“Shareowner Value Creation and the Management of Intangible Assets”

Poster Presentation Slide Deck

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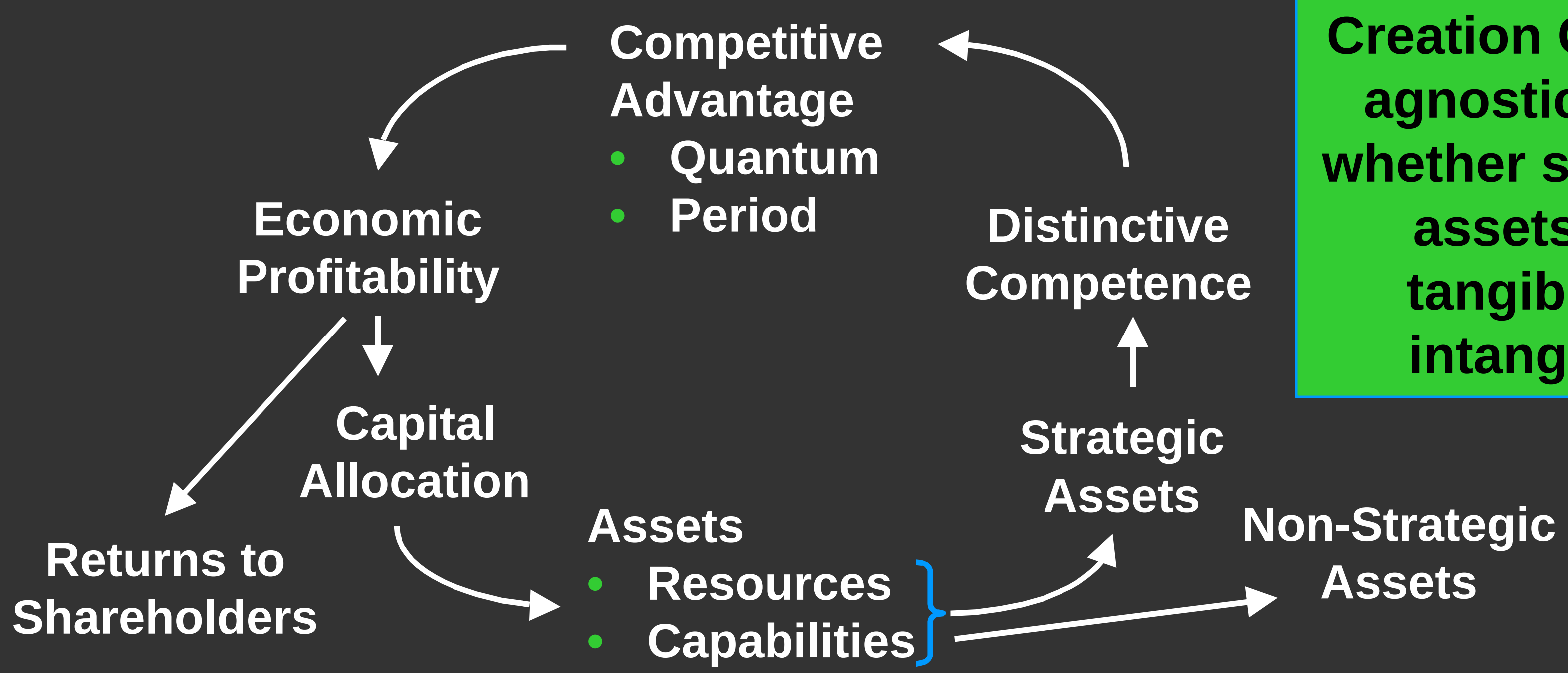
"Managing for Value"

Managing for value has required that a company grow profitably. This imperative has in turn required that the following Value Creation Cycle be understood and managed.

The Value Creation Cycle is agnostic as to whether strategic assets are tangible or intangible!



“Managing for Value” - Today!

The **Value Creation Cycle** is reliant on a complete understanding of what constitute strategic assets (and what do not). In essence,strategic assets are all those resources (things we own) and capabilities (things we can do) that give rise to distinctive competence and ultimately to competitive advantage (which is the basis for achieving positive economic profit).

Today, this more and more means understanding what the intangible assets are that are under management as well as their behavior, both independently and interactively. This fundamental to the prime responsibility of the managers of (especially publicly listed) economic entities - to create wealth for the owners of their companies.

Shareholder Value Added = Market Value Added, or MVA

...but, Enterprise Value is <u>not</u> the same as Shareholder Value Added

Enterprise Value (EV)

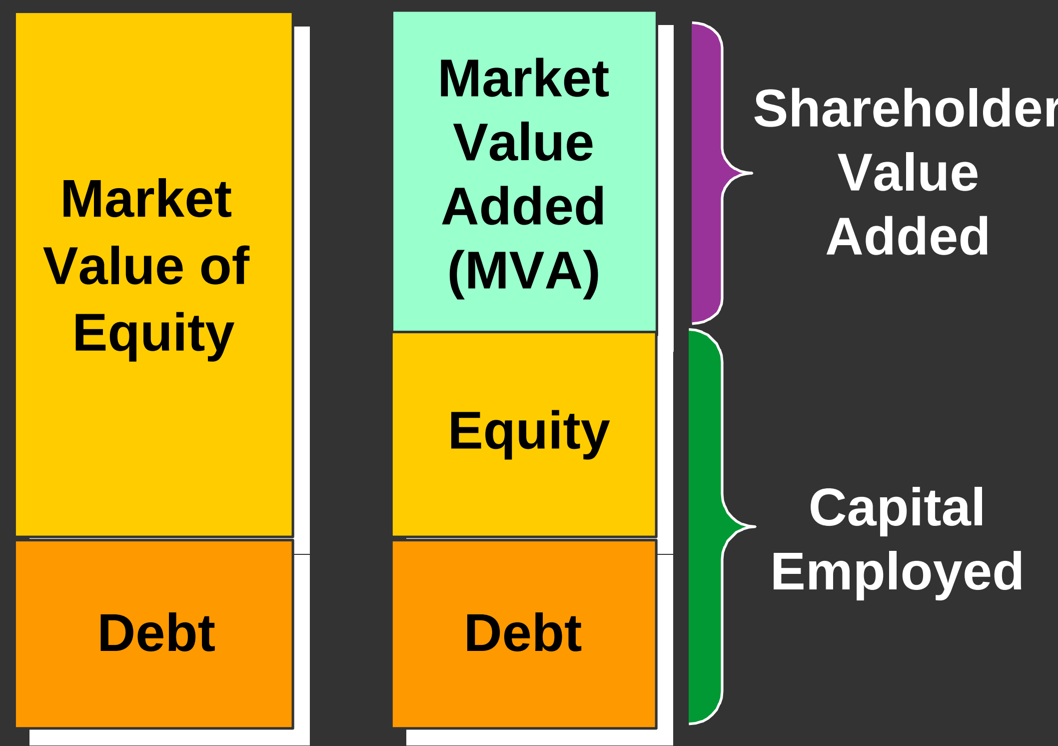
=

Market Value of Equity

(ie. the number of shares on issue x current share price)

+

Value of Interest Bearing Debt Obligations



EVA Expectations Drive MVA and therefore the Value of the Enterprise

MVA represents the <u>expectations</u> of the present value of a company's EVAs

Enterprise Value

MVA

Capital Employed

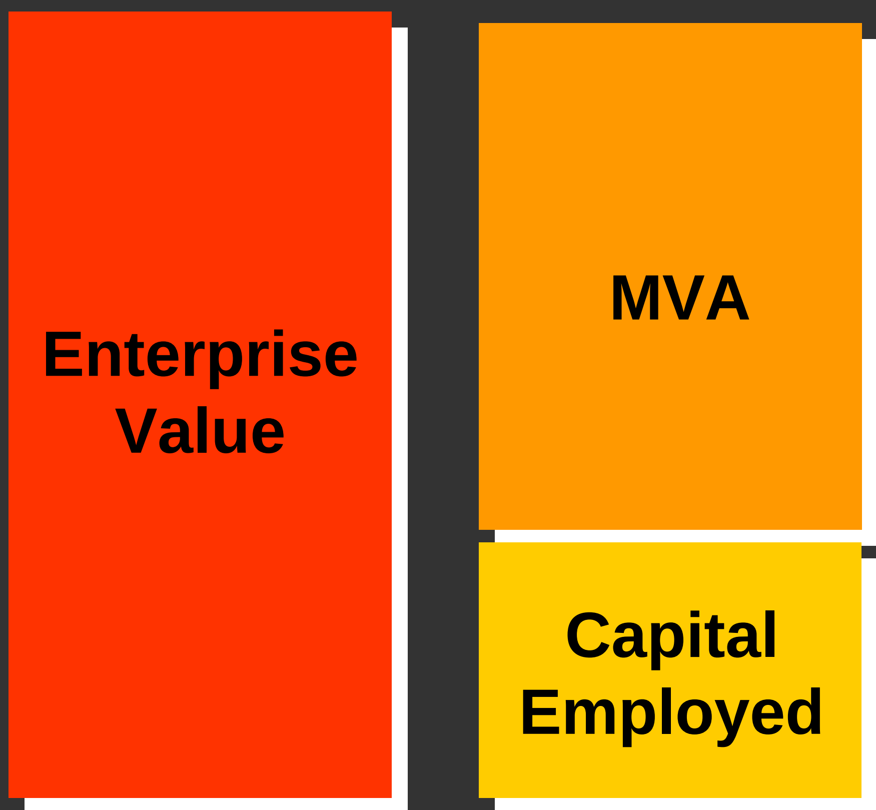
$$\text{MVA} = \frac{\text{EVA}^{\,t}}{(1 + \text{WACC})^1} + \frac{\text{EVA}^{\,t+2}}{(1 + \text{WACC})^2} + \frac{\text{EVA}^{\,t+3}}{(1 + \text{WACC})^3} + \ldots$$

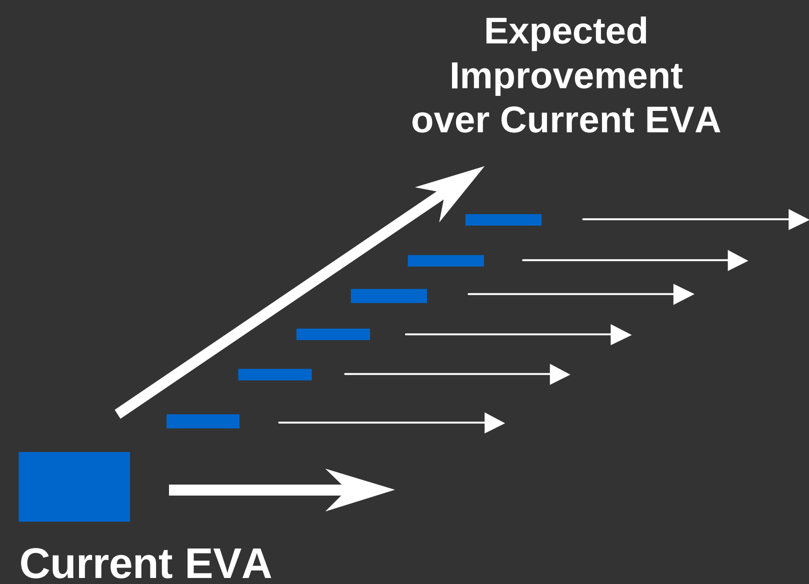
MVA = Present Value of Future EVAs

The value of future returns is brought back to today's value of the enterprise … and added to the capital

MVA’s (and Value Creation’s) link to EVA

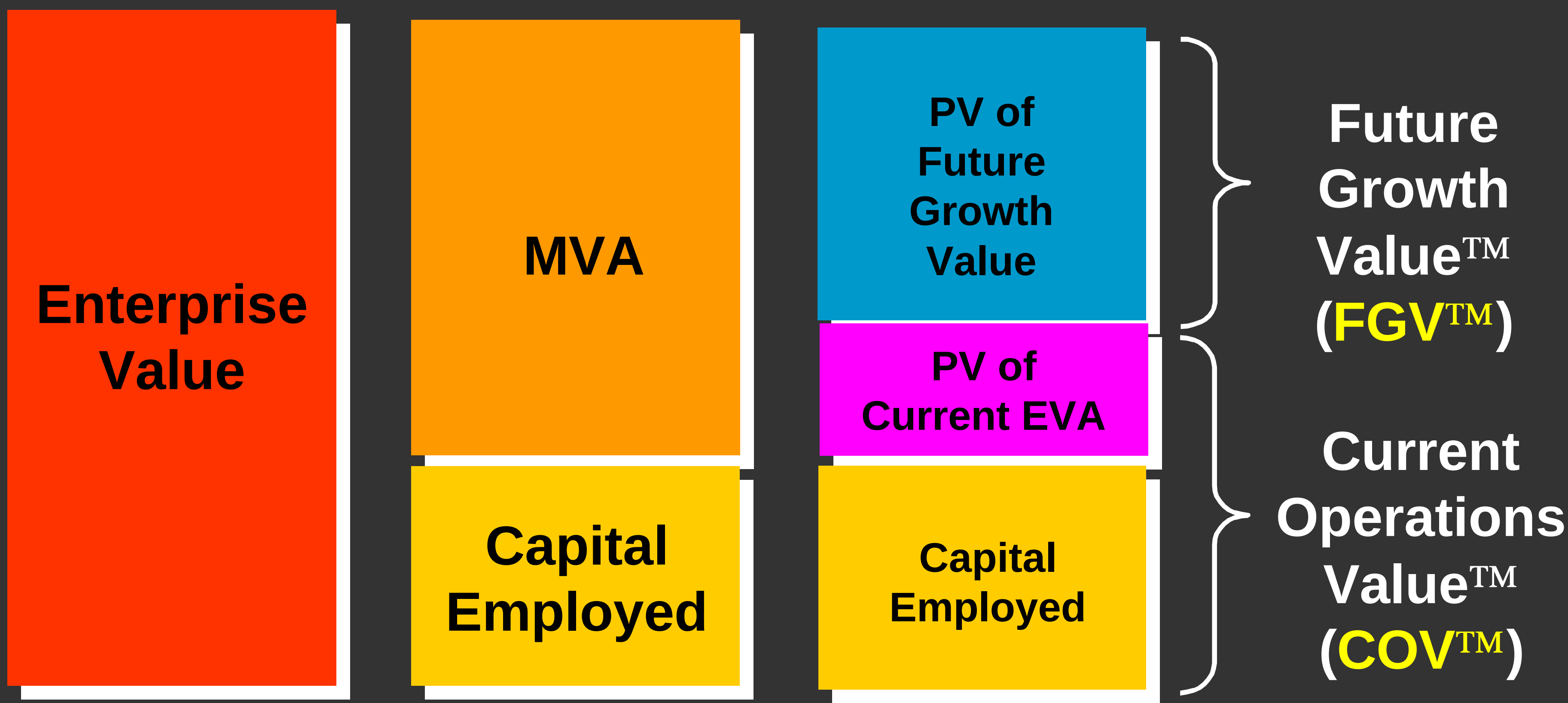
Shareholder value is created when expectations are met <u>and exceeded</u>





MVA represents the expectations of the Present Value of an enterprise’s total EVA stream …

The Components of Enterprise Value!



Share Price Volatility - What Gives!

Enterprise Value

Enterprise Value =

Market Value of Equity
(ie., the number of shares on issue x current share price)
+
Debt
(ie., the net value of Interest Bearing Debt Obligations)

What changes are expectations about future growth (Future Growth Value) - since everything else is constant. Such changes in expectations are reflected in changes in the Share Price.

"Managing for Value" means managing for FGV!

What is the FGV/EV View for the Wealth Creation Majors?

The *Stern Stewart Performance 1,000* and its update (published in *Fortune*, December 10th, 2001) shows the following -

		Top 20	Top 50	Top 100	Top 150
2001	**Median**	**61.9%**	**54.9%**	**51.0%**	**51.2%**
	Average	**59.9%**	**52.1%**	**50.0%**	**39.7%**
2000	**Median**	**79.8%**	**75.4%**	**74.2%**	**72.1%**
	Average	**78.1%**	**78.9%**	**75.8%**	**73.5%**

*** Using the company share price as at October 30th, 2001 and 2000**

A New View on Asset Management

Share Price components ...

arising from ...

	Current Operations Value™	Future Growth Value™
Tangible Assets	Traditional Management Focus*	Embedded Growth Value
Intangible Assets	Effect?	The New Management Imperative !

Enterprise Value

* The traditional management focus (and basis for firm valuation) is mainly through the Income Statement and Balance Sheet. Thus the emphasis in valuations is on extrapolating Current Operations Value™ based on the exploitation of Tangible Assets.

Findings on Future Growth Value in the United States!

The dynamics of FGV are important!

- The better you are doing (EVA), the more is expected of you in the future (FGV)
- The larger you are (EV), the more (proportionally) is expected of you in the future (FGV)
- FGV expectations have increased over time for all companies and now represents <u>the</u> major component of share price (FGV vs. EVA/WACC vs. CE)
- The largest companies (EV) no longer rely on traditional capital (CE) - meaning that balance sheets are increasingly under-specified (don't recognize the intangible assets that are increasingly relied on by management to create value and are increasingly valued in share prices) rather than mis-specified (don't capture recognized intangible assets "properly")

What's the Problem?

The problem is one of conceptualizing stocks and flows. The bath tub metaphor that is often used in System Dynamics is of limited use here since we also have to worry about what is going on inside the bath tub! Intangible assets are qualitatively different from tangible assets.

Tangible assets are <u>more likely</u> to ...

- Have formal marketplaces
- Have stable values
- Not interact with one another (have additive effect)
- Not create a new asset (in combination)
- Depreciate steadily (and slowly)
- Be rigid (not able to be redeployed)
- Have immediate effect

Intangible assets are <u>more likely</u> to ...

- Have informal marketplaces
- Have volatile values
- Interact with one another (have multiplicative effect)
- Create a new asset (in combination)
- Depreciate suddenly (and totally)
- Be flexible (able to be redeployed)
- Have slow effect

What is Being Valued in Future Growth Value?

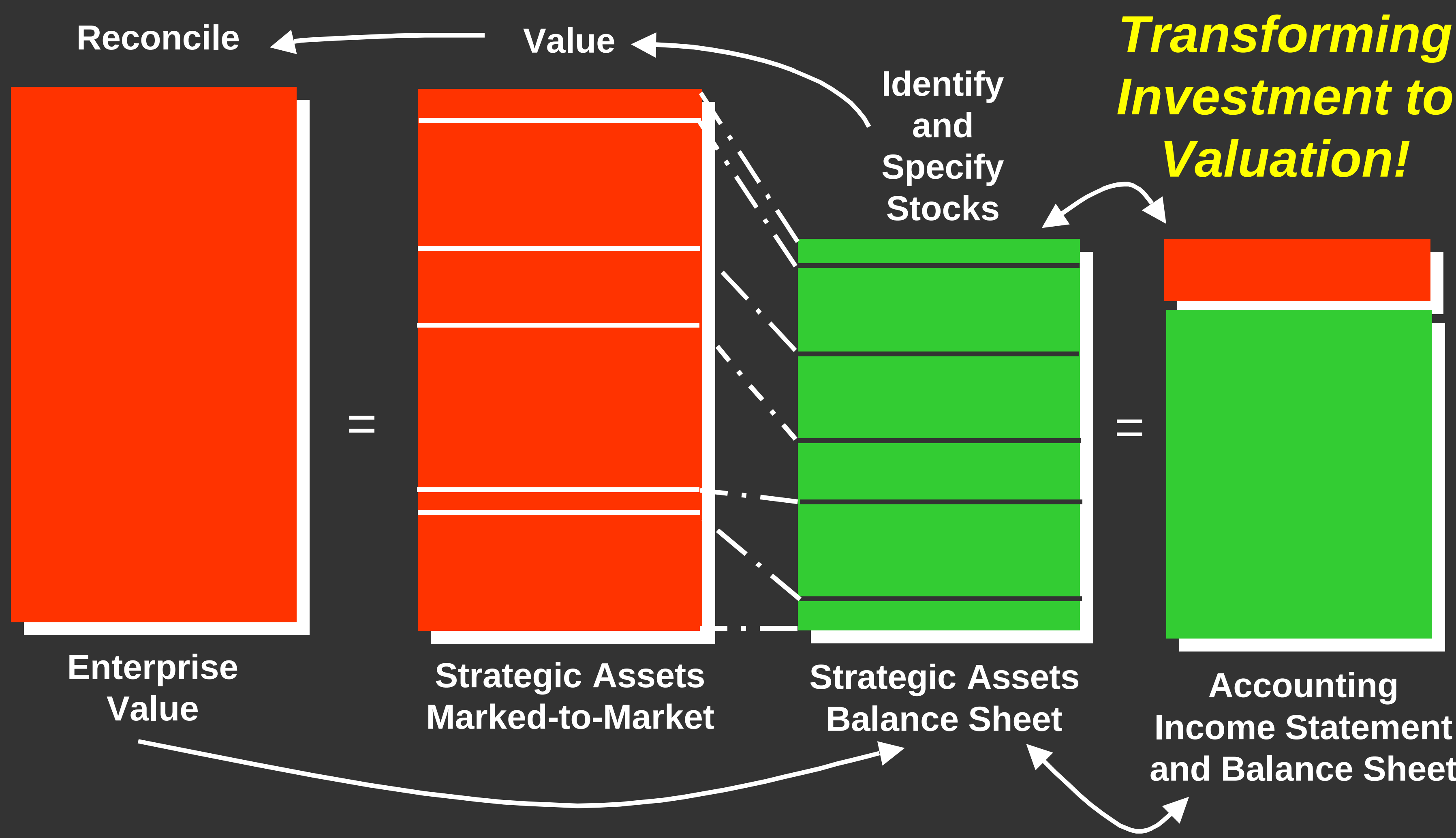
The **simple answer** is that it is the Present Value of <u>all changes</u> to the current (EVA) performance arising from current activities, estimated into perpetuity, discounted to the present.

The **more complex answer** is that the FGV Present Value represents a constellation of the following -

- Foreseeable future operations
- Unforeseen opportunities and future operations
- Ownership claims
- Path dependent behavior

all valued and discounted to the present

The 4-Column Balance Sheet™ - Reconciling Paradigms



Strategic Asset Management

based on ...	Earnings ... Current Operations Value	Future Growth Value
Tangible Asset Value	Traditional Management Focus*	Embedded Option Value
Intangible Asset Value	Effect?	The New Management Imperative !

* The traditional management focus (and basis for firm valuation) is through the P&L and Balance Sheet - COV. This doesn't apply for FGV.

A New Asset Classification

Assets are what what we have, capabilities are what we can do!

- **Strategic Assets**
  - **Tangible**
    - **Non-renewing**
    - **Self-renewing**
  - **Intangible**
    - **Replicable**
    - **Non-replicable (exclusive)**

What are the Strategic Assets that we Are Talking About?

Not just the Traditional ...

- Brand equity (from advertising and promotion)
- Intellectual property and patents (from R&D)
- Human capabilities (from training)

But also the New Old...

- Knowledge creating capability
- Right of access
- Ability to utilize Information
- Operating procedures and processes
- Management capability
- Ability to execute strategy
- Innovativeness
- Real Options

A New Methodology - Introduction

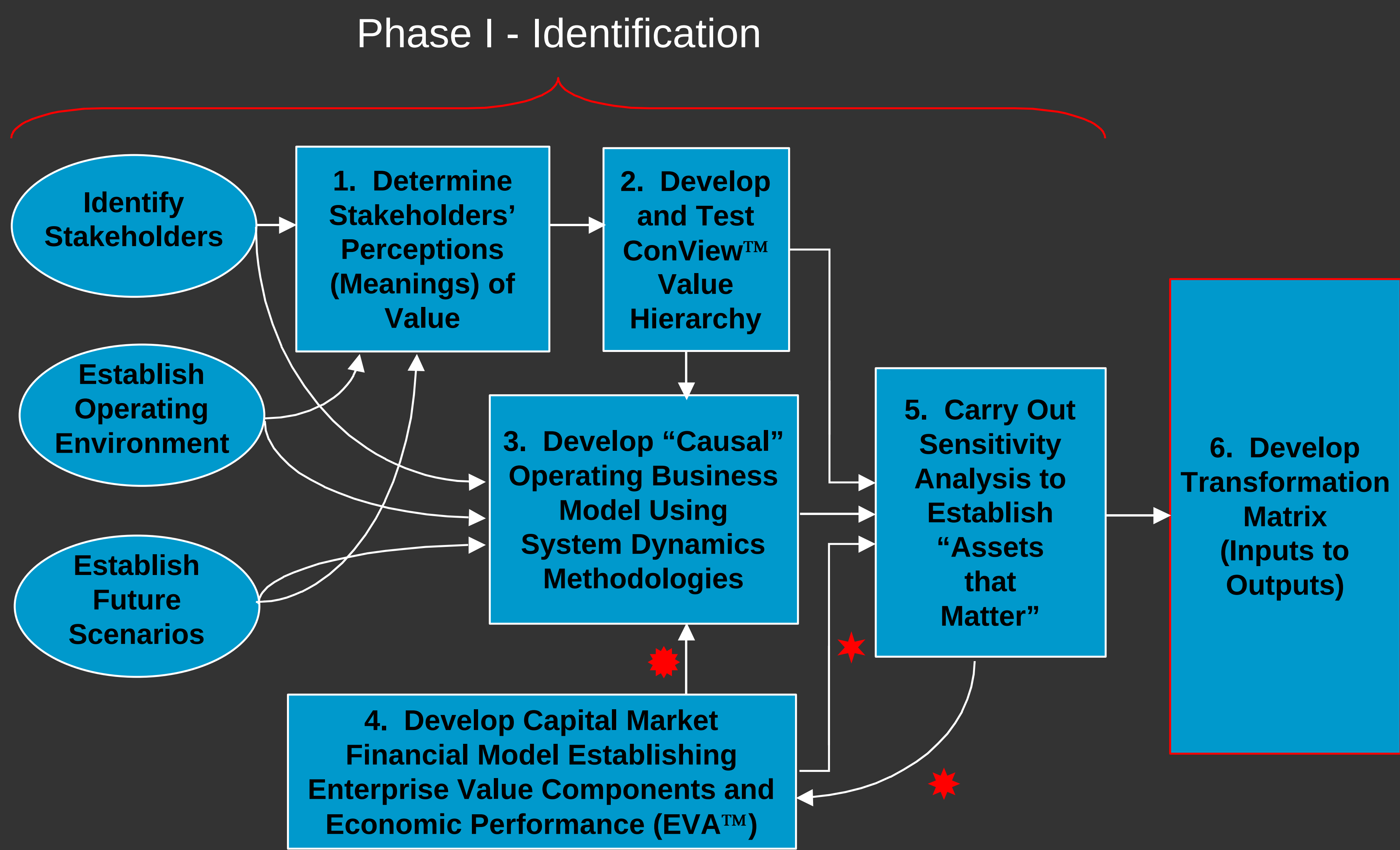
This methodology, called Seer™, has three phases and ten steps. The phases are -

I Asset Identification
II Asset Quantification
III Asset Prioritization

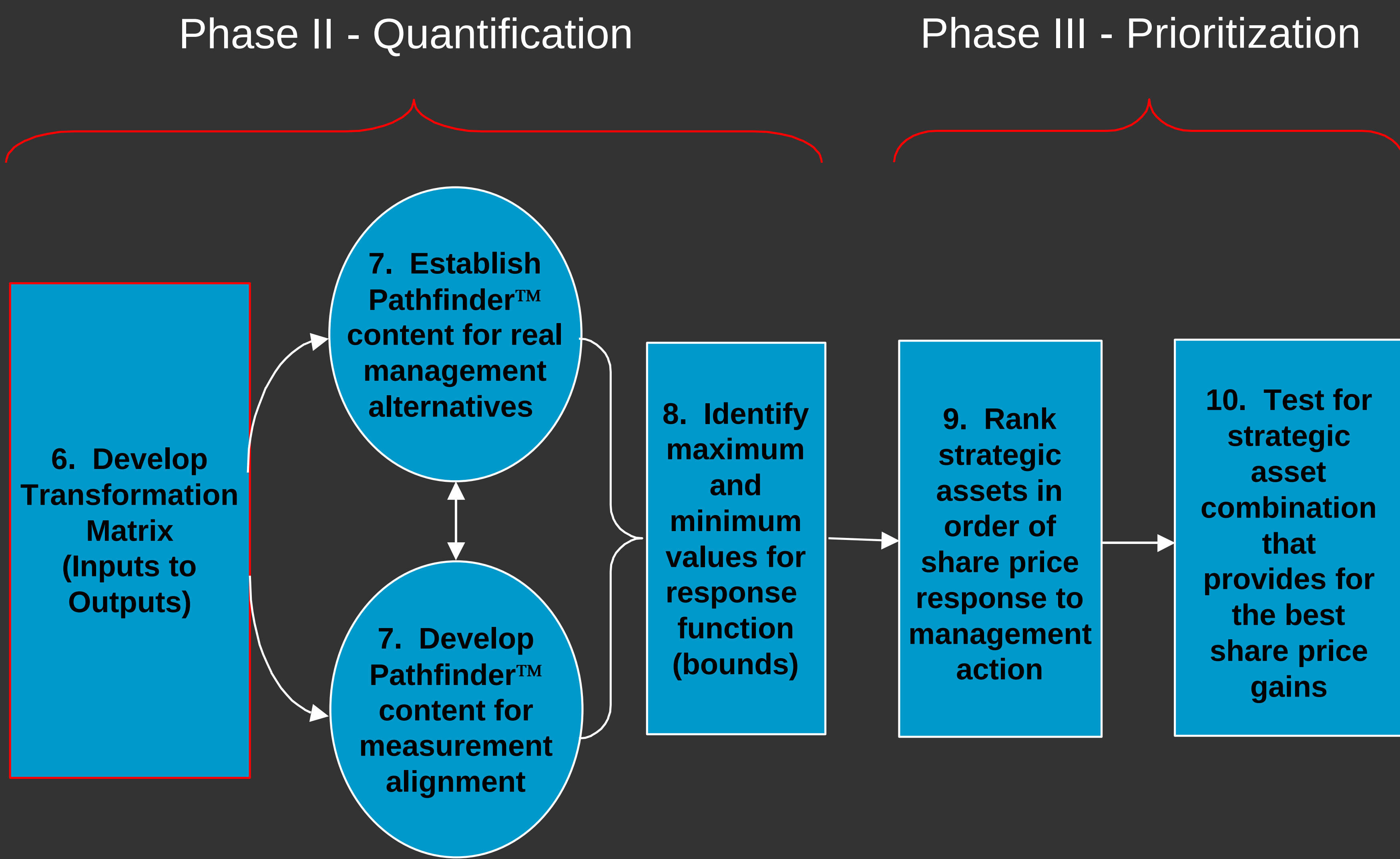
The process is a variation of the M'Pherson, Roos and Pike IC process* which does two things - (i) introduces System Dynamic modeling to fully capture the value driver causal relationships and (ii) links current and future period economic profit outcomes (EVA) with the capital market valuation of the enterprise (the EV) to establish "best possible" cause and effect between management actions and share price outcomes.

Refer, for example,
Philip M'Pherson, Goran Roos and Stephen Pike, "Accounting , Empirical Measurement and Intellectual Capital", *Journal of Intellectual Capital*, Vol. 2, No. 3, 2001, pp. 246-260

Seer™ Methodology - Flow Diagram (A)



Seer™ Methodology - Flow Diagram (B)



The Central Place of System Dynamic Modelling

Establishing the drivers of performance and share price has traditionally been approached by financial modeling and its derivatives (such as DuPont schematics). The hidden assumption has been that all relevant management information is captured by a firm's financial statements or can be quantitatively linked to them. This historically workable assumption is no longer useful.

Fortunately, System Dynamics can make a substantial contribution to identifying and quantifying the drivers of value through establishing the causal (stock and flow) determinants of shareholder value creation.

The Benefits of System Dynamic Modeling

The Objective

To develop a complete causal management model where that model's behavior and outputs are linked to shareholder value outcomes

The Outcomes

- **A complete <u>descriptive</u> business model**
- **What the critical drivers of shareholder value creation are (stocks and flows)**
- **How to manage the critical value drivers (since cause and effect are systematically linked)**
- **What management information is required in order to be able to manage for value (intervene in the system)**
- **What the content and expectations should be for performance monitoring**

Case Study - Sun Microsystems, Inc.

Work in Progress -
Hand Outs to be Provided

Back to the Top