

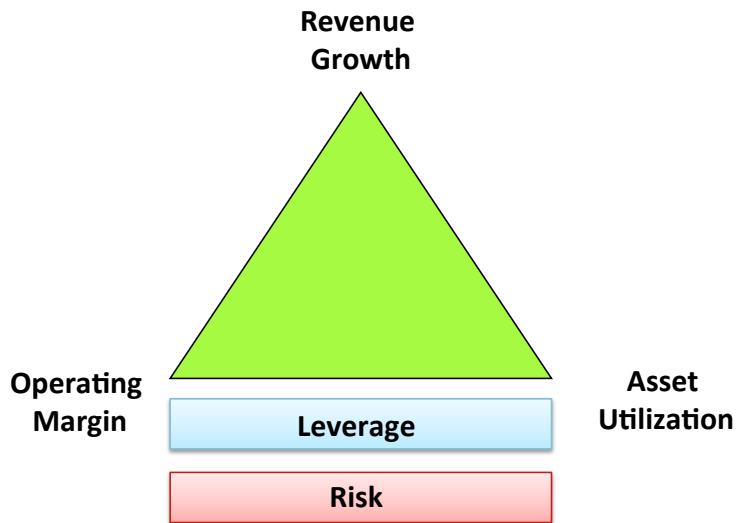
Two Goals of the CEO

- Provide Shareholder Value
- ...and stay out of jail

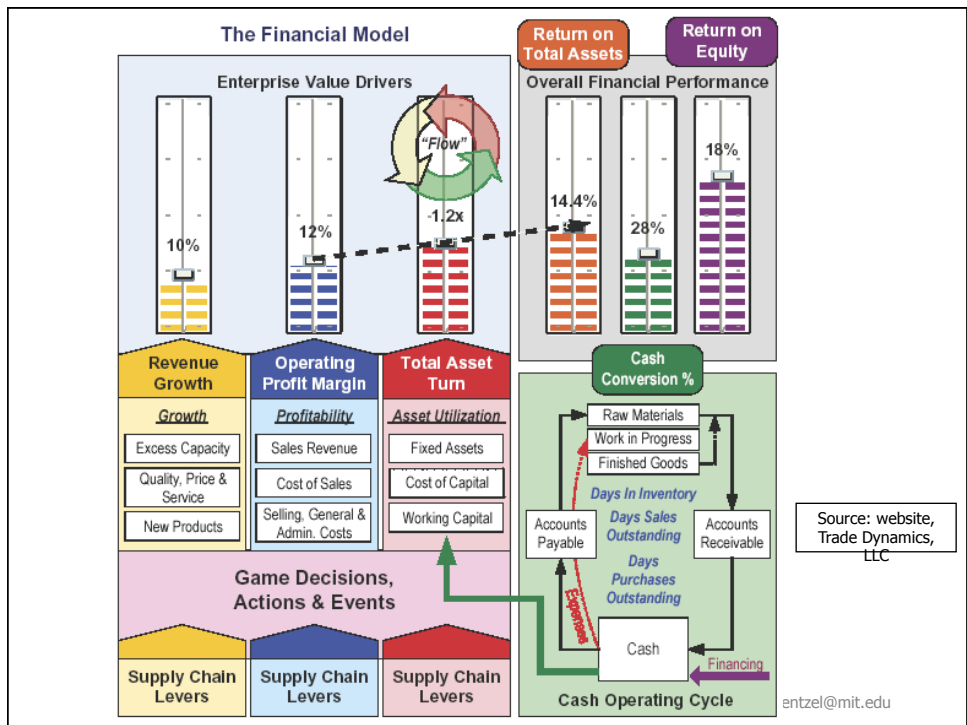
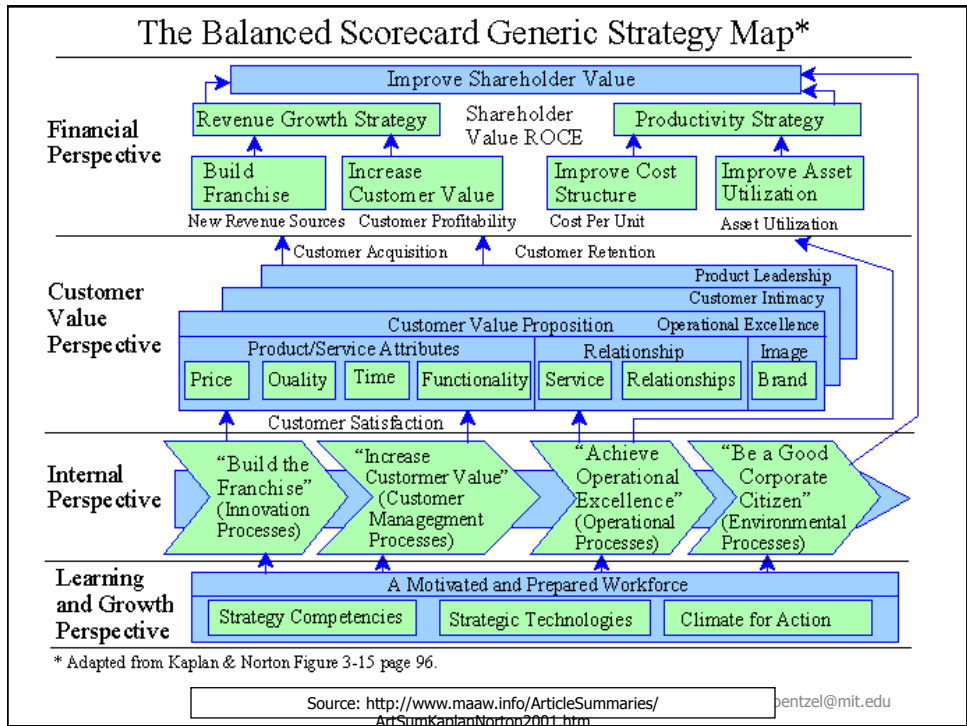


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Drivers of shareholder value

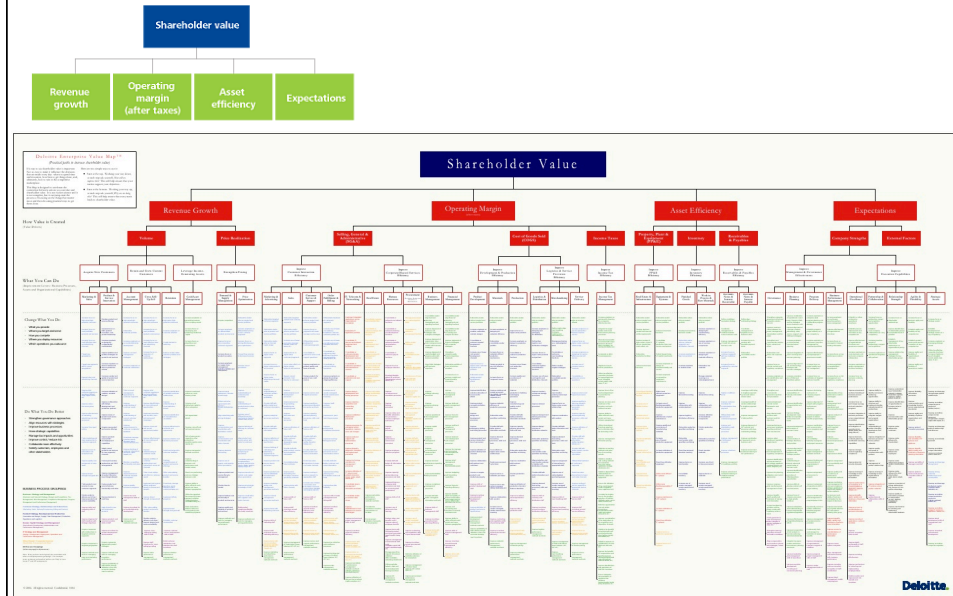


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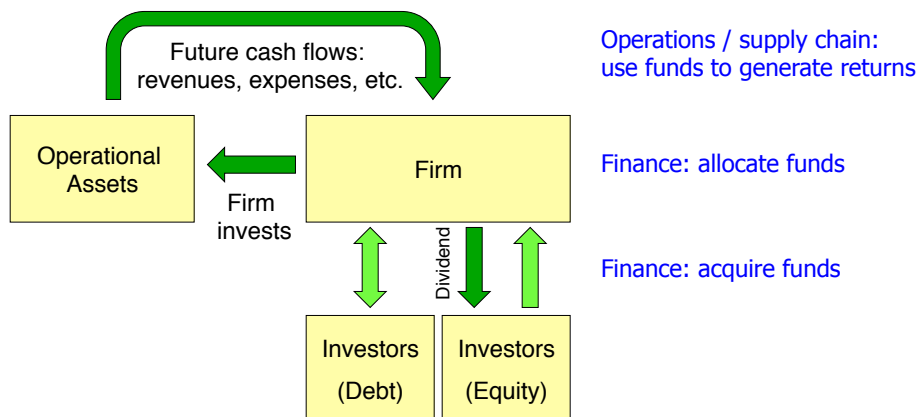


Deloitte Enterprise Value Map

Enterprise Value Map™ (EVM)



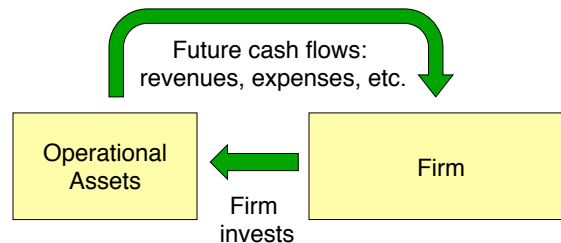
Finance and supply chain work together to create shareholder value



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Investment evaluation

1. Estimate the relevant cash flows
2. Calculate a figure of merit for the investment
3. Compare the figure of merit to an acceptance criterion



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What is a relevant cash flow?

1. Cash Flow Principle:

only cash flows where *money moves* in or out of the firm are relevant

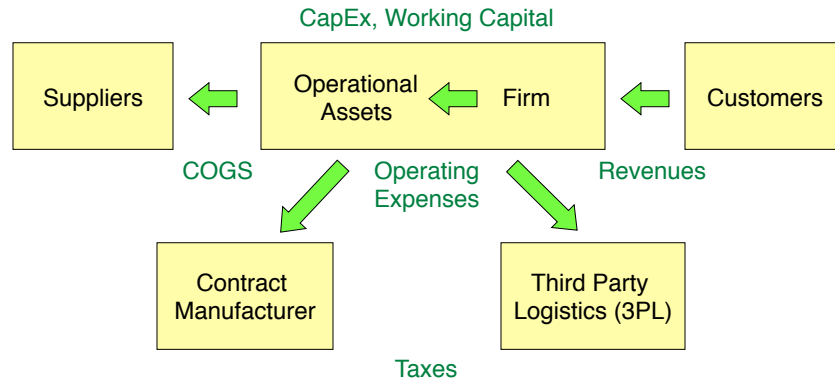
2. With-Without Principle:

only cash flows that are different (incremental) *with* the investment than *without* the investment are relevant to the decision

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Projected, relevant cash flows in the SC

Use incremental financial statements to capture the projected, relevant cash flows and calculate FCFs



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Incremental Income Statement

Revenue
 Cost of goods sold (COGS)
GROSS INCOME
 Operating expenses
OPERATING INCOME (EBITDA)
 Depreciation & amortization
OPERATING INCOME (EBIT)
 Interest expense
 Other non-operating expenses/income
 Income taxes
 Extraordinary items
NET INCOME

Revenue
 Cost of goods sold (COGS)
GROSS INCOME
 Operating expenses
OPERATING INCOME (EBITDA)
 Depreciation & amortization
OPERATING INCOME (EBIT)
 Income taxes
Net Operating Profit After Taxes (NOPAT)

$$NOPAT_t = EBIT_t - TaxRate \times EBIT_t$$

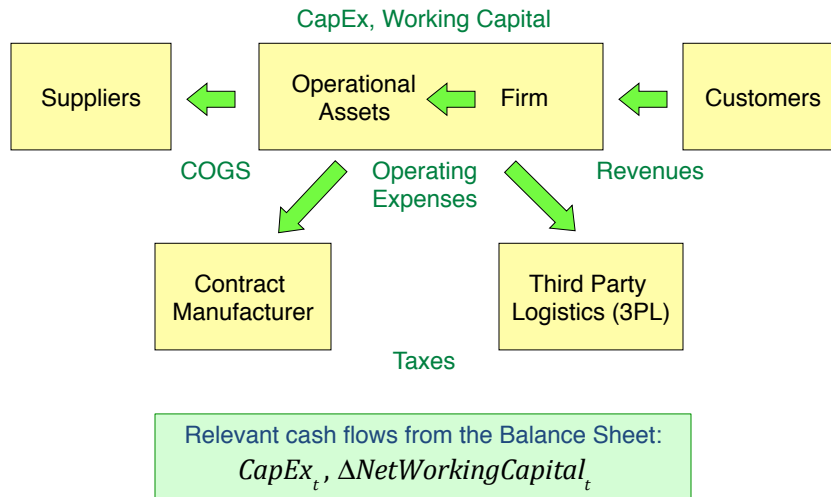
$$= (1 - TaxRate) \times EBIT_t$$

Relevant cash flows from the Income Statement:

$$NOPAT_t + DA_t$$

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Incremental Balance Sheet



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Free cash flows

$$FCF_t = NOPAT_t + DA_t - CapEx_t - \Delta NetWorkingCapital_t$$

$$FCF_t = [(1 - TaxRate) \times EBIT_t] + DA_t - CapEx_t - \Delta NetWorkingCapital_t$$

| Incremental Income Statement | Year 0 | Year 1 | Year 2 | Year 3 |
|--|--------|--------|--------|--------|
| Revenue | | | | |
| - COGS | | | | |
| = Gross Income | | | | |
| - Operating Expenses | | | | |
| = Operating Income (EBITDA) | | | | |
| - Depreciation & Amortization | | | | |
| = Operating Income (EBIT) | | | | |
| - Income Tax | | | | |
| = Net Operating Profit After Taxes (NOPAT) | | | | |
| Adjustments | | | | |
| + Depreciation (not a cash flow) | | | | |
| - Net Capital Expenditures | | | | |
| - Net Working Capital Investment | | | | |
| Free Cash Flow | | | | |

Net Present Value – NPV

- Figure of Merit: The discounted sum of all cash flows including the initial outlay (time 0)
- Acceptance Criterion: Invest if $NPV > 0$
 - + Theoretically sound and widely used
 - Difficult to determine the correct discount or interest rate

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Free cash flows for investment decisions

Why consolidate various line item cash flows from your investment/project into FCFs?

- An incremental Income Statement confounds various cash flows in a consistent way, e.g. revenue growth and margin growth
- It applies Income Tax once in an effective way
- Business professionals are accustomed to reading Income Statements
- Investor value is driven by free cash flows

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