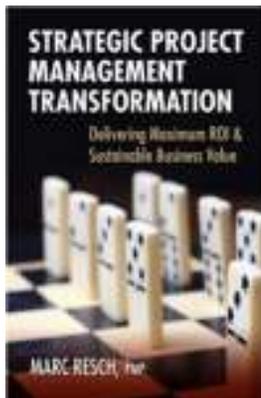


How can a PM / PMO demonstrate value to the organization in financial terms?

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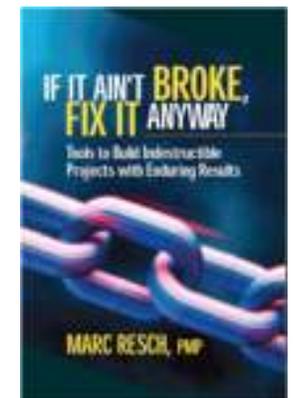
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Agenda

- Projects are strategic investments
- The business case forecasts financial value
- The ROI Umbrella -- NPV, IRR, ROI and payback period
- Business metrics are key inputs to forecasting financial value
- Project selection and prioritization utilizing objective business criteria
- Benefit realization plans enable the achievement of financial value



...Lean, Scrum, Gantt,
PMBOK, CSM, Six Sigma,
Agile / Fragile / Bedazzle,
PRINCE2, PgMP, PfMP,
Deming, Waterfall, TQM,
SAFe, PMP, CPM...



What about
ROI?



Don't bother me
with buzz words!



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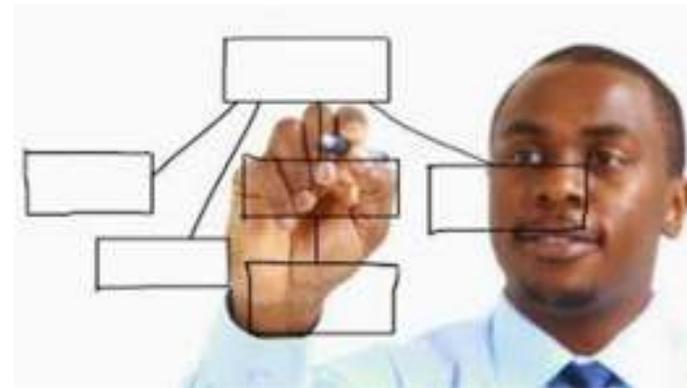
Projects are strategic investments and we expect returns on our investments

Financial Analyst



- **Considers client situation**
 - Married? Children? Age?
- **Considers many factors**
 - P/E ratio, profit, ROE, revenue

Project Professional

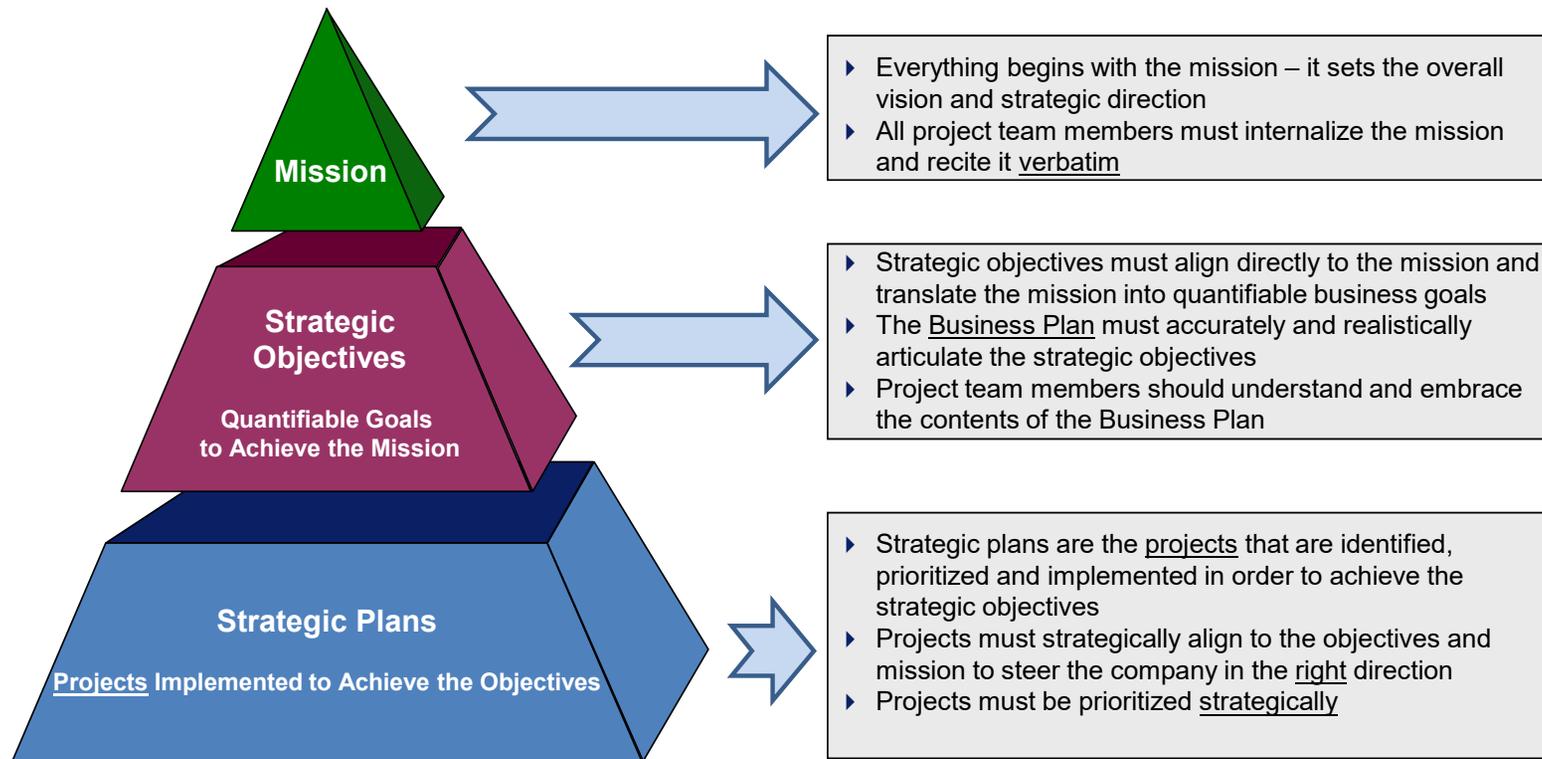


- **Considers company situation**
 - Vision, mission, objectives
- **Considers many factors**
 - Revenue generation
 - Cost savings, time savings
 - Productivity improvements

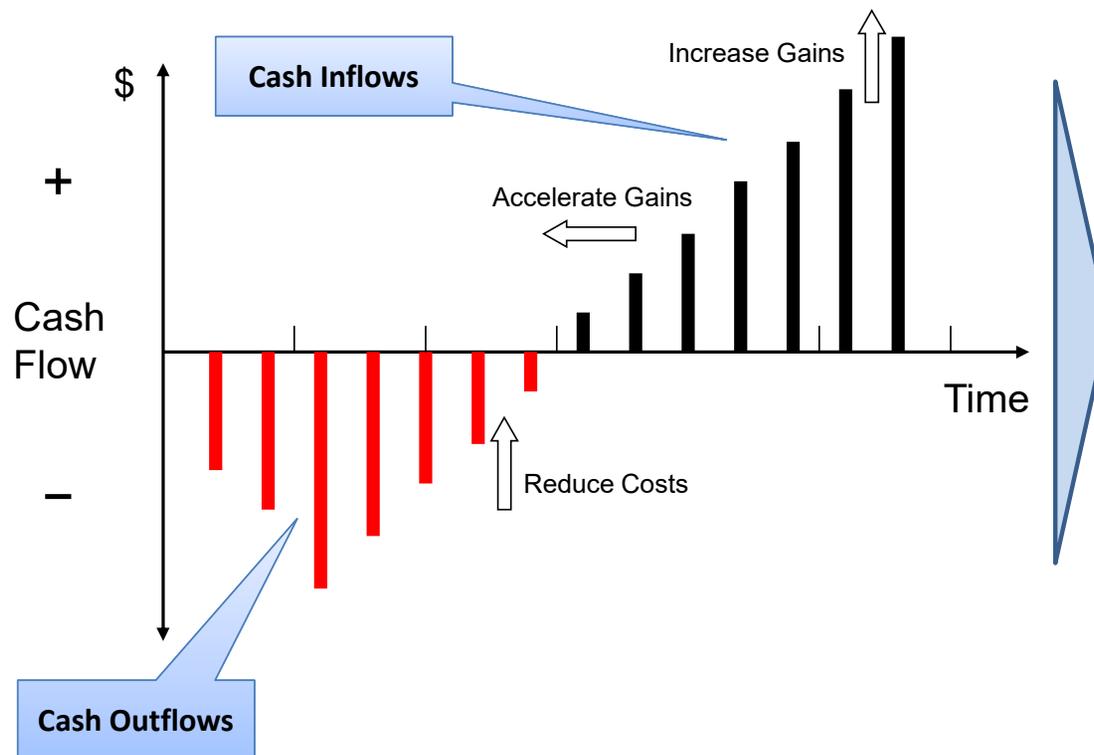
But! The cost of doing business



Project alignment to the strategic intent is paramount to success



The business case forecasts cash flows for your project investment



ROI Measurements

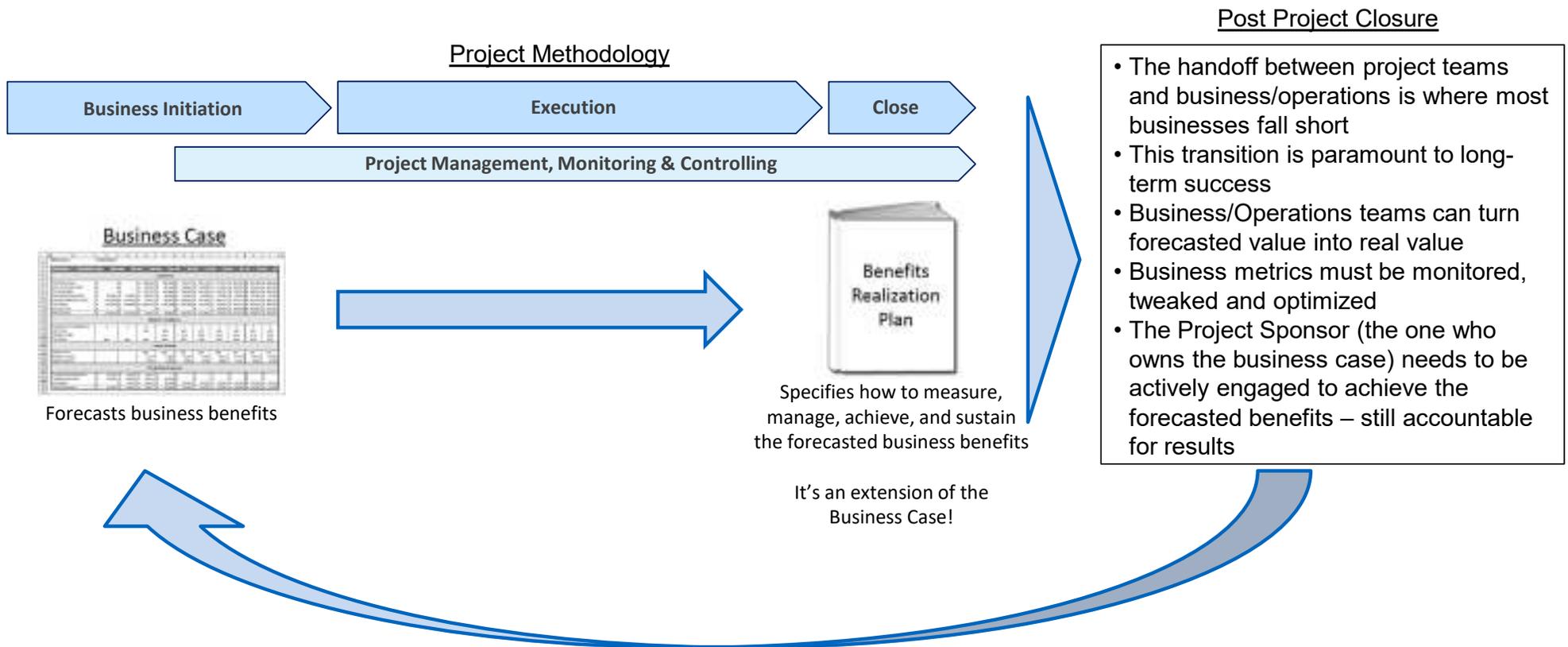
- NPV
- ROI
- IRR
- Payback Period

The business case answers strategic questions

- Why is the project investment needed in the first place?
- What will happen if the effort is not undertaken ('do nothing')?
- How much money, people, and time will be needed to deliver the solution?
- How much financial value will be generated (or lost)?
- What qualitative benefits will be achieved?
- What are the risks of implementing this project?



Everything ties back to the Business Case – it's that important!



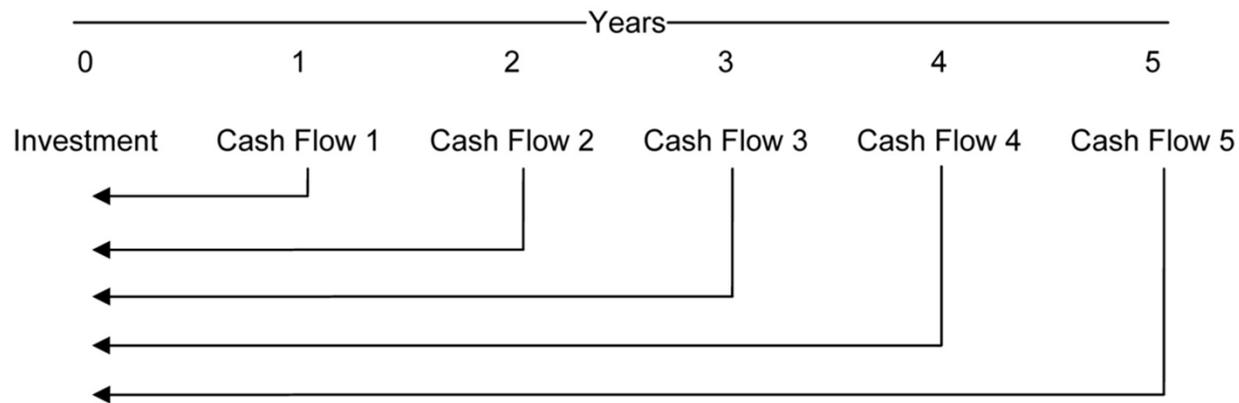
The Project ROI Umbrella



Net Present Value (NPV)

NPV calculates the amount of money, in today's dollars, that a project is expected to make or lose for a company

Discounting a Series of Future Cash Flows.



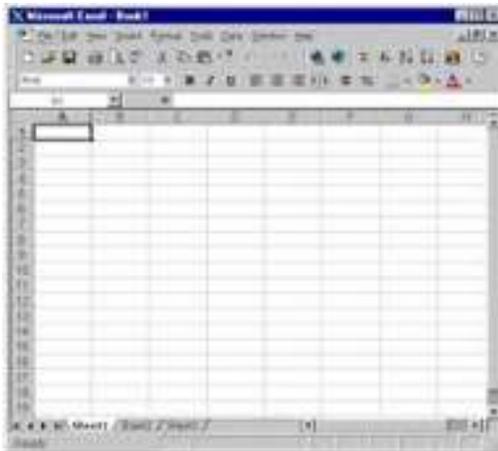


$$NPV = \sum_{t=0}^n \frac{CF_t}{(1+r)^t}$$

$$NPV = CF(\text{year } 0) / (1+r)^0 + CF(\text{year } 1) / (1+r)^1 + CF(\text{year } t) / (1+r)^t$$

Thank goodness for Excel!

=NPV(.07, H1:H6)



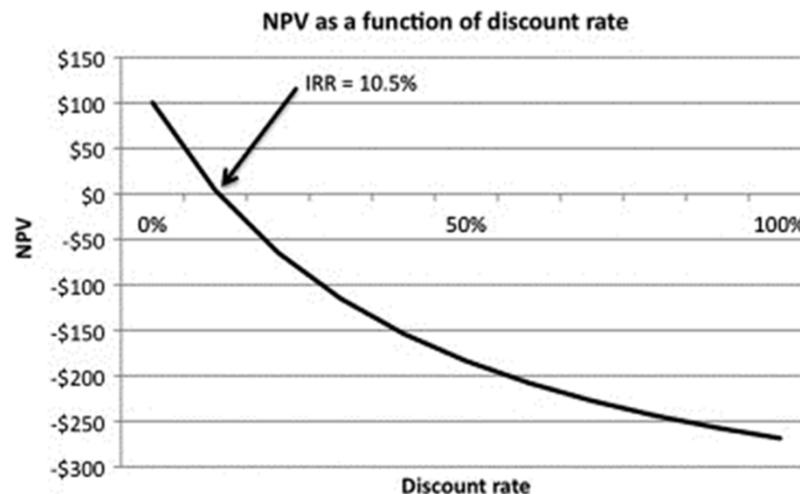
- Companies will know the amount of money that is expected to be generated and returned to the company's cash reserves
- That money can then be used to:
 - Pay shareholders
 - Reduce debt
 - Re-invest in other projects
 - Re-invest in other business initiatives

Internal Rate of Return (IRR)

- The yearly rate (%) to recover the investment in a project (makes the NPV = \$0)
- If the IRR is greater than the rate of financing the project, then a surplus will remain after all of the finance costs are paid

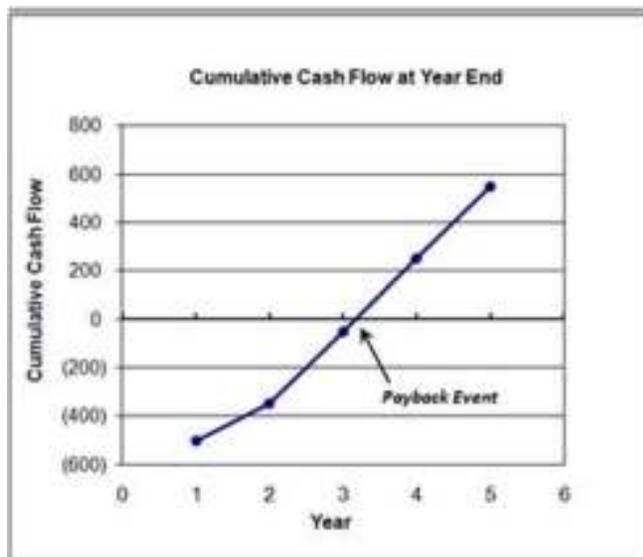
$$0 = CF(\text{year } 0) / (1 + r)^0 + CF(\text{year } 1) / (1 + r)^1 + CF(\text{year } T) / (1 + r)^T$$

Solve for r



Payback Period

The period of time required for a project's financial benefits to 'repay' the sum of the project investment costs



- In most cases, shorter payback periods are preferable to longer ones
- The payback period is more aligned with liquidity
- The payback period is often used as a measure of risk; the longer the payback, the riskier the project

Return on Investment (ROI)

- Compares the overall project benefits to costs
- Expressed as a percentage and is based on financial returns over a pre-determined time period

$$\text{Basic ROI} = (\text{Total benefits} - \text{Total costs}) / \text{Total costs}$$



If a project investment costs \$100 and quickly produces financial benefits of \$150, what is the ROI?

We need to be cognizant of the Inherent flaws with basic ROI

- ROI only compares the total costs to the total benefits and doesn't deal with the individual cash flows, which often include depreciation and taxes
- ROI extremely dependent upon the length of the analysis
 - ROI results can become overly-inflated when the analysis covers many years, especially when financial benefits keep occurring far into the future
- Increases in ROI values come as no surprise as benefits keep occurring and rising
 - We must keep the cash flow analysis to a reasonable time period (useful life of a project)
 - As professionals, we must show true ROI results, not inflated ones



Project Benefit Metrics

Key inputs into our cash flow models



Let's redefine project benefits so they make business sense

ROI Contributing Benefits (Hard / Tangible)

Benefits that can be quantified and expressed monetarily and contribute directly to a project's return on investment (ROI)

- Items produced / items sold
- Staff reduction
- Reduction in FedEx shipments
- Equipment downtime
- Reduction in defects
- Reduced travel time
- *Time savings / efficiency gains*



Value Enabling Benefits (Soft / Intangible)

Benefits that enable the achievement of business value, but cannot be expressed monetarily for inclusion in a project's ROI analysis

- Customer satisfaction
- Community / Investor image
- Employee knowledge base
- Communication
- Employee morale
- *Time savings / efficiency gains*



Effective baselining and benchmarking greatly enhances project success

- You know where you are with baselining
- You know where you can be with benchmarking
- Now you can determine where you should be, given business requirements, risk tolerance and project objectives



Case study #1: Wireless technology Implementation



Overview

- Pioneers in deploying wireless technology for package tracking purposes – very expensive at the time!
- Goal was to reduce drivers from using pay phones to submit package tracking information
- What can't drivers do when they are going off their routes, dialing a number, and transmitting information?
- A lot more packages can be delivered with thousands of additional hours at their disposal!
- Easy to quantify in financial terms -- Higher profits!

Case study #2: Supply chain software implementation

Overview

“We targeted a 10-15% forecast accuracy improvement in beer shipments. We went from 63% forecast accuracy to over 80%. That’s over a 17% forecast accuracy improvement!”

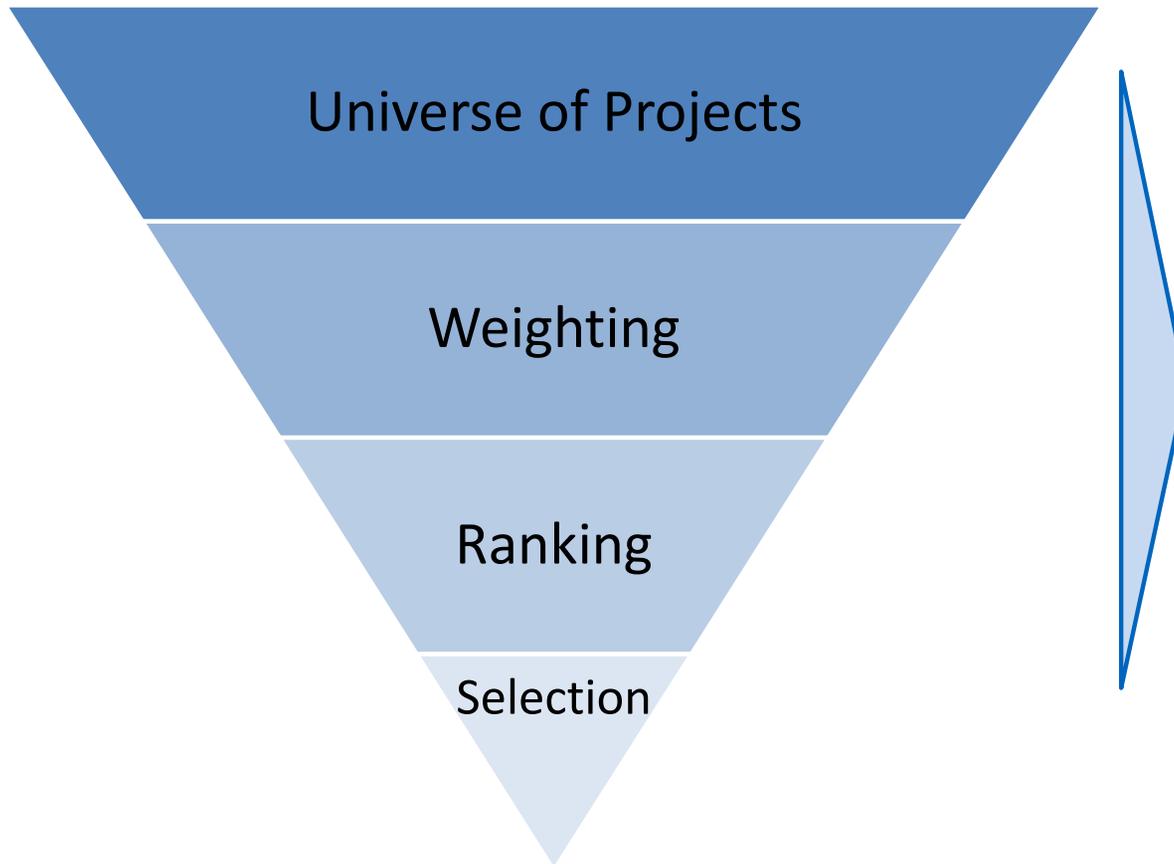
Results

- Less beer wasted
- More satisfied and satiated customers
- Easy to quantify results in financial terms
- Higher profits!

Mission Accomplished...CHEERS!



Project Selection and Prioritization



Examples

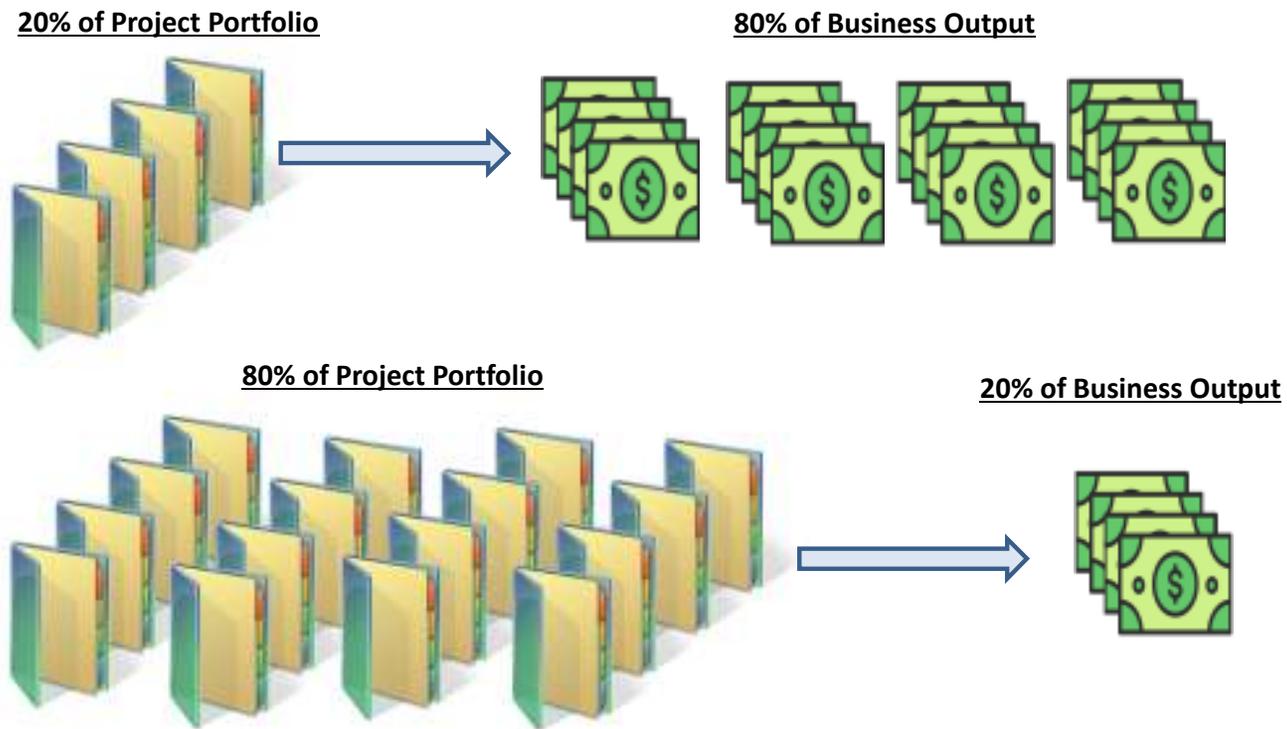
- Produces a good ROI
- Reduces defects and rework
- Increases output production
- Improves customer satisfaction
- Improves corporate image
- Has a low implementation risk
- Improves competitiveness
- Increases sales
- Reduces costs
- Improves product quality
- Supports strategic objectives

You can be executing a project flawlessly, but if it's the wrong one, what's the point?



Think Pareto

80% of the business output is produced by 20% of the project input



Concentrate on “vital few” rather than “trivial many”

Objective business criteria and weighted scoring model to facilitate project decision making, ranking, and prioritization

Example

Weighted Importance of Business Criteria

| Attribute | Description | Weight |
|--|--|-------------|
| Achieves financial benefits | Project delivers a positive return on investment (ROI) / reduces costs | 35% |
| Addresses mandates and/or risks | Project required to meet legal, regulatory, audit, and/or contractual mandates | 25% |
| | Project addresses risks, such as privacy, security, breaches, data confidentiality | |
| Aligns to 12-18 month strategic objectives | Project aligns to the 12-month corporate goals | 20% |
| Has a high probability of success | Project has limited risk factors that adversely affect the outcome | 20% |
| | | 100% |

| Business Attribute | Scoring Method and Guidelines (0 - 10 Scoring) |
|------------------------------------|--|
| Achieves financial benefits | 0: Project does not achieve any financial benefits |
| | 2: Project achieves less than \$100,000 in financial benefits |
| | 4: Project achieves \$100,00 to \$250,000 in financial benefits |
| | 6: Project achieves \$250,000 to \$500,000 in financial benefits |
| | 8: Project achieves \$500,000 to \$1MM in financial benefits |
| | 10: Project achieves over \$1MM in financial benefits |

| Business Attribute | Scoring Method and Guidelines (0 - 10 Scoring) |
|--|--|
| Addresses mandates and/or risks | 0: Project does not comply with a mandate or addresses any risks |
| | 2: Project addresses a mandate or risk of low impact |
| | 4: Project addresses a mandate or risk of low-med impact |
| | 6: Project addresses a mandate or risk of medium impact |
| | 8: Project addresses a mandate or risk of med-high impact |
| | 10: Project addresses a mandate or risk that has a major impact |

Portfolio can be prioritized once the projects have been assessed

Example

Weighted Scoring Matrix

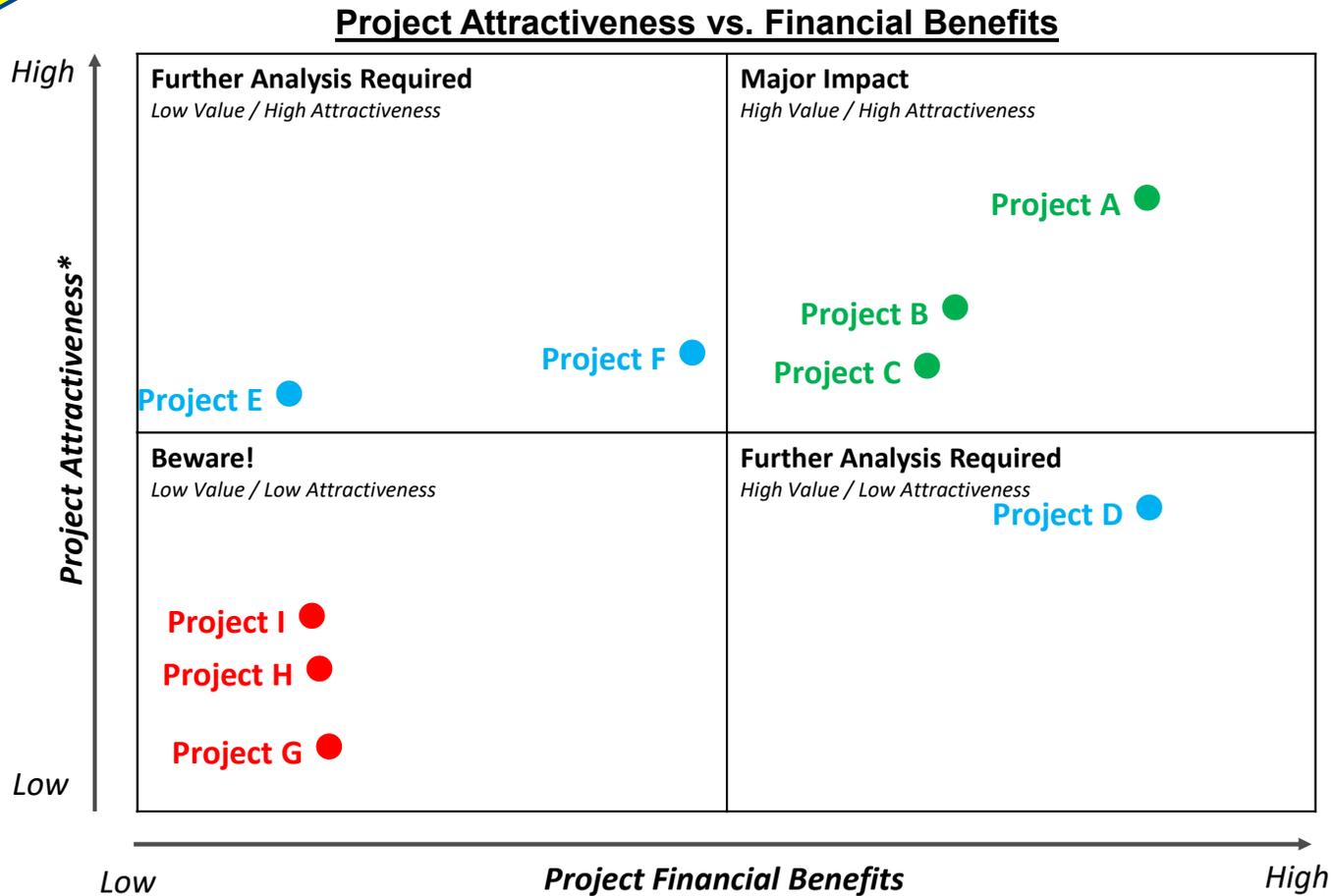
| Business Unit | Financials | | Mandates/Risks | | Aligns | | Success Probability | | Total Score |
|---------------|------------|-------|----------------|-------|---------|-------|---------------------|-------|-------------|
| | Ranking | Score | Ranking | Score | Ranking | Score | Ranking | Score | |
| Project A | 10 | 3.5 | 10 | 2.5 | 8 | 1.6 | 10 | 2 | 9.6 |
| Project B | 8 | 2.8 | 5 | 1.25 | 8 | 1.6 | 10 | 2 | 7.65 |
| Project C | 8 | 2.8 | 5 | 1.25 | 8 | 1.6 | 8 | 1.6 | 7.25 |
| Project D | 10 | 3.5 | 10 | 2.5 | 2 | 0.4 | 2 | 0.4 | 6.8 |
| Project E | 4 | 1.4 | 0 | 0 | 4 | 0.8 | 4 | 0.8 | 3 |
| Project F | 8 | 2.8 | 0 | 0 | 2 | 0.4 | 2 | 0.4 | 3.6 |
| Project G | 2 | 0.7 | 0 | 0 | 2 | 0.4 | 4 | 0.8 | 1.9 |
| Project H | 2 | 0.7 | 5 | 1.25 | 2 | 0.4 | 2 | 0.4 | 2.75 |
| Project I | 2 | 0.7 | 10 | 2.5 | 2 | 0.4 | 2 | 0.4 | 4 |

Ranking x Weight = Score

The goal is to have automated tools perform all the calculations “behind the scenes” and to produce dashboards, heatmaps, etc.

Tools can then produce effective dashboards

Example



Business Value Attainment

Ensuring that your forecasted value
becomes a reality



Think about a project you've completed a year
or two ago...



...did your benefit forecasts become a reality?

It's an extension of the Business Case

Business Case



| Category | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|------------|--------|--------|--------|--------|--------|
| Revenue | 1000 | 1100 | 1200 | 1300 | 1400 |
| Costs | 600 | 650 | 700 | 750 | 800 |
| Net Profit | 400 | 450 | 500 | 550 | 600 |

Forecasts business benefits



Specifies how to measure, manage, achieve and sustain the forecasted business benefits

Key elements of the Benefits Realization Plan

1. Benefit name
2. Detailed benefit description
3. Current baseline measurement
4. Benefit owner
5. Benefit beneficiaries
6. Start date
7. Benefit milestone date(s)
8. Benefit attainment date
9. Benefit dependencies
10. Risk to achieving the benefit and mitigation plans
11. Measurement process and frequency
12. Performance reporting process and frequency
13. Benefit optimization process and frequency



Financial Measurements

- Planned ROI vs. Actual ROI
- Planned Benefits vs. Actual Benefits

