



Building the Business Case for Technology Investments



John Shinneman, CPA
Solution Architect, ACS, Inc.
john.shinneman@acs-inc.com

Agenda – What to Expect Today

- Understanding Business Drivers and Quantifying Technology Benefits
- Understanding Key Financial Measures
- Building the Business Case
- Surviving the Boardroom
- Questions/Answers



Understanding Business Drivers and Quantifying Technology Benefits: *Getting to First Base*



Understanding Business Drivers



What are Business Drivers?

- Factors or forces that affect the success or operation of a market, industry, or enterprise.
- Examples of Business Drivers include:
 - Financial (lower costs, increase revenue, etc.)
 - Regulatory (HIPAA requirements, Sarbanes-Oxley reporting, etc.)
 - Competitive (market shifts, “fight or flight”, etc.)

Understanding Business Drivers



What are *not* Business Drivers?

- Concerns or issues that may be a nuisance but do not impact the overall success of an enterprise
- Examples of non-Business Drivers include:
 - Reduce latency of network
 - Expedite release of equipment or application

Quantifying Technology Benefits

Two Categories



- Quantitative Benefits
 - Hard dollars - typically easy to identify
- Examples of Quantitative Benefits
 - Reduction in capital expense
 - Reduction in operating expense
 - Increase in revenue
 - Reduction in customer churn

Quantifying Technology Benefits

Two Categories



- Qualitative Benefits
 - Soft dollars - more difficult to identify, but can have just as much positive impact to a project analysis
- Examples of Qualitative Benefits
 - Increase in customer satisfaction
 - Increase in end-user productivity
 - Increase in employee morale

Quantifying Technology Benefits: Converged Environment Example



- **Hard Savings:**
 - Reduction in support staff
 - Reduction in maintenance expense
 - Reduction in travel/training expense
 - Reduction in transport expense
- **Soft Savings:**
 - Increase in personal productivity
 - Increase in employee retention
 - Improve customer satisfaction

Understanding Key
Financial Measures:
Advancing to Second Base



Understanding Key Financial Measures

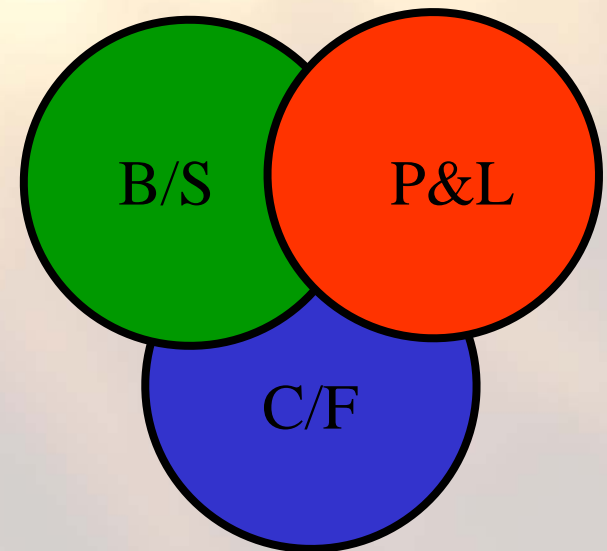


- **Total Cost of Ownership (TCO):** Cost of owning a particular investment over a specified time period and includes both the acquisition and ongoing support costs.
- **Return on Investment (ROI):** The expected return on an investment in technology over a defined period of time.
- **Cost of Capital:** An entity's calculation of their opportunity cost, or internal hurdle rate.

Understanding Key Financial Measures



- Relationships between three basic financial statements
 - Balance Sheet
 - Income Statement (P&L)
 - Cash Flow



Understanding Key Financial Measures



- **Payback Period:**

$$0 = (\text{Cumulative Cash Outflows}) - (\text{Cumulative Cash Inflows})$$

- **Present Value (PV):**

$$PV = FV / (1 + r)^n$$

- **Future Value (FV):**

$$FV = PV * (1 + r)^n$$

Understanding Key Financial Measures

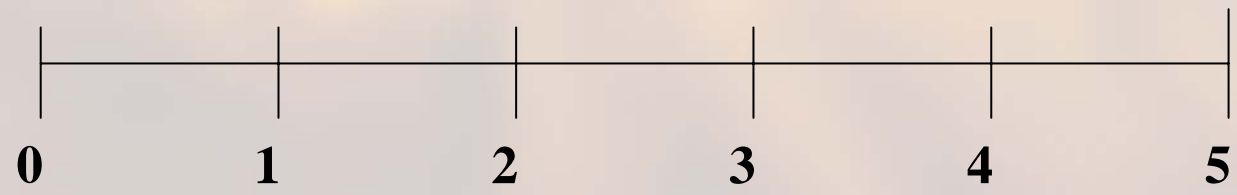


PV

FV

\$

\$



Understanding Key Financial Measures

- **Net Present Value (NPV):**

$$\text{NPV} = \text{Sum (PV (C}_n\text{))} - i_0$$

NPV \geq 0: The project has a high probability of approval

NPV $<$ 0: There are probably better uses of capital



Understanding Key Financial Measures



NPV Example:

What would the Net Present Value for a project with an initial investment of \$40,000 and the following net cash flows be if the company's cost of capital is 5%?

Net Cash Flows for Year 1 is \$25,000, for Year 2 is \$36,000 and for Year 3 is \$5,000.

Year	NCF	x	PVIF @ 5%	PV
1	\$25,000	x	.952	\$23,800
2	\$36,000	x	.907	\$32,652
3	\$5,000	x	.864	\$4,320
Sum of Discounted Cash Flows @ 5%				\$60,772
Less: Initial Investment				\$40,000
Net Present Value				\$20,772

Understanding Key Financial Measures



- **Internal Rate of Return:**

$$0 = CF_0 + CF_1/(1 + r)^1 + CF_2/(1 + r)^2 + CF_3/(1 + r)^3 + CF_n/(1 + r)^n$$

Answers the question: At what discount rate does the NPV = 0?

Understanding Key Financial Measures



Internal Rate of Return Example



Building the Business Case: *Moving Over to Third Base*



Building the Business Case



- Optimize vs. Invest
- Identify the Business Drivers
- Identify the Key Stakeholders
- Identify the Critical Success Factors
- Quantify the Current State
- Quantify the Goal State
- Create a Gap Analysis

Building the Business Case: Optimize vs. Invest



- Technology Optimization – when an entity tries to resolve business issues by better utilizing its existing IT assets and resources.
- Technology Investment – once an entity has concluded that further optimization is not possible, investment in new technology to resolve business issues is necessary.

Building the Business Case: Identify the Business Drivers



- Identify the *Issues*
 - What problem(s) will the investment resolve?
- Gather the *Evidence*
 - How is the problem(s) measured or observed today?
- Quantify the *Impact*
 - How will solving this problem help?
 - What are the consequences of not solving the problem?

Building the Business Case: Identify the Key Stakeholders



- Who is currently experiencing the “pain”?
- Who will provide input during the project?
- Who will benefit from solving this problem?
- Who needs to approve the project?
- Who will be accountable during the implementation process?

Building the Business Case: Identify the Critical Success Factors



- What measures will be used to determine if the project is a success?
- When (and how often) will measurements be taken?
- What necessary corrective actions will be made during the measurement period?

Building the Business Case: Current State Analysis



Build a baseline of existing environment:

- Capital expense
- Operating expense
- FTEs
- Historic volumes
- Service Delivery
- Current exposure to Risk

Building the Business Case: Goal State Analysis



Build a projection of the new environment:

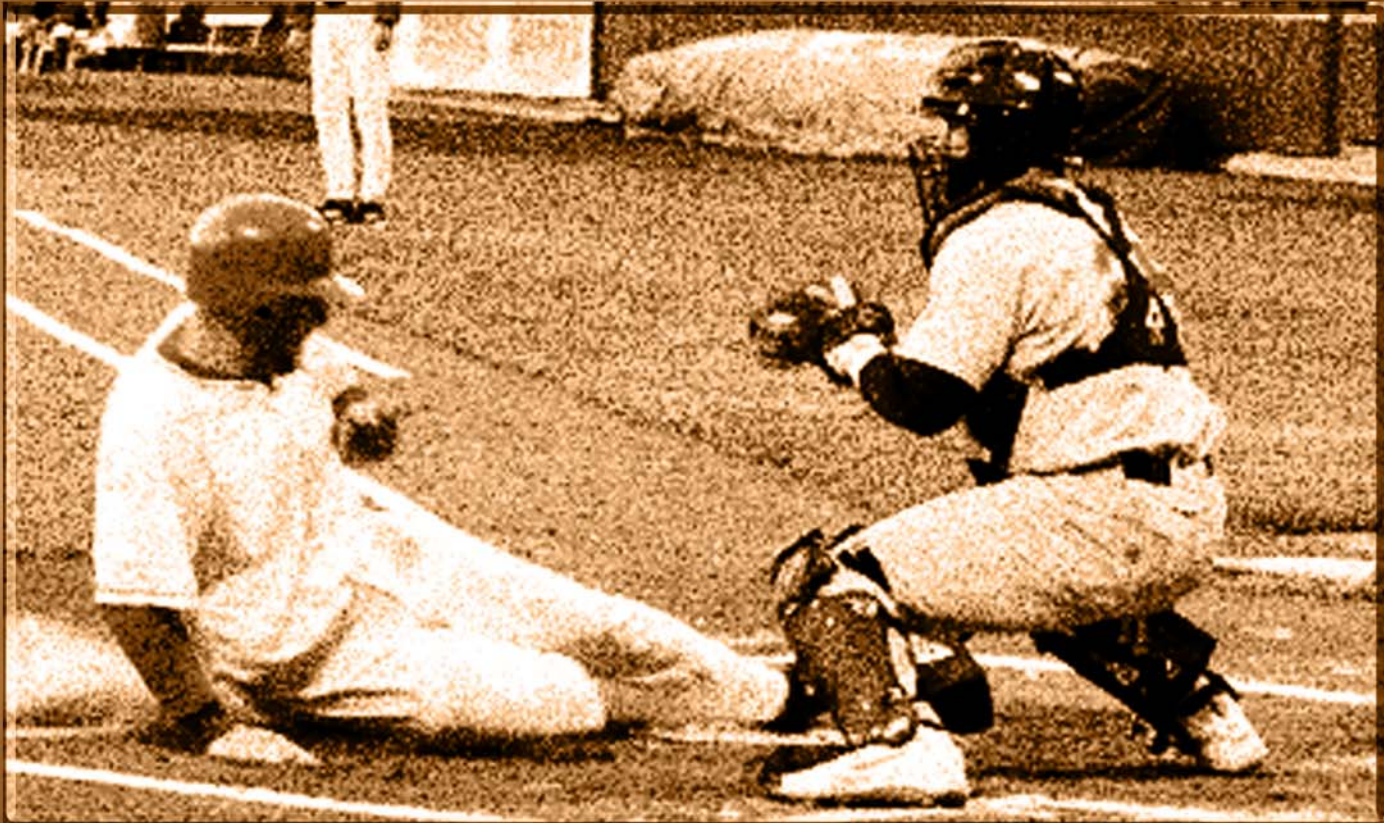
- Capital expense
- Operating expense
- FTEs
- Changes in volumes
- Service Delivery
- New benefits
- Exposure to Risk (and how it will be mitigated)

Building the Business Case: Gap Analysis



- Quantify the incremental changes (+/-) between the Current State vs. Goal State.
- Apply financial metrics to determine ROI of project.
- Illustrate when measurements will be taken.
- Tie financial analysis to Business Drivers and Key Stakeholders.
- Make recommendations based on results of analysis.

Surviving the Boardroom:
Getting to Home Plate to Score

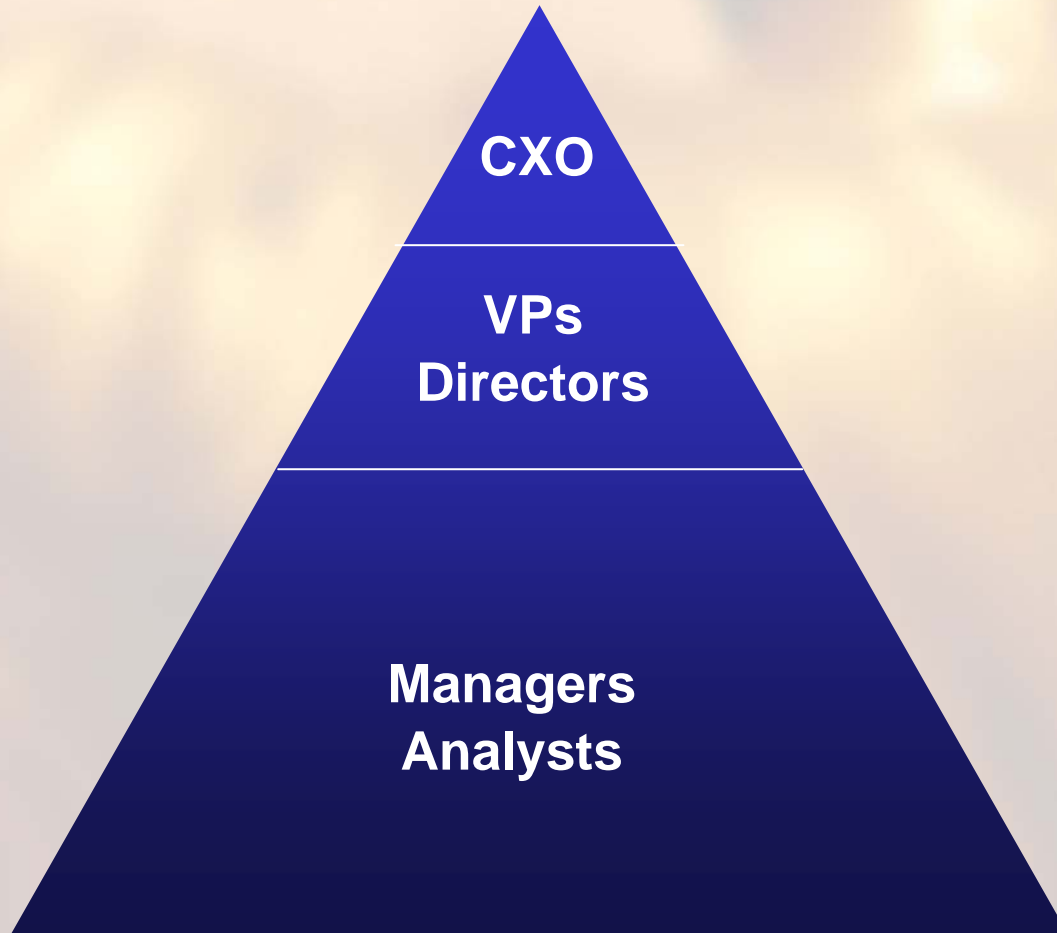


Surviving the Boardroom: Getting to Home Plate



- Know your audience
- Understand the agendas - professional *and* personal
- Know the Approval Process
(Capital Budgeting Process)

Surviving the Boardroom: Know Your Audience



Surviving the Boardroom: Concerns and Responsibilities

- CIO Concerns:



Security/Regulatory Policies

Bus. Continuity

Capacity & Growth

Secure Funding

Manage Op/Cap Exp

SLA Definition

Consistent Vision



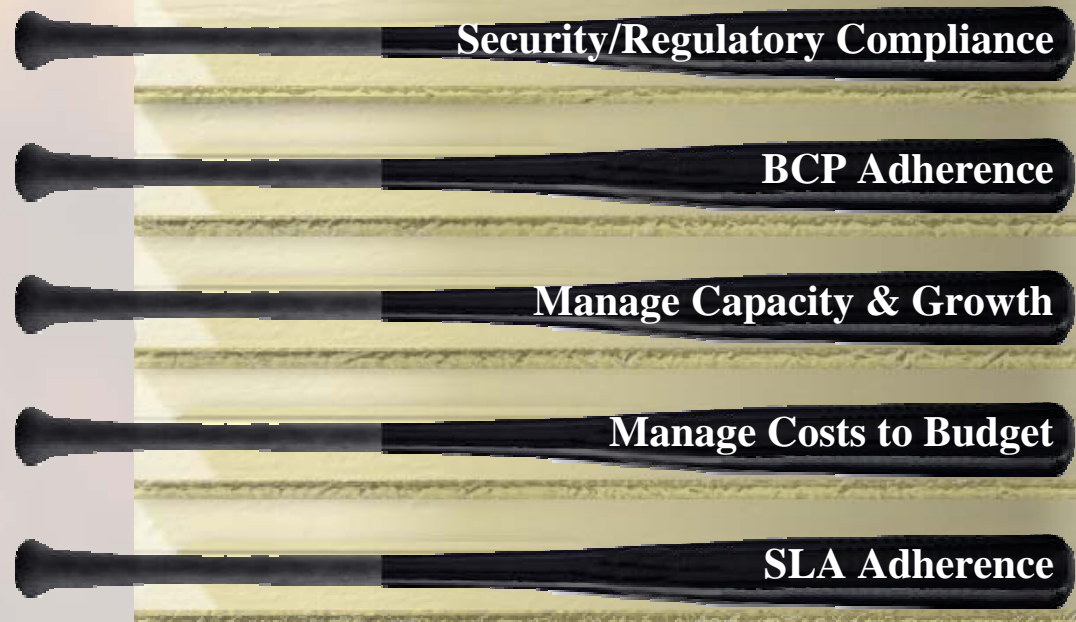
Surviving the Boardroom: Concerns and Responsibilities

- CIO Responsibilities:



Surviving the Boardroom: Concerns and Responsibilities

- VP/Directors Concerns:



Surviving the Boardroom: Concerns and Responsibilities

- VP/Director Responsibilities:



Manage Performance

Set Dept. Priorities

Manage Dept. Spend

Own/Build Relationships

Leverage Technologies

Distribute Initiatives

Translate Vision to Plan



Surviving the Boardroom: Concerns and Responsibilities

- **Manager Concerns:**



Surviving the Boardroom: Concerns and Responsibilities

- **Manager Responsibilities:**



Surviving the Boardroom: Agendas



Professional agendas:



Improve existing Service Delivery



Demonstrate value of Current Environment



Little faith in new initiative (risk/reward)



Little confidence in resources



Prioritization of Project Funding

Surviving the Boardroom: Agendas



Personal agendas:



Personal visibility & profile



Strengthen position relative to peers



Maintain/increase power base



Distancing from risky project



Job preservation/justification



Fear of change

Surviving the Boardroom



- Budgetary process is where the *agendas* and *concerns* become the most visible.
- Tactics for approval can become complex.
- Implementation of strategies, plans, or projects can be delayed or stopped.

Surviving the Boardroom: What is Capital Budgeting?



- **Capital Budgeting Analysis:** Process of evaluating how a company invests in capital assets, or assets that provide cash flow benefits for more than one year.

Surviving the Boardroom: Why Have Capital Budgeting?

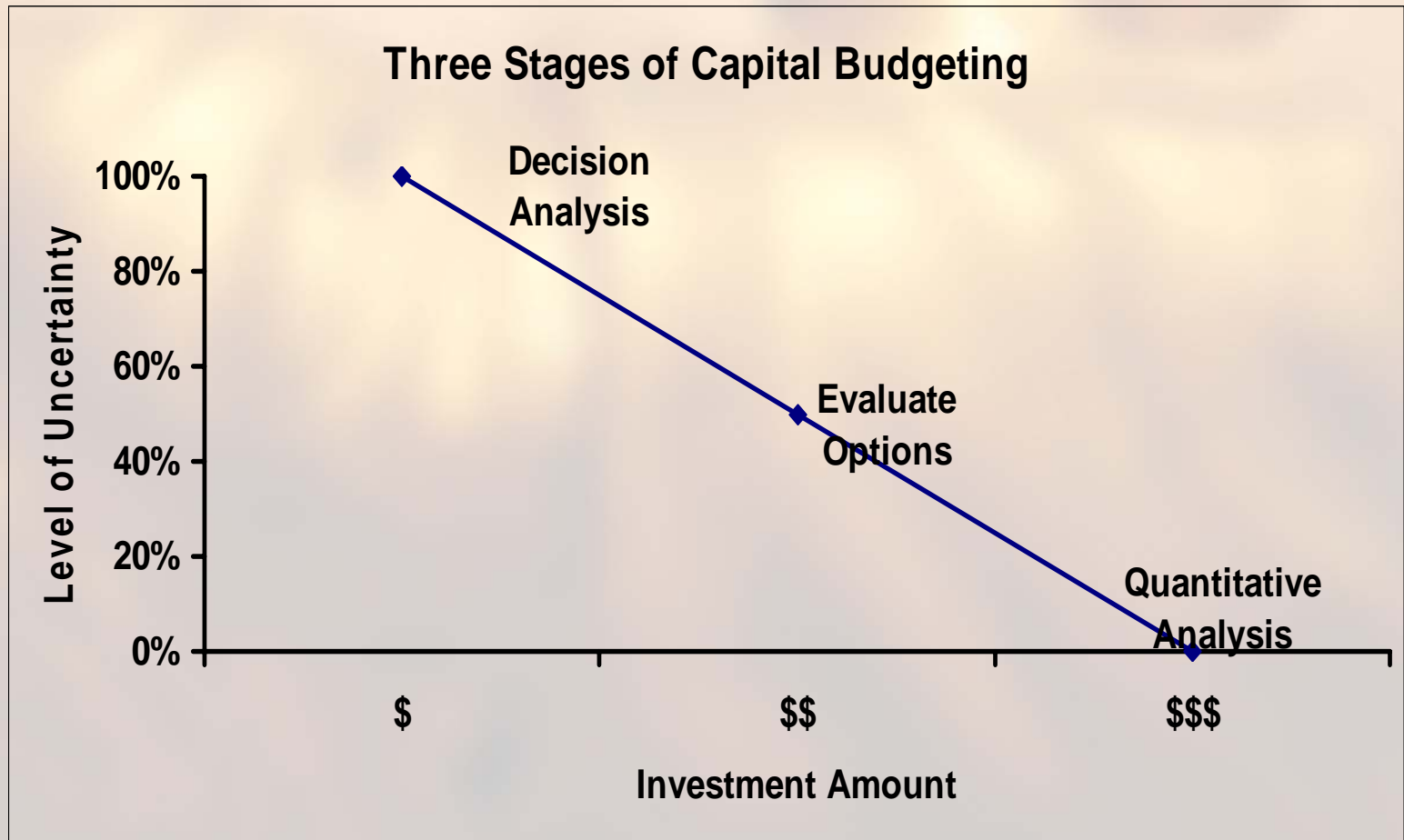


- Corporate strategies link to capital investments
- Consider impact to shareholder value
- Allocation of finite resources
- Total cost of investments
- Performance benchmarks

Surviving the Boardroom: Capital Budgeting Process



3 stages of Capital Budgeting Analysis:



Surviving the Boardroom: Approval Process



- ✓ Identify Business Issues to be solved
- ✓ Calculate cost to implement and support
- ✓ Ensure that initiative aligns with corporate strategy
- ✓ Consider alternatives
- ✓ Leverage other initiatives when possible
- ✓ Review tangible & non-tangible benefits of project

Surviving the Boardroom: Approval Process



- ✓ Consider short-term and long-term impact
- ✓ Analyze cost/benefit data to ensure positive ROI
- ✓ Develop plan to measure progress of implementation with major milestones identified
- ✓ Create “go/no-go” points throughout implementation and project life
- ✓ Manage and measure results throughout project life and identify accountable individuals

Surviving the Boardroom:
SAFE!!



A wooden baseball bat and a white baseball with red stitching are positioned in the top-left corner of the slide, appearing to be part of a graphic element.

Summary

- Identify Business Drivers as problems to resolve with technology
- Communicate the quantitative and qualitative benefits of an initiative
- Understand common key financial measures
- Build a business case that stands alone
- Know those empowered to authorize projects and the process of approval



Q&A

