

Continuous Improvement for TFL Production

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Continuous improvement overview



Usual activities at CRO:

- Maintaining performance
- Control over work

These activities can prevent change and improvement

Continuous improvement - aim to improve:

- Price
- Cost
- Productivity
- Delivery
- Responsiveness
- Customer and Employee satisfaction

Outcome:

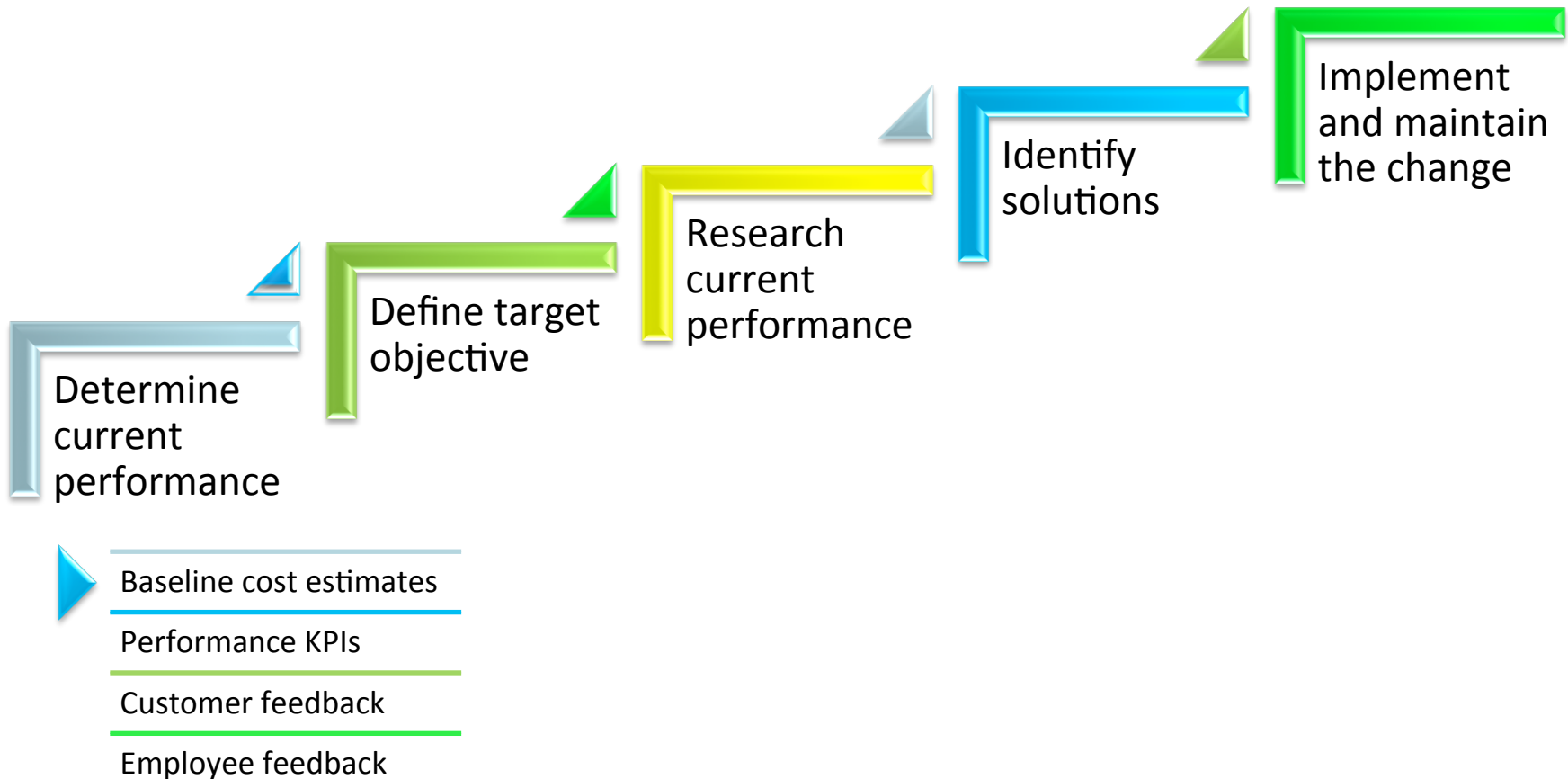
Establish a process that everyone can repeat



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The 5 steps



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Step 1: Determine current performance



Performance measure	Process	Business Critical	High Cost Impact	High Time Impact	High Delivery Impact
Baseline Cost Estimates	Table Programming	High	High	High	High
	Listing Programming	Medium	Medium	Medium	High
	Figure Programming	Medium	Medium	Medium	High
	Dataset programming & validation	High	High	High	Medium
	SDTM programming	High	High	High	Medium
	ADaM programming	High	High	High	Medium
	SDTM / ADaM documentation	Medium	Medium	Medium	Low
	Output delivery	High	Medium	Medium	High



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Step 1: Determine current performance



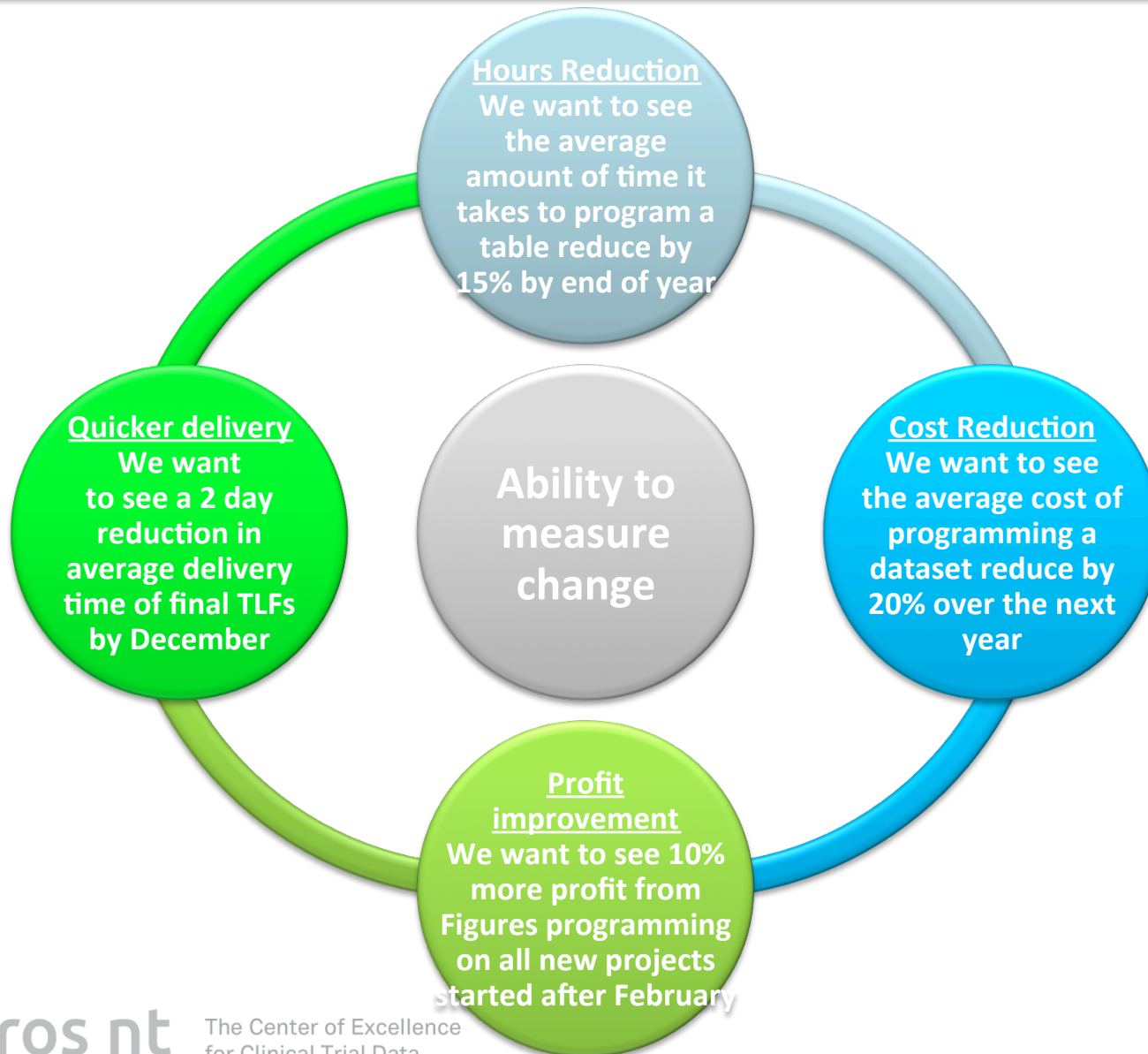
Performance measure	Process	Business Critical	High Cost Impact	High Time Impact	High Delivery Impact
Performance KPIs	Table Programming	High	High	High	High
	Dataset programming & validation	High	High	High	Medium
Customer Feedback	Output delivery	High	Medium	Medium	High
Employee Feedback	Table Programming	High	High	High	High
	Figure Programming	Medium	Medium	Medium	High



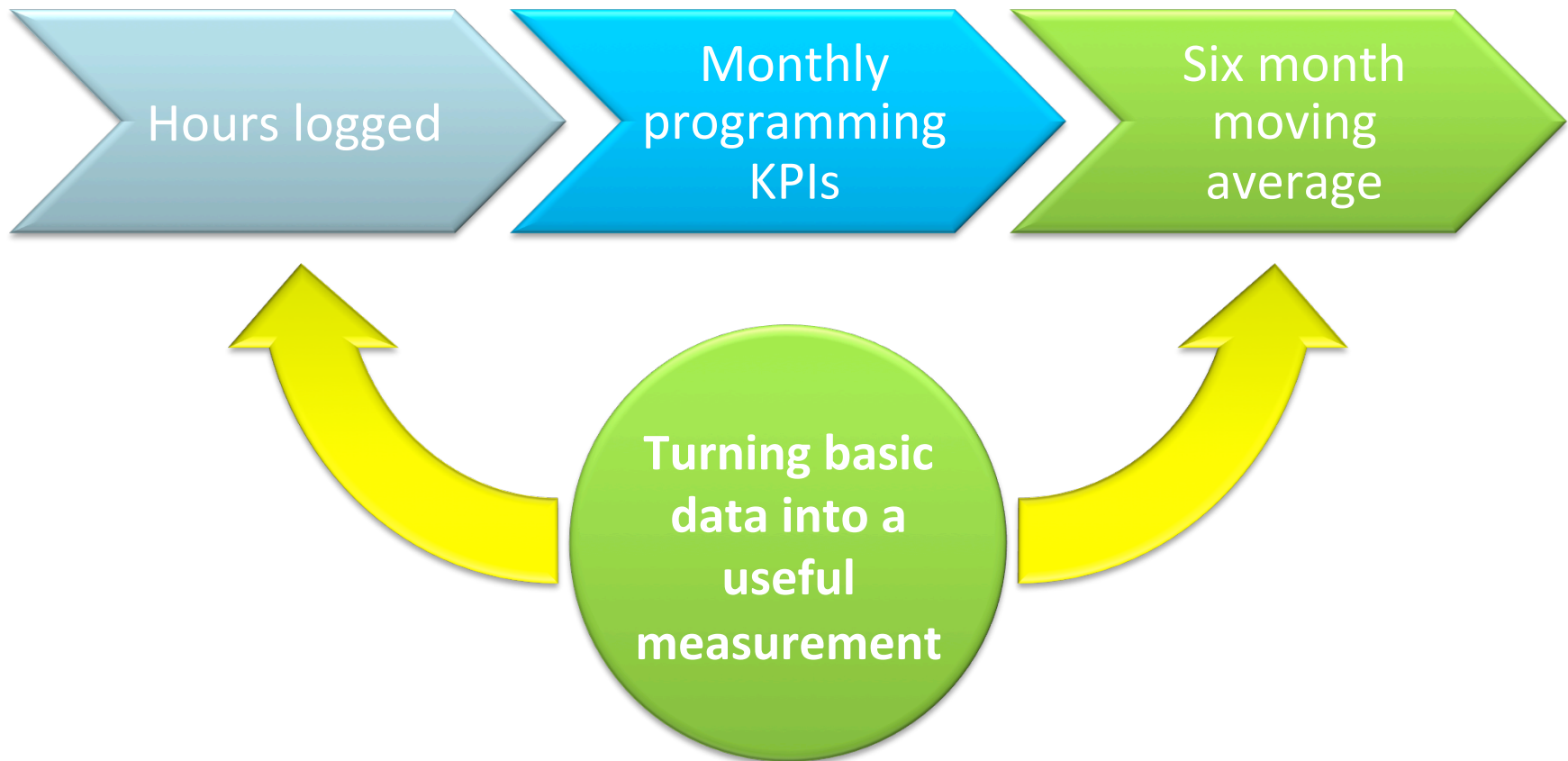
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Step 2: Define the target objective



Step 2: Define the target objective



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Step 3: Research current performance



Step (Activity)	Resource used	Time taken for step	Cost of resource	Cost of step	Rate of resource	Revenue from step	% profit from step



Break down the process into each individual step that is required, include

Preparation activities

Waiting time

Movement of items within the process

Deliverables produced



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Table programming: Steps



Utility Programs



- ☐ Copy
- ☐ Update
- ☐ New Formats

Macros



- ☐ Copy
- ☐ Update
- ☐ New Macros

Programs



- ☐ Copy
- ☐ Update
- ☐ New Programs



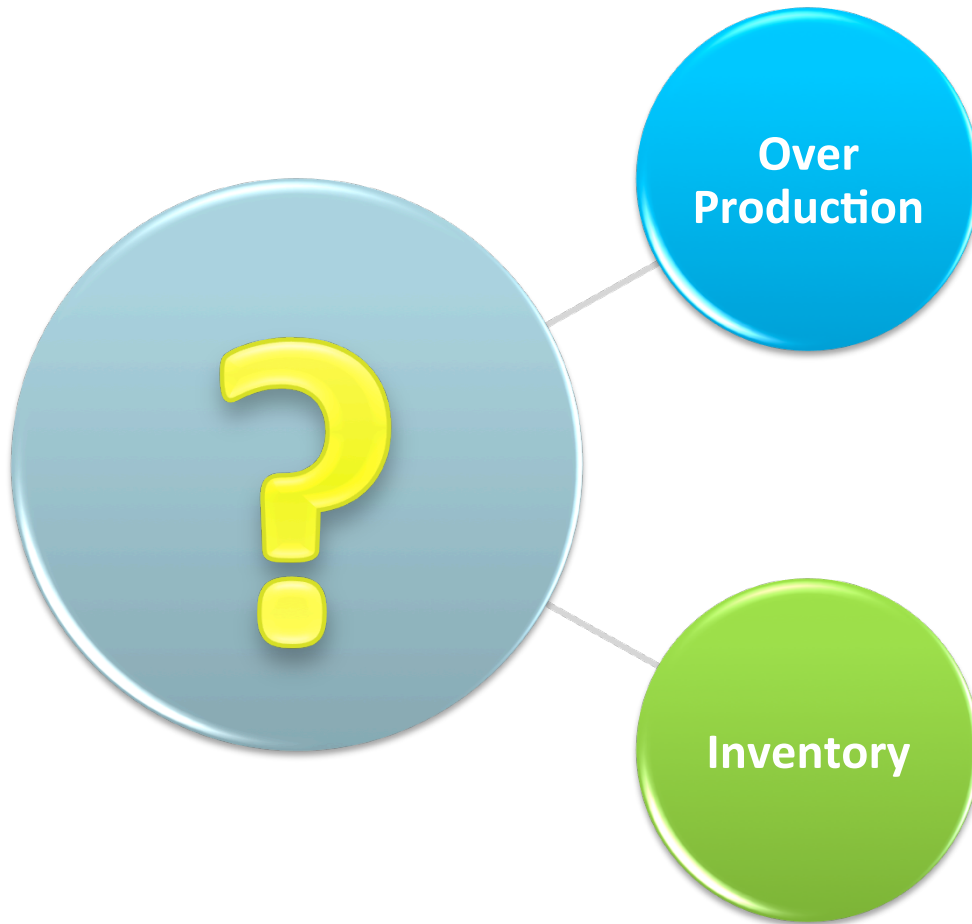
Produce Production



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Step 3: Question your process



- *Are there any tasks where we are:*
 - *completing tasks sooner than needed?*
 - *producing deliverables faster than needed?*
 - *providing more deliverables than the customer requires?*

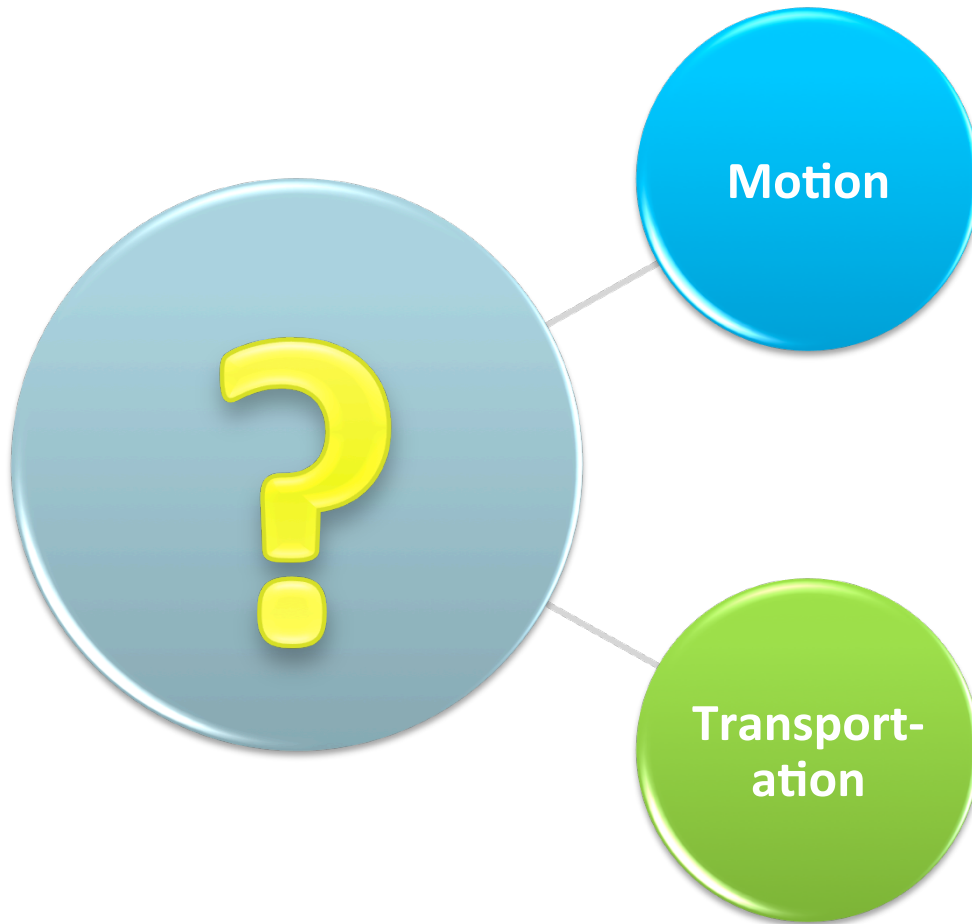
- *Are we gathering more information than we need to conduct a task?*
- *Do we have documents that are produced but not used?*



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Step 3: Question your process



• *Do we have unnecessary movement of...*

- *People*
- *Documents*
- *Tasks*
- *Information*
- *...within a process?*

• *Do we have unnecessary movement of...*

- *People*
- *Documents*
- *Tasks*
- *Information*
- *...between areas of work (offices and departments)?*



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Step 3: Question your process



- *Do we have people who wait for the work to be completed?*
- *Do we have tasks that wait for people to do them?*
- *Do we spend time waiting for information?*
- *Does information have to wait before being processed?*

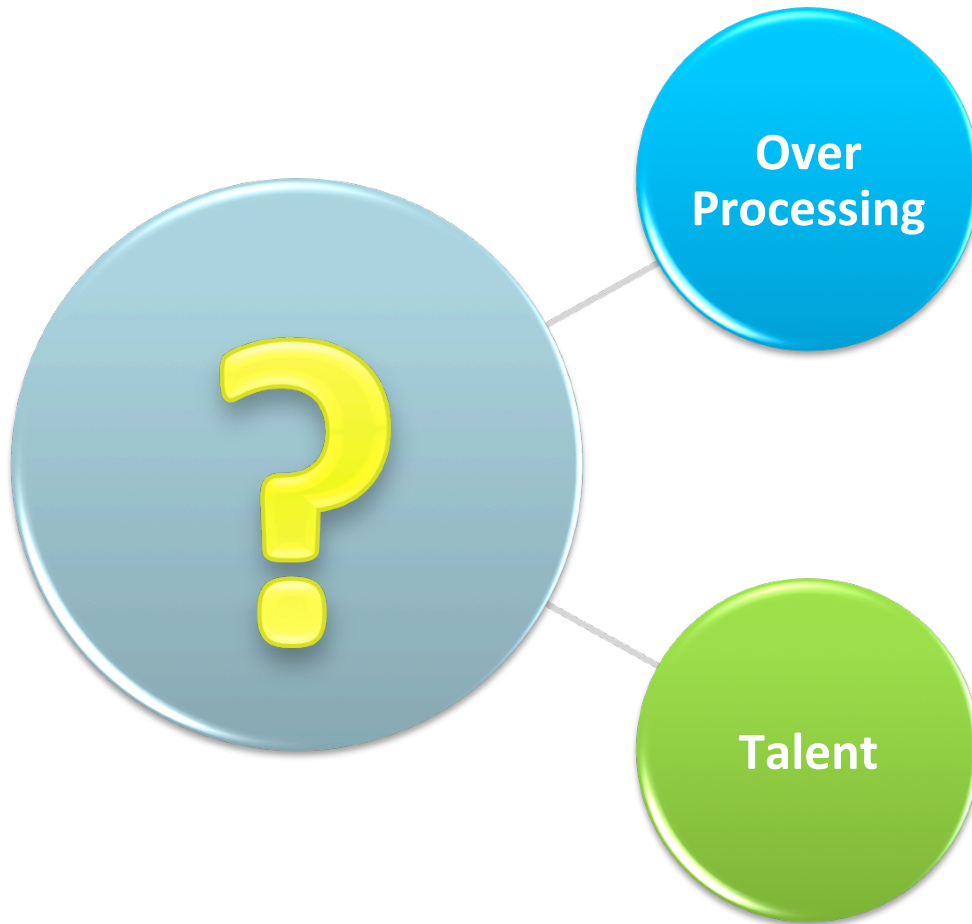
- *Do we have a large amount of tasks or documents which are not right first time?*
- *Do we have repetition or correction of a process?*
- *Do we use incorrect information?*



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Step 3: Question your process



- *Do we process beyond the standard required by the customer or regulatory agency?*
- *Do we process more than necessary to produce the desired output?*
- *Do we unnecessarily use expensive resource?*

- *Are there areas where we are underutilising people's talents, skills and knowledge?*
- *Are there areas where we are not providing the right skills to the right people?*
- *Are there areas where we can make a change to the skills, talents and knowledge to positively affect any area of the process?*



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Step 4: Document inefficiencies, identify solutions

Inefficiency



Solution

Step 4: Document inefficiencies, identify solutions



Step 5: Plan and implement the change



Who will manage the change?

Who does the change affect?

How will the communication of the change be managed?

What quality documents need updating and who will do this?

What other documents need updating and who will do this?

What training is required and who will do this?



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Step 5: Performance controls



Project hours vs baseline cost estimates

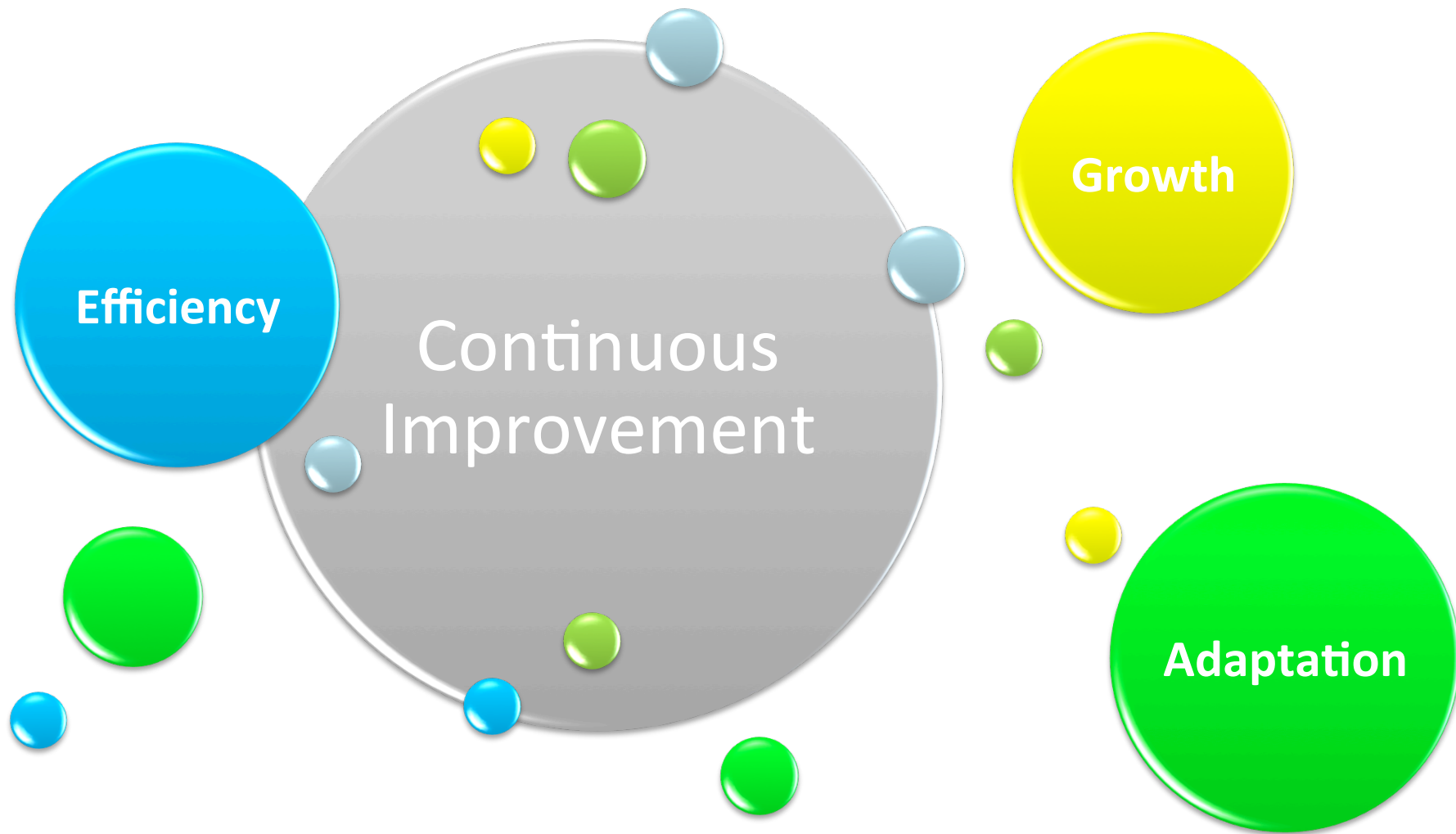
KPIs

Customer feedback

Employee feedback

Other options

Conclusion



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