Functional Requirement Document

Project Start Date   : 29th of June 2017

User   : Bio-Care

BRM   : Christopher Linkoln

Version	Date Updated	Remarks
1.0	20th April 2017	
1.1	29th June 2017	

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1.0 Executive Summary

Bio-Care provides environmental solutions for the food services manager such as High pressure Vacuum Service, High pressure water jetting service, Closed circuit television for pipes inspections, Electro-Mechanical or Mini-jetting service, and Bio-Care portable grease traps and by using EQUIP ERP system, admin can enter necessary lead details, set the schedule of the appointment while at the same time a team of worker receives the details of the work via an app and starts working on the tasks.

The following FRD outlines the following features for Bio-Care project:

a) **CRM**
   Bio-Care can enter the contact details, creating new leads and convert it to opportunities. Using CRM, Bio-Care is able organize sales and customer data into manageable chunks that can be used to inform all of the other data that is necessary for decision making.
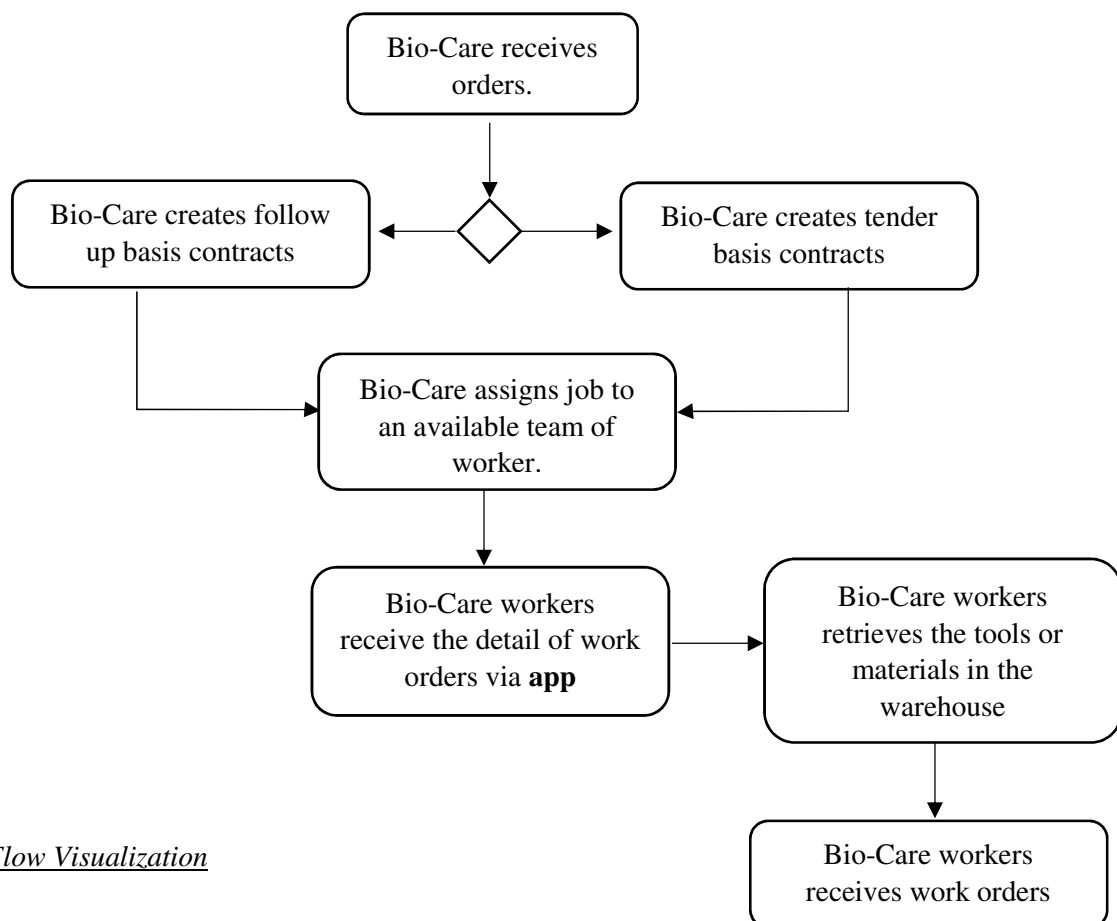
b) **Booking System**
   Bio-Care can create bookings based on tender or follow-up basis contracts. Bio-Care assigns the job to a team of worker that is available and finally, the cost of the contract will be entered after the job is done.

c) **Bio-Care App**
   By using the Bio-Care app, team of workers will receive the detail of the work, start the timer while GPS is being activated, enter the material and tools used in the process, and remarks.

d) **Warehouse Management**
   Centralized management that supports day to day operations in a warehouse. Bio-Care can track the inventory level of each item, stock location, stock in and stock out process between the vehicle and warehouse.

Booking Flow Visualization

2.0 Features

2.1 CRM

2.1.1 Customer Management

Objective	Allow users to manage customer database, track past sales and assign tags for classification.
Features	1. Create, update and delete: 2. Customers record 3. Contact persons 4. Differentiate between invoicing address and delivery address through Contacts 5. Set default Payment Terms for Customers 6. Manage Customer tags for classification and easy search 7. Generate Debtor's statement and partner ledger 8. Filter and sort based on existing fields

Fields	Type	Restrictions	Default Value	Remarks
Customer Name	Textfield			
Company	Dropdown			
Address	Textfield			
Website	Textfield			
Tags	Dropdown			
Job Position	Textfield			
Phone	Textfield			
Mobile	Textfield			
Fax	Textfield			
Email	Textfield			
Title	Dropdown			
Language	Dropdown			

2.1.2 Leads and Opportunities Management

Objective	Allow Bio-Care to create leads and convert them into opportunities.
Features	1. Create, update and delete leads and opportunities 2. Kanban view and list view for all applicants 3. Determining high-quality leads and convert them into opportunities

| | | 4. Setting the priority of each leads
5. Record logged calls
6. Create segmentation of opportunities | | |

Fields	Type	Restrictions	Default Value	Remarks
Company Name	Textfield			
Customer	Dropdown			
Address	Textfield			
Website	Textfield			
Salesperson	Dropdown			
Job Position	Textfield			
Contact Name	Textfield			
Title	Dropdown			
Tags	Dropdown			
Function	Textfield			
Phone	Textfield			
Mobile	Textfield			
Fax	Textfield			
Email	Textfield			
Title	Dropdown			
Language	Dropdown			

2.1.3 Contracts Management

Objective	Allow tender or follow-up contracts creation
Features	1. Create, update and delete contracts 2. Renew, close and cancel contracts 3. Set the template of contracts 4. Renewal of contract based on pre-set range of date. 5. Create invoices based on contracts. 6. Create recurring invoices. 7. Expiry date will be set for contracts – 3 months

2.1.4 Quotation and Sales Order

Objective	Allow quotation and sales order creation
Features	1. Create, update and delete sales order 2. Search, Filter & Sort Sales order records 3. Create quotation and sales order based on contracts 4. Create invoice based on finished work orders (contract based job) 5. Create invoice before work order starts (ad-hoc based job) 6. Generate quotation printouts 7. Set the payment term for each sales order created

Fields	Type	Restrictions	Default Value	Remarks
Product	Dropdown			
Description	Free text			
Qty	Free text			
Unit Price	Free text			
Discount	Dropdown			
Subtotal	Predefined			
Taxes	Dropdown			
Status	Predefined			
Company	Dropdown			
Date	Dropdown			
Attention	Dropdown			
Project	Dropdown			
Terms	Dropdown			
Currency	Dropdown			
From	Predefined			
Prepared by	Dropdown			
Validated by	Dropdown			
E-Mail	Textfield			

Fields	Type	Restrictions	Default Value	Remarks
Expiration Date	Dropdown			
Payment Terms	Dropdown			
Fiscal Position	Dropdown			
Incoterms	Dropdown			
Shipping Policy	Dropdown			
Salesperson	Dropdown			
Sales Team	Dropdown			
Customer Reference	Textfield			
Printouts				Work orders

2.2 Booking System

2.2.1 Booking Management

Objective	Creating bookings based on type of contracts
Features	1. Create, update, and delete booking 2. Search, Filter & Sort booking records 3. Assign bookings to workers 4. Determine expected and the actual cost for each contracts 5. Determine the invoiced amount per contracts 6. Show the materials and tools used for each bookings 7. Generate recurring invoices 8. Determine team leader for each bookings 9. Show history of bookings

Fields	Type	Restrictions	Default Value	Remarks
Team	Dropdown			
Workers	Multi-selection			
Work Location	Dropdown			Location of the job based on work orders
Work orders	Text field			List of work orders
Appointment date	Date			
Appointment time	Time			
Job History	Pre-defined			
PIC	Dropdown			PIC – Contact number

2.2.2 Worker Management

Objective	Assign workers to specific team and jobs
Features	1. Create, update, and delete worker records based on bookings 2. Search, Filter & Sort worker records based on bookings 3. View calendar showing workers activities 4. Allocate workers and the team leader to specific vehicle 5. Allocate workers and the team leader to specific booking 6. Show available time-slots for each workers 7. Show timesheet of each workers

Fields	Type	Restrictions	Default Value	Remarks
Team leader	Pre-defined			WH/ Type of Vehicle / Vehicle name
Worker	Pre-defined			
Time in	Pre-defined			Recorded per work order for all workers involved
Time out	Pre-defined			Recorded per work order for all workers involved
Type of Vehicle	Pre-defined			WH/ Type of Vehicle / Vehicle name
Vehicle name	Pre-defined			WH/ Type of Vehicle / Vehicle name
Source of Vehicle (WH)	Pre-defined			WH/ Type of Vehicle / Vehicle name
List of Materials and tools	Product lines			
Start / Stop	Button			
Remarks	Text area			

2.2.3 Configurations

Objective	To configure the components to be available to the users
Features	1. Allocate vehicles according to the zone 2. Pre-set each locations to one particular zone based on Singapore District Map 3. Pre-define type of vehicles based on the services type.

Fields	Type	Restrictions	Default Value	Remarks
Vehicle name	Dropdown			
Zone	Text field			
Locations	Text field			Pre-recorded based on Singapore District Guide

Type of Vehicles	Dropdown			
Type of Services	Text field			

2.3 Bio-Care App

2.3.1 Time Tracker

Objective	Allow workers to record the time used for each jobs
Features	1. Record the start time and end time of each jobs 2. Show the status of the job 3. Enter the materials and tools used on each jobs 4. Enter remarks

Fields	Type	Restrictions	Default Value	Remarks
Team leader	Pre-defined			WH/ Type of Vehicle / Vehicle name
Worker	Pre-defined			
Time in	Pre-defined			Recorded per work order for all workers involved
Time out	Pre-defined			Recorded per work order for all workers involved
Type of Vehicle	Pre-defined			WH/ Type of Vehicle / Vehicle name
Vehicle name	Pre-defined			WH/ Type of Vehicle / Vehicle name
Source of Vehicle (WH)	Pre-defined			WH/ Type of Vehicle / Vehicle name
List of Materials and tools	Product lines			
Start / Stop	Button			
Remarks	Text area			

2.3.2 Job Lists

Objective	Allow workers to see their assigned job lists
Features	1. Show the assigned jobs to the worker (work orders) 2. Show the location of the job (work orders) 3. Show the appointment date and time of the job (work orders) 4. Time stamp for each job taken. 5. List out the details of equipment in the vehicle. 6. Show the list of the workers involved in the job Condition: 2 vehicles may be involved in one work order.

Fields	Type	Restrictions	Default Value	Remarks

Location	Pre-defined			Location of the job based on work orders
Work orders	Pre-defined			List of work orders
Appointment date	Pre-defined			
Appointment time	Pre-defined			
Job History	Pre-defined			
PIC	Dropdown			PIC – Contact number

2.4 Warehouse Management

2.4.1 Managing Inventory

Objective	Allow workers to check the available materials and tools
Features	1. Create, update and delete the products 2. Show and adjust the inventory level for each materials and tools. 3. Show the available materials and tools in warehouse 4. Show stock movement between warehouses and vehicles 5. Manage and configure warehouse and stock location. 6. Determining the units of measurements of each materials and tools. 7. Create, update, and delete product category 8. Assign each product category to a specific products.

Fields	Type	Restrictions	Default Value	Remarks
Type of Vehicle	Textfield			WH/ Type of Vehicle / Vehicle name
Short Name	Textfield			
Address	Dropdown			Location of Vehicle
Vehicle Name	Textfield			WH/ Type of Vehicle / Vehicle name
Source of Vehicle (WH)	Dropdown			WH/ Type of Vehicle / Vehicle name
Location Type	Dropdown			Internal for inventory
Owner	Dropdown			
Product Category	Dropdown			
UOM	Dropdown			
Location Barcode	Textfield			WH – Source of Inventory <to be confirmed on the second phase>

3.0 Access Rights

3.1 Administrator

Function	Features
2.1.1 CRM Module	1. User will add the client details to lead 2. Converted to opportunities 3. Creates sales order (work orders) 4. Assign the work orders to the team (day shift team OR night shift team) 5. User is able to reschedule the work order. 6. Assign the team to the vehicle 7. You need to set the type of services to the vehicle 8. Generate work orders 8 am and upon validation, it will send the work order to the respective team. 9. Receives Ad hoc basis job – user will create new work order. 10. each contracts has one type of service 11. each services has multiple work orders 12. Text field on the invoice lines for work orders. 13. User should assign the location A, B , C , D in the contract 14. Time and customer name, Vehicle number will be shown in the calendar Sales report < to be confirmed>

2.1.2 Booking Management	1. Create, Edit, Delete Bookings
	2. User creates lead and convert it to opportunity
	3. Contract will be created based on the opportunity
	4. User will add the following components in the scheduler to auto-generate work orders:
	  - Weekly
	  - Twice weekly
	  - Fortnightly – 2 times a month
	  - Monthly
	  - Bi Monthly – every 2 months
	  - Quarterly
	  - Half yearly
	5. Team will be allocated to the work orders and upon validation, the details of the work orders will be sent to the app for the team to work on.

2.1.3 Worker Management	1. Create, Edit, Delete Workers 2. User creates workers and allocate them into a team. 3. A team will be assigned to vehicle in which has been set as per type of services. 4. Each equipment has been allocated to each vehicles.

2.1.4 Configurations	1. User is able to configure each zones based on the locations
	  example : Pasir ris, bukit panjang – West zone
	2. User is able to assign workers to the team
	  example : Eric, Chris – Team A

2.1.5 Biocare App	1. User will receive the work orders based on the validation of the work orders. 2. User is able to indicate the start time and end time of the work orders 3. User is able to submit the work orders. 4. Log time will be recorded per team not per workers
2.1.6 Warehouse Management	1. User will allocate different equipment or tools into vehicles (warehouse) 2. Hierarchy will be applied to analyzing purposes example : WH/ Type of Vehicle / Vehicle name 3. User is able to track the number of equipment or tools in each vehicles

	4. User is able to track the movement of the equipment and tools.

4.0 Timeline

Phase	Deliverables	Start	End	Implementation
Functional Requirement Gathering	Functional Requirement Document	20th April 2017	29th June 2017	Functional Requirement Gathering for Booking system - Biocare
Implementation of Booking system	Beta System	29th June 2017	25rd August 2017	Implementation of Booking system
Implementation of BioCare App	Beta System	26th August 2017	10th October 2017	Implementation of App
UAT	UAT Checklist Document	11th October 2017	13th October 2017	UAT for Booking system
		14th May 2017	15th June 2017	UAT for Biocare App
Deployment & Live	Alpha System	16th June 2017	17th June 2017	Deploy system to live environment

5.0 Document Acceptance

By the signatures of the duly representatives below, HashMicro Pte Ltd and the Customer agree to all of the terms of this document. The document once signed is considered final and valid as a Functional Requirement Document from the Customer.

Acknowledged By:

_____
(Name & Signature of Authorized Person)

Name: Alex To Hui Hong
Title: Manager
Company: Bio-Care Grease Control Pte Ltd

Acknowledged By:

_____
(Name & Signature of Authorized Person)

Name:
Title:
Company: