

(A)Musing... Wicked problems and project management

Recently, I was investigating the relation between project management problems (*i.e. any kind of project organizing questions (e.g. Puranam et al, 2014)*), competent project managers and ethics (*Bredillet, 2014; Bredillet et al., 2015*). I argued that deontological ethic (*“what ought be”, doing “right”, i.e. using “the right means”*) and consequentialist ethic (*“right” outcome, i.e. focusing on the best possible “end”*) perspectives were not sufficient in order to fully support project managers in their problem solving and decision making processes. I suggested shifting to Aristotelian ethics of character and practical philosophy, acknowledging the role of *phrónêsis*, i.e. practical wisdom, in order to fully equip competent project managers in their ability to cope with project problems, where the particular always takes precedence over the general.

A good illustration of “tough” problems to be addressed and involving practical wisdom are the so-called “wicked problems”. This concept, like usually for such umbrella constructs (*Floyd et al., 2011, Rouleau, 2013*) and buzz words part of the management fashion (*Abrahamson, 1996*), is worthwhile discussing in order to fully grasp the managerial consequences attached to its understanding.

1. Defining “wicked problems”

If we take Rittel’s definition as exposed in Churchman (1967, p. 141), the concept of “wicked problem” refers to a class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole systems are thoroughly confusing”.

They are “wicked” because they resist to solutions. They are “difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize”. Conklin (2006) defines their characteristics as follow:

- The problem is not understood until after the formulation of a solution.
- Wicked problems have no stopping rule.
- Solutions to wicked problems are not right or wrong.
- Every wicked problem is essentially novel and unique.
- Every solution to a wicked problem is a ‘one shot operation.’
- Wicked problems have no given alternative solutions.

2. Projects and “wickedness”

Classically wicked problems occur in any socio-organizational system and “chaordic” environment (*Hock, 1995*) where the organizing context shows increasing volatility, uncertainty, complexity, and ambiguity (*VUCA*) affecting organizations and the socio-economic environment. These wicked problems can emerge at any time (*Taleb, 2007*) as, by nature, they are not foreseeable. You know they will happen but you can’t predict which form they will take (*a bit like influenza pandemic or natural hazards*).

Every project has its part of “wickedness” as each project involves some uniqueness and novelty. However projects embedded in particular “VUCA” context and environment are good candidates – for instance projects linked to political & societal contexts and involving multiple stakeholders with divergent interest (*Flyvbjerg, 2014*) such as international development projects (*e.g. Dams*), or major infrastructures (*e.g. Channel Tunnel, Olympic Games*), or social reform systems (*e.g. Obamacare*), or major acquisitions in the Defence sector (*see Joint Strike Fighter*), or any organizational change including mergers or acquisitions of organizations...

3. Coping with wicked problems

Thinking “project” may lead the various stakeholders – part the wicked problem ecosystem and usually with

divergent pluralistic or coercive values (*Jackson, 2010*) – to find some commonalities and way forward through politics, vested interests and power games. However this may require huge amounts of efforts (*see European countries and EU discussions around economic development plan(s)* as a good example). However project management decisions may be part of the wicked problems or ecosystem and to some extent awake the “sleeping dragon” or contribute to open pandora’s box... for good or bad.

Using traditional PM methodologies? Forget about them... they are not designed to tackle such problems, but to address problems when a certain level of consensus does exist amongst stakeholders, when the “problems” are identified, when information is available and when a certain level of stability in the socio-economic environment makes things somehow predictable. In short, in order to apply traditional PM approaches, we need a certain level of order and things (*variables, factors, ...*) should be know or knowable (*French, 2013*).

We need to turn to alternatives approaches acknowledging project managers’ practical wisdom as a landmark.

Authors emphasize moving from functionalist paradigm to Creative Holism & Total Systems Intervention and Critical Systems Practice (*Jackson, 2003*). This author suggests a set of approaches to be used in context and “with practical wisdom”, e.g. interpretive and soft systems thinking (*which enable accommodating different viewpoints and alternative perspectives, learning & change - focus on: social systems, people purposes, interpretations of situations, people act & interact / interpretations*), emancipatory systems thinking approaches (*who benefits*

Prof Christophe N. Bredillet

PhD, D.Sc., IPMA Level A, FAPM, FloD

Scientific Director Société française pour l’avancement du Management de Projet (SMaP)

First assessor, IPMA Certification of Project Management Consultants (CPMC)

Lead assessor, IPMA Four Level Certification (4-L-C)

Adjunct Professor, Queensland University of Technology (QUT)



from / is affected by the system design – focus on: emancipate oppressed individuals & groups, reveal forms of power & domination, discrimination) or Postmodern Systems Thinking (No methodology can guarantee improvement, diversity encouraged & suppressed viewpoints to be surfaced – focus on: challenge any totalizing attempts to provide comprehensive explanations / organizations function. Emphasize having fun. Learn much by bringing conflict to surface, space for disregarded opinions, encouraging variety and diversity).

Last (but not least...) thoughts

Therefore, in these “wicked problems” contexts, we need to move from the classical “sense-categorize-respond” or “sense-analyse-respond” problem solving and decision making processes to “probe-sense-respond” process supported by the above mentioned paradigms and methodologies such as problem-structuring methods, exploratory data analysis, expert judgment, metagames... or even to “act-sense-respond” process supported by exploratory practice and trial & error (Kurtz & Snowden, 2003, French, 2013). In order to do so, we acknowledge project managers’ practical wisdom as a landmark.

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