# 8. QUALITY MANAGEMENT PLAN

Quality management is an element that was introduced since the early stages of project management’s definition, sharing the same status as cost and time aspects as mentioned by Roger (Atkinson, 1999).It is an important aspect in project management where the performance of the product – the Integrated Supply Chain Management System in this scenario – is matching the required quality as mentioned in the project’s scope. For ensuring the quality of the product in development, actions and policies would be undertaken in form of three major processes:

* **Plan Quality Management**;
* **Performing Quality Assurance**; and
* **Performing Quality Control**

And in those three processes, tools and techniques would be applicable in managing the project’s output quality, where it includes quality metrics, checklists, Pareto Charts, quality control charts, fishbone diagrams, maturity models and many others (Marchewka, 2014).

## 8.1 Plan Quality Management

Planning would be the focus of this process. The content of planning includes identifying which quality standards are relevant to the project, and methods to meet those standards. This is done to anticipate situations and prepare appropriate actions to bring out the needed outcome.

To devise a plan to an overall quality management, it is required to have a

Inputs

1. Project Management Plan
2. Stakeholder Register
3. Requirements Documentation
4. Enterprise Environmental Factors
5. Organizational Process Assets

Tools & Techniques

1. Cost-benefit Analysis
2. Cost of quality
3. 7 Basic quality tools
4. Benchmarking
5. Design of experiments
6. Statistical sampling
7. Additional quality planning tools
8. Meetings

Outputs

1. Quality management plan
2. Process improvement plan
3. Quality metrics
4. Quality checklists
5. Project documents updates

## 8.2 Perform Quality Assurance

Inputs

1. Quality management plan
2. Process improvement plan
3. Quality metrics
4. Quality control measurements
5. Project documents

Tools & Techniques

1. Quality management & control tools
2. Quality audits
3. Process analysis

Outputs

1. Change requests
2. Project management plan updates
3. Project documents updates
4. Organizational process assets updates

## 8.3 Control Quality

Inputs

1. Project management plan
2. Quality metrics
3. Quality checklists
4. Work performance data
5. Approved change requests
6. Deliverables
7. Project documents
8. Organizational process assets

Tools & Techniques

1. 7 basic quality tools
2. Statistical sampling
3. Inspection
4. Approved change request review

Outputs

1. Quality control measurements
2. Validated changes
3. Validated deliverables
4. Work performance information
5. Change requests
6. Project management plan updates
7. Project documents updates
8. Organizational process assets updates