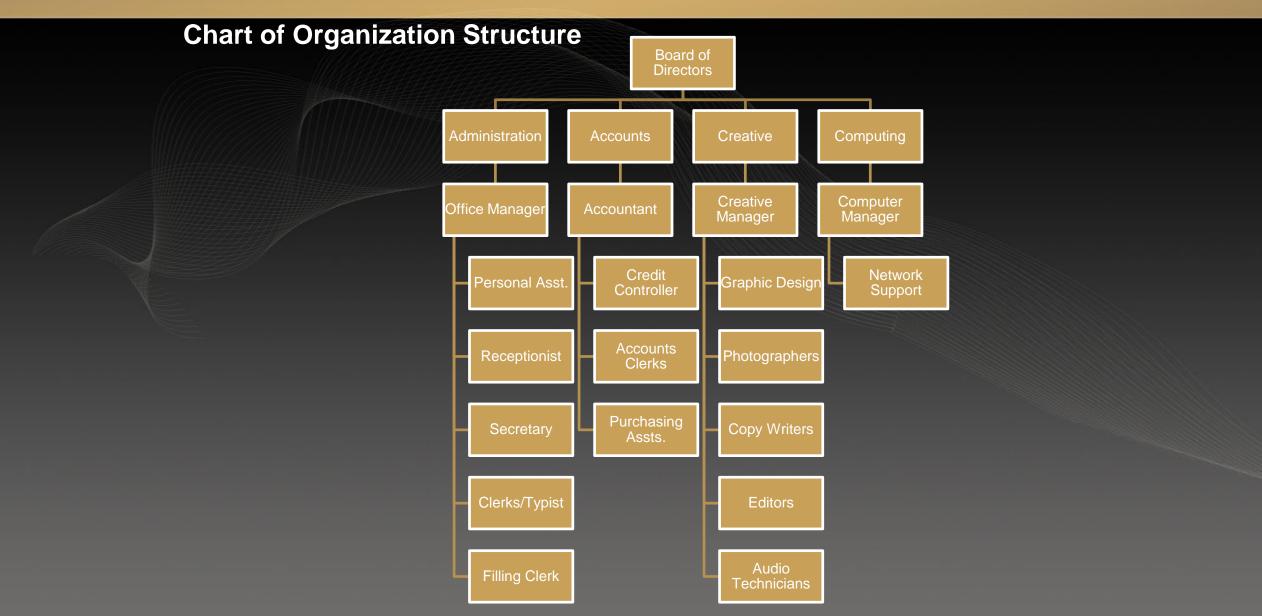
Introduction to Agate

Agate is an advertising agency in Birmingham, UK. Agate was formed as a partnership in 1982 by three advertising executives, Amarjeet Grewal, Gordon Anderson and Tim Eng (the mame is a combination of their initials). Gordon Anderson is Managing Director, Amarjeet Grewal is Finance Director and Tim Eng is Creative Director. They now employ about fifty staff at their office in the centre of Birmingham and a further hundred or so at seven offices around the world. Each of these other offices is set up locally as a company with the shares owned jointly by Agate and the local directors. The company's Information Systems strategy has a focus on developing systems that can support this international business. Currently, Agate is considering the development of a new business information system to manage their business.

Existing Computer Systems

Agate already uses computers extensively. Like most companies in the world at design and creativity, Agate uses Apple Macintosh computers for its graphic designers and other design- oriented staff. However, the company also uses PCs to run accounts software in Microsoft Windows.



Last year, Agate had a basic business system for the UK office developed in Delphi for Windows. However, after the system was developed, the directors of Agate decided that it should have a system developed in Java, one of the most popular Object-Oriented languages. One of the reasons for the choice of Java was that it is portable across different hardware platforms and the company wants software that could run both on the PCs and on the Macs. Another reason is that Agate foresees the possibility of using Java to deliver information to clients via the Internet.

This existing system is limited in its scope: it only covers core business information requirements within Agate. activities and to deal with the international way in which the business operates It was intended that it would be extended to cover most Agate's activities and to deal with the international way in which the business operates

Business Activities in the Current System

Agate deals with other companies that it calls Clients. A record is kept of each Client company, and each Client company has one person who is the main contact person within that company His or her name and contact details are kept in the client record.

Similarly, Agate nominates a member of staff - a Director, an Account manager or a Member of the creative team to be the Staff Contact for each client and may also be replaced if needed.

Clients have advertising campaigns, and a record is kept of every Campaign. One member of Agate's staff, again, either a Director or an Account manager, manages each Campaign and known as the Campaign Manager. Other Staff may work on a Campaign and Agate operates a project-based management structure, which means that staff may be working on more than one project at a time. For each project they work on, they are answerable to the Campaign Manager of that project.

When a Campaign starts, the Campaign Manager responsible estimates the likely cost of the Campaign, and agrees it with the Client. A finish date may be set for a Campaign at any time, and may be changed. When the Campaign is completed, an actual completion date and the actual cost are recorded. When the Client pays, the payment date is recorded. Each Campaign includes one or more Adverts.

Adverts can be one of several types:

- Newspaper Advert- including written copy, graphics and photographs
- Magazine Advert- including written copy, graphics and photographs
- Internet (Media Social) Advert- including written copy, graphics, photographs and animations
- TV Advert, using video, library film, actors, voice-over, music etc.
- Radio Advert using audio, actors, voice-overs, music, etc.
- Poster Advert using graphics, photographs, actors
- Leaflet -including written copy, graphics and photographs.

Purchasing Assistants are responsible for buying space in newspapers and magazines, space on advertising g hoarding, and TV or radio air-time. The actual cost of a campaign is calculated from a range of information. This includes:

- Cost of staff time for graphics, copy-writing etc.
- Cost of studio time and actors
- Cost of copyright material photographs, music, library film
- Cost of space in newspapers, air-time and advertising hoardings
- Agate's margin on services and products bought in.

This information is held in a paper-based filing system, but the total estimated cost and the final actual cost of a campaign are held on the new computer system. The new system also holds the salary grades and pay rates for the staff so that the cost of staff time on projects can be calculated from the timesheets that they fill out. This functionality has been partially implemented and is not used in the existing system.

Summary of New Business Requirement

This section summarizes the requirement for the new system

- 1. To record details of Agate's Clients and the advertising campaigns for those clients
 - a. To record names, address and contact details for each Client.
 - b. To record the details of each Campaign for each Client. This will include the title of the Campaign, planned start and finish dates, estimated costs, Budgets, actual cost and dates, and the current state of completion.
 - c. To provide information that can be used in the separate accounts system for invoicing clients for campaigns
 - d. To record payments for campaigns those are also recorded in the separate accounts system.
 - e. To record which Staff are working on which campaigns, including the Campaign Manager for each Campaign.
 - To record which staff is assigned as Staff Contacts to clients.
 - To check on the status of campaigns and whether they are within budget

- 2. To provide creative staff with a means for recording details of Adverts and the products of creative process that leads to the development of concepts for campaigns and Adverts.
 - a. To allow creative Staff to record notes of ideas for campaigns and adverts.
 - b. To provide other Staff with access to these concept notes
 - c. To record details of Adverts, including the progress on their production.
 - d. To schedule the dates when adverts will be run
- To record details of all staff in the company
 - a. To maintain Staff records for Creative and Administrative staff
 - b. To maintain details of staff grades and the pay for those grades
 - c. To record which staff are on which grade
 - d. To calculate the annual bonus for all staff
- 4. Non-functional requirements
 - a. To enable data about clients, campaigns, adverts and staff to be shared between offices
 - b. To allow the system to be modified to work in different languages