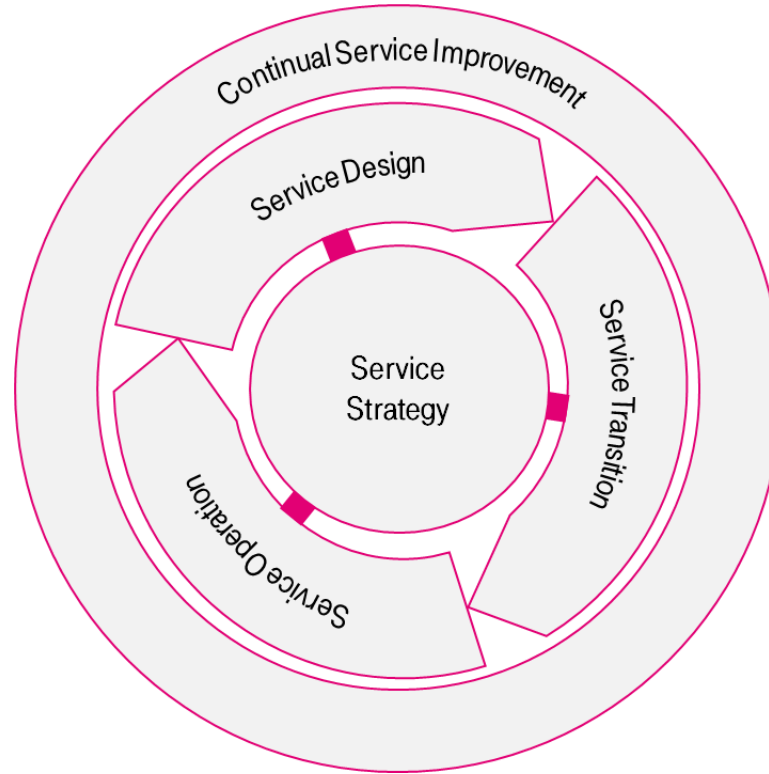


**DEEP DIVE**

→ **Continual Service Improvement**

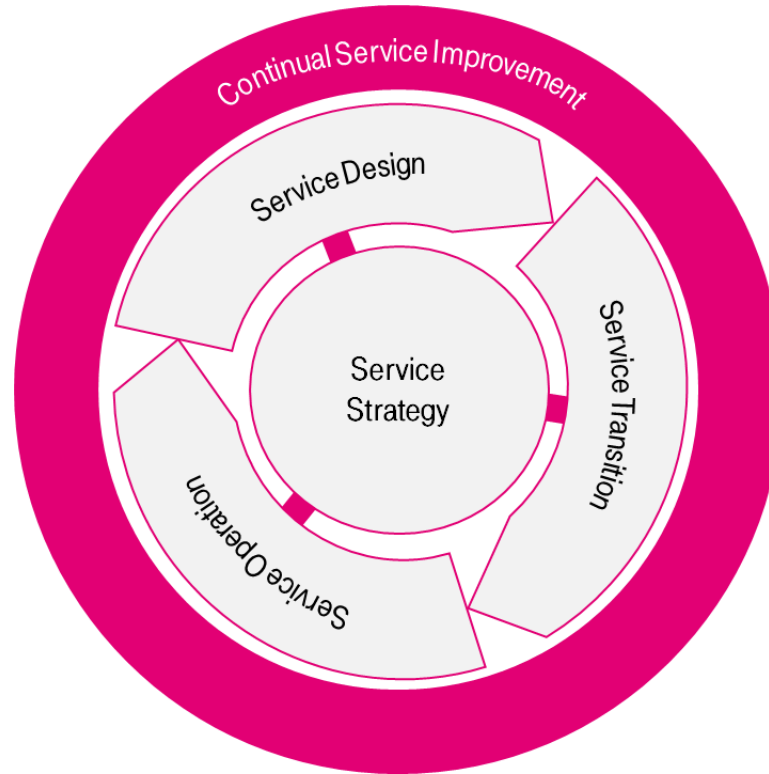
# CONTINUAL SERVICE IMPROVEMENT - INTRODUCTION



# CONTINUAL SERVICE IMPROVEMENT - INTRODUCTION

Concept of  
Service  
Improvement

Where do ideas  
come from

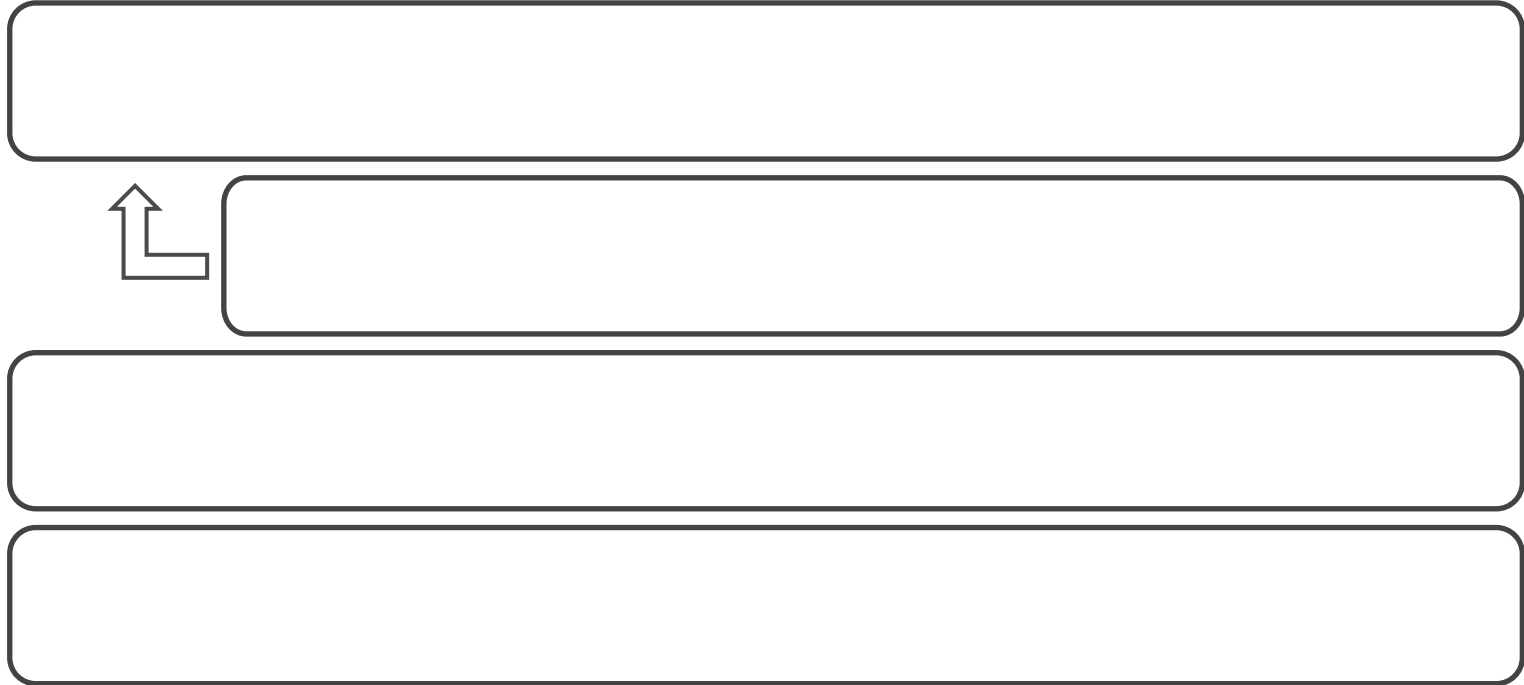


Why is it  
necessary

The CSI Core  
Processes

# WHAT DOES “SERVICE IMPROVEMENT” MEAN?

Discussion: What improvements to popular services (IT or non-IT) have you experienced?



Four horizontal text input boxes are stacked vertically. The second box from the top has a small icon to its left consisting of an upward-pointing arrow and a rightward-pointing arrow, indicating a list or sequence.

# WHY IS SERVICE IMPROVEMENT NECESSARY?

- Why should we try to improve a service?
- Classical saying: “If it ain’t broken, don’t fix it” – why do we go against this wisdom?

Exercise: Think of at least three reasons why improvement is necessary

# REASON 1 – OUR SERVICE IS NOT PERFECT

- Not even the best service is perfect.
- Small deficiencies and flaws become jarring over time.

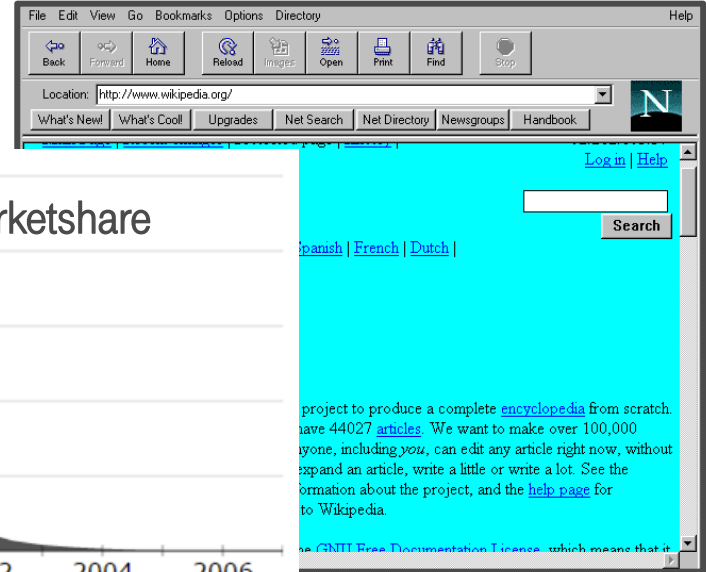
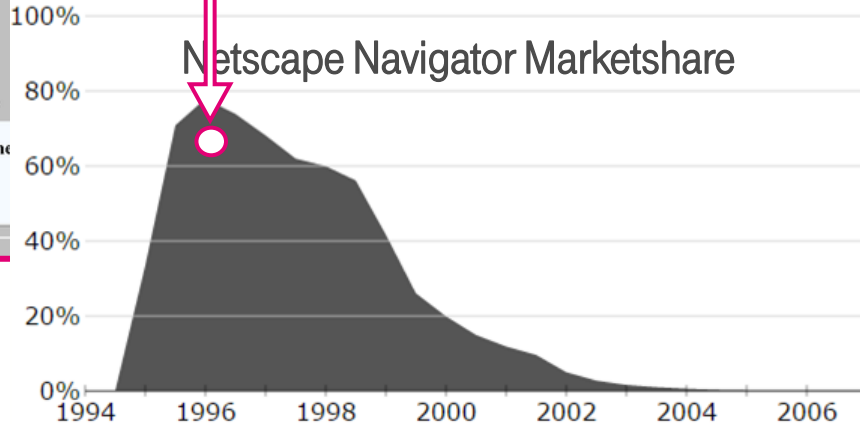
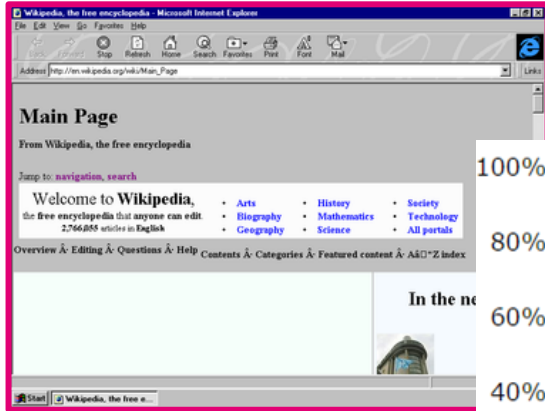
No indicators on first cars

People stretched their arm out to indicate intent to turn



# REASON 2 – COMPETITION NEVER SLEEPS

- Profitable service attracts competitors.

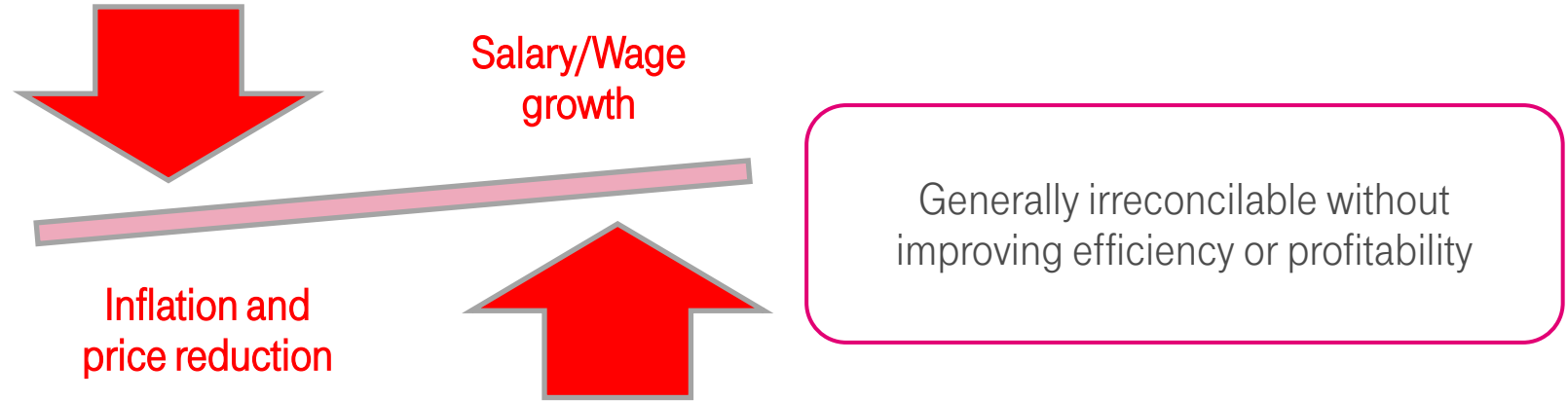


## REASON 3 – ATTRACTING NEW CUSTOMERS

- There are potential customers that did not become actual customers of current service.
- The original service was not meeting expectations of these customers.
- The service must improve (from the perspective of these customers) to attract them.

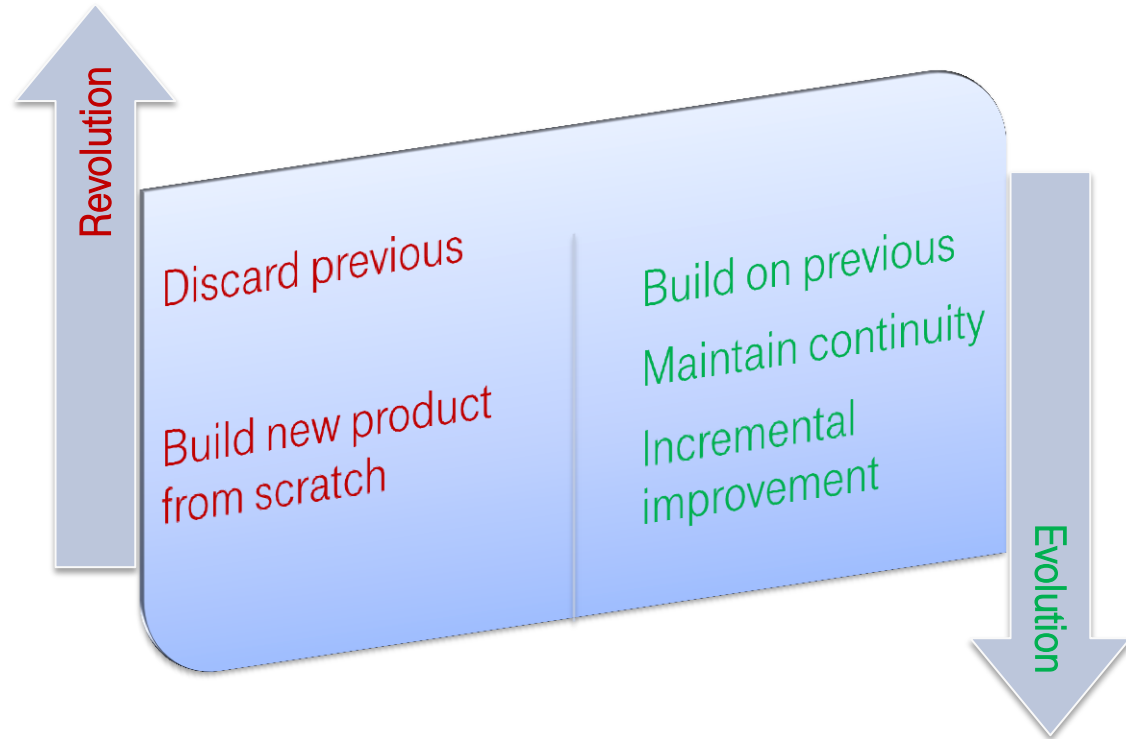


# REASON 4 – FINANCIAL PRESSURE

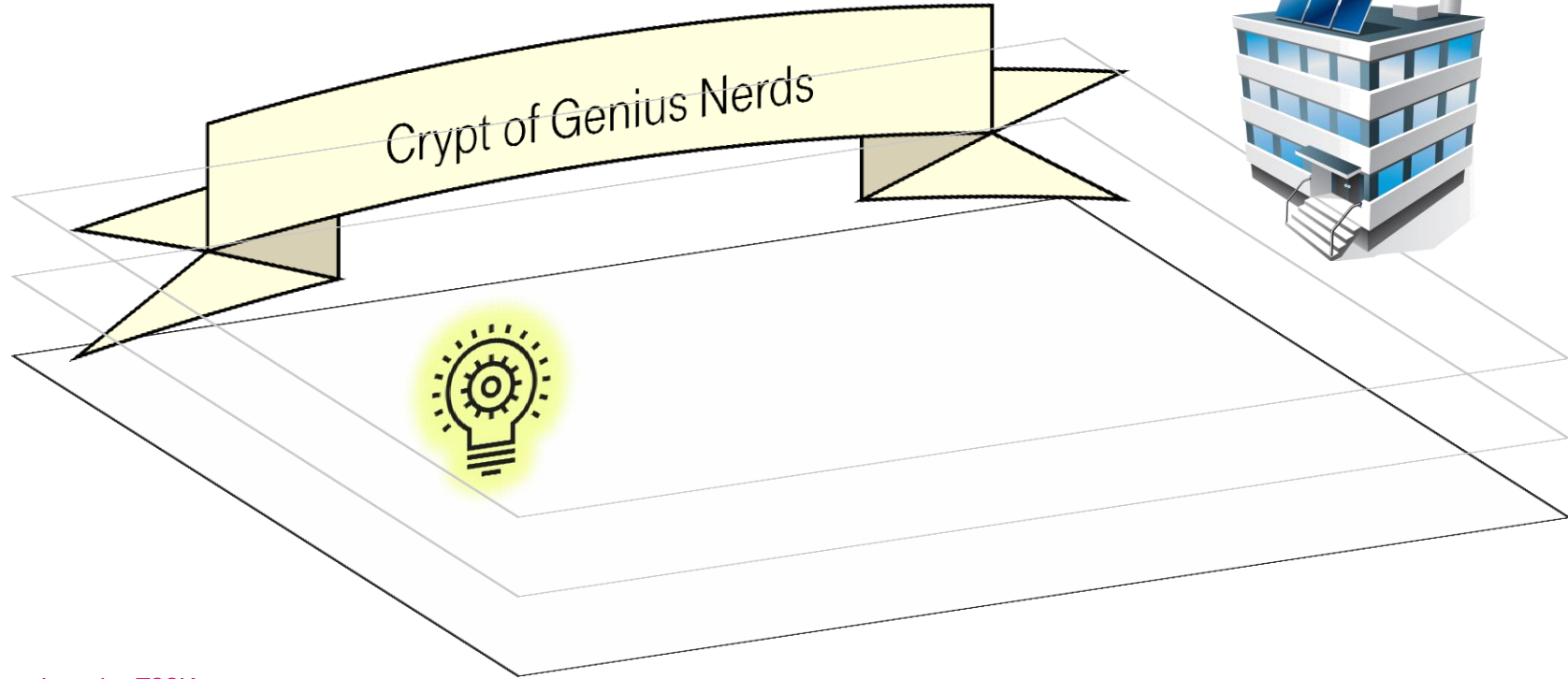


# WHY CONTINUAL IMPROVEMENT?

- Service Improvement is necessary to keep or improve market position.
- But why “continual”?

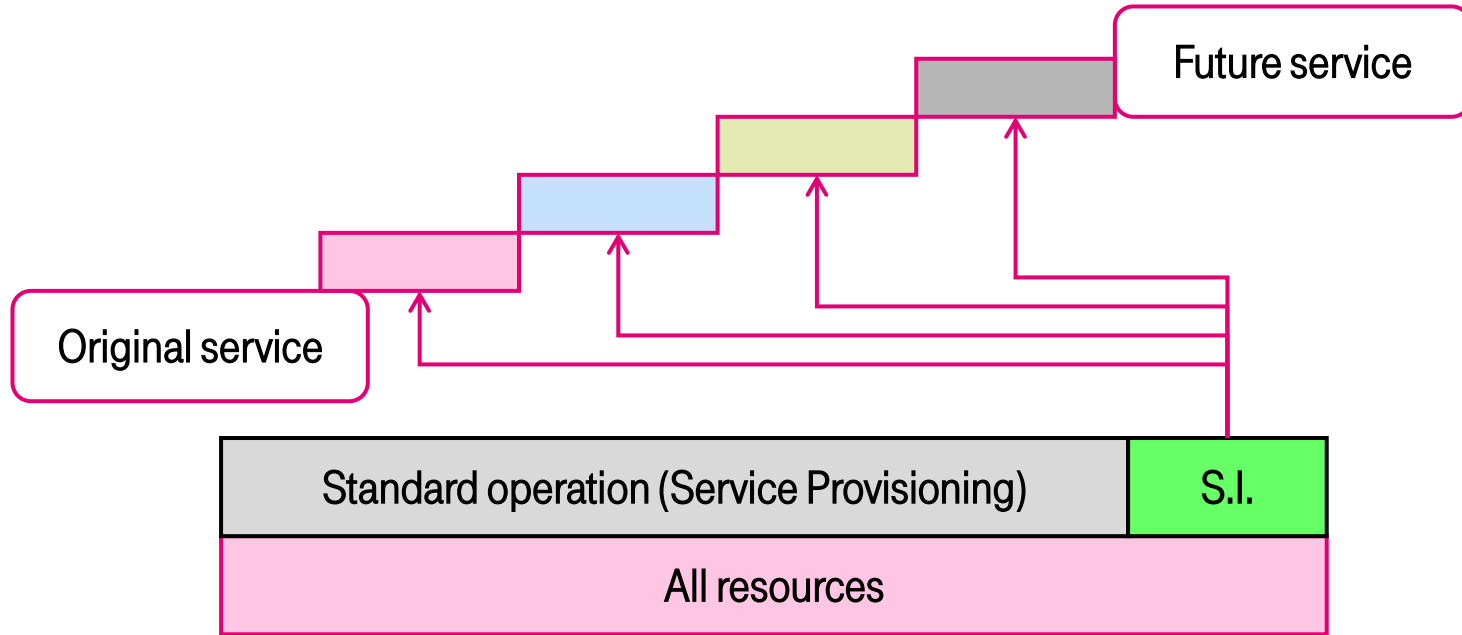


# REVOLUTIONS ARE NOT MANAGEABLE



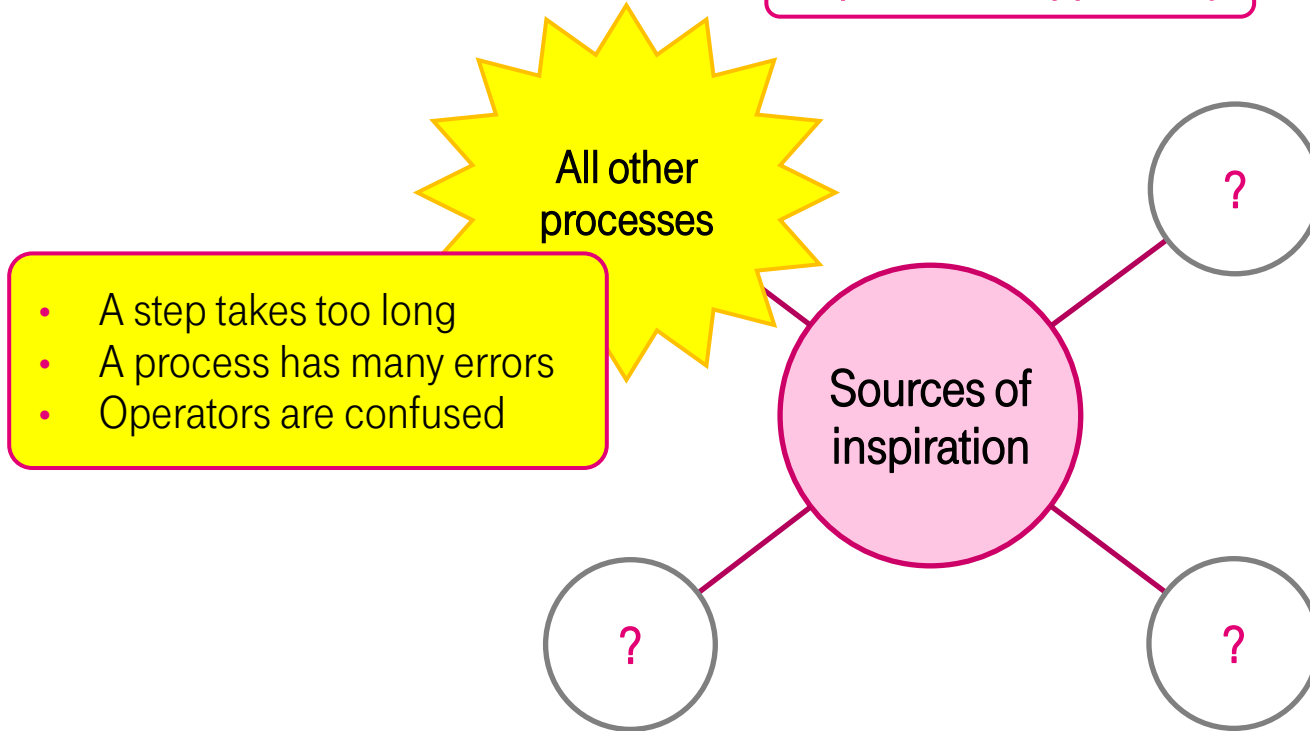
# IMPROVEMENTS TAKE TIME

- Improvements typically require a lot of effort, research and experimentation.
- **S**ervice **I**mprovement activities strain available resources and must be properly planned.

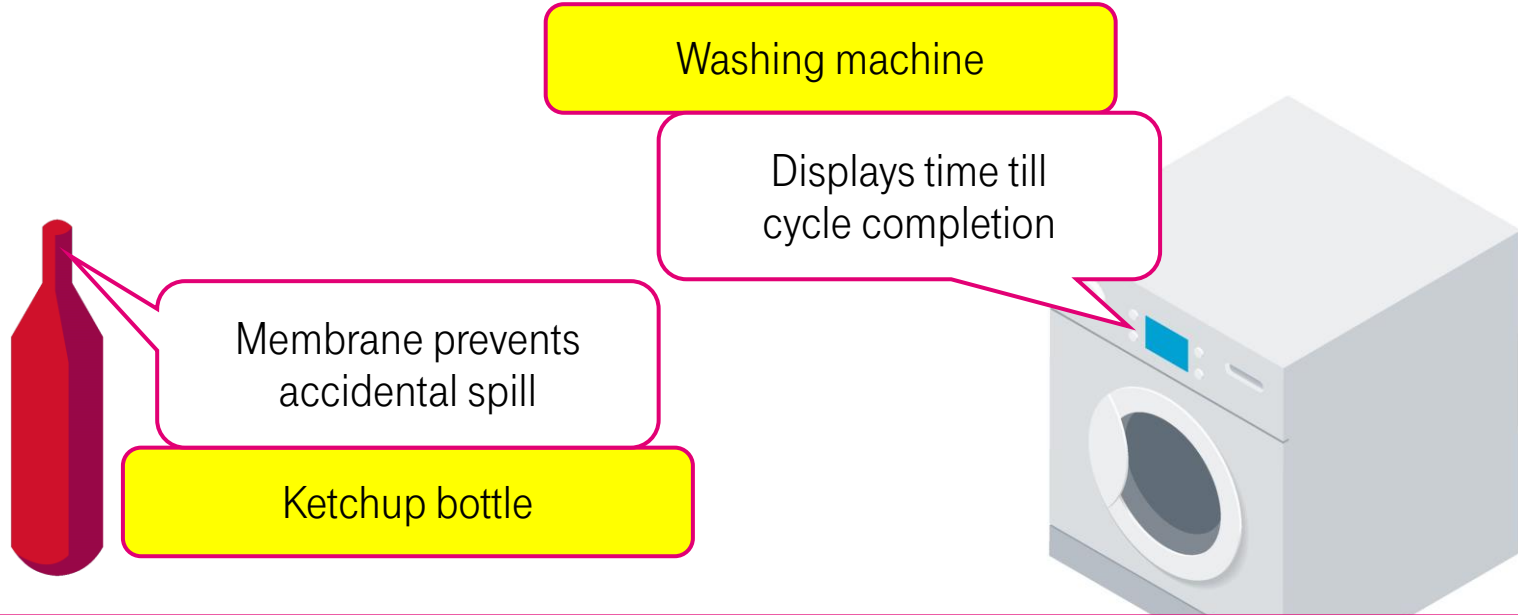


# SOURCES OF INSPIRATION FOR IMPROVEMENT

- Before a service can be improved, an **Improvement opportunity** must be identified.



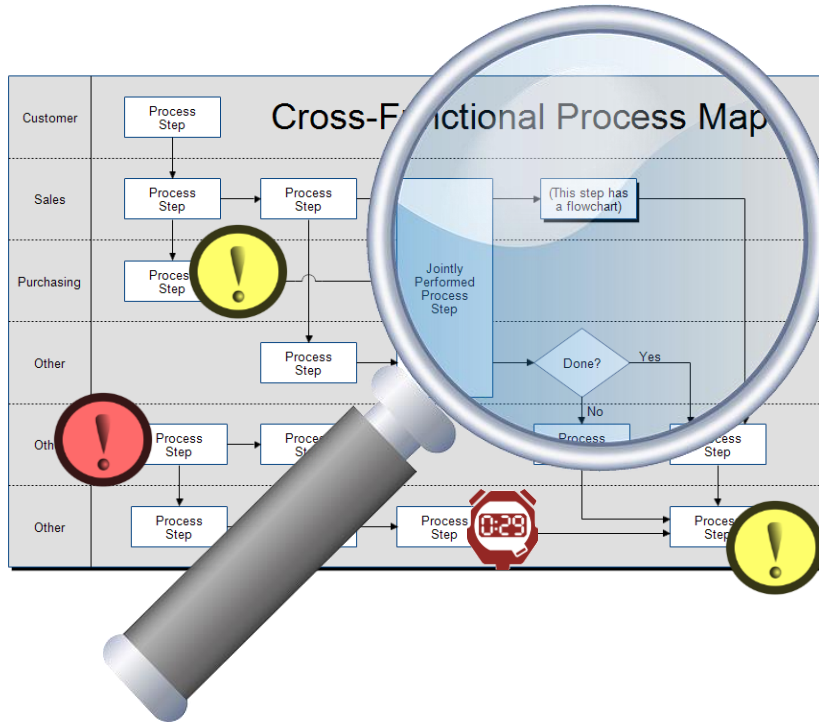
# EXAMPLES



Formal search for improvement opportunities within internal processes:

## PROCESS REVIEW

# PROCESS REVIEW



Problem review report

Slow process step

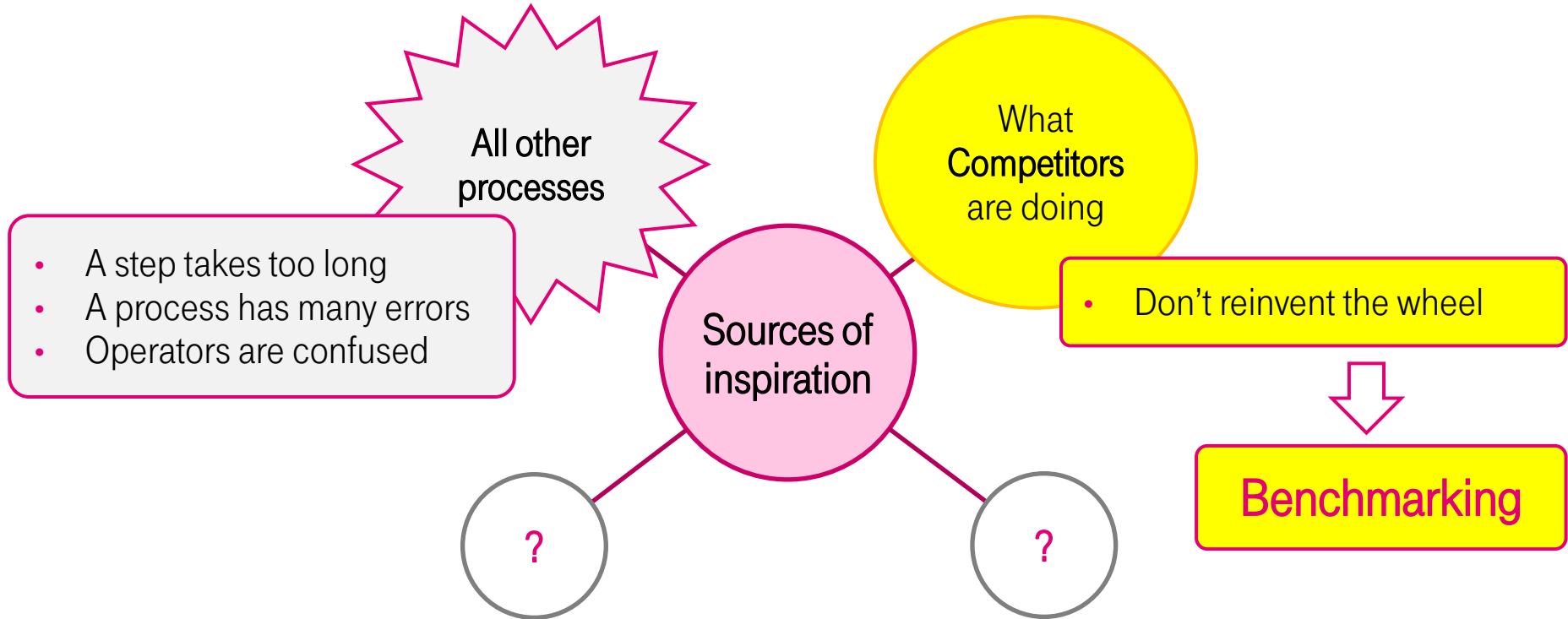
High error rate

Significant error rate

Significant error rate


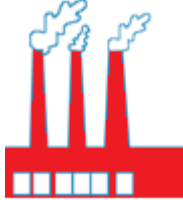
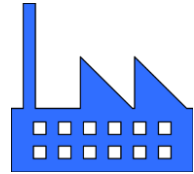
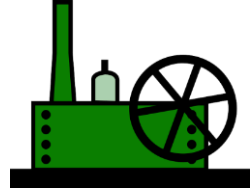
# SOURCES OF INSPIRATION FOR IMPROVEMENT

- Before a service can be improved, an **opportunity for improvement** must be identified.





# BENCHMARK

				
		RED	BLUE	GREEN
	+	Faster cloud	Better networks	DBs, Networks, cloud
	-	Higher error rate	Worse databases	-

# BENCHMARK

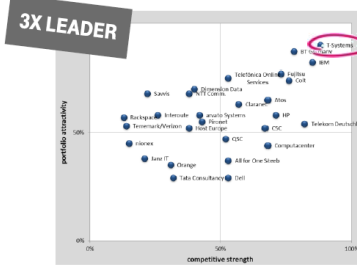
## ANALYSTS CONFIRM A STRONG VISION AND EXECUTION.

### GARTNER MAGIC QUADRANT: DATA CENTER OUTSOURCING



"T-Systems is the most visionary player for Data Center Outsourcing and Utility Services."

### EXPERT ON CLOUD VENDOR BENCHMARK



"In 2013, T-Systems is the dominant player for 'Managed Cloud IaaS', too."

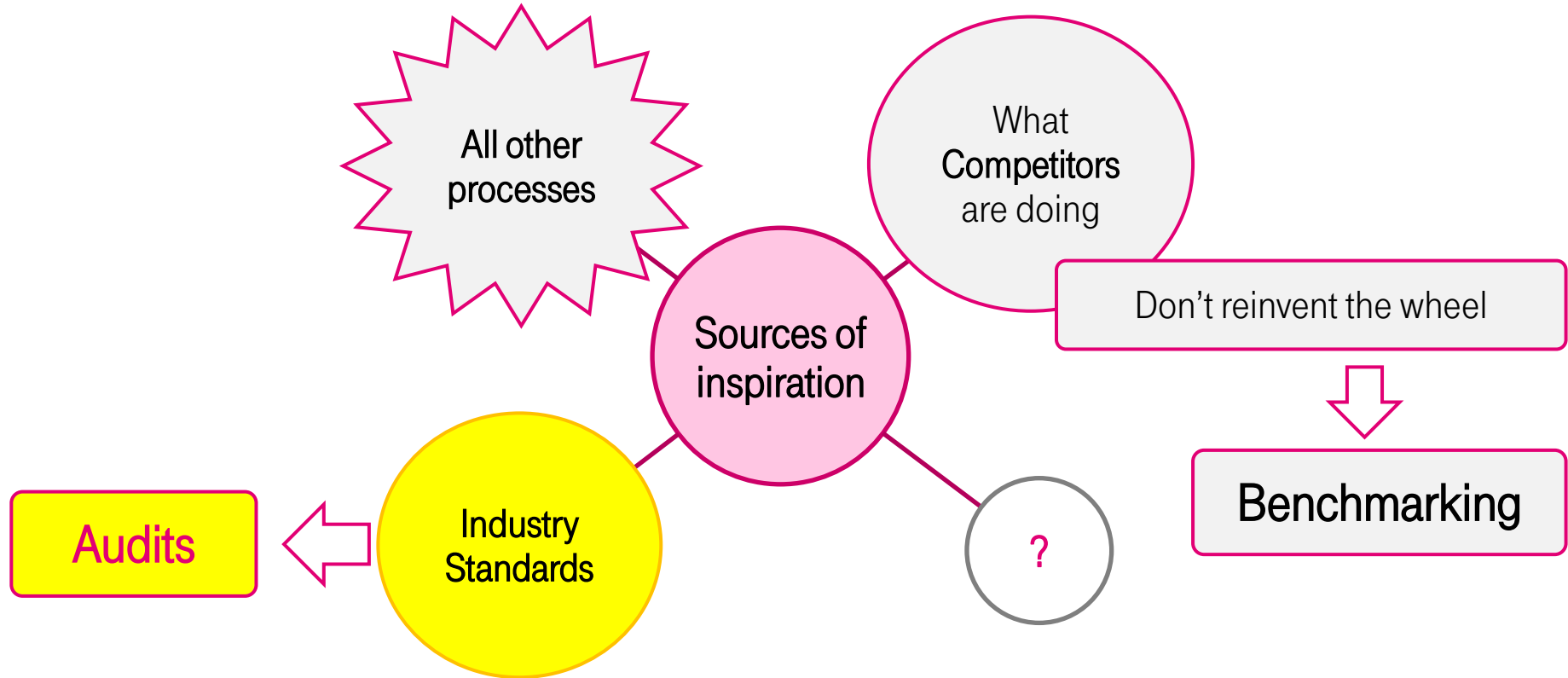
### EXPERT ON BIG DATA BENCHMARK



"T-Systems fully transferred the company's vision of Big Data into a clear strategy."

# SOURCES OF INSPIRATION FOR IMPROVEMENT

- Before a service can be improved, an **opportunity for improvement** must be identified.



# AUDIT

		AUDITOR's CHECK							
		1	2	3	4	5	6	7	8
LEGAL / STANDARD OBLIGATIONS	1	OK							
	2		S						
	3			R					
	4				S				
	5					OK			
	6						NC		
	7							S	
	8								R

Recommendations are clearly areas for improvement

Strengths can become part of the standard in the future

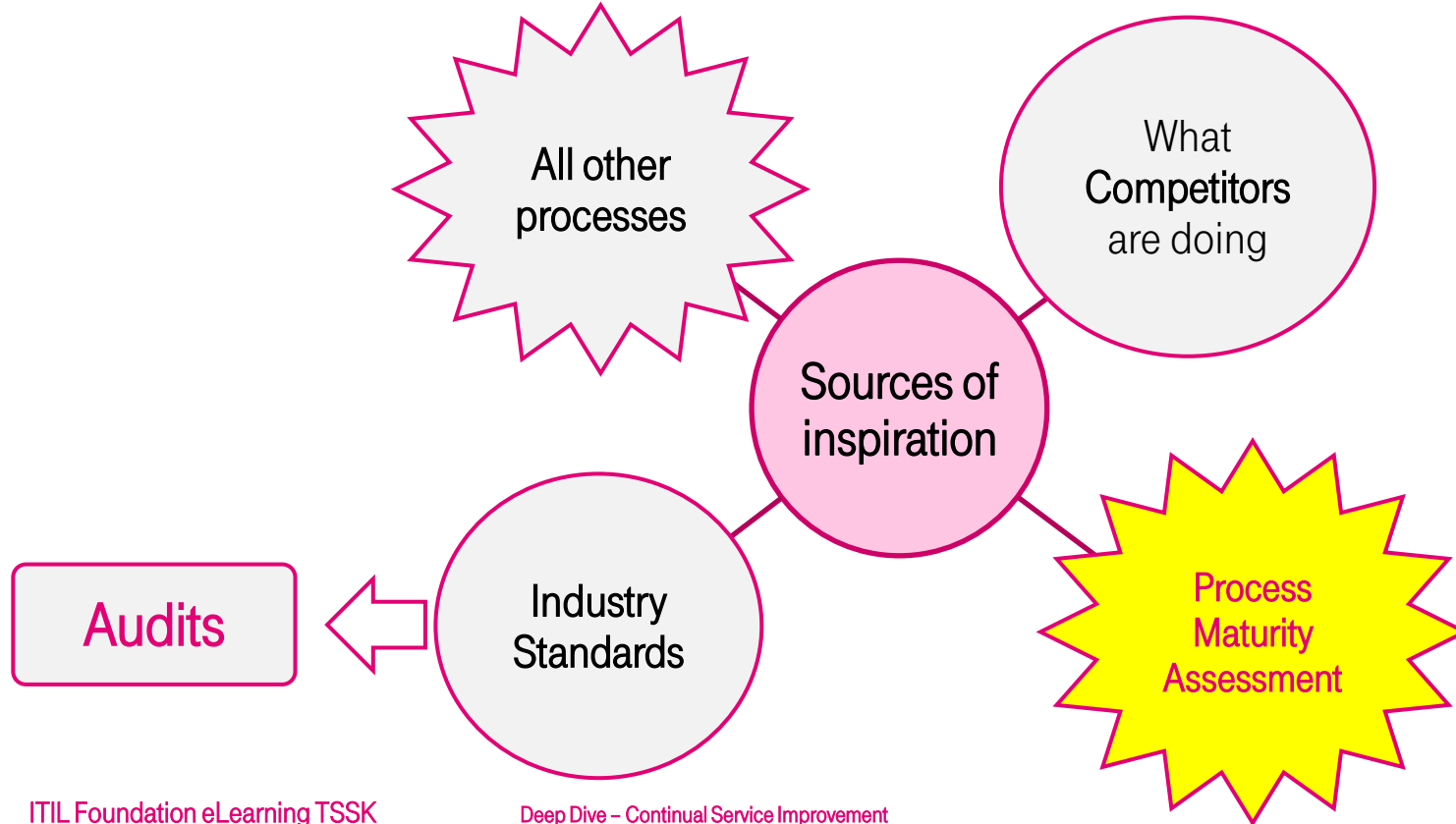
Recommendations are clearly areas for improvement

Strengths can become part of the standard in the future

OK	Meets standard req.
S	Strength
R	Recommendation
NC	Non-Conformity

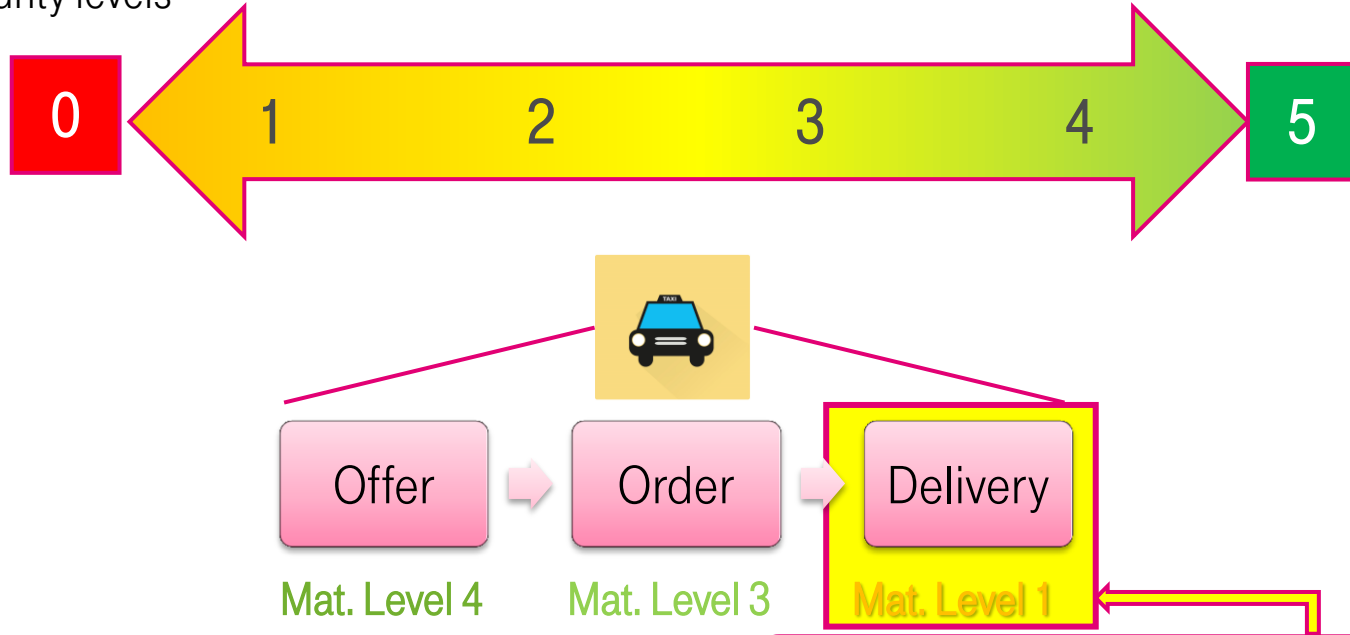
# SOURCES OF INSPIRATION FOR IMPROVEMENT

- Before a service can be improved, an **opportunity for improvement** must be identified.



# PROCESS MATURITY ASSESSMENT

- Six maturity levels



Bringing all processes to the same level eliminates (many) operational issues

Processes with Maturity Level below 3 automatically fail audits

# PROCESS MATURITY LEVELS

## Person-Dependent Practices

- No documentation
- Results depend entirely on the practitioners – What and How they will do

## Documented Process

- A documentation on how the process **should** be done exists
- No guarantee that the documentation is followed

## Partial Deployment

- Following the documented processes is enforced in some portion of the organization
- First opportunity for tangible benefits of following a process

## Full Deployment

- Everyone is required to follow the documented process
- Failed service provisioning usually signals flaws in process design

## Measured And Automated

- Metrics for process performance are defined (timing, customer satisfaction etc.)
- Computer systems help manage available resources, first automation takes place

## Continuously Improving

- Performance targets are regularly tightened, necessitating improvement actions
- Methodologies such as Six Sigma, Kaizen, 5S, Poka-Yoke are applied regularly

# PROCESS MATURITY - ASSESSMENT

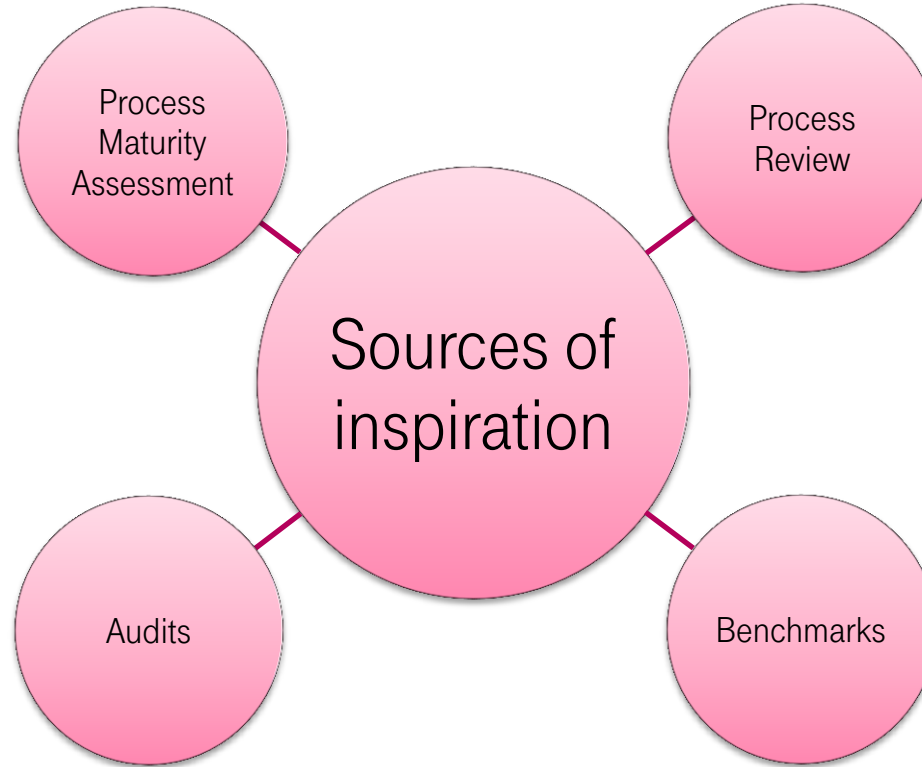
- Similar approach to **audits**
- **Assessor** uses questionnaire to check for completely fulfilled levels

Example:

- ☒ **Level 2:**
  - ☒ “Is this process used by at least 1 of our locations?”
  - ☒ “Has at least one product today been produced according to the documentation?”



# SOURCES OF INSPIRATION FOR IMPROVEMENT



# ADDITIONAL SOURCES OF INSPIRATION

Smart service providers consider other sources of improvement inspiration

- Suggestion or wish from a customer
- Idea from an employee involved in the process
- Observation from a person with fresh eyes

Every idea should be documented and then properly managed

# CSI REGISTER

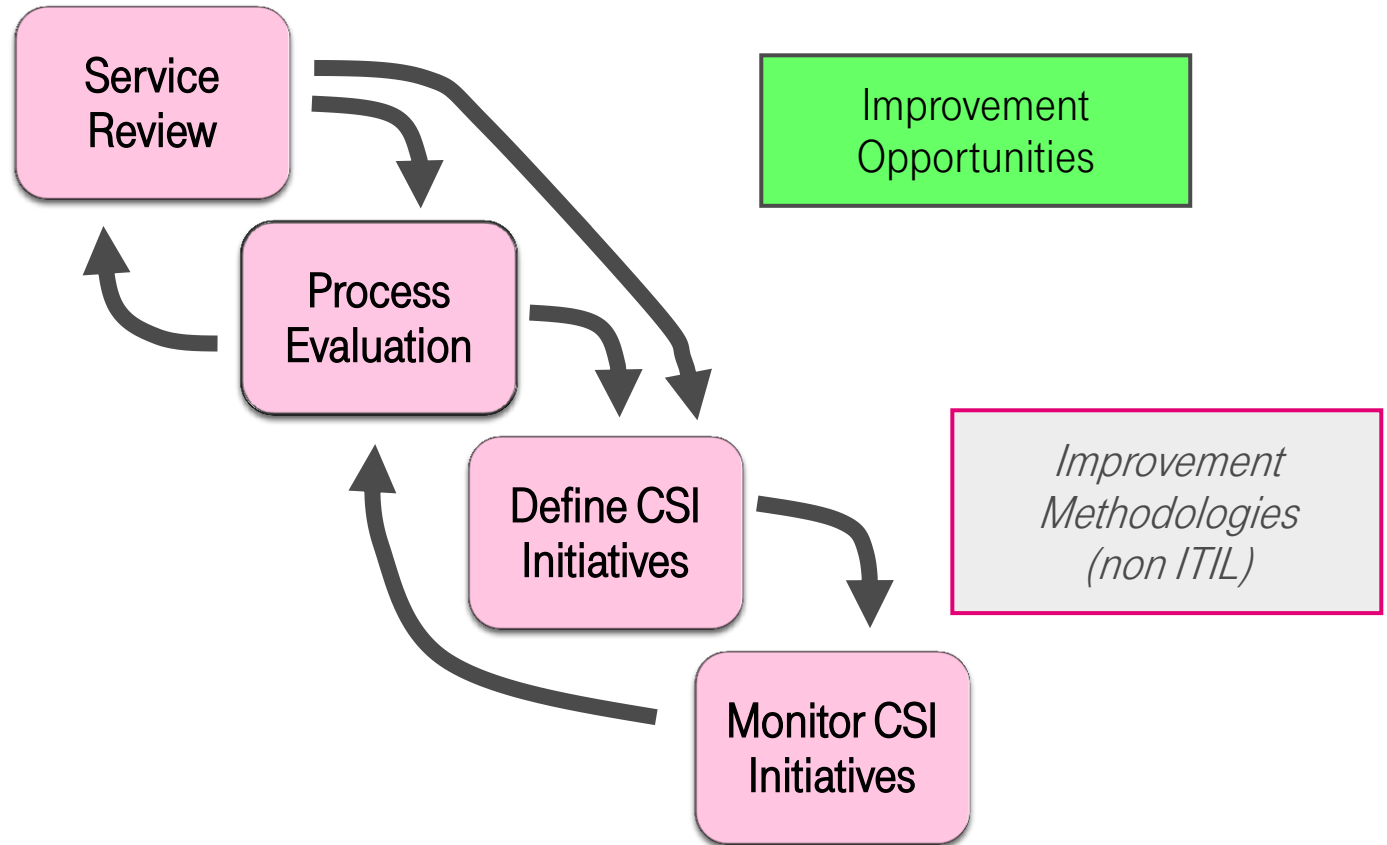
**CSI Register:** Tool, document or database collecting all improvement suggestions

## Improvement Opportunity record

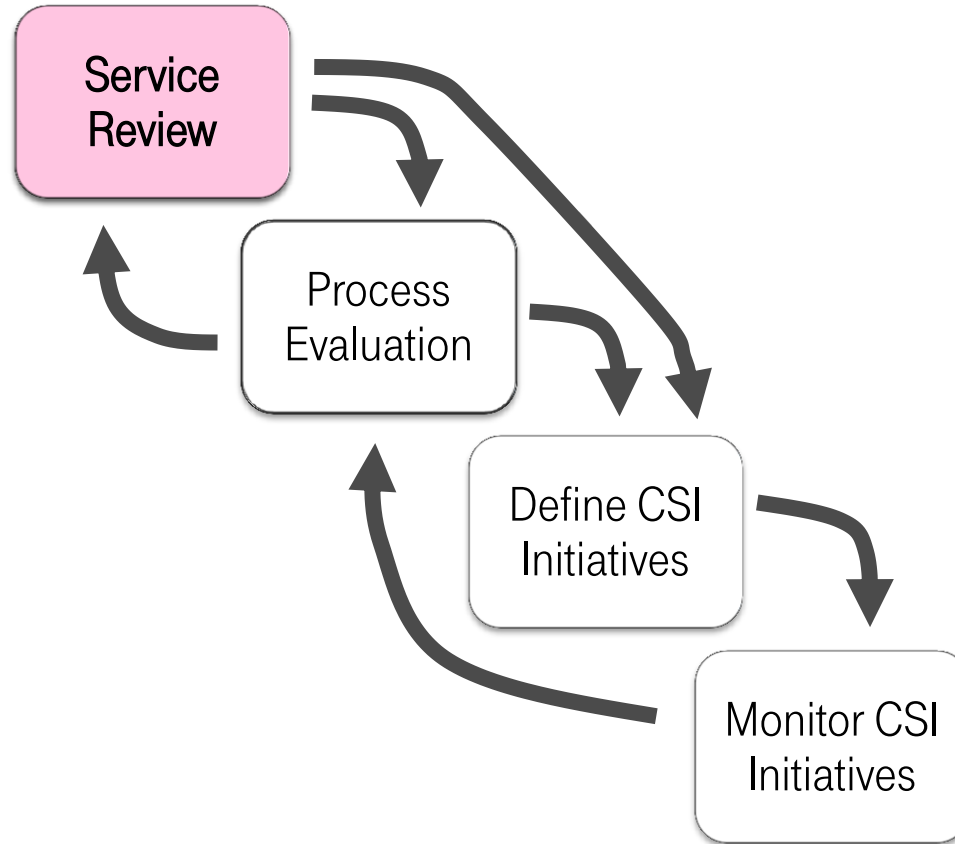
- Name, ID, Description, Status
- Source (Complaint, Audit, Proposal)
- Current impact, Date of discovery
- Assigned Improvement Manager
- ✓ Proposed Solution, Implementation Budget, Plan and Schedule
- ✓ Confirmed results of solution



# CSI PROCESSES



# CSI PROCESSES



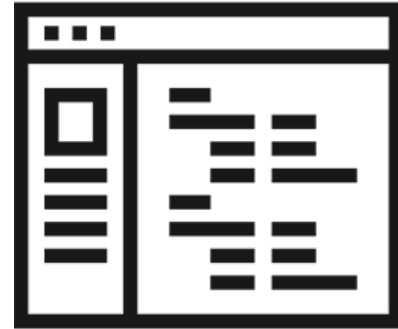
# SERVICE REVIEW

Objectives:

- Regularly review business and infrastructure services
- Improve quality of the service
- Look for more efficient ways to deliver the service

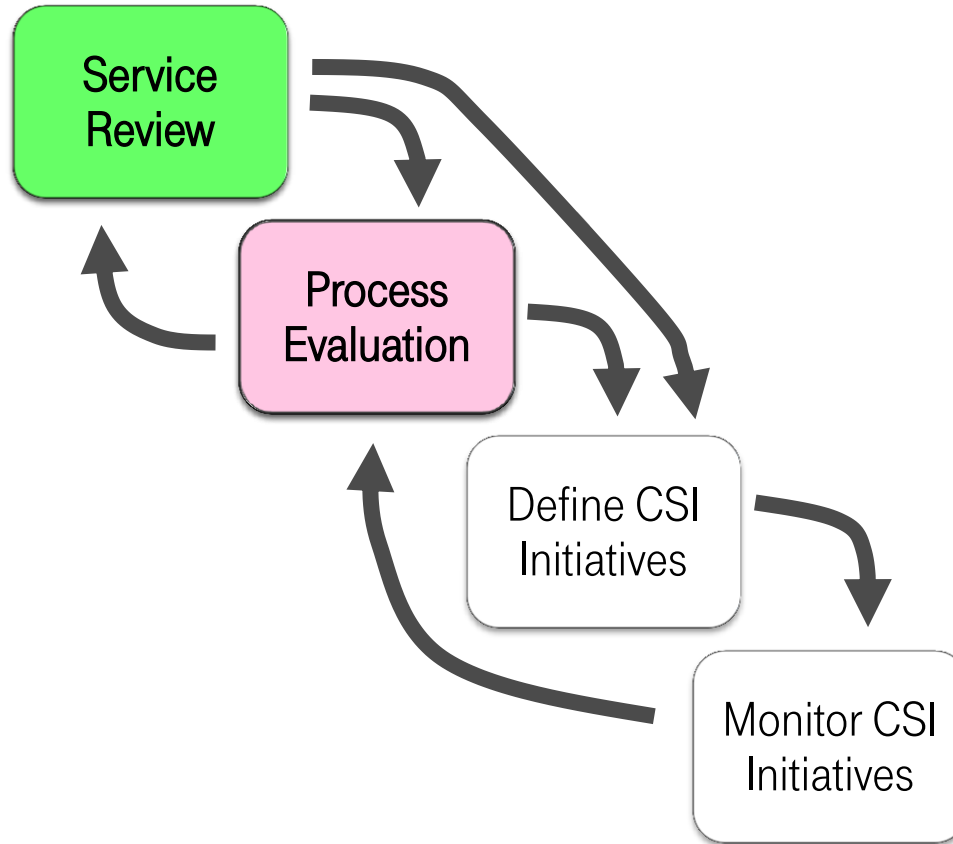
Global business demand:

- More with the same costs
- The same with lower costs
- “More with Less”



Service Review Report

# CSI PROCESSES



# PROCESS EVALUATION

## Process Assessment Guideline

- Describes how to apply process evaluation methods: Process Maturity Assessment, Benchmark, Audit, Process Review

## Process Evaluation

- Ensures that evaluation methods are regularly applied



# PROCESS EVALUATION



## Food Safety Inspectors

- Audit of following industry standards
- Non-conformities must be fixed immediately

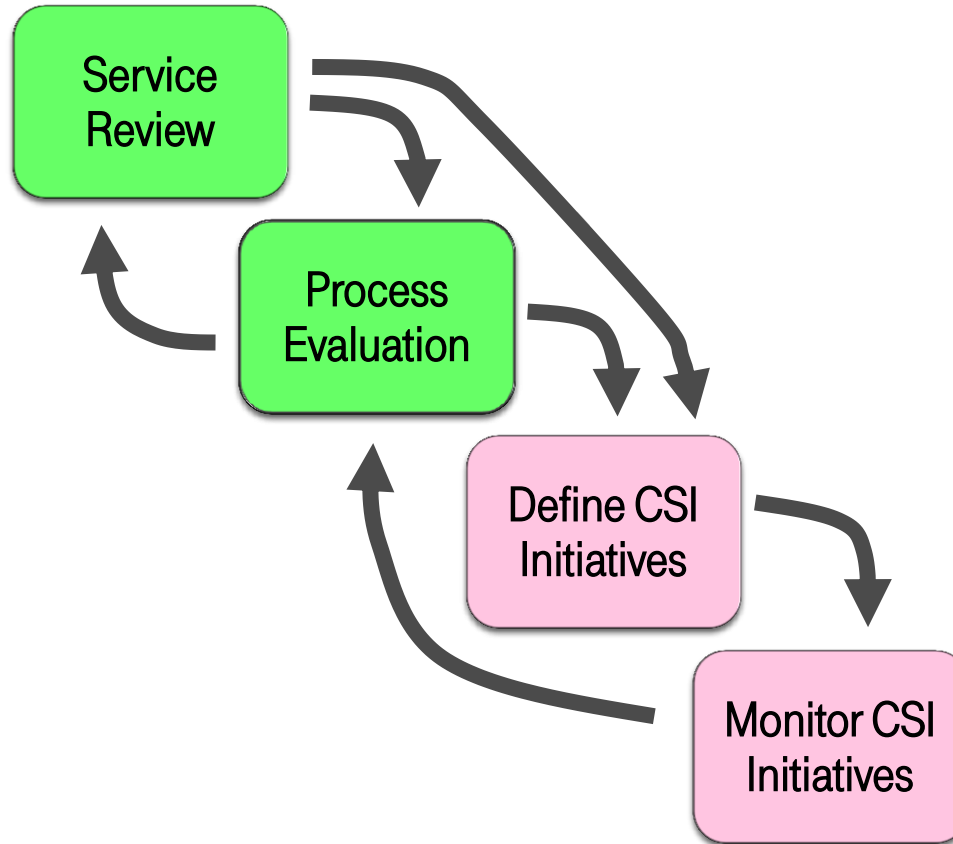
## Book of Complaints

- A form of process review
- Once per week by shift leader
- Once per month by restaurant owner

## Newspaper Reviews

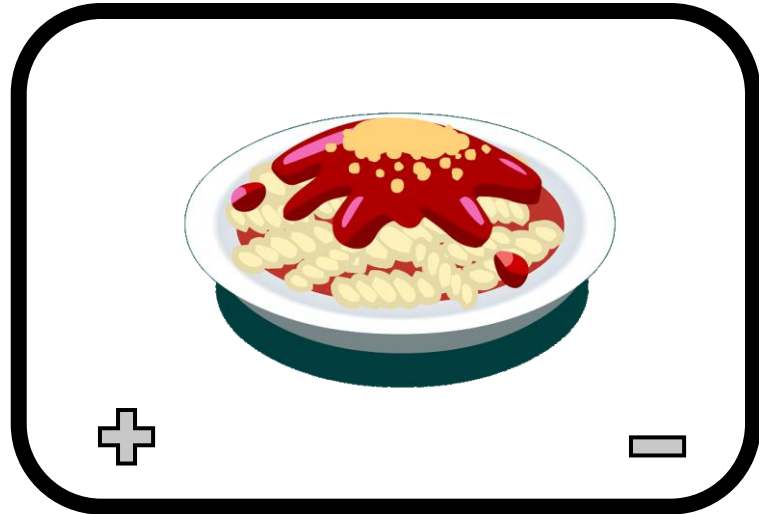
- Benchmark
- Comparing to other restaurants in the city

# CSI PROCESSES

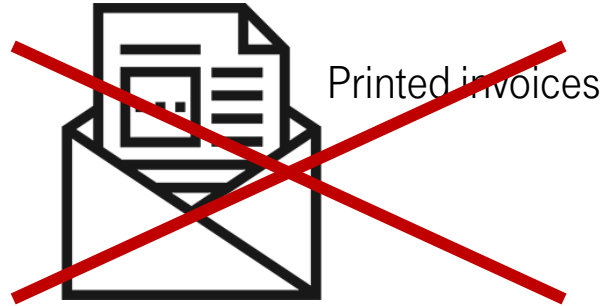


# CSI INITIATIVES

- Service Review and Process Evaluation produce **improvement opportunities**.
- **Improvement opportunities** are recorded in **CSI Register** (formerly: SIP).
  - improvement manager transform an opportunity into **CSI Initiative**



# CSI INITIATIVES



Printed invoices

Invoices sent by email



**Required:**

Adjustments of internal processes

Legislative changes

# CSI INITIATIVES

CSI Initiatives may result in redesign of other processes

Formal procedure: **Change Request to Process Architecture**

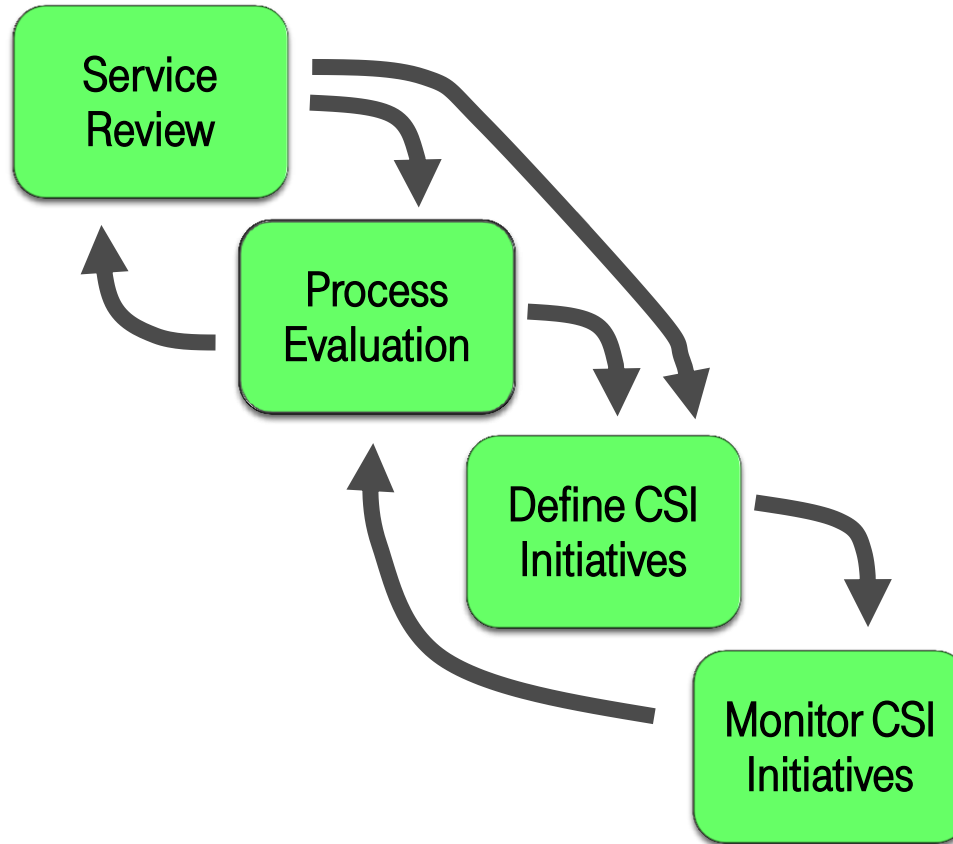
(Note: Do not confuse this with “Change Request to **Enterprise** Architecture”)

Common benefits from CSI Initiatives:

- Simplification of a process
- Partial automation
- Enhancement with additional functionality

**Every process may be improved via CSI!**

# CSI PROCESSES



# CONTINUAL SERVICE IMPROVEMENT - SUMMARY

Remember: Proactive Problem Management is a sign of service (operation) maturity

Continual Service Improvement is a sign of organization's maturity.

- Not just providing a service
- Trying to make it better in an organized manner

Highest level of Process Maturity is “Continuously Improving”

**DEEP DIVE**

→ **Continual Service Improvement**

