Case Study 1

Project Management for DW

Project Background

A leading arcade gaming chain has approximately 500 branches all over the Philippines. One of its perennial problems is its prize items inventory stock outs. Customers after playing games win points from the machines and may opt to claim gift rewards from the prize item booth. However, most customers complain of out-of-stock inventory and long replenishment lead times. Furthermore, a majority of the branches are situated in malls and thus have limited storage space for keeping enough inventory. Therefore, keeping sufficient as well as the right inventory to cover supplier lead times is one of the major objectives of the study. Based on requirements gathered from the business, the project will encompass the following items:

- To analyze the historical demand for prize items from the different branches, different regions and propose simple forecasting tools to provide forecasts for inventory ordering policies.
- To analyze supplier purchasing information from the purchasing department in terms of lead time, bulk orders, volume price discounts to name a few.
- To design inventory ordering policies for each prize item based on the behavior of demand, supplier order lead time and other relevant product group characteristics such as shelf life or storage space requirement.

Business Process Overview

A POS system is installed in all braches that tracks the point of sale of redemption items. Whenever a customer redeems a prize from the prize booth, the transaction is logged into the system. Furthermore, a local inventory tracking database system called ITDS tracks the receipts of replenishment items, management of inventory levels and requests for replenishment stocks. When prize item's inventory is low, the branch manager requests additional stock through ITDS. The quantity of the requested stock is good for one month. The request form is then emailed to the company's centralized procurement department. A buyer collates all stock requests into a Purchase Order which is sent to a predetermined supplier using an SAP ERP system. The supplier then delivers the ordered stock at the warehouse. The receipt of the items is logged in the same SAP ERP system. Then warehouse personnel divides the receipt into quantities for all branches that requested for that prize item. The stock transfer is logged in an excel sheet, and henceforth delivered to requesting branches. The branch manager then receives the delivery and logs it in the ITDS. The issuance of items to the prize both is done once a day and the cycle continues.

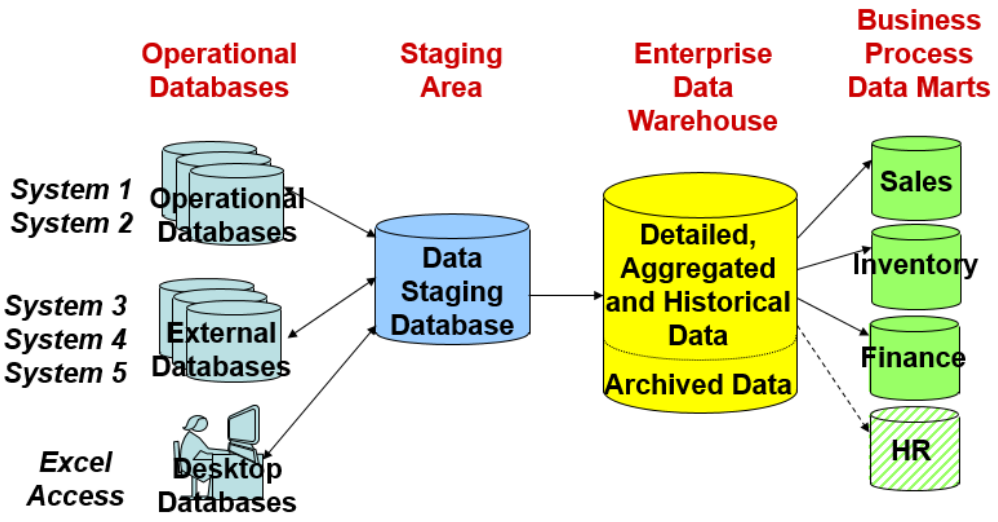
It is desired that the project is considered a success when:

- Improved service level provided to customers by minimizing stock outs
- Ordering the right amount of inventory

E.R.L. Jalao
eljalao@up.edu.ph

1. **Develop a high level list of tasks for Project/Program Planning and Management for the BIDW project. Estimate and include the following columns:**
   1.1. Work Breakdown Structure (WBS) Number
   1.2. Task Number
   1.3. Task Description
   1.4. Duration (days)
   1.5. Work (hours)
   1.6. Task Number(s) of immediate prerequisite task(s)
   1.7. Resources (initials of person/role with the primary responsibility)
   1.8. Gantt Chart

2. **High Level BIDW Architecture Model**
   2.1. Create and adapt a version of Kimball's High Level DW/BI System Architecture Model



   2.2. Create and adapt a version of Kimball's Application Architecture Model as shown

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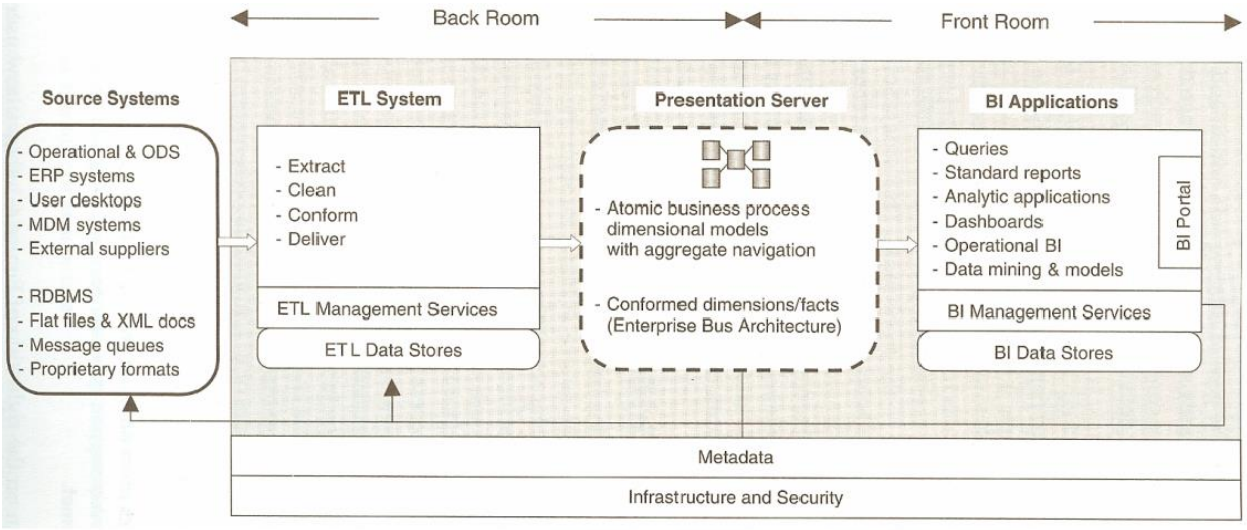

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