

Study unit 2

An overview of the Internet

and major role players

Overview

In this study unit we introduce you in more detail to the Internet. We explain how the Internet operates and introduce you to the major role players involved in cyber trade or e-commerce. We also explain the difference between entities that provide access and Internet services to Internet users (service providers) and entities that provide and operate web sites (content providers). Finally, we explain briefly the various contractual relationships that are created by the parties, or that exist between them.

Learning outcomes

After completing this study unit, you should be able to explain —

- ☐ explain what the Internet is and how it operates
- ☐ explain what a network is, and distinguish it from the Internet
- ☐ identify the different role players involved in the Internet
- ☐ explain the difference between online service providers, access providers, and content providers
- ☐ describe the various services offered on the Internet
- ☐ explain the various contractual relationships that may be created between online service providers, access providers, content providers, and consumers
- ☐ explain how the consumer and the content provider are connected to one another and communicate with one another

Setting the scene

John, Vusi, and Thandi have decided to launch their Internet venture, as they believe that it will open up new markets for them. On your advice, they have incorporated a private company — JTV (Pty) Ltd. They are its only shareholders and directors.

JTV has contracted with Tio to design and launch their Internet

trading site for the company.

On behalf of JTV, Tio has contracted with Netlink — an online service provider. In terms of the contract, Netlink will provide space on its computer (server) for JTV's web site. Netlink will link the site to the Internet in order to give consumers worldwide access to JTV's products and services. Tio has an independent contract with Netlink in terms of which he earns 5 per cent commission for every customer whom he introduces to Netlink. Netlink does not employ him.

The web site that Tio has developed consists of a home page that describes in general terms the various products and services offered for sale by JTV, a page with JTV's standard contractual terms and conditions, a page with descriptions of the various types of products and services offered by JTV, and a page where these products and services can be ordered by a consumer.

JTV also has an e-mail facility with Netlink, as well as access to a chat line. Tio has also developed and installed an internal network to link all the computers in JTV's offices, and to provide all employees with access to the Internet through Netlink.

Discussion

Introduction to the Internet

The Internet is a global network of computers all speaking the same language, a kind of 'digital Esperanto' of zero's and ones. The Internet is made up of a shared infrastructure — a network of networks that all use the same protocols. The TCP/IP protocol is used in the United States and the Opens System Interconnection (OSI) protocol in Europe.

The Internet had its humble beginnings in 1969 in the United States. It was intended for strategic military objectives. It originated in ARPAnet — the first inter-linked network of forty computers, which enabled the American Department of Defence simultaneously to dispatch orders to all ballistic missile bases. The basic principles that guided the development of that first network in the 1960's still apply today.

These networks link computers throughout the world by several means of telecommunication, such as telephone and coaxial cables, fibre-optics, and satellites. The best-known category of communication over the Internet is the World Wide Web. It allows users to search for and retrieve information stored in remote computers, often in other parts of the world, and, in some cases, to communicate to designated sites. Several other communication applications are also available to the consumer, such as electronic mail (e-mail), Telnet, FTP (File Transfer Protocol), gopher, mailing lists, discussion groups (such as newsgroups, and Internet relay chat.

The core infrastructure of the Internet consists mainly of routers (computers designed to receive and transmit data), hosts (computers which store programs and data), and pipes (telecommunication links between the routers and hosts).

Internet role-players

The main players in the Internet context, then, are infrastructure and network providers, content providers, administrators, access providers (commonly, and perhaps less accurately, known as Internet Service Providers (ISPs), or, more accurately, as Online Service Providers (OSP's)), navigation providers, and transaction facilitators.

Contractual relationship between the parties

Any relationship between Internet role-players is determined by the contractual relationship between them. In the law of contract, relationships between contractual parties are determined primarily by the agreement between the parties. But there are certain specific contractual types and relationships for which the common law has developed a number of specific rules — the so-called natural incidents that apply to the relationship created by a specific contract type unless the parties have agreed differently. So it is important to establish with what kind of contractual relationship one is dealing.

In the South African law of contract, the principle of freedom of contract plays a fundamental role in the flexibility and adaptability of this part of the law. This principle means,

amongst other things, that the parties have a substantial degree of freedom to structure any contractual relationship according to their wishes and needs. This is also true of the contractual relationships that may be concluded in respect of Internet services and cyber trade.

But the common law also provides for certain residual rules that will apply in respect of certain types of contract, unless the parties have made a different arrangement in their contract. This is to make sure that where parties fail to provide for commonly occurring events in their agreement, that the agreement will still be valid and enforceable. For example, in a contract of sale there are certain common-law warranties that apply where the goods suffer from latent defects, even though the parties have not agreed to these warranties. The parties are free, however, to change or exclude these warranties if they so wish.

These natural incidents apply to certain identified types of contract, such as sale, service (*locatio conductio operis*), agency, and hire. These contracts can be identified according to the common-law principles set out below. If a contract cannot be classified as one of these specific contracts, it is called an innominate contract and no natural incidents will follow. Regarding cyber trade and the various relationships involved, it is important to distinguish between the contracts of service, hire, sale, and agency:

Sale can be described as an agreement for the delivery of goods against the payment of a certain price. The distinguishing feature of this type of contract is that the seller provides the goods to the buyer on a permanent basis, in that the seller guarantees to the buyer that the buyer will not be disturbed in its possession by someone with a stronger right or vested interest. In most cases, the aim of the sale is to provide ownership of the goods, although this is not an essential requirement for an agreement to be classified as sale.

Hire can be described as an agreement for the temporary delivery of goods against payment of an agreed sum for a certain period of time. The features that distinguishes hire from sale is the fact that only the *use* of the goods is provided to the hirer on a *temporary* basis, whereas sale is aimed at providing free and undisturbed possession to the buyer on a permanent

basis.

An *agreement for work and services* can be described as an agreement in terms of which the one party completes certain work or renders certain specified services in exchange for the payment of an agreed sum of money.

The agreement for work and services must be distinguished from the employment contract. In an employment contract, the employee agrees to make her services available to the employer on an ongoing basis and under the control of the employer. Although the defining line between these two types of contract are not always easily established, the usual test for determining whether a particular relationship is one of employment or one of work and services, relates to the extent of the control that the employer/mandator is entitled to exercise over the employee/contractor. Usually, the contractor who performs work and services retains a high degree of independence regarding when and how the work is to be done, as long as the required end result is achieved within the agreed time. An employee, by contrast, is usually under the control of her employer, who may stipulate requirements as to when and how the employee should render specified work.

Legal representation, or *agency*, is a relationship established by a contract of mandate in terms of which an agent is authorized by the principal to perform certain juristic acts on behalf of the principal. For example, the agent may be authorized to conclude a contract with a third party on behalf of the principal, which will bind the third party and the principal, but not the agent. The agent does not become a party to such a contract, even though she physically may have negotiated and concluded it. An agent may act in terms of an independent agency agreement, or as an employee in terms of an employment contract, or in certain instances as a result of her legal status (for example, in the case of the parent of a minor, or the curator of an insolvent).



Activity 2.1

John approaches you for legal advice. He wants to know what type of legal relationship exists between —

- ☐ JTV and Tio
- ☐ JTV and Netlink
- ☐ Tio and Netlink
- ☐ JTV and any potential customer

After you have performed this activity, read the discussion in Tutorial Letter 201 for feedback.

Conclusion

You should now understand the global information network structure, and the functional roles that different parties play. You should also be able to describe the various services offered on the Internet, and understand the various contractual relationships that are created between online service providers, access providers, content providers, and consumers.