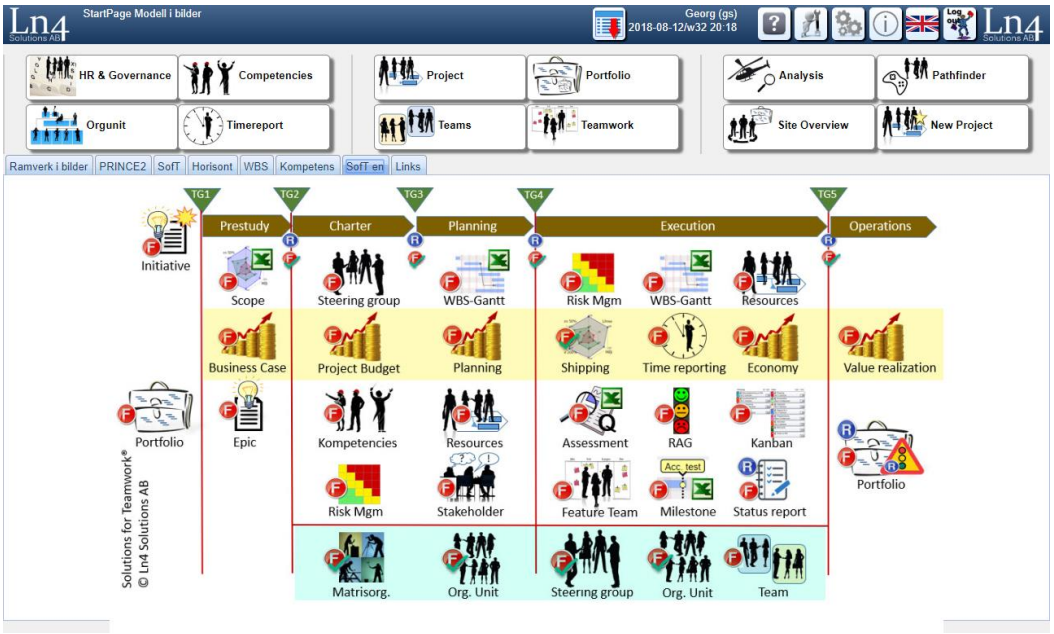
# Quality assurance with self-assessment




Menu page for LeanFour TP3

## Learning by doing

The term quality assurance often leads to the idea of after-checking and time-consuming surveys, something that comes from manufacturing where after-check is always necessary. However, for projects, especially in the service sector, quality must be integrated from the beginning. There are three dominant technologies to ensure that quality is an integral part of project management (described below in the document). Through the concept of self-assessment and follow-up of an assessor, the project manager is motivated to learn how to manage a project and to meet the set criteria for management, while the assessor will act as a mentor.

## Implementation in LeanFour™ TP3

### Issues and their properties

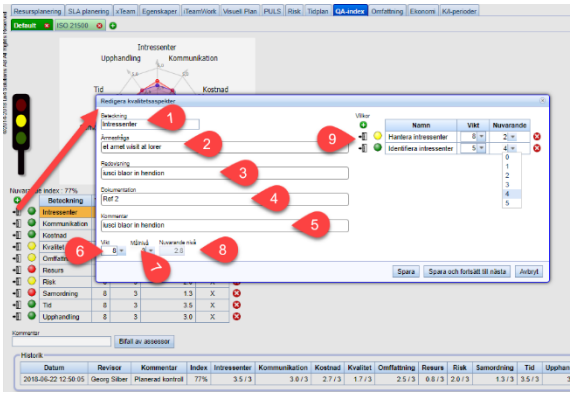
LeanFour™ TP3 is designed to handle a wide range of issues and to respond to different self-assessment scenarios.

a. Simple check-lists with yes/no answers.
b. Using the CMMI scale 1 – 5 with its assessment bases.
c. Project Excellence Baseline with Red – Yellow – Green and the use of Deming's circle.

This feature allows to provide a project with multiple issues simultaneously. One issue may be a checklist for a stage decision, and in parallel, another to increase delivery capability of the project or to verify that the project management applies best practice and complies with a prescribed standard. To each question that constitutes a checkpoint, there is a number of conditions to be evaluated and graded. An example of a question with conditions is described below. All data needed to perform this quality assurance can be placed in an Excel sheet as template, and then directly imported into LeanFour ™ TP3.

## The properties of a question / checkpoint

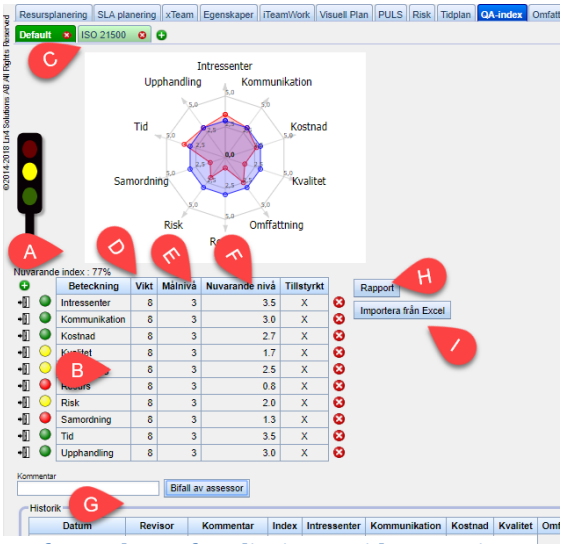
1. Short designation.
2. A more detailed description of the checkpoint (question).
3. Project leader's response to actions taken.
4. Document references for alleged results.
5. Assessor's comments.
6. The importance of the question when calculating the index.
7. Required level for approved level.
8. Current level after self-assessment.
9. List of conditions that must be met and reported individually by the project manager, then rescheduled by an assessor who assesses self-assessment and, if necessary, indicates necessary improvements.



Properties and settings for a quality question

## Each set of quality issues is reported separately

A. Summarizing index and reporting with traffic lights. The cover levels are set globally.
B. List of questions to assure the quality.
C. Possibility of several sets of lists of quality issues.
D. Each question can be given a weight for its impact on a resulting index.
E. For each question, a target level is specified for a complete approval.
F. Present value of a self-assessment.
G. Registration when an assessor has approved the self-assessment.
H. All information can be printed to an Excel report with a sustained traffic light signal.
I. An entire set of quality questions with all information can be imported from an Excel template.




One of several sets of quality issues with accounting

## Example of an Excel report with questions, answers and self-assessment

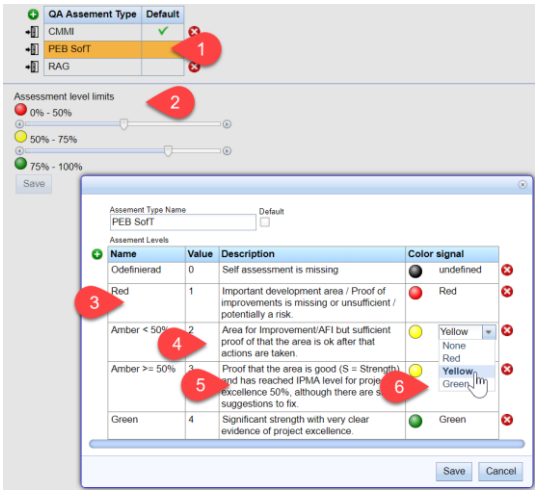
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | | 2018-06-22 14:42 | | | | | | | | | |
| 3 | | Georg Silber | | | | | | | | | |
| 4 | | 1-ex SofT | | | | | | | | | |
| 5 | | ISO 21500 | | | | | | | | | |
| 6 | | 77% | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | Assessment | Weight | Target | Current | Approved | Question | Answer | Documentation | Comments | Evaluation Aspect | Description |
| 9 | Intressenter | 8 | 3 | 3,5 | Yes | et amet wisit at lorer | iusci blaor in hendion | Ref 2 | iusci blaor in hendion | Hantera intressenter | Iso-4.3.10 |
| 10 | | | | | | | | | | Identifiera intressenter | Iso-4.3.9 |
| 11 | Kommunikation | 8 | 3 | 3 | Yes | eratumsan ut veliqui | fb,vå,febvRud do odiamet | ref 10 | od tatin henim | Distribuera information | Iso-4.3.39 |
| 12 | | | | | | | | | | Hantera kommunikation | Iso-4.3.40 |
| 13 | | | | | | | | | | planera kommunikation | iso-4.3.38 |
| 14 | Kostnad | 8 | 3 | 2,7 | Yes | iuscidunt la augue | quatum ipit wis nos | Ref 6 | quatum ipit wis nos | Estimera kostnader | Iso-4.3.25 |
| 15 | | | | | | | | | | Styra kostnader | Iso-4.3.27 |
| 16 | | | | | | | | | | Ta fram budget | iso-4.3.26 |
| 17 | Kvalitet | 8 | 3 | 1,7 | Yes | wis augait autatuer | nibh euisl del iure vel | Ref 8 | nibh euisl del iure vel | Planera kvalitet | Iso-4.3.32 |
| 18 | | | | | | | | | | Utföra kvalitetskontroll | Iso-4.3.34 |
| 19 | | | | | | | | | | Utföra kvalitetssäkring | Iso-4.3.33 |
| 20 | Omffattning | 8 | 3 | 2,5 | Yes | et amet wisit at lorer | alit, consequip | Ref 3 | alit, consequip | Definiera omfattning | Iso-4.3.11 |
| 21 | | | | | | | | | | Fastställa aktiviteter | Iso-4.3.13 |
| 22 | | | | | | | | | | Skapa struktur för arbetsnedbrytning, W | Iso-4.3.12 |
| 23 | | | | | | | | | | Styra omfattning | Iso-4.3.14 |
| 24 | Resurs | 8 | 3 | 0,8 | Yes | volore con verci tin ex ent | vullaor se dionsequat | Ref 4 | vullaor se dionsequat | Estimera resurser | Iso-4.3.16 |
| 25 | | | | | | | | | | Etablera projektgrupp | Iso-4.3.15 |
| 26 | | | | | | | | | | Fastställa projektorganisationen | Iso-4.3.17 |
| 27 | | | | | | | | | | Hantera projektgruppen | Iso-4.3.20 |
| 28 | | | | | | | | | | Styra resurser | Iso-4.3.19 |
| 29 | | | | | | | | | | Utveckla projektgruppen | Iso-4.3.18 |
| 30 | Risk | 8 | 3 | 2 | Yes | dolorper sendre conullut | sisci et, quat prat. | Ref 7 | sisci et, quat prat. | Bedöma risker | Iso-4.3.29 |
| 31 | | | | | | | | | | Behandla risker | Iso-4.3.30 |
| 32 | | | | | | | | | | Identifiera risker | Iso-4.3.28 |
| 33 | | | | | | | | | | Styra risker | Iso-4.3.31 |

Excel report showing a compilation of questions and answers

# Self-assessment settings based on a scale

There are different methods for answering and evaluating issues that aim to ensure quality aspects. LeanFour ™ TP3 facilitates this by defining assessment types. Each type is given a scale where each part of the scale has its own characteristics.

1. List of defined assessment types.
2. Limit values for reporting the total index with traffic light signal.



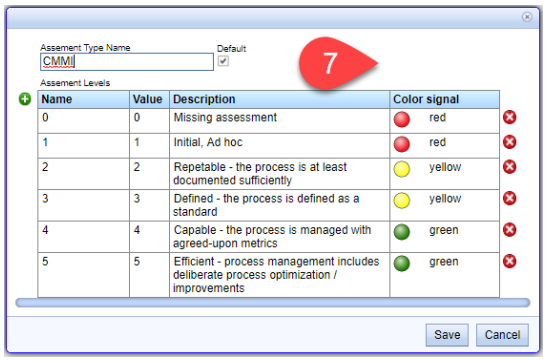

**PMO can define common criteria but a project can define its own definitions and criteria**

## Settings for assessment according to PEB

3. Each level is given a name.
4. Each level has a value that is used in conjunction with the condition's weight to calculate the total index's value for the quality question.
5. Text displayed shown when selecting self-assessment level.
6. Color signaling the selected level. "No color" indicates that no self-assessment has been made.

## Settings for assessment according to CMMI

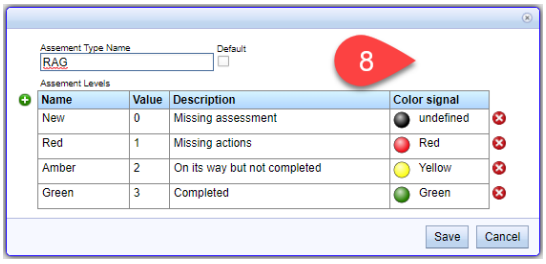
7. Configuration for assessment according to CMMI. If no self-assessment has been made, it is a sign of lack of project maturity. What is required to achieve the different levels can each PMO decide to set the desired quality level of the organization. Obegriplig mening på svenska




**Definition and assessment grounds for CMMI**

## Settings for assessment according to RAG

8. Configuration for assessment according to the traffic light model RAG (Red, Amber, Green). Even lack of self-assessment can be signaled with "no color".




**The basic traffic light signals can be used in simple check lists**

# Briefly about used techniques

## Check lists

Checklists consist of checkpoints for a specific decision. It may be to give a clearance to take off for an aircraft after the captain checked that all points on the airplane checklist were marked as functioning or fulfilled conditions for a decision point prior to a start. Checklists are by nature binary, i.e., works/have been done, respectively, fail/missing. This is sufficient in the context of zero tolerance such as aircraft ahead of start but not really useful for project management where nothing is completely white or black.

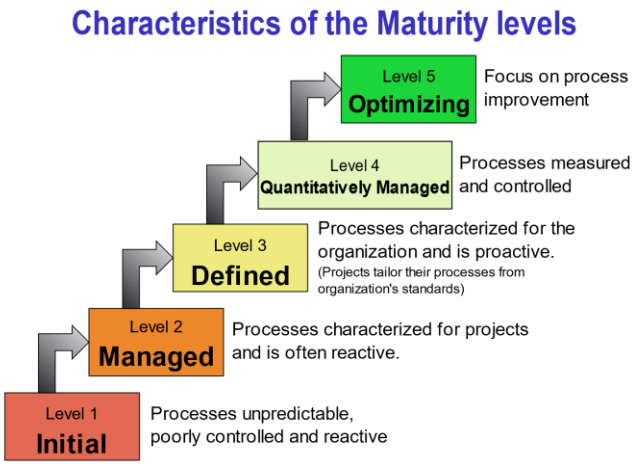
## Evaluation based on CMMI

Projects are divided into subject areas with issues that must be met to comply with a certain standard and to achieve a quality level. Topics are generally the ones on which project standards are based. These are already well known; Planning, Economy, Monitoring, Scheduling, etc. Now, a binary evaluation can no longer be made because it is not so clear when the management is good enough. Instead, self-assessment can be applied on a scale. One such scale is defined by CMMI and Wikipedia.

### Capability Maturity Model Integration, CMMI

Capability Maturity Model Integration, CMMI, was developed by the CMMI project, which aimed to improve the usability of maturity models by integrating many different models into one framework. CMMI is a process level improvement training and appraisal program especially in software development. Administered by the CMMI Institute, it was developed at Carnegie Mellon University (CMU). CMMI can be used to guide process improvement across a project, division, or an entire organization. CMMI defines the following maturity levels for processes: Initial, Managed, Defined, Quantitatively Managed, and Optimizing. CMMI is registered in the U.S. Patent and Trademark Office by CMU.

CMMI defines five maturity levels that specify the level of quality control and the mechanisms introduced into the organization to ensure quality.



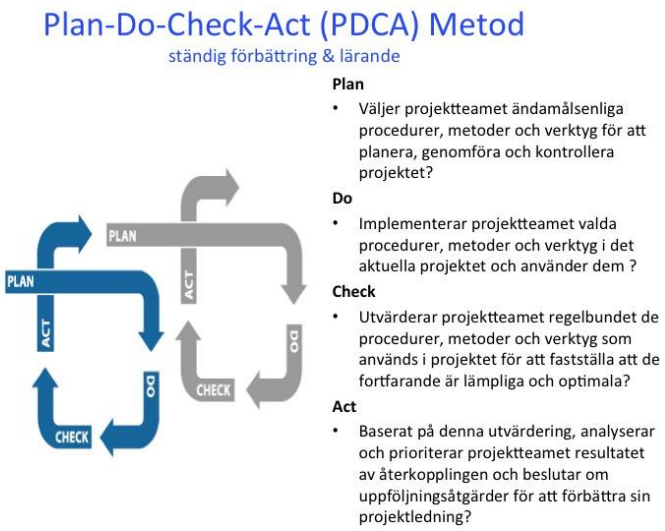
# Project Excellence and continuous improvements

## From Wikipedia

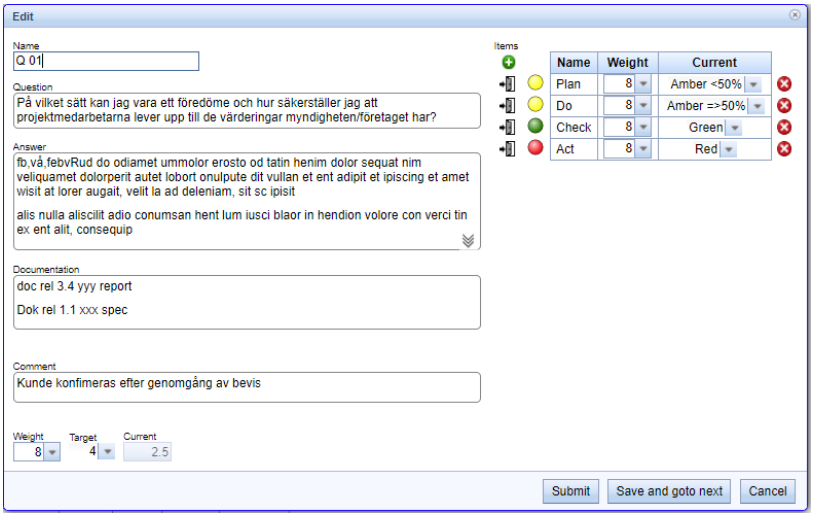
*The PDSA tool (plan, do, study, act) is a variant of PDCA, and can be used for quality and improvement work in an organization. The tool is a cycle that works iteratively, that is, repeatedly. In the first phase, a problem has been identified in the business and plans are being made for a solution. When this is done, the second phase begins where the solution is implemented. In the third phase, the effects of the solution that are applied are studied and in the final phase, action is taken to avoid the same problem.*

## From Project Excellence Preparation handbook

*Project Excellence is defined as the ability to live up to as many as possible of the 20 different areas / perspectives that are part of IPMA's Project Excellence model. The Project Excellence Preparation (PEP) method (see separate document) offers an opportunity to promote periodic and systematic improvement of a project step by step.*




| Ref. | Fråga |
|---|---|
| Q1 | På vilket sätt kan jag vara ett föredöme och hur säkerställer jag att projektmedarbetarna lever upp till de värderingar myndigheten/företaget har? |
| Q2 | Hur söker jag återkoppling från intressenter för att förbättra mitt ledarskap? |
| Q3 | Hur inspirerar jag projektmedarbetare i deras strävan till att förbättra sina beteenden och arbetsmetoder så att dessa stämmer överens med projektmålet? |
| Q4 | Beskriv hur du beter dig socialt och ansvarsfullt utifrån alla intressenternas behov? |
| Q5 | Hur säkerställer jag att projektledningen skapar utrymme för att upprätthålla relationen med kärnintressenter? |
| Q6 | Hur skapar jag en uppmuntrande dialog mellan intressenter som leder till god stämning? |
| Q7 | På vilket sätt identifierar jag systematiskt alla intressenter och deras inbördes relationer? |
| Q8 | På vilket sätt söker jag ett aktivt interagerande med projektets intressenter och säkerställer att de är involverade när det behövs? |
| Q9 | Vilka processer har jag definierat och implementerat för effektiv ledning av mina intressenter? |
| Q10 | Hur involverar vi våra intressenter beträffande projektlednings processer? |
| Q11 | På vilket sätt definierar vi projektledningsprocesser utifrån bra praxis och erfarenheter från andra projekt? |
| Q12 | På vilket sätt identifierar och implementerar vi lämpliga projektledningsprocesser? |
| Q13 | Hur kan vi bevisa kundtillfredsställelse genom skriftliga eller verbala uppskattningar och rekommendationer från kund? |
| Q14 | Vilka resultat får vi från systematiska metoder för kundåterkoppling som nöjdhetsundersökningar och fokusgrupper? |
| Q15 | Hur får vi kundåterkoppling beträffande 1) fullgörande av behov och förväntningar 2) projektledning 3)samarbete med projektgruppen 4) projektresultat/ kundens “business case” eller 5) viljan att arbeta i ytterligare projekt? |




**Exempel från PEB med tillämpning av Demings circle -PDCA**

**Plan**
The planning phase involves assessing a current process, or a new process, and figuring out how it can be improved upon.

**Do**
The do phase allows the plan from the previous step to be enacted. Small changes are usually tested, and data is gathered to see how effective the change is.

**Check**
The data and results gathered from the do phase are evaluated. Data is compared to the expected outcomes to see any similarities and differences. The testing process is also evaluated to see if there were any changes from the original test created during the planning phase.

**Act**
Based on this evaluation, the project team analyzes and prioritizes the outcome of the feedback and decides on enhancement measures to improve its project management