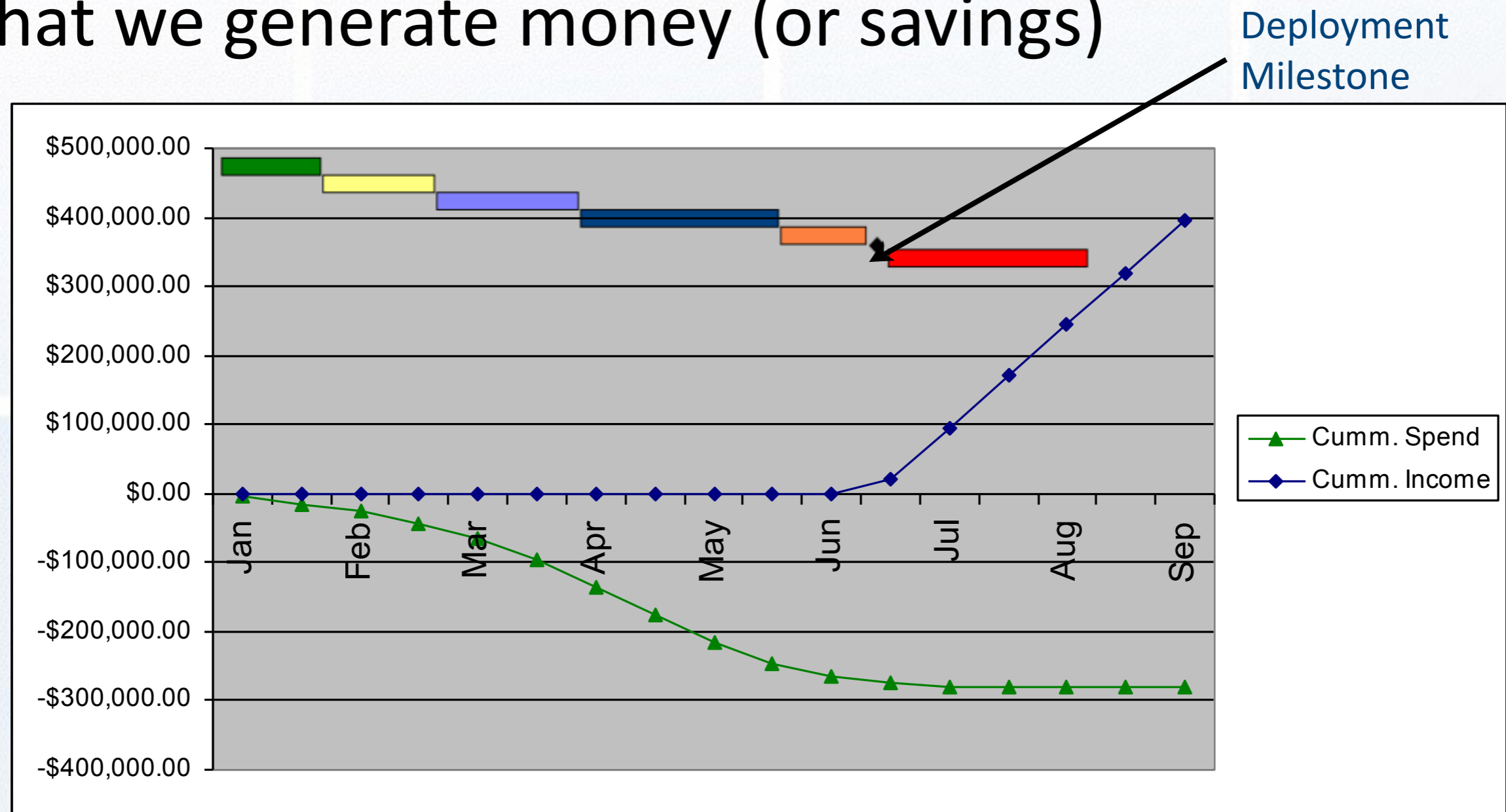
# Agile Financial Models

- Removes the emotion and focuses on common determinant across projects
- Results are 'in the numbers' - objective perspective
- Traditional approach to cost/benefit analysis
- Usually applied to large projects
- Examples of specific models:
  - Payback Period
  - Present Value
  - Net Present Value
  - Internal Rate of Return



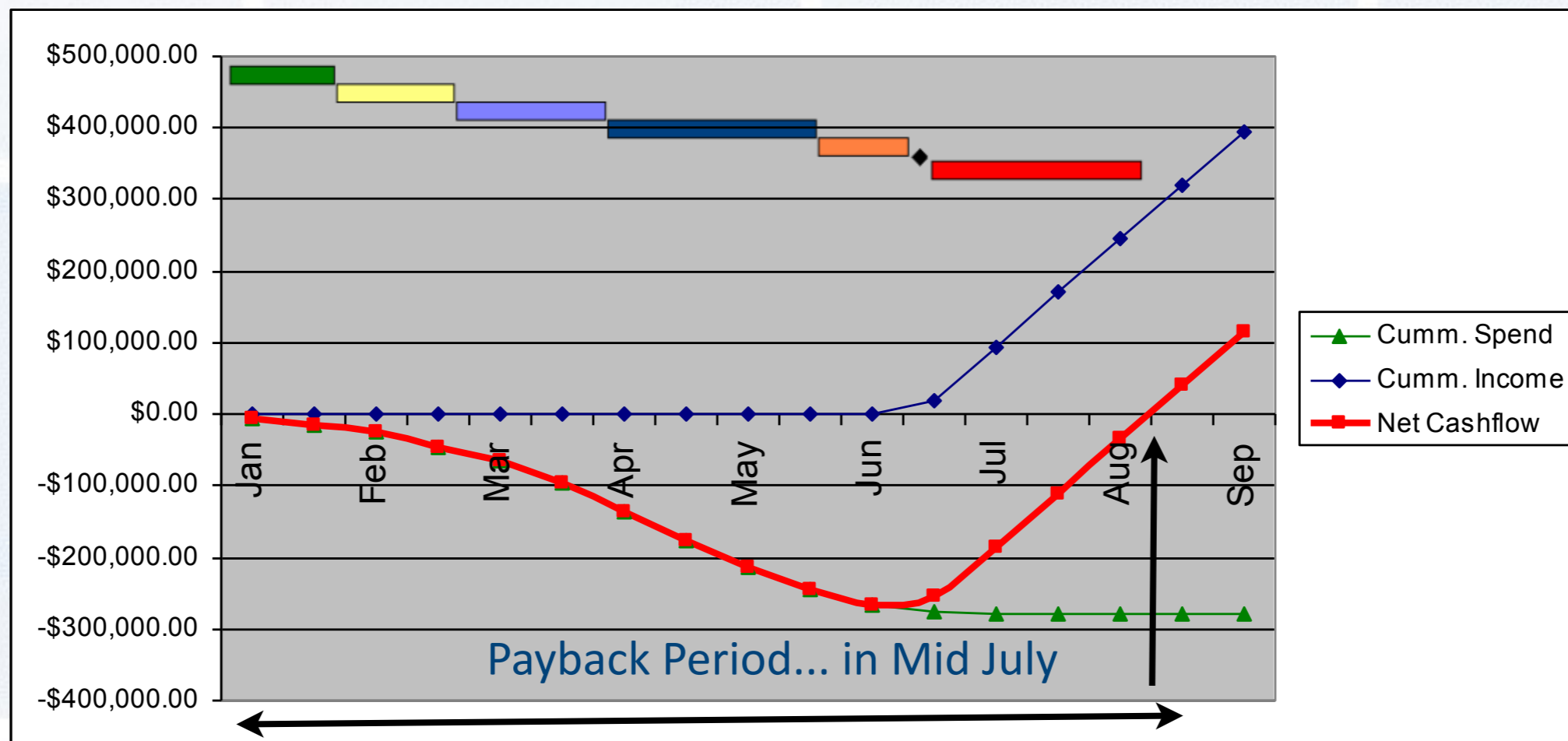
# Payback Period - Spend and Income

- As the project progresses we spend money (green). Then after the project is implemented it is hoped that we generate money (or savings)



# Payback Period - Net Cash-flow

- If you average the two cash flows, a net cash-flow can indicate the break even (outgoings equal incomings) point. However, this does not account for the fact that future returns are not valuable as cash reserves today or the effect of inflation



# Iterative Implications

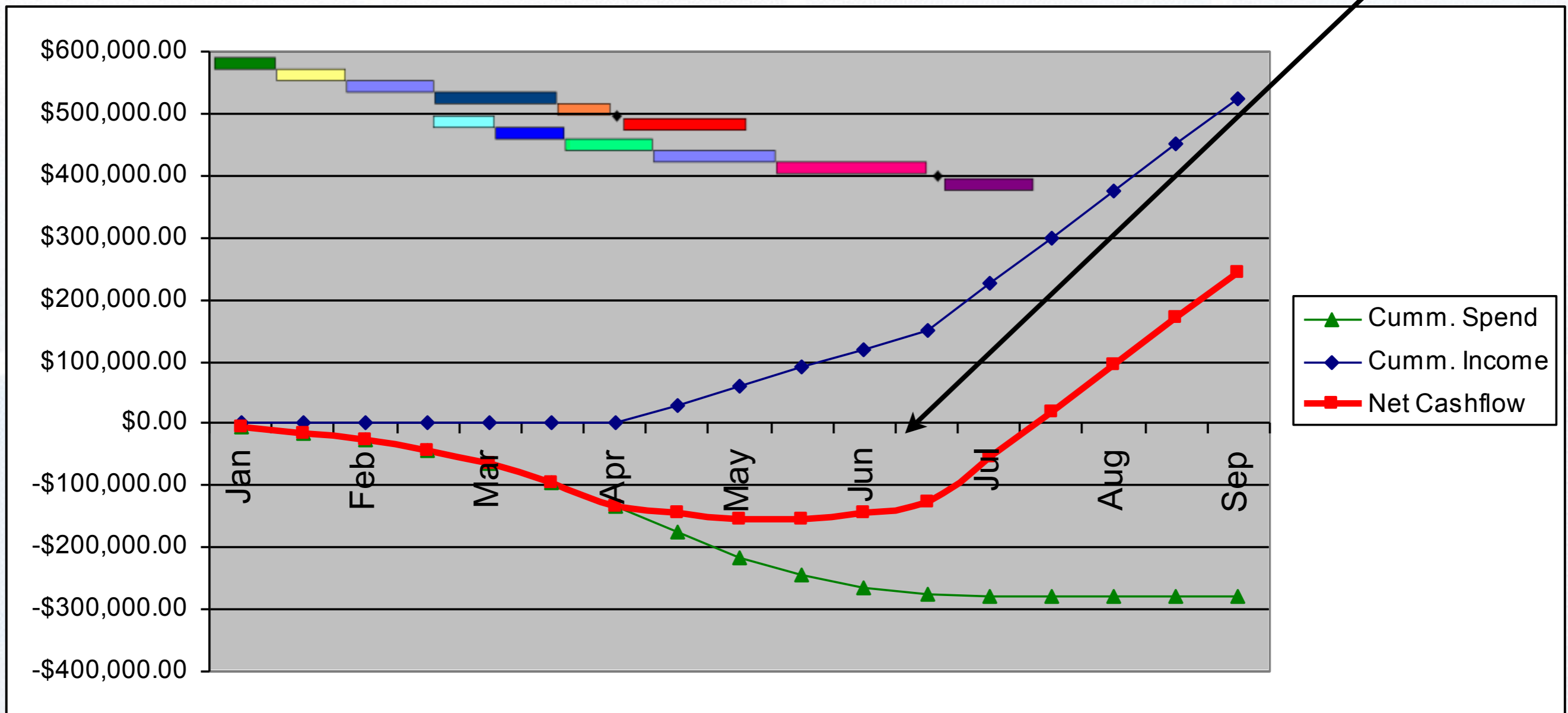
- Iterative projects can be planned to deliver useful functionality in an early release
- Generate an early (although reduced) revenue stream
  - Example would be Sprint 1 will process regular orders
  - The remainder will be delivered in the next iteration



# Payback Period - Iterative Projects

- Iterative projects can deploy early to provide income sooner

Payback mid June



# Present Value

- Present Value = The value in today's terms of a future amount

$$PV = \frac{FV}{(1+r)^n}$$

FV = Future Value

r = Interest Rate

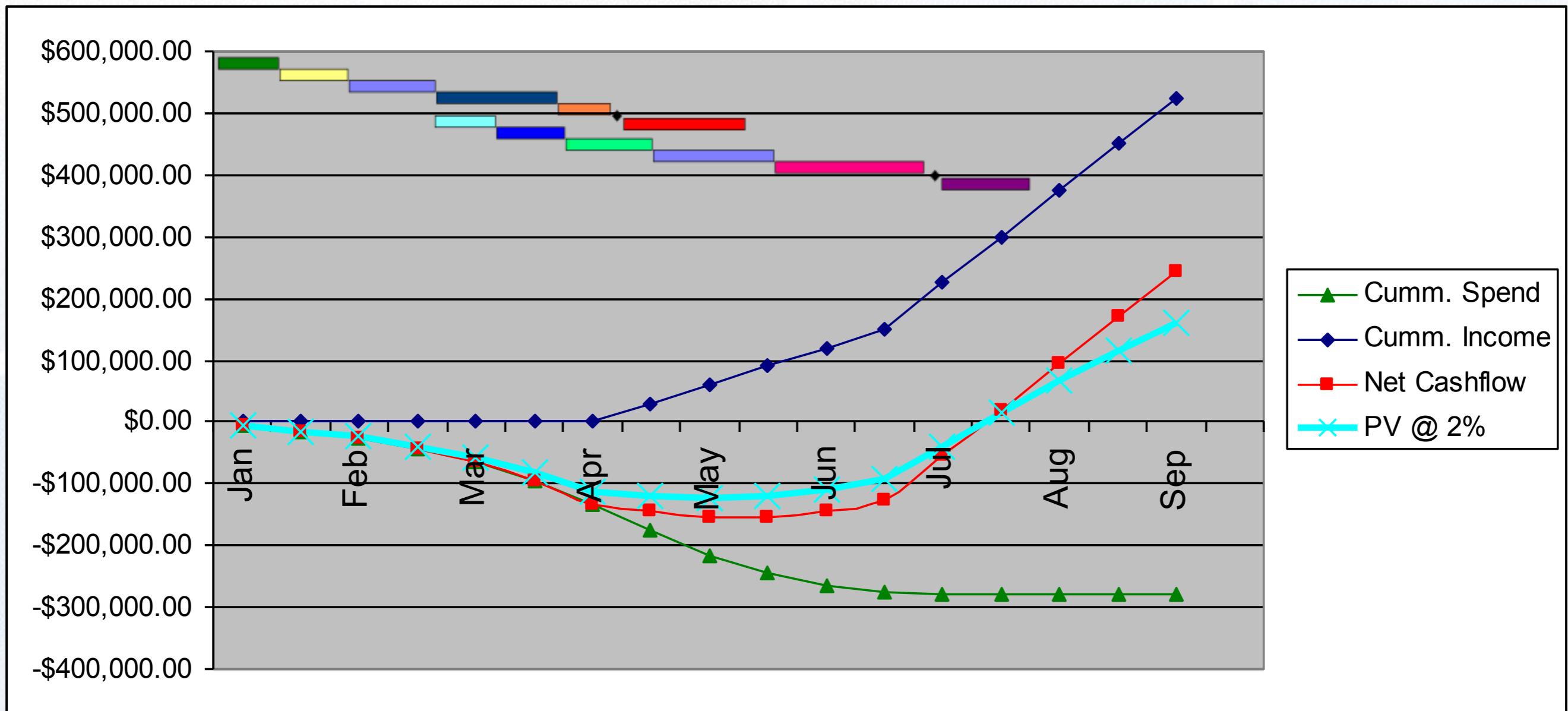
n = number of time periods

- What is the present value of \$200,000 received 4 years from now if the interest rate is 7%?
  - \$200,000 / (1 + 0.07)<sup>4</sup> = \$152,579
  - Levels the playing field for financial comparisons by adjusting future amounts in today's terms
  - Which is better to have? \$10,000 in two years or \$15,000 in 4 years?



# Present Value - Iterative Projects

- “Present Value” calculation adjusts for the effect of inflation when evaluating returns.





# Net Present Value

- Net Present Value = The total benefits (income less the costs) for a revenue stream

$$NPV = I_0 + \frac{I_1}{(1+r)^1} + \frac{I_2}{(1+r)^2} \dots + \frac{I_n}{(1+r)^n}$$

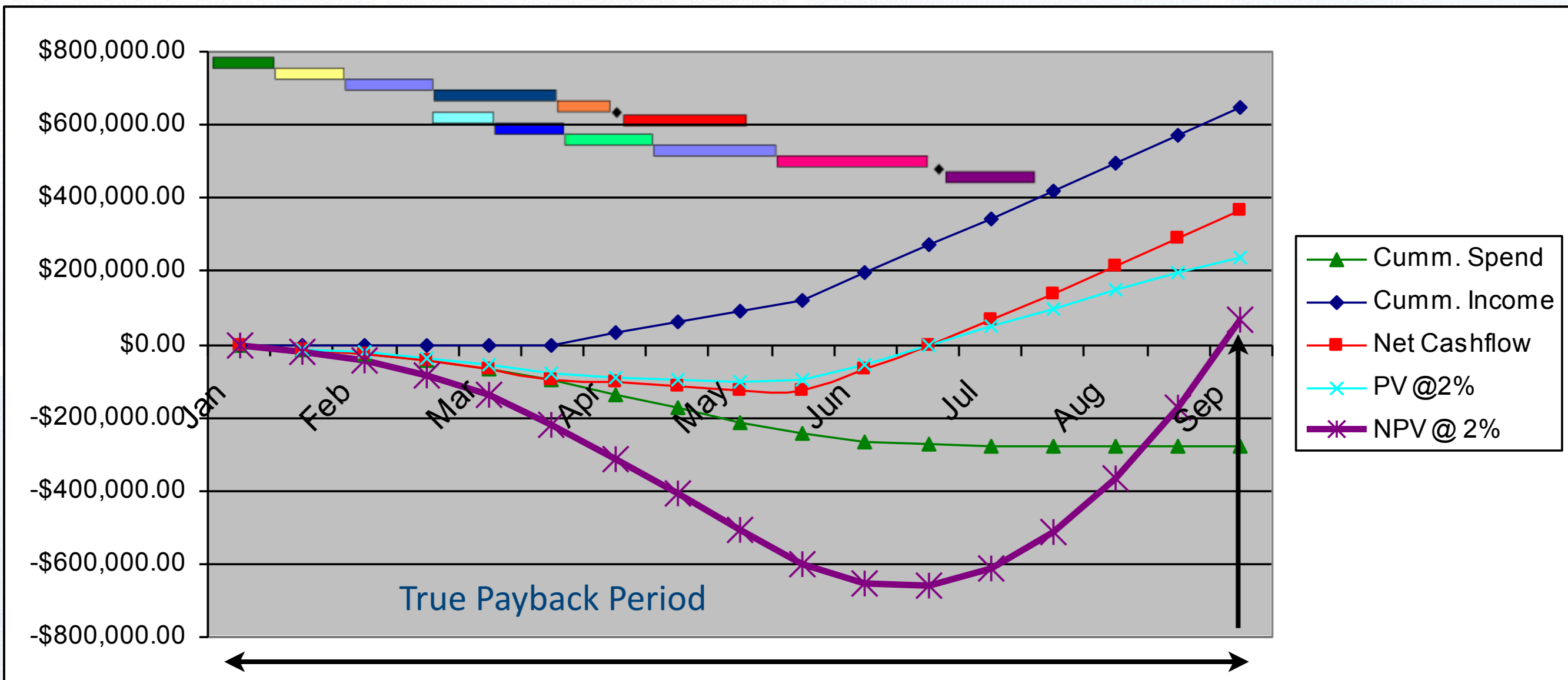
I = Income for each year  
r = Discount Rate  
n = number of time periods

- What is the net present value of a project that costs \$300,000 in the first year and returns \$80,000 for the next 4 years, assuming a discount rate of 5%?
  - $-300,000 + 80,000/(1+0.05) + 80,000/(1+0.05)^2 + 80,000/(1+0.05)^3 + 80,000/(1+0.05)^4 = -\$16,324$



# Net Present Value - Iterative Projects

- Iterative projects can deploy early to provide income sooner



# Internal Rate of Return

- “The discount rate that makes the Net Present Value of cash flows equal to zero.”
- OR...
- “What discount rate would I have to use to move the True Payback Period to the end of my project?”
- The higher the discount rate the better the project is, from a Return on Investment perspective
  - Project A IRR = 25%, Project B IRR = 18%,  
–Choose Project A



# In Summary

## □ Scoring Models

- Unifying and dispassionate look at features across user groups

## □ Financial Models

- Objective comparison of ROI on projects

## □ Iterative Fit

- Artifacts key references to checkpoint in staying on track on extended projects
- Effective tools in managing opportunities and change in an iterative approach
- Can provide a faster return on investment

# Action & Influence Clients

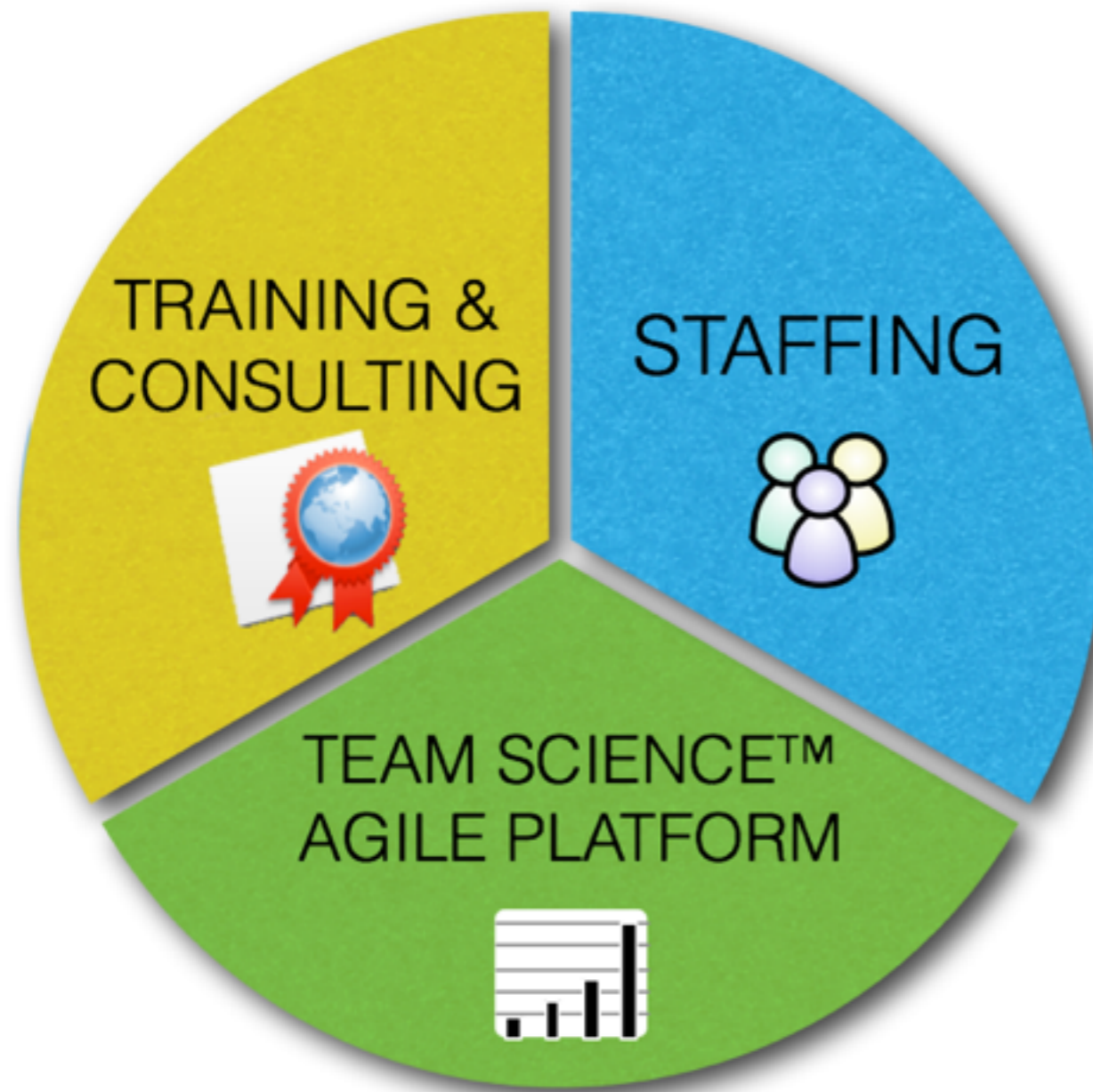


communications



# What does Action & Influence do?

## AGILE TRANSFORMATION SERVICES



Please contact **Jenny Mintz**, *VP of Talent and Development* for any staffing needs:

- Looking for a new opportunity
- Looking for candidates for your company

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# Peter Saddington MDiv, CST

- Organizational Consultant and Certified Scrum Trainer (CST)
- 15+ Years in Software Development
  - Govt/DoD <-> Fortune Companies
- *The Agile Pocket Guide - A Quick Start to Making Your Business Agile* (Wiley, 2012)
- 3 Masters Degrees:
  - *M.A. Counseling*
  - *M.A. Education*
  - *MDiv Religion*
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