

IMPROVEMENT SKILLS CONSULTING LTD.

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*“Simply, improvement...”*



Do you have a  
Wicked Problem?

# What's your Problem?

*“Prejudice is a great time-saver; it enables you to form opinions without having to gather any facts”*

## Problems and Wicked Problems

One of the presentations at the Operational Society’s 2011 Conference Criminal Justice Stream was on the subject of “Policing Problem Archetypes” and, I have to admit, the title didn’t give me much of a clue what it would be about. As it turned out, the subject matter was close to my experience: **NOT ALL PROBLEMS CAN BE SOLVED IN THE SAME WAY.**

Now, that may seem obvious, but Ian Newsome’s presentation reminded me of the importance of recognising what type of problem you face, before you try to solve it. In particular, he usefully described a range of “problem archetypes” and suggested what might be appropriate ways to tackle them. His problem types ranged from:

- **“simple”**: problems that can be readily defined and where there are often “best” or “right” answers

to...

- **“wicked”**: problems that need lots of stakeholder engagement, are much more complex, with lots of inter-dependencies and don’t have a right answer and no single, right approach for solving them

Different tools and different thinking are required, depending on the type of problem to be solved.

1: <b>Simple</b>	Find the right answer. Use data (Excel). Apply known best practice solutions.
2:	Look at the end-to-end process or system. Use simulation and modelling tools.
3:	Understand the increasing complexity of the whole system. Use Systems Dynamics tools or Agent-based modelling.
4:	Recognise potentially conflicting objectives across the system. Use Soft Systems tools and aim for consensus.
5:	Recognise and address power, politics and minority views. Use Multi-Stakeholder Engagement techniques.
6: <b>Wicked</b>	Complex, fast-paced change, no right answer. Use Large-group participative processes. Novel solutions are more appropriate than best practice ones.

Some of the characteristics of Wicked Problems were defined as follows:

**Wicked problems** (Rittel & Webber, 1973)

1. No definitive formulation.
2. No stopping rules.
3. Solutions not true-or-false, but better or worse.
4. No immediate and no ultimate test of a solution.
5. Solution is a "one-shot operation"; no opportunity to learn by trial and error, every attempt counts significantly.
6. Do not have enumerable (or exhaustively describable) set of potential solutions, no set of permissible operations to employ.
7. Every wicked problem is essentially unique.
8. Every wicked problem can be a symptom of another problem.
9. Wicked problem can be explained in numerous ways. Choice of explanation determines the nature of the problem's resolution.
10. No right to be wrong (planners liable for consequences of actions).

When you are trying to solve Wicked Problems, you face a range of barriers which are both cultural and technical. People “in the problem” are likely to have conflicting objectives and there may be hidden agendas that don’t surface readily. Equally, people may not have the technical capability to solve the problem, either through a lack of knowledge of relevant tools, or lack of skill in applying them in a what will inevitably be a culturally challenging environment.

### Wicked Problems are Foggy Problems

The idea of Wicked Problems reminded me of Eddie Obeng’s four types of project:



- **Painting by numbers** projects have clear objectives and there is a clear way to achieve them
- **Making a movie** projects have a clear way to do them, but the end result is not well-understood at the start
- **Going on a quest** projects have a clearly defined end-point, but it's unclear how that will be achieved
- **Lost in a fog** projects have unclear end results and no clear path for achieving them

It seems to me that Foggy Projects and Wicked Problems have a lot in common: there are multiple stakeholders, many of whom have unclear and/or conflicting objectives about what “the answer” will look like and there is no obvious or “right” way to tackle the issue, so what works will have to be developed with the support of the multiple stakeholders.

Logically, the way to tackle a Foggy Project or a Wicked Problem would be in three steps:

1. Get clarity on the end-game; perhaps by defining success criteria or proposing some scenario outcomes (the aim is to move towards a Quest-type problem)
2. Develop a way to achieve the outcomes; by defining workable routes to follow (the aim is to move towards a Painting by numbers type of problem)
3. Adopt tools and techniques that enable you to solve specific problems on the way to your outcome, managed against clear milestones

## What this means in practice

There are some pretty clear lessons to be learned from thinking about the type of problem you face before you launch into trying to solve it.

Firstly, you have to decide how simple or wicked your problem is. The number of stakeholders who want to get involved and their degree of consensus should give you a clue. If it's a problem that's been around for a long time, it's probably not going to be simple to solve, is it?

Secondly, it's no use being a “one trick pony”; only the simplest of problems are amenable to being solved using basic or single problem solving tools. Be very wary of consultants who have a methodology (Lean, Six Sigma, Simulation, etc. etc.) and will “do it to you”, irrespective of its relevance and fit. Anything complex will require excellent facilitation skills and access to a range of possible problem solving tools which need to be applied intelligently, at the right time, with the right people.

Thirdly, you may need to accept (and get stakeholders to accept) that, for some problems, there will be no right answer. It will be uncomfortable for some people to live with that level of ambiguity, but unless you can, problem solving will probably be a very painful process.

## **Our track record**

Our consultants have been helping organisations in the private and public sectors to manage and improve performance for over two decades. We have supported European Quality Award winners in their approach to continuous improvement but we are not wedded to a particular methodology.

We help clients identify their improvement goals and then develop an approach to achieve these; invariably ensuring their people develop the skills to make further improvements themselves.

If you need to help your people increase their capability to define and solve problems, please contact us.

[I am grateful to Ian Newsome of West Yorkshire Police for inspiring this article.]

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