



# A Sustainable Whole Life Value Agenda

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# agenda for sustainable whole life value

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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

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

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

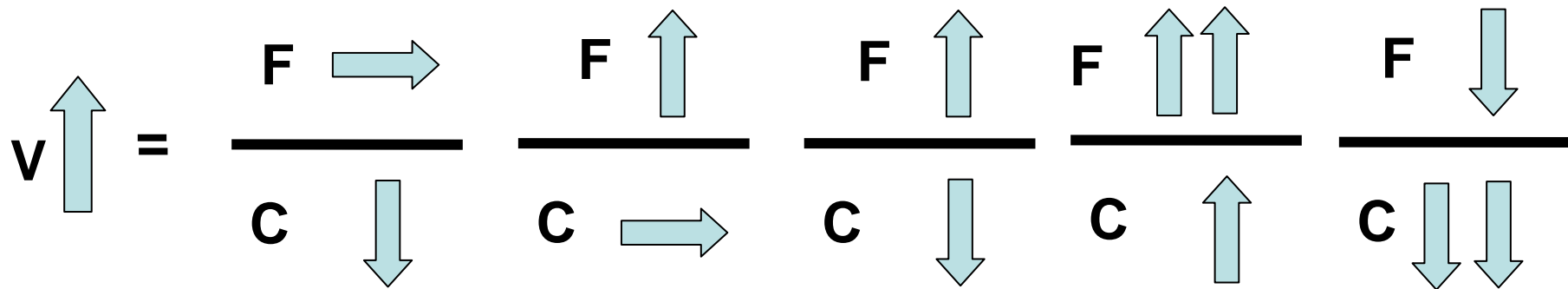
\*

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

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- Fallon (1980) - customer

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

- Austin et al (2005)

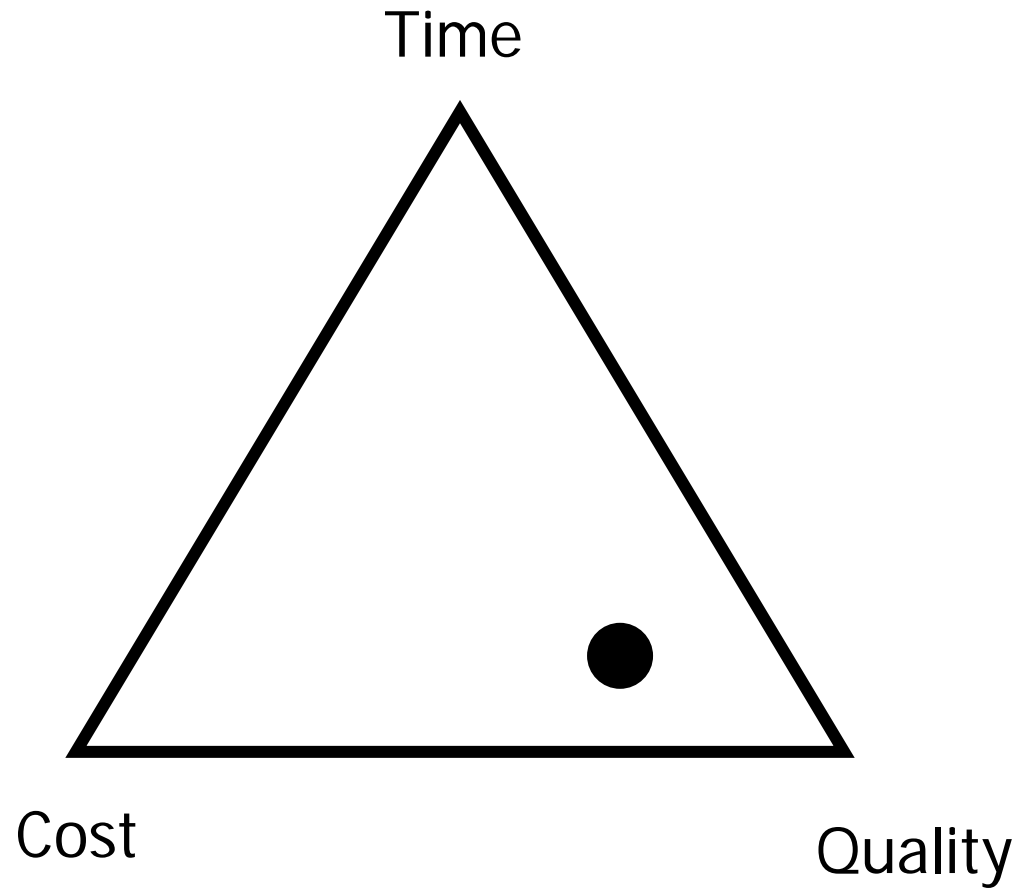
$$\text{Value} = \frac{\text{Benefits} - \text{Sacrifices}}{\text{Resources}}$$

related to

# value ~ time, cost & quality

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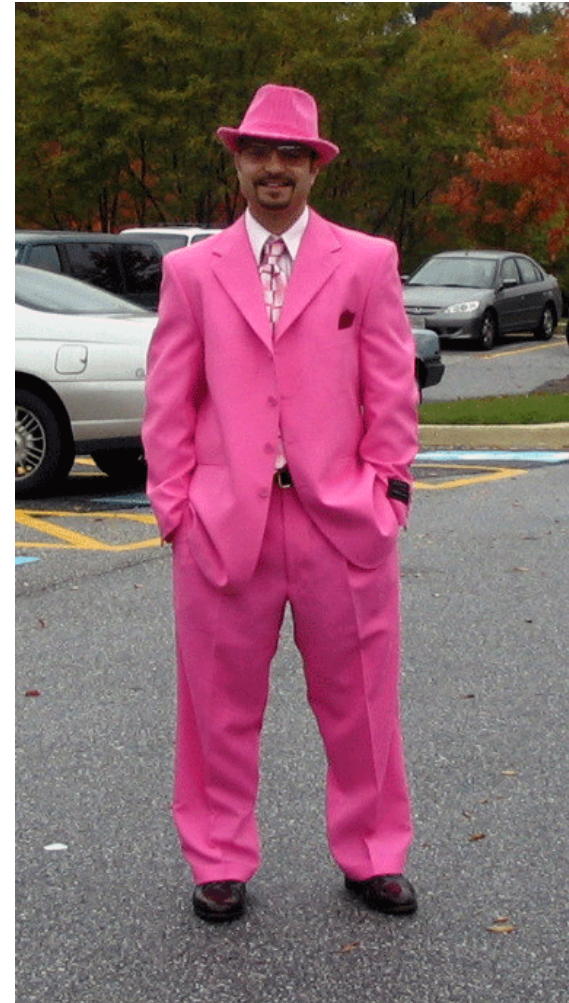
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# 1. value specification

- “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



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# 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

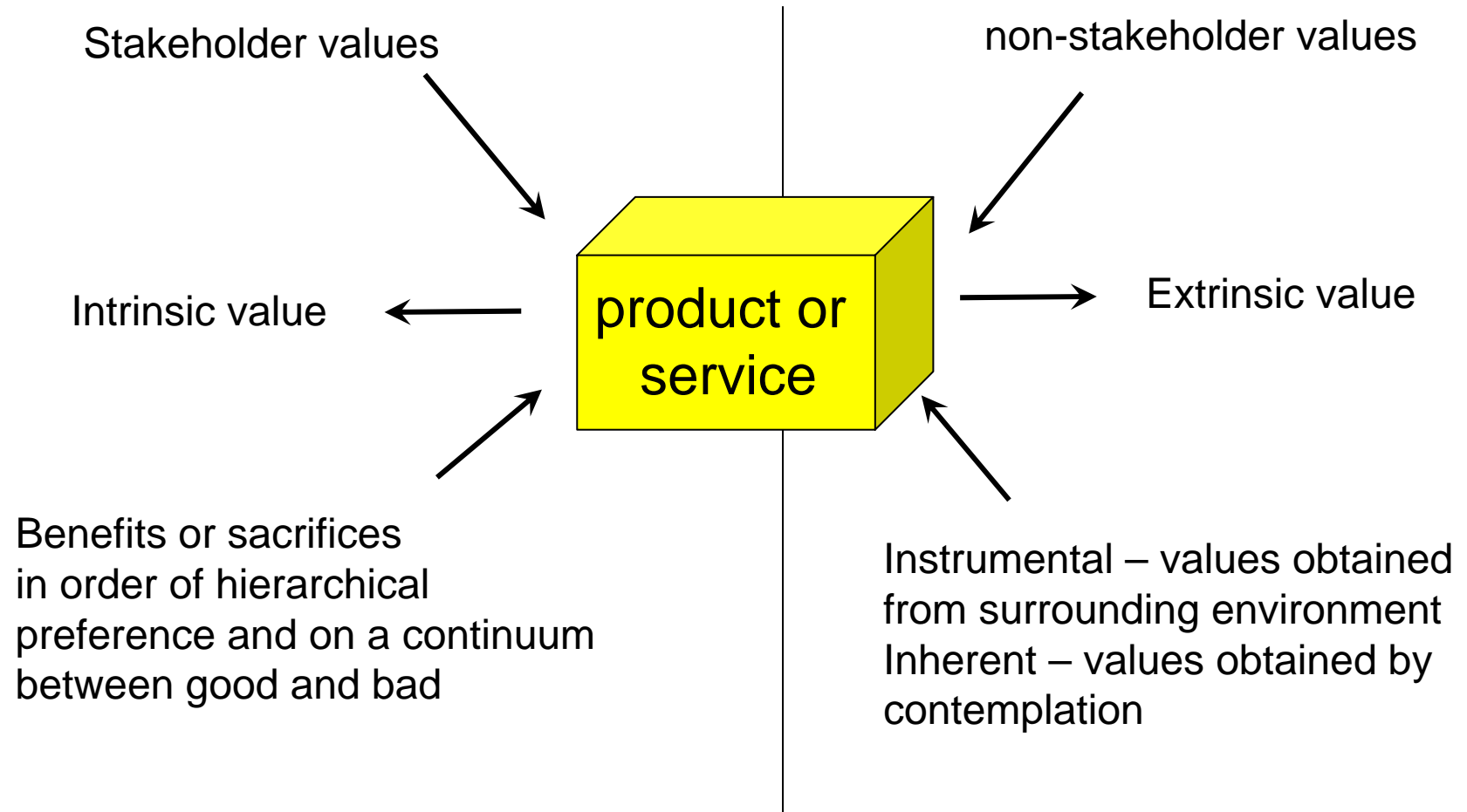
A	B	C	D	E	F	G	H	I
7	5	2	5	0	1	6	3	7

Total

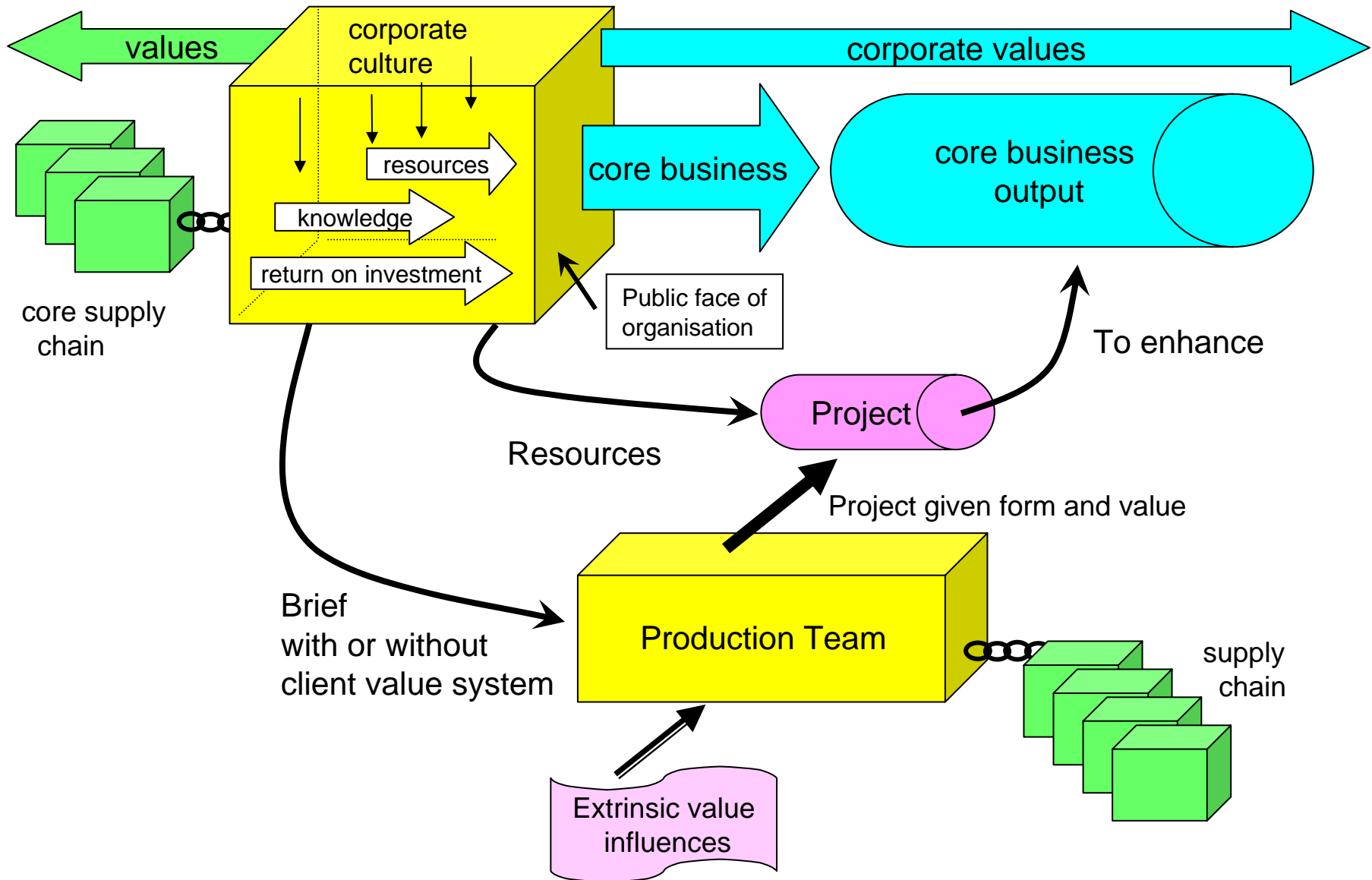
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## 2. corporate values

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# CLIENT



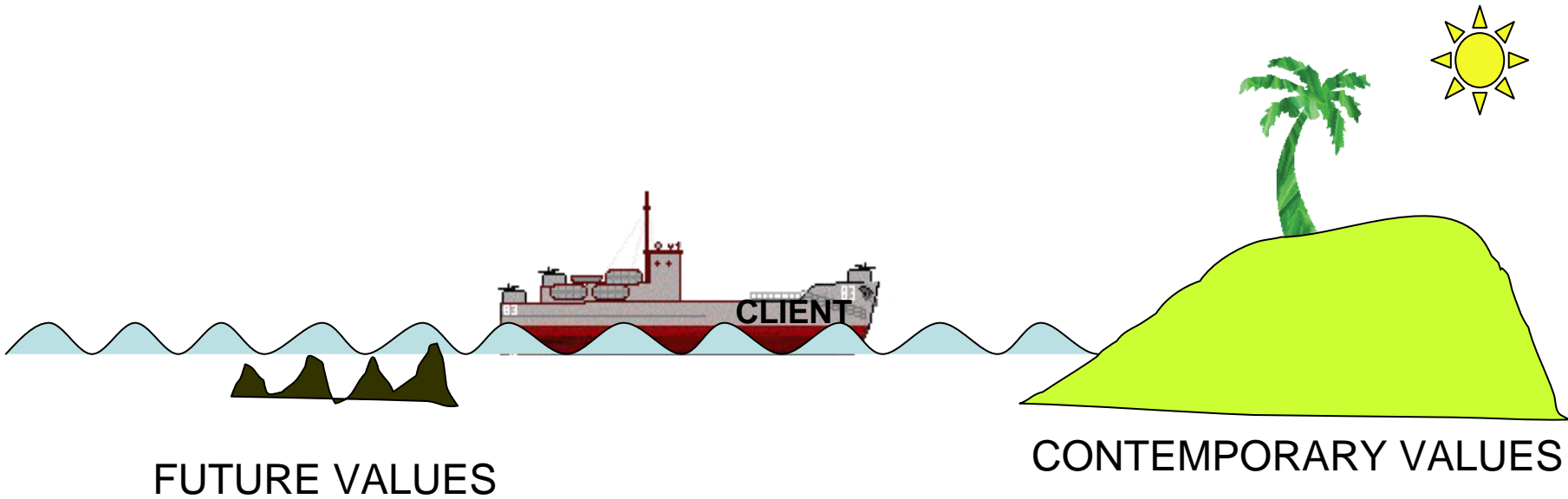


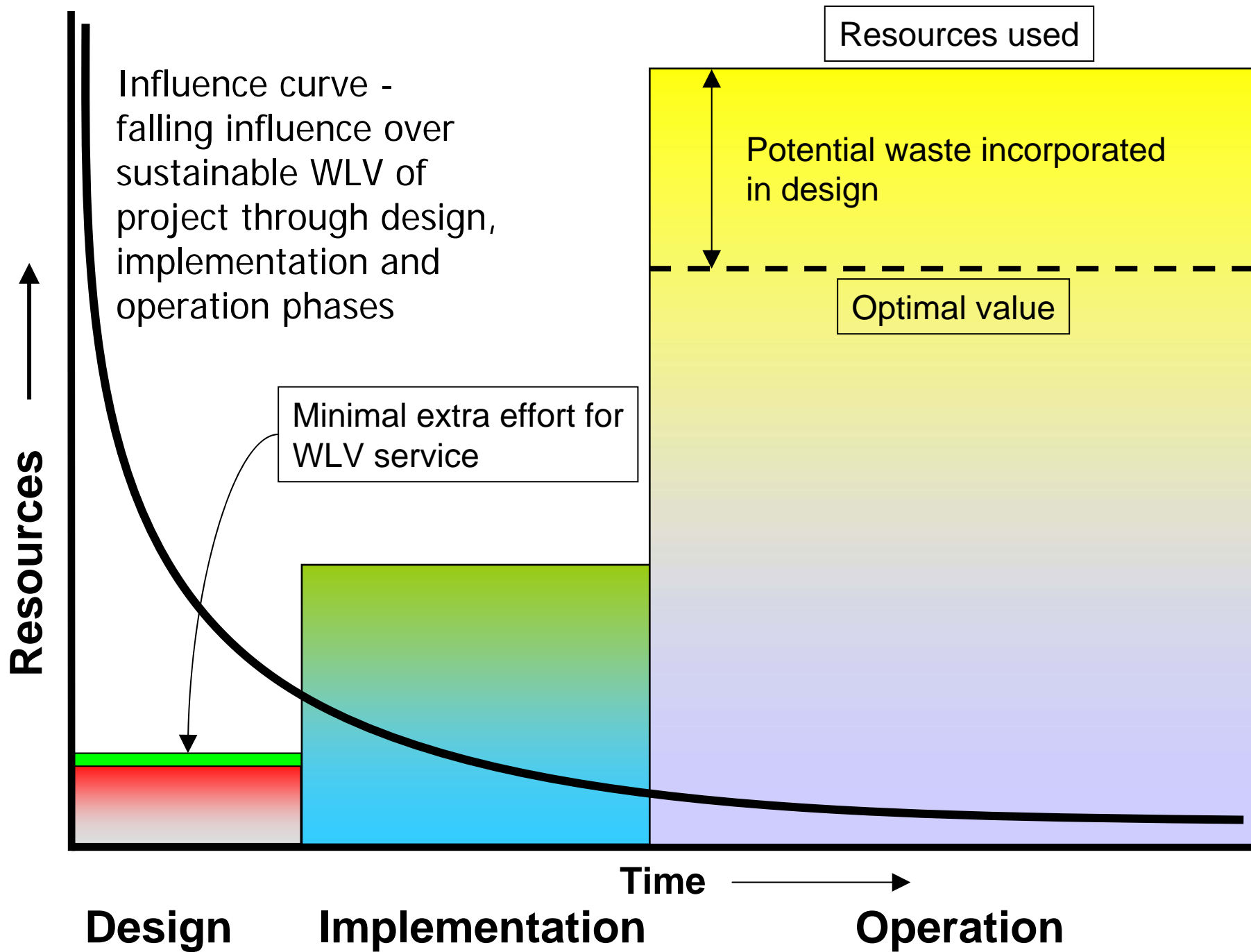
### 3. sustainable whole life value agenda

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An agenda for WLW  
which is robust and  
will last

A WLW agenda  
which reflects the  
requirements of  
sustainability







# Life – RICS definitions

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- 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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