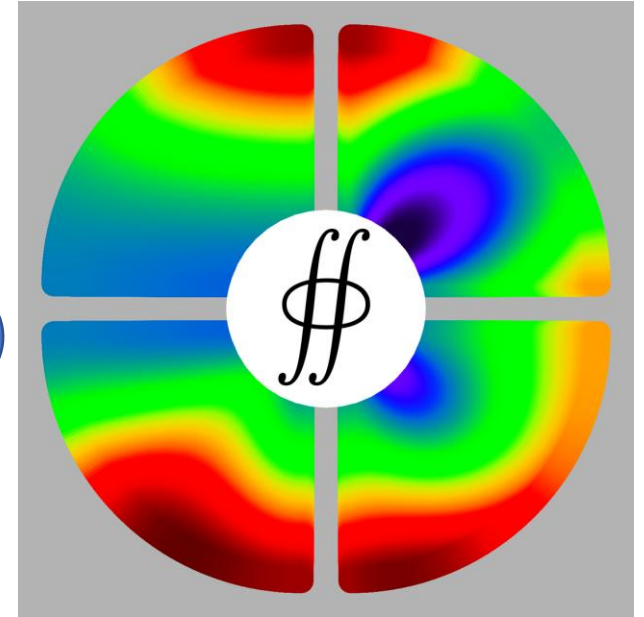


PluraTecNova Lda

Jeroen van Engelshoven
May 5 2026



Some project management Way of Working experience in Research & Development



Topics

- ‘Keep it simple’
- ‘It is always TEAM work’
- Priority of project
- Critical chain
- Technology Readiness Level
- Quality tools
- Product maturity grid

**HEB JE
JAREN GESTUDEERD**

**WORDT
GEZOND
BOERENVERSTAND
WEER HIP**

Loesje

Postbus 1645
6801 DA Arnhem
www.loesje.nl



'Keep it simple'

Project management = **communication**

Communication **sticks** better if 'it is simple'

most important
management tool



Therefore:

- full planning on 1 page !!
- Bullet points (no big texts)
- International projects ↔
cultural awareness ↔
respect !!!

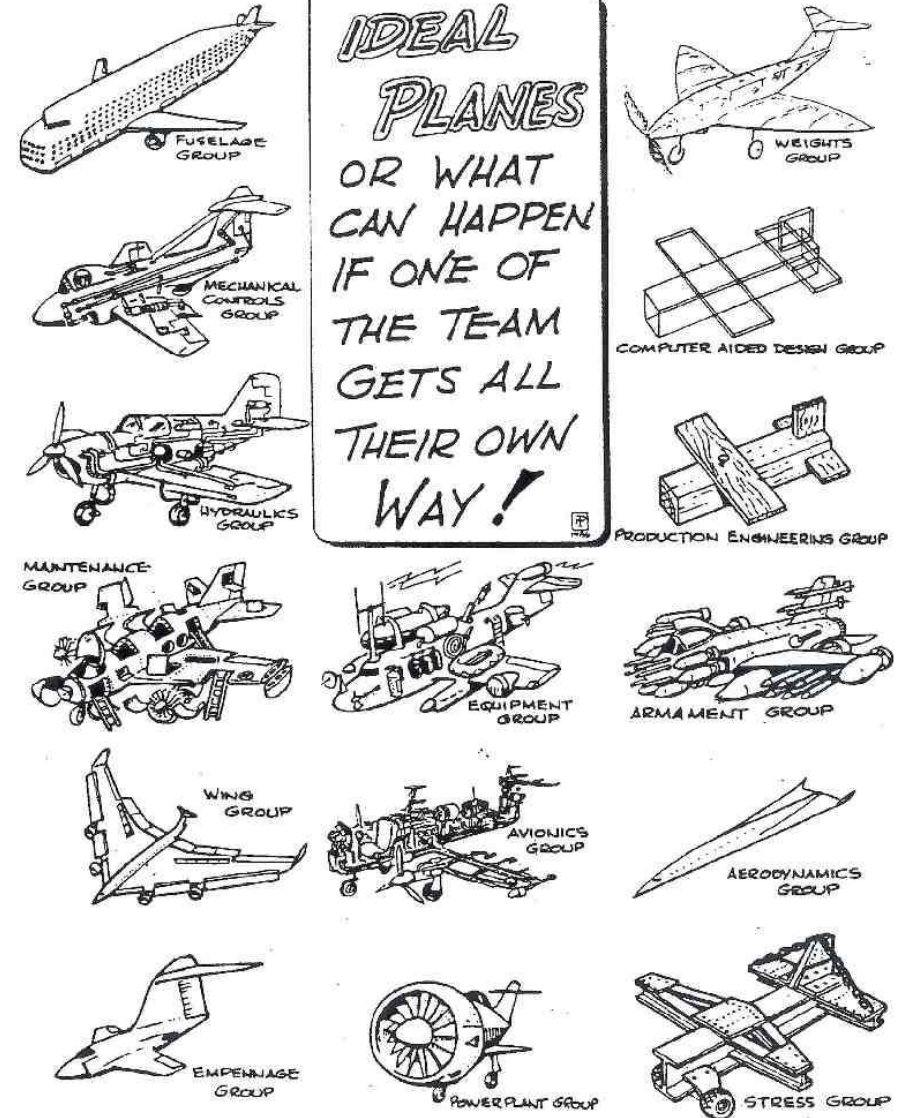
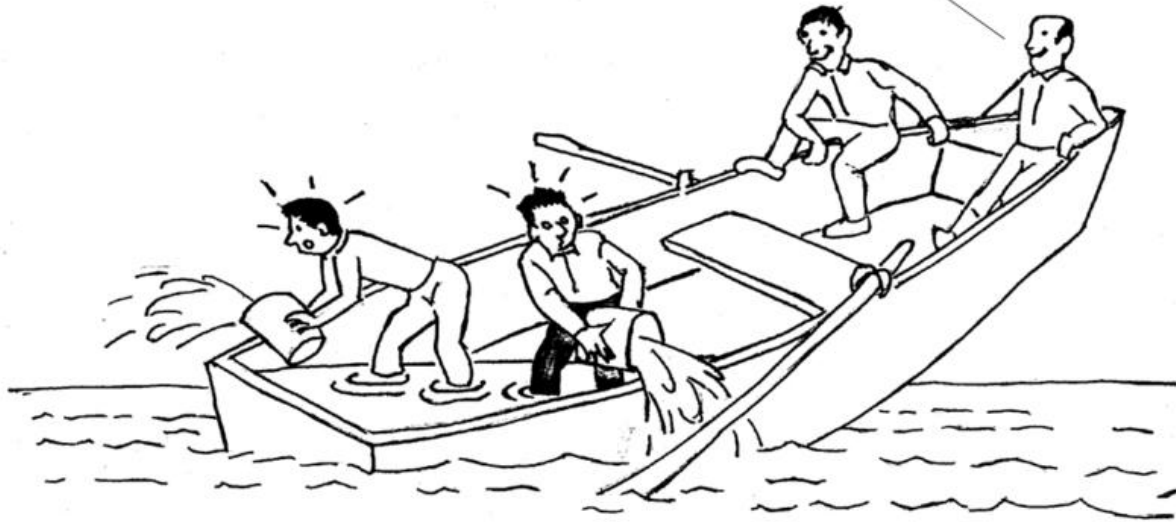
*But not in
Safety / medical*



TEAM @ work

= compromise
= work together

Sure glad the hole isn't at our end.



Priority

'day-to-day' business
(= paying tomorrow's salary)
always has priority

Business case of project

Who gets 'red ears', if you
propose to stop the project?

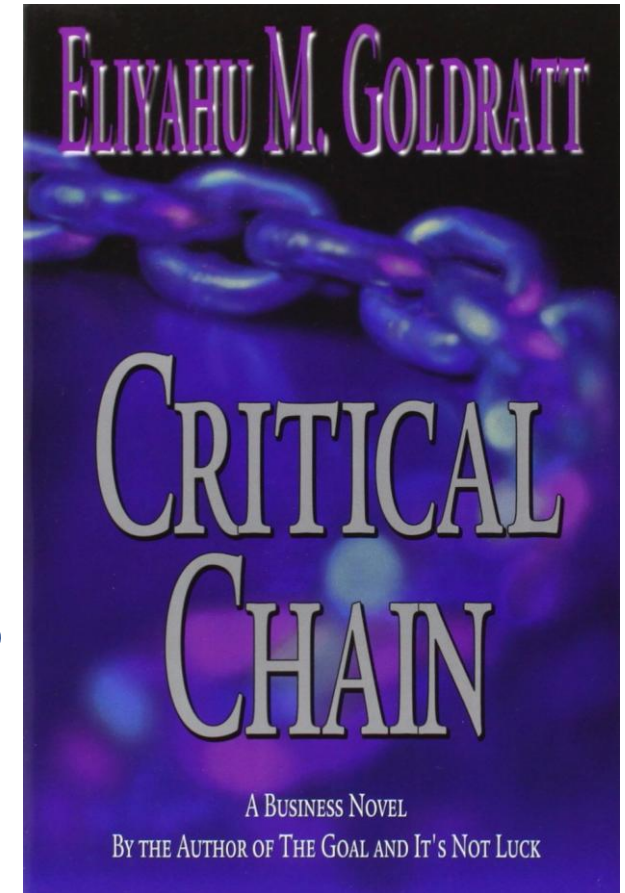


Critical Chain

There is **ALWAYS** something that hinders you to go faster or better



*SW supported tools for critical chain
have not helped me nor the organisation (2x)*



Technology Readiness Level (TRL)

J.v. Engelshoven / Jan 31 2017			available HW / SW			succesfully completed tests			
TRL	Technolgy Readiness level (acc. EU description)	theory	ad-hoc	early proto	final design	proof of concept (targeted function)	lab tests (all functions & side effects)	full system	field tests
1	basic principles observed								
2	technology concept formulated								
3	experimental proof of concept								
4	technology validated in lab								
5	technology validated in relevant environment								
6	technology demonstrated in relevant environment								
7	system <u>proto</u> demonstration in operational env.								
8	system complete and qualified								
9	<u>actual</u> system proven in operational environment								

'What is the Technology readiness progress that you can show me for my R&D \$\$\$?'

marketing

R&D

'Do you really want to sell a technology that is not ready?'



Quality tools

6-sigma

FMEA

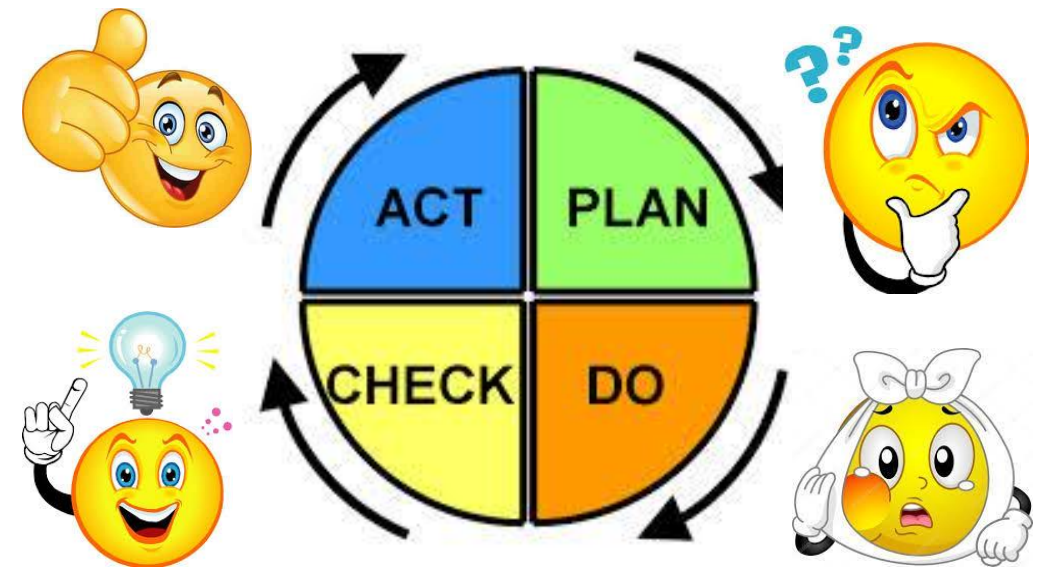
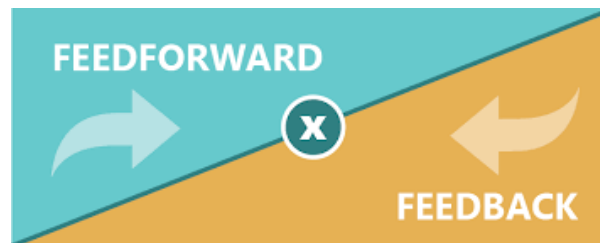
Maturity grid

PDCA

before

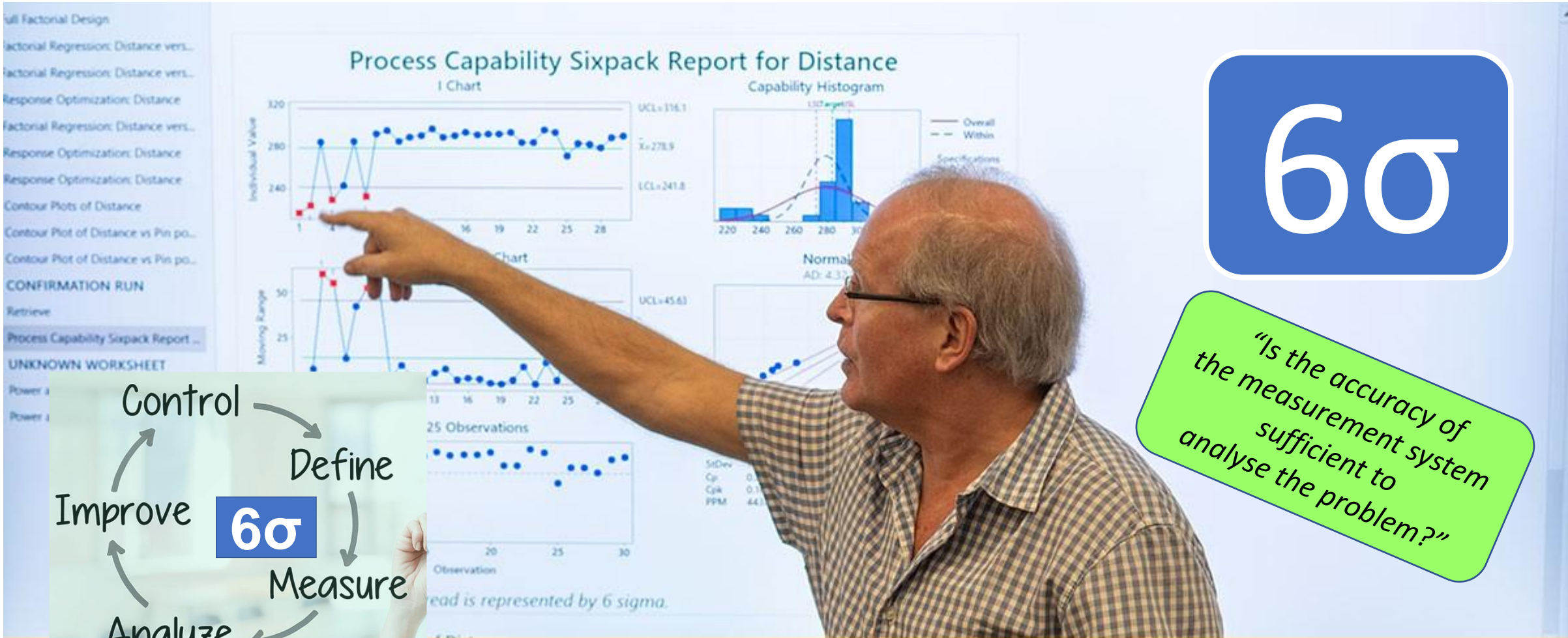
after

problem



‘nothing beats knowing
the business you are in’





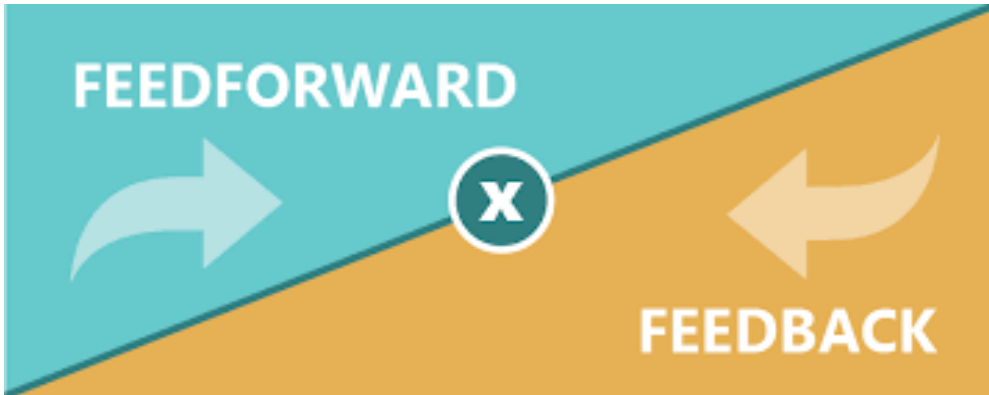
6σ

“Is the accuracy of the measurement system sufficient to analyse the problem?”



U wordt opgeleid tot Six Sigma Green Belt en bent in staat om activiteiten binnen een project uit te voeren volgens de Six Sigma methodiek





Feedback is self-correcting and robust against unmeasured disturbances.

Feedforward is faster but requires a precise model of the system.

In technology (and product) development,
I found feedback (= real world) to be more effective
than feedforward,

as precise model & 'all interactions'
are not known *initially*

Race towards..

Rapid
Proto



Maturity grid: quality metric to help prioritization & communication

“If problem persists, what would be the business impact?”

“where is R&D with problem solving?”

maturity grid	R	A	B	C
4	0	2	0	0
3	0	3	1	0
2	1	1	2	0
1	0	0	0	0

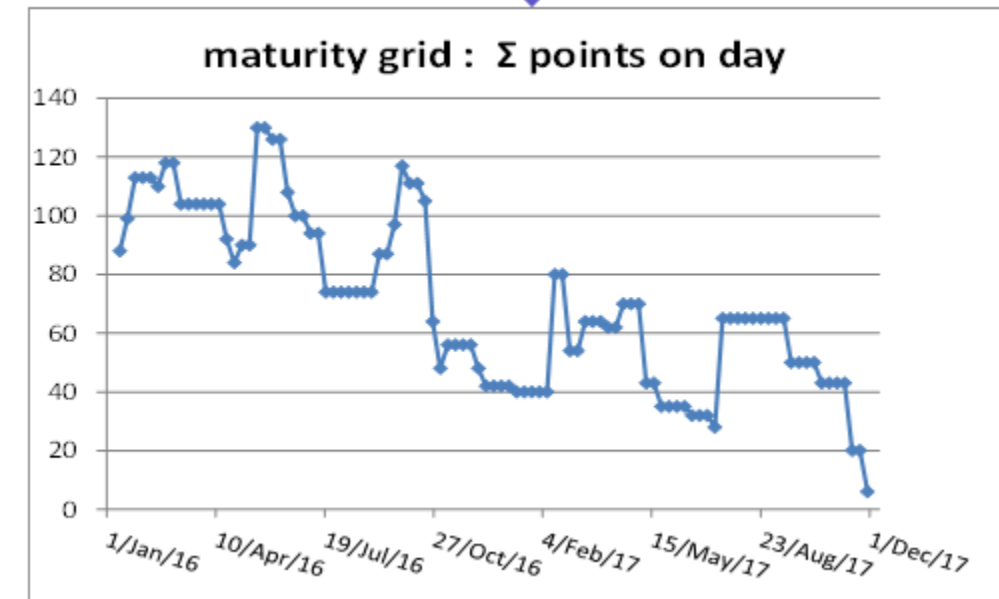
R Regulatory not compliant
 A Not acceptable by any customer or Manufacturing/Service
 B Limited sellable / produceable with difficulties
 C Sellable & produceable with some remarks

4 Cause problem not known
 3 Cause known, solution not
 2 Solution proposed, not yet tested
 1 Solution verified, not yet implemented



Penalty points table for maturity grid

	R	A	B	C
4	32	16	8	4
3	24	12	6	3
2	16	8	4	2
1	8	4	2	1
0	0	0	0	0



Maturity grid: quality metric to help prioritization & communication

"If problem persists, what would be the business impact?"

"where is R&D with problem solving?"

maturity grid	R	A	B	C
4	0	0	0	0
3	0	0	0	0
2	0	0	0	0
1	0	0	0	0

Penalty points table for maturity grid

	R	A	B	C
4	32	16	8	4
3	24	12	6	3
2	16	8	4	2
1	8	4	2	1

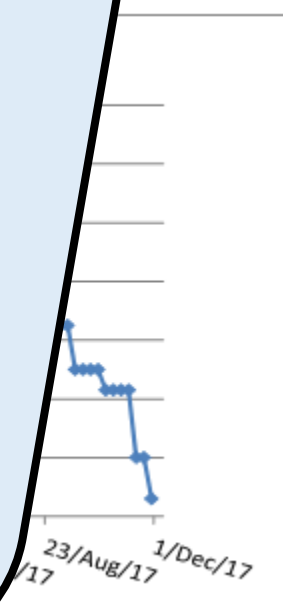
- R Regulatory no
- A Not acceptable
- B Limited sellable
- C Sellable & profitable

- 4 Cause problem not known
- 3 Cause known, solution not
- 2 Solution proposed, not yet tested
- 1 Solution verified, not yet implemented

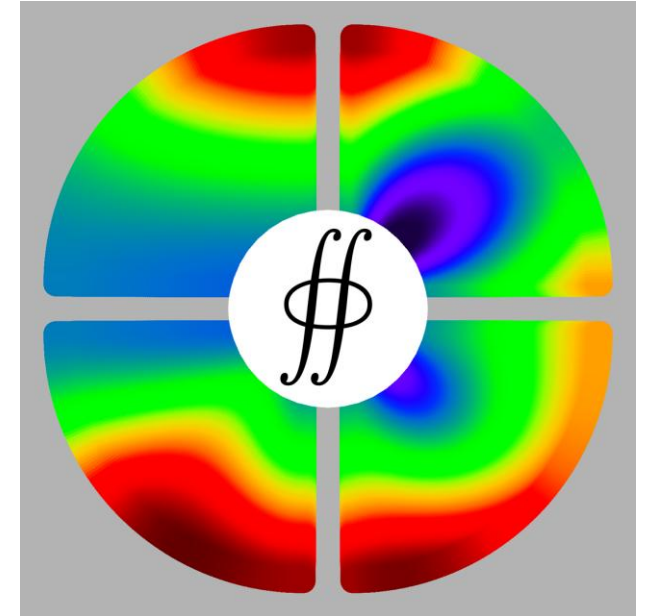
"A problem is only a problem, when it is a week old."

↕

"A solution is only a solution, when it is a week old!"



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Questions ????

Please share your experiences

Thanks for your attention

