



Business Requirements Document

Esquire Fleet Management (EFM) Tool Cost of Ownership (TCO) System

Prepared for:	Esquire Fleet Management
Prepared by:	Chrome Data Solutions
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1. Definitions, Acronyms and Abbreviations

ACE	Automatically Comparably Equipped – Chrome Data tool for true apples-to-apples comparisons between vehicles
AFC	Account Fleet Coordinator
ACR	Annual Client Review - EFM tool for communicating with the customer their actual fleet operating costs.
AE	Account Executive - principally deals with the soliciting of new customers (the Hunter)
AE Presentation Generator	Creation of prospect-facing presentations based on PDFs created by other tools
AM	Account Manager - principally deals with the continued management of existing customers (the Farmer)
APPSEC	Application Security - EFM's in-house authentication system
Black Book	Source of residual vehicle values
Branch	Individual office within a Group
Customer	Paying client
EDGE	Portal application at EFM
EFM	Esquire Fleet Management
FRS	Fleet Replacement Schedule - EFM tool for building the schedule for replacing the vehicles in the customer's fleet
Full Maintenance Program	EFM would pay for all normal repairs
Group	Regional area consisting of one or more Branches.
LvP	Lease vs. Purchase - EFM tool for comparing the cost of leasing vs purchasing a vehicle
Maintenance Management Program	Customer pays for all repairs
MCA	Monthly Cost Analysis - EFM tool for calculating the monthly cost of leasing a vehicle
PDF	Portable Document Format
PING	In-house Windows security application
Prospect	A potential customer that is being pursued
Reimbursement	An expense that a customer has when their drivers use their own vehicles and the drivers are reimbursed for their usage
TCO	Total Cost of Ownership - New tool being proposed by this document, also refers to the existing LvP tool
VIN	Vehicle Identification Number
VPN	Virtual Private Network

2. Objective

The purpose of this document is to outline the high-level business requirements for the new TCO project for Esquire Fleet Management (EFM).

3. Overview

EFM currently operates a set of tools for approximating the cost of acquiring, operating, maintaining and replacing a fleet of vehicles on behalf of prospective and existing customers. These tools are implemented as Microsoft Excel spreadsheets involving the use of macros and other automation to enter assumptions, fleet data and historical data to arrive at several reports showing the advantage of using EFM to manage the customer's fleet of vehicles. These tools are:

- **MCA - Monthly Cost Analysis:** A tool that helps understand the cost of operating a vehicle on a month-by-month basis.
- **LvP/TCO - Lease vs Purchase/Total Cost of Ownership:** A wizard-like tool that asks questions about the operating costs of a vehicle in order to compare against their current costs vs letting EFM manage the vehicle.
- **Government 10-Year Model:** For government customers only, this tool imports the existing fleet data, analyses the usage patterns and recommends replacement vehicles and schedules.
- **FRS - Fleet Replacement Schedule:** By entering the customer's fleet information, recommendations can be made as to when vehicles can be replaced and by which vehicles.

EFM would like to consolidate and replace these separate tools into a single web-based system that not only unifies these disparate systems but also introduce improvements such as making it easier to understand, more client-friendly, financially accurate and consistent, giving more freedom of navigation, and the ability to use it anywhere. In order to perform an analysis, the user will be able to select vehicle related information, and enter financing and operational data. This document addresses these issues in the following business requirements.

4. Problem Statements

4.1.1. Disparate Tools

The current tools used to show the advantages of using EFM to the prospect or customer are powerful but are separated in terms of data and formulae. The same data has to be entered in various places and calculations are performed using different code, leading to inconsistent or erroneous results.

4.1.2. Excel as Platform

The current tools are implemented as Microsoft Excel spreadsheets. Excel is a great tool for small scale projects and prototyping, but as a project gets larger, it becomes difficult to maintain and manage. It also limits its usefulness in managing the sharing of data to various levels of authorization.

4.1.3. Difficult to Use

The current set of tools at EFM's disposal are difficult to train new employees on, and even seasoned employees give inconsistent results.

4.1.4. Manual Entry

Some data is already imported into the system via EDGE or Chrome Data sources. However, there are many data points that are entered manually that could be entered via a feed. Some data comes from internal sources such as maintenance data, and others are external like residuals.

4.1.5. Unknown User Changes

It is difficult using today's tools for EFM corporate staff to understand who is using the tools and what they are changing.

4.1.6. Inflexible Data

EFM's tools today do not save the data to a central repository, most reports are saved on the executive's own computer. This makes it difficult to reuse the data in other tools, have someone else take over an account, or analyze data months down the road.

4.1.7. Single Vehicle Analysis

Currently, EFM's LvP/TCO tool can only provide analysis on one vehicle at a time, which is inconvenient for prospects or customers who have a mixed fleet.

4.1.8. Limited Vehicle Comparisons

EFM can only compare two vehicles at a time when choosing appropriate fleet vehicles. In addition, it is limited to comparing vehicles with standard equipment only, which is not generally realistic with fleet vehicles.

4.1.9. Missing Warranty Information

Although the LvP/TCO tool handles some warranty information when it calculates the cost over many years, it does not handle all of it, so there are increased costs indicated where there should not be.

4.1.10. No VIN Decoding

When importing fleet data, there is no way to get information from the VIN code, which is sometimes the only indicator of what type of vehicle they have.

4.1.11. No Aftermarket Details

There are no details concerning aftermarket options that belong to a vehicle and no way of comparing vehicles with such options. Examples like ladders, winches, work platforms, etc. that may be used by electricians or plumbers. These can be a significant additional cost for owning a vehicle.

4.1.12. Inability to Use Remotely

The current tools do not allow the ability to make changes when at a client's location, making the presentation of data fixed and inflexible.

5. Business Requirements

5.1.1. Replace MCA

TCO-BR-1 The system shall replace the Monthly Cost Analysis (MCA) tool.

Notes: The functionality in the MCA tool is largely redundant and also found in the LvP/TCO tool. An exception to this is the Reimbursement section.

5.1.2. Replace LvP/TCO

TCO-BR-26 The system shall replace the functionality of the Lease vs. Purchase / Total Cost of Ownership (LvP/TCO) tool.

Notes: The LvP/TCO tool includes a wizard that walks through the building of assumptions for a specific vehicle's true capital and operating costs. It then generates a series of reports that provides the AE with detailed information to make informed choices for the customer's future fleet.

5.1.3. Replace Government 10-Year Model

TCO-BR-27 The system shall replace the functionality of the Government 10-Year Model tool.

Notes: The Government 10-Year Model includes the importation of the government customer's current fleet and a complete usage analysis for each vehicle. It provides a recommended fleet replacement plan and a quote generator.

5.1.4. Replace FRS

TCO-BR-28 The system shall replace the functionality of the Fleet Management Schedule (FRS) tool.

Notes: The FRS tool includes the construction of a customer's fleet, its analysis and the schedule for replacement.

5.1.5. Web-Based Solution

TCO-BR-33 The system shall be a web-based application solution.

5.1.6. Laptop, Desktop and Tablet Computer Flexibility

TCO-BR-9 The system shall support the usage of laptop, desktop and tablet computers.

Notes: The principal OS / browser combination supported at EFM is Windows 7 / IE 9 working on laptop and desktop devices. However, there is a desire to be allowed to at least browse the system's data on tablets without necessarily providing full functionality on them.

5.1.7. Support Up to a Thousand Users

TCO-BR-2 The system shall support the ability of having up to a thousand users logged in simultaneously.

Notes: It is not important that hundreds of users be accessing a specific network node simultaneously, just that they are logged in. Currently there are 800 potential users.

5.1.8. Support Tens of Thousands of Customers

TCO-BR-3 The system shall support the creation, access and maintenance of tens of thousands of customer accounts.

Notes: Currently, there are approximately 13,000 customers.

5.1.9. Support Tens of Thousands of Prospects

TCO-BR-4 The system shall support the creation, access and maintenance of tens of thousands of prospect accounts.

Notes: Currently, there are up to 80,000 prospects.

5.1.10. Security

TCO-BR-34 The system shall demand logging in of the user through an encrypted connection.

Notes: Authentication can be achieved through EFM's own security system, APPSEC, or by another system called PING.

5.1.11. Each User has a Role

TCO-BR-5 The system shall support the notion that each user logged in has been assigned a role.

Notes: Roles identified are Admin, Corporate, Group Management, Sales Management, Sales Team, and Customer. New roles can be added over time.

5.1.12. Each Role has Specific Access Rights

TCO-BR-6 The system shall support the notion that roles provide users with specific data access rights.

Notes: Access rights include field-level read/write and read-only access, and limiting access completely within an account or a group, as well s globally. Also, roles can restrict what functionality can be performed.

5.1.13. Users may be Internal or External to EFM

TCO-BR-7 The system shall support users logging in from inside or outside EFM's internal network.

Notes: This is to include the obvious need for customers to view the data they are allowed to see, but it also allows for EFM staff to not need to VPN into their intranet to access the system.

5.1.14. Collect User Activity

TCO-BR-8 The system shall collect user activity for internal reporting purposes.

Notes: This is for EFM corporate management to be able to see which users changed what fields.

5.1.15. Collect User Analytics

TCO-BR-38 The system shall collect system usage analytics for internal reporting purposes.

Notes: The data collected could be generated by Google Analytics.

5.1.16. Import Data from EDGE Data Tables

TCO-BR-10 The system shall import data from the EDGE data tables.

Notes: This data includes customer, fleet and residual information.

5.1.17. Import Maintenance Data from AS/400 Data Tables

TCO-BR-29 The system shall import maintenance data from existing AS/400 data tables.

5.1.18. Import Maintenance Data from Auto Integrate

TCO-BR-40 The system shall import maintenance data from Auto Integrate.

Notes: This assumes that Auto Integrate data is available for import.

5.1.19. Import Residual Data from Black Book

TCO-BR-35 The system shall import residual data from existing Black Book feeds.

Notes: This is dependent on their being available suitable feeds from Black Book.

5.1.20. Import Vehicle Data from Chrome Data

TCO-BR-36 The system shall import vehicle data from existing Chrome Data source feeds.

5.1.21. Import of Prospect- or Customer-Supplied Fleet Data

TCO-BR-13 The system shall allow the import of the prospect's or customer's fleet data.

Notes: Prospect or customer fleet data is normally to be accessible from EDGE. However, the AE or AM would have the option to manually add or edit fleet data.

5.1.22. Support Data Provision for Public- and Customer-Accessible Web Sites

TCO-BR-11 The system shall support the provision of data to web sites accessible to the public and customers.

5.1.23. Support Data Export to AE Presentation Generator

TCO-BR-37 The system shall support the export of data to the AE Presentation Generator tool.

5.1.24. Localization of Language and Units

TCO-BR-12 The system shall operate in multiple languages and units of measure.

Notes: This is primarily for use in the Canadian group as there are legal implications operating in Canada. The languages to be supported are Canadian French, Canadian English and US English and the units of measure are imperial and metric. The use of French may be limited to customer-visible content.

5.1.25. Modification of Default Values and Formulae

TCO-BR-14 The system shall allow users with the Admin or Group Management role to modify default values and formulae on an account, group or global level.

Notes: Modifying a default value is not the same as changing a field's value from its default. This would change the default value for all future occurrences of that field for the account, group or globally.

5.1.26. Side-by-Side Comparison of Multiple Vehicle Types

TCO-BR-15 The system shall allow the user to compare multiple vehicle types alongside each other.

Notes: The user should be able to select up to six vehicle types to compare. It is anticipated that the comparison uses Chrome Data's ACE tool, including the addition of optional equipment, as well as financial data, also provided by Chrome Data. It would also be useful to include fleet numbers and be able to group vehicles by category, such as heavy-duty trucks, one-ton trucks, vans and sedans.

5.1.27. Multiple Vehicles for Assumptions

TCO-BR-32 The system shall allow more than one vehicle type when entering lease vs purchase assumptions for analysis.

Notes: Currently, only one vehicle type can be analyzed at a time in LvP/TCO tool.

5.1.28. Report Generation with Older Data

TCO-BR-16 The system shall allow older reports to be regenerated based on new information.

Notes: Older reports in this case can be up to 24 months old. New information might be tax rate or gas price increases or vehicle changes.

5.1.29. Limited Duration of Reports

TCO-BR-17 The system shall preserve reports for a limited time.

Notes: A certain age in this case is 24 months. This data can be used to compare what was quoted and what the actual results were. Purging older data is to prevent the system from filling up with unwanted data.

5.1.30. Field Description Help Text

TCO-BR-22 The system shall provide field-level descriptive help text that would help aid new users.

Notes: Many of the fields already have help text in the legacy system which can be re-used here.

5.1.31. Handle Warranty Details

TCO-BR-23 The system shall accommodate and make use in maintenance formulae the warranty details for the particular vehicle.

Notes: Currently, only engine, drive-train and differential warranty information is being used when calculating maintenance costs. Other warranties, such as bumper-to-bumper, are not yet included.

5.1.32. Generate PDFs from Reports

TCO-BR-24 The system shall generate PDF files from previously-generated reports.

Notes: These are used to print out vital information to customers and to be saved for future reference.

5.1.33. VIN Decoder

TCO-BR-31 The system shall provide the means to decode VINs to get year, make and model information.

5.1.34. Technical Manuals

TCO-BR-30 The system shall include technical manuals for its installation and operation.

Notes: This would not be considered training material.

6. Out of Scope

The following items are considered out of scope for this project:

- ACR