1)Problem statement:

As per the scenario described here, there is a need of a proper  warehouse management system with effective order management system, so the proposed solution will comparise both the capabilities.  
warehouse management and order management system.apart form all these aspects, now in the era of globalization, no business wants to be confined with in geographically boundaries.so customer should be able to place order from any where any time.

After having all the aspect into consideration , there is a need to develop a

"online warehouse and order management system"

2)Capabilities  
a)inventory management:  
inventory should be automatically updated with every dispatch and receipt of consignments accordingly

reorder level:  
there should be alert , if stock goes down up to a certain limit.  
so instead of displaying message "out of stock" there should be a message displaying "only x numbers are left" where x is the minimum stock that should be always available in the stock.  
b)Electronic data Interchange (EDI) Capabilities:  
all the business documents are exchanged between organizations in standard formats without retyping the data so reduce the cost because it eliminates paper work.  
c)customer should be able to place order from remote locations using internet.  
d)efficient and effective order processing includes:  
ready to take orders from customer round the clock  
tracking of order processing stages.

e)Logistics and supply chain management  
To ensure the proper distribution of auto parts there is a requirement of strong logistics system.  
apart from this one more important aspect is that product should be available to the end user on time.  
since, there are several levels between company and end user. so there is a requirement of strong supply chain management where all the entities at different levels works together to give a better experience to the end user.

f)generation of proper shipping schedule in cost effective manner:  
instead of sending consignments Separately to the customer.  
try to find if more consignments  belong to same(or vicinity) geographical location.  
send consignments in a form of a group to reduce the transportation cost.

g)feedback system: there should be proper feedback system which will be used by customer to share his/her experience with the company. on the basis of this feed back company can take corrective actions to improve the business operations

g)Reporting  
reporting is very important to take corrective actions.  
reports show the health of business  
all types of reports should be available to top management.

3)benefits:  
a)reduce cost due to use of EDI(reduces paper work and eliminate the need of operator).  
b)reduce cost due to generation of proper shipping plan.  
c)on time delivery due to logistics and supply chain management.  
d)improvement in business due to presence of feedback back system  
e)corrective actions can be taken on time because of reporting.

**Functional Requirements:-**

The main purpose of functional requirements is to define all the activities or operations that take place in the warehose management system. of auto parts. These are derived through interactions with the users of the system.  The general Functional Requirements arrived at the end of the interaction with the Users are listed below.

1. The System holds all the details of the all the employees who are working in the organization.

2. It allows admin to manage all types of users, hold their details, authenticate these users at the time of login and accordingly provide different options to communicate with the system.

3. It holds the details of all the warehouses which are part of our company.

4. It holds the details of all Product Stocks held in the ware-house of the company.

5. The system allows the warehouse manager to log into the system and enter their inwards entries related to their warehouse.

6. It also allows them to view the list of inward entries.

7. The system allows the warehouse manager to log into the system and enter their outward entries and their purpose related to their warehouse .

8. It also allows them to view the list of Outward entries.

9. Whenever an inwards entry is entered then accordingly the stock number will be automatically updated.

10. Whenever an outward entry is entered then accordingly the stock number will be automatically updated.

11. The system allows the warehouse  manager to log into the system and enter stock return entries and the reason for return.

12. Whenever a return entry is entered then accordingly the stock number will be automatically updated if the reason is order cancelled otherwise It need not update the stock.

13. It allows the authorized manager to process the order.

14. It allows the admin to view the list of users and take the print

15. It allows admin to generate warehouse details report.

16. It allows admin to generate inwards details report.

17. It allows admin to generate outwards details report.

18. It allows admin to generate returns details report.

19. It allows admin to generate stock statement report.

20. It allows any user to logout when he wants to come out from the system.

NonFunctional Requirements:-

1. Analysis, Design & Data requirements :-

  The Analysis & Design phases of the system yield Use Case diagrams, textual analysis, Sequence Diagrams, Class diagrams & Data Dictionary. Data dictionary consists of process statements showing how data is flowing from starting point to end point.

2. Constraint:-

  These are the requirements that are not directly related to the functionality of the system. These should be considered as mandatory when the system is developed.

1. The system should be available over the intranet so that the Users like the warehouse managers & clerks can use the system from their respective locations which could be anywhere in the organization.

2. The system should be easy to understand and organized in a structured way. The users should also receive feedback about any errors that occur.

3 .Data integrity should be maintained if an error occurs or the whole system comes down

4. An inward entry should be entered in the database whenever stock comes into the warehouse. That is the number of items should be updated automatically.

5. An outward entry should be entered in the database whenever stock goes out into the warehouse. That is the number of items should be updated automatically.

6. A return entry should be entered in the database whenever stock returned into the godown. That is the number of items should be updated automatically.

3. Guidelines

Some guidelines should be follow to enhance the usability of the system.

1. The system should display a user friendly menu for users to choose from.

2.The system should display warehouse ID and item to be selected from the popup list in the forms .

3.Services of the system should be available 24 hours a day.

4.The system should be designed in such a way that it is easy to enhance it with more functionality. It should be scalable & easily maintainable.