Chapter – 3

HYPOTHESIS
Hypothesis

Nowadays middleware technology not only in banking sector even used in all organization either government or private sector. Because this technology is providing reliability, continuity is there with this technology. Apart from that banking application is very crucial, so security point of view middleware technology providing lot of feature.

Till yet this technology mostly used in private banks but many Indian bank and other banks in all over world using old technology. Through middleware technology product weblogic, it’s very easy to implement application setup. All banks those are not using this technology to understand about this technology and need to adopt the reality of this technology. As all organization want good outcome against low cost. As I said earlier security is major concern in banking sector so they need to understand the security mechanism feature of this technology.

3.1 Previous disadvantage and requirements

Security is one of the reasons for moving to three-tier architecture for enterprise access, there are many practical security challenges which arise in designing a three-tier-system. These include assuring user authentication, controlling user access, auditing user actions, protecting data security between tiers, limiting privilege of the middle tier, managing identities across tiers, and building scalable systems.

The three-tier architectures exist in market from last couple of years. As an example, it's very common for dumb terminal or PC's to access the data on mainframe by allowing transaction processing monitors. Why we develop the three-tier system?, The reason is because it provides efficient resource management, security, improved scalability and high availability. By allowing a number of users device to share a relatively connection to database or any backend, middleware work as a middle layer or we cay as a concentrator in three tier technology. In brief we can say, presentation of data to user is focused by middle tier in a three tier system and it allowed to backend about the management and processing of data. However for efficient data management database are already optimized, it can improve efficiency and scalability of a system in middleware by moving responsibility for data presentation and connection management. If I will talk more on it, users have a limited access in middle tier where the business logic exist and maintained a sensitive data in database is provided by another layer of isolation. Need of three tier technology greatly increased by internet. Companies provide their enterprise data processing systems by allowing user to access through internet. For this purpose they provide a front end to their enterprise system by deploying a webserver. They use of thin client by allowing webservice in middle tier(like browser), and it support number of communities which is easy to use and user friendly and in last it reduce the overall cost of system. Enterprise systems are the fastest growing type of three tier system by providing Web-enabled access to companies. [18][23]

Earlier there was not lot of difficulties was there like suppose we are withdrawing some money from ATM but we are not able to get the money however amount is less form account, mean to say transaction is not successful so many of these kind of difficulties are still there in banking.
3.2 Main problems to adopt three tier technologies

As three tier technology provide more advantage however still this technology is not very popular in banking sector. We can say there are different problem to adopt this technology like below.

1] There is no proper infrastructure

2] Cost is very high of software product

3] Support of this product is not easy

4] Proper planning and triaging on product

It’s very difficult to replace the current technology specially is government banking sector because staff is not as young generation, Second need to replace old banking application and infrastructure this is main difficulty because it’s not sure like changes in existing system will work properly, so If I will talk about developers they will not sure this existing system will work with new three tier technology.

So all these are support problem and we can categorize as below.

1] How the new system support to existing system

Suppose in few banks this technology is already going on and in feature something is new launched so question is how we will replace to existing, is there any extra cost for it and is this new launch product is compatible with old one because some time it’s happen new launched do not worked with old one.

2] Changes to existing system

It’s very challenging to replace the existing system. Suppose a vendor had complete knowledge of a particular product and he do the complete setup of application including infrastructure and company decided some cost for him but after some time something new launched and it will improve the performance of application, so in that case it’s very challenging with old vendor with same cost.

3] Expert limitation in Middleware technology

As lot of product launched in Middleware technology and expert are very limited in this field. This is major problem with this technology because without expert we cannot do the complete setup or we can say deploy this infrastructure. Expert those are in market is very costly so due to cost government banking sector is still not adopting this technology.

4] Licensing cost is very high

Cost of license is very high and still government banking sector and other small banks are not able to purchase.

3.3 Hypothesis
At conclusion I can say below is the hypothesis by adopting the Middleware technology.

1] Middleware technology increase the reliability

2] Middleware technology increase the flexibility

3] Middleware technology provides the business continuity, mean without failure get the application available for 24*7

4] Middleware technology provide the failover mechanism

5] Middleware technology provides the single point of control with application.

6] High performance with low cost

7] Better security feature that can secure the banking application