CS1TQ2 COTS Software - Assignment 2003

Introduction

This assignment constitutes 40% of the marks for this course. Your are required to put yourself in the position of a consultant who has been brought in to advise an organisation on the use of Commercial-Off-The-Shelf software and other software. You should provide a written report and a presentation summarising your report. Your report should make specific recommendations wherever possible, or at least suggest a process by which a specific recommendation could be arrived at. You should try to cover at least the issues noted in lecture 11 and any others that you believe may be relevant.

Background

Edgingtons are a Main Dealer for a large motor manufacturer. They are a long established family firm, situated in a large town, and are a successful company, selling reasonable numbers of new and used cars. They also have a busy parts business and rent cars and vans. They have some computerised functions that have been implemented over the past few years but still have many manual or paper based activities.

Edgingtons are however coming under increasing pressure, both from "car supermarkets" and decreasing profit margins from the motor manufacturer. A significant amount of venture capital has been obtained and a business plan is being produced to turn Edgingtons into a multi-franchise dealership. The intention is to supply new vehicles from any manufacturer, along with parts for those vehicles and to expand the used vehicle sales and rentals departments.

You have been called in to contribute to the business plan by making recommendations on the use of software to improve the operation of the business. Although new finance is available to invest in Information Technology it is important that each investment clearly contributes either to increased profits or reduced costs to the business.

In your report you should make a list of recommendations, for each one clearly stating whether you would use COTS software, modified COTS software or bespoke developments. You should describe how the software will contribute towards Edgingtons business aims and any issues or problems that may arise from its use. You should also try to describe the appropriate hardware necessary to run the software, although precise details are not required.

Existing Activities

An indication of existing activities, and the use of information technology is as follows:

- Production of normal office documents, letters, reports etc.
    - Two stand-alone PCs, each with a laser printer are provided in the "administration office", used by two secretaries. They use Microsoft

Works (a small office suite, including word processing, simple spreadsheets and graphics) which was supplied with the PCs. An address database has been created from the customer records for mailings.

- Customer Records

    o Paper files are used to record information on individual and business customers. They are filed alphabetically, with the date of the most recent service written on the cover of the file. At the start of each month customers with vehicles due for service are identified by a search of the files and a mail merge carried out to generate reminder letters.

- Electronic Mail

    o There is no internal e-mail system. Edgingtons have a number of external e-mail address (e.g. sales@edgingtons.co.uk), however these are all received on the web PC (see below) and are printed daily and distributed to the appropriate department. Replies are typically only sent by postal mail or telephone / fax, to those enquiries that include this information, however the secretaries will respond to other e-mails electronically if they have time available.

- Vehicle Order Processing

    o Customer orders for new vehicles are recorded on paper and filed. Details are copied onto the manufacturer's order forms which are faxed to the manufacturer. The manufacturer typically phones with expected delivery dates, which is noted on the customer's order form.

- Parts Order Processing

    o The manufacturer has provided an on-line parts identification and ordering system. There are four PCs and four printers in the parts department networked and connected by leased line to the manufacturer. These are supported by the manufacturer and run only the parts application.

- Car and Van Rental System

    o The rental office is situated in a temporary building in the parking area. This is equipped with a PC and a printer on which a custom built application is run. Both the PC and the application are some years old but adequate for the small volume of rentals. Most rental business is from established customers who contact the office via telephone.

- Workshop Activity Bookings

    o A page per day diary is used to record advance bookings for workshop activities. Towards the end of each day a whiteboard is populated with the activities for the following day, allocating activities to the vehicle

bays. The foreman allocates his mechanics to activities on an ad-hoc basis.

- Preparation of Sales and Marketing Literature

    o Some literature and marketing material is provided by the manufacturer, material specific to Edgingtons is produced by an external design and print bureau. This is often a rather slow process and is separate from the updating of the web site.

- Edgingtons.co.uk Website

    o This was developed by a Web Design Bureau who also host the site. The site has a largely static set of pages describing the company, its location and contact details, along with a simple list of current used vehicles. A "Web PC" is provided in the office with a modem attached. Sales staff use this PC as required to update the list of available used vehicles.

- Book-keeping and payroll

    o Edgingtons employ a part-time bookkeeper who uses their own PC accounting package. The bookkeeper also generates the monthly payroll request to the bank, based on paper timesheets.

New Requirements

- Most manufacturers now provide secure web based ordering for new vehicles. Edgingtons will need to use these facilities.

- The part-time bookkeeper will not be able to manage the increased financial activities, or the manual entry of timesheets into payroll requests.

- The providers of the venture capital expect much closer management and control of the business. In particular they require an asset register (of garage equipment, computers etc.) and monthly reports on utilisation of assets (workshop vehicle bays, rental vehicles etc.)

- Although long-established there is a feeling that Edgingtons are seen as being rather dated an old-fashioned. The company will also undergo a "makeover", with an updated logo an colour scheme for stationary, clothing, literature and company vehicles. This should extend to all aspects of the business including letters, printed forms, screen designs and so on.

- There is also expected to be an increase in the total number of staff employed. some of whom will be employed on a shift basis and thus there will be a need for improved internal communications, both "broadcast" to all staff and between individual staff members.

Questions and Clarifications

If you have any questions or would like any clarifications on the above then please e-mail K.R.Wilcox@reading.ac.uk . All questions and answers will be posted (anonymously) on Blackboard. You should monitor this regularly for any updates.

Karl R. Wilcox
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