**ALTERNATIVE SOLUTIONS** 

## 1.2.3 Alternative Solutions

At the moment Formula 1 uses a manual filing system that consists of records stored onto paper and the filed. I have identified that Formula 1 Autocentre will require a computer based system to solve the problem within the organi sation.

The first possible method I have considered is another manual filing system. This would be a waste of time, as it will create further problems as the system becomes larger. However it would be the cheapest solution as there is no specialist softw are needed. Data would still have to be inputted manually, stored and onto non -carbon required paper.

The second possible method I considered was a spreadsheet system, as this would give more precise calculations of invoices, stocks and labour costs. It m ay also help to provide a way to make estimates more accurate to a price of a repair. I can also use the built in functions of a spreadsheet program (formulas) to my advantage for the ease of calculations. Another feature that may help would be to create g raphs and charts. However it will be very difficult to create a way to input data or design a data entry form.

The third possible solution I considered was to create custom written software (bespoke system), which can be customised to the requirements of Formula 1 Autocentre. This will be specifically designed for car repairs; hence this will have a smaller hard disk footprint. The software will have specialised backup for any technical help and a full user manual. I have spoke to Mr Parker of having Cus tom written software and he had told me that he is aware of this kind of software for car repairs but he believes that the systems are created for larger garages and is very costly.

The forth-possible solution I could undertake is a generic software pac kage. I am confident that a generic software package database package could be a dependable solution.

A Database is an electronic filing system that is organised into a collection of data. A Database Management System can provide facilities to co-ordinate data in a flexible manner. This is a cheaper method and is readily available. A database can add, modify or delete from the database. Questions or queries can be asked about the data stored. A database can also produce reports that review selected in formation stored in the database.

The reason for me choosing a database is because it will allow Mr Parker to set up a relational database, which holds the data on tables (such as what was repaired) and these tables could be linked together by common fields such as the customer reference number, which is a unique identification. This link relates data together and provides a flexible way of handling data. The tables will be self contained so new tables can be added and the structure of the database can be easily modified if Mr Parker requires any new information to be put into the database. The link of common fields allow data from different tables to be easily combined so that reports and

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searches identified later, these can be created by a member of the team as and when required.

I have researched into different types of database management systems.



Microsoft Access version 2002 XP would offer a first time database user support for managing and analysing data to create a sophisticated database. The new Microsoft access has many new features that will help Mr Parker to have a more sufficient system.

The computer program Microsoft Access has the ability to relate tables with common fields; it can allow three different possible degrees of relationship between the tables. Access also allows the user to customise the menus and forms these can be guided by wizards. Access automatically builds an index for a table using a key field. Validations and verifications can be inputted. Complex AND/OR queries can be performed these are multiple criteria's to find records.

Access can enable the user to crea te their own data entry forms this can make data entry and editing easier. Access can allow the user to create their own form of output; these are reports and can me modified to the user requirements. Charts can be created from output of quires. Access can create macros or command buttons that perform one or more actions; these can be in within the forms. A new data access page designer enables user to design their data access page more effectively through multi select support through the keyboard and mous e to apply sizing and spacing. An improved auto sum makes it easier then ever to create totals.

A subform improves scrolling making it easier for an amateur such as Mr Parker to navigate through the database. As some of the team have difficulties understan ding some handwriting and spellings Access XP now has a spell checker. Moreover, Access provides new shortcut keys that will help conduct task quickly and easily. Levels of access into the software can be created; the user can produce their own interface.

Access can integrate with other Microsoft Software to perform other task such as mail merging, and creating formal letters in Microsoft Word. Microsoft Access is a smarter way of working with a computer.

www.microsoft.com

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Lotus Approach is relational database software and is designed to manage, analyze, and report business information. Lotus approach has an interface rich in feature to maximise productivity within a database to meet the user's requirements. Approach extends the ability to simple creation of accurate reports. A dialog editor makes it easy to create custom dialog boxes and has the traditional controls: list boxes, radio buttons, images and check boxes. Queries allow for named finds on calculated fields and more flexible "if" queries. Lotus has an action bar for frequently used commands to reduce time and learning. Info box lets users easily apply fonts, colour, macros, field order, check boxes and radio buttons for a consistent fashion. A finder assistant wizard lets the user create and store complex queries with step by step assistance. Quickly find top or lowest values, unique records, duplicates and more. Power click report writer allows the user to create professional reports designing them accurately by seeing how data will appear in print modes. Crosstabs queries can be used to perform sophisticated data analysis. Charts to present data can also be created in Approach.

www.Lotus.com

The Corel Paradox 9 is database that is designed for new users, experts and developers. Paradox 9 is an easy to use powerful relation database; it can allow amateur users to get started quickly with easy to use templates and online tutorial. Paradox 9 allows data to be shared across applications such as outside applications like Microsoft word and excel. Advanced Customisation of forms and reports to suit the users needs backed up by the use of specified toolbars. Paradox 9 enables the user to publish, retrieve and manage data on the web, and can redesign table structures to ease usability. Corel have still the traditional reports and charts to represent data.

www.Corel.com