

ZAID HASSAN

HOW TO ADDRESS COMPLEX CHALLENGES

Summary

1. AS DEMAND FOR PHYSICAL CAPITAL (NATURAL RESOURCES, INFRASTRUCTURE, SERVICES) INCREASES, WE ARE STRUGGLING WITH SUPPLY.
2. IF WE FOCUS EFFORTS ON ALLEVIATING SYMPTOMS, WE WILL BE OVERWHELMED BY TRENDS.
3. OUR CHALLENGES TODAY ARE COMPLEX IN NATURE. SOCIAL LABS REPRESENT A STRATEGY FOR ADDRESSING THESE CHALLENGES.

I. The Problem of Supply & Demand

AS DEMAND for physical capital increases, we are struggling with supply.

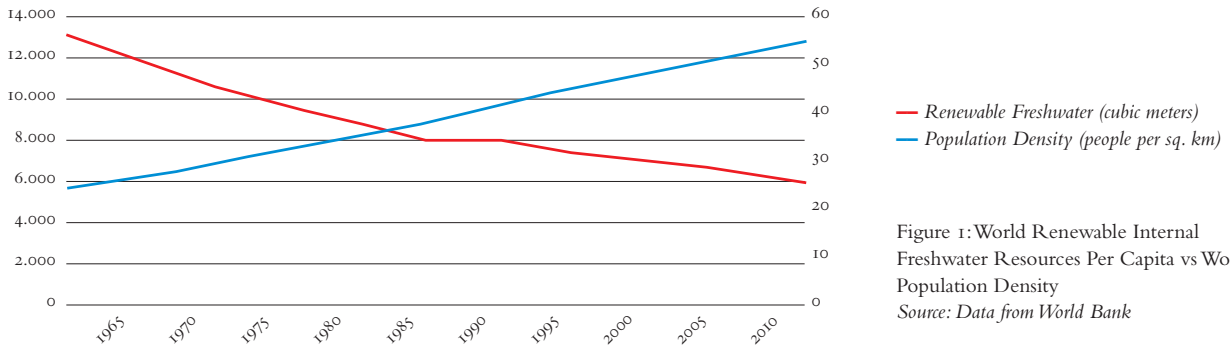


Figure 1: World Renewable Internal Freshwater Resources Per Capita vs World Population Density
Source: Data from World Bank

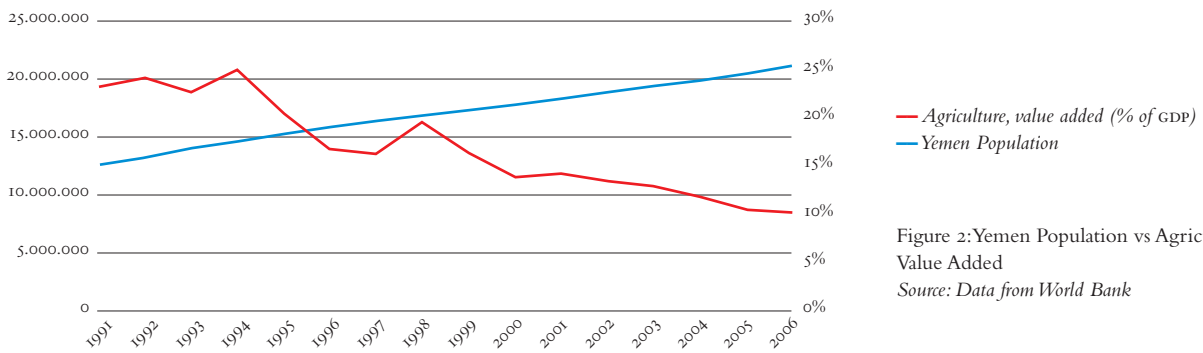


Figure 2: Yemen Population vs Agriculture Value Added
Source: Data from World Bank

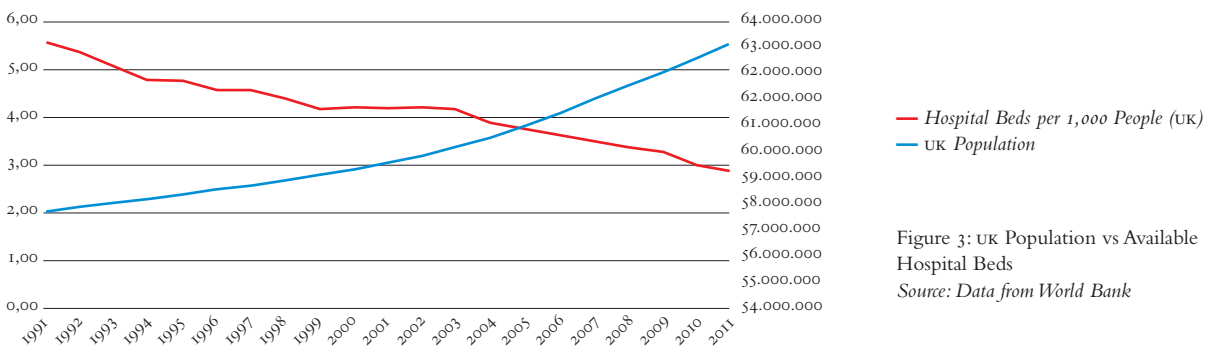


Figure 3: UK Population vs Available Hospital Beds
Source: Data from World Bank

Even if we just focus on subsistence in Western democracies, we have a real challenge.

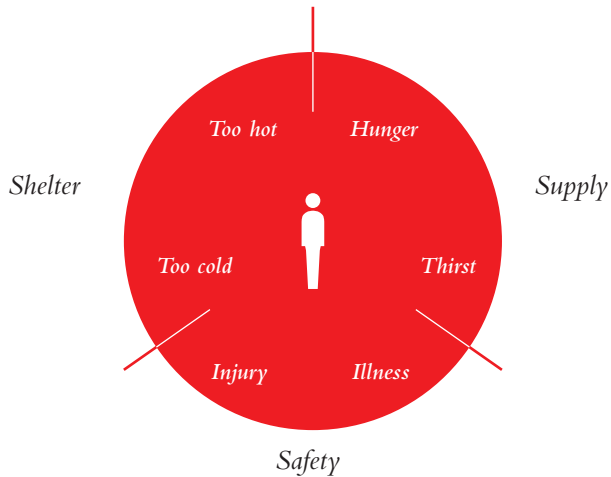


Figure 4: Six Ways to Die
Source: Vinai Gupta

Demand for physical capital comes from lifestyle choices. As quality of life increases, so to does demand for physical capital.

Imagine a scenario where one third of a population are under 16, one third are retired and the remaining one third bear the tax burden for supporting the remaining two thirds.

HIGHLAND PARK, Mich. — When the sun sets in this small city, its neighborhoods seem to vanish. In a deal to save money, two-thirds of the streetlights were yanked from the ground and hauled away this year, and the resulting darkness is a look that is familiar in the wide open cornfields of Iowa but not here, in a struggling community surrounded on nearly all sides by Detroit.

Highland Park's circumstances are extreme; with financial woes so deep and long term, it has extinguished all but 500 streetlights in a city accustomed to 1,600, utility company officials say. But similar efforts have played out in dozens of towns and cities, like Myrtle Creek, Ore., Clintonville, Wis., Brainerd, Minn., Santa Rosa, Calif., and Rockford, Ill.

— Darker Nights as Some Cities Turn Off the Lights, New York Times, Dec 29, 2011

“Dense connectivity and tight coupling also raise the probability of cascading failures. Think of a row of dominoes falling over: the dominoes are close enough together that tipping the first one tips all the rest in succession. Cascading failures occur more often now in our modern systems because the sharply higher speed and volume of movement of energy, material and

information between components of our economies, societies and technologies has dramatically tightened the physical and temporal proximity of events in these systems.

I use the analogy of a system of cars tailgating each other at high speed on a freeway. The cars are traveling fast and close together, so they cover the distance between themselves in an instant. Then, if one driver is not really paying attention, perhaps because he or she is entering a text message into a BlackBerry while switching lanes (at this point in the presentation I always see a lot of people turn their heads down, because they know who they are), a sideswipe happens and in a flash dozens of cars are piled in a heap.”

—Thomas Homer Dixon

As long as we have coupled, divergent supply and demand curves, we have a serious challenge.

This challenge is complex in nature.

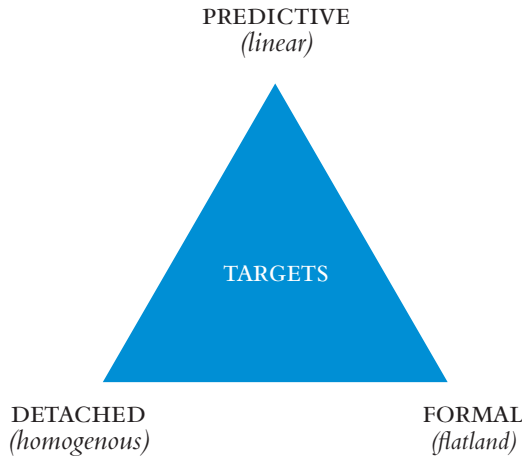
It manifests both locally and globally. It requires a strategic response.

2. The Problem of Business-As-Usual

“Our board thinks that systemic work is too difficult, so we’re focusing on projects and prototypes.”

— CEO of Foundation

What is BAU?



Source: *The Social Labs Fieldbook*
<http://www.social-labs.org>



STRATEGIC PLANNING RESPONSES SUFFER BETWEEN A 90%–100% FAILURE RATE.

Failure occurs at multiple levels:

- System
- Region
- Sector
- Organisational
- Project

An organization might be “succeeding” according to traditional measures, such as budget going up, but “failing” at every other level.

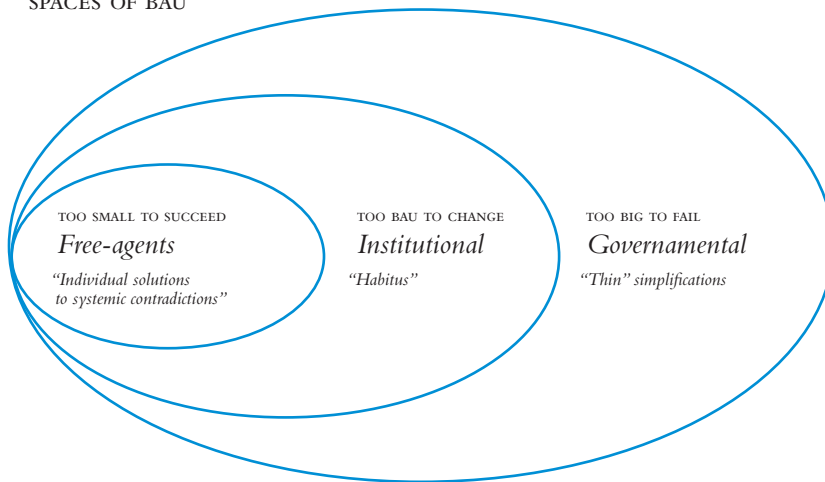
Projects are not on time, on budget or on scope; the sector as a whole is failing (Global Financial Crisis 2008); a geographic failure sees population flows out and tax revenue declines; a system level failure might be socio-economic (youth unemployment), environmental (biodiversity) or political.

— The Rise and Fall of Strategic Planning – Henry Mintzberg, Simon and Schuster, Jan 31, 1994

— The Rise of The Prototyping Paradigm: Complex Social Challenges, The Impulse to Help, How It Fails and How It Can Succeed Again – Zaid Hassan et al. Social Kritik, No. 142, June 2015, Denmark

— Megaprojects and Risk - An Anatomy of Ambition - Bent Flyvbjerg, Nils Bruzelius, and Werner Rothengatter, Cambridge University Press. 2003

SPACES OF BAU



Business-As-Usual responses typically focus on strategies for the alleviation of symptoms because addressing causes is too hard.

BAU responses are tactical and not strategic.

What does it mean to address symptoms? What does it mean to address causes? What happens if we simply continue to address symptoms and ignore causes?

Continuing to pursue BAU means we are facing the mathematical certainty of a day where our supply curves hit zero for the majority of the population.

"More and more organizational leaders say they have a strategy, but they do not. Instead, they espouse what I call bad strategy. Bad strategy tends to skip over pesky details such as problems. It ignores the power of choice and focus, trying instead to accommodate a multitude of conflicting demands and interests. Like a quarterback whose only advice to teammates is "Let's win," bad strategy covers up its failure to guide by embracing the language of broad goals, ambition, vision, and values. Each of these elements is, of course, an important part of human life. But, by themselves, they are not substitutes for the hard work of strategy."

"Bad strategy is more than just the absence of good strategy. Bad strategy has a life and logic of its own, a false edifice built on mistaken foundations. Bad strategy may actively avoid analyzing obstacles because a leader believes that negative thoughts get in the way. Leaders may create bad strategy by

mistakenly treating strategy work as an exercise in goal setting rather than problem solving. Or they may avoid hard choices because they do not wish to offend anyone—generating a bad strategy that tries to cover all the bases rather than focus resources and actions.”

“There’s a wonderful story of the five whys. The Lincoln Memorial stonework was being damaged. Why? By cleaning spray eroding it. Why? Because it’s used to clean bird poop. So they tried killing the birds. Didn’t work. Why are the birds there? To eat insects. Let’s kill the insects! Didn’t work. Why are the insects there? Because the lights are on after dusk. So let’s just turn the lights off. That works.”

— Good Strategy, Bad Strategy: The Difference and why it Matters - Richard P. Rumelt, Profile, 2012

- 1. <https://wallbuilder.wordpress.com/2013/05/29/the-lincoln-memorial-and-the-5-whys/>
- 2. https://en.wikipedia.org/wiki/5_Whys

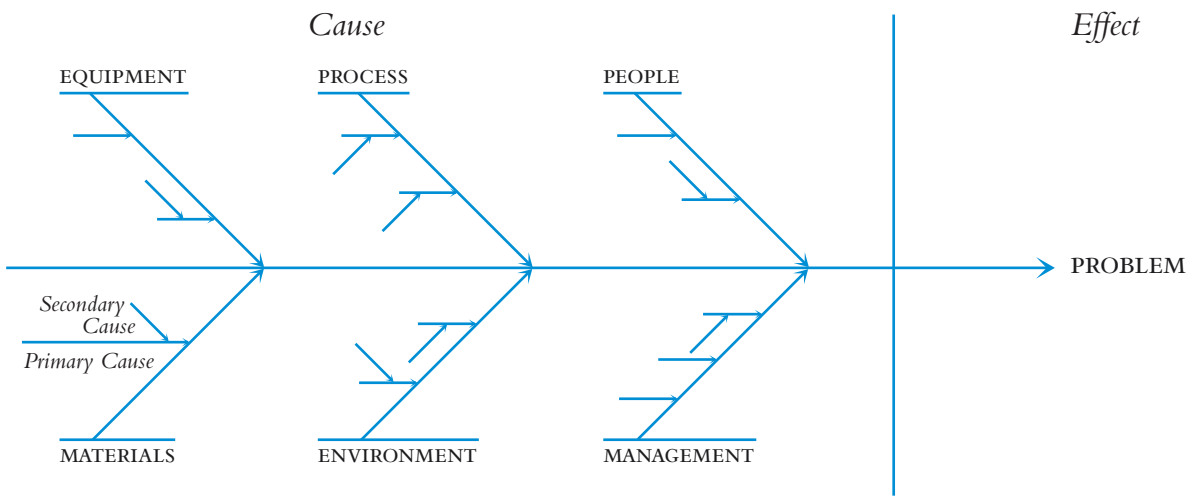


Figure 5: Ishikawa Diagram
https://en.wikipedia.org/wiki/Ishikawa_diagram

3. *How To Address Complex Challenges*

BAU is a situation where your numbers do not add up, the situation is deteriorating even though a lot of resources are being spent.

BAU is a situation where despite everything being done, you're losing and there is no space to do anything differently.

Good strategy has a handle on the odds. What is the nature of the underlying challenge you're facing? What are the odds?

Odds of winning the National Lottery in the UK are 14 million to 1.

If you're going to play the National Lottery, your options are:

1. Accept the odds and devise a strategy
2. Cheat ("gaming")
3. Don't play
4. Delude yourself as to the real odds and devise a strategy.

Which is the bad strategy?

A neo-Soviet approach – bad strategy that is – will say, "I don't like those odds, so I'm going to pretend the odds are something else."

What does good strategy look like?

"A good strategy has an essential logical structure that I call the kernel. The kernel of a strategy contains three elements: a diagnosis, a guiding policy, and coherent action. The guiding policy specifies the approach to dealing with the obstacles called out in the diagnosis. It is like a signpost, marking the direction forward but not defining the details of the trip. Coherent actions are feasible coordinated policies, resource commitments, and actions designed to carry out the guiding policy."

— Good Strategy, Bad Strategy: The Difference and why it Matters - Richard P. Rumelt, Profile, 2012

What does good strategy in situations of complexity look like?

DIAGNOSTIC

Divergent supply & demand curves mean loss of capital stocks in our systems.

GUIDING PRINCIPLE

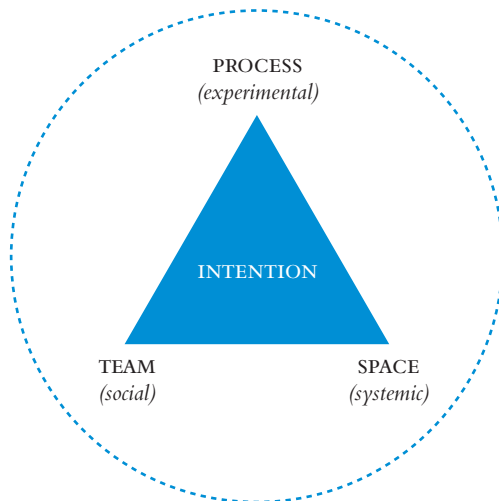
Replenish multiple capital stocks (human, social, physical, intellectual, financial and natural)

COHERENT COURSE OF ACTION = SPACE + TEAM + PROCESS

SPACE: Where is the space to come up with a better strategy?

TEAM: Where is the capacity to realize a better strategy?

PROCESS: What does the process of better strategy look like?



Source: *The Social Labs Fieldbook*
<http://www.social-labs.org>



Strategy is not a plan. Strategy is action. Strategy is what you do and most importantly, *it is the story you tell about what you do.*

And the bottom line is that you have to fight for each of these.