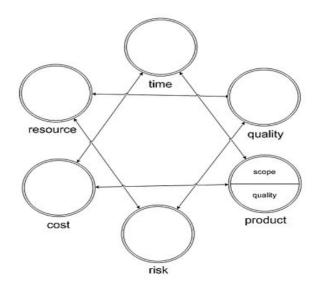
# **PROJECT MANAGEMENT STAR MODEL**



Traditionally the Project Constraint Model recognised three key constraints; "Cost", "Time" and "Scope", but the project management star model evolved based on the previous triple constraint with 6 factors to be monitored and managed. This is illustrated as a 6 pointed Star that is the combination of two overlaid triangles.

It represents the separation and relationship between project inputs/outputs factors on one triangle and the project processes factors on the other. The star variables are:

- 1. Input-Output Triangle
  - Product (Scope & Quality)
  - Cost
  - o Time
- 2. Process Triangle
  - o Risk
  - Quality
  - Resources

We can infer that, in terms of project's output, "scope & quality" both can be adjusted to make up the product, while quality of process can also be monitored separately.

### THE 6 PROJECT CONSTRAINTS:

## 1. Product (Scope & Quality):

What will be the outcome of the project in terms of scope and quality.

# 2. Cost:

The budget available to complete the project.

## 3. Time:

What is the schedule of the project, when will the project be completed?

# 4. Risk:

What can go wrong and what can be done about it.

## 5. Quality:

Is the expected outcome and actual outcome of the process same?

#### 6. Resources:

Who and what is required to do the work (team members, equipment etc.)

#### **DESCRIPTION OF STAR MODEL:**

From the above diagram, it is clear that for cost, product (quality and scope) and schedule are dependent on each other, change in one will have an impact on others, either one or both.

There might be a case,

- Where we have to deliver a project in a limited time, so we can reduce the scope, exclude some features and increase the budget to complete the project earlier.
- Where we want to increase the scope, so it will require more cost and time to complete the project.
- Where we have limited budget, so in this case we'll reduce the scope and exclude some features, and time can also exceed as we dont have the budget to acquire more staff and allocate them salaries.

We can also see that processes, resources, quality and risks are dependent on each other.

There might be a case,

- Where we may have any risk like inaccurate time or resource estimation for a process, which could affect the quality, so to avoid the risk from turning to failure we'll have to adjust the allocation of resources.
- Where resources are not available, this might result in the risk of delay or exceeding the budget, or if we don't allocate more resources, then the quality would be affected.
- Where improving the quality of a process may result in using more resources which in return can again increase the risk of costs exceeding the limits or else if quality is compromised then it can result in the risk that stakeholders might not be satisfied by the progress of the project.