eMarketing
The essential guide to digital marketing

4th Edition

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What's inside: In this chapter we look at some background information for understanding how the Internet makes digital marketing possible. We also examine a brief history of the Internet as well as a description of how it works and what role it plays in people’s lives.
Introduction to the Internet

There is no doubt about it: the Internet has changed the world we live in. Never before has it been so easy to access information, communicate with people all over the globe and share articles, videos, photos and all manner of media.

The Internet has led to an increasingly connected communications environment, and the growth of Internet usage has resulted in declining distribution of traditional media such as television, radio, newspapers and magazines. Marketing in this interconnected environment and using that connectivity to market is digital marketing.

Digital marketing embraces a wide range of strategies, but what underpins its success is a user-centric and cohesive approach to these strategies.

While the Internet and the World Wide Web have enabled what is sometimes referred to as New Media, the theories that led to the development of the Internet were being developed from the 1950s.

Over the past two decades, marketers began waking up to the power of the Internet, both as a platform for communication and as a way of tracking conversations.

By its very nature, the Internet is a network of interlinking nodes. We as marketers use these nodes to track conversations, and therefore patterns.

A Brief Timeline of Internet Developments

1958 US ARPA (Advanced Research Projects Agency) established to lead science and military technological developments.
1961 MIT research paper of Packet Switching Theory.
1961-69 Ongoing research into inter-computer communications and networks.
1969 ARPANET, commissioned by US Defense Department, goes live.
1971 Ray Tomlinson creates first network email application.
1973 Development of protocols to enable multi-network Internet opportunities. First international ARPANET connections made.
1976 HM Queen Elizabeth II sends an email.
1978 First spam email is recorded.
1980 Tim Berners-Lee develops rules for the World Wide Web and is credited as the Web Father. Alan Emtage develops the first search tool known as ‘ARCHIE’.
1982 Standard network protocols are established: Transmission Control Protocol (TCP) and Internet Protocol (IP), commonly referred to as TCIP/IP.
1984 Joint Academic Network (JANET) is established, linking higher education institutions.
1985 Domain Name System (DNS) is introduced.
1987 A company named Symbolics becomes the first registered dot.com domain.
1988-90 28 countries sign up to hook up to the NSFNET, reinforcing international Internet potential.
1990 Senator Al Gore coins the term ‘information superhighway’.
1991 America Online (AOL) is launched and raises $23m in floatation. The term ‘surfing the net’ is introduced by Jean Armour Polly. The World Bank goes online.
1992 Senator Al Gore coins the term ‘information superhighway’.
1993 Mainstream media attention increases awareness of the Internet. First Internet publication. Wired, goes on sale. Mosaic introduces the first web browser with graphical interface and is the forerunner of Netscape Navigator. First online shopping malls and virtual banks emerge as does evidence of spam. First clickable banner advert is sold by Global Network Navigator to a law firm.
1995 Amazon is launched by Jeff Bezos. Trial dial-up systems such as AOL and CompuServe launch. Charging is introduced for domain names. Search technology companies such as Alta Vista, Infoseek, Excite and Metacrawler rapidly appear.
1996 Yahoo! is launched on the stock exchange and shares are up nearly 300% on first day.
1997 MP3.com is founded. The term ‘search engine optimisation’ is used for the first time in a forum.
1998 XML is released to enable compatibility between different computer systems. Google founded by Larry Page and Sergey Brin.
1999 Peter Merholz coins the word ‘blog’.
2000 AOL and Time-Warner announce they are merging. Pay per Click campaigns are introduced for top ten search rankings. Google AdWords launches, charging for adverts on a CPM basis.
In its simplest form, the Internet is a collection of connected documents or objects. Hyperlinks are what connect these documents.

A hyperlink is a virtual link from one document on the World Wide Web to another. It includes the Uniform Resource Locator (URL) of the linked-to document which describes where on the Internet a document is. It is what you enter in the address bar of the browser, because it is the address of that document on the Internet.

A URL provides information to both browsers and people. URLs include domain names which translate to Internet Protocol (IP) addresses. Every website corresponds to an IP address, which is a structured series of dots and numbers indicating where it is physically located. In fact, every device on the network has an IP address.

When you enter a URL into the address bar of a browser, the Domain Name System (DNS) record indicates where the document is that you are linking to.

Confused? Look at the domain name and IP address for Quirk’s website:

- **Domain name:** www.quirk.biz
- **IP address:** 212.100.243.204

A domain name looks something like this: www.domainname.com

But a lot more information can be included in this. URLs can carry the following information: subdomain.domain.tld/directory

- **Domain** - the registered domain name of the website.
- **Subdomain** - a domain that is part of a larger domain.
- **TLD** - the top level domain, uppermost in the hierarchy of domain names.
- **Directory** - a folder to organise content.

The TLD can indicate the country in which a domain is registered, and can also give information about the nature of the domain.

- **.com** – is the most common TLD.
- **.co.za, .co.uk, .com.au** – these TLDs give country information.
- **.org** – used by non-profit organisations.
- **.gov** – used by governments.
- **.ac** – used by academic institutions.

While the Internet was developed in order for academic and military institutions to share data, it has become a sharing tool for anyone with an Internet connection the world over.
Domain names must be registered and there is a fee for doing so.

A website, or any content on the Internet, is hosted on a server. A web server is a machine that serves web content, and the term often refers to the software (applications) and the hardware (machine), that serve the content.

Very simplistically, it works a little something like this:
- Someone enters a URL in a browser.
- This is translated to an IP address, which indicates where the content is located, or where the server for the content is.
- The server then returns the content requested.
- And the person sees the website that she requested.

404: this is returned when the content was not found on the server, either because there was an error in the link, or because the content has been moved or deleted. Website owners can design a custom page for when a 404 error occurs, giving users useful information.

You can find a full list of status codes at www.w3.org/Protocols/rfc2616/rfc2616-sec10.html.

This information can be sent via Hypertext Transfer Protocol (HTTP), or HTTPS, which is a combination of HTTP with a secure way of transmitting information. HTTP makes it easy to request and transfer information. It’s what makes our websites load, and allows us to connect with people on social networks. However, the information that is transferred is not transferred securely, meaning that it could be viewed by third parties. If this was the only way of sending information online, it would be a bad idea to bank online, or to purchase anything over the Internet. This is why we use HTTPS to encrypt information when it is sensitive. In order to make use of HTTPS, the relevant website needs to get a secure certificate, which ensures that various details have been verified by a trusted third party.

If you’re unsure, look in the browser address bar to check whether the site you are on is HTTP or HTTPS. Most browsers will indicate a secure site with a little padlock in the address bar, or somewhere else in the browser, to make sure that you know you are in a secure site.

How Do People Access the Internet?

People connect to the Internet and access content in many different ways. When it comes to the physical connection to the Internet, the market presents a number of options:
- Dial-up
- 3G connections
- WiFi and WiMax
- Broadband
- ADSL

The list goes on. The devices people use vary from mobile phones and handheld small devices to personal notebooks and desktop computers. The environment that people are in when they access the Internet also differs:
- At home
- At the office or place of work
- Libraries and education centres
- Internet cafes and coffee shops
Not only do these environmental factors affect how people use the Internet, but their reasons for using the Internet also have an effect on how they interact online.

For some people, it is primarily a communications channel, and their online activity is focused on their email inbox, while for others it may be a research channel, with search engines playing a large role in their online experience.

Having such a diverse audience means that there are many channels available to marketers when it comes to digital marketing.

What Does This All Have To Do With Marketing?

Marketing is about conversations, and the Internet has become a hub of conversations. The connected nature of the Internet allows us to follow and track these conversations, and provides entry points for all parties. What follows in this book are ways of conversing with existing and potential customers using the Internet.

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further reading

Tim Berners-Lee’s Answers for Young People is a brief outline of how he invented the World Wide Web: www.w3.org/People/Berners-Lee/Kids
His book Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web covers this in far more depth.
Make your mark with eMarketing

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Reviews and Comments

“The first thing you should do is obsess about the terms in this book. Vocabulary is the first step to understanding, and if you don’t know what something means, figure it out. Don’t turn the page until you do.”
Seth Godin: Author Purple Cow, Permission Marketing and Linchpin

“If you are a marketer, this is a must have book; if you know a marketer, do him or her a favour and get it for them; if you are just interested in eMarketing and want to expand your general business knowledge, buy two copies - someone will want to borrow this from you.”
Jaco Meiring: Digital - Investec

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