

## Introduction

The Yellow Pages® Small Business Index™ is an ongoing series of surveys designed to track confidence and behaviour in the small business sector.

The primary objectives of the Index are to track small business activity over the past three months; expectations over both the next three and 12 months; and to measure overall confidence within the small business community. A second purpose is to provide an independent, objective channel for reporting proprietors' experience and attitudes on key issues.

Each quarter the Index examines one or more special issues. In the May 1996 survey, we focus on Technology in Small Business. To what extent have small businesses embraced computer and communication technology and what are their plans for the future?

These latest results are compared with those from similar investigations conducted in February 1994 and May 1995.

The Index is an initiative of Yellow Pages Australia as part of its commitment to this vital business sector and is conducted by the market research firm Brian Sweeney & Associates.

## About this Special Report

The Index is the largest economic survey of small business in Australia and focuses specifically on businesses with up to 19 full time employees (including the proprietor if he or she is part of the workforce).

The Index uses a panel of at least 1,200 randomly selected small business proprietors who are interviewed by telephone every three months.

The panel was drawn from all metropolitan and non-metropolitan regions of Australia. Quotas are set on geographical location and type of business division to produce the standard sample breakdown shown opposite. Where replacement panellists are recruited, this sample breakdown is maintained.

Because this is a quota sample, at the analysis stage results are weighted by selected ANZSIC divisions within the metro and non-metro region of each state or territory to reflect actual small business population distribution. The ABS Business Register as at June 1995 is used to weight the sample to be representative of the total business population.

Interviewing for this latest survey was conducted over the period 18th April to 3rd May, 1996.

### Location of Business

	TOTAL	METRO	NON-METRO
NSW	200	160	40
VIC	200	160	40
QLD	200	110	90
SA	150	130	20
WA	150	130	20
TAS	100	60	40
NT	100	60	40
ACT	100	100	—
<b>TOTAL</b>	<b>1200</b>	<b>910</b>	<b>290</b>

### Division

MANUFACTURING	215
BUILDING/CONSTRUCTION	215
WHOLESALE/RETAIL	215
TRANSPORT/STORAGE	125
FINANCE/PROPERTY/BUSINESS SERVICES	215
RECREATION/PERSONAL & OTHER SERVICES	215
<b>TOTAL SAMPLE</b>	<b>1200</b>

# Equipment Owned

The chart opposite summarises the current level of ownership of eight items of computer or communication equipment. As illustrated...

- more than eight out of 10 (83%) have a fax machine;
- around three-quarters have a mobile phone (76%) and desk top computer (74%);
- roughly one-third have a CD ROM (33%) and modem (31%);
- close to a fifth (18%) have a personal electronic organiser; and
- 16% have a lap top or note book computer and about one in ten (11%) a pager.

Less than one-tenth (7%) have none of these.

Trend data over the February 1994 to May 1996 period suggest a slowing down in the adoption of computer and communication technology.

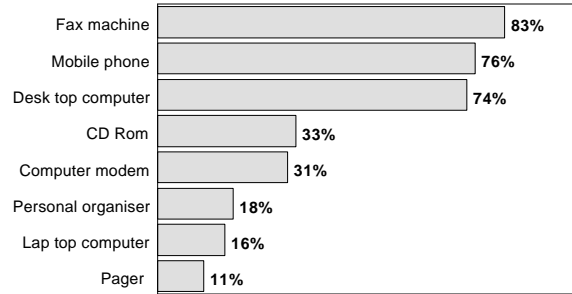
For example, between February 1994 and May 1995, the proportion owning mobile phones increased by 17 percentage points. This compares with a five percentage point increase over the 12 months to May 1996.

Similarly, the use of modems increased by a sizeable 11 percentage points over the February 1994 to May 1995 period - but has hardly moved since that time. CD ROM adoption has also slowed - from a 19 percentage point increase between February 1994 and May 1995, to only a seven point lift over the past year.

Clearly, the actual level of adoption of technology in small business is nowhere near the level predicted in May 1995.

Whereas, for example, 45% **expected** to be using a modem by May 1996, the actual figure is 31%. Similarly, the 41% expectation for CD ROM equipment materialised into only a 33% adoption rate.

## Equipment Currently Owned



SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

## Trends in Ownership

	Feb '94	May '95	May '96
Fax machine	79%	85%	83%
Mobile phone	54%	71%	76%
Desk top computer	68%	71%	74%
Lap top computer	11%	17%	16%
Modem	19%	30%	31%
CD Rom	7%	26%	33%
Pager	n/a	16%	11%

SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

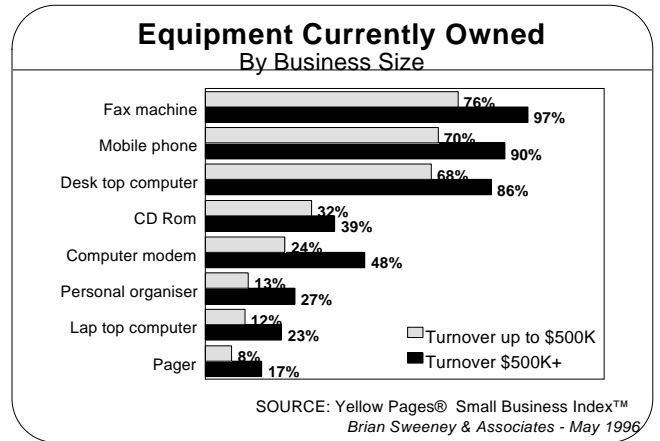
## Predicted Versus Actual Ownership Levels

	May '95 *Predicted for May '96	May '96 Actual
Fax machine	90%	83%
Mobile phone	81%	76%
Desk top computer	80%	74%
Lap top computer	26%	16%
Modem	45%	31%
CD Rom	41%	33%
Pager	19%	11%

\*Based on the proportion in May '95 who either owned or expected to acquire by May '96  
SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

The chart opposite looks at current ownership levels by size of business.

The results suggest that the higher turnover small businesses are considerably more likely to own all of these equipment items than are the smaller enterprises. Fax machine ownership, for example, is almost universal for those with a turnover of \$500,000 or more per annum.



It is also of interest to compare ownership levels by type of industry. In terms of computer equipment, we note that those in the **business services** sector are most computer oriented. Almost 90%, for example, have a desk top computer. Those in the **building/construction** sector are least likely to have computers in their businesses. The ownership of CD ROM technology is high in **manufacturing** as well as in **business services**.

### Computer Equipment Ownership By Sector

	Desk Top	Lap Top	CD Rom	Personal Organiser
All Businesses	74%	16%	33%	18%
Manufacturing	76%	16%	40%	19%
Building/Construction	61%	7%	26%	12%
Wholesale/Retail	70%	13%	30%	21%
Transport/Storage	70%	14%	20%	22%
Business Services	88%	28%	48%	18%
Personal Services	69%	11%	28%	15%

SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

Analysis of communication equipment usage by sector reveals higher than average usage of fax machines in the **manufacturing** and **business services** sectors with modems being most often used in the **transport/storage** and **business services** sectors.

### Telecommunications Equipment Ownership By Sector

	Fax	Mobile Phone	Pager	Modem
All Businesses	83%	76%	11%	31%
Manufacturing	92%	77%	7%	35%
Building/Construction	78%	81%	11%	26%
Wholesale/Retail	86%	77%	11%	27%
Transport/Storage	81%	83%	14%	39%
Business Services	96%	81%	13%	46%
Personal Services	63%	60%	10%	20%

SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

Ownership of computer equipment (desk tops or lap tops) does not vary dramatically from state to state - although it is noticeable that CD ROM technology appears to be very strongly entrenched in the ACT.

Computer Equipment Ownership By State/Territory				
	Desk Top	Lap Top	CD Rom	Personal Organiser
All Businesses	74%	16%	33%	18%
NSW	81%	18%	35%	17%
Victoria	71%	14%	35%	17%
Queensland	67%	16%	28%	20%
South Australia	72%	15%	32%	20%
Western Australia	70%	11%	32%	15%
Tasmania	66%	20%	24%	21%
Northern Territory	80%	22%	31%	16%
ACT	81%	14%	52%	24%

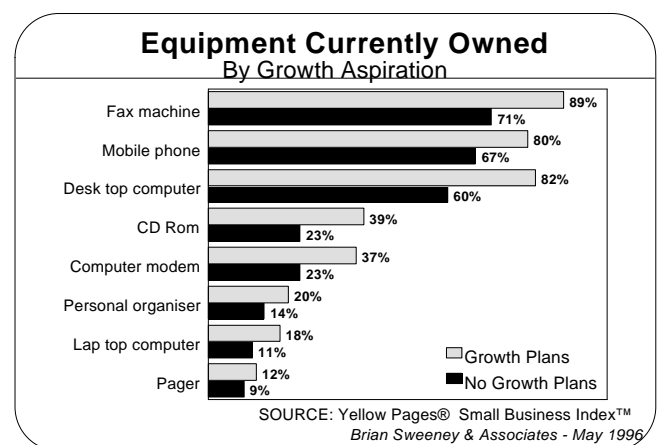
SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

The mobile phone tends to be less popular than average in Tasmania and WA. Queensland small businesses are most likely to use mobile phones.

Telecommunications Equipment Ownership By State/Territory				
	Fax	Mobile Phone	Pager	Modem
All Businesses	83%	76%	11%	31%
NSW	82%	73%	15%	38%
Victoria	80%	79%	6%	26%
Queensland	85%	86%	12%	25%
South Australia	82%	72%	10%	28%
Western Australia	85%	63%	5%	33%
Tasmania	80%	56%	16%	27%
Northern Territory	94%	79%	19%	27%
ACT	81%	79%	17%	51%

SOURCE: Yellow Pages® Small Business Index™  
Brian Sweeney & Associates - May 1996

Finally, it is worth noting that businesses with growth plans are significantly more likely to be technology oriented than those with no growth aspirations.

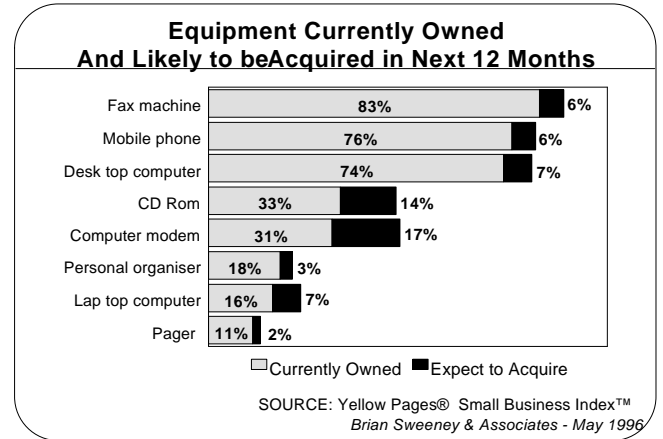


# Expectations for Next 12 Months

Small business proprietors were asked to indicate which items they expect to acquire (for the first time) in the coming 12 months.

As illustrated, expectations suggest that the usage of both CD ROM and modem technology is likely to grow quite considerably over the next twelve months.

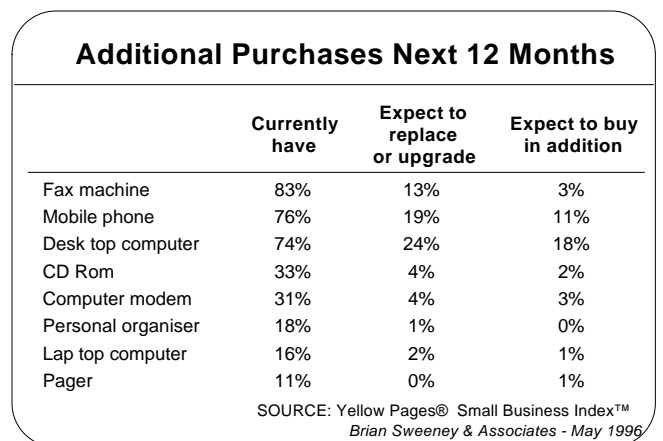
However, it is unlikely that the true growth figures will be as significant as these results suggest, given our experience with last year's level of unrealised expectation.



We also asked which items, already owned, were likely to be replaced by new or upgraded units in the next 12 months; and which items were likely to be bought as additional units to ones already owned.

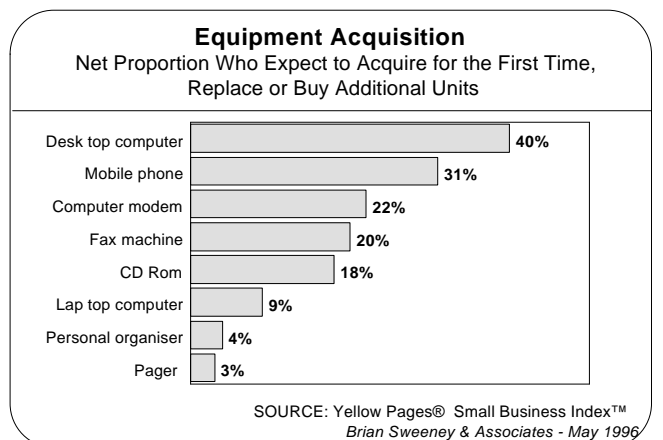
As illustrated, many small business proprietors expect to both replace items and buy additional pieces of equipment.

Expectations for computer purchases are particularly high with 24% of all small businesses expecting to buy one or more replacement units and 18% expecting to buy one or more additional units.



In the chart opposite, we show the net proportion of all small businesses expecting to acquire for the first time, replace units or add additional units to those they already own.

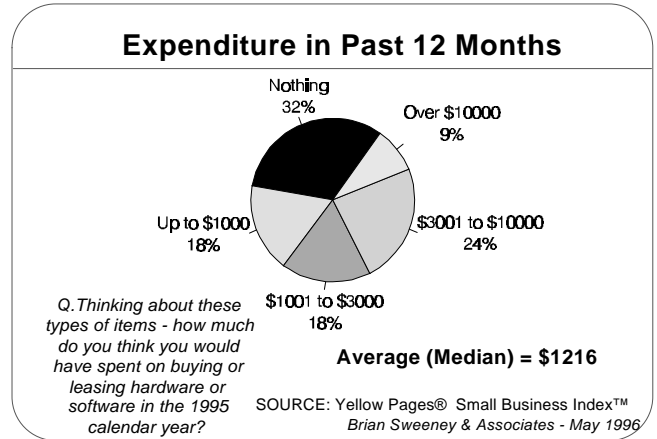
As shown, as many as four in 10 of all small business proprietors expect to acquire a new desk top computer in the next 12 months.



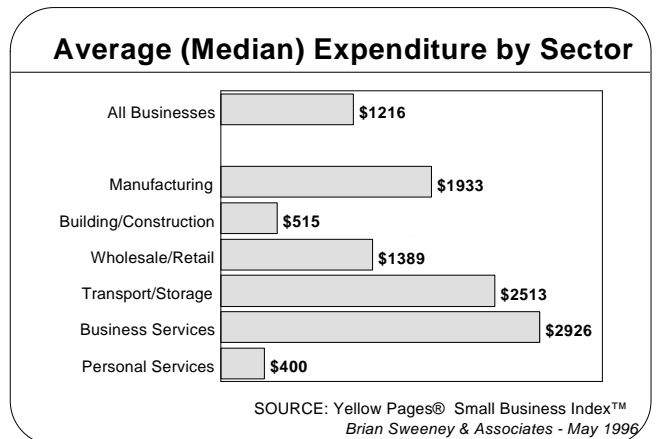
# Expenditure in Past Year

Small business proprietors were asked for their estimated expenditure on these communication and computing items in the past calendar year.

As illustrated opposite, the average (\*median) expenditure across all small businesses was around \$1,200 - although a small proportion spent significantly more than this. One tenth or so, for example, spent in excess of \$10,000.

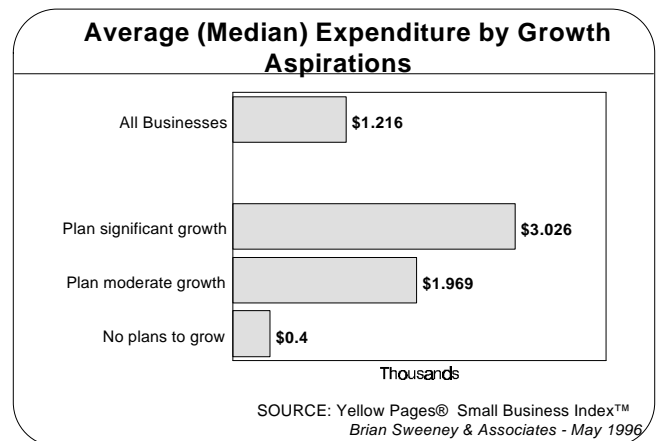


In the table opposite, we show the sizeable variations in expenditure on technology by business sector. Businesses in the **business services** sector are the major spenders.



It is also interesting to note that those businesses planning to grow significantly are the major spenders on technology.

Indeed, while those planning significant growth represent just 7% of the total small business population, they account for 59% of the expenditure on technology.



\* Median is defined as the mid-point in a set of values; half the values are larger than the median; half are smaller.

# Software Packages Used

In total, 74% of small businesses use computers in the operation of their businesses. These users were asked to indicate the types of software packages used.

As illustrated opposite, **word processing packages** are the most popular - being used by 85% of computer users. **Accounting or bookkeeping packages** are next in line, at 75%.

Just under two-thirds (65%) use **spread sheet packages** - the third most popular category.

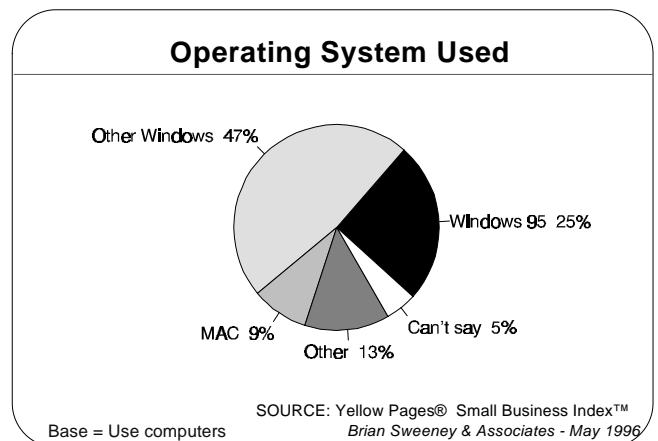
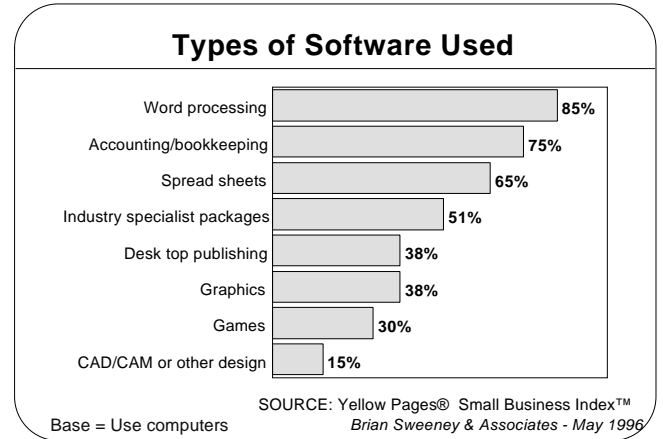
This is followed by **specialist packages designed for their industry**. In total, 51% use these - although this rises to over 60% of those in the finance and business sectors.

Just under four out of 10 (38%) use **graphics packages** and the same proportion use **desk top publishing packages**.

Across all computer users, 15% use **CAD/CAM and other design computer packages** - although this rises to just over 20% of those in the manufacturing and construction sectors.

Almost one-third relax with **computer games!**

In terms of operating systems, **Windows** dominates, with 72% using. Twenty-five percent already claim to use **Windows 95**.



# e-mail

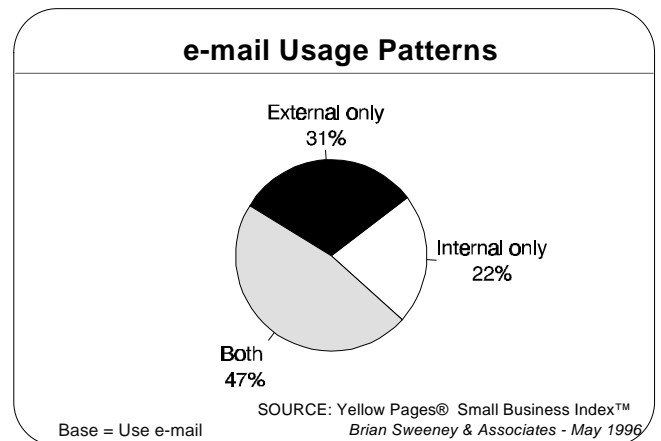
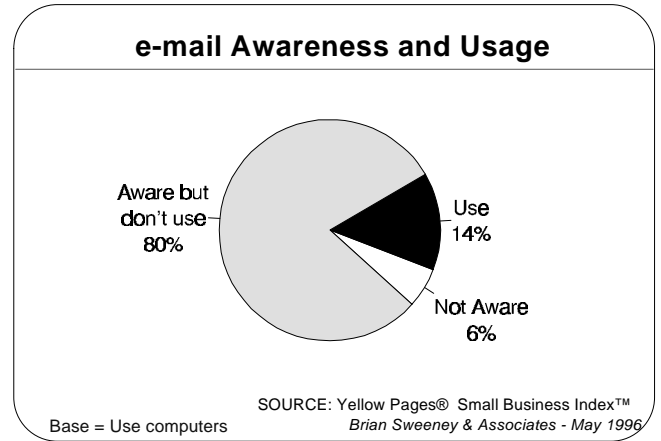
Among computer users, 94% have heard of the terms *e-mail* or *Electronic Mail* - but only 15% of these (14% of all computer users) actually use this facility.

Those who are aware of the facility usually have a fair grasp of what it actually is. When asked to define e-mail, most answers centred on...

- a way of transmitting messages between computers (28% mentioned);
- transmission of data through phone line/modem without fax or phone (22%);
- sending mail from one computer to another (15%); and
- communication between computer operators by computer (12%).

e-mail users were asked whether they use the facility to communicate internally or externally. As illustrated, close to half use e-mail for both external and internal communication. In total, 78% communicate externally using e-mail; 69% internally.

Most e-mail users (70%) use e-mail as part of an Internet facility.



# The Internet

A series of questions was asked about awareness and usage of the Internet.

All of those (100%) who own a computer have heard of the Internet. This compares with a 96% awareness figure in May 1995.

Twelve percent of **computer users** are now connected to the Internet - compared with about 7% one year ago.

The table opposite looks at the proportion of **all small businesses** aware of and connected to the Internet. As shown, the connection rate has almost doubled since May 1995.

However, while we have seen substantial growth, it is below the level predicted by small businesses in May 1995.

As summarised in the chart opposite, in May 1995, 5% were connected - but a further 14% said that they intended to connect in the next 12 months - a total figure of 19%. As discussed, the **actual** connection figure for May 1996 is half that level, at 9%.

In other words, the incidence of connection has increased by only 4 percentage points, not 14% as predicted in May 1995.

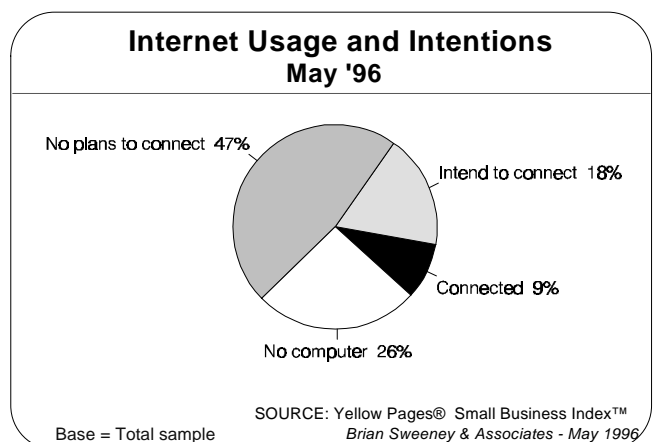
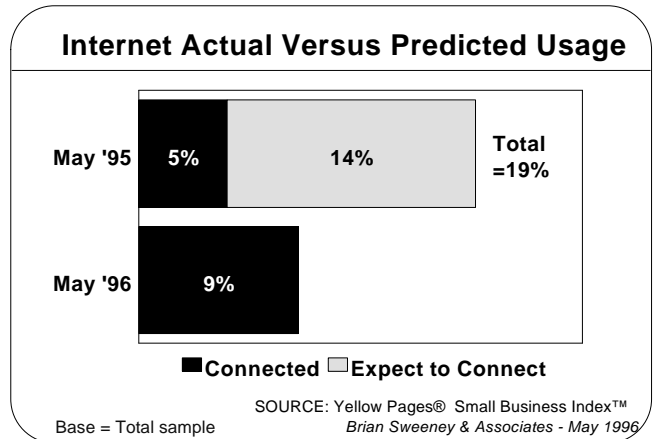
We need, therefore, to be a little cautious in our interpretation of the intention to connect results for May 1996. These should be seen as reflecting interest in the Internet rather than an accurate prediction of what will happen over the next 12 months.

Nevertheless, we have found that 27% of computer users who are not yet connected to the Internet expect to connect over the next 12 months. This translates to 18% of all small businesses.

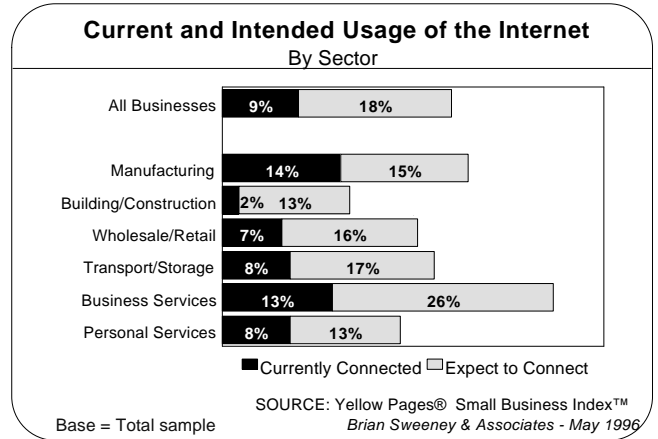
As discussed above, the expectations figure in May '95 was 14%.

	May '95	May '96
Not aware of Internet	6%	0%
Connected to Internet	5%	9%
Aware but not connected	60%	65%
No computer	29%	26%

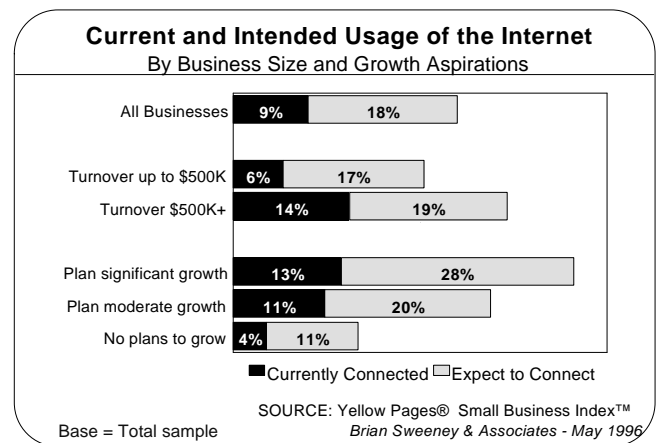
SOURCE: Yellow Pages® Small Business Index™  
 Brian Sweeney & Associates - May 1996  
 Base = Total sample



Analysis by business sector reveals that businesses in the **manufacturing** and **business services** sectors are the main Internet users, with usage set to grow most substantially in the business services sector.



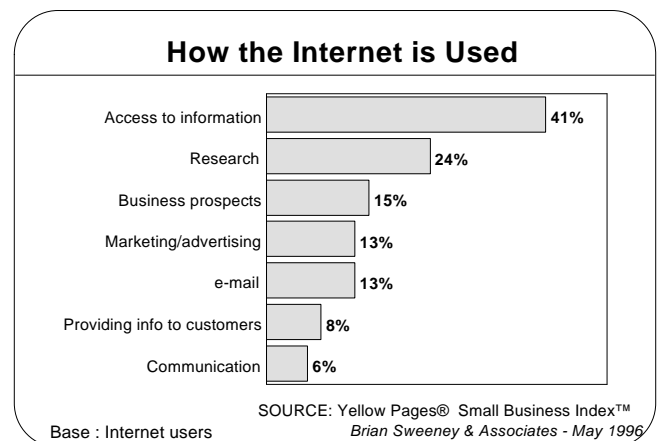
Analysis by turnover reveals the larger businesses to be somewhat more Internet oriented. The differences according to growth aspirations are, however, highly significant, with some 40% of the significant growth concerns either currently connected or expecting to connect in the future.



Those connected to the Internet were asked how they used the Internet. Responses to this unprompted question are summarised opposite.

Access to information or research was the primary usage, although sizeable minorities used the facility...

- to locate business prospects;
- for e-mail;
- for marketing or advertising; or
- to provide information to their customer base.



Those who expressed an intention to connect to the Internet in the next year were asked how they intended to use the facility.

While the most common responses were fairly non-specific ('access to information', 'business communications', 'personal use'), sizeable proportions referred to specific business usages, including...

- advertising their services;
- overseas business;
- marketing; or
- transferring data to clients.

All respondents aware of the Internet, irrespective of whether they were connected, were asked what they saw as the main uses or benefits of the Internet.

The chart opposite summarises responses and shows that fact finding is seen as the number one benefit, with access to worldwide data, fast transfer of information and the ability to advertise also being frequently mentioned.

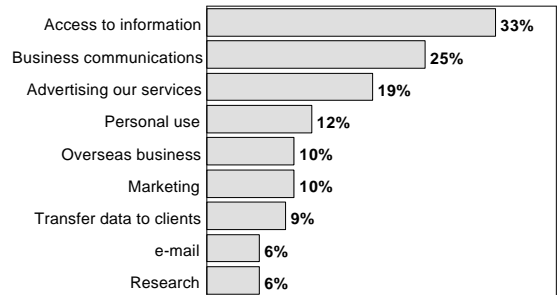
Finally, the study looked at reasons small business proprietors did not wish to connect to the Internet. In the question, respondents were asked which of the reasons shown opposite applied to them.

The perceived lack of a business benefit was the number one reason given, although all eight factors applied to a fair degree.

Other (unprompted) reasons included...

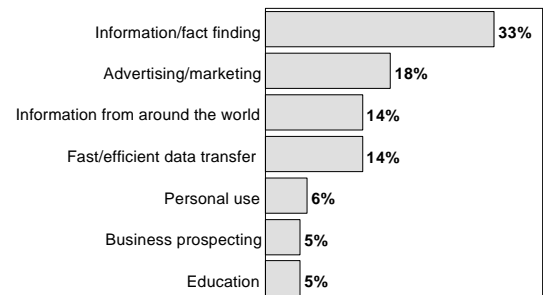
- too expensive to set up (5% mentioned); and
- concerns about privacy/security (4%).

### How the Internet Would Be Used



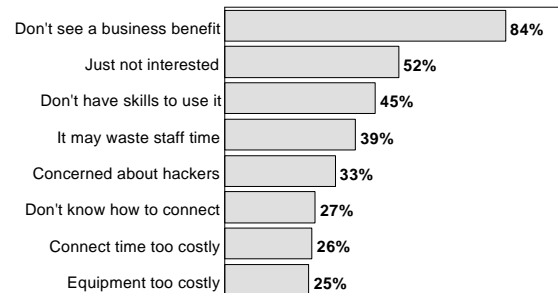
SOURCE: Yellow Pages® Small Business Index™  
Base : Intend to connect to the Internet Brian Sweeney & Associates - May 1996

### Perceived Main Uses or Benefits of the Internet



SOURCE: Yellow Pages® Small Business Index™  
Base : Aware of the Internet Brian Sweeney & Associates - May 1996

### Reasons for Not Wishing to Connect



SOURCE: Yellow Pages® Small Business Index™  
Base : Do not intend to connect Brian Sweeney & Associates - May 1996

# Changes in Communication Patterns

Respondents were asked whether they had experienced an increase or decrease in usage of the five major means of communication shown opposite.

As illustrated, while there has been a net increase in all communication forms, the traditional telecommunication means (fax and telephone) show the greatest increase in usage.

Changes in Communication Patterns				
	Increased	Same	Decreased	Net Increase
Personal contact	32%	61%	7%	25%
Telephone contact	49%	48%	3%	46%
Fax contact	57%	41%	2%	47%
Mail	20%	63%	16%	4%
Computer contact	7%	93%	0%	7%

Q. Has your usage of this type of communication increased, decreased or stayed the same over the last year?

SOURCE: Yellow Pages® Small Business Index™  
 Brian Sweeney & Associates - May 1996

Base = Total sample

## ***Yellow Pages Small Business Index "Special Reports"***

Since the inception of the Small Business Index, a range of Special Reports has been produced. Major reports include:

SOCIAL ISSUES - NOVEMBER 1993

WOMEN IN BUSINESS - JULY 1994 & FEBRUARY 1996

INDUSTRIAL RELATIONS AND THE NEW NATIONAL TRAINING WAGE - SEPTEMBER 1994

ATTITUDES TO GOVERNMENT - OCTOBER 1994 & NOVEMBER 1995

THE IMPACT OF THE DROUGHT ON RURAL SMALL BUSINESS - NOVEMBER 1994

SMALL BUSINESS GROWTH ASPIRATIONS AND THE ROLE OF EXPORTS - FEBRUARY 1995

TECHNOLOGY IN THE SMALL BUSINESS SECTOR - JULY 1995 AND JULY 1996

FINANCE & BANKING ISSUES - AUGUST 1995

GOVERNMENT REGULATION AND COMPLIANCE BURDEN - JUNE 1996

Other special topics investigated include NSW Bushfires, the Sydney Olympics, Exports, Australian Made and other Credential Advertising, and Employment Skills and Training.

For further information on these reports, please contact:

Holt Public Relations  
499 St. Kilda Road  
Melbourne, Victoria 3004  
FAX: (03) 9866 2410  
PH: (03) 9866 2811

The regular *Yellow Pages* Small Business Index reports are updated each quarter (February, May, August and November). The latest report can be accessed on Australia's *Yellow Pages* site on the Internet:

**<http://www.yellowpages.com.au>**

Pacific Access Pty Ltd was established in Melbourne, Australia in 1991. The company brings together Australian expertise in sales, marketing and compilation of directional advertising, with the experience of its partners in international markets. Pacific Access Pty Ltd continues to invest in skills and resources to extend its reach into the Pacific Rim Region.

In Australia, Pacific Access Pty Ltd trades as Yellow Pages Australia. Yellow Pages Australia is commercially responsible for the sales, marketing, billing, compilation and customer service operation to produce 68 directories nationally. *Yellow Pages* is a 100% Australian-owned product.

Yellow Pages Australia services more than a quarter of a million customers every year. Eighty per cent of *Yellow Pages* customers is small businesses. Yellow Pages Australia values the support of small businesses, and is therefore committed to supporting this vital sector of the business community.

This support is demonstrated through a number of initiatives like the Small Business Index, Small Business Success magazine and Ausbiz Small Business Development Program.

*If you have any inquiries relating to Yellow Pages Australia and its initiatives, please phone (03) 9246 4744.*

Yellow Pages Australia, a business name of Pacific Access Pty. Ltd., ACN 007423912, official advertising contractor to Telstra, and officers hereby disclaim, to the full extent permitted by law, all liability, costs and expenses whatsoever arising from or in connection with copy, information or other material in this report.

# **SMALL**

---

# **BUSINESS**

---

# **INDEX<sup>TM</sup>**

---

**A Special Report on  
Technology in the  
Small Business Sector  
July 1996**

Yellow Pages Australia, a business name of Pacific Access Pty. Ltd., ACN 007423912, official advertising contractor to Telecom Australia, and officers hereby disclaim, to the full extent permitted by law, all liability, costs and expenses whatsoever arising from or in connection with copy, information or other material in this report.

© Copyright 1996 Pacific Access Pty. Ltd.

®<sup>TM</sup> Trademarks of Telstra Corporation Limited

# Contents

Introduction	1
About this Special Report	1
Equipment Owned	2
Expectations for Next 12 Months	5
Expenditure in Past Year	6
Software Packages Used	7
e-mail	8
The Internet	9
Changes in Communication Patterns	13