Innovation versus Operational Excellence

Averages are meaningless in the innovation context. The real question is what did the companies at the top do that the other didn’t?
Spot The Innovation

How many innovations?
Explain your reasoning.

Innovation?

US Patent 3,216,423

98% of attempted ‘innovations’ fail
98% of Lean-sparked innovation attempts fail
98% of QFD-sparked innovation attempts fail
98% of 6Sigma-sparked innovation attempts fail
98% of Design-Thinking innovation attempts fail
98% of JTBD-sparked innovation attempts fail
98% of OBI-sparked innovation attempts fail
98% of WOIS-sparked innovation attempts fail
98% of Blue-Ocean innovation attempts fail
98% of i4i-sparked innovation attempts fail
98% of Agile-sparked innovation attempts fail
98% of Scrum-sparked innovation attempts fail
99.5% of Open Innovation attempts fail
What Is Happening Here?

What did the 2% do differently?

SUCCESS

WHAT PEOPLE THINK IT LOOKS LIKE

SUCCESS

WHAT IT REALLY LOOKS LIKE
For every complex problem there is an answer that is clear, simple, and wrong.  

_H. L. Mencken_
…which means you can’t ‘exclude the trivial’ because it could turn out to be the thing that triggers a non-linear shift.

“fly as close to your neighbours as possible”
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.

Innovation – Cruellest Game In The World

Right Problem

Right Solution

Right Customer

Right Time

Right Price
First Principles: S-Curve

anything we wish to improve

time spent trying

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First Principles: S-Curve

waste reduction

typically one or two orders of magnitude

Optimization & Innovation

Innovation:
successful step change
(nothing to do with ‘optimization’)
Greater Operational Excellence = Worse Innovation Capability

Tomorrow’s disruption does not come from today’s competitors

Optimization

- Everything’s working
- Feels good
- Clear rules
- Clear Direction (‘Progress’)
- Knowledge exists
- Routine
- Manage-able
- Controllable

Innovation

- Nothing seems to work
- Uncomfortable/horrible
- Confusion
- Find ‘new rules’
- Challenge assumptions
- Knowledge has to be found
- Creativity
- Not manage-able
- ‘Out of control’

ordinary world

special world
Lean & S-Curves

Waste Reduction (%)

Phase I              II             III

Usually less than 10% of total potential

Phase II

waste reduction with consequences

Each time we do something to reduce the waste in the system, something gets worse

- Waste reduces
- Flexibility reduces
- Time to think decreases
- etc
“How wonderful that we have met with a paradox. Now we have some hope of making progress.”

x 9million cases =

Progress Engine

but... adaptability is reduced

we want to improve...

manufacture

solutions already found by others
MILLIONS of systems

HUNDREDS of different problems

TENS of successful (First Principle) solutions

Selecting The Right Tools:
1) What kind of change?
2) How far through process?
Selecting The Right Tools:

1) What kind of change?
2) How far through process?

Divergence & Convergence
Selecting The Right Tools:

1) What kind of change?
2) How far through process?
3) Level of Capability

The ‘Right’ Tool Depends On… Capability

Level 1: SEEDING
Level 2: CHAMPIONING
Level 3: MANAGING
Level 4: STRATEGISING
Level 5: VENTURING
The ‘Right’ Tool Depends On… Capability

Level 1
- SEEDING
- Tynefin
- Means-End Analysis
- CBR
- Design for Man/Assembly
- Shainin
- Brain-Writing
- Blue Ocean
- KA
- TRIZ
- Boyd

Level 2
- CHAMPIONING
- Theory Of Constraints
- Axiomatic Design
- Pahl/Beitz
- Kaizen
- Brain-Writing
- Open Innovation
- Lean
- TRIZ
- PSL

Level 3
- MANAGING
- Function Analysis
- Sun Tzu
- Simplex
- TRIZ
- Solar
- Scenario Planning
- USP

Level 4
- STRATEGISING
- DeBono
- Axiomatic Design
- Taguchi
- Simplex
- TRIZ
- Sun Tzu
- Scenario Planning
- USP

Level 5
- VENTURING
- Function Analysis
- DeBono
- Axiomatic Design
- Taguchi
- Simplex
- TRIZ
- Sun Tzu
- Scenario Planning
- USP

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First Principle Questions

S-Curves
Contradictions
Capability?
Innovation… Most Difficult Game In The World?

Customer Need
Understanding Populations Better Than They Understand Themselves

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Yekta Özözer
Matrix 2010

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