

Beyond the DMAIC Recipe: The Human Reality and Relational Dynamics of Conducting Lean Six Sigma Projects

Process to Practice Summit 2026



Alan Skinner



Agenda

- Session Focus – Key Points
- Basis for Findings and Recommendations
- Four Major Themes Experienced by Facilitators
- Facilitator Behaviours
- Implications

Session Theme or Focus

➤ **The Rational Illusion:**

- Improvement is a recipe to be followed that produces results

➤ **Missing Micro-Level:**

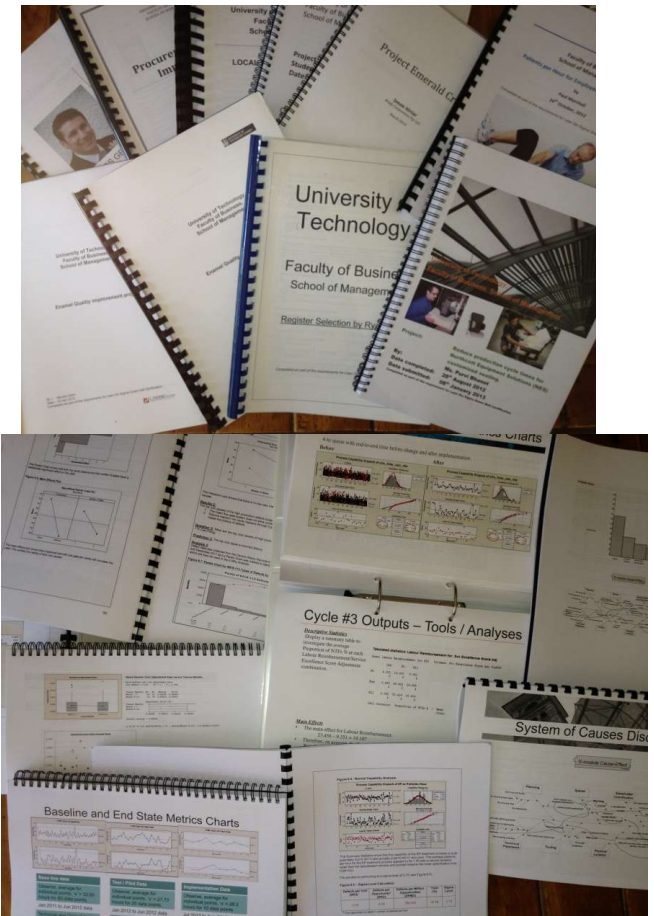
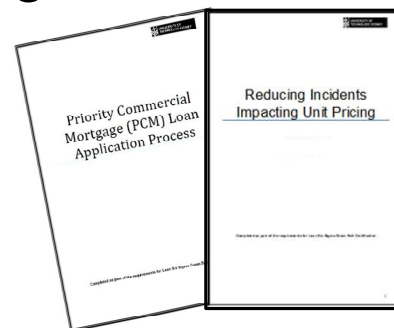
- Little focus on how it actually feels to lead an improvement team through the messy, human reality of a project.

➤ **The Facilitator's Burden and Effect:**

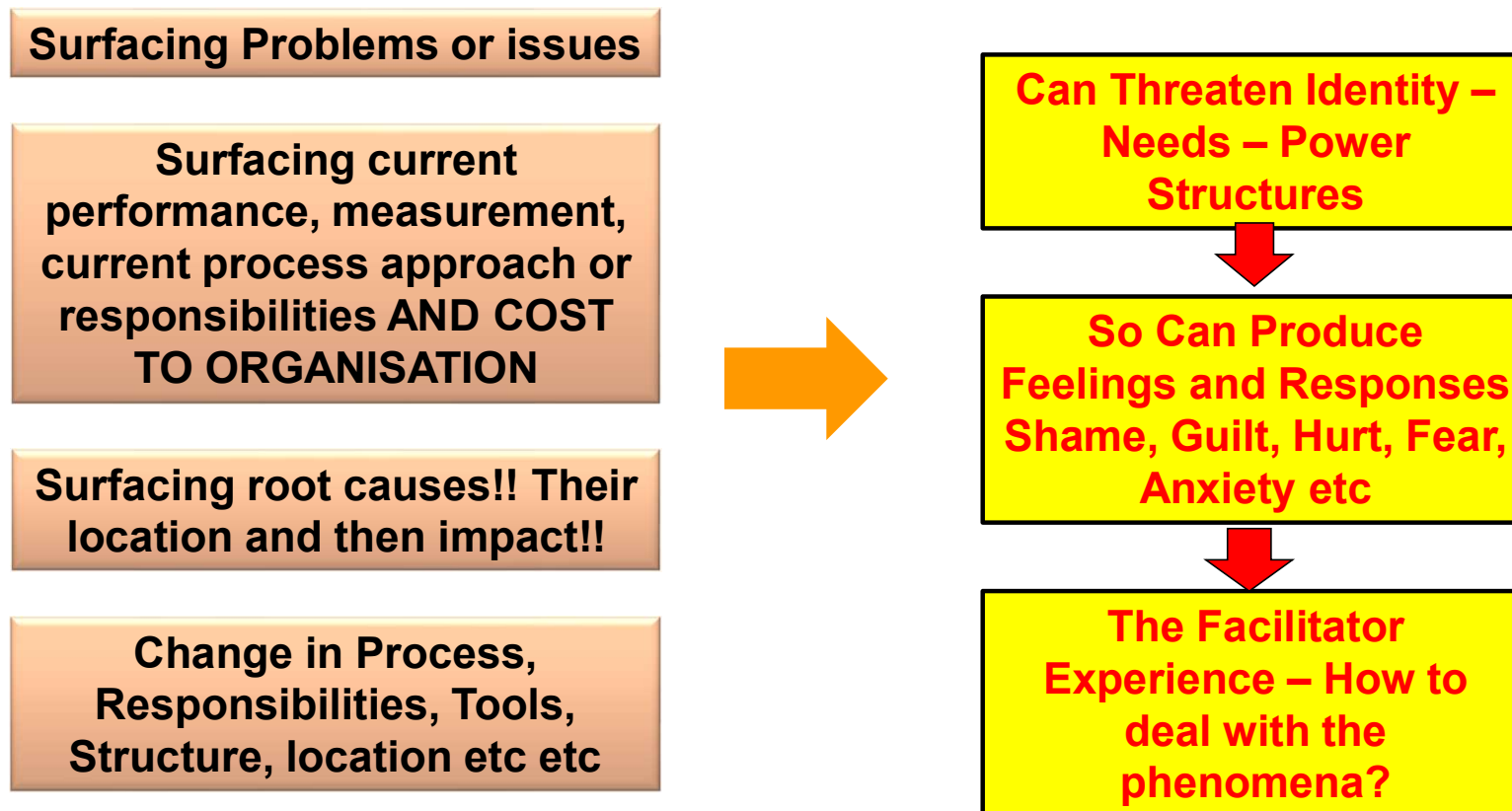
- Significant Therapeutic Effect on the pathology within the process / function
- Carry a significant emotional and relational load that is largely ignored by traditional LSS training.

Basis for Findings and Recommendations

- UTS Program now 20+ Years
- Teaching / Coaching During Real Projects
- Structured Portfolios of Work
- Reflections, Plan, PDSA's
- Volume of Data and Emerging View (Hundreds of Cases)
- Contrast between literature with the lived reality of practitioners.



Reality of the Disruption of Social Dynamics



Prompt for Research My experience vs Literature



Analysis of:

- Practitioner and Academic Literature on Improvement / LSS
- Reviews of LSS Literature and Research
- Relevant Research Studies

**Reveals
GAPS**



- Emphasis that Rational implementation of LSS will deliver results
- This Mechanistic portrayal of improvement phenomenon does not reflect the realities of the experience of improvement work.
- Little qualitative research has explored the human side of improvement



Lived Experience, Qualitative Inquiry best suited to study subjective reality of the improvement phenomenon from facilitator's perspective
Gain Deeper Richer Nuanced Understanding

OBSERVING THE IMPROVEMENT JOURNEY

Understand

Intelligent Change

**Sustained
Measurable
Improvement**

Define

Measure

Analyse

Design

**Pilot
Implement**

Control

**Problem
or
Opportunity**

Simple to Complex Projects – Existing Processes or Design



Research Focus

What is the essence of the lived experience of improvement facilitators during the improvement journey?

Personal World Lived Experience

What experiences emerged within the personal world of facilitators that led them to being involved in improvement project facilitation?

Surrounding World Lived Experience

What did facilitators notice in their surrounding organisational context of the Improvement project and the project itself?

Relational World Lived Experience

What experiences predominate in the relational world of facilitators whilst being involved in the improvement project?



Portfolio diaries, interviews, personality inventory, facilitator and stakeholder feedback and reflection

Personal World Lived Experience



What experiences emerged within the personal world of facilitators that led them to being involved in improvement project facilitation?

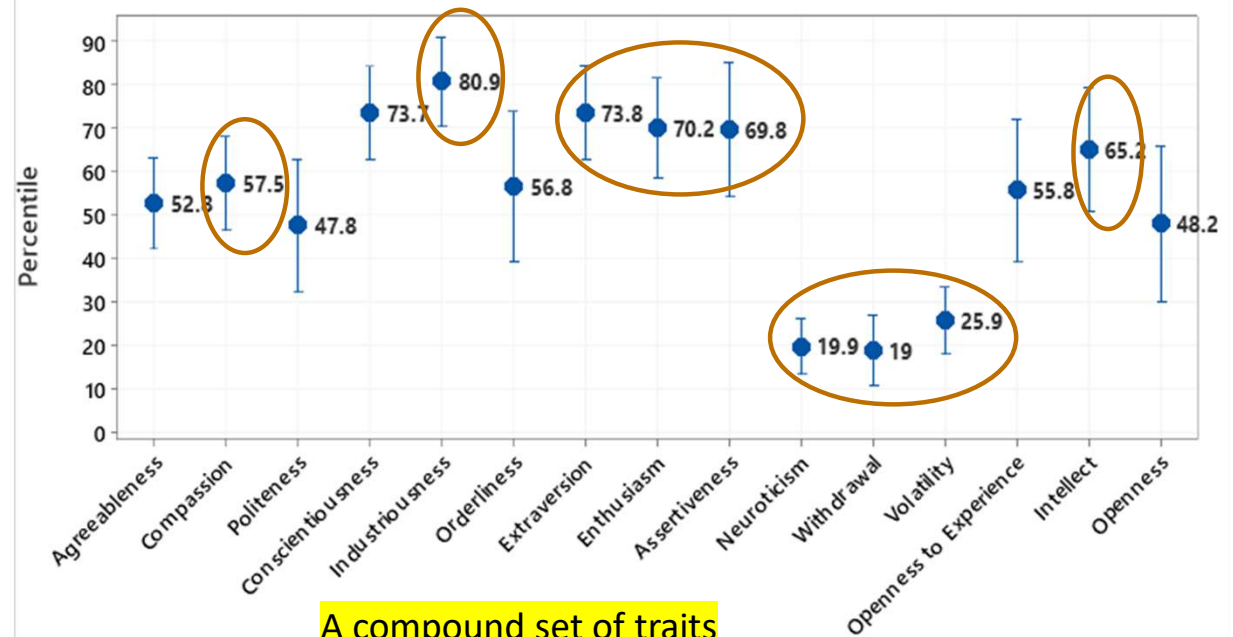
- They have an 'A Priori' Interest in Problem Solving
- Personality Profiles Show Meta Traits that Suit Facilitation of Improvement Projects
- Entry Experiences Attracted Facilitators into Professional Practice

**Experienced in Improvement:
6-20 yrs
All successfully Completed
Projects**

‘It’s in the Blood ‘

I think it's something that's in your blood, or certainly for me it has been. I feel like it's in my DNA. Reflecting on it, I could actually see that I think what drew me to process improvement as a formalized type of work is that it was like hand in glove. I felt like I'm made for this type of thing.

Summary of Personality Results for Research Sample Using Interval Plots
95% CI for the Mean



A compound set of traits

Individual standard deviations are used to calculate the intervals.

Personality Aspects

- Compassion
- Industriousness
- Enthusiasm
- Assertiveness
- Emotional Stability - low Withdrawal and Volatility
- Intellect

**Plasticity
&
Stability**

Surrounding World Lived Experience

What did facilitators notice in their surrounding organisational context of the Improvement project and the project itself?

- Projects Located in Various Industry and Functional Contexts
- Working in Predominantly Immature to Emerging Maturity Organisational Contexts
- Crises and Facilitator Initiative Often Drive Project Initiation
- Projects Worked Show Several Characteristics of Complexity

Organisational Environment

Experience Different Organisational LSS Capability
Mature, Emerging and Immature

Immature Context

So, if courthouse caught on fire, this is where you scream. That type of mentality if you like (reacting to problems).

Out of Crisis

- Before too long the customer complaints started flowing in about the turnaround time. It was pretty bad. So, they jumped up and down about that.
- Issues Bubble Away and Turn into Crises – Frankenstein Effect!!

Project Environment

Influencing - Agency Role of the Facilitators

Project Characteristics

Project Initiation Experiences

- Out of Crisis
- Aids team arrive at the improvement project decision
- Organisational Assessment Prompts the Project
- Supporting Manager in Project Context

- Longer Project Durations with Multiple Learning Cycles within the DMAIC Project Phases
- Multiple Improvement Project Outcomes Across Various Scorecard Categories
- Multiple Management Levels and Teams Involved

Relational World Lived Experience

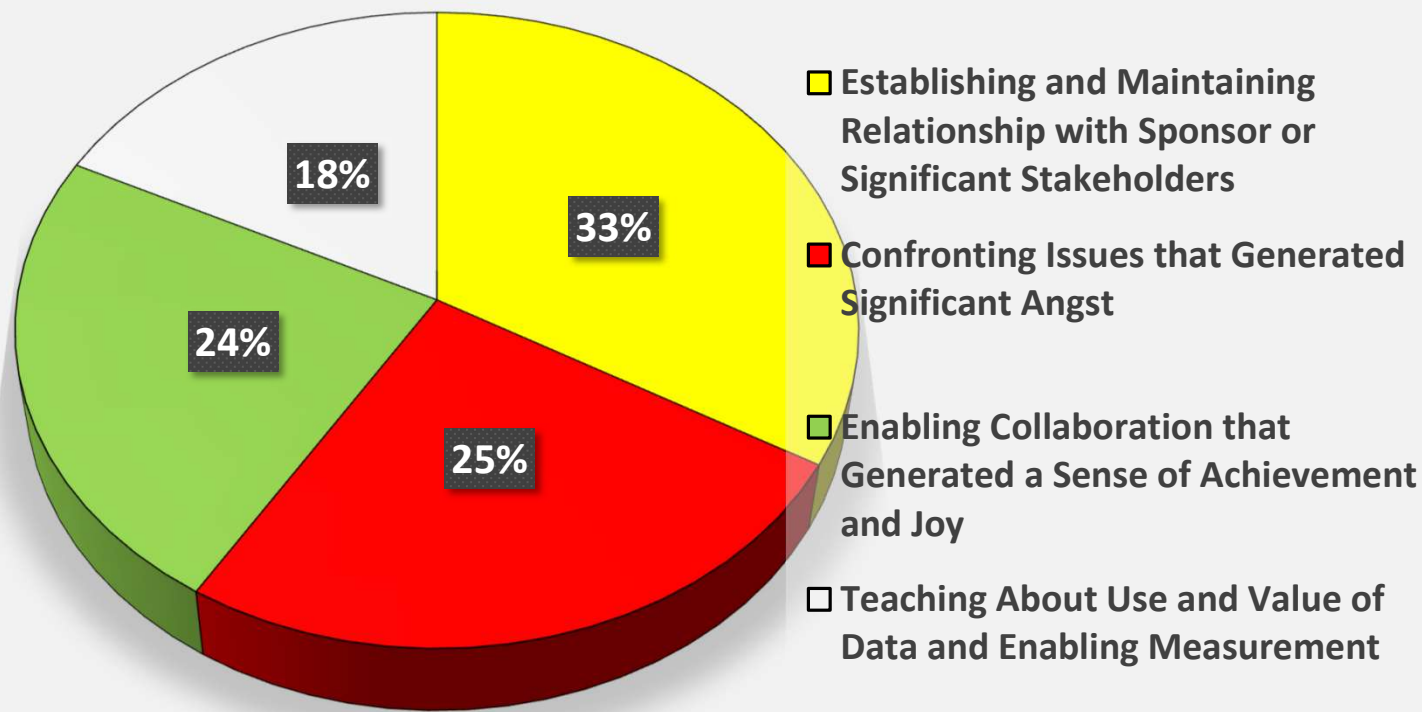
What experiences predominate in the relational world of facilitators whilst being involved in the improvement project?

➤ Four Macro Relational Themes

1. Establishing and maintaining a relationship with the sponsor or significant stakeholders
2. Confronting issues that generated significant angst
3. Enabling collaboration that generated a sense of achievement and joy
4. Teaching about the use and value of data and enabling measurement

Proportion by Theme

Macro Themes Across All Evocative Accounts



- Nearly 50 percent of the most memorable and significant experiences occur at the beginning (Define) and end stages (Implement) of projects

See the Pathology and Reactions in the Themes Presented

Theme 1: Maintaining Sponsor Relationship – 33%

Characteristics	Facilitator Reactions & Affect	Key Interventions	Self-Awareness & Traits
Maintaining senior stakeholder relationships was the most dominant relational experience - Senior stakeholders frequently jumping to solutions 41% predominantly in Define - Sponsor reactions to resource requests - Disengaged sponsors - Confronted by sponsors' hidden agendas	- Anxiety for reputation, - Fear & Frustration, - Relief, and emotional highs - turns standoffish leaders into advocates! You could see a real frustration emerging within him. He's kind of flustered and annoyed, reflecting it on me, like are you stupid? The executive is just venting his own stuff. I sensed their frustration and I'm not taking it personally. I'm not going to get ruffled.	- Contracting (Engagement in Problem Definition, Plan / Role Definition) - Teaching LSS principles, - Coaching on data-driven logic, - Active listening.	- High Assertiveness, - Conscientiousness, and - Low Volatility (patience under stress). I saw the Director as very human. He was genuinely digging deep to help define the problem which I really appreciated. You need some degree of agreeableness and compassion to listen deeply, to connect with people.

Theme 2: Addressing Hostile Confrontations – 25%

Characteristics	Facilitator Reactions & Affect	Key Interventions	Self-Awareness & Traits
Stakeholders exercise power often based on tacit knowledge, fears, or self-interest - Stakeholders' hostile reactions to ideas - Confrontations with external consultants - Senior stakeholders intervene unilaterally - Confronted by hidden agendas - Conflict between senior managers preventing collaboration	- Acute Physical & Emotional Stress: Confrontational interactions induce anger, sweaty palms, and intense feelings of threat. - Staff hold long-term tacit beliefs and deep anxiety over being blamed.	- Early sponsor escalation, - Successful facilitators step back from raw drive, absorb emotional hostility, and engage in compassionate face-to-face dialogue. - Face-to-face dialogue over speed.	- Restraining extraversion/drive; - Developing empathic systems perspective. After that meeting I met and spoke to the specialist lead. His behaviour was a massive change. In the one-on-one I said, "Look, that was really unacceptable the way you behaved. It was unnecessary. The support, your knowledge, and skill set that you have, and brought to the project, is very valuable. I'd like to understand if we can get back to that stage.

I was feeling, very anxious - knot in my stomach, because I don't like that confrontation. It was so overt, in your face and so ridiculously childish. It's not how you expect people should behave in the workplace. I did get a bit protective of the analyst, because I knew that she was a lot less assertive.

Theme 3: Addressing Low Collaboration & Mutual Action– 24%

Characteristics	Facilitator Reactions & Affect	Key Interventions	Self-Awareness & Traits
Stakeholder interaction and engagement stifled, reducing collaborative learning and action - Enabling participation with teams dominated by managers or disengaged, sceptical, teams - Conflict between managers preventing collaboration - Leaders lack confidence in their role and understanding of LSS	- Unlocking collective agency brings immense relief, joy, and shared pride. - Satisfaction in breaking down organizational silos. I explained the scenario you get to run this place. What do you do within the context of the root causes identified? And then we brainstormed. Within three minutes the word collaborative was being used, and the solutions started to surface. Chalk and cheese - You could just see them going 'wow' and just feeling this energy lift.	- Venting & Active Listening sessions, 1-on-1 coaching, - Standing up for cross-functional representation. - Idea Generation techniques Significant Effort to encourage engagement, openness in dialogue and collaboration	- Systems thinking, - Overcoming the urge to jump to premature solutions. I felt jubilation, 'yeah finally', light all of a sudden. In the end this was a very simple exchange where everyone was given a voice.

Theme 4: Addressing Low Measurement Capability – 18%

Characteristics	Facilitator Reactions & Affect	Key Interventions	Self-Awareness & Traits
Practice of measuring and analysing performance results is inappropriate or absent - Senior leadership do not refer to baseline data so jump to expensive solutions. - Teams inexperienced with measurement and data does not exist - Stakeholders' confusion over analysis concepts interpret results as blaming them for poor performance	- Initial frustration with lack of metrics; - Great sense of accomplishment when teams participate in collection and data routines stick. I'm imagining my heart rate's going up. I had to accept that it was necessary to move the project forward because the two teams weren't backing down. We managed to get agreement that we would try on one line. They felt threatened that if something went wrong, they would be blamed.	- Build measurement practices into daily routines. - Stakeholders often fear metrics due to past experiences where data was used punitively. Facilitators actively coach leaders to view variation objectively, framing data analysis as a psychological tool for systemic learning rather than personal blame.	- High Intellect & Industriousness; - Balancing technical rigor with social empathy. We are with the teams discussing how to get accurate measurements. Some of the process leaders pull out this page with graphs as the evidence. The two graphs just happened to vary on the same page as if there was correlation. They got stuck on this perception and saw it as causation that did not exist.

Additional Reported Challenges

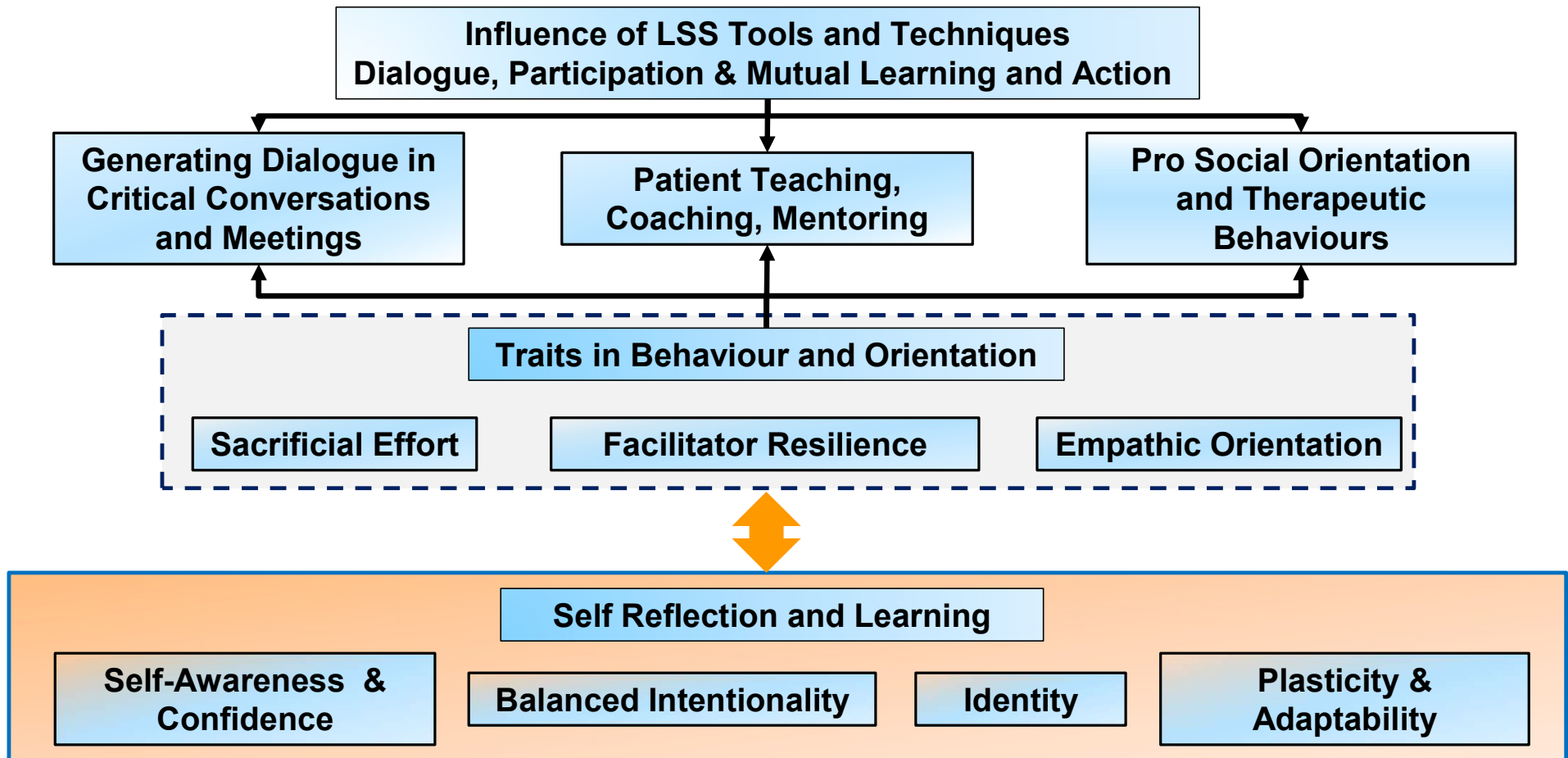
Lack of Systems Thinking	Dysfunctional Interpersonal Relationships	Disruptive Personality Types and Behaviour	Immature Leadership Practices	Immature Team Capabilities
• Lack of knowledge and analysis of workflows • Lack of collective engagement and reflection on systems of work, performance, and causes • Lack of engagement of people who know the system of work	• Conflicts between individuals or groups • Leadership conflicts • Interpersonal dynamics lack openness in dialogue and are oriented to attributing blame • Abusive and threatening behaviour	• Personality types and associated dominant, disruptive or withdrawal behaviours • Abusive and threatening behaviour	• Leadership teams lack cohesion, planning and decision capabilities • Tendency to unilateral forms of decisions • Dominating discussions • Ignoring engagement and collaboration • Driving self-interests and agendas	• Poor planning capability including visual management • Lack of measurement and reflection on performance • Lack of dialogue and openness in communication • Avoidance from within and between collaborative work

Types of Influence of LSS Tools on Facilitator Intentionality and Behaviour and Stakeholder Learning

Understanding the System of Work – Systems Thinking	Understanding Variation in Performance of Work System	Collaboration and Mutual Action	Planning Tools
• Process mapping techniques • Value stream analysis • Process stability analysis and causation analysis	• Stability, Capability and cost analyses	• Techniques of communication and dialogue • Idea generation techniques	• Improvement plan • Learning cycles (PDSA)
Stakeholders learning about their systems of work and becoming more conscious of influences in the work system	Stakeholders learning about how to measure and interpret performance and continue monitoring results	Stakeholders learning and practicing effective dialogue to enable team and individual learning and engage in constructive conflict	Stakeholders learning how to define problems, objectives, and measures to plan a project and avoid jumping to solutions. Learning agility in planning short bursts of action learning to progress a project

Techniques help engage staff, generate participation, and promote mutual learning and action.

Characteristics of Facilitator Interventions



Redefining Project Success

- **Seeing the work of effective LSS Facilitators illustrates a range of Benefits:**
 - **Beyond Process Metrics:** Achieving the project's financial or operational objectives is only one dimension of a successful LSS intervention.
 - **Capability Growth:** Success must also be measured by shifts in stakeholder perceptions and the organization's increased capability to use LSS tools independently.
 - **Prosocial Outcomes:** Repaired relationships, increased trust, and diminished workplace fear.
 - **Facilitator Growth:** The continuous cycle of self-reflection and behavioral adaptation builds the facilitator's own resilience and self-efficacy for future projects.

Implications for Practice

- Sponsorship Model and Behaviours for Managers
 - Use of structured contracting process with senior stakeholders
 - Define and assess joint stewardship of project
- Balancing the focus on methodology, analysis and statistics with learning and structures that enables facilitators and other stakeholders to be effective in their agency roles:
 - Developing inquiry and deep, active listening skills to understand the lived experience of stakeholders in situ and promote ‘respectful engagement’.
 - Facilitation skills to promote dialogue and enable ‘sympathetic understanding’ ‘generous reciprocity’ that contributes to team learning, creativity, and collective agency. (see beyond the tool!)
 - Analytical frameworks and facilitation techniques to enable critical reflection and learning to help facilitate productive dialogue and discussion
 - Observing people and the process

Thank You

Questions / Comments