**2.3.3 – Function Estimate - Hours**

1. Overview

This section describes the methodology used to calculate the estimated number of hours of the project using Function Point Estimation, based on a wider base of knowledge gained from class lectures and working on the SPMP up until this point, as well as the techniques detailed in CIS375 Powerpoint 2 - Software Engineering Project Management, slides 31-37.

1. Estimation
   1. Functionality Breakdown
      1. Overall Functionality (via use cases)
         1. Inventory
            1. Store / Warehouse data updates (store info, item stock, etc)
            2. Item-level data updates
         2. Customer
            1. Point of sale purchasing/ordering
            2. Point of sale customer data updates
         3. Transactions
            1. Batch transactions (overnight)
            2. Online transactions (point of sale)
         4. Sales
            1. Sales Reporting
            2. Promotions Management
         5. Store Management
            1. View/Update & Close Store
      2. Category Breakdown
         1. External Inputs (EI)
            1. Store Management screen - Average
            2. Inventory screen - Average
            3. Point of sale screen - High
            4. Batch file processing input - High
            5. Sales screen - Low
            6. Sales promotion update - Average
         2. External Outputs (EO)
            1. Store Management screen - Average
            2. Inventory screen - Average
            3. Point of sale screen - High
            4. Sales promotion update - Low
            5. Error log file - Low
         3. External Inquiries (EQ)
            1. Batch file processing output - Low
            2. Sales report output - Average
         4. External Interface Files (EIF)
            1. Vendor order file - Low
         5. Internal Logical Files (ILF)
            1. Transaction table - Low
            2. Customer table - Average
            3. Store table – High
            4. Item table - Average
   2. Function Point Valuation

|  |  |  |
| --- | --- | --- |
| Category | How Many | Complexity |
| EI | 2 | 3 |
| EI | 3 | 4 |
| EI | 1 | 6 |
| EO | 2 | 4 |
| EO | 2 | 5 |
| EO | 1 | 7 |
| EQ | 1 | 3 |
| EQ | 1 | 5 |
| EIF | 1 | 5 |
| ILF | 1 | 7 |
| ILF | 2 | 10 |
| ILF | 1 | 15 |

* 1. Function Point Summation: 104 Total
  2. Total Hours Estimation: 832 Total Hours