



A Sustainable Whole Life Value Agenda

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agenda for sustainable whole life value

Consider 3 factors

1. Specification of value
2. Value in the context of a corporate structure
3. Future value – Sustainable Whole Life Value

1. value specification

- most common expression* states that value (V) has a relationship with function (F) and cost (C), most usually expressed as:

$$\text{Value} = \frac{\text{Function}}{\text{Cost}}$$

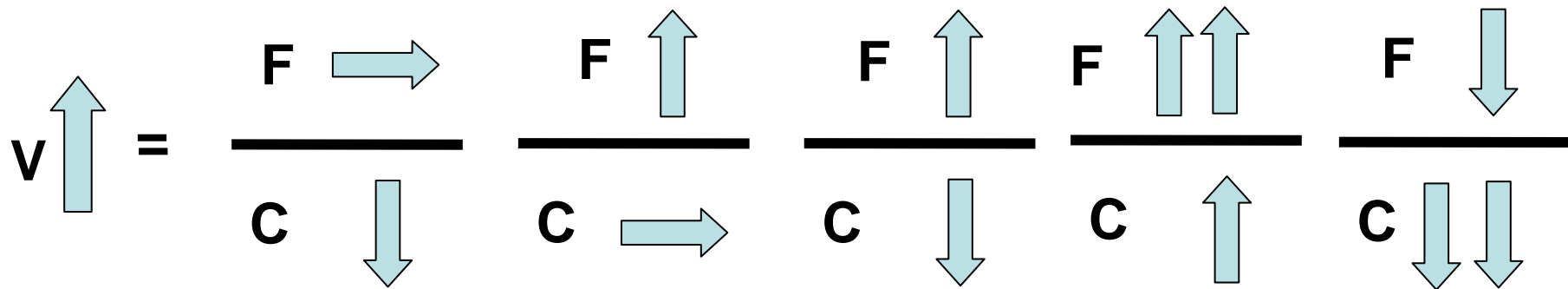
*

O'Brien:1976 p16, Crum: 1971 p14, EUR 14394:1993, ICE: 1996 p3,
Hayden and Parsloe: 1996 p5, RJ Park: 1999 p96

Value from Original Systems & Solutions

value, cost, function

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other perspectives

- Fallon (1980) - customer

$$\text{Value} = \frac{\text{Benefits}}{\text{Price}}$$

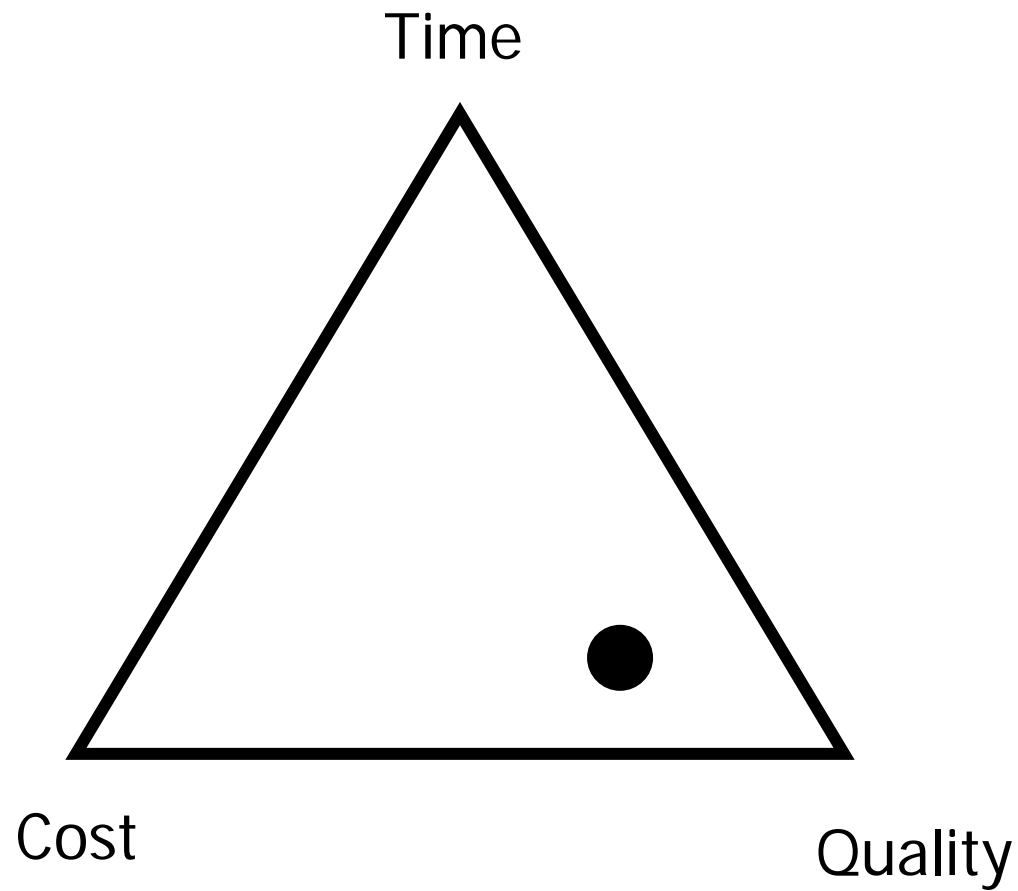
- Austin et al (2005)

$$\text{Value} = \frac{\text{Benefits} - \text{Sacrifices}}{\text{Resources}}$$

related to

value ~ time, cost & quality

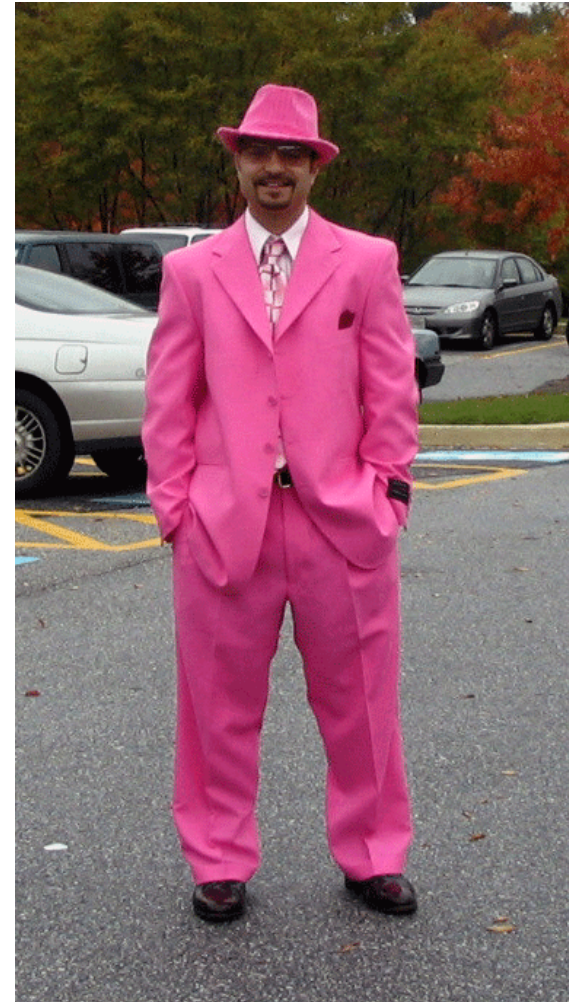
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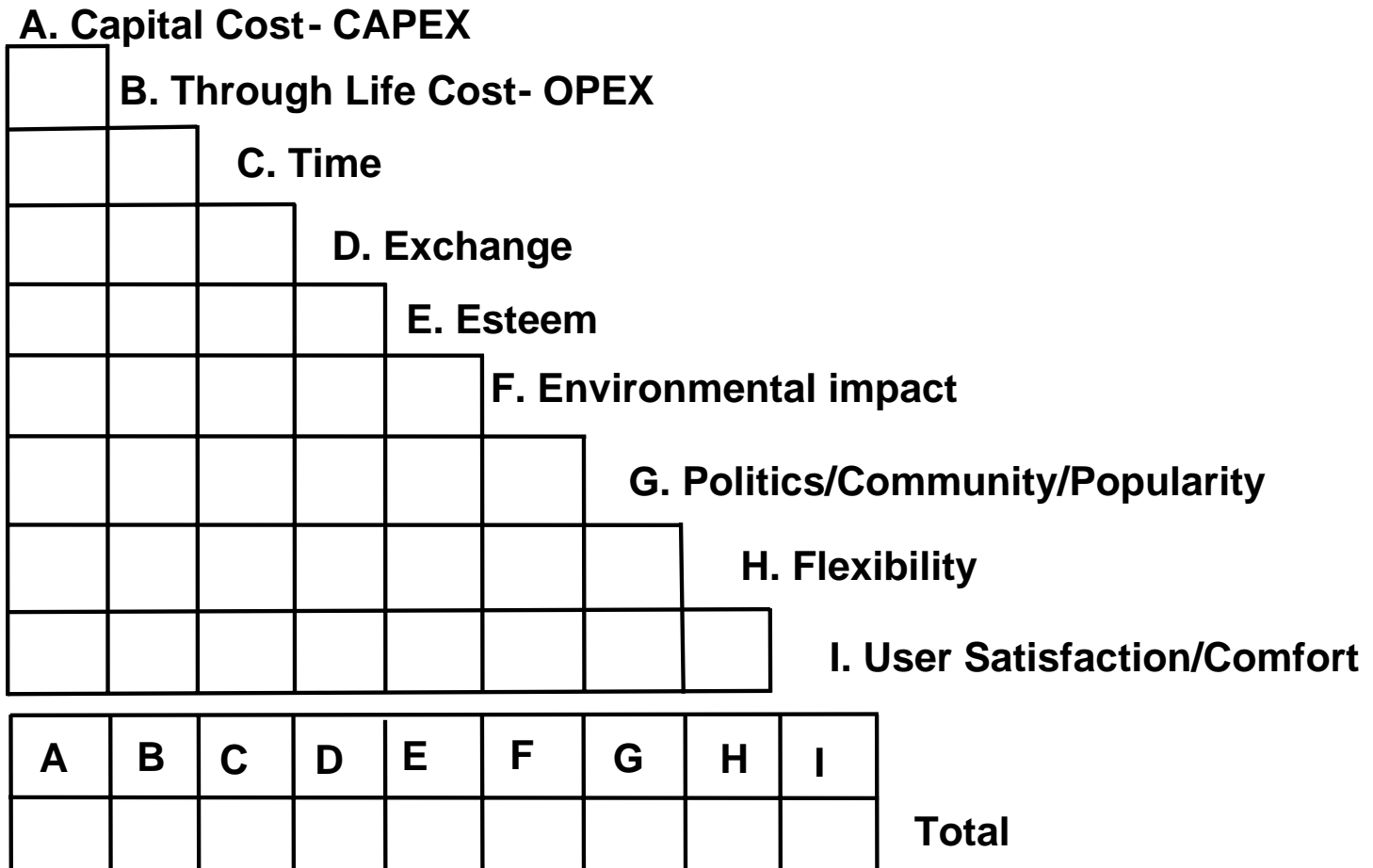
1. value specification

- “I want a really smart suit with a matching hat”
 - “I want it before I leave Hong Kong next week”
 - “I do not want to pay more than HK\$2500”
-
- with apologies to Jacky Chung



Value from Original Systems & Solutions

client value system



example – sports centre



A. Cost CAPEX

B	B. Cost OPEX							
A	B	C. Time						
A	D	D	D. Exchange Income					
A	B	C	D	E. Esteem				
A	B	C	D	F	F. Environment			
A	G	G	G	G	G	G. Politics		
A	B	H	D	H	H	G	H. Flexibility	
A	I	I	I	I	I	I	I	I. Satisfaction / Comfort

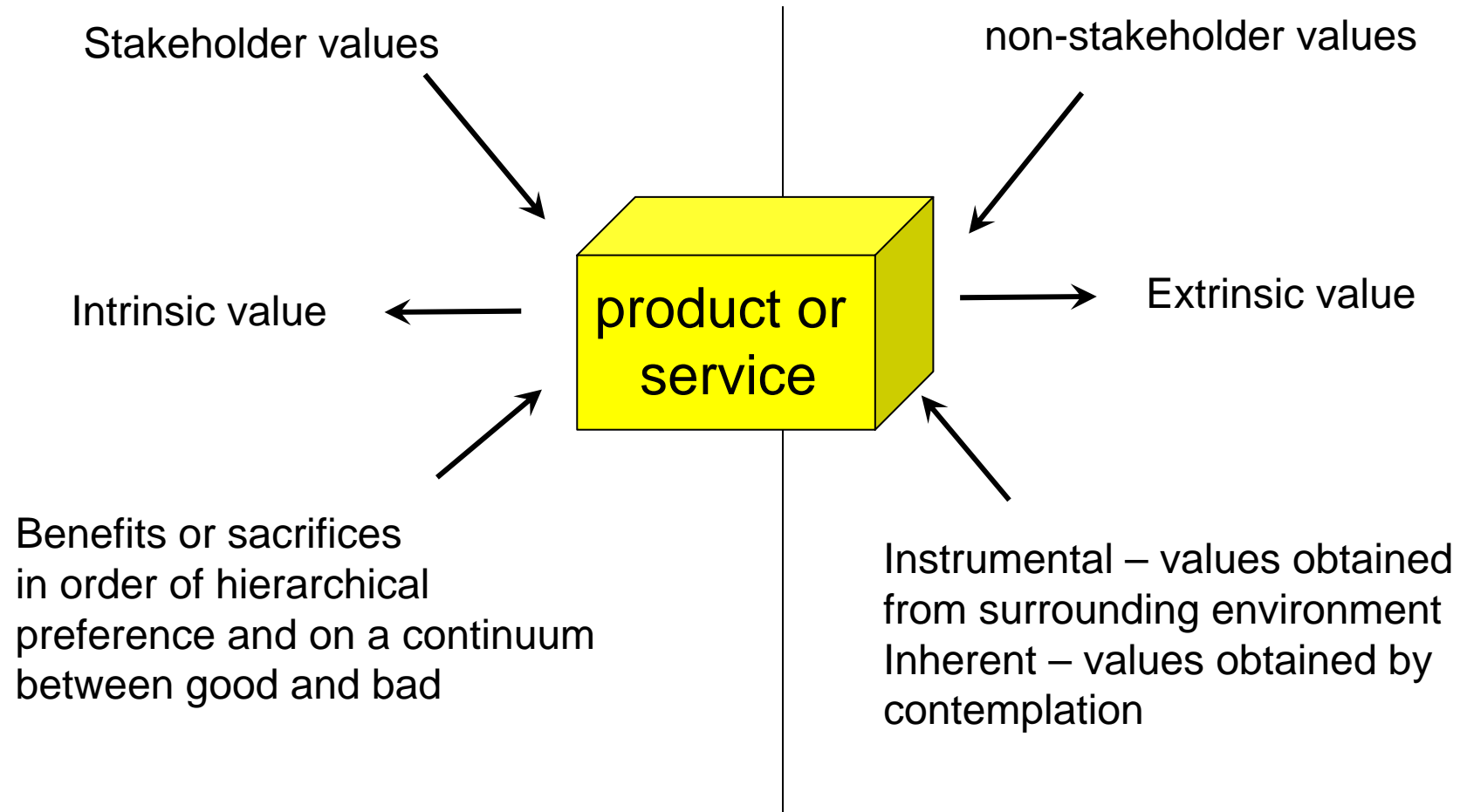
A	B	C	D	E	F	G	H	I
7	5	2	5	0	1	6	3	7

Total

Value from Original Systems & Solutions

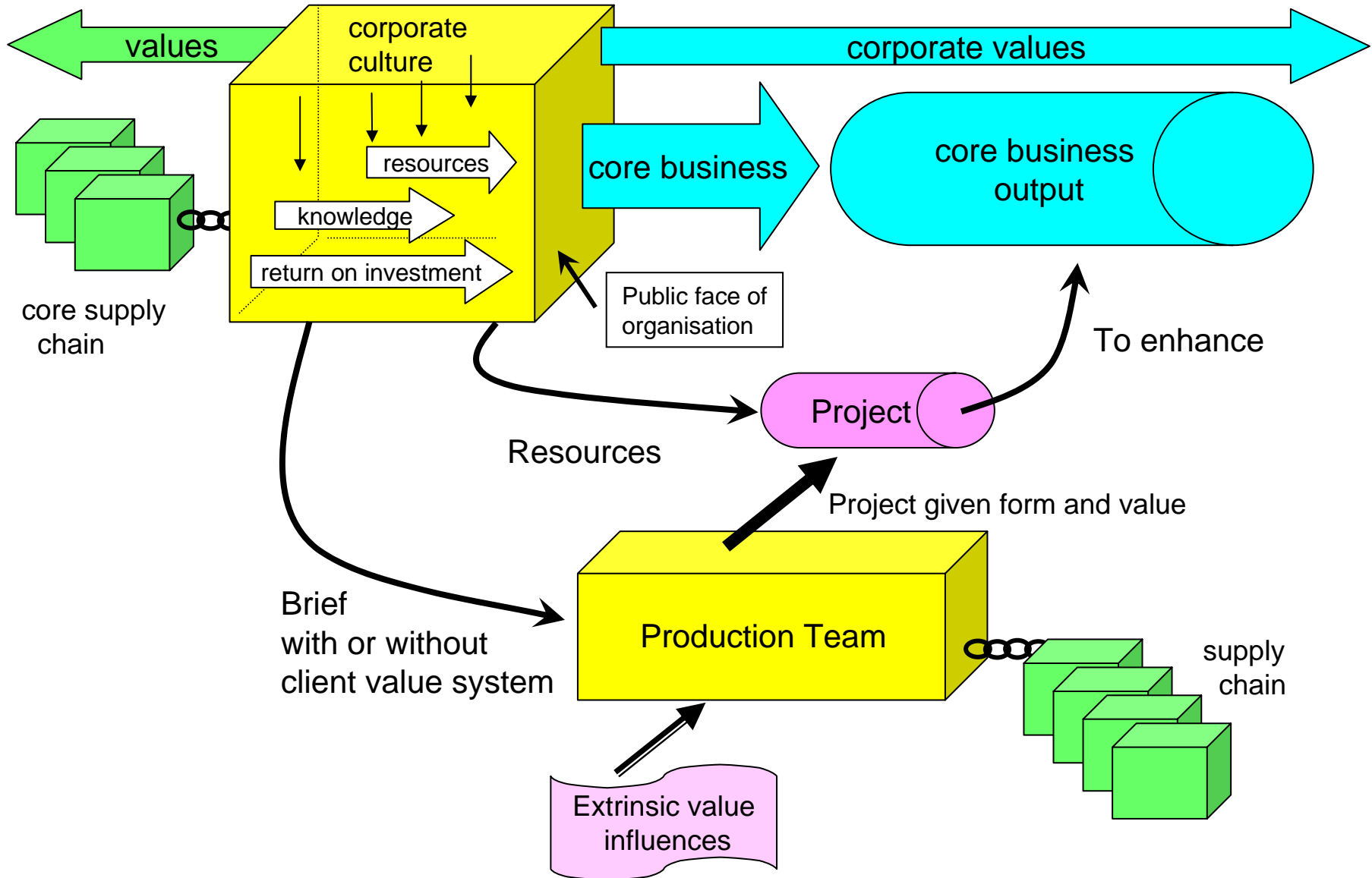
2. corporate values

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Value from Original Systems & Solutions

CLIENT

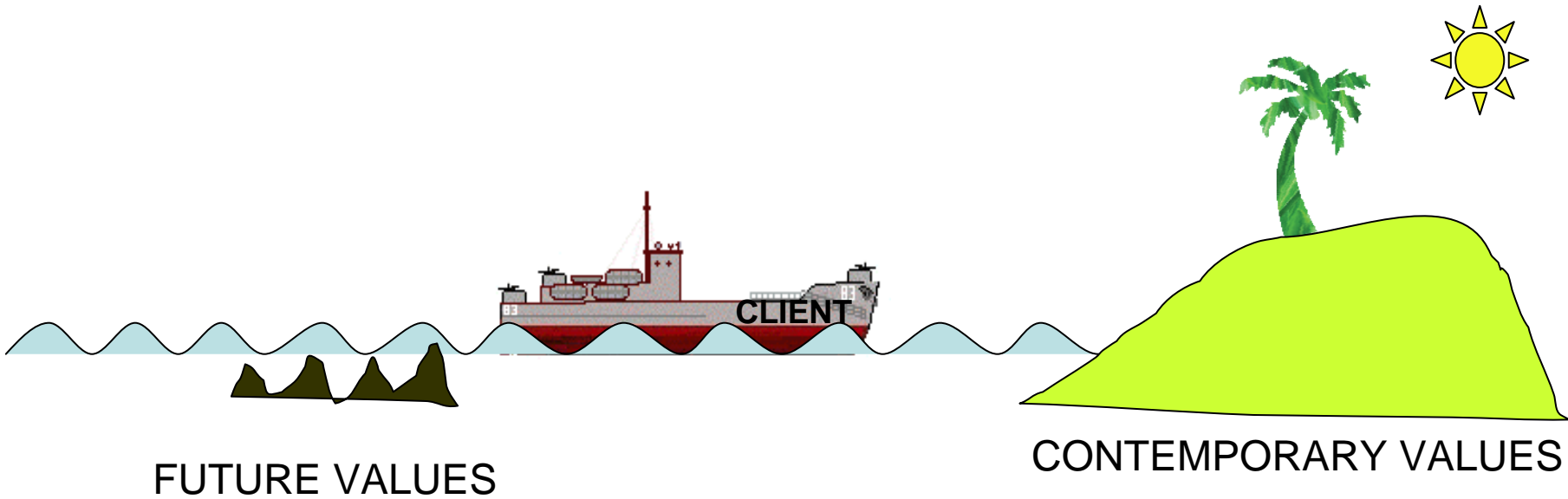




3. sustainable whole life value agenda

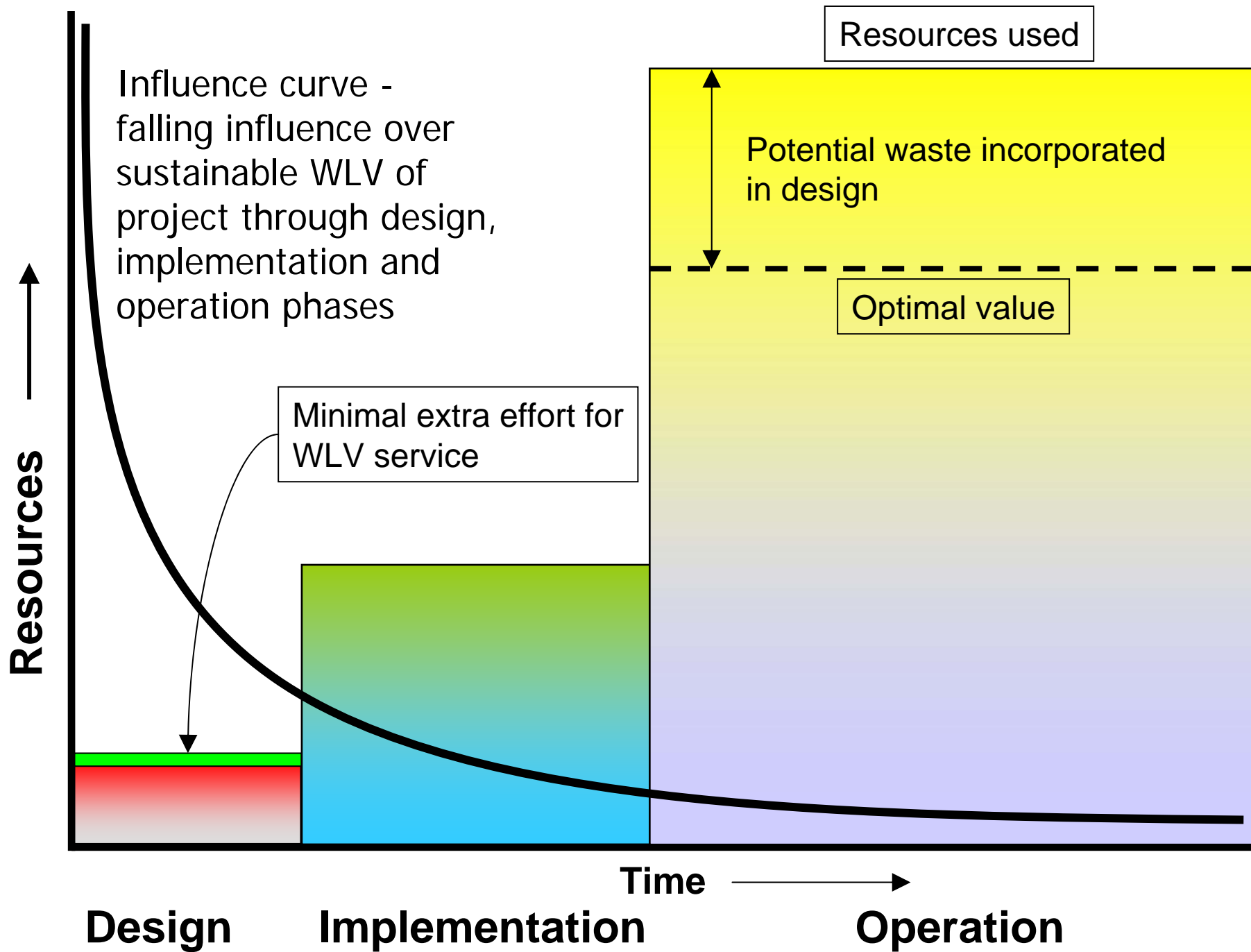
An agenda for WLW
which is robust and
will last

A WLW agenda
which reflects the
requirements of
sustainability



FUTURE VALUES

CONTEMPORARY VALUES



values & units of sustainability

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Life – RICS definitions

- Economic – period for which least cost option
- Functional – while performing original function
- Legal – satisfying legal requirements
- Physical – until collapse
- Social – until no longer required by society
- Technological – until superseded

stakeholders

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data for sustainable WLV option appraisal

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Where do we find the necessary data

where to from here?

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$$WLV = \frac{\text{Benefits – Sacrifices in initial stage}}{\text{Resources in initial stage}} + \sum_{n=0}^n \left[\frac{\text{Benefits – Sacrifices in each period}}{\text{Resources in each period}} \right] - \text{Residual Value}$$



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