Part 4 Designing Systems

Many people have told me that no system can be flexible because that implies you can do what you want, and by its own definition a system is 'a prescribed way of achieving a given objective'. The rigidity apparent in many information systems, which gives rise to the above view, stems not from the nature of systems but from the way they are designed.

The UK has the most flexible road system in the world. It consists of a vast network of roads which are graded in size and importance and signposted in such a way that every single hamlet is linked to every other hamlet in the country. Often there are many possible routes that could be used. Sometimes, due to the location of certain towns, converging routes cause a bottleneck. As traffic increases, so the routes are restricted to avoid the bottlenecks and to ensure an even flow. Unfortunately, unlike a car with its own driver, each piece of information is not capable of deciding for itself where it should go; it has to be directed along the system, often with a prescribed destination and route given, but like a letter posted second class, it will eventually arrive.

The design of effective systems demands considerable thought and an approach which is based on a knowledge of management's needs, and an understanding of the methods available to meet these needs, including of course the computer.