





Problem Characterisation Canvas

Problem type				
Examples	Simple Assembling furniture Processing survey data Financial bookkeeping	Complicated Operating a water treatment plant Selecting a development site Minimising your tax liability	Complex Adapting to post-COVID working Resolving homelessness Mitigating climate change	Chaotic Responding to a terror event Addressing a fake-news scandal Dealing with a business collapse
Related roles	Technician, clerk, supervisor	Disciplinary specialist, functional leader	Company director, CEO, change leader	First responders, armed forces
Time horizon	Short term	Medium term	Longer term	Short term
Problem characteristics	<ul style="list-style-type: none"> • A same, repeated problem • Static or closed systems • Cause-effect is obvious • Simple objectives • Predictable outcomes 	<ul style="list-style-type: none"> • Identifiable problems • Static or closed systems • Cause-effect needs analysis to understand • Predictable outcomes 	<ul style="list-style-type: none"> • No definitive problem description • Product of interrelated systems • The problem keeps evolving • Essentially novel and unique <p><i>For the sub-class of wicked problems:</i></p> <ul style="list-style-type: none"> • Time is running out • Irrational discounting of the future • Those seeking to solve the problem are also causing it 	<ul style="list-style-type: none"> • Symptoms are stark • High turbulence, high tension • No 'right' answers • Cause-and-effect may clarify in retrospect • Underlying causes are unlikely to be resolved by the action taken
Response characteristics	<ul style="list-style-type: none"> • Some expertise is useful • Roles and processes guide action • Seeking a "right" solution • Solvable in a knowable timeframe • Replicable lessons learnt inform evolution of best practice 	<ul style="list-style-type: none"> • Expertise is required • People have defined roles • Seek "best" and efficient solutions • Requires processes to resolve the problem reliably • Solvable with persistence • Lessons learnt inform good practice 	<ul style="list-style-type: none"> • Collaboration by specialists is needed • Solutions aren't right or wrong, but better or worse • A solution depends on how the problem is framed • Each attempt at solving changes the system (and so the problem) • Requires experimentation and learning to achieve progress 	<ul style="list-style-type: none"> • Cooperation is required • Demands immediate action to impose order • Role definitions guide action • Many decisions must be made with little time to contemplate • Stabilising the situation over time
Big risks	Failure to innovate and adapt	Paralysis by analysis	Assuming the problem is complicated	Imposing command and control too long
Principal job	EFFICIENTLY DELIVERING	COOPERATIVE OPTIMISATION	COLLABORATIVE LEARNING	COMMANDING STABILITY
Desirable skills	Identification, categorisation, delegation, following rules, decision making	Identification, data analysis, decision making, questioning, learning, optimisation	Observation, critical thinking, questioning, synthesis, collaboration, testing, learning, reflection, adaptation	Synthesis, prioritisation, decision making, communication, direction setting, adaptation, project management
Practice type	Best practice	Good practice	Emergent practice	Novel practice
Dominant expertise	TECHNICAL / CONTENT EXPERTISE		PROCESS EXPERTISE	