

The Magnificent Seven versus the Insurance Industry

Google, Facebook, Amazon, Microsoft,
Baidu, Alibaba and Tencent



Darrell Mann

Cardiff Business School, 19 February, 2019



Some of our clients from the last 20 yrs:



The Industry (Everyone's) Holy Grail?



Fine thanks.

How was the meal?

The lamb
tasted like
boot-leather

Veracity



Never Make Predictions...

Systematic (Software) Innovation

Darrell Mann

Foreword by best-selling IT author, Bryan Maizlish

**“The geeks will
inherit the Earth...”**

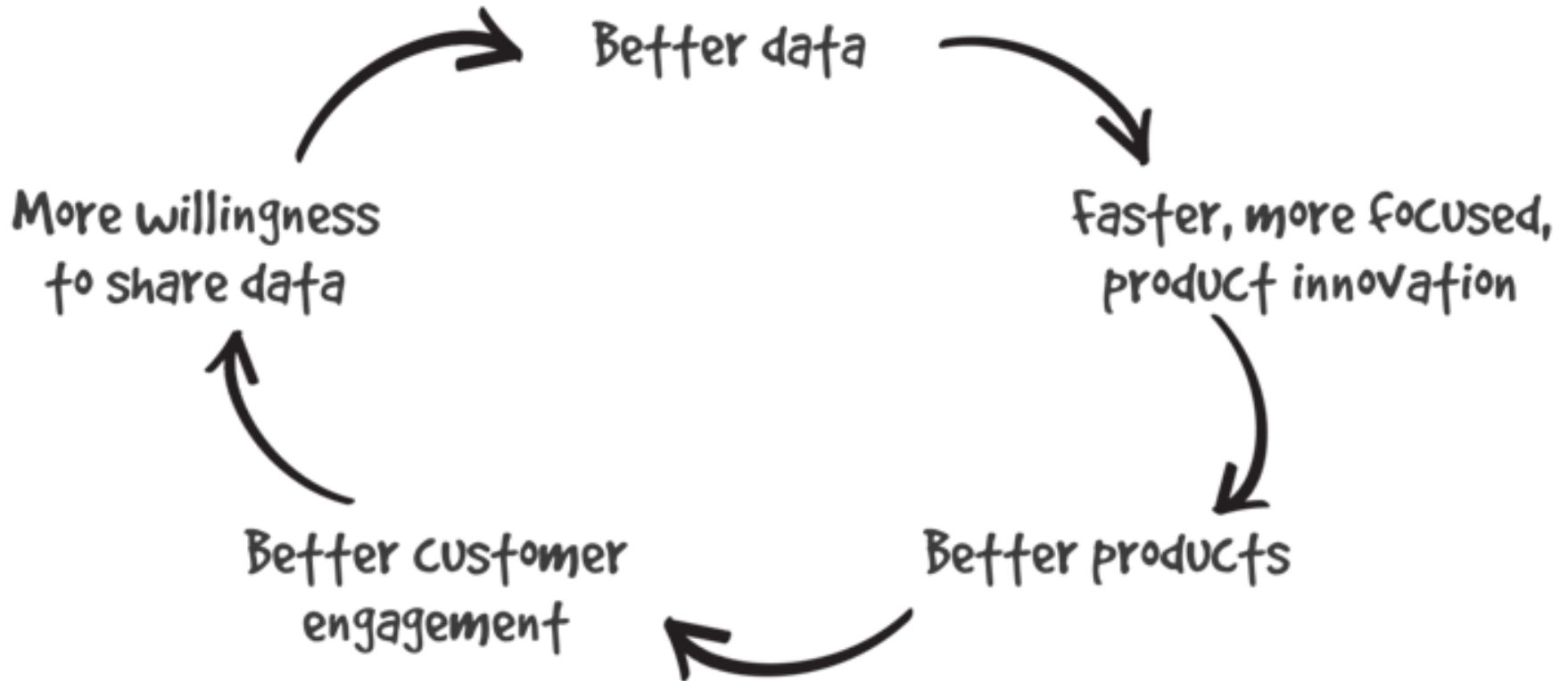


**“...they are the least
qualified people for
the job”**



AI: The Ultimate Winner-Takes-All Cycle

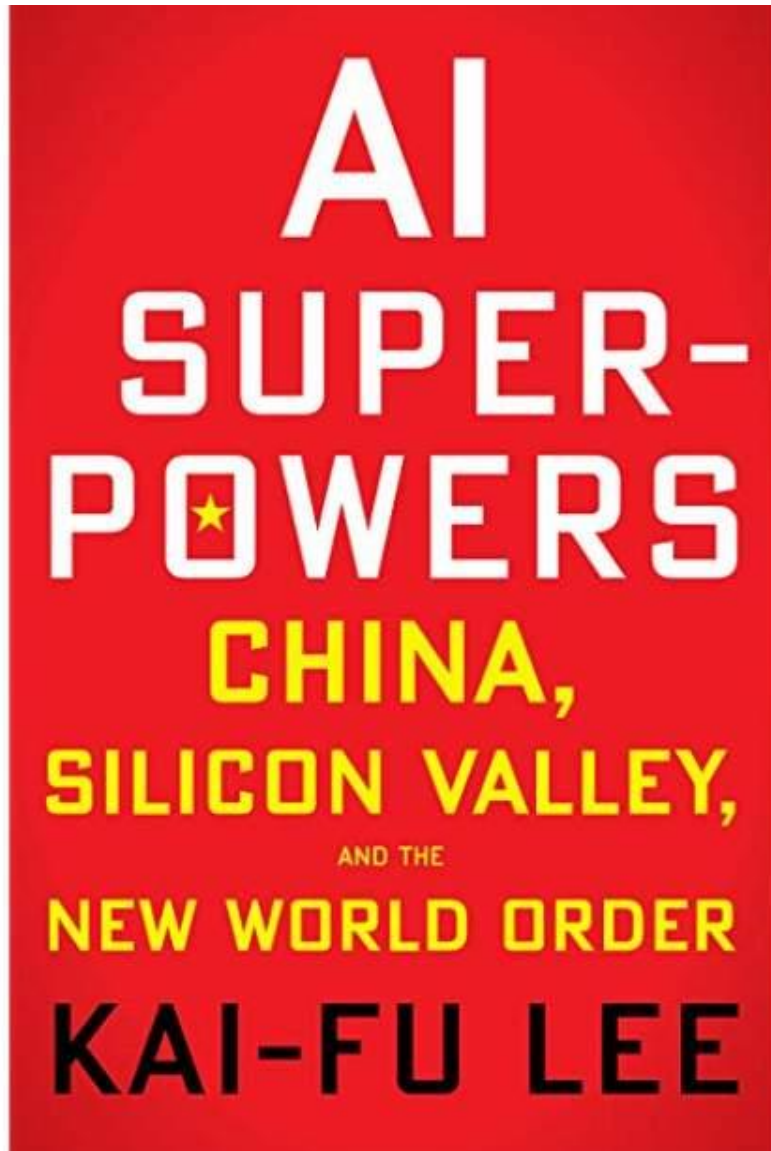
The Virtuous Cycle of Data



Learning Algorithm beats 'domain expert'
after 100K training cases... radiologist to loss-adjuster



Never Make Predictions...



“The Chinese and Silicon Valley geeks will inherit the Earth...”

“...they are still the least qualified people for the job”



A New World Order



“mass entrepreneurship and mass innovation”
2014



CHINA AI TOP 50

There are 14 unicorns worth a combined \$40.5 billion*



\$15B



\$5B



\$4.5B



\$2.5B



\$2B



\$2B



\$2B



\$1.5B



\$1B



\$1B



\$1B



\$1B



\$1B



\$1B

*This is based on disclosed and estimated valuations.

China's Sputnik Moment



柯洁 KE JIE
00:15:19

ALPHAGO
01:45:25



May 25 2017





O2O - Online To Offline

Online ② Offline



China's Big Advantage:

DATA

100Ms of O2O transactions daily

Say-Do Gap gone



Fire Your Banker

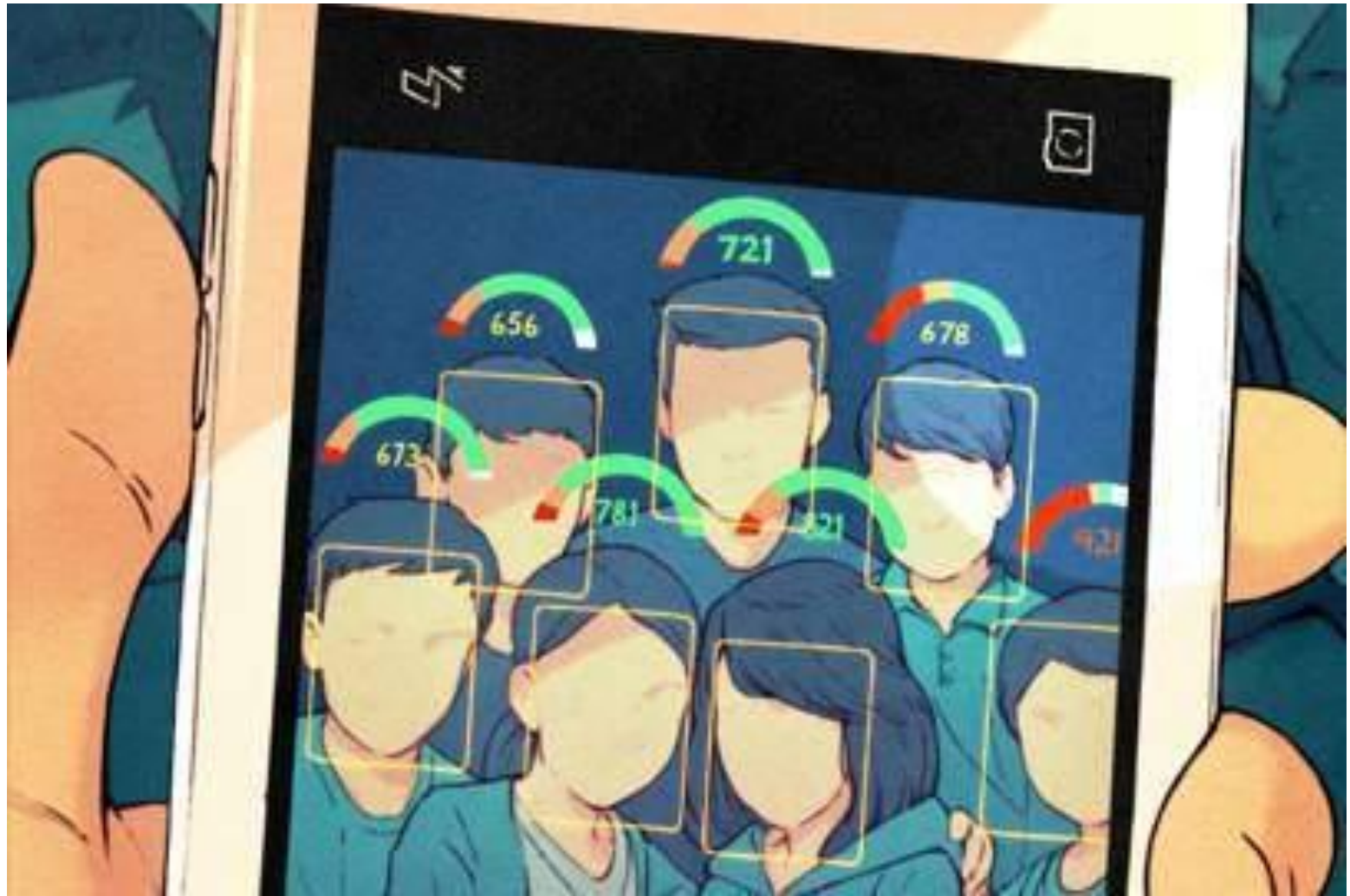


Unsecured loans of up to £30,000
App assesses a person's trustworthiness and likelihood of paying based on thousands of automatically gathered criteria:

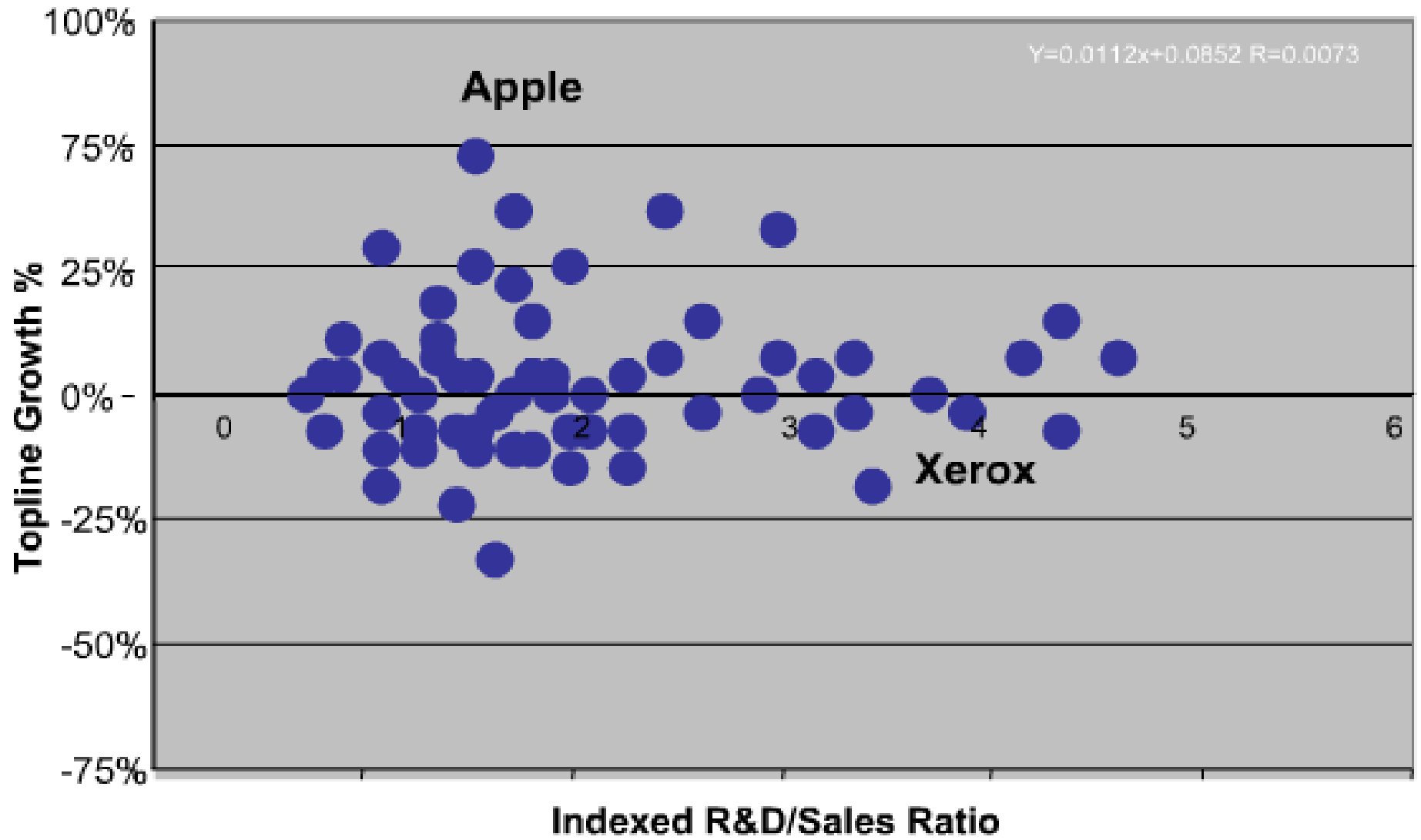
- remaining battery-life
- how quickly you typed your date-of-birth



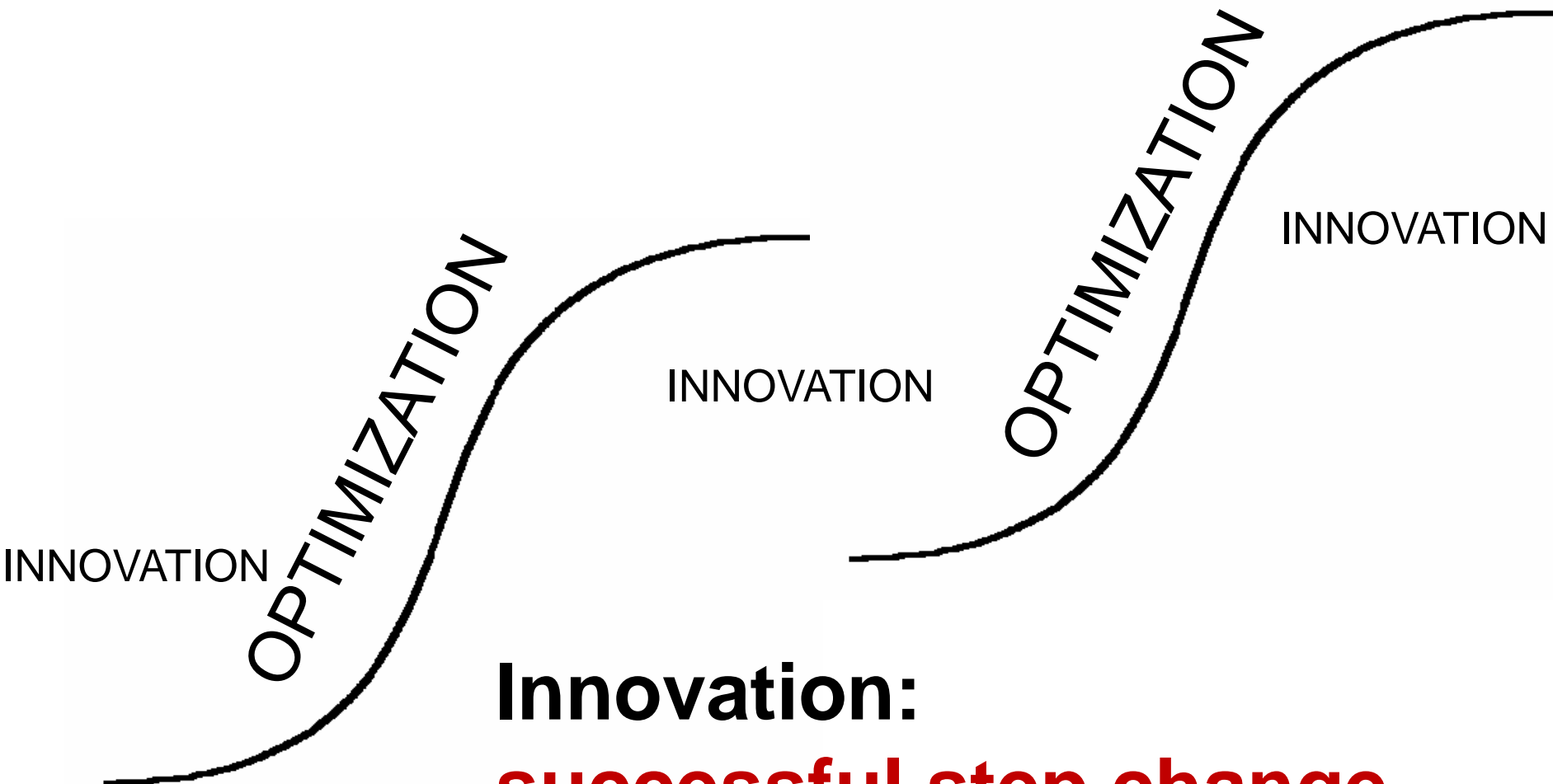
Trust? – Social Credit System



Innovation Performance



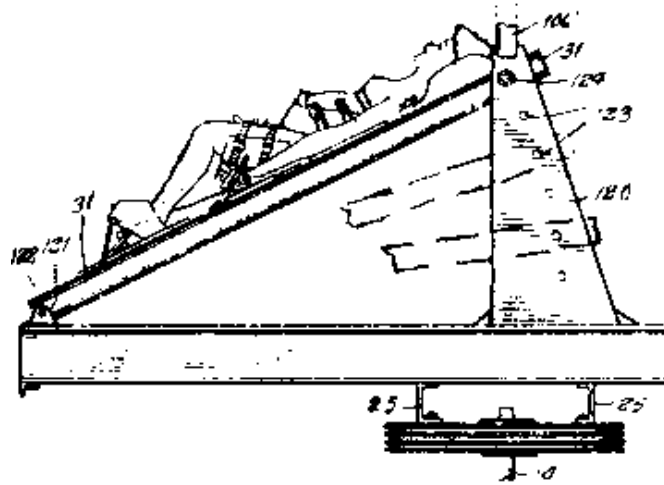
Optimization & Innovation



Innovation:
successful step change
(nothing to do with 'optimization')

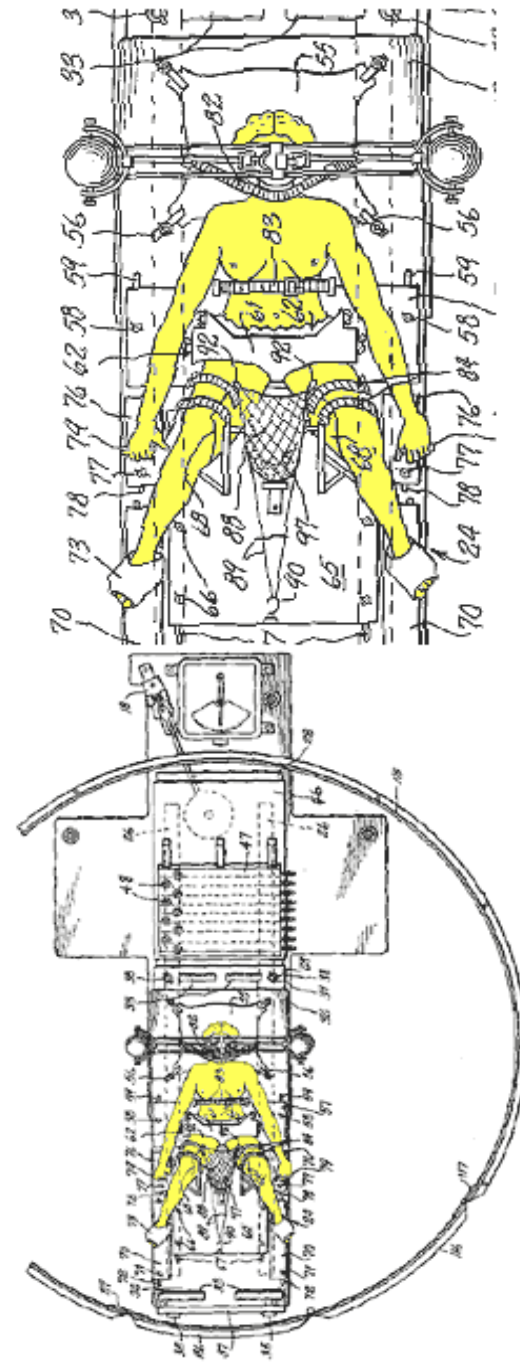


Innovation?

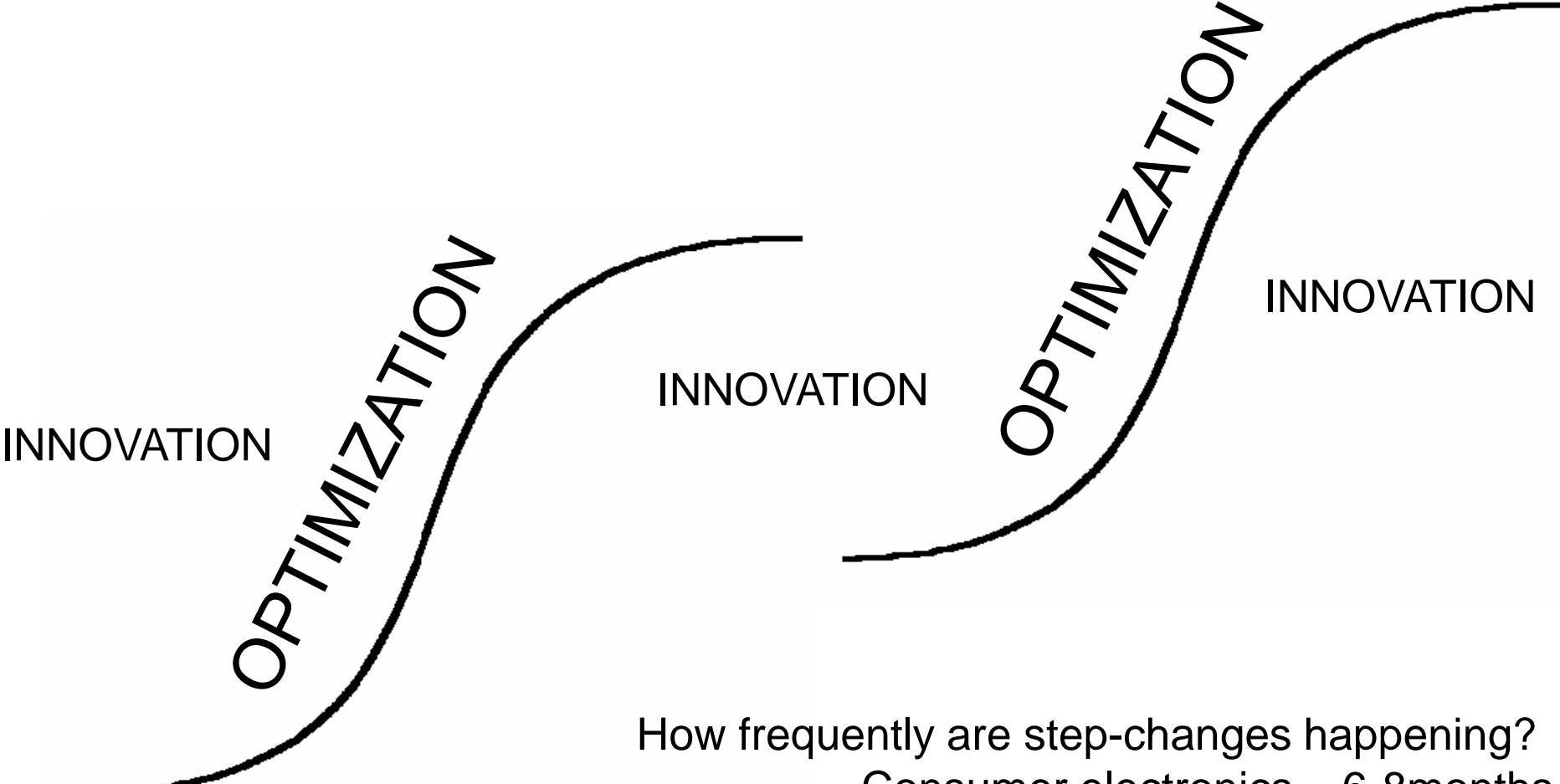


US Patent 3,216,423

98% of attempted
'innovations' fail



Industry Pulse Rates



How frequently are step-changes happening?

- Consumer electronics – 6-8months
- AI/Digital – 6 months
- Fintech (west) – 2-3 years
- China (digital) – 2-3 months



Veracity: Three Strategies



- 1) **Masses of O2O data**
- 2) **Read 'Between The Lines'**
- 3) **First Principles**





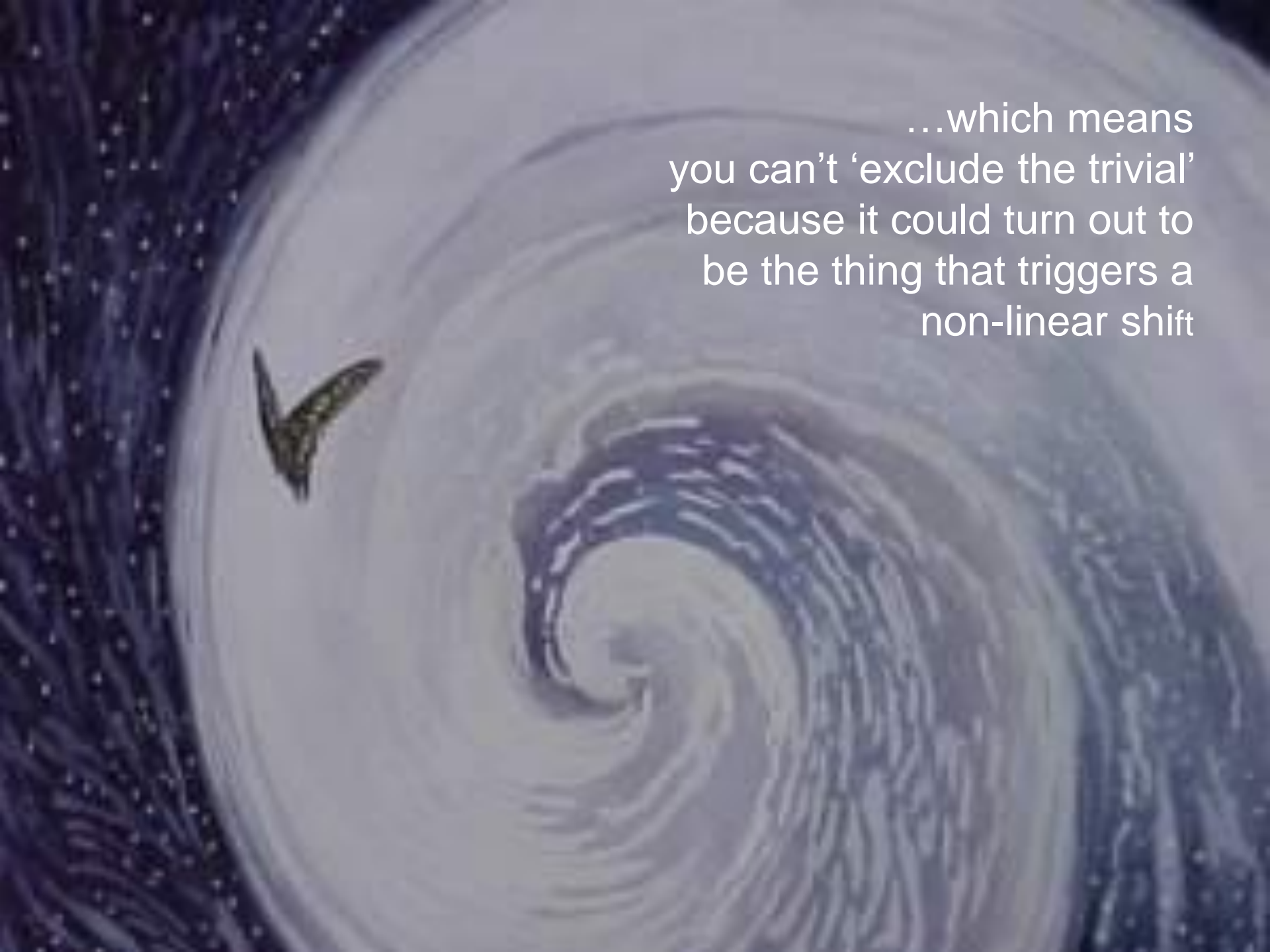
**For every complex problem
there is an answer that is
clear, simple, and wrong.**

H. L. Mencken



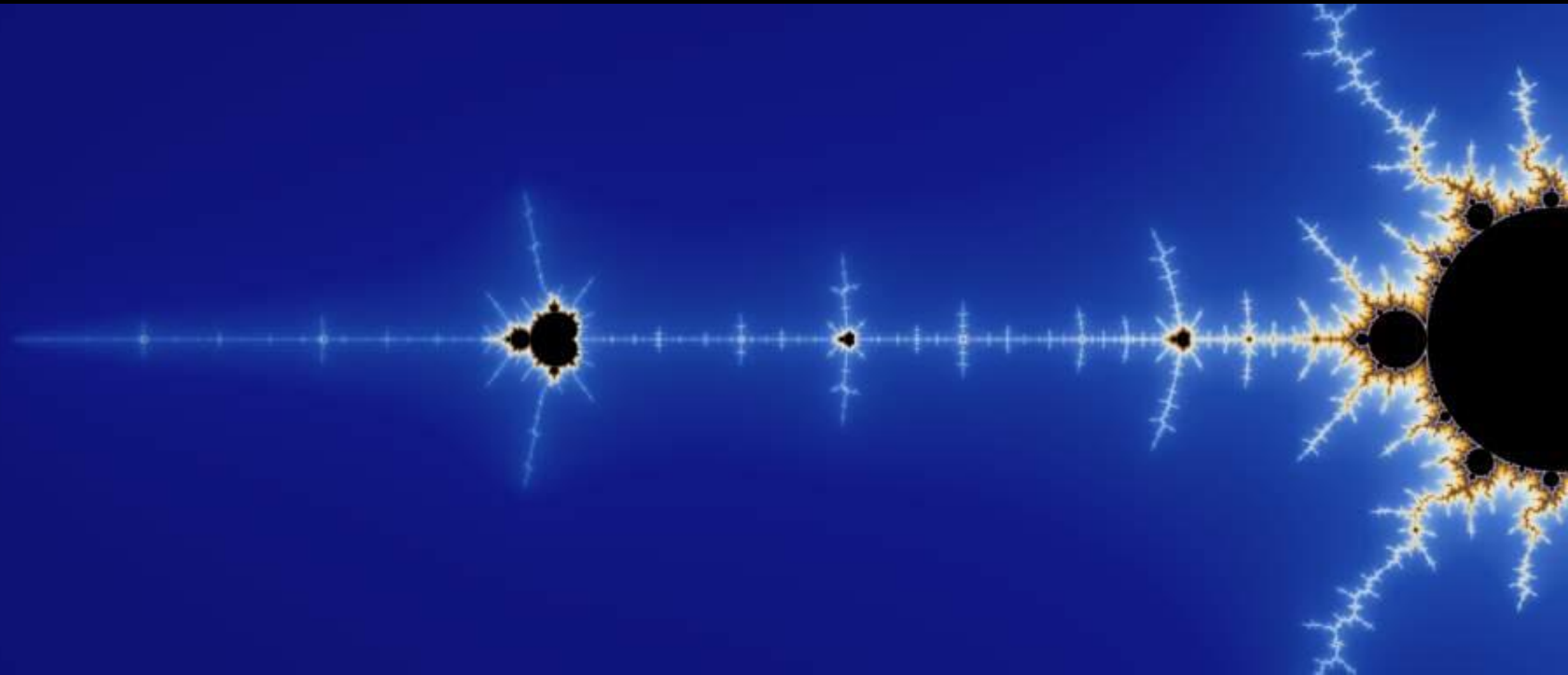
CAUSE and **EFFECT**
relationships are often
highly tenuous...



The image features a large, intricate swirling pattern that resembles a vortex or a complex fractal, set against a dark, starry background. The swirls are composed of many fine, overlapping lines, creating a sense of depth and movement. A small butterfly is positioned on the left side of the frame, appearing to fly towards the center of the vortex. The overall color palette is dominated by dark blues, purples, and greys, with some lighter, almost white, highlights within the swirls.

...which means
you can't 'exclude the trivial'
because it could turn out to
be the thing that triggers a
non-linear shift

For every complex problem there are thousands of clear, simple, wrong answers.



For every complex problem there is a clear, simple, right one.

If we understand and affect **the first principles**.



“fly as close to your
neighbours as possible”





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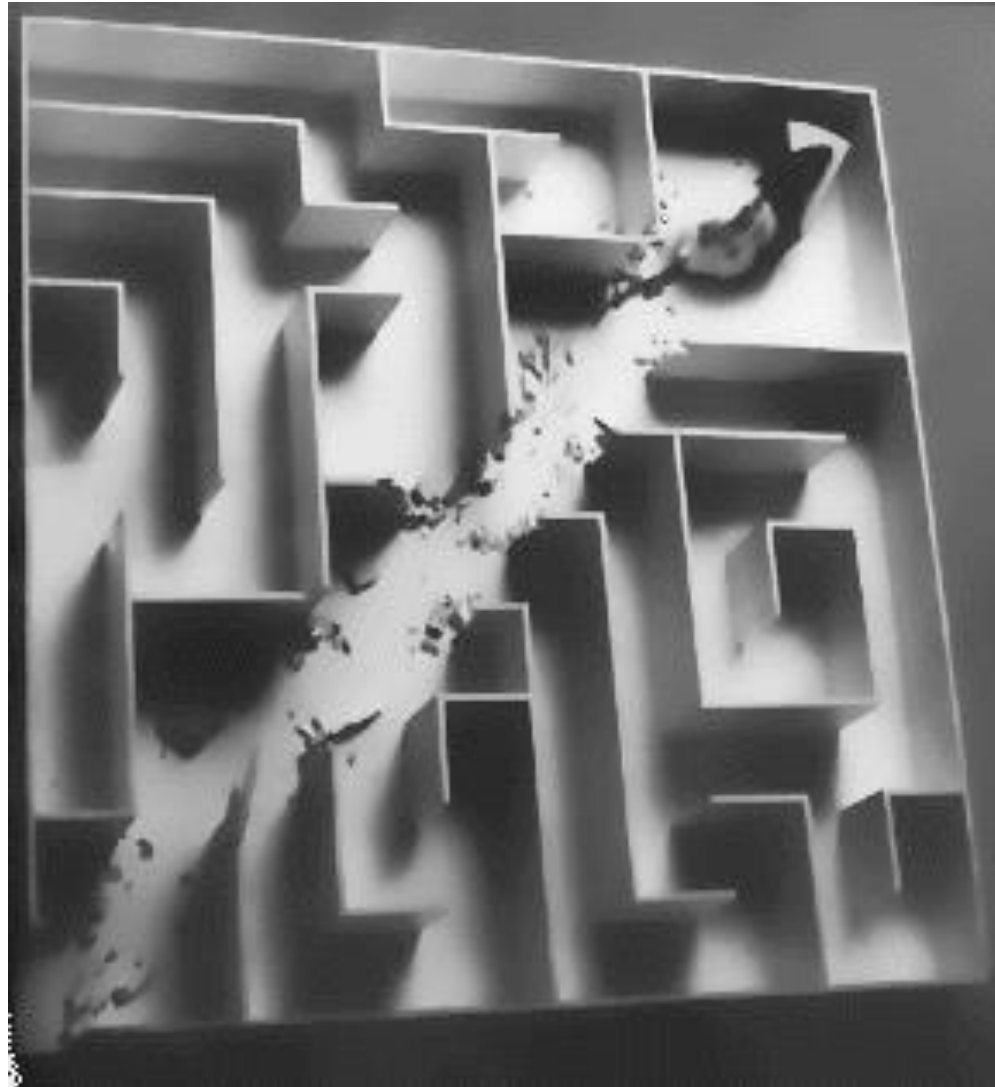
- * Ideality is the over-riding driver for system evolution
- * Ideality is about increasing the good, decreasing the bad
- * Ideality = 'Value' =
$$\frac{\text{(Perceived)Benefits}}{\text{(Cost + Harm)}}$$
- * IDEAL FINAL RESULT – all the benefits, none of the cost or harm
- * *'free, perfect & now'*
- * **'SELF'**



The Perfect Insurance?

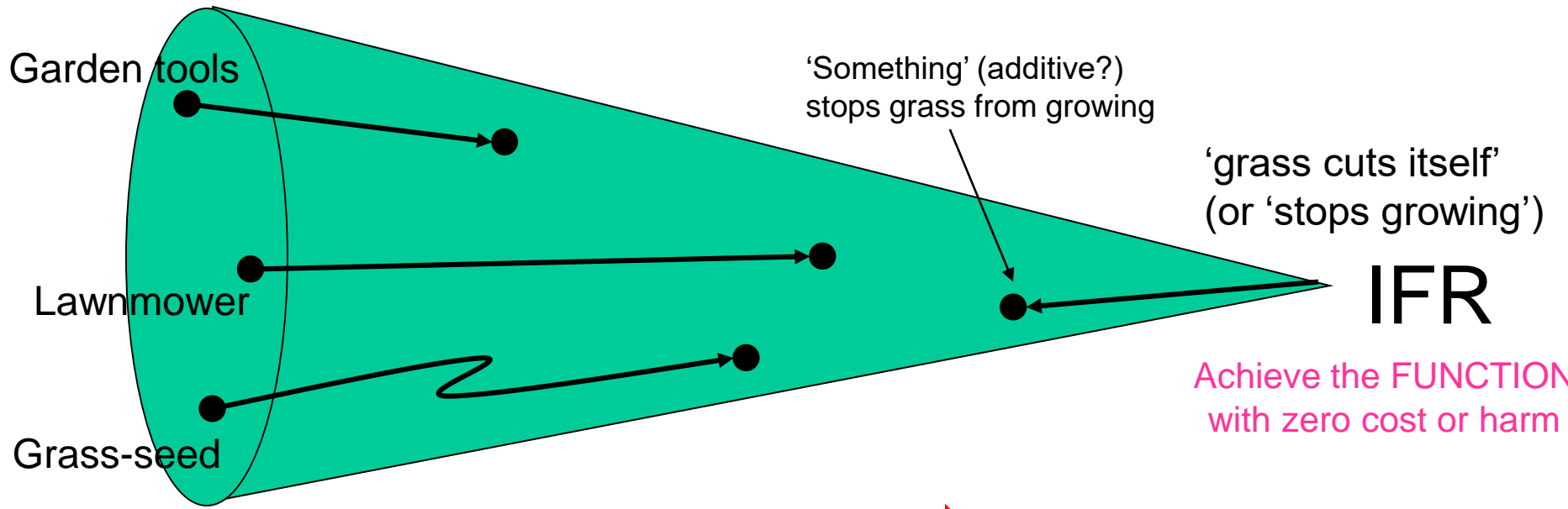


Innovation Strategy



Lawnmowers – The Bigger Picture

Today



IFR

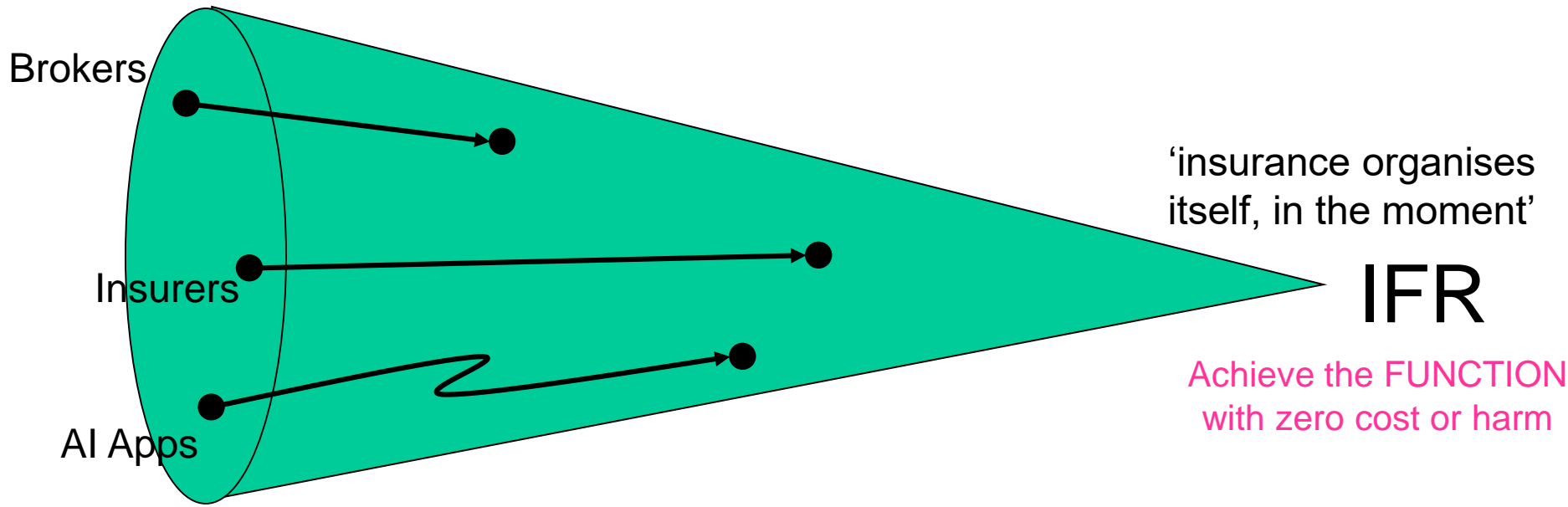
Achieve the FUNCTION with zero cost or harm

$$\frac{\text{(Perceived)Benefits}}{\text{(Cost + Harm)}}$$



Insurance – The Bigger Picture

Today



Contradiction-Solving Process

BUT

lack of trust from customers

IDEALLY

we need to innovate

Feature	Worsening Feature	Design					Production					Supply					Support					Customer					Systems					Intangibles					Measure					Harm					
		Design	Production	Supply	Support	Customer	Systems	Intangibles	Measure	Harm	Design	Production	Supply	Support	Customer	Systems	Intangibles	Measure	Harm	Design	Production	Supply	Support	Customer	Systems	Intangibles	Measure	Harm	Design	Production	Supply	Support	Customer	Systems	Intangibles	Measure	Harm										
1	Design Speed/Capability/Risk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
2	Design Cost	2	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
3	Design Time	3	4	2	1	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
4	Design Risk	4	5	3	2	1	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
5	Design Interface	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
6	Production Speed/Capability/Risk	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
7	Production Cost	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
8	Production Time	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50			
9	Production Risk	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50				
10	Production Interface	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50					
11	Supply Speed/Capability/Risk	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50						
12	Supply Cost	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50							
13	Supply Time	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50								
14	Supply Risk	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50									
15	Supply Interface	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50										
16	Support Speed/Capability/Risk	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50											
17	Support Cost	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50												
18	Support Time	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50													
19	Support Risk	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50														
20	Support Interface	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50															
21	Customer Reviews	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																
22	Market Demand	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																	
23	Customer Feedback	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																		
24	Customer Loyalty	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																			
25	Amount of Information	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																				
26	Communication Flow	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																					
27	Connectivity	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																						
28	Adaptability/Variability	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																							
29	System Complexity	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																								
30	Autonomy	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																									
31	Biologging	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																										
32	Competence	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																											
33	Sense of Progress	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																												
34	Positive Intangibles	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																													
35	Neutral Intangibles	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																														
36	Negative Intangibles	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																															
37	Trust	37	38	39	40	41	42	43	44	45	46	47	48	49	50																																
38	Engagement	38	39	40	41	42	43	44	45	46	47	48	49	50																																	
39	Mitigating	39	40	41	42	43	44	45	46	47	48	49	50																																		
40	Ability to Measure	40	41	42	43	44	45	46	47	48	49	50																																			
41	Measurement Accuracy	41	42	43	44	45	46	47	48	49	50																																				
42	Harvest Factors	42	43	44	45	46	47	48	49	50																																					
43	Affecting System	43	44	45	46	47	48	49	50																																						
44	System Generated	44	45	46	47	48	49	50																																							
45	Harvest Factors	45	46	47	48	49	50																																								

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2 - Taking Out 13 - The Other Way 19 - Periodic Action 25 - Self Service

solutions already found by others



CUSTOMER EXPECTATION



Commodity



Product



Service



Experience



Transformation



Reasons
For
Jump

Customer expectations increase with time
If you stand still, you are actually going backwards.
In order to remain competitive, you should be looking to the right along the trend

Key jump motivations:
Service-experience = intangibles
Experience-transformation = responsibility

Reasons
For
Jump

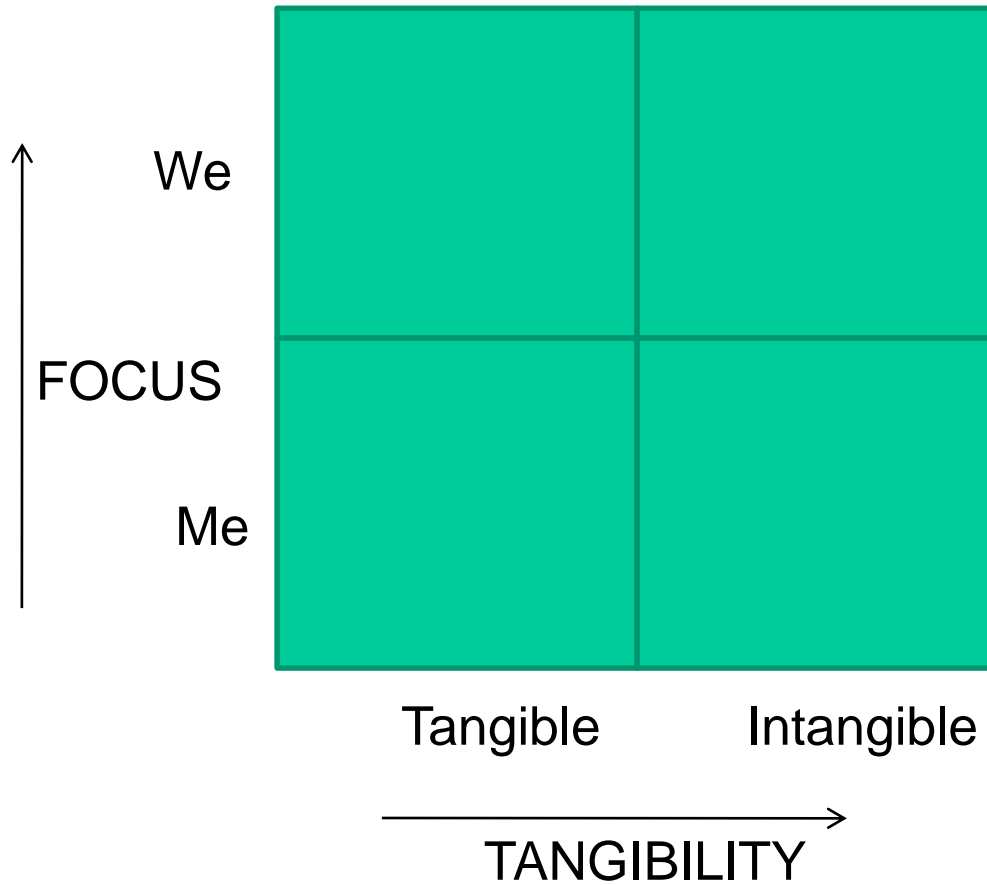


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- * FUNCTION = 'JOB' = 'OUTCOME'
- * **'Solutions Change; Functions stay the Same'**
(we will all continue to want to achieve the function 'communication' but we will not necessarily want a mobile phone to achieve it)
- * TANGIBLE & INTANGIBLE



Customers Buy 'Outcomes'



Customers Buy Outcomes

Collective/
Societal

move family/friends
protect family/friends
entertain occupants
minimise environment
damage

‘safe family’
‘peace of mind’
‘cool’

Individual

move me from A-B
transport goods
protect me
isolate me

reward myself
my safety
trustworthy driver
no tipping stress
not being ripped-off

Tangible

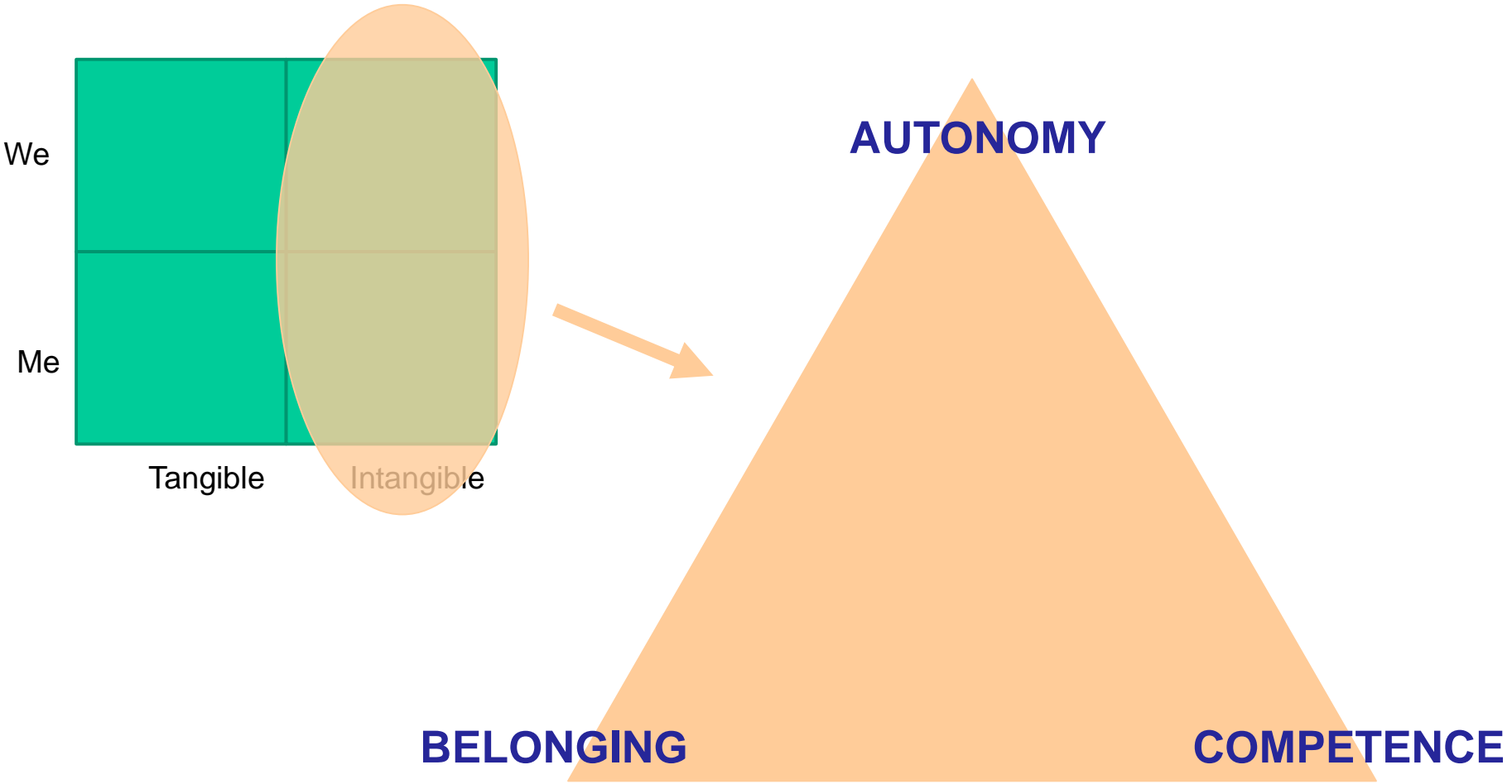
Intangible



*“A man makes a decision for two reasons – the good reason and the real reason.”
J.P.Morgan*



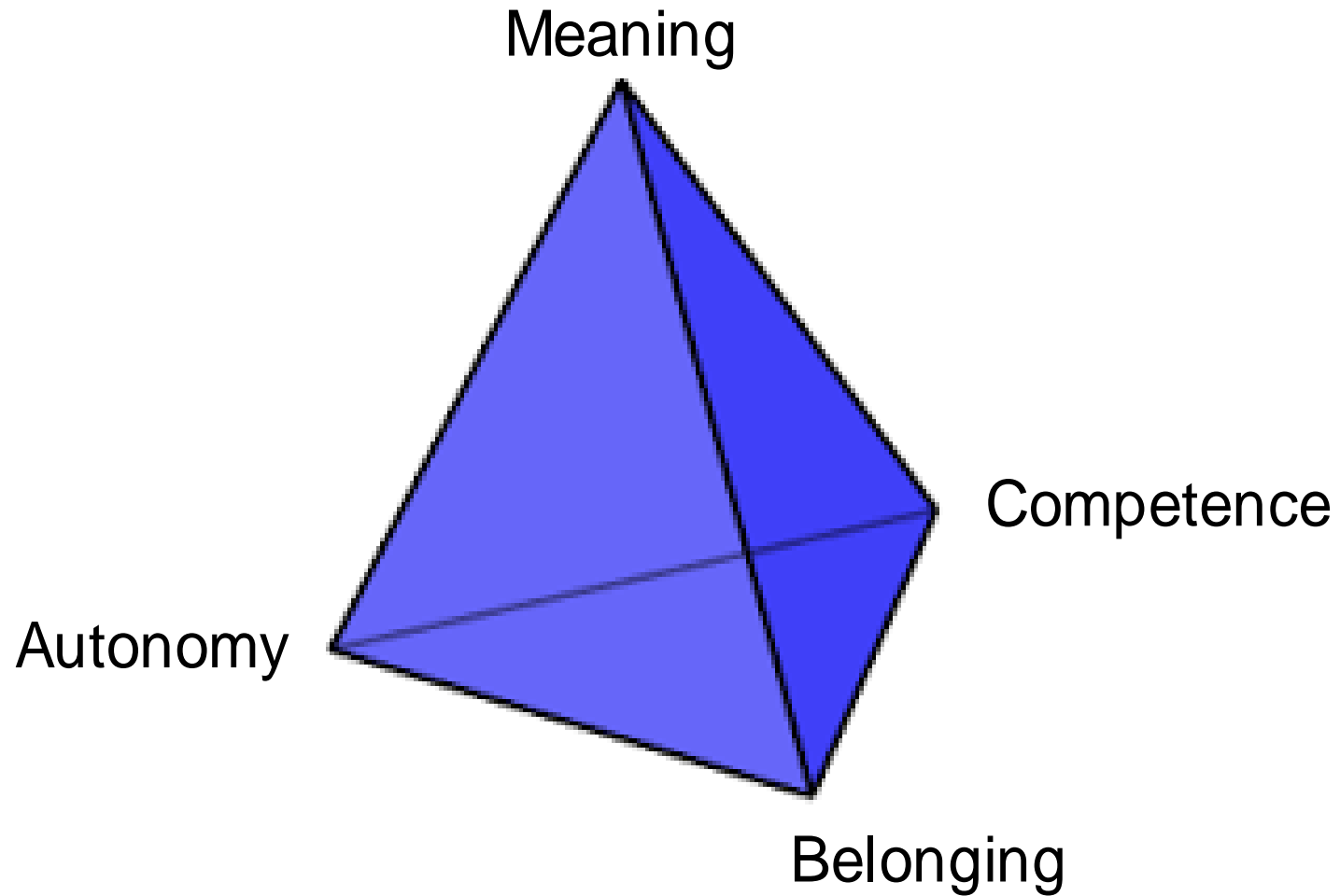
Universal Intangibles:



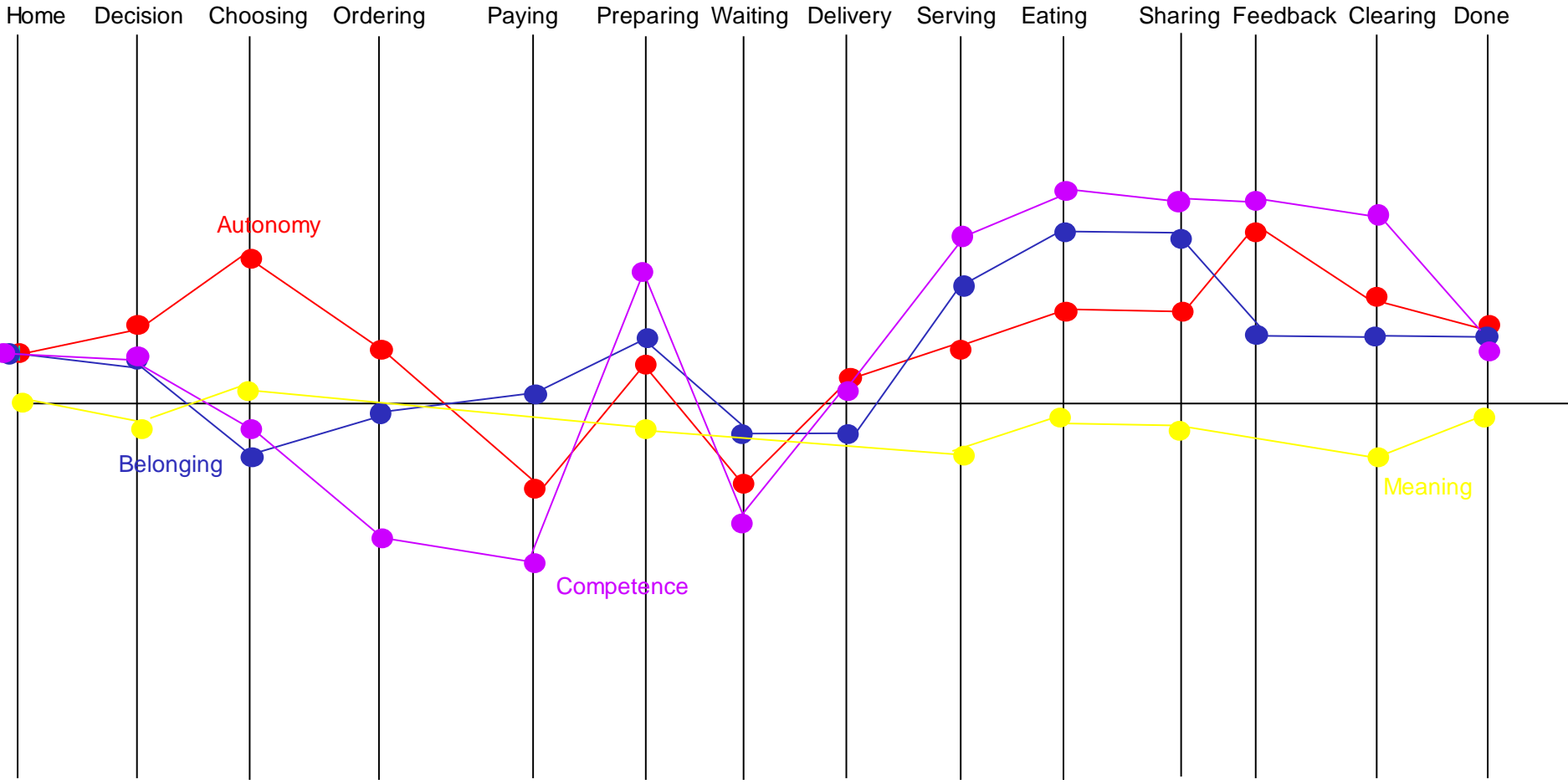
Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 3149). New York: Plenum.



Universal Intangibles:



ABC-M Landscape – Takeaway Food



UK Insurers



Most people overestimate what they can do in one year and underestimate what they can do in ten years.

— *Bill Gates* —

AZ QUOTES

- 1) First Principles**
- 2) Innovate (Much) Faster**
- 3) Sell The Experience**



The Science Of Step Change



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