**Ex 1)** A data warehouse is subject-oriented. What would be the major critical business subjects for the following companies?

a. an international manufacturing company

b. a local community bank

c. a domestic hotel chain

1. An international manufacturing company

1)Shipments (shipment is the major subject for an internationalManufacturing companies)

2)Manufacturing( it contains product,order etc dimension)

3)Financial Management( it contains sales, price,account,contract)

6)Supplier

b). A local bank community

1. loans
2. profits
3. customers
4. Accounts
5. Transactions
6. Employees

c). a domestic hotel chain

1. Booking
2. Fairs
3. Branches
4. Rooms (Room type)

**Ex 2)** Identify an Organization whose business needs can not be fulfilled by existing operational database systems and it require a data warehouse solution. List down the issues, which can not be resolved by operational databases for this particular organization and how a data warehouse would help. Also identify required levels of granularity (Be Precise).

1)The association which need to gather an ever increasing number of data for logical based choices.

2)he association which have colossal data and exchange developing each day

3)The association which need to supplanting/supporting human dynamic with mechanized calculations;

4)The association which need to advancing new plans of action, items, and administrations.

**Issues in functional database**

1.Can handle less traffic

2.Can’t gather data from numerous sources without any problem

3.Not useful for examination as have less BI devices mixes

**How a data warehouse would help.**

**A Data Warehouse Generates cost saving money on High ROI**

Organizations that have executed data warehouses and corresponding BI frameworks have created more income and saved

more cash than organizations that haven't put resources into BI frameworks and data warehouses as they can take better choice on data bases.

**A Data Warehouse Saves Time and productivity**

Since business clients can rapidly get to basic data from various sources—across the board place—they can quickly

settle on educated choices on key drives. They will not burn through valuable time recovering data from various sources.

**Conveys improved business insight**

By approaching data from different sources from a solitary stage, leaders will at this point don't have to depend on restricted data or their sense.

**EX3)**Data warehouse projects are different from projects building the transaction processing systems.

How about traditional system development life cycle (SDLC) approach?

Can we use this approach to data warehouse projects as well?

If so, what are the development phases in this life cycle?

The existence cycle philosophy separates the undertaking intricacy and eliminates any uncertainty with respect to the obligations of venture colleagues. It infers an anticipated arrangement of undertakings and expectations.

That the existence cycle approach separates the task intricacy is distant from everyone else reason enough for this way to deal with be applied to a data warehouse project

**Data warehouse development phases.**

* Project plan
* Requirements definition
* Design
* Construction
* Deployment
* Growth and maintenance

**Ex4)**You are the vice president of marketing for a nation-wide appliance manufacturer with three production plants. Describe any three different ways you will tend to analyze your sales. What are the business dimensions for your analysis?

One way deals can be investigated is through period correlations as to the last year versus the current monetary year that has recently finished. These period examinations project the improvement or absence of it in deals of a given organization. The subsequent method to break down deals is through contender examination. For this situation, the three plants might be evened out against one another searching for the one with the best deals over a similar period. Third, deals can be dissected through Per Capita Sales which decide the quantity of dollars that have been produced using the offer of items by a given populace.

The business measurements can incorporate client type, time span), (client district and area.

**Ex5)** For an airlines company, identify three operational applications that would feed into the data warehouse. What would be the data load and refresh cycles?

Booking application: need full burden and the start and steady burden; the invigorate possibly month to month or quarterly User Account application: need full burden and the start and gradual burden; the revive perhaps month to month or quarterly. Client data will have tremendous sum to data and client data changes each day, this can completely stacked toward the start and afterward update the progressions every month or quarter. Flight application: need full burden, the invigorate possibly quarterly or yearly. Flight data is relative stable and has restricted data. This can be full stacked to framework.

Ex6)Construct an information package diagram for analyzing expenses against provided budget. for a large scale manufacturing organization dispersed across 15 countries, and more than 50 divisions and districts. Management would like to study and analyze expense over time (days, months, years and so on), district , division and budget line items. Show also a drill down dimension.

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Location** | **Product** | **payment** |
| Year | Country | Product model | Visa debit |
| Quarter | District | Product year | Online payment |
| Month | division | Product styling | Online payment |
| Date | City | Product line | Cod |
| Day of week | Store | Product category |  |
| Day of month |  |  |  |
| Season |  |  |  |
| Holyday flag |  |  |  |
|  |  |  |  |

Ex7 BigBook, Inc. is a large book distributor with domestic and international distribution channels. The company orders from publishers and distributes publications to all the leading booksellers. Initially, you want to build a data warehouse to analyze shipments that are made from the company’s many warehouses. Determine the metrics or facts and the business dimensions. Prepare an information package diagram.

|  |  |  |  |
| --- | --- | --- | --- |
| Time | Dealer | Costumer | Location |
| Year | Publisher | Name | Counter |
| Quarter | Author | Age | Division |
| Month |  | Gender | City |
| Date |  | Books bought | address |
| Day of week |  |  |  |
| Day of month |  |  |  |
| Season |  |  |  |
| Holyday flag |  |  |  |

Facts: dealer, publisher, costumer, location

Ex8 Construct an information package diagram for hotel stays, identifying the dimensions, attributes, and facts. The hotel management would like to study the occupancy patterns in their hotels over time (days, weeks etc), locations, travel agents, customers, room types, rate plans, etc. Furthermore, they would also like to have ready access to the rooms that are occupied or vacant on a given date.

|  |  |  |  |
| --- | --- | --- | --- |
| Time | Costumers | Rooms | rate planes |
| Year | Name | booked date | One bed room |
| Quarter | location | Check in date | 2 bed room |
| Month | phone number | Check out date | Daily rent |
| Date | email | Room | Weekly rent |
| Day of week |  | Vacant or booked |  |
| Day of month |  |  |  |
| Season |  |  |  |
| Holyday flag |  |  |  |

Facts: vacant rooms, booked rooms, booking pattern, rate planes