1 Introduction

1.1 The purpose of this book

So why do computing students need to know anything about law, beyond – just like anyone else – how to keep themselves out of trouble with the police?

Well, most students who take a degree in computing (computer science, information systems, "informatics", or similar) aim to find a computing-related job in a company or a public-sector organization. And that job will not involve just sitting in a back room hacking code. Jobs like that mostly disappeared with the twentieth century, and those that remain have largely been offshored to countries like India. Jobs for British computing graduates in the 21st century involve using technical knowledge to help a business to flourish; they are about business savvy as much as about bits and bytes. (This includes public-sector jobs; public-sector organizations do not make profits, but they run "businesses" as commercial companies do.) A crucial factor for successful business is an understanding of the broad legal framework within which business operates; computing graduates need to be aware in particular of how law impinges on information technology.

Readers need not take my word for this. In Britain, the body which lays down standards for our profession under royal charter is the British Computer Society. One function of the BCS is accrediting computing degrees: the Society scrutinizes curricula and delivery of teaching, and confirms (or declines to confirm!) that particular qualifications from particular institutions are acceptable by national standards. The BCS lays special stress on the need for computing degrees to balance technical content with substantial elements of what it calls "LSEPI" – legal, social, ethical, and professional issues. This book is about the L of LSEPI.

It is true that, up to now, a BCS-accredited qualification has not been an indispensable requirement for working in our profession. Computing is not yet like, say, medicine or architecture: no-one is allowed to practise as a doctor or an architect without a qualification recognised by the appropriate professional body, but as yet there are no legal restrictions on entry to the IT profession. However, that is because our subject is still new; the situation is unlikely to last. Already in 2006 the British government made the first moves towards introducing statutory controls on entry to jobs in computer security, and it seems probable that this trend will spread to other areas of the profession. Some university computing departments may still be teaching the subject in exclusively techie terms – the first generation of computing teachers tended to come from backgrounds in maths or engineering, so the techie stuff is what they care about. But degrees which do not have an "LSEPI" dimension yet will find that they need to develop one.

In any case, the real issue is not about some arbitrary requirement by a professional organization; it is about what employers want. Ian Campbell, chairman of the Corporate IT Forum and Chief Information Officer at British Energy, spells the point out clearly:

> the future will be IT lite, with technology departments staffed by smaller numbers of people, with higher levels of commercial awareness and lower levels of technical expertise…they will be business people first and their core skill set will be commercial rather than technological.[1]

Awareness of the legal framework within which an IT-based business operates is one of those core skills.

Some familiarity with information technology law is a necessary part of 21st-century computing education, then. That does not mean that people in computing jobs need to have every clause of every computing-related statute at their fingertips, or that this book will be offering that level of detail. (It would be many times longer than it is, if it tried to do that.) When a business confronts a specific legal problem, it takes advice from a professional lawyer, just as we do in our private lives if we find ourselves in some legal difficulty. (Sensible people in their private lives try to avoid the need for lawyers as far as possible, but a business, even if it is respectable and well-run, will commonly encounter quite a few situations calling for legal advice and perhaps for actual litigation.)

What the rest of the graduate-level people in a business need, who are not trained lawyers, is a broad grasp of the general nature of the legal environment in which the business (together with its trading partners and its competitors) is operating. In private life, the average person does not need detailed knowledge of the law of contract, but he certainly needs to understand that his signature on a document may create a binding commitment. What this book aims to give computing students is that kind of broad level of understanding of the law applicable to IT. When the book discusses individual laws, the focus will be on their overall thrust; there will be no attempt to list every special case and exception. It is more important to show the reader *whereabouts in an IT-based business legal problems are likely to arise*, than to identify the exact nature of potential problems and problem solutions.

(Let me stress that someone facing a specific legal problem should not attempt to use this book as a substitute for taking professional advice. The book is not intended for that purpose, and not suitable for it.)

Even a longer textbook could not provide a detailed statement of IT law which graduates could rely on after they find jobs, because law changes. IT law is changing particularly fast. This is part of what the student needs to learn: not just elements of what the law happens to be at a particular moment, but a sense of the extent to which it is fluid, the directions in which it is tending to evolve, and the nature of the pressures influencing this area of legal development. This book will discuss these latter issues, as well as the state of the law as it stands at the time of writing (namely 2009).

One of the central things which computing students need to understand about law is how unclear it often is. This may come as a shock, because in technical areas of computing everything is precise. Within a given computer language, a sequence of characters either is a valid line of code or it is not. There is no room for debate; if the compiler accepts the line, it is valid, and if not, not. The student's only task is to learn to write valid code and avoid writing the other kind. Law is not like that (it cannot be, unfortunately). Quite often we shall find that even legal experts cannot say for certain what the legal implications are of some entirely realistic computing-related business scenario. Understanding that the law is often vague is an important part of understanding the law.

1.2 Geographical perspective

Another way in which law contrasts with standard computing topics is that computing technicalities are the same everywhere, but law varies from country to country. In this book we shall be concerned with IT law as it affects business in England and Wales. This will frequently require us to look at laws of other countries. British businesses often depend heavily on trade with the USA, and many British firms are subsidiaries of American parent companies; consequently, some American laws impact on business life in Britain. Also, thanks to UK membership of the European Union, much new law, including IT-related legislation, originates in Europe rather than being purely "home-brewed". There will be many references in this book to these legal influences from outside, but to make sense of them we need to adopt some particular geographical perspective. Our perspective will be that of IT professionals based in England and Wales.

England and Wales share a single system of law, which for historical reasons is called "English law". The legal system of Northern Ireland is separate in terms of organization, and differs in some details of content; but none of those differences, to the best of my knowledge, affect matters discussed in this book.

Scotland is a rather different case. When Scotland and England were joined into one kingdom in 1707, Scotland kept its own legal system, which differed from English law not just in detail but in fundamentals. The two systems have grown together to a considerable extent over the subsequent 300 years, but they remain distinct, and new laws are often restricted to one or other side of the Scottish border. Thus, one English law that we shall need to look at in some detail in chapter 6 is the *Data Protection Act 1998*; that law does not apply in Scotland, which has its own data protection act with somewhat different provisions.

At the very general level at which this book is written, differences between Scottish and English law are few and not crucial. The bulk of material will apply equally to both countries. But where differences are visible even at this general level, the book will present the position that applies in England (and Wales and Northern Ireland) rather than in Scotland.

It is impossible to understand a particular area of law, information technology law or any other, without a general awareness of the overall legal system within which it is embedded. Accordingly, chapter 2 will outline some of the basics of our legal system. Subsequent chapters will then look in turn at various areas of law which are specially relevant to the profession of computing.

1.3 Further reading

In compiling this brief introductory survey of law for computing students, I have relied heavily on longer books which present the material in much greater authoritative detail. Some of these are intended chiefly for legal professionals, but computing students and others who are not law specialists will often find it enlightening to look at what they say about particular points.

For a general account of how English law works, see:

> Catherine Elliott and Frances Quinn, *English Legal System*, 9th edn, Pearson Longman, 2008.

The details of IT law are covered in the following textbooks, each of which has its own strengths and weaknesses:

> David Bainbridge, *Introduction to Information Technology Law,* 6th edn, Pearson Longman, 2008.[2]

> Ian J. Lloyd, *Information Technology Law*, 5th edn, Oxford University Press, 2008.

> Chris Reed and John Angel, eds, *Computer Law: the Law and Regulation of Information Technology*, 6th edn, Oxford University Press, 2007.

> Diane Rowland and Elizabeth Macdonald, *Information Technology Law*, 3rd edn, Cavendish Publishing, 2005.

A book addressed to IT managers concerned with the interactions between law and practical managerial problems is:

> Jeremy Holt and Jeremy Newton, eds, *A Manager's Guide to IT Law*, British Computer Society, 2004.

The following title is designed to cover the syllabus of the ISEB foundation course "IT Law Essentials" (ISEB is the Information Systems Examination Board):

> Jon Fell, ed., *IT Law: an ISEB Foundation*, British Computer Society, 2007.

Because the law is constantly evolving, books like these have to be kept up to date through frequent new editions; someone checking the law on a specific point should take care to use the latest edition. The editions listed above were the newest editions of the respective titles when this book was written.

Since this book relates mainly to law as it applies to IT-based businesses, it will sometimes be relevant to refer to passages in my textbook on e-business:

Geoffrey Sampson, *Electronic Business*, 2nd edn, British Computer Society, 2008.

Literature citations in this book which give author or editor alone, e.g. "Lloyd, p. 95", will refer to one of the items listed above. Publication details for other quoted works will be shown in footnotes.