

## ANNUAL INFOCOMM USAGE BY ENTERPRISES SURVEY, 2008 EXECUTIVE SUMMARY

### INTRODUCTION

This Survey seeks to determine the level of infocomm adoption and usage by enterprises in Singapore.

Infocomm usage surveys have been carried out by IDA annually since 1999. This is the 10th in the series.

### RESEARCH METHODOLOGY

The sample, covering all industrial sectors, was selected from the Establishment Sampling Frame maintained by the Department of Statistics (DOS). The sample was stratified by the Singapore Standard Classification of Industrial Codes (SSIC). Data collection (via self-administered questionnaires by mail/email/Internet submission) and processing for the Survey was carried out from August to December 08.

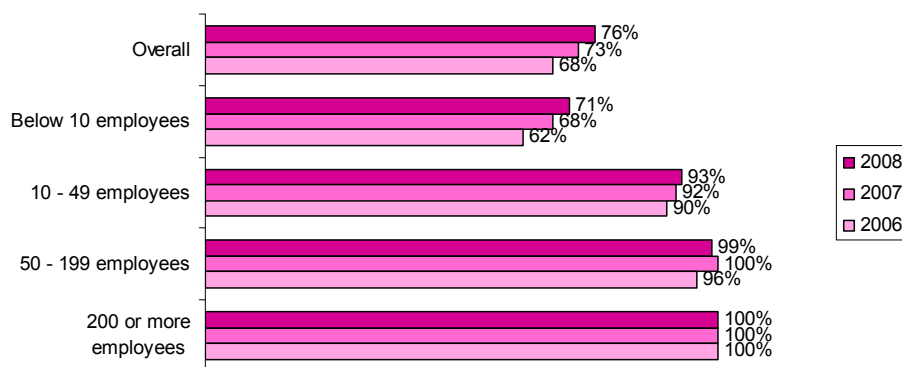
### KEY FINDINGS ON INFOCOMM USAGE BY ENTERPRISES

Part 1 presents the findings of the 2008 Survey on infocomm usage by enterprises in Singapore. Part 2 sets out the findings for local Small and Medium Sized Enterprises (SMEs<sup>1</sup>).

#### Usage of Computers

Computer usage among enterprises grew by 3 percentage points to reach 76% in 2008 ([Chart 1](#)). Computer usage by enterprises with 50 or more employees has reached saturation level.

**Chart 1: Computer usage by employment size**



Base: All enterprises

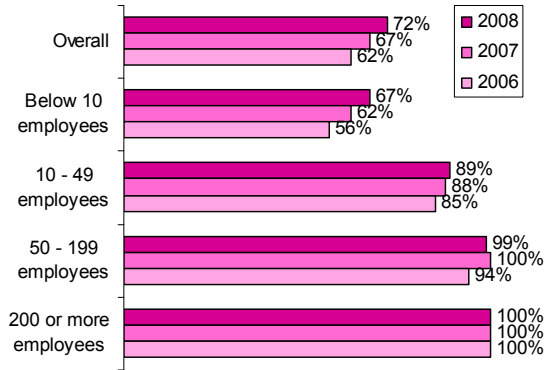
<sup>1</sup> The definition of local SME is as follows:

- At least 30% local equity
- Less than \$15m fixed assets investment
- Less than 200 employees (for the non-manufacturing sectors)

Usage of Internet, Broadband and Web Presence

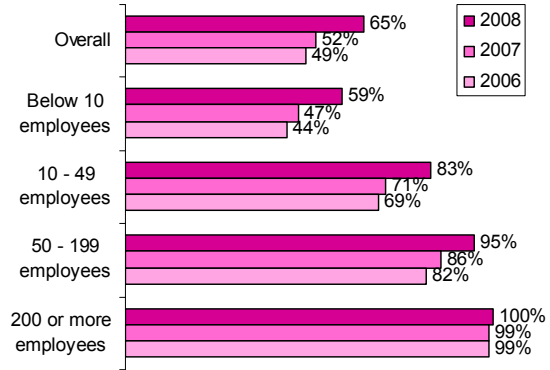
Similar to computer usage, Internet penetration for enterprises with 50 or more employees has also reached saturation level (Chart 2).

**Chart 2: Internet usage by employment size**



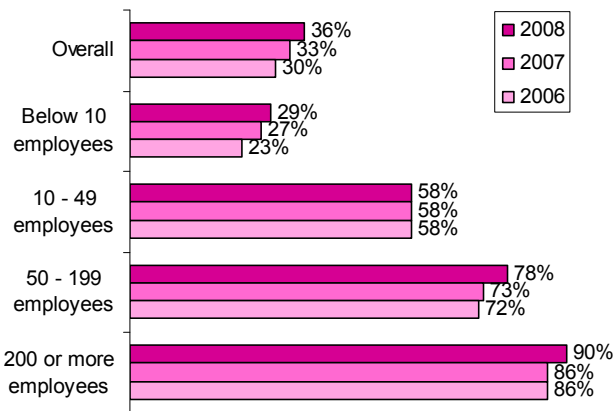
Base: All enterprises

**Chart 3: Broadband usage by employment size**



Base: All enterprises

**Chart 4: Web presence by employment size**



Base: All enterprises

Internet Applications/Services

The top Internet applications/services used by enterprises remained *Sending or Receiving Mails* and *Information Search*, followed by activities involved with dealing with government organisations (Table 1).

**Table 1: Top ten uses of Internet**

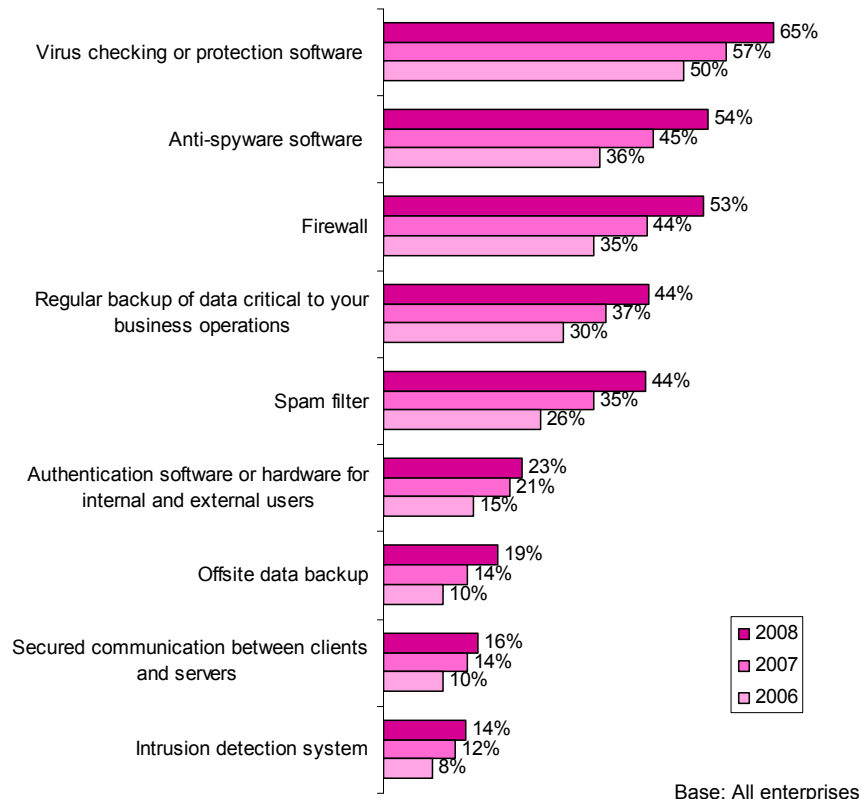
	Internet Applications / Services	Proportion of Enterprises		
		2008	2007	2006
1	For sending or receiving mails	96%	96%	95%
2	For information search	92%	92%	91%
3	For obtaining information from government organisations (e.g. from web sites or via e-mail)	84%	77%	70%
4	For downloading or requesting government forms	81%	74%	68%
5	For completing government forms online or sending completed government forms	78%	69%	60%
6	For making online payments to government organisations	58%	48%	42%
7	For banking and financial services	56%	48%	44%
8	For placing orders for goods/services	40%	37%	35%
9	For market monitoring purposes (e.g. prices)	39%	33%	29%
10	For receiving orders for goods/services	37%	37%	34%

Base: Enterprises with Internet usage

**Infocomm Security Measures Adoption**

Overall, there was an increase in adoption of infocomm security measures by enterprises (Chart 5).

**Chart 5: Infocomm security measures adoption**



Barriers to Usage of Infocomm in General and Internet

Tables 2 and 3 list the top five barriers to the usage of infocomm in general and Internet, as cited by enterprises with no computer and Internet usage respectively.

**Table 2: Top five barriers to infocomm usage in general<sup>2</sup>**

Barrier to Infocomm Usage	2008 Ranking	2007 Ranking	2006 Ranking
Lack of perceived benefits	1	5	1
Supply of infocomm technology does not match the infocomm needs of the organisation	2	6	6
The level of infocomm skills is too low among the employed personnel	3	2	4
Cost of infocomm expenditure is too high	4	1	2
Existing personnel are reluctant to use infocomm technologies	5	4	3

Base: Enterprises with no computer usage

**Table 3: Top five barriers to Internet usage**

Barrier to Internet Usage	2008 Ranking	2007 Ranking	2006 Ranking
Lack of perceived benefits	1	5	1
Technology is too complicated	2	1	2
Cost of Internet connectivity is too high	3	3	3
Security concerns (e.g. hacking and viruses)	4	2	5
Cost of development and maintenance of web sites is too high	5	4	4

Base: Enterprises with no Internet usage

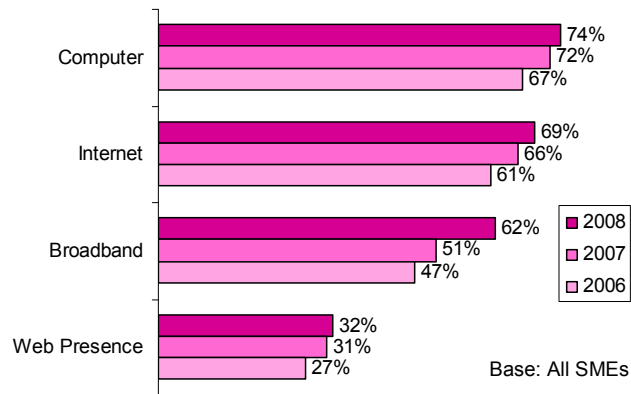
The next section presents the key findings from the 2008 Survey for infocomm usage in SMEs.

<sup>2</sup> In general, infocomm usage starts with computer usage.

## **KEY FINDINGS ON INFOCOMM USAGE BY SMEs**

Chart 6 shows a rise in infocomm usage generally among SMEs in 2008.

**Chart 6: Infocomm usage among SMEs**



*Accounting & Finance; Human Resource (HR) & Payroll and Point of Sales (POS)* are the top software services adopted by SMEs (Table 4).

**Table 4: Software services used by SMEs**

	Internet Applications / Services	Currently using	Not using	
			Plans to use	No plans to use
1	Accounting & Finance	36%	8%	48%
2	Human Resource (HR) & Payroll System	11%	7%	74%
3	Point of Sales (POS) System	8%	4%	80%
4	Computer Aided Design (e.g. AutoCAD etc)	7%	4%	81%
5	Customer Relationship Management (CRM) System	5%	6%	82%
6	Supply Chain Management, Execution	3%	5%	84%
7	Integration with Suppliers, Manufacturers, etc	3%	4%	85%
8	Enterprise Resource Planning (ERP)	3%	4%	86%
9	Material Requirements Planning (MRP)	2%	4%	86%
10	Supply Chain Management, Planning	2%	5%	86%
11	Construction Project Cost Estimation System	2%	3%	87%

Base: All SMEs

Table 5 shows the preferred business models for SMEs to implement infocomm.

**Table 5: Preferred business models by SMEs (More than one choice is allowed)**

	Preferred Business Model	Proportion of SMEs
1	No Preferred Model	60%
2	User-owned Model	19%
3	Pay as You Use Model	11%
4	Fully Outsourced	10%

Base: All SMEs