

The Problem with Agile & Contracts
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## The Problem with Agile



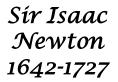
## The problem with contracts

Traditional contracts are out-dated

Contracts distort behaviour

You get what you measure

### Influences behind the traditional contract



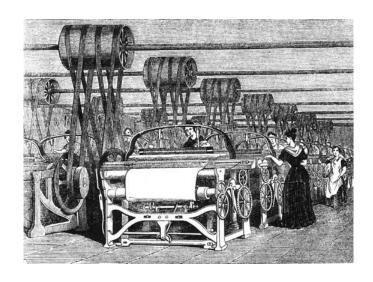


The Industrial Revolution 1750-1850



20<sup>th</sup> century US manufacturing







Frederick Taylor 1856-1915



Alfred P. Sloan



Henry Ford

## You get what you measure!

"Perhaps what you measure is what you get. More likely, what you measure is all you get. What you don't (or can't) measure is lost."



H Thomas Johnson (2006)

### Contracts distort behaviour



"I'd exercise more if it were billable."

## Early versions of Agile contracts

Contracts with shorter development paths

Velocity-based contracts

PLUS:

• 'Agile methodology' contracts

## Contracts with shorter development paths

Typically the solution is decomposed into a series of 'minimum viable products' or the equivalent

#### Pros:

- Customer insight into the development process
- Mirrors current procurement models
- Appears to facilitate the management of budgets and schedules

- The solution will not necessarily meet the customer's expectations
- Risk of amateurish design by the customer
- Supplier is incentivised to create more features

## Velocity-based contracts

 Typically the supplier commits to provide a certain number of 'units of work' which may comprise story points or function points over a set period of time

#### Pros:

- Increased flexibility
- Easy to measure

- The solution will not necessarily meet the customer's expectations
- An emphasis on velocity is no guarantee of quality
- > The supplier is incentivised to create more output

## 'Agile methodology' contracts

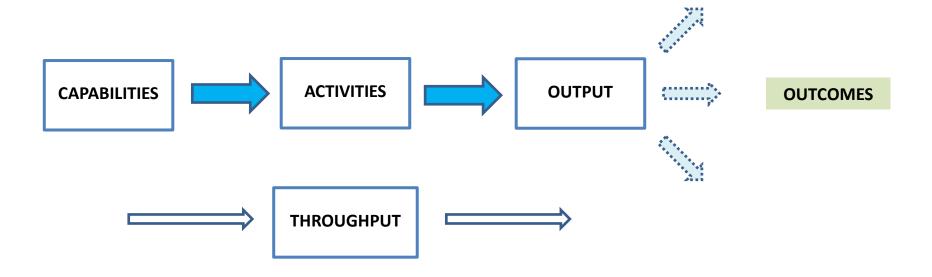
The contract documents the Agile development process

#### Pros:

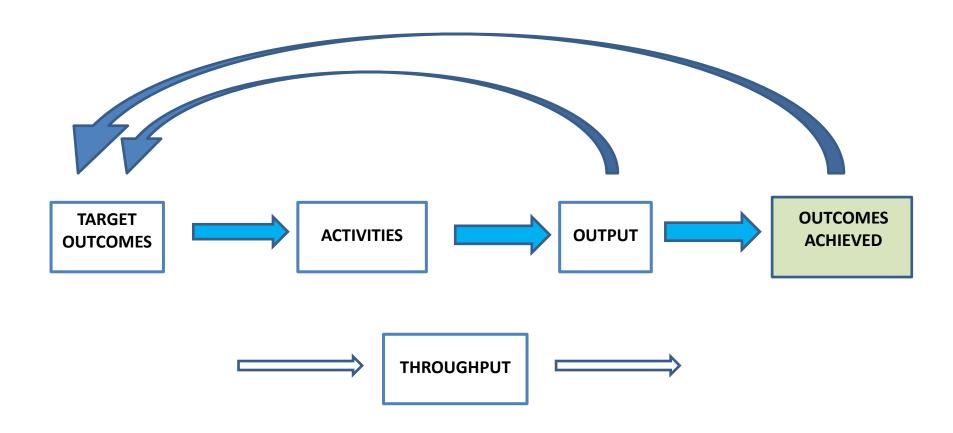
More accurately reflects the 'Agile process'

- > Typically the Agile process changes over the course of the project
- Inconsistent with the principles of Agile which are 'results-focused'
- The supplier is incentivised to create more activities
- The solution will not necessarily meet the customer's expectations

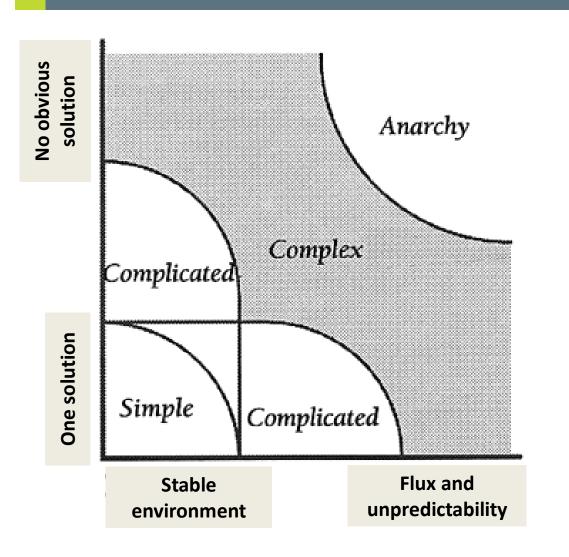
### Traditional view of contract metrics



### Outcome-driven view of contract metrics



## The scope of this presentation

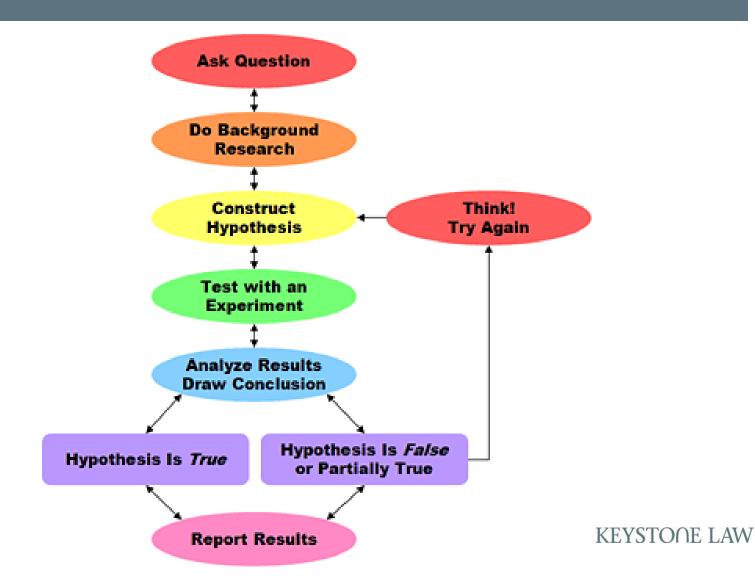


### The Stacey Matrix

# Management for different contexts

COMPLICATED	COMPLEX	
'Known Unknowns'	'Unknown Unknowns'	
Stable environment	Unpredictability and flux	
Clear relationship between cause and effect	No/little relationship between cause and effect	
BUT not everyone can see it	Understand only in retrospect	
Multiple right answers	No right answers	
BUT not everyone can see it		
'Sense, Analyse, Respond'	'Probe, Sense, Respond'	
Consult the experts  Trade-off between right answer and making a decision	Empirical management  Allow patterns to emerge and select the best ones	
	'Known Unknowns'  Stable environment  Clear relationship between cause and effect  BUT not everyone can see it  Multiple right answers  BUT not everyone can see it  'Sense, Analyse, Respond'  Consult the experts  Trade-off between right	

## An introduction to empirical management



### The Flexible Contract

- An open source, outcome-based contract
- Freely available at <u>www.flexiblecontracts.com</u> under a Creative Commons license
- Created by Susan Atkinson and Gabrielle Benefield
- Any feedback greatly appreciated!



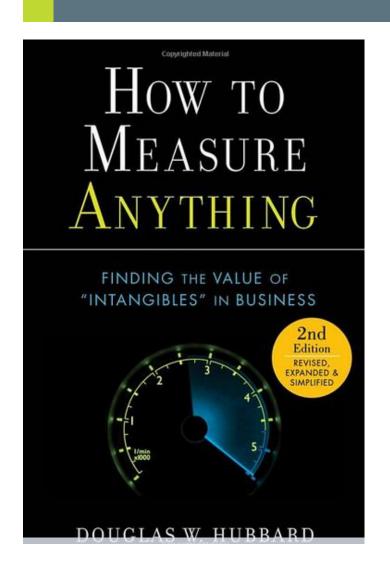
## An overview of the Flexible Contract (part 1)

- Modular delivery To increase contractual flexibility.
- Outcome-based delivery The supplier is free to develop the optimum solution within the constraints to deliver the target outcomes which will achieve the business objectives:
  - Business objectives— The opportunity(s) to address and/or the problem(s) to solve and how they will deliver tangible value to the customer.
  - ➤ Target outcomes The business results aligned with the business objectives that the customer wishes to pursue. These must be objective and either quantified or qualified.
  - Constraints The constraints outside of which the solution must not deviate.
  - ▶ Options Potential solutions which facilitate measurable progress towards the target outcomes.
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## An overview of the Flexible Contract (part 2)

- Outcome-based metrics Any potential solution must be measured against the target outcomes.
- Outcome-based fees At least part of the fees should be payable on the achievement of target outcomes.
- No contractual sanction if the outcome-based metrics are not achieved - It is an empirical process to explore whether the target outcomes are achievable and when enough has been done to achieve them.

## How to measure anything



"Measurement is a quantitatively expressed <u>reduction of uncertainty</u>
based on one or more observations."

Douglas Hubbard, 2010

"A problem well stated is a problem half solved"

Charles Kettering (1876-1958)

"It is <u>better</u> to be approximately right than precisely wrong."

Warren Buffett

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### Pros and cons of the Flexible Contract

#### Pros:

- A structured approach for focusing on the customer's strategic plan
- The creation of shared goals helps to align the interests and motivation of the parties
- The supplier is incentivised to achieve the target outcomes in the most cost-effective way
- Outcomes are less susceptible to change than output
- The parties can learn rapidly what works and what doesn't by measuring progressively the outcome delivery

- Lack of familiarity
- Outcomes are not as straightforward as other contract metrics and require some training

# Characteristics of Agile

Contract Characteristics	Shorter development paths	Velocity- based	'Agile methodology'	Flexible Contract Model
Evolutionary and emergent solution				•
Experimental approach				•
Fast feedback loops / learning cycles	•			•
Rapid response to embrace changes	• ½	• ³⁄ <sub>4</sub>	• ½	•
Collaborative relationship				•



## Thank You!

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