

*It is strongly recommended that you read this document **several** times before making any start.*



National Council for Vocational Awards

Information Technology CITXX
(Clonmel Central Technical Institute)

Computer Architecture and
Systems
C20012

Academic Year 2000-2001

PROJECT BRIEF

This project counts as 30% of the total module

The Company

CleereView Communications Ltd is a design, advertising and communications company. It was founded by Stephen Cleere in 1989 and has shown steady though unspectacular growth since that time. This slow rate of growth is more because of the desire that the company should not outgrow the individual control of Stephen Cleere than a reflection on the company itself. In fact the company has an extremely good reputation for producing very high quality of work, extremely professionally and with a sense of great thoroughness in every aspect of its operation.

What the company does

The company is regularly contracted to assist in the production of such items as magazines, brochures, posters etc. These may be for tourism, product or political promotions amongst others. They have of late also been regularly contracted to either assist in the design of websites, or indeed to fully create sites themselves. Advertising campaigns of all types are regularly undertaken.

Who works in the company

The company now employs 30 people including the founder. 17 of these people work in the main offices. 5 work at home. 4 work in the field and at home. 4 work in the field and the office. The workers in the office are mainly designers who will work with design materials already on hand or with materials (such as photographs, maps, sketches, designs etc) sent in by the staff in the field. 5 of the staff in the offices are purely administrative staff performing secretarial, payroll/accounting and other administrative tasks. 1 of these is Stephen Cleere himself whose design input now is largely in the overview of projects. Most of his work now is in project management.

Materials the company uses

The company uses all available design and design-related materials in its productions. They will use clipart, photographs, textures (which may be scanned), maps and diagrams (which may be scanned, traced using graphics tablet or drawn directly into the PC) or any other objects which are suitable for their tasks at hand. This latter group obviously includes all traditional materials such as inks, paints etc for the production of original artwork which can then be scanned for inclusion into projects. Final submissions to clients are either full paper mock-ups of the completed project, in electronic format, or both as appropriate.

The current solution in place

The company is currently using an obsoleted network system that has been in place for in excess of 5 years. There are no plans to maintain any part of this network. Neither is there any plan to port any data currently stored on the network fileserver. Most staff currently have a computer or access to a computer. There is no standard specification for a workstation, as they were all bought at different times and from different suppliers as requirements dictated. There is no plan to maintain any of these workstations or to port any data from them. Workstations in the office are connected by thin Ethernet cabling. Employees with workstations at home physically transport their data into the office when required using floppy disk, ZIP disk, printout, sketch, CDROM and for smaller items, email; there is no standard method of transfer. These transfers are done by traditional mail. Not all home based systems have internet access. Dial-up access to the offices is not currently supported. One of the major faults with the current solution is the absence of modern reliable communications facilities for data transfer. There is no internally provided email service. Staff with email have individual accounts with a variety of ISPs. The company has added on parts to its system on an ad hoc basis over the years, and as such does not so much have a system as a collection of parts. Employees in the field do not currently use computers when making sales or presentations. All such activity is paper-based.

Why is the company making these changes now

The company is moving from its existing premises to a new premises shortly. The main reason for the move is that the existing office space is no longer sufficient to accommodate the current number of employees. The new premises is in an office block that is designed to a modern standard and therefore already has sufficient electrical outlets for computer purposes and already has ducting in place for network and other cabling, though no cabling is included in the office accommodations as yet. The decision to make a clean start is a recognition that there is limited justification for bringing the existing non-system into the new premises, as well as a recognition that having grown to the size it currently is, the company need to start formalising the standards for its computer system.

Overview of requirements

You must select all hardware and software required to enable a comprehensive solution to be implemented. This solution will see all employees being provided with a computer, all necessary peripherals, email and all other forms of communications that you deem necessary. Your budget is €50,000. If it is completely necessary to exceed this amount you may do so, but to a maximum of 10% of the budgeted value and then only with logical, well-expressed reasons. **NOTE:** Exceeding the budget without valid reasons may have implications for the marks awarded to your project.

Restrictions

Though in reality **CleereView** would expect to be able to scan paper sizes in excess of A4 you are not required to allow for this in your project. Equally, they would expect to be able to print on larger than normal paper sizes; however you are not required to facilitate a maximum print size above A2. You may assume that no VAT needs to be paid as these purchases are to facilitate the company in carrying out it's normal business. There is no requirement to allow for labour costs for installation of hardware, software or infrastructure.

Brief Specification of Requirements

Provide, in accordance with the marking scheme, an initial A4 page in which you specify the purpose of the project, sources of information are identified, a plan of progress for the project. This initial page should provide a discussion about the broad overview of the IT solution you propose putting in place.

At a later stage, for each person employed by **CleereView** you must list what hardware and software they will receive, and why. To assist you with this Figure 1 has been provided. You are required to use considerable imagination in the definition of the jobs and duties undertaken by each employee. You will also be required to list *all* network related items to be installed. This list will include cost, function, purpose and justification for each item.

Please note that there is no one right answer to this project. There are many valid solutions, as long as there good reasons for the solutions offered. Considerable imagination is required.

Due dates as per website: <http://linux2>

Figure 1 lists the staff by category, indicating their place of work and shows an overview of their computing requirements. Figure 2 shows the main software server functions that must be incorporated into the new network. You must determine and include any other functions that you consider desirable.

Figure 1

CleereView Communications Ltd.							
Overview of staff duties and broad computational requirements							
Staff		Place of work			Requirements		
Count	Category	Office	Field	Home	Primary	Secondary	Tertiary
5	Design			Yes	Design	Communications	
4	Design/Resource	Yes		Yes	Design	Capture	Communications
4	Sales	Yes	Yes		Presentation	Communications	Office Applications
12	Design	Yes			Design	Office Applications	
4	Administrative	Yes			Office Applications	Accounting/Financial	
1	Administrative/Owner	Yes		Yes	Project Management	Office Applications	Accounting/Financial
30	:Total						

Figure 2

CleereView Communications Ltd.		
Overview of principal server requirements (please add more as required)		
Software	Function	
Servers	Primary	Secondary
E-mail	In-office communications	External communications
Web	Testbed for sites under design	Internal communications (Intranet)
File	Storage for work in progress	Centralised backups
Dial-in	Permits remote staff to access network functionality	Internal & external communications