RAG

Purpose: To initiate an open collaboration to coordinate – and support – the development and application of the Resilience Assessment Grid (RAG) in healthcare.

> To increase the participants' competence with the RAG as a management tool.
> To compare experiences from using the RAG.
> To enhance the RAG methodology.
> To draft a handbook or guidance for how to use the RAG, including teaching materials.

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Two types of safety management

Region Syddanmark

SAFETY-I

SAFETY-II

SAFETY-I		SAFETY-II
Zero accidents – elimination of preventable harm	**GOALS / TARGETS:** What is the goal or target?	As much as possible goes well (AHARP)
Counting adverse outcomes – things that go wrong.	**POSITION:** Where are we now?	Measuring processes and functions – things that go well.
Linear thinking: eliminate, prevent, protect	**MEANS:** How can we improve?	Non-linear thinking: Improve, support, facilitate
Work-as-imagined: WAI-WAD compliance	**FOCUS:** What should be in focus?	Work-as-done: Reconcile WAI-WAD

What should be measured?

Proxy measures
Resilience potentials (RAG)

Resilient
performance
(WAD)

INPUT PARAMETERS → **PROCESS** → **PRODUCT**

Management policies
Roles & responsibilities
Safety culture
Certification
QA / QM - Lean

Raw data (WAR)
Processed data (WAD)

Safety-I
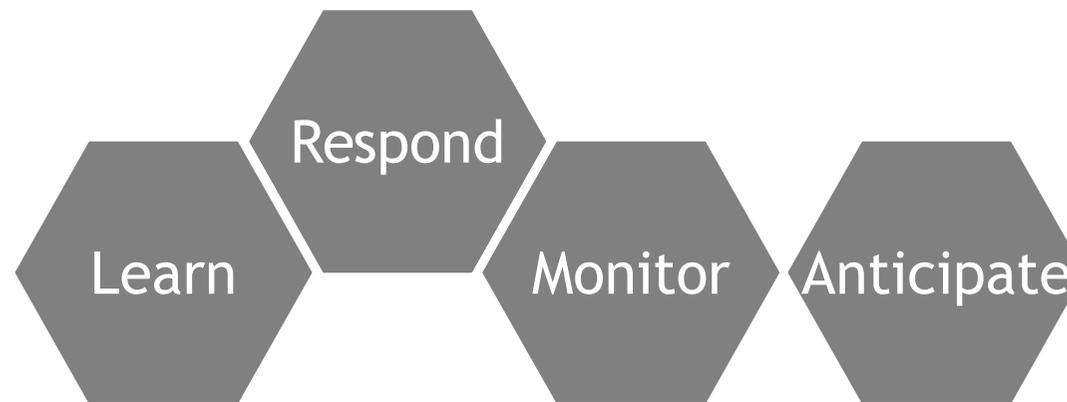performance
(KPI)
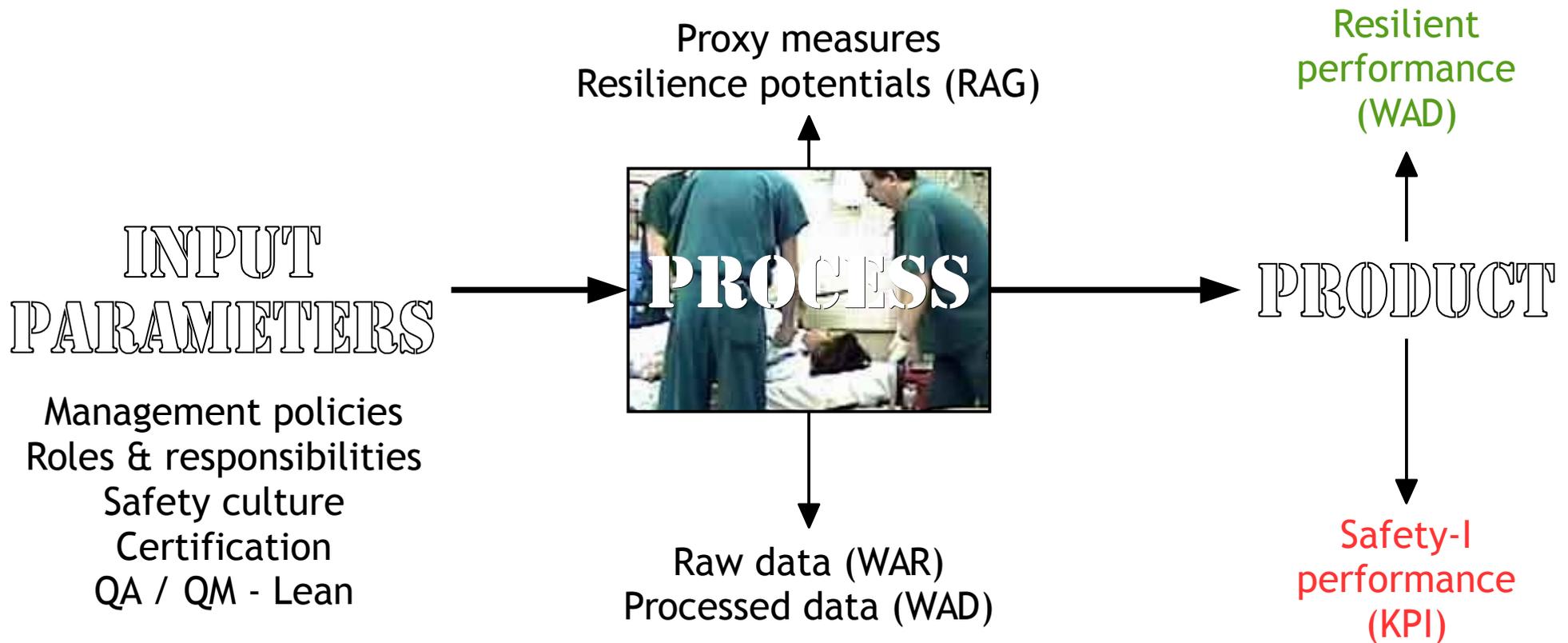
Static electricity ➡ Lightning

Resilience Potentials ➡ Resilient performance

Resilience versus resilient performance

Resilience is an expression of how people, alone or together, cope with everyday situations - large and small — by adjusting their performance to the conditions.

Resilient performance means that an organisation can function as required under expected and unexpected conditions alike (changes / disturbances / opportunities).

Respond

Learn

Monitor

Anticipate

Resilient performance requires that an organisation has the potentials to **respond, monitor, learn,** and **anticipate.**

Four resilience potentials

Improve the potential to **respond** to threats and opportunities alike
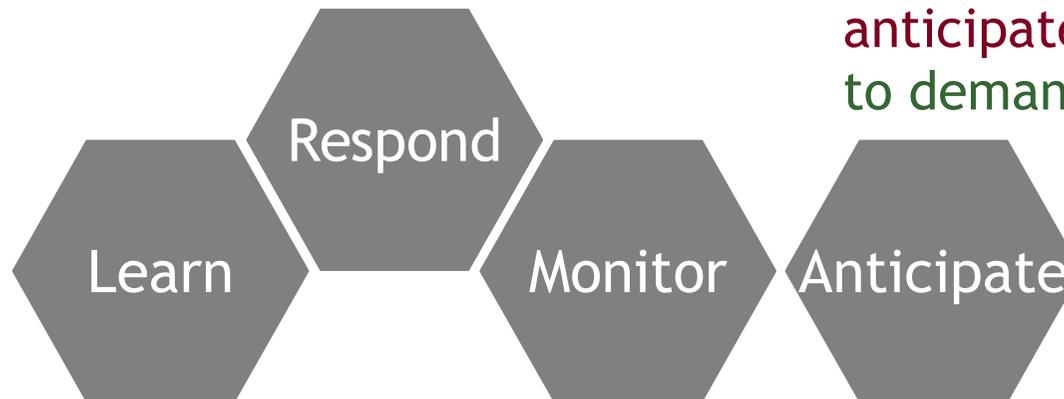
Improve the potential to **anticipate** long-term changes to demands and resources.

Respond

Learn

Monitor

Anticipate

Improve the potential to **learn** both from what goes right and what goes wrong.

Improve the potential to **monitor** what happens externally and internally.

The Resilience Assessment Grid (RAG)

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Potential to respond

Potential to monitor

Potential to learn

Potential to anticipate
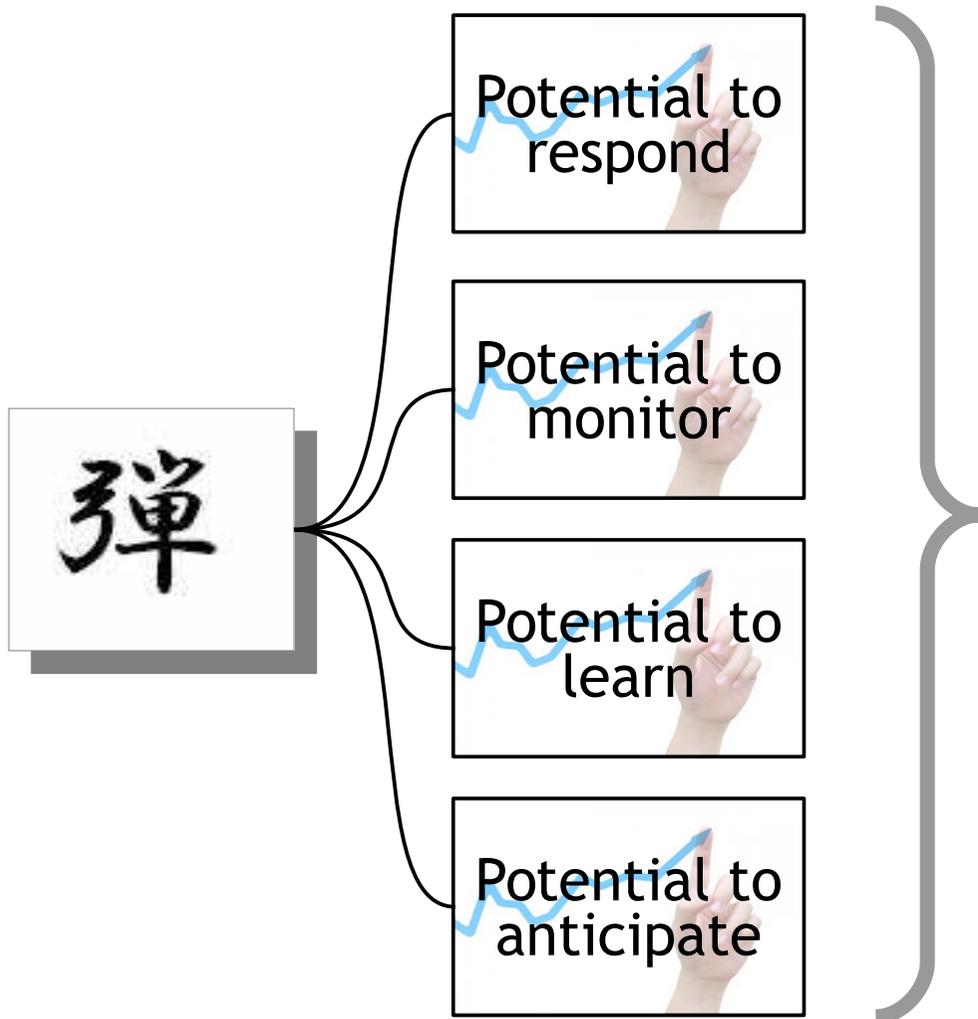
Comprises four sets of questions, one for each potential.

The questions are:

DIAGNOSTIC – point to details of a potential that are meaningful to assess.

FORMATIVE – answers can be used to make decisions about how to improve potentials

SPECIFIC – address issues that are important for an organisation.

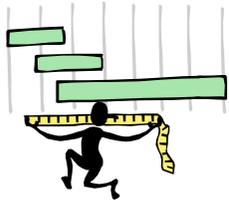# As high as reasonably practicable

Respond

For which events is there a response ready?
What is the threshold of response?
How many resources are allocated to response readiness?
...

Monitor

How have the indicators been defined?
How many indicators are leading and how many are lagging?
What is the delay between measurement and interpretation?
....

Learn

What is the learning based on (successes – failures)?
Is learning continuous or event-driven?
How are the effects of learning verified and maintained?
...

Anticipate

What is the implicit/explicit "model" of the future?
How far does the organisation look ahead ("horizon")?
What risks are the organisation willing to take?
…

The Resilience Assessment Grid (RAG)

To perform in a resilient manner, an organisation must have the potentials to respond, monitor, anticipate, and learn. Resilient performance is not possible if any of the four potentials is missing, even if others may be there in abundance.

The proper balance between the four potentials depends on what an organisation does. For instance, it is very important for a fire brigade to be able to respond. But it may be more important for a business to be able to anticipate.

The RAG provides a measure or profile of how well an organisation does on each of the four potentials. This can be used as the basis for proposing specific ways of either improving an ability or re-establishing the proper balance.

The RAG is a process measure rather than a product measure, since it shows how well an organisation does on each of the four main potentials. It must therefore be made regularly.

Example of generic RAG questions

ITEM - Learning

Does the organisation have a clear plan for which events to learn from (frequency, severity, value, etc.)?

Does the organisation try to learn from things that go well or does it only learn from failures?

Is learning event driven (reactive) or continuous (scheduled)?

Are there any formal procedures for data collection, classification, and analysis?

Is it clear who is responsible for learning? (Is it a common responsibility or assigned to specialists?)

Does learning function smoothly or are there significant delays in the learning process?

Does the organisation provide adequate support for effective learning?

How are 'lessons learned' implemented? (Regulations, procedures, training, instructions, redesign, reorganisation, etc.)

# Example of specific RAG questions

ITEM – Learning; Domain - ATM	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
It is clearly established what should be reported.					
Submitted reports are being investigated sufficiently.					
There are good responses/feedback on submitted reports.					
The time from the submission of a report until a response is acceptable.					
There are sufficient resources to write reports.					
The employees are being motivated to write reports.					
Lessons are learned from things that go right, as well as things that go wrong.					
We meet with personnel from other units to learn from each other.					

Example of RAG (Inner city hospital)

| Question	Contents
1	We have a list of everyday and unexpected clinical, system, and environmental events for which we prepare and routinely practice action plans.
2	We revisit and revise our list of events and action plans on a systematic basis.
3	We follow defined thresholds, actions, and stopping rules to adapt/transform operations and proactively mobilize resources in order to maintain our capacity for response under conditions of increased volume and acuity.
4	We effectively team, communicate and work together within the department, and with other departments and services.
5	We have organizational support and resources to maintain our capability to meet acuity and volume demands.
6	We link our local department adaptations to organizational and health system changes.

Example RAG (potential to respond)

How can this *potentialing* be improved?
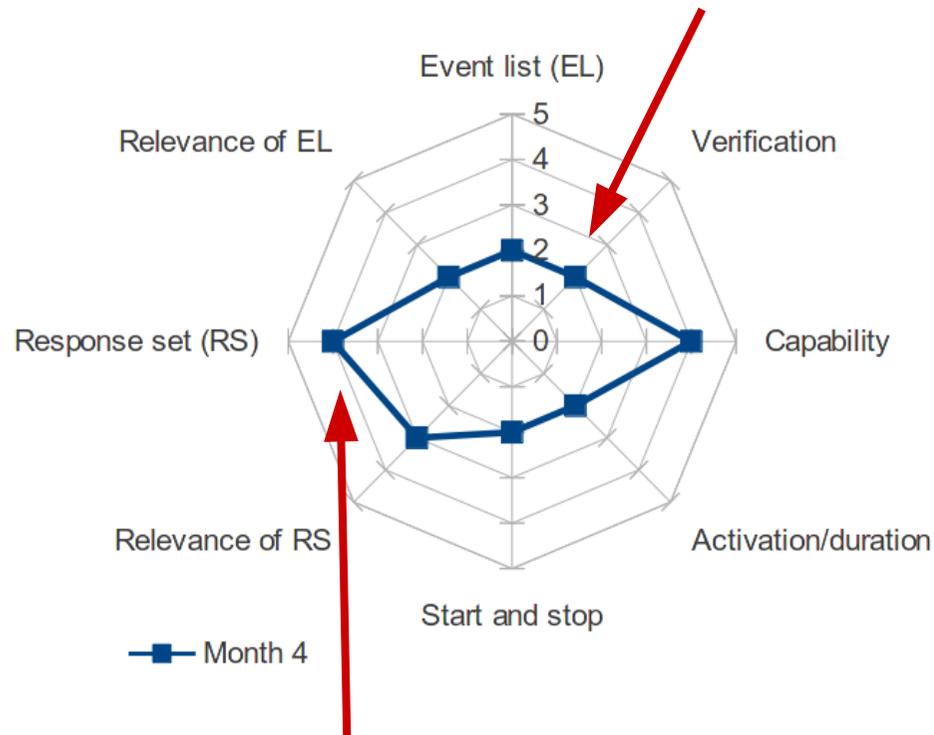
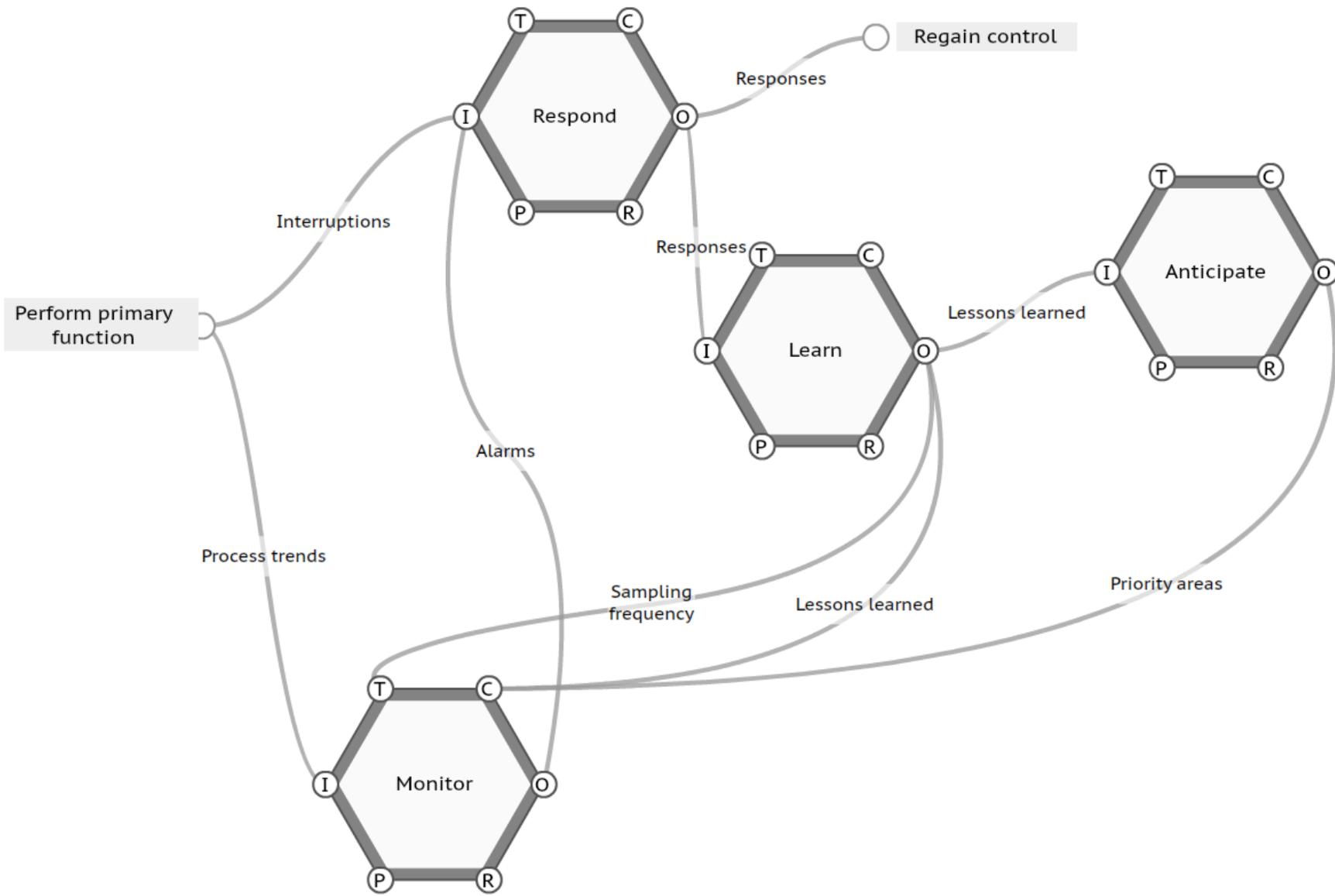How can this *potentialing* be maintained?
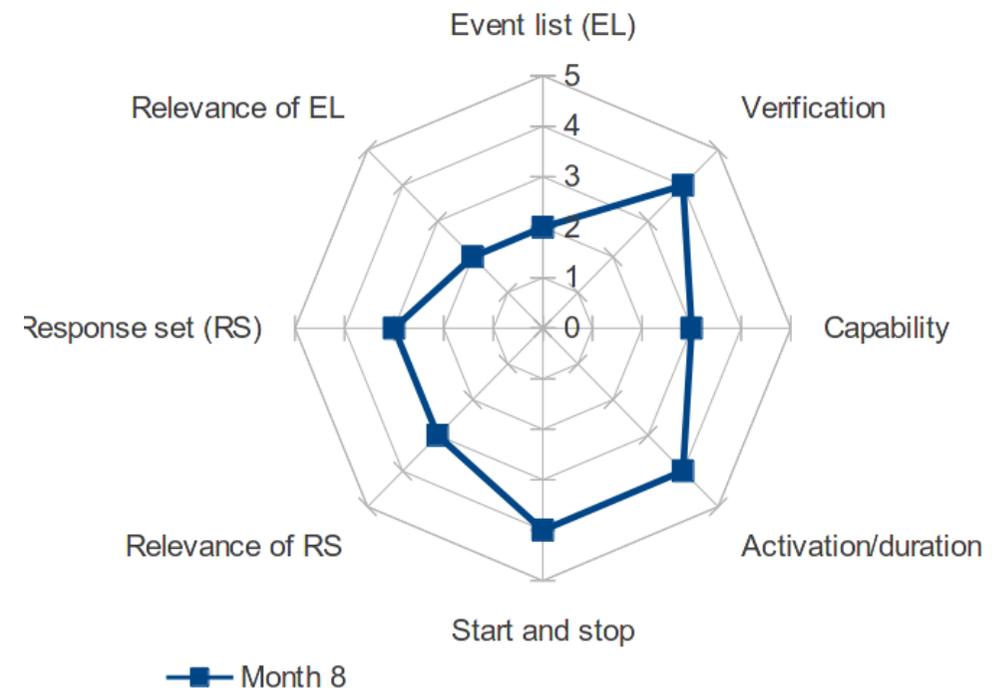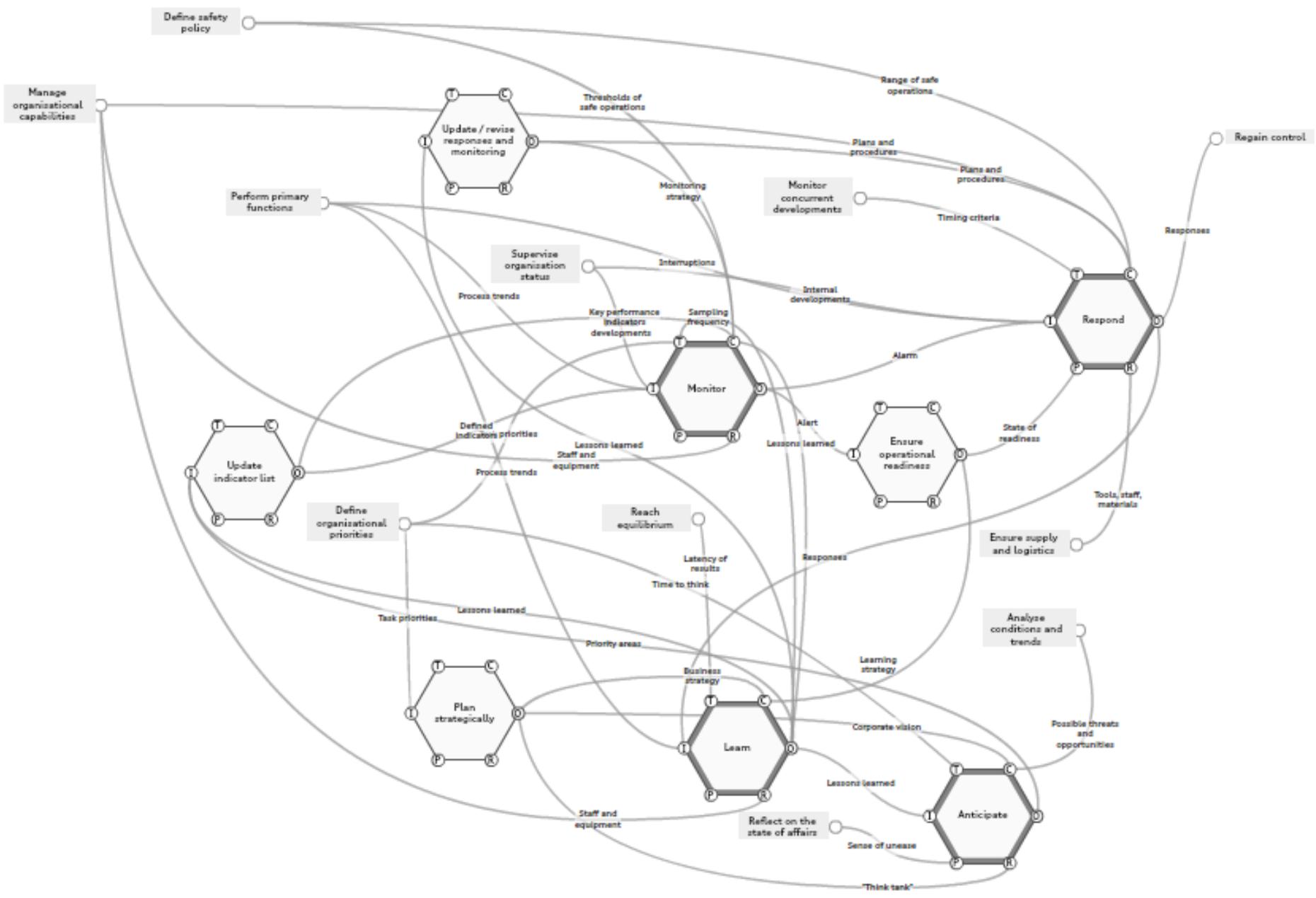
Interpretation of RAG answers

Neither the four potentials, nor the detailed functions for each potential, are independent of each other.
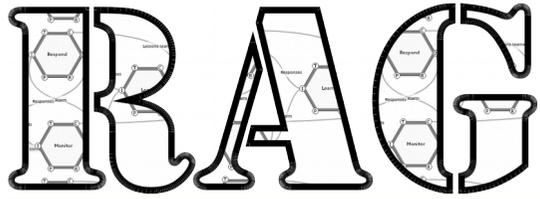
This interdependence (coupling) must be properly understood in order to interpret the answers to the diagnostic questions, and in order to develop and implement effective interventions.

The four potentials, as well as their details, can be described as functions. It is therefore possible to use the FRAM to produce a functional model of the interdependencies.

A FRAM model of the four potentials – and of their details – can be used both to plan effective interventions and to improve the set of diagnostic questions.

Respond

Regain control

Responses

Interruptions

T C
I O
P R

Responses

Learn

T C
I O
P R

Lessons learned

Anticipate

T C
I O
P R

Perform primary
function

Alarms

Process trends

Sampling
frequency

Lessons learned

Priority areas

Monitor

T C
I O
P R

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RAG

Current plans and activities:

Skåne University Hospital (SE): Pilot project with two departments

Region Jönköping County (SE): Evaluate and improve the potential for resilience at a paediatric ward.

CARe (UK): tool to analyse organisational resilience and improve the adaptive capacity of nursing teams

University of British Columbia (Canada): Enhancing resilience in emergency care.

Center for Quality (DK): Method development, producing and testing practical RAG guidelines; interface to other domains.