F*ck Quality

@mpilaeten

% of requirements covered

% of code covered

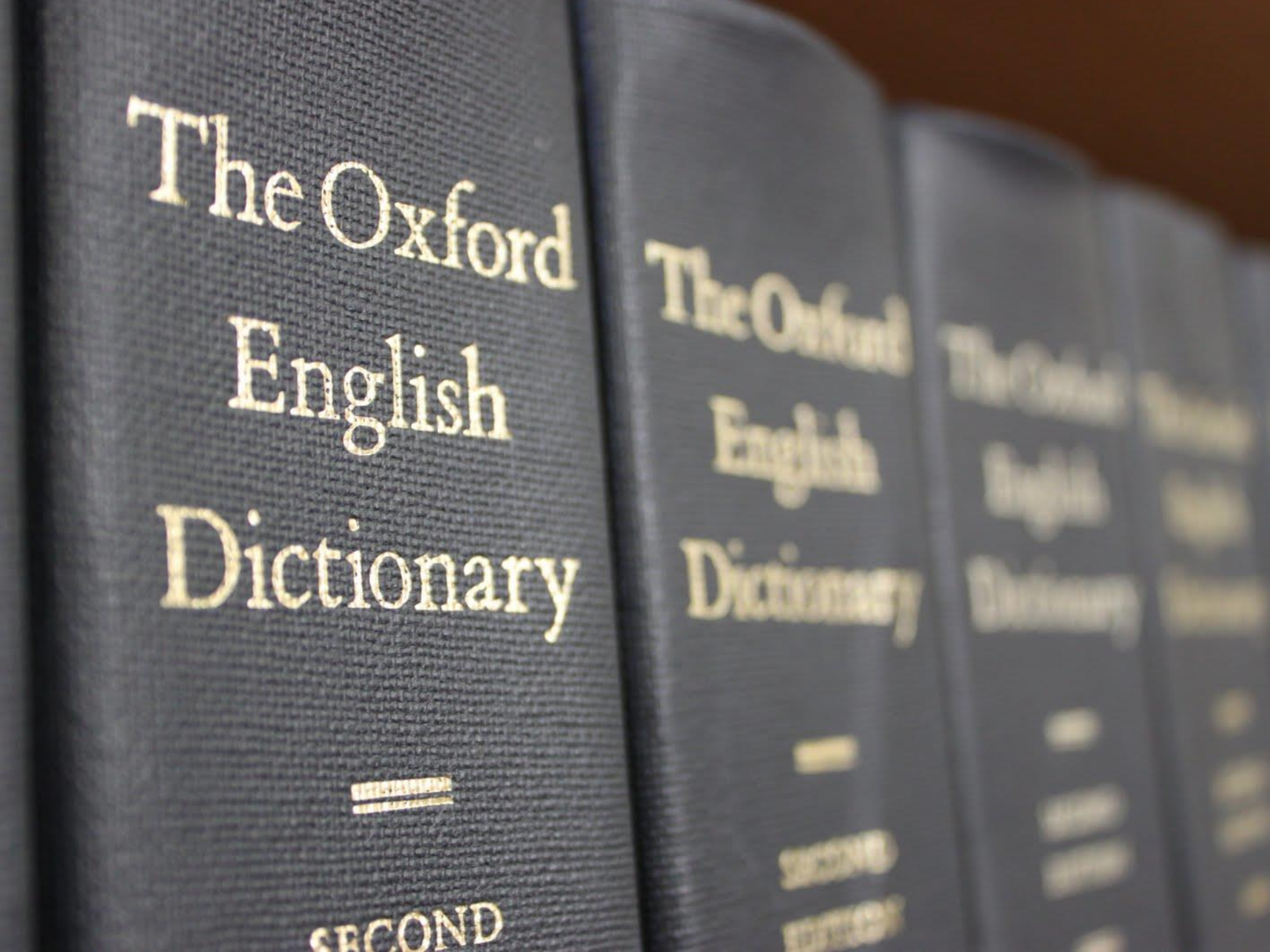
% of test cases executed

% of test cases passed

# of open defects

So ?

Unreachable expectations about quality

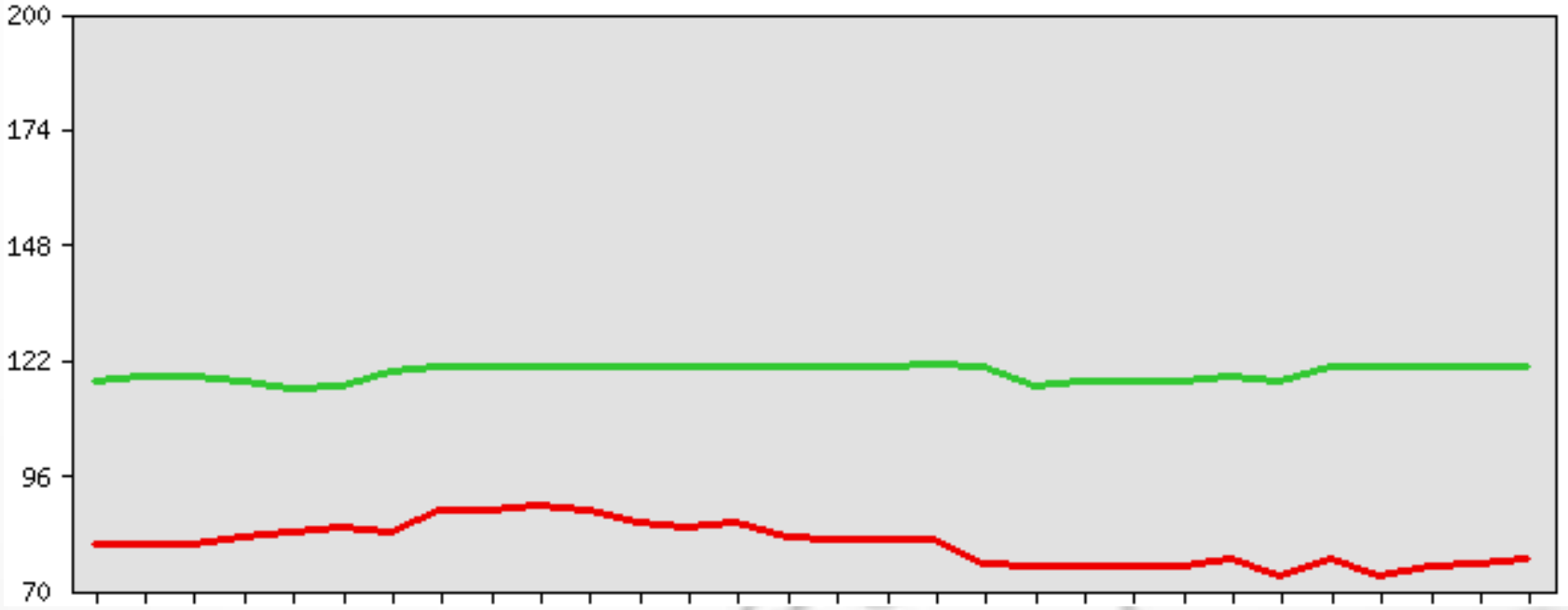

The Oxford English Dictionary
SECOND
The Oxford English Dictionary

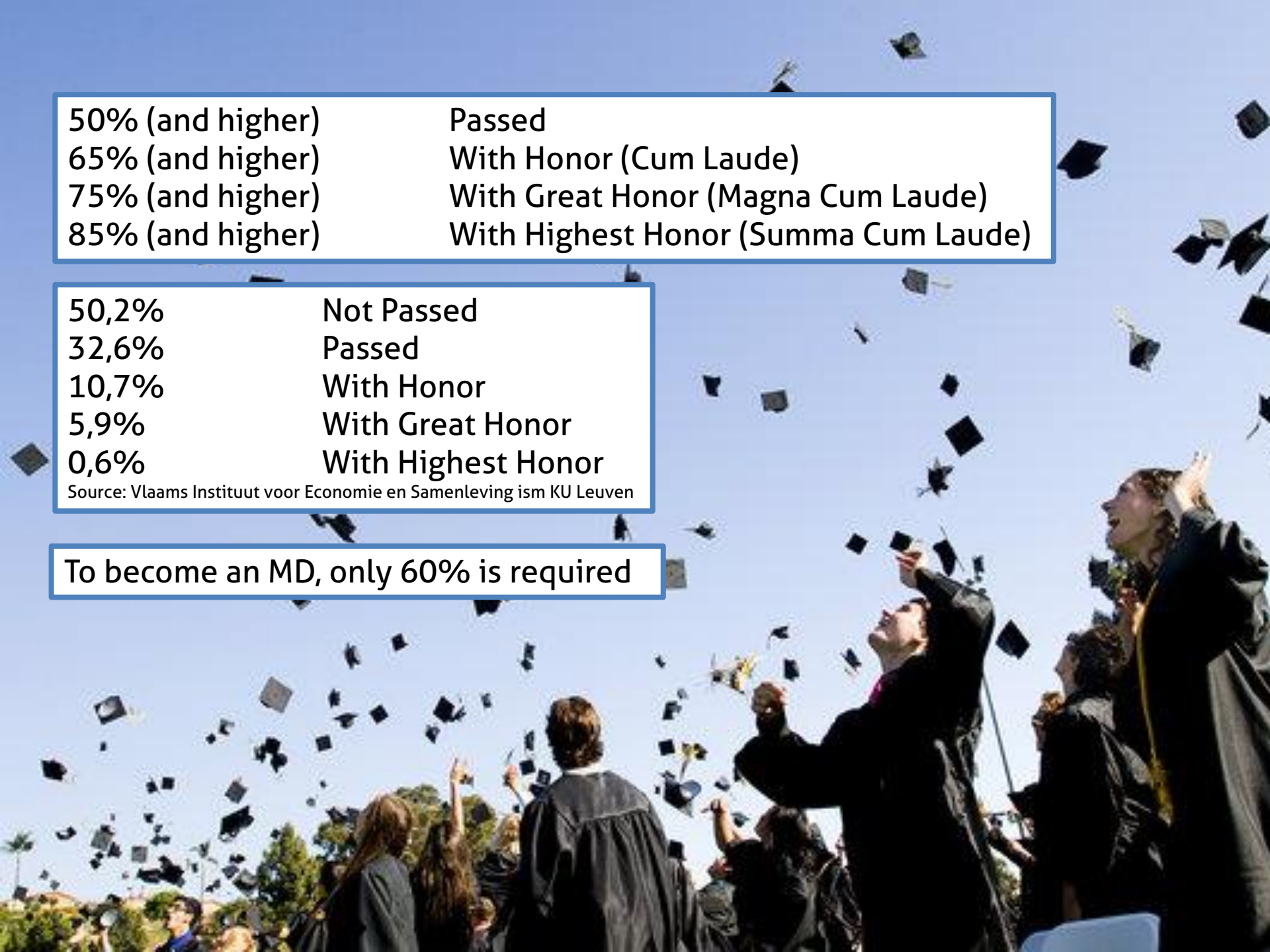
To abjure	To reject
Limpid	Clear, transparent
Tantamount	Equivalent in value
To proscribe	To condemn, to outlaw
Officious	Offering unwanted services

So ?

Overestimate our own level of quality

$$\text{Defect Percentage} = \frac{\text{\# defects}}{\text{KLOC}}$$





50% (and higher)	Passed
65% (and higher)	With Honor (Cum Laude)
75% (and higher)	With Great Honor (Magna Cum Laude)
85% (and higher)	With Highest Honor (Summa Cum Laude)

50,2%	Not Passed
32,6%	Passed
10,7%	With Honor
5,9%	With Great Honor
0,6%	With Highest Honor

Source: Vlaams Instituut voor Economie en Samenleving ism KU Leuven

To become an MD, only 60% is required

So ?

Perfection may/must not be within reach

The 50 Worst Cars of All Time

As the North American International Auto Show kicks off in Detroit, TIME and Dan Neil, Pulitzer Prize-winning automotive critic and syndicated columnist for the Los Angeles Times, look at the greatest lemons of the automotive industry

1960-1974

1971 Ford Pinto

They shoot horses, don't they? Well, this is fish in a barrel. Of course the Pinto goes on the Worst list, but not because it was a particularly bad car — not particularly — but because it had a rather volatile nature. The car tended to erupt in flame in rear-end collisions. The Pinto is at the end of one of autodom's most notorious paper trails, the Ford Pinto memo , which ruthlessly calculates the cost of reinforcing the rear end ($121 million) versus the potential payout to victims ($50 million). Conclusion? Let 'em burn.

Corbis

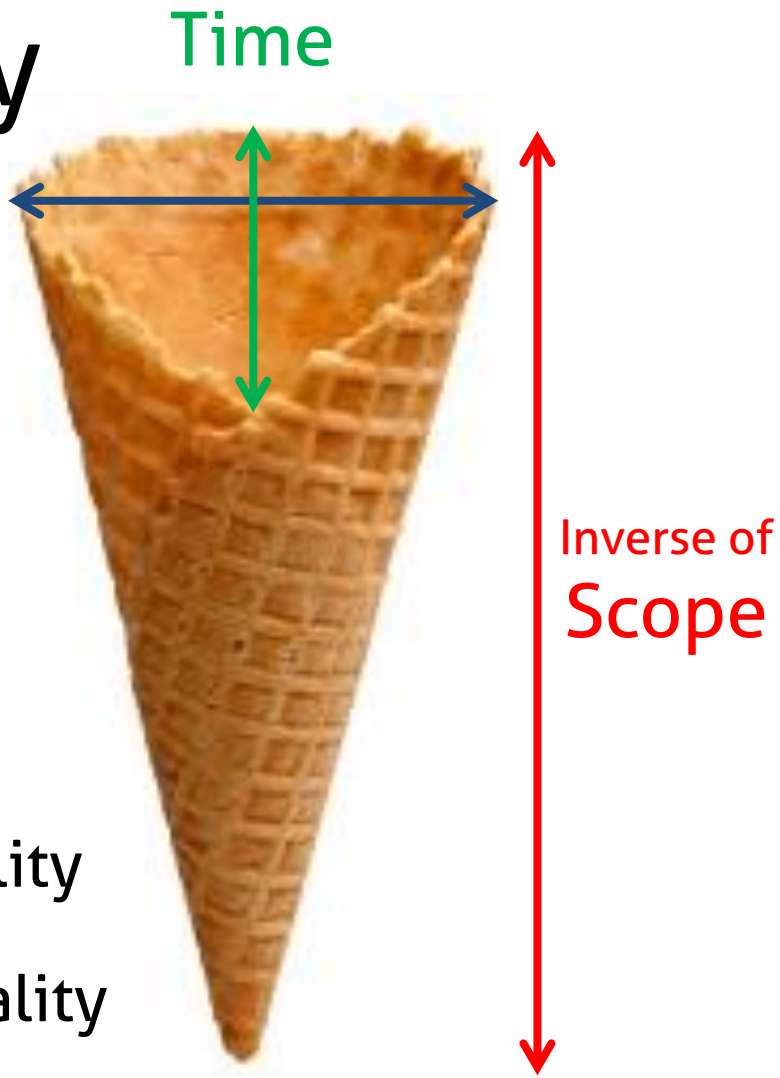
So ?

Quality is Contextual

But ...

How can we determine quality?

Introducing…
The Cone of Quality



More time - possible higher quality

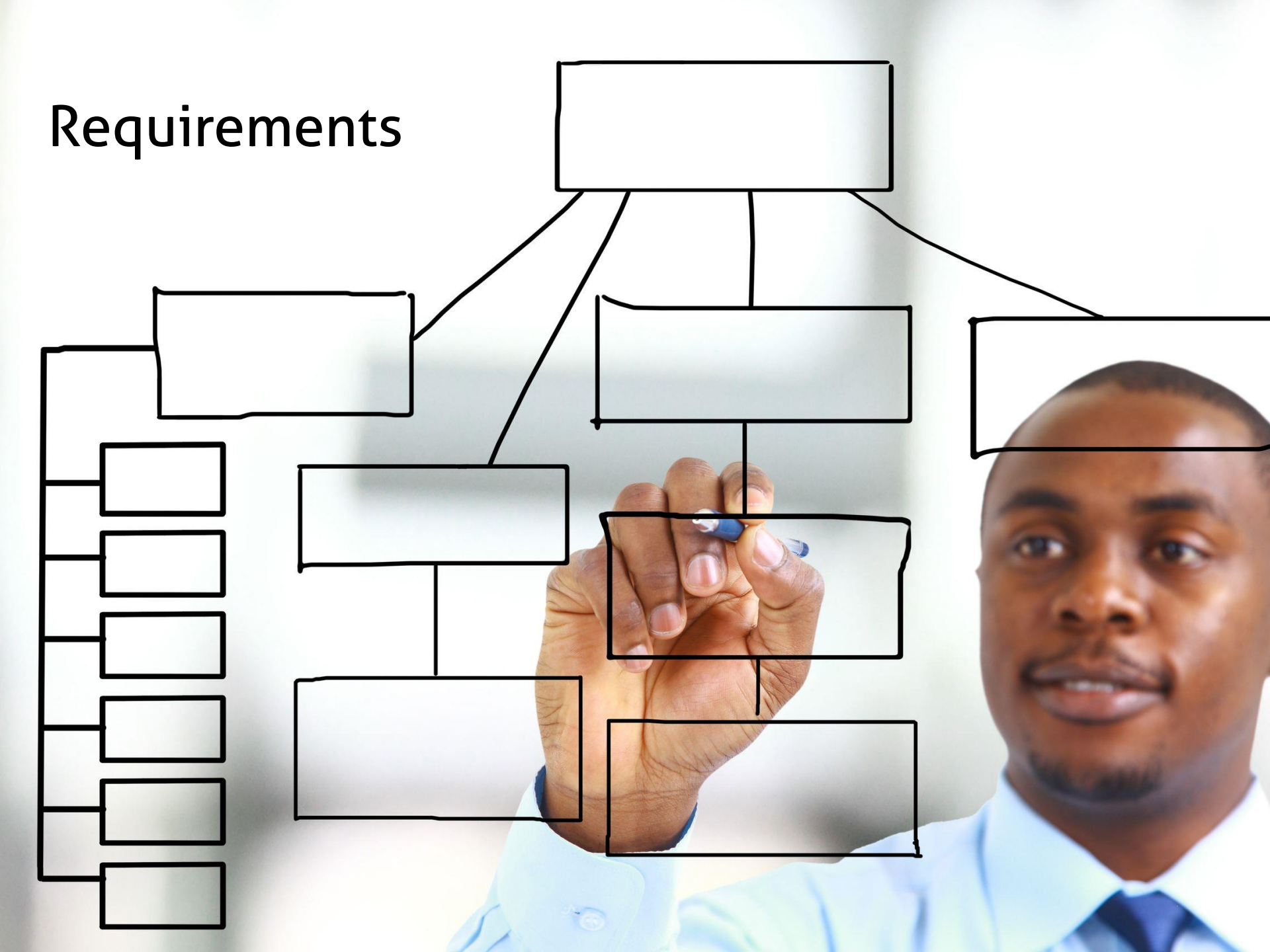
Higher budget - possible higher quality

Increased scope - possible lower quality

The quality we hope for

The quality we get

Requirements

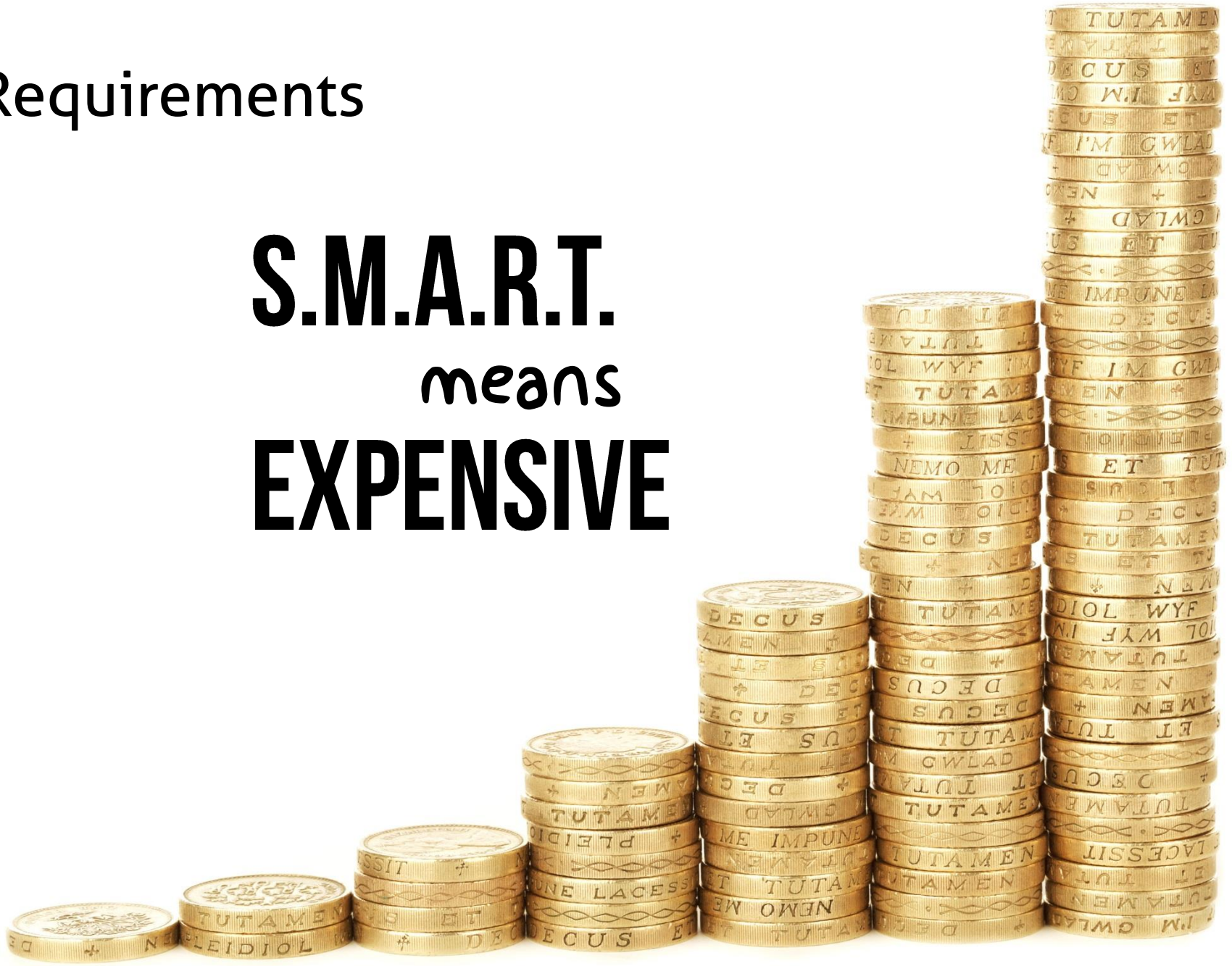


Requirements

S.M.A.R.T.

means

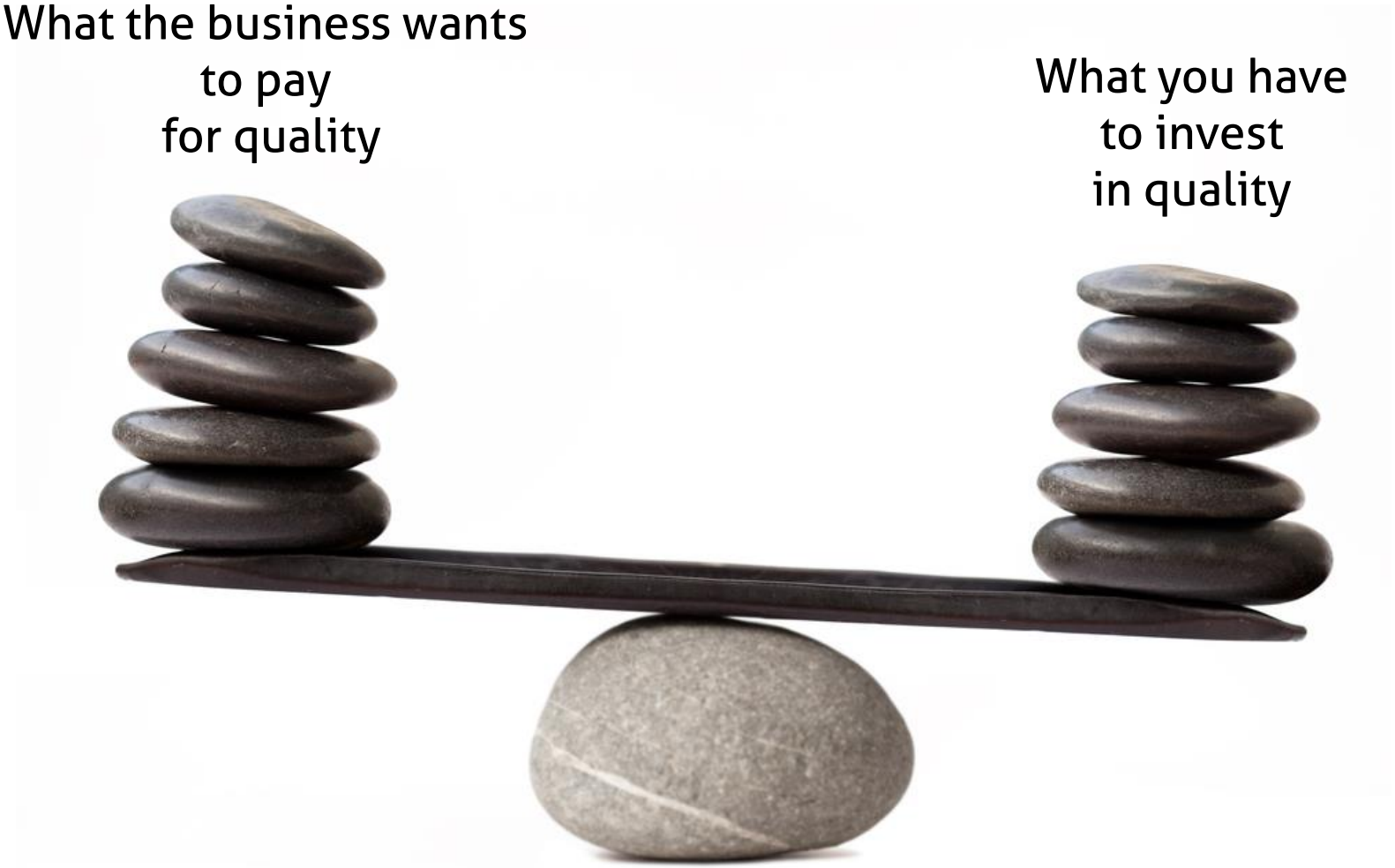
EXPENSIVE



The quality equilibrium

What the business wants
to pay
for quality

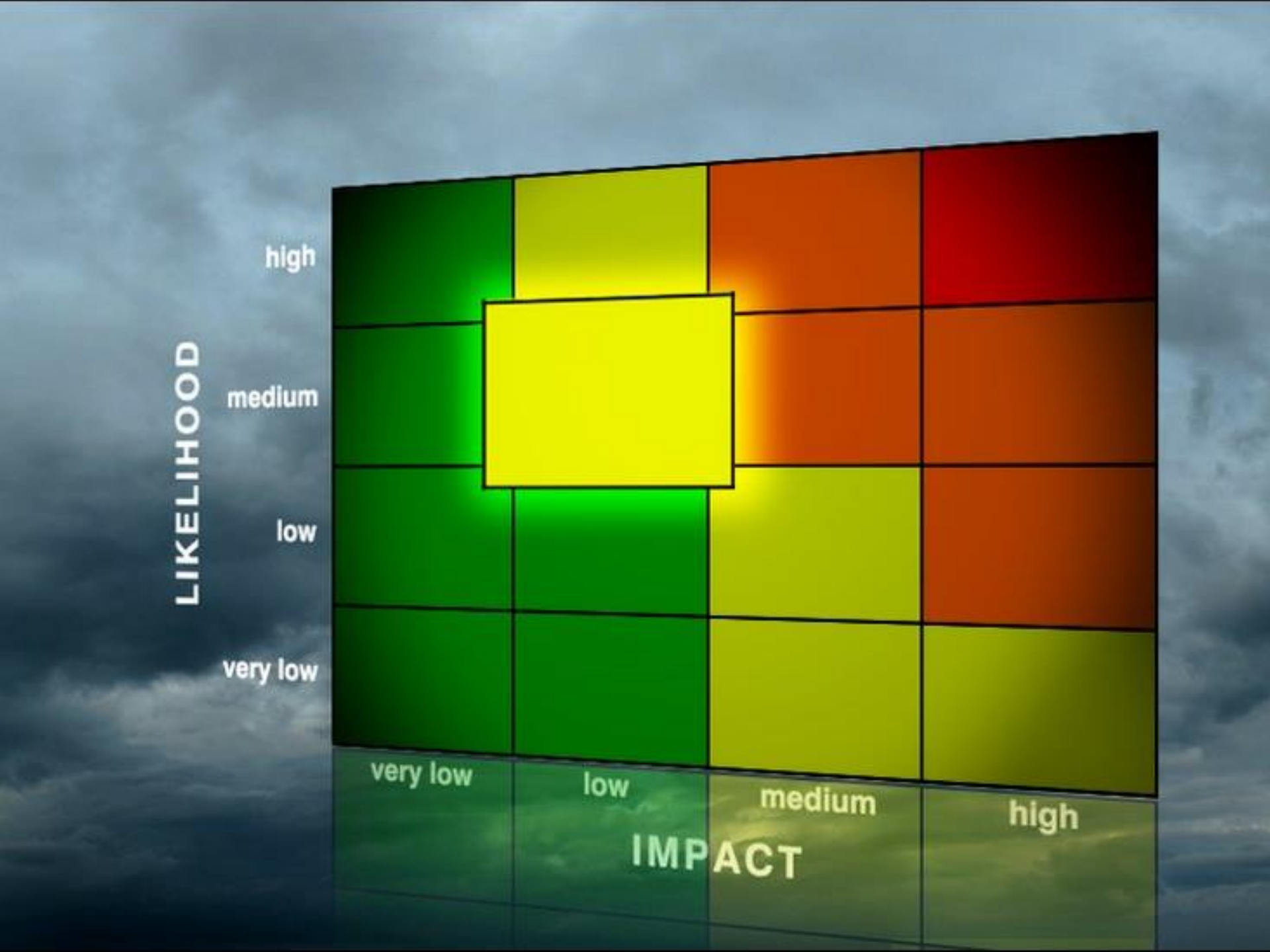
What you have
to invest
in quality



But ...

How to determine the quality investment?


R
I
S
K

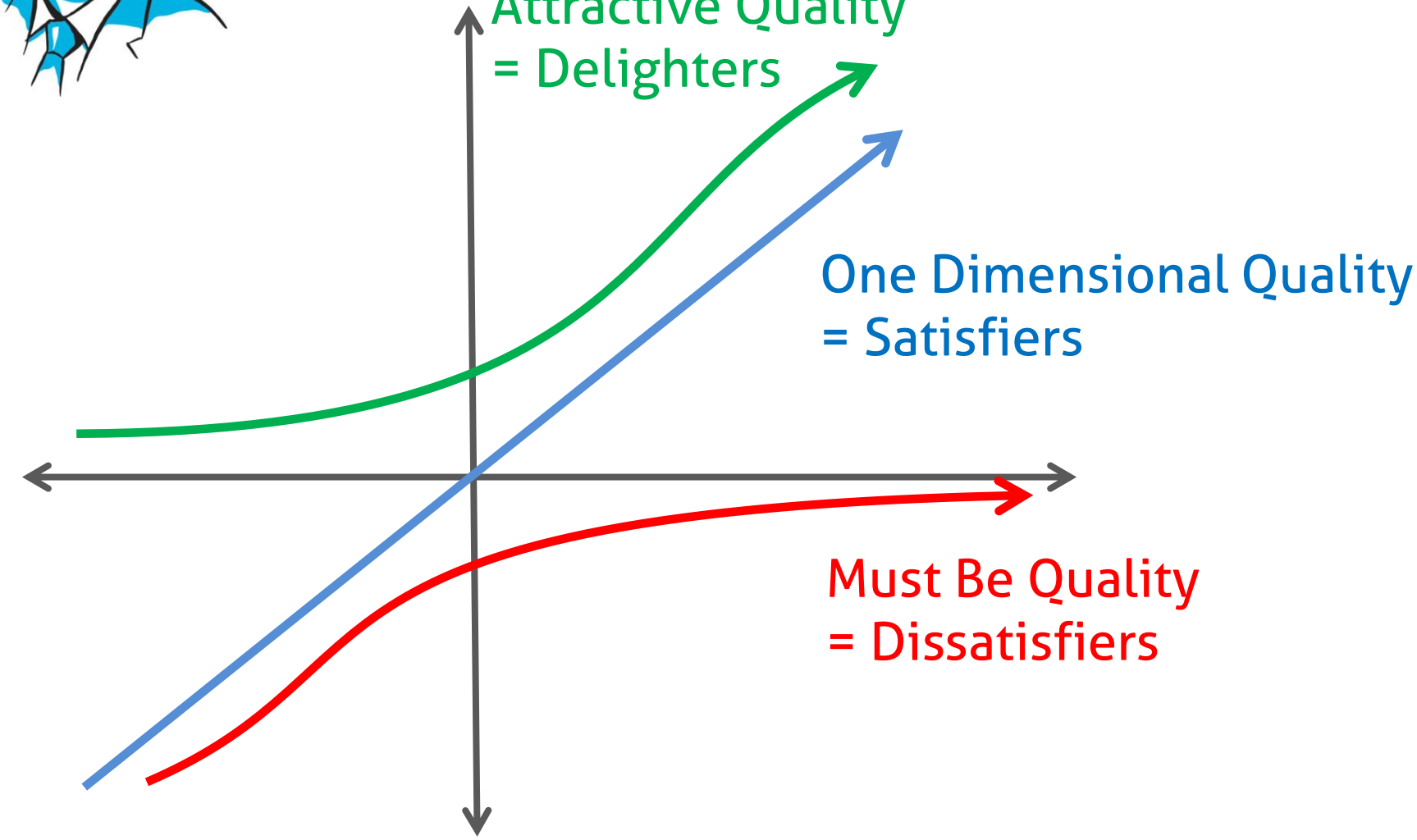

LIKELIHOOD
high
medium
low
very low
very low
low
medium
high
IMPACT


Thinking Risk
=
Being Afraid

But ...

better

How to determine the quality investment?


Attractive Quality
= Delighters
One Dimensional Quality
= Satisfiers
Must Be Quality
= Dissatisfiers

Wait ...

How to make decisions regarding quality?

Karl E. Wiegers

Step 1: Determine the requirements

Feature	Relative Benefit	Relative Penalty	Value	Value %
Registration Module				
Update content				
Facebook Integration				
Customer migration				
New look and feel				

Step 2: Assess the Benefit

Feature	Relative Benefit	Relative Penalty	Value	Value %
Registration Module	1			
Update content	5			
Facebook Integration	6			
Customer migration	5			
New look and feel	7			
Total:	24			

Step 3: Assess the Penalty

Feature	Relative Benefit	Relative Penalty	Value	Value %
Registration Module	1	3		
Update content	5	8		
Facebook Integration	6	5		
Customer migration	5	3		
New look and feel	7	4		
Total:	24	23		

Step 4: Calculate the Value

Feature	Relative Benefit	Relative Penalty	Value	Value %
Registration Module	1	3	4	
Update content	5	8	13	
Facebook Integration	6	5	11	
Customer migration	5	3	8	
New look and feel	7	4	11	
Total:	24	23	47	

Value : Benefit + Penalty

Step 5: Calculate the Value %

Feature	Relative Benefit	Relative Penalty	Value	Value %
Registration Module	1	3	4	8,51
Update content	5	8	13	27,66
Facebook Integration	6	5	11	23,40
Customer migration	5	3	8	17,02
New look and feel	7	4	11	23,40
Total:	24	23	47	

Value % : Value / Total Value

Step 6: Assess the Relative Cost

Feature	Value %	Relative Cost	Cost %	Relative Risk	Risk %
Registration Module	8,51	2			
Update content	27,66	10			
Facebook Integration	23,40	4			
Customer migration	17,02	3			
New look and feel	23,40	8			
Total:		27			

Step 7: Calculate the Cost %

Feature	Value %	Relative Cost	Cost %	Relative Risk	Risk %
Registration Module	8,51	2	7,41		
Update content	27,66	10	37,04		
Facebook Integration	23,40	4	14,81		
Customer migration	17,02	3	11,11		
New look and feel	23,40	8	29,63		
Total:		27			

Cost% : Relative Cost / Total Cost

Step 8: Assess the Relative Risk

Feature	Value %	Relative Cost	Cost %	Relative Risk	Risk %
Registration Module	8,51	2	7,41	2	
Update content	27,66	10	37,04	4	
Facebook Integration	23,40	4	14,81	4	
Customer migration	17,02	3	11,11	10	
New look and feel	23,40	8	29,63	8	
Total:		27		28	

Step 9: Calculate the Risk %

Feature	Value %	Relative Cost	Cost %	Relative Risk	Risk %
Registration Module	8,51	2	7,41	2	7,14
Update content	27,66	10	37,04	4	14,28
Facebook Integration	23,40	4	14,81	4	14,28
Customer migration	17,02	3	11,11	10	35,71
New look and feel	23,40	8	29,63	8	28,57
Total:		27		28	

Risk% : Relative Risk / Total Risk

Step 10: Calculate the Priority

Feature	Value %	Cost %	Risk %	Priority	Order
Registration Module	8,51	7,41	7,14	0,58	2
Update content	27,66	37,04	14,28	0,54	3
Facebook Integration	23,40	14,81	14,28	0,80	1
Customer migration	17,02	11,11	35,71	0,36	5
New look and feel	23,40	29,63	28,57	0,40	4

Priority: Value % / (Cost % + Risk %)

A final word

Better prioritization

means

Higher quality

means

Happier customers

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LinkedIn: linkedin.com/in/michaelpilaeten/