

IT PROJECT MANAGEMENT

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Finding a project's ROI

Finding the present value

It's math time! The *present value* is a formula that determines how much a future amount of dollars is worth today. Imagine a project manager that boasts his project deliverables will be worth \$275,000 in five years. But what's \$275,000 today?

Here's what the formula looks like:

$$\text{Future Value} \div (1+I)^n$$

I is the interest rate and n is the number of time periods for the project. If the project manager promises \$275,000 in five years and our interest rate is 6 percent, the formula would be $\$275,000 \div (1.06)^5$. That'd be roughly \$205,000 in today's dollars (see Figure 2-5).

$$\text{Present Value} = \frac{\text{Future Value}}{(1+I)^n}$$

$$\text{Present Value} = \frac{\$275,000}{(1+.06)^5}$$

$$\text{Present Value} = \$205,000$$

Finding the future value

If you can calculate the present value of a future amount of cash you can do the inverse. Future value allows us to take a present value and see what it will be worth in the future. The formula is

$$PV \times (1+I)^n$$

where I is the interest rate and n is the number of time periods.

So imagine Jane's software promises to be worth \$500,000 in five years, but she'll need \$275,000 to make it happen. So you want to know whether the \$275,000 investment for Jane's project is worth it. If the compounded interest rate is 6 percent, the formula to use is $\$275,000 \times (1+.06)^5$.

This works out to approximately \$368,012, which means that if Jane's project can really deliver what it promises it would be a better investment — by a few thousand bucks — than leaving the money in the bank at a 6 percent interest rate (see Figure 2-6).

$$\text{Future Value} = (\text{Present Value}) (1+I)^n$$

$$\text{Future Value} = (\$275,000) (1+.06)^5$$

$$\text{Future Value} = \$368,012$$

Finding the net present value

1. Complete the present value for each release of the software.
2. Find the sum of each release's present value.
3. Subtract the organization's original investment from the sum of present value.

This value is your mystical NPV. The bigger the number, the more potential the project has. If you end up with a negative number, your project won't be profitable.

Table 2-2 shows you what this might look like for a project that will be released over three years with predicted future values for each year.

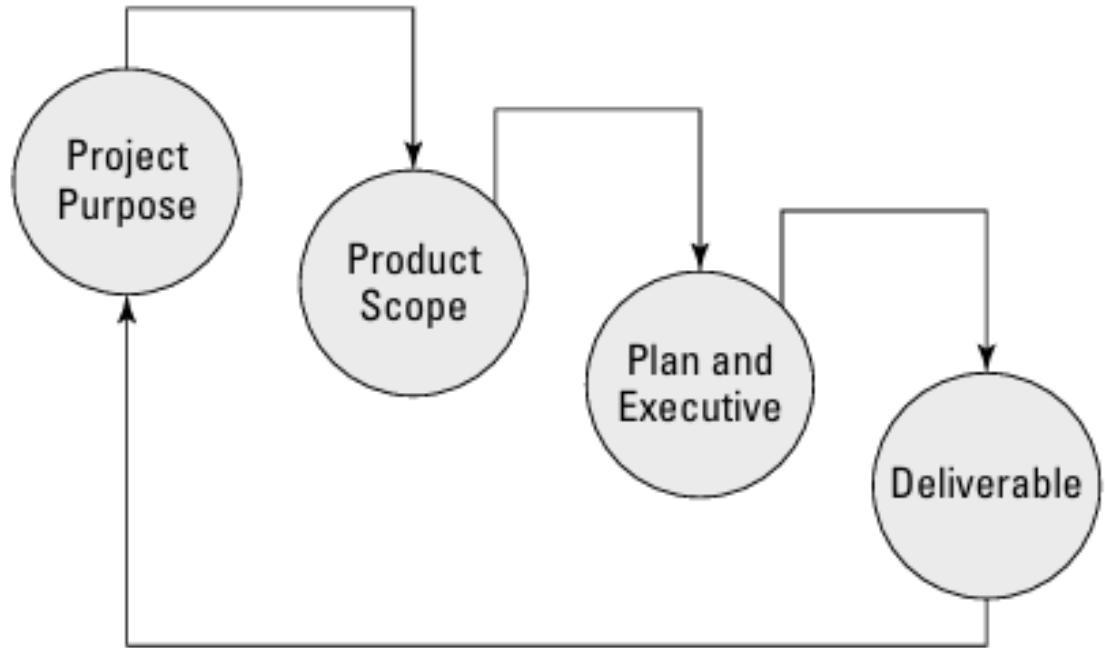
Table 2-2		Finding the Net Present Value
Year	Future Value	Present Value
1	\$35,000	\$33,019
2	\$48,000	\$42,720
3	\$81,000	\$68,009
Sum PV:		\$143,748
Investment	\$97,000	
NPV (Sum of PV – Investment)		\$46,748

We know what you're thinking: What does this mean for me when you've got a score of projects, frustrations, and stakeholders pestering you for changes, updates, and new deliverables every day?

The NPV is a decision tool not only to help managers and customers select projects, but also to determine which projects get cut first. Doesn't that sound nice? The point (the honest, real-world truth) is that these formulas can help you predict which projects should demand the bulk of your time,

Writing the Product Description

- Overall function of the software
- Features of the software the project will create or revise
- Purpose of the project work (whether it's to solve a specific problem, seize a particular opportunity, or what have you)
- Any optional or desired components that may be incorporated into the product based on the project manager's discretion
- Metrics for product acceptance (speed, reliability, and consistency, for example)



Making Your Project Wish List

Finding the ideal tools

- Development language: You need to know which code will deliver the product the fastest, and which code will deliver the best product for the customer.
- Hardware: Hardware is so freakin' cheap nowadays that we don't think you should worry too much about this tool. If your team says it needs a faster machine and can prove it, don't scrimp.
- Training: In ideal circumstances, your team already knows how to accomplish their tasks. At the very least, they have some experience working in a particular development environment. Well, the world's not always ideal.
- Other resources: Typically, when people think of resources they think of people, but resources are also things. And the things you want on your wish list are items that keep your developers happy.

Building a dream team

- Forming: In this stage, folks all come together, shake hands, and play nice. It's your job as the project manager to make certain everyone communicates with one another, feels comfortable, and recognizes who's in charge (you, of course) and what each person's roles are.
- Storming: In this stage, attitudes, personalities, and alliances begin to form. This process can be heated or passive (you can hope for a quiet storm), but you're guaranteed to see someone (besides you) take charge on the project team.
- Norming: After roles have been clearly identified, politics have been accepted or bucked, and things have calmed, you can focus on how to get the work done. This is a natural process and there's not much the project manager can really do to force the team to move into norming, or normalizing.
- Performing. Now the project team has settled and is focused on getting the work done. The project manager works to ensure work is done according to plan and tries not to get in the way of progress

Elements of a RACI chart

- A RACI chart creates clear roles and gives direction to each team member and stakeholder.
- R: Responsible: who gets the work done
- A: Accountable: who makes sure the work is done
- C: Consulted: who gives input or feedback on work
- I: Informed: who needs to know the outcome

R: Responsible	Assigned to complete the task or deliverable			
A: Accountable	Has final decision-making authority and accountability for completion (only one per task)			
C: Consulted	Must be consulted before a decision or action is taken			
I: Informed	Must be informed after a decision or action is taken			
Task	List Roles			
	R	A	C	I
Task 1				
Task 2				
Task 3				
Task 4				