

PRESENTATION TO:
AUSTRALASIAN EVALUATION SOCIETY

21 SEP 2018

MEASURING VALUE



ARE WE COUNTING WHAT ACTUALLY
COUNTS

PRESENTERS:
DR LES TRUDZIK

LOCATION
LAUNCESTON

ACIL ALLEN CONSULTING

SOME CONTEXT

A cynic is a man who knows the price of everything and the value of nothing

Oscar Wilde, *Lady Windemere's Fan*, 1892



AND ANOTHER

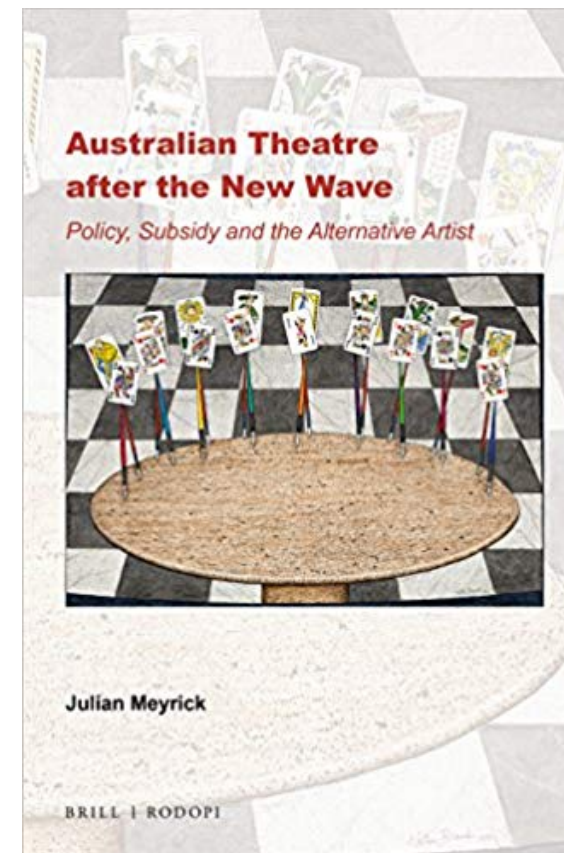
The book set out to discuss *VALUING CULTURE*

Mid-authoring epiphany ...

the problem is not the difficulty in **DEFINING CULTURE**

but


the decreasing orbit of **[THE DEFINITION OF] VALUE**



PURPOSE OF TODAY



evaluation

/ɪˌvæljuˈeɪʃ(ə)n/ 

noun

the making of a judgement about the amount, number, or value of something; assessment.
"the evaluation of each method"

synonyms: assessment, appraisal, judgement, gauging, rating, estimation, ranking, weighing up, summing up, consideration, assay, analysis, opinion; *informal* sizing up
"proper evaluation of results is crucial"

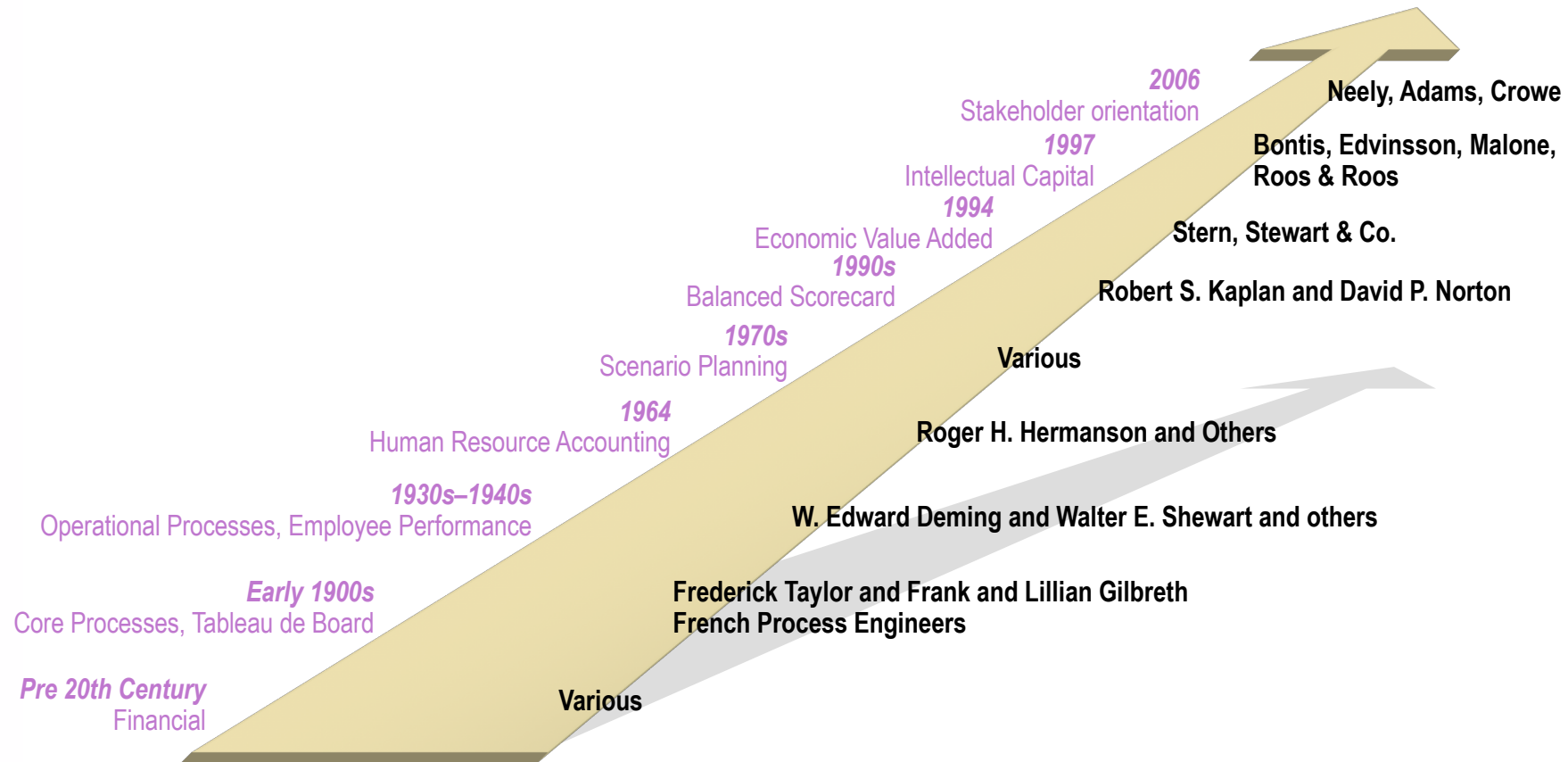
PROVIDE TECHNIQUES TO BETTER DEFINE AND MEASURE THIS



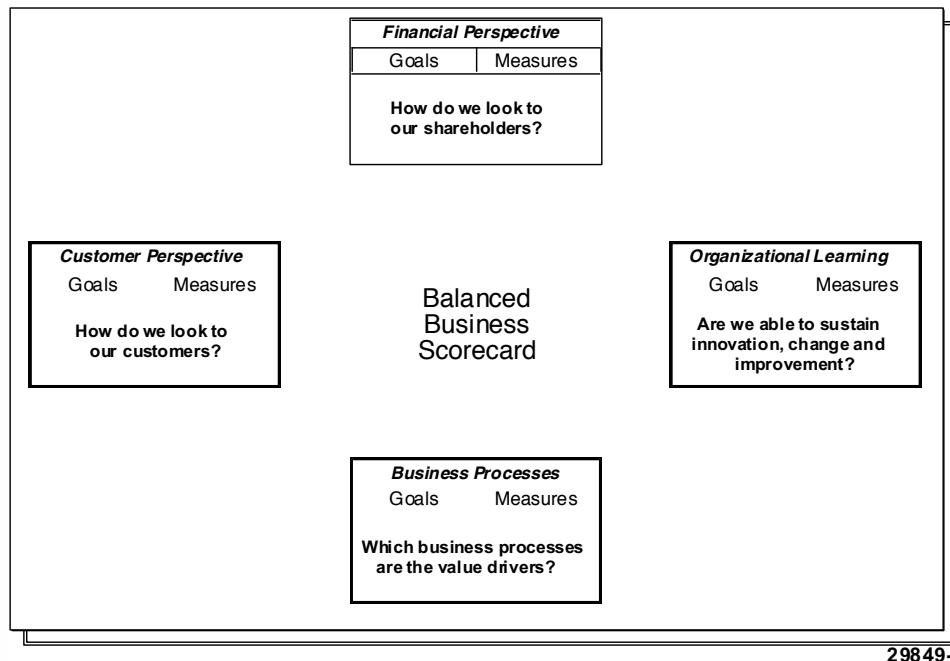
A B R I E F H I S T O R Y

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A BRIEF PERFORMANCE MEASUREMENT CHRONOLOGY



THE GOOD OLD BALANCED SCORECARD



No mention of other key stakeholders which can have a significant impact

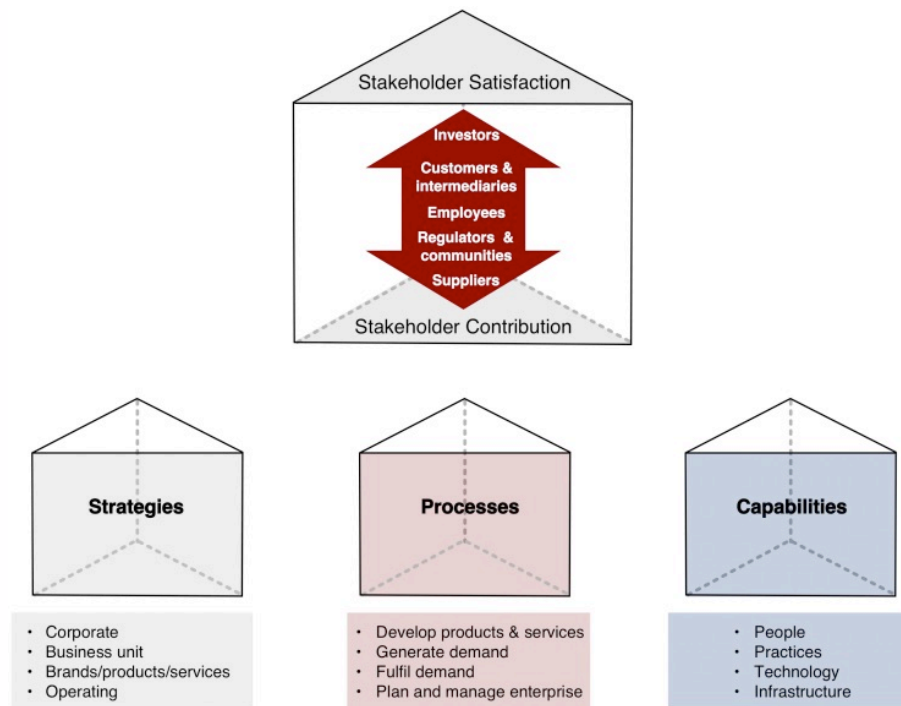
suppliers, regulators, pressure groups or local communities

Addresses customer and employee expectations, but not an organisation's requirements of its key stakeholders

Does not mean that the balanced scorecard has been ineffective, but that organisational requirements have changed

While highlighting the multi-faceted nature of most organisations, can fail to capture adequately what public value is created

ADDITIONAL LENSES WITH THE PERFORMANCE PRISM



Source: A. Neely and C. Adams 2001, 'The performance prism in practice', in *Measuring business excellence*, 5(2), pp. 6–12.

- Attempts to integrate the lessons from past approaches into a single more comprehensive framework
 - Moving from the primary concept of customers and shareholders to a more general consideration of **all stakeholders** relevant to the organisation
 - Considering not just stakeholder **satisfaction** with the organisation but also stakeholder **contribution** to the organisation
 - Linking more explicitly how **capabilities and processes** support the strategies of the organisation
- Particularly relevant to public sector organisations with a need for the 'customer' perspective to include both the individual consumer as well as the broader community
- Has led many public sector organisations to adapt the balanced scorecard to add a fifth dimension — the **community** perspective

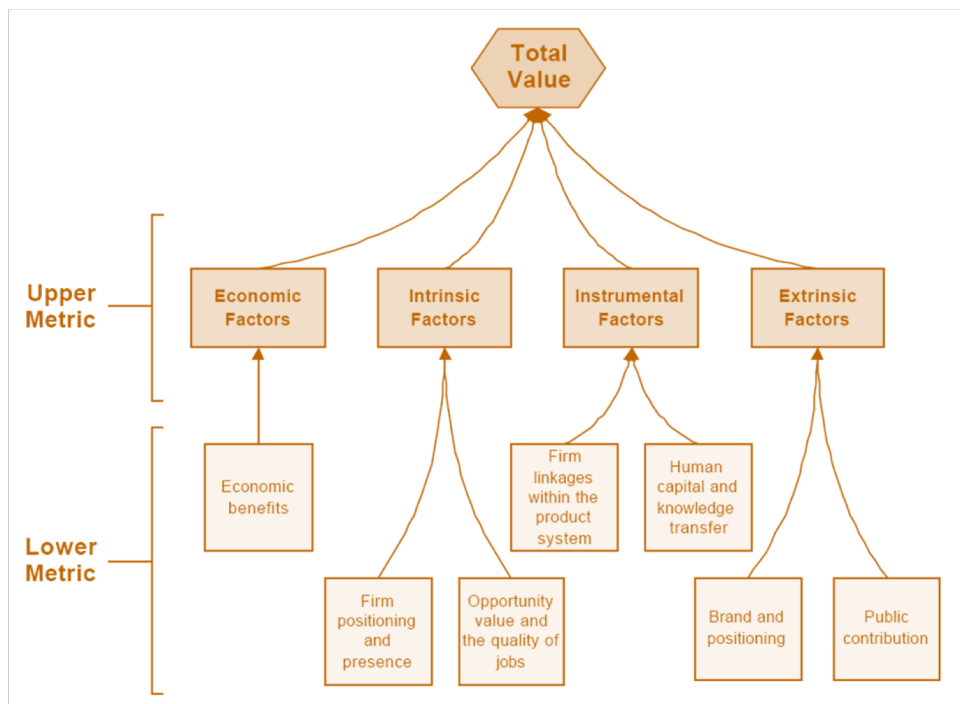
SO WHAT'S THE ISSUE NOW

- Approaches such as Balanced Scorecard and the Performance Prism go part of the way to identifying what to value and measure but ...
- It is difficult for policy-makers to assess results of programs aimed at outcomes that are not readily measured by the hard 'soft' numbers
- Likewise, investors have to work hard to obtain the information they need to make a realistic assessment of a company's future potential and a common basis of comparison
- In summary there is a dual challenge:
 - What to measure—the definition of **value**
 - How to measure it—particularly the **intangibles**



WHAT TO MEASURE

CATEGORIES OF VALUE



Economic factors — direct economic or financial attributes

number of students enrolled, revenue, profitability, market trajectory, delivery capacity

Intrinsic factors — inherent benefits to stakeholders

student outcomes/quality, staff satisfaction, ethically important

Instrumental factors — means to an(other) end

supporting future enrolments, research capacity, connections to industry

Extrinsic factors — benefits to the outside

brand, community/regional perceptions

VALUING COFFEE

HOW TO CHOOSE WHERE TO GET COFFEE

Economic

What will it cost me?



Intrinsic

Does it make me feel good?



Instrumental

Will it help me do other things?



Extrinsic

What will others think about my choice?



VALUING US: HOW WE ADD VALUE TO THE WORK PLACE AND THE WORKPLACE PROVIDES VALUE TO US

Economic



Work winning
Work doing
Lower opportunity cost
Project management

Intrinsic



Social environment
Support and advice
Quality control

Instrumental



Network development
Training staff
Systems and processes

Extrinsic



Marketing
Quality public work
Public speaking

Value to firm

Value to us

Salary / package
Fringe benefits (phones etc)



Pride in our work
Social interactions



Gaining expertise and knowledge
Skills for future work



Brand of the firm
Policy contributions





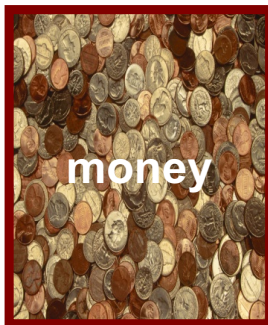
HOW TO MEASURE (THE INTANGIBLES)

MCDA HAS BEEN TO 'GOTO' SOLUTION

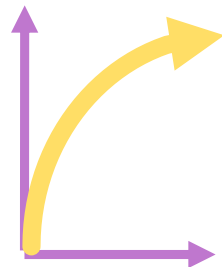
- ▲▲ When trying to assess benefits, risks or other making other 'qualitative' value assessments, MCDA (Multi Criteria Decision Analysis, or weighted arithmetic) is typically used
- ▲▲ This has served well in many situations
 - ▲▲ relatively easy to initiate and use
 - ▲▲ low measurement overhead
- ▲▲ But there are severe limitations with this approach
 - ▲▲ highly subjective
 - ▲▲ not auditable or reliable
 - ▲▲ difficult to compare across applications or repeated use
- ▲▲ Is there a better way?

VALUE CAN HAVE DIFFERENT 'ARITHMETICS'

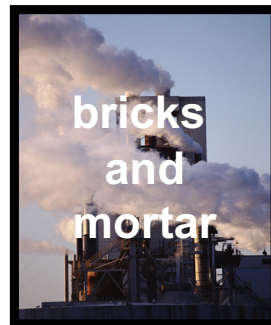
decreasing marginal returns



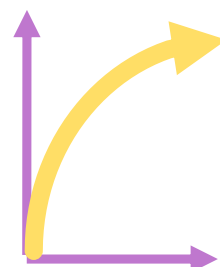
**Owned or Controlled
By the Firm**



Additive



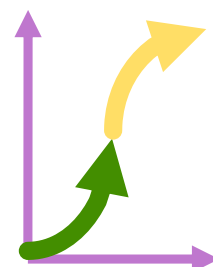
**Owned or Controlled
By the Firm**



Additive



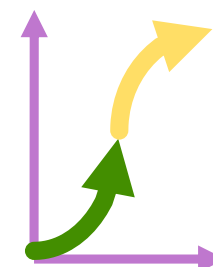
**Owned or Controlled
by the Other Party**



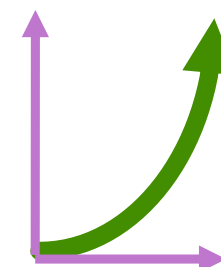
increasing marginal returns



**Owned or Controlled
By the Firm**



**Owned or Controlled
By the Employee**



STEP-BY-STEP APPROACH



Identify the set of attributes or indicators that influence/impact the reference objective:

- Minimalist—no more than needed
- Definitionally distinct—no overlap between attributes
- Orthogonal—mutually independent
- Comprehensive—structurally complete
- Participatory—obtained through good old stakeholder consultation/research



Measure the attributes

- Tangible attributes—use the metrics available
- Intangible attributes—use survey or similar to stratify/segment metrics



Combine the attributes two-by-two

- Additive (no preference)
- Both essential
- Preference for both
- Preference for only one

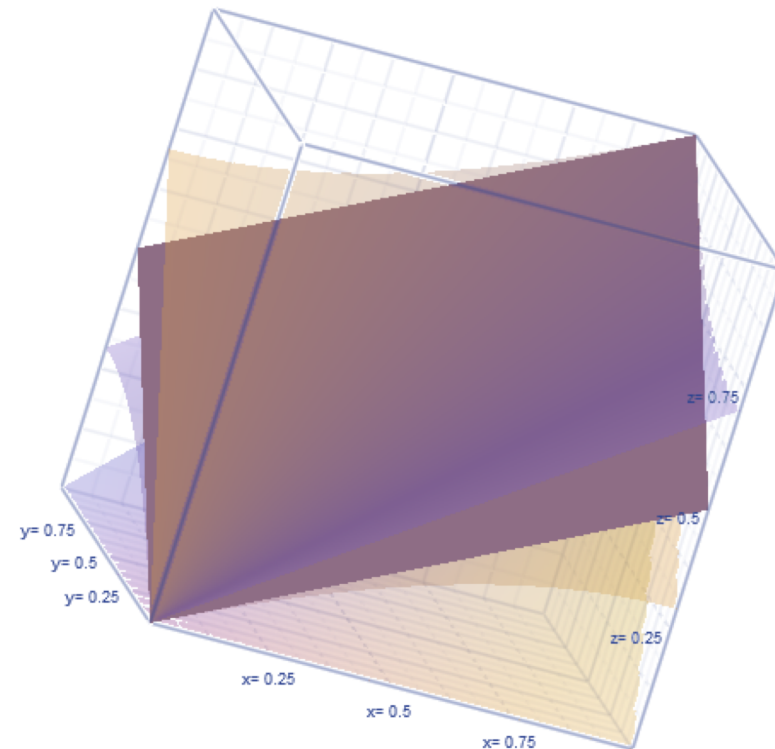


Set and normalise weights

- Sensitivity analysis to set preferences to ensure attribute values have equal impact on the total value metric
- Set priorities to balance the relative contributions of the model branches in calculating the total value

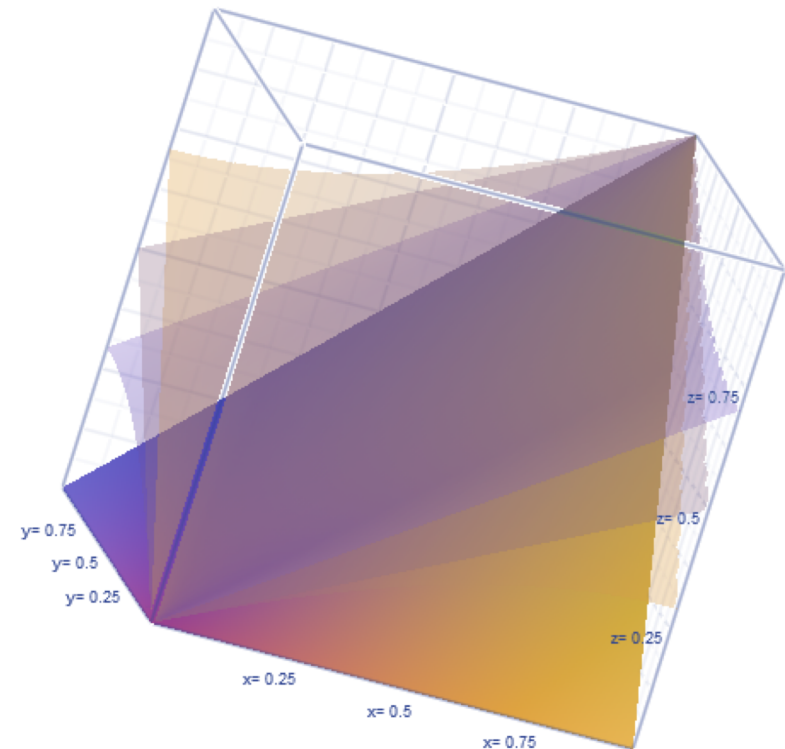
TRADITIONAL (ADDITIVE)

- ▲▲ No preference exists between the two attributes
- ▲▲ In economic terms, the two attributes are perfectly substitutable
- ▲▲ This rule is used when there is no preference between the two attributes and there is simply a desire to maximise value
- ▲▲ Examples:
 - ▲▲ Revenues and Expenses
 - ▲▲ 'Bricks and Mortar'



BOTH ESSENTIAL

- ▶▶ No combined value exists if one value attribute is missing
- ▶▶ In practical terms, there is a substantial penalty for the non-existence of one attribute such that no combined value exists
- ▶▶ There is a drop in combined value as the presence of one value attribute gradually disappears
- ▶▶ This rule is used in situations where the absence of one of the two attributes destroys all combined value
- ▶▶ Examples
 - ▶▶ Safety and Profit
 - ▶▶ Health and Wealth



PREFERENCE FOR BOTH

▲▲ The value curve follows a convex radial contour map, in that value is still registered if one value attribute is missing

▲▲ In practical terms, there is a penalty for the non-existence of one attribute, but the penalty is not absolute

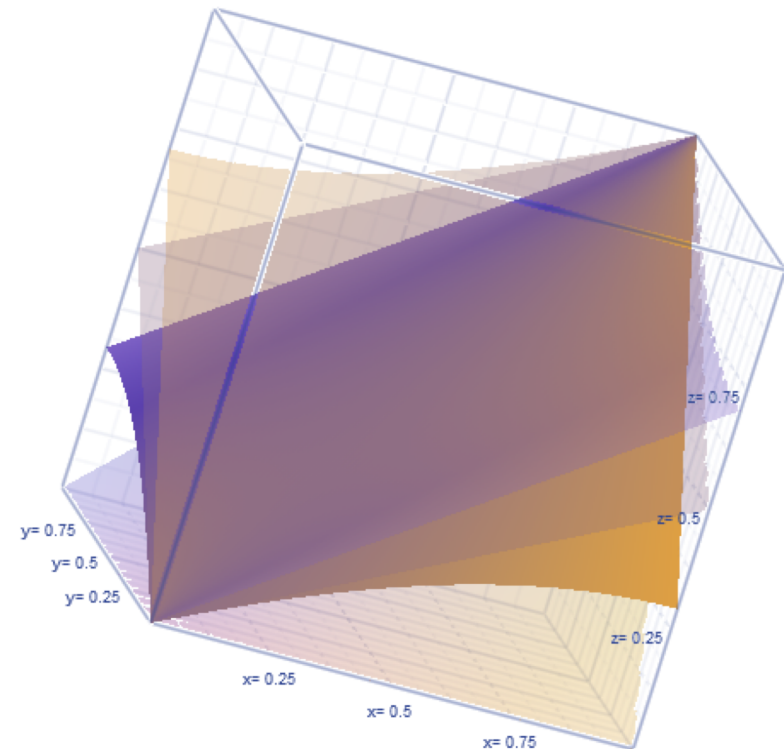
▲▲ This rule is used in situations where there is a preference for the presence of both value attributes, but combined value still exists even if one attribute is missing

▲▲ The most common of the non-traditional measures

▲▲ Examples

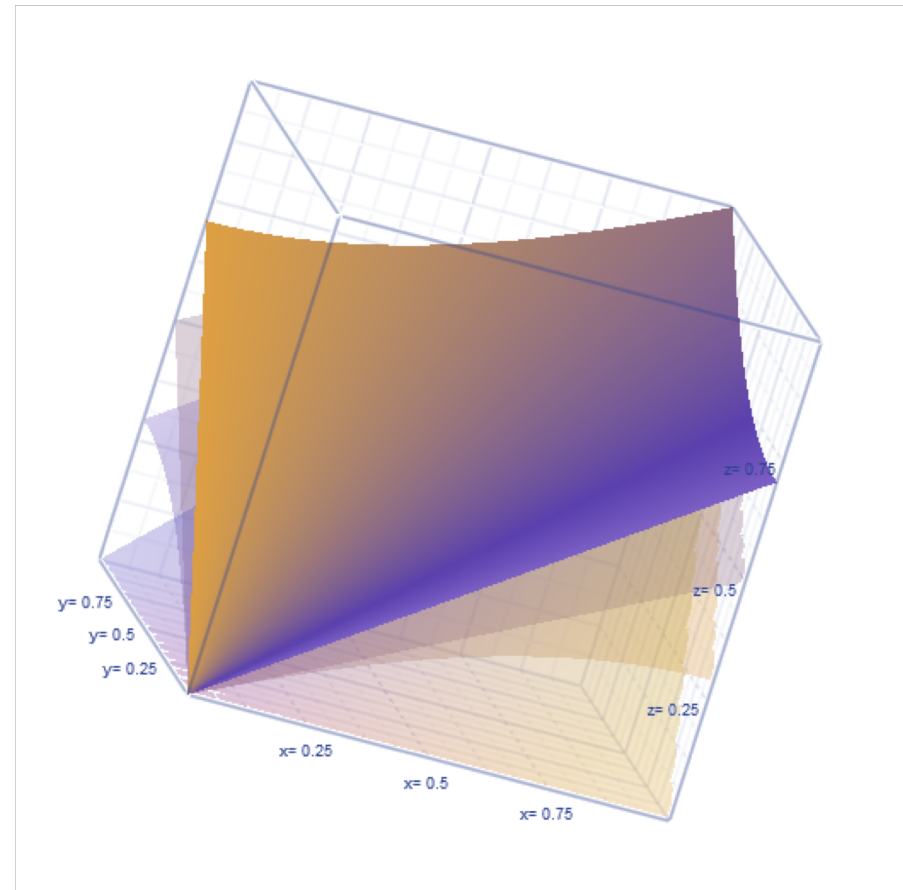
▲▲ Exports and Jobs created (multipliers)

▲▲ Competencies and skills transfer



PREFERENCE FOR ONLY ONE

- ▲▲ The value is higher, if one attribute exists while the other is missing
- ▲▲ In practical terms, the presence of only one of the two value attributes is preferred to the presence of both
- ▲▲ This rule is used in situations where it is not reasonable to expect the presence of both value elements and achieving one would be a substantial step forward
- ▲▲ Very very rare
- ▲▲ Example:
 - ▲▲ Generalisation and Specialisation

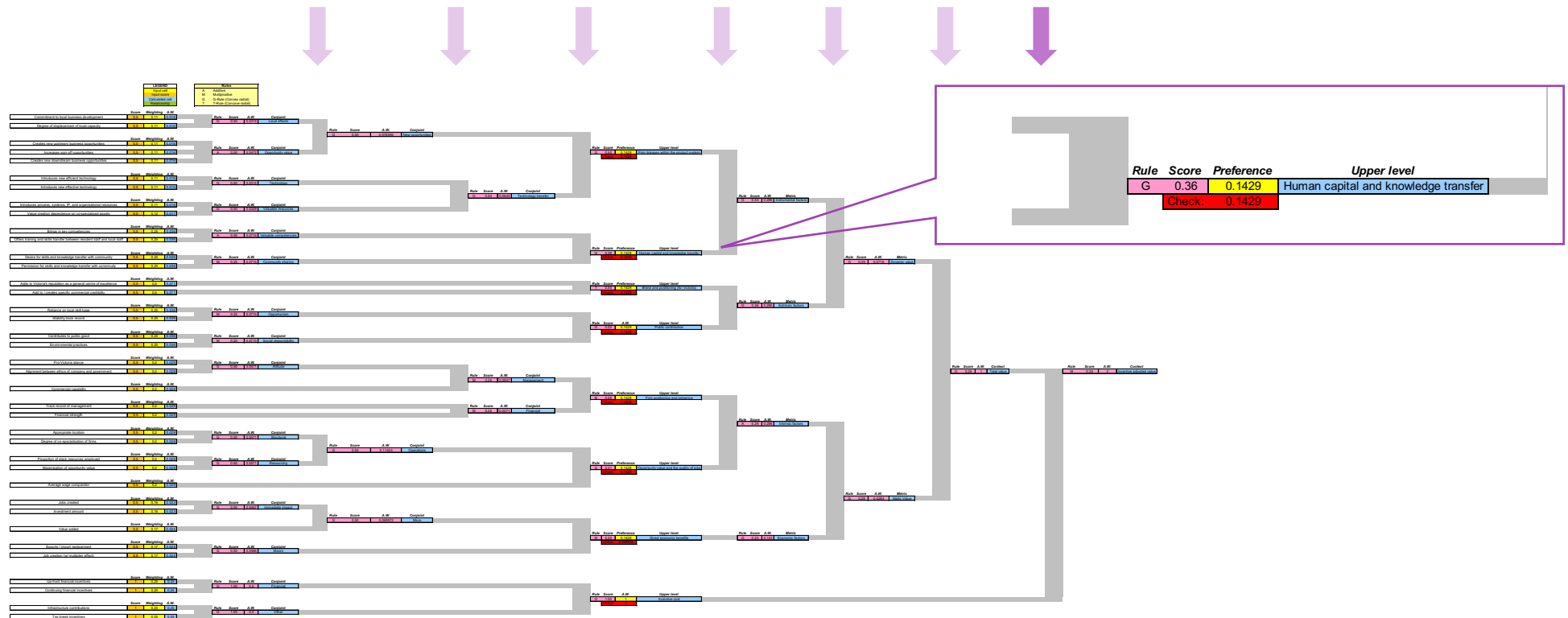


ZOOM OUT VIEW OF COMBINING ATTRIBUTES



Other potential value indicator levels

Total Value



EXAMPLES

- ▲▲ Government had an investment attraction calculator that was filtering out (knowledge economy) project applications that were considered inherently good
- ▲▲ Research undertaken to develop the categories of value and the measurement approach
- ▲▲ Qualitative measures were stratified using careful definitions based on historical data and best-worst cases
- ▲▲ Tournament tree combination of value attributes
- ▲▲ Calibrated against historical (bricks-and-mortar) grants
- ▲▲ Total value approach enabled meaningful comparison and recognition of knowledge economy projects/benefits
- ▲▲ Educational institution required a tool to determine which courses to promote, and which to re-develop
- ▲▲ Concerns about their current model:
 - ▲▲ Capturing all relevant factors?
 - ▲▲ Ability to weight model components appropriately for different applications/purposes?
 - ▲▲ Comparing courses of different scale?
 - ▲▲ Measuring the intangibles?
- ▲▲ Total value approach addressed these problems
- ▲▲ Including helping to articulate what was important but previously hidden

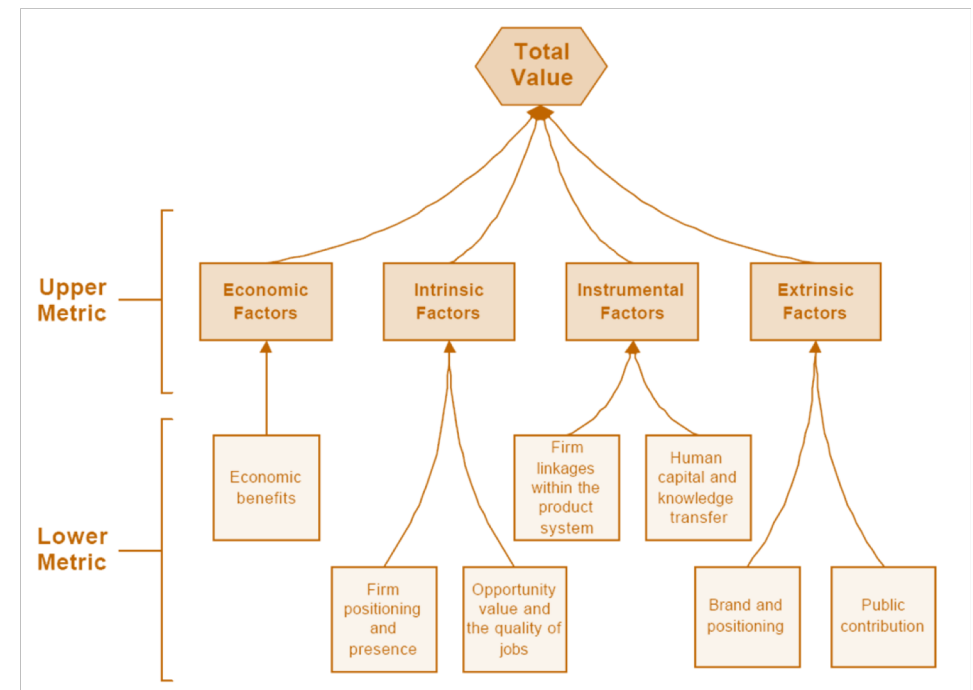
RECAP—WHAT TO MEASURE

Establish the reference/value objectives

Generally related to the outcomes sought

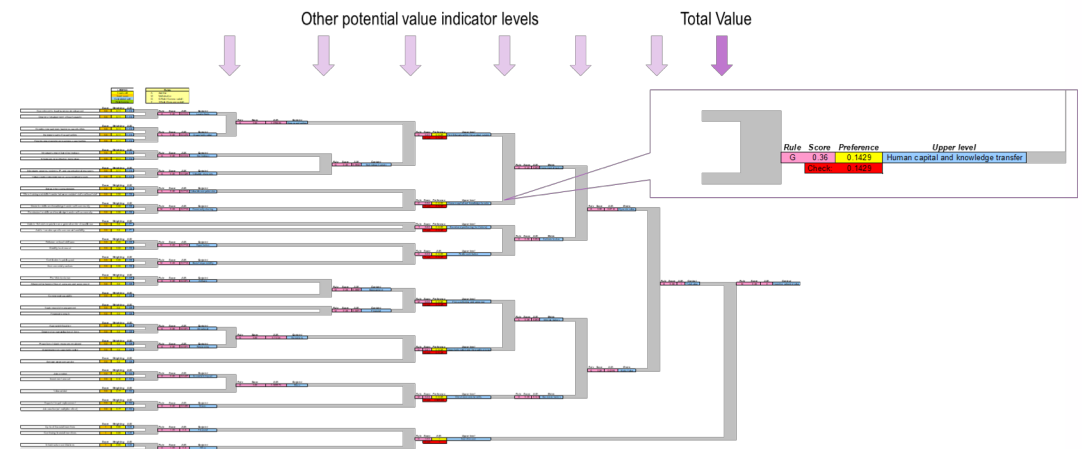
Identify factors which contribute to or influence the reference objectives

Use the categories as prompts—economic, intrinsic, instrumental, extrinsic



RECAP—HOW TO MEASURE

- Break factors into indivisible attributes (i.e. individually assessable)
- Design the measures
 - Tangible—quantitative
 - Intangible—use bands through guided survey questioning
- Combine the measures up
 - In the right way
 - To the relevant level (using a tournament tree approach)



WHAT THIS ALLOWS YOU TO DO



- ▲▲ Develop a richer understanding of all aspects of a program/intervention/system that derive value
- ▲▲ Place a quantitative metric on these aspects, whether tangible or intangible
- ▲▲ Combine these in a way that better reflects the reality of their interactions and combinations

- ▲▲ Analyse relative contributions to value of tangible and non-tangible factors within an option
- ▲▲ Compare across alternate options for value impact differentials

But not yet (ever?) ...

- ▲▲ PUT AN ACTUAL PRICE ON ALL ASPECTS OF VALUE

THANK YOU AND QUESTIONS



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