Beverage Metrics Enterprise Proposal

Hosted Beverage Management Solution

# Overview

Beverage Metrics is looking to replace the existing enterprise solution with a new platform.

# Architecture

The following diagram describes the high level software architecture of the system to be built:



# Scope of Work

The Beverage Metrics Enterprise and Banquet Clients will be built on the existing infrastructure set up for the Lite system to accelerate the development process.

**Bev Met Enterprise Client**

1. Inventory
   1. Track Branded and Unbranded Inventory
   2. Move Branded and Unbranded inventory from location to location (in bulk for unbranded items and by tag for tagged items)
   3. Ability to view inventory snapshots by date. (Not just what’s currently on hand)
   4. Inventory needs to push changes to the cloud in real time.
   5. Inventory (branded and unbranded) needs to have information associated with it, but not required.
      1. Potential data elements:
         1. Pricing
         2. Invoice #
         3. PO#
         4. Notes
      2. Need ability to brand and add to inventory. Facilitate capturing data when this is done, but don’t get in the way.
   6. FIFO Inventory management – when inventory is tagged or dispensed, use the oldest first.
   7. Par Levels – recorded at the location level (i.e. Bars and/or storerooms)
      1. Ability to roll up par levels for an organization.
2. POS Reconciliation
   1. Ability to match pours to POS ring-ups. This includes mixed drinks.
      1. Matches within X amount of time
      2. By pour/UPC and recipes.
      3. Ability to match pours on a per shift basis (see below).
   2. Ability to configure unknown POS ring-ups to UPC’s based on what is not matching.
   3. Intuitive display of matches and un-matched items.
3. Alerts – Via Email/Text Messages
   1. Missing Bottle Alert (after X minutes) – Tag ID, UPC Name, Location
   2. Detach Alert (after X seconds) – Tag ID, UPC Name, Location
   3. Unknown Pour – Tag ID, Location
   4. Device Status – alert that a device has gone offline.
   5. Poured but not rung-up (POS after X minutes) – Pour type, location, date time.
4. Reports
   1. Ability to print, export, and email reports.
   2. Easily updated
   3. Ability for some limited user customization.
   4. Report List
      1. Daily Summary – delivered via email
      2. Beverage Costs by % and actual
      3. Par Level Report – delivered via email
      4. Over/Under Pour Report – delivered via email
      5. Tag Status – low battery, missing/not reporting.
      6. Actual vs. estimated revenue report (site level or bar location level).
      7. Actual vs. estimated cost report (site level or bar location level).
      8. Margin report (site level or bar location level).
      9. Bar operational efficiency and POS reconciliation report.
      10. Yield report.
      11. Pour detail report.
      12. UPC Roster.
      13. Bottle Information Detail Report
      14. Current Branded Bottle Detail Report
      15. Total Inventory On-Hand Report
      16. Cart Inventory On-Hand Report
      17. Inventory Adjustments Report
      18. Running Counts Report
      19. On Hand Historical Inventory Snapshot
      20. Receiving Report
      21. Issues Report
5. Engine plugins
   1. Cloud Data Publisher
   2. Alert Publisher
   3. Missing Bottle Filter
   4. Modify Detach Filter to send alerts.
6. Branding
   1. Ability to brand inventory
   2. Ability to un-brand inventory
7. UPC Management
   1. Ability to add/update/remove UPC’s from the system
   2. Ability to import UPC’s in bulk from a specified file format.
8. Remote Branding Station
   1. Ability to move tagged inventory
   2. Ability to brand inventory
   3. Ability to view reports
9. (FUTURE)\*\* Shifts – who’s working at what locations during which times.
10. (FUTURE)\*\* Data Analytics – historical analysis of the bar and its performance.

**Bev Met Cloud System**

1. Multi-client login
2. Admin tool – User/Group/Organization setup.
3. Reporting based on location or rolled up to selected level.
4. Reports (same as on the Branding Station)
   1. Daily Summary
   2. Beverage Costs by % and actual
   3. Par Level Report
   4. Over/Under Pour Report
   5. Tag Status – low battery, missing/not reporting.
   6. Actual vs. estimated revenue report (site level or bar location level).
   7. Actual vs. estimated cost report (site level or bar location level).
   8. Margin report (site level or bar location level).
   9. Bar operational efficiency and POS reconciliation report.
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   19. On Hand Historical Inventory Snapshot
   20. Receiving Report
   21. Issues Report

**Bev Met Banquet System**

1. Banquet Configuration
   1. Ability to create events
      1. Packages – specific brands of product with recommended amounts
      2. Associate readers with events
      3. Associate staff to readers
   2. Consumption report
2. Banquet Tablet
   1. Ability to “start” an event
   2. Ability to view a “pick list” of items needed for the event and scan items in based on that list (but not restricted to the list).
   3. Ability to add/remove/move items while the event is running.
   4. Ability to dispense untagged product – Scan and done
   5. Ability to capture pours from all tags in range – reconciled on upload.
      1. Multiple reads of a single tag are reconciled to a single pour and event.
      2. Unknown tags are marked as such.

Other items that will be included in the estimate are:

1. Project Management/Meetings
2. Application installers
3. Quality Assurance and Testing
4. Documentation

# Time Estimate

The scope of work above can be decomposed into the following major sections:

|  |  |  |
| --- | --- | --- |
| Days | Task |  |
| 25 | Client – Inventory |  |
| 18 | Client – POS Reconciliation |  |
| 2 | Client – Alerts |  |
| 27 | Client – Reports |  |
| 5 | Client – Engine Plugins |  |
| 5 | Client – Remote Branding Station |  |
| 5 | Server – Admin Tools |  |
| 10 | Server – Reporting infrastructure |  |
| 21 | Server – Reports |  |
| 5 | Server – User/Group/Org Infrastructure |  |
| 10 | Banquet – Configuration |  |
| 1 | Banquet – Reports |  |
| 24 | Banquet – Client |  |
| 158 | **Development Total** |  |
| 30 | Testing |  |
| 5 | Install Packages |  |
| 5 | Build/Code Management |  |
| 5 | Documentation |  |
| 15 | Project Management |  |
| 60 | **Testing/Management Total** |  |
| 218 | **Estimate Total** |  |

# Schedule

Based on the time estimates above, the application of 2.5 developers, and a start date of 1/4/2012 the following schedule will be targeted for delivery:

**Phase** 1:

1/4 Project Start Date

1/13 Delivery of modifications for Alerts (Start testing alerts)

1/27 Delivery of POS Reconciliation modules (Start testing POS)

2/8 Delivery of Remote Branding Station (Start testing Remote Branding Stations)

2/17 Delivery of Inventory modifications and Cloud based reporting infrastructure

3/2 Delivery of Banquet Configuration (Start testing Banquet Config)

3/9 Delivery of a subset of the reports (Client)

3/16 Delivery of additional reports (Client)

3/23 Delivery of Banquet Client and additional reports (Client) (Start testing Banquet Client)

3/30 Delivery of a subset of the reports (Client & Server)

4/6 Delivery of a subset of the reports (Client & Server)

4/13 Delivery of a subset of the reports (Server) and application installers

4/20 Delivery of a subset of the reports (Server) and documentation

4/27 Delivery of a subset of the reports (Server)

5/4 Complete testing and report verification

# General Notes

* Development will be done in a modular fashion with regular releases to ensure that the direction of the development is in line with the direction of the business.
* Testing will be done by Beverage Metrics employees or by contract testers.
* Documentation will be done by a technical writer.
* Environment
  + Development Tools : Visual Studio 2010
  + Language : C#
  + Framework : WinForms, Windows Services, HTML5/ASP.NET