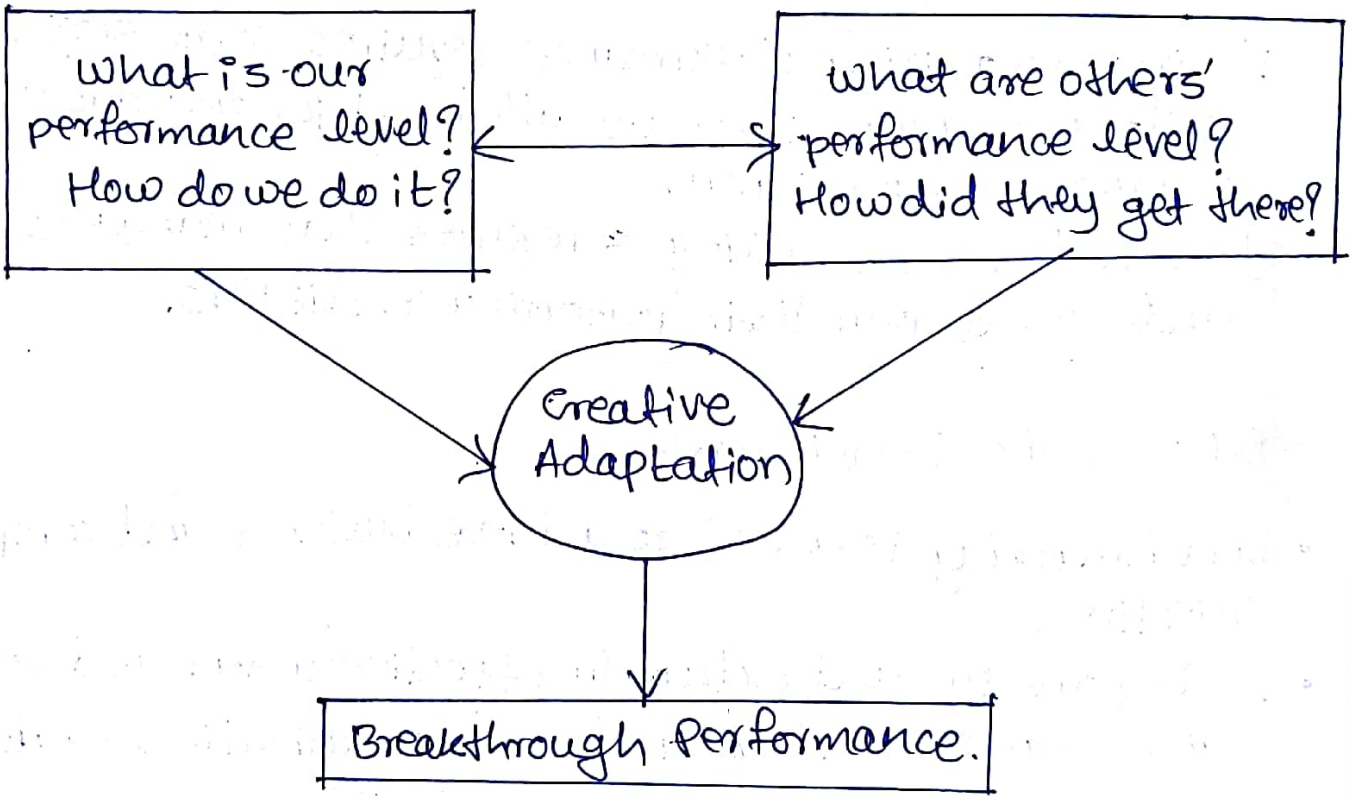
- **Benchmarking** :- is the systematic search for best practices, innovative ideas, and highly effective operating procedures.
- Benchmarking considers the experience of others and uses it.

Benchmarking Concept



Process :-

- Organizations that benchmark, adapt the process to best fit their own needs and culture.
- Although the number of steps in the process may vary from organization to organization, the following six steps contain the core techniques.

1] Decide what to benchmark.
2] Understand current performance
3] Plan
4] Study others
5] Learn from the data
6] Use the findings.

- **Benchmarking Concept.**
  - As shown in figure, benchmarking measures performance against that of best-in-class organizations,
  - determines how the best in class achieve those performance levels, and
  - uses the information as the basis for adaptive creativity and breakthrough performance.

- **Benchmarking are two key elements.**

1] First, measuring performance requires some sort of units of measure. These are called metrics and are usually expressed numerically.

2] second, benchmarking requires that managers understand why their performance differs.

Reasons to Benchmark.

- Benchmarking is a tool to achieve business and competitive objectives.
- It is powerful and extremely effective when used for the right reasons and aligned with organization strategy.
- It is not a panacea that can replace all other quality efforts or management processes.
- Organizations must still decide which markets to serve and determine the strengths that will enable them to gain competitive advantages.
- Benchmarking is one tool to help organizations develop those strengths and reduce weaknesses.

Sector - Specific Standards under ISO 9000 System

- The ISO 9000 system is designed as a simple that could be used by any industry.
- Other systems have been developed that are specific to a particular industry such as automotive or aerospace.
- These system uses the ISO 9001 as the basic framework and modify it to their needs.
- There are currently three other quality systems:

1] AS 9100
2] ISO/TS16949
3] TL 9000

1] AS9100 :- This aerospace industry quality system was officially released by the society of Automotive Engineers in May 1997.
- Its development and release represents the first attempt to unify the requirements of NASA, DOD and FAA.

2] ISO IS 16949:- This standard is entitled "Quality Systems Automotive suppliers" - Particular Requirements for the application of ISO 9001.

3] TL 9000 :- The Quality Excellence for suppliers of Telecommunications Forum wrote TL9000 to consolidate the various quality system requirements within the telecommunication industry.

Quality Function Deployment (QFD)

- Def^{n} of QFD :- QFD is a planning tool used to fulfill customer expectations.
- QFD focuses on customer expectations or requirements.

Benefits of QFD

1] Improves Customer satisfaction :-

- Creates focus on customer requirements.
- Uses competitive information effectively.
- Prioritizes resources.
- Identifies items that can be acted upon.

2] Reduce Implementation Time :-

- Decreases midstream design changes.
- Limits post introduction problems.
- Avoids future development redundancies.
- Identifies future application opportunities.

3] Promotes teamwork :-

- Based on concensus
- Creates communication at interface.
- Identifies actions at interface.
- Creates global view out of details.

4] Provides Documentation :-

- Documents rationale for design.
- Is easy to assimilate.
- Adds structure to the information.
- Adapts to changes.