This research revolves around the impact of Advanced Manufacturing Technologies in Indian Manufacturing industries. Statistics inculcates a number of industries subsists, which are using different forms of Advanced Manufacturing Technologies. The study is focused on the analysis of different AMT practices, sources of information support, perceived benefits of the implementation and the forms of AMT implemented by Indian manufacturing industries. The data have been collected from four sectors of manufacturing industries. The majority of respondents are from automobile sectors, followed by process sectors, electrical & electronics sectors and industrial machinery and equipment sectors. Respondents were requested to choose a response on five point likert scale; anchored at one end with ‘least important’ meriting a score 1 and the other by ‘most important’ meriting a score of 5. First of all to find out the correlation for each variable which are involved in manufacturing industries, then further test their need to be carried out on factors generated to see whether they are normally distributed in order to make meaningful inferences. After which the hypotheses testing have been performed by testing the level of conformity between the variables. Some case studies have been taken from manufacturing industries and after implementation of advanced manufacturing technology performance have been investigated. The manufacturing strategies of Indian manufacturing industries are dependent on different sectors.

The various advanced manufacturing strategies can be described as:

- The study corroborates that quality is considered as important for any industry. There is a strong conformity between the four sectors in providing quality products which are reliable and offer high performance in order to compete effectively in the market. It is perceptible that the cost is considered as the least competitive priority by all industries.
- All manufacturing industries emphasize on almost the same competitive strengths. All sectors relied on quality, responsiveness, flexibility, advanced manufacturing technologies, product customization, information technology, sales and marketing, manufacturing functions and innovativeness.
All sectors emphasize to implement the automation in manufacturing industries. Different automation steps vary according to the sector it has been applied to.

The measurement of advanced manufacturing technologies is derived from its level of investment. Industries were asked to indicate the amount of investment in the individual technology, on a likert scale of 1 to 5, where 1 indicates no investment and 5 to show heavy investment. The level of investment by different sectors is different in advanced manufacturing technologies.

The various advanced manufacturing technologies can be described as:

- The most common advanced design technology among the industries surveyed is CAD. CAD is the most popular technology and GT is the least favorable technology for manufacturing industries. Process industries have invested relatively less in advanced design and engineering technologies than automobile and electronics industries. Although all industries choose to have investments in advanced design and engineering technologies, all sectors agree almost to the same fact that investment in CAD takes the most vital position followed by CAM and CAE, while GT is the least significant field of investment.

- The most important investments are made in CNC technology. All the manufacturing industries have invested less in robotics technology. In automobile industries the maximum investments have been made in CNC technology followed by NC/DNC and flexible manufacturing system. In electronics industries & machinery industries the maximum investments have been made in CNC followed by flexible manufacturing system and NC/DNC. In process industries the investments have been made in flexible manufacturing and CNC are almost same, followed by NC/DNC. Except the automobile industries, all other industries have invested less on robotics technology.

- The automobile industries have invested more in MRP followed by MRP II, ERP and ABC analysis. Electronics industries have invested more in MRP followed by MRPII, ERP and ABC analysis. Machinery industries have invested more in MRP II followed by MRP, ERP and ABC analysis. Process
industries have invested more in ERP followed by MRP, MRP II and ABC analysis.

- The automobile and electronics industries have made moderate investments in material handling technologies. It is concluded that material handling technologies (AMHS, AS/RS, AGV) get the least attention in manufacturing industries.

- Automobile industries have invested the maximum on TQM followed by BPR, SPC and JIT. Electronics industries have invested the maximum on TQM followed by SPC, BPR and JIT. Machinery industries have invested the maximum on TQM followed by SPC, JIT and BPR. Process industries have invested the maximum on TQM followed by SPC, JIT and BPR.

- Automobile industries have invested the maximum on kaizen followed by management training, recycling and bench marking. Electronics industries have invested the maximum on management training followed by, recycling, bench marking and kaizen. Machinery industries have invested the maximum on kaizen followed by management training, recycling and bench marking. Process industries have invested the maximum on kaizen followed by recycling, management training, and bench marking.

It is observed that owing to adoption of advanced manufacturing technologies, the factors such as productivity, efficiency, product management, market performances have improved. It is concluded that efficiency enhancement of manufacturing industries takes place through advanced manufacturing technologies.

The various valuable improvements incorporated in the case studies can be summarized as:

- Industry A: Process Improvement by Advanced Technologies
- Industry B: Efficiency Improvement by Advanced Design
- Industry C: Productivity Improvement by Advanced Cutting Tool Technology
- Industry D: Process and Efficiency Improvement by implementing Kaizen and Advanced Training Techniques
- Industry E: Improvement in the Effectiveness of the equipment through Product Modification.