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| **Project Charter** | | | |
| **Project Name** | IST 722 Group Project Assignment – Fudgeflix & Fudgemart | | |
| **Project Description** | The goal of this project is to integrate and build a BW/BI solution for the two subsidiaries that make up the Fudgemart Inc. | | |
| **Project Manager** | Zachary Chipman  Andrew Dobkowski  Kevin Hager  Jennifer Han  Alison Reikher | **Date Approved** | **5/29/022** |
| **Project Sponsor(s)** | Prof. Humayun Khan | **Signature** |  |
| **Business Case** | | **Expected Goals/Deliverables** | |
| Integrating the two separate databases (Fudgemart\_v3 & Fudgeflix\_v3) as well as the ExternalSources database into a single data warehouse will give Fudgemart, Inc. a solid foundation for their business intelligence that is subject oriented, non-volatile, time variant, and is seamlessly integrated. | | **Requirements**: construct a single integrated BW/BI. Starting with outline of functional requirements as well as 5 business processes and building high-level dim model. Identifying 1 business process for detail-level dim model and integration across both Fudgemart and Fudgeflix. | |
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| **Team Members** | | **Deliverables** | |
| **Name** | **Role** | High-level Dimensional Model: Sales, Order  Fulfillment, Customer Feedback, Payroll, Monthly Subscriptions | |
| Zachary Chipman | Dimensional Modeling, ETL in SSIS, Business Intelligence | Detail-level Dimensional Model: Customer Feedback | |
| Andrew Dobkowski | Dimensional Modeling, ETL in SSIS, Business Intelligence | SQL Implementation: Use generated SQL code from detail dim model | |
| Kevin Hager | Dimensional Modeling, ETL in SSIS, Business Intelligence | Initial ETL: Execute ETL in SSIS | |
| Jennifer Han | Dimensional Modeling, ETL in SSIS, Business Intelligence | Creation of MOLAP Cubes: Using SSAS | |
| Alison Reikher | Dimensional Modeling, ETL in SSIS, Business Intelligence | Business Intelligence: Connect to DW and build business intelligence using PowerBI | |
| **Risks and Constraints** | | **Milestones** | |
| **Fudgeflix Dates** | Shipped date and returned date are the same for all null rows | **Milestone 01:** Project Document | **5/1/2022** |
| **Integration** | Figuring out best way to integrate across databases | **Milestone 02: High** Level Dim Model | **5/12/2022** |
| **Fuzzy Matching** | Might need to fuzzy match customer first/last names | **Milestone 03:** Detail Dim Model | **6/5/2022** |
| **Data Limitations** | Few shared characteristics across both databases | **Milestone 03:**  SQL Implementation | **6/12/2022** |
|  |  | **Milestone 03:**  Initial ETL | **6/12/2022** |

# **Business Requirements**

For any business to have lasting success they must be focused on data. Fudgemart is no exception to this, which is why they are seeking to improve their current data bases. Fudgemart is wanting to create a data warehouse in order to enable the integration of their two currently separated data bases, Fudgemart and Fudgeflix. They want to be able to use their data to its fullest potential by guaranteeing that it is compatible with business intelligence tools, as well as ensuring that their newly created data warehouse is subject-orientated, non-volatile, integrated, and time-variant.

# **Functional Requirements**

1. The business must be able to track the spending habits of its customers across the different parts of the business and their demographics.
2. The business must be able to track the length of time between the ordering and the shipping of products. The business must also be able to analyze these times to see if they factor into the sales/perception of a product.
3. The business must be able to monitor and measure the perception of their products amongst both of their subsidiaries. This metric can be used to assess the quality of products by vendor.
4. The business must be able to understand the internal expenses they are encountering.
5. Fudgeflix must the able to track the retention among current customers as well as tracking new subscriptions.

# **Business processes (related to above questions)**

1. **Sales:** Need to understand the sales for both Fudgemart and Fudgeflix. This will give us a deeper insight into the business of each company. Will be using the following facts: Retail Price, Wholesale Price, Quantity and Total Sold Amount, and the following dimensions: Product, Customer and Billed Date.
2. **Order Fulfillment:** We will assess the efficiency of order fulfillment to better understand competency of Fudgemart and Fudgeflix shipping. We will be using the following facts: Order Date, Shipped Date, Lag and using the following dimensions: Customer, Order Date, Shipped Date, and Shipper.
3. **Customer Feedback:** Want to gain additional knowledge into the customer’s experiences with Fudgemart and Fudgeflix products by gleaning valuable insight from the customer reviews left on said products. We will use the following fact: ReviewStars and the following dimensions: Product, Customer, Review Date.
4. **Payroll:** Want to look at the current Payroll expenses for Fudgemart and Fudgeflix. This will help us understand the internal workings of both companies. We will use the following facts: Hours Worked and Total Pay and we will use the following dimensions: Employee, and Payroll Date.
5. **Subscriptions:** Want to look at the details of Fudgeflix’s monthly subscriptions as well as any changes to the number of subscribers and any change rates between different plans. This will also allow us to better understand Fudgeflix’s revenue. We will use the following facts: Total Number of Subscribers, Total Number of Plan Changes, Retention Rate, Total Monthly Revenue. We will also use the following dimensions: Customer, Billing Snapshot Date, Plan.

# **Business Process (selected from above) for integration implementation**

Customer Feedback: Understanding customer’s experiences with the products from both companies

**Fact Table**

* FactCustomerFeedback
* Fact Grain Type: Transaction
  + One row per product review

**Facts**

* ReviewStars

**Dimensions**

* Product
* Customer
* ReviewDate

# **Comments**