ANNUAL SURVEY ON INFOCOMM INDUSTRY FOR 2002

EXECUTIVE SUMMARY

Introduction

The Annual Survey on Infocomm Industry for 2002 is the latest edition in a series of infocomm industry surveys carried out by IDA. This survey aims to determine the market performance of the Singapore infocomm industry for the year 2002 as well as identify key development trends of the industry in Singapore.

The fieldwork for this survey was carried out from February 2003 till June 2003. The survey covered a representative sample of infocomm enterprises stratified by the Singapore Standard Industrial Classification codes. The responses were then extrapolated for analysis. A different methodology was adopted in this survey as compared to the survey for 2001. In particular, the extrapolation method used differed in terms of the treatment of organisations which contributed significantly to the overall performance of the industry. To set a new baseline, the 2001 data was recollected and recomputed under this survey for 2002.

Overall Performance

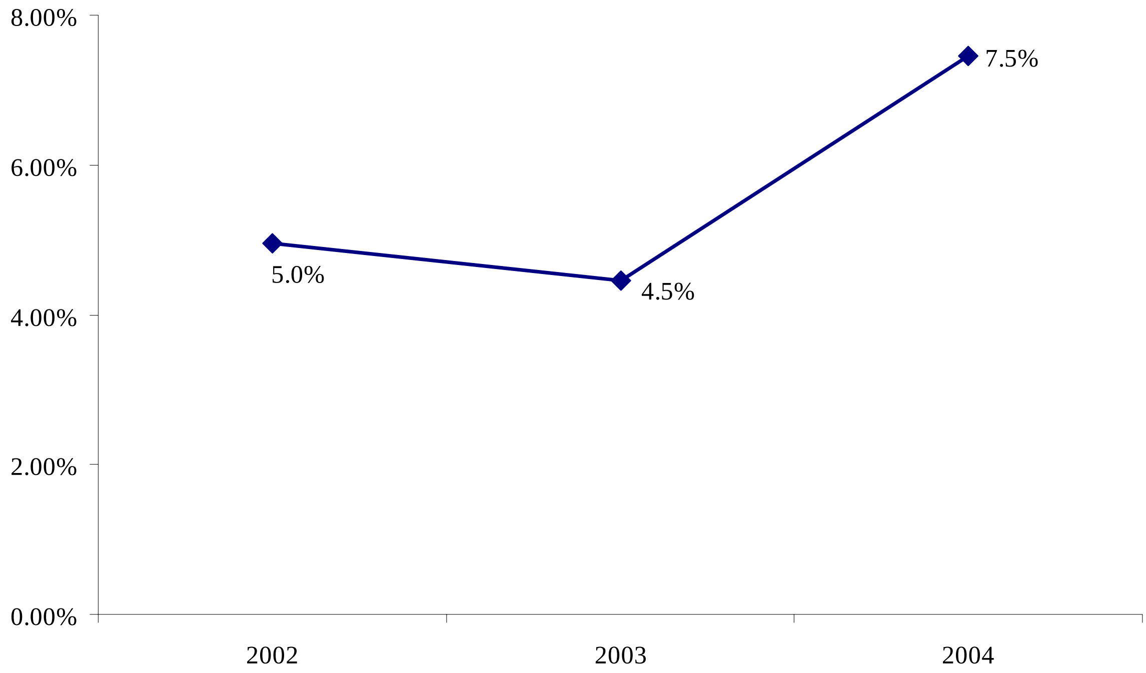
Singapore's infocomm industry grew by 5.0% in 2002 (see Figure 1). Total revenue chalked up by the infocomm industry in 2002 was $32.17billion, up from $30.65billion in 2001.

Table 1: Total Infocomm Industry Revenue by Products and Services ($ millions)

Products/Services	2001 (actual)	2002 (actual)	2003 (forecast)	2004 (forecast)
Hardware Retail	11,476	11,094	11,693	12,689
Software	7,614	8,056	8,191	8,815
Telecommunication Services	6,140	6,402	6,749	7,079
IT Services	3,788	4,327	4,514	4,844
Content Activities	1,631	2,290	2,455	2,678
Total	30,649	32,169	33,602	36,105

Singapore's infocomm industry revenue is expected to see a marginally smaller growth in 2003 (4.5%) and a much higher growth in 2004 (7.5%).

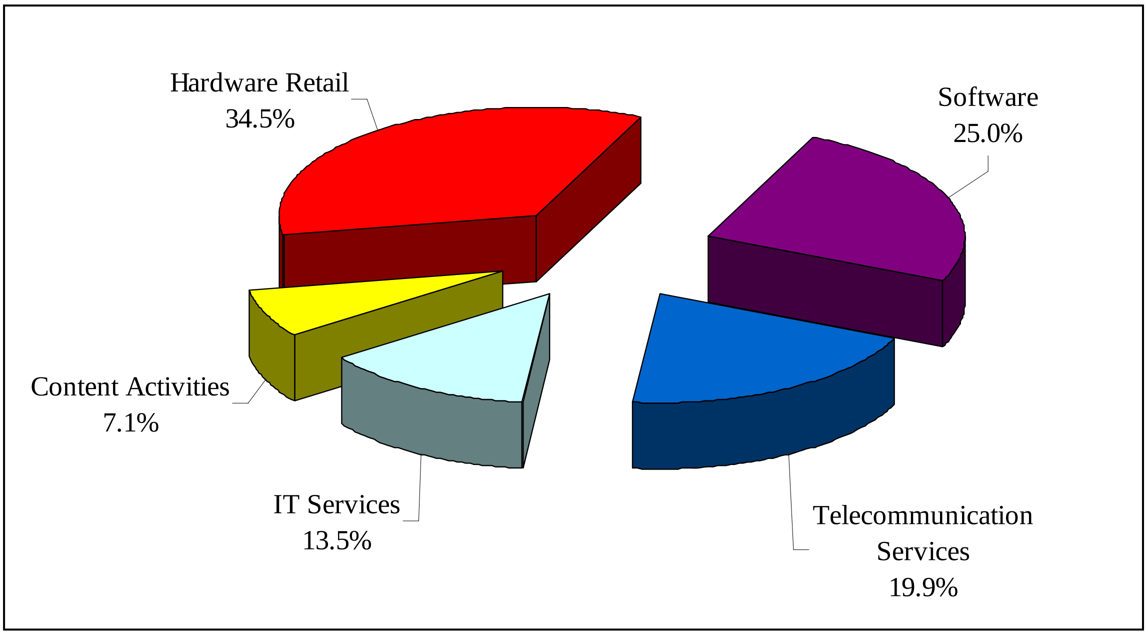
Figure 1: Total Infocomm Industry Revenue Growth Rates



Contribution by Industry Segments

Hardware Retail and Software take the lion's share of the total infocomm industry revenue in 2002, accounting for 34.5% and 25.0% respectively of the overall pie (see Figure 2). These were followed by Telecommunication Services (19.9%), IT Services (13.5%) and Content Activities (7.1%).

Figure 2: Total Infocomm Industry Market Composition by Products and Services



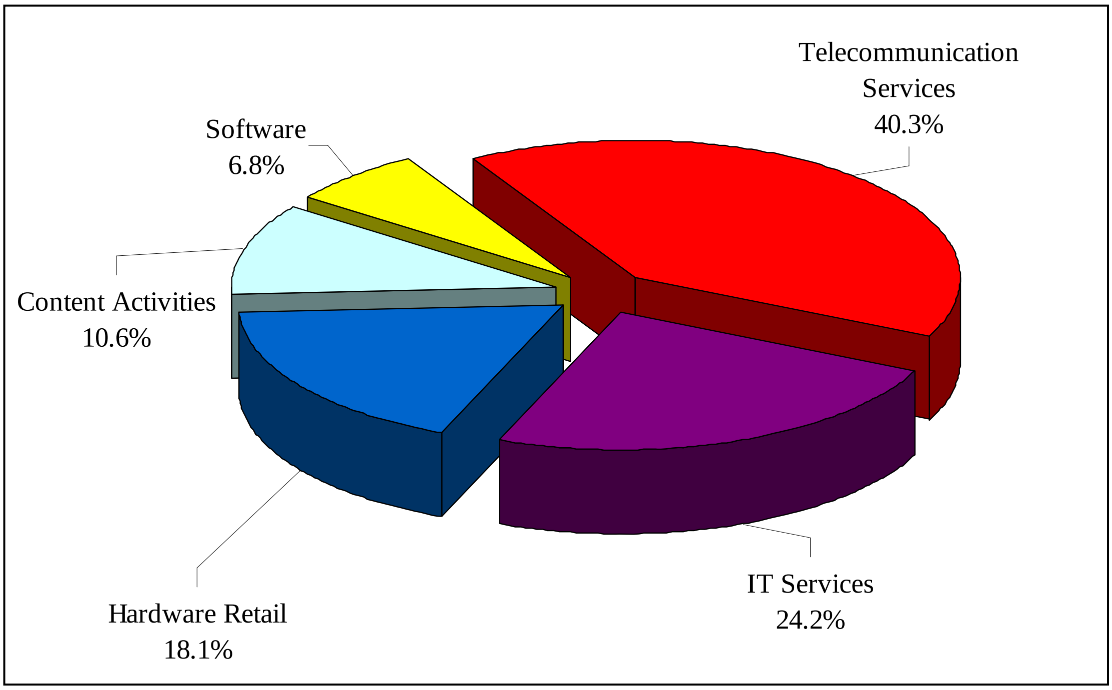
Contribution by Domestic and Export Markets

The export market had a slightly higher share of the total 2002 infocomm industry revenue than the domestic market i.e. 53.1% versus 46.9%.

Domestic Market Performance

For the domestic market, Telecommunication Services accounted for more than two fifths of the total domestic revenue in 2002 (40.3%), followed by IT Services (24.2%), Hardware Retail (18.1%), Content Activities (10.6%) and Software (6.8%) (see Figure 3).

Figure 3: Total Domestic Market Composition by Products and Services



In 2002, domestic revenue from Content Activities, IT Services, Software and Telecommunication Services experienced growth rates of 21.50%, 14.05%, 13.21% and 3.86% respectively (see Figure 4). In contrast, Hardware Retail declined by 8.39%. Looking ahead to 2003, domestic revenue from Content Activities, IT Services, Software and Telecommunication Services is expected to see lower positive growth. Hardware Retail is expected to grow marginally by 0.94% in 2003. The prospects are brighter for 2004 with all products/services registering higher percentage growth than 2003.

Figure 4: Domestic Market Growth in year 2002, 2003 and 2004 by Products and Services

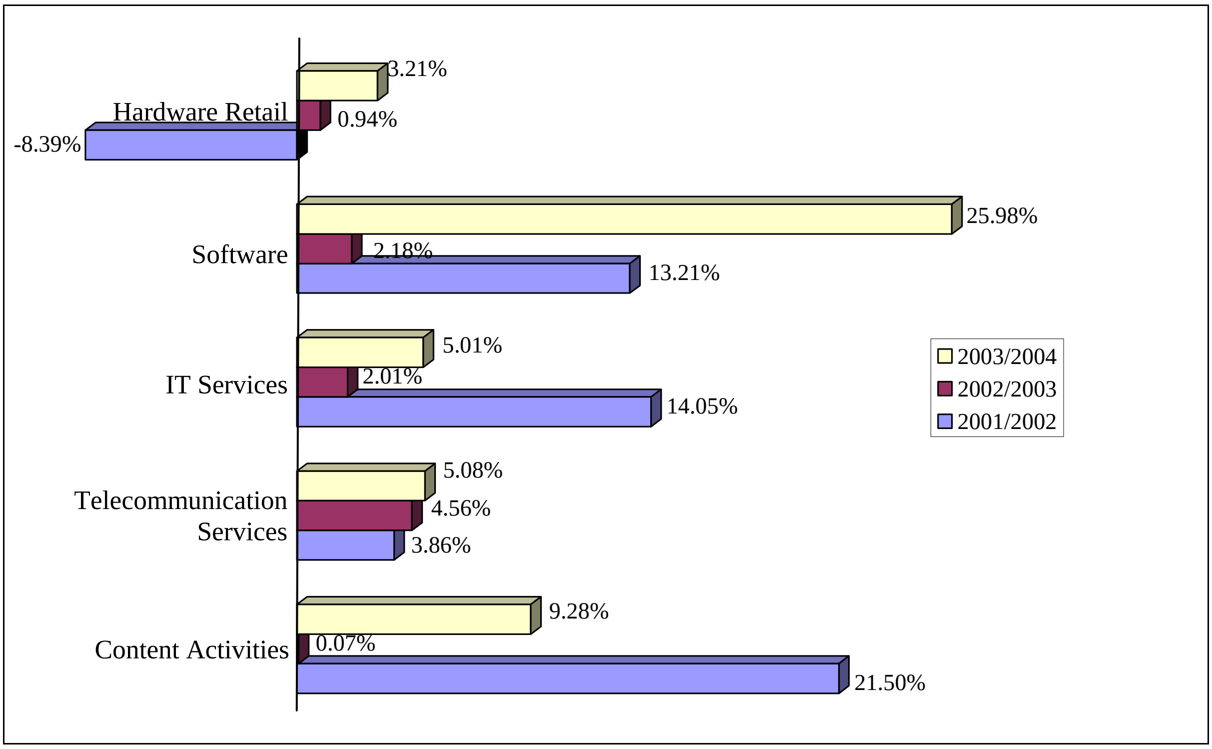
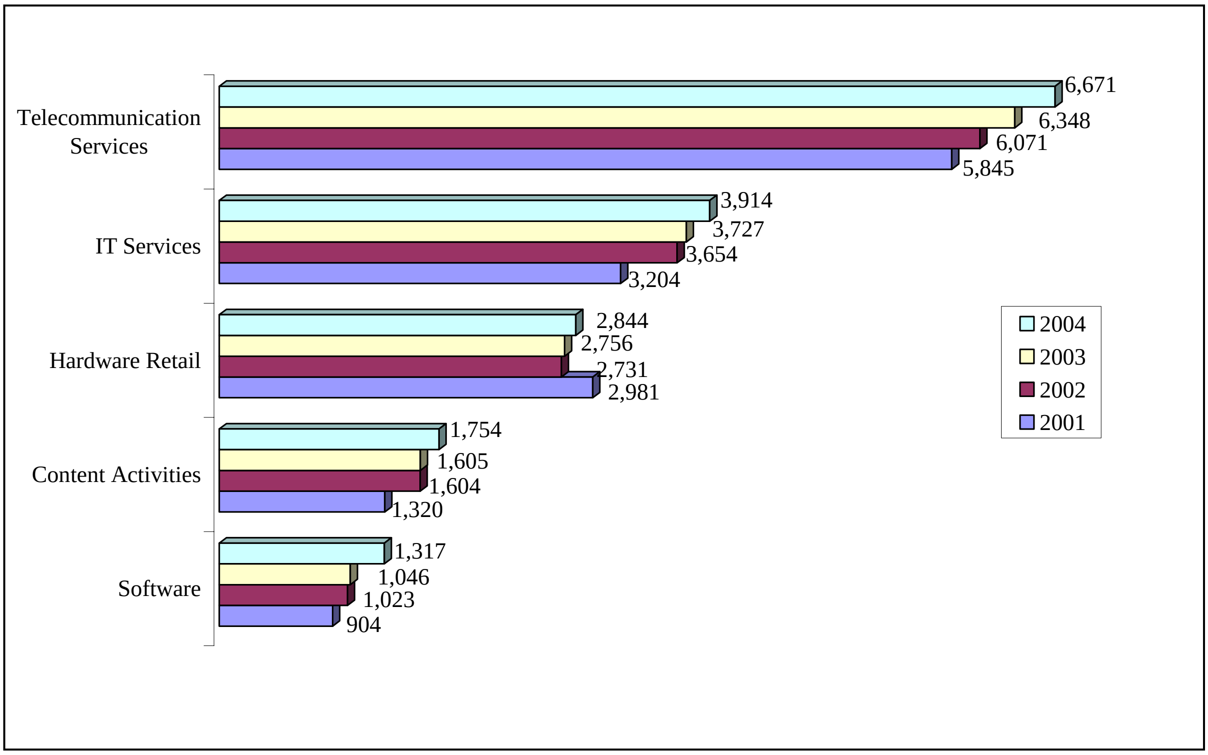


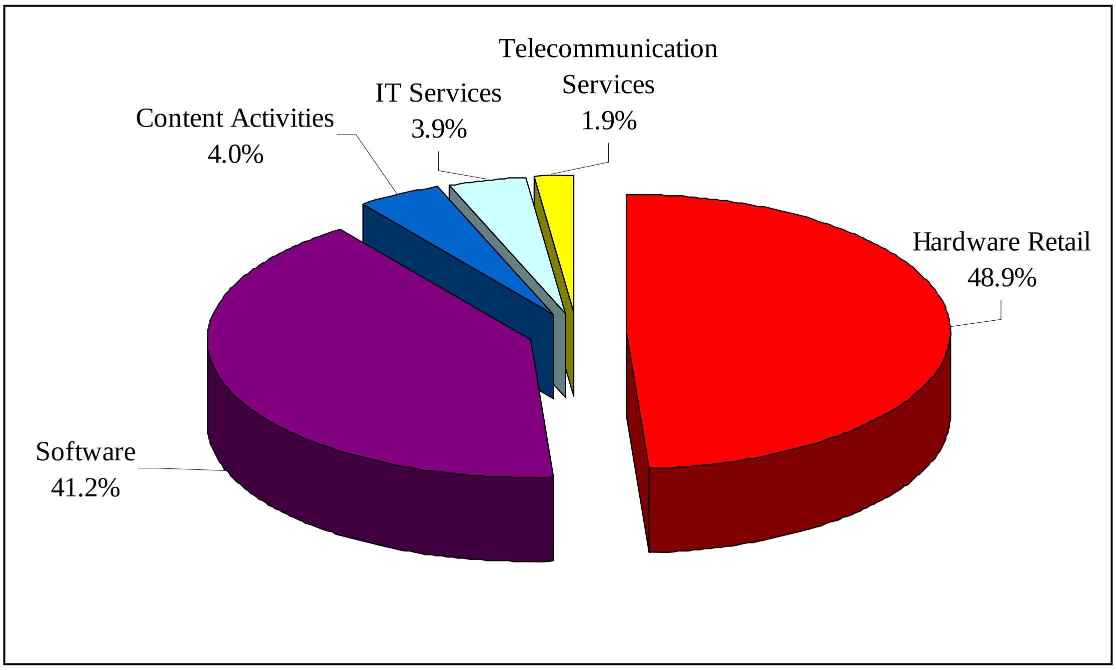
Figure 5: Domestic Market Revenue in year 2001, 2002, 2003 and 2004 by Products and Services ($ millions)



Export Market Performance

For the export market, the picture was slightly different. Both Hardware Retail and Software dominated the export market in 2002, capturing more than four fifths (Hardware Retail – 48.9% and Software – 41.2%) of the total export revenue (see Figure 6). This was followed by Content Activities (4.0%), IT Services (3.9%) and Telecommunication Services (1.9%) (see Figure 5).

Figure 6: Total Export Market Composition by Products and Services



In 2002, Content Activities saw the strongest growth (120.66%) to reach a total revenue of $0.686 billion (because it started from a smaller base than the rest of the products/services), followed by IT Services (15.15%), Telecommunication Services (12.52%) and Software (1.60%). In contrast, Hardware Retail declined by 1.55% (see Figure 7).

It was forecasted that 2003 and 2004 would continue to be good years for the export market with all products/services registering positive growth.

Figure 7: Export Market Growth in year 2002, 2003 and 2004 by Products and Services

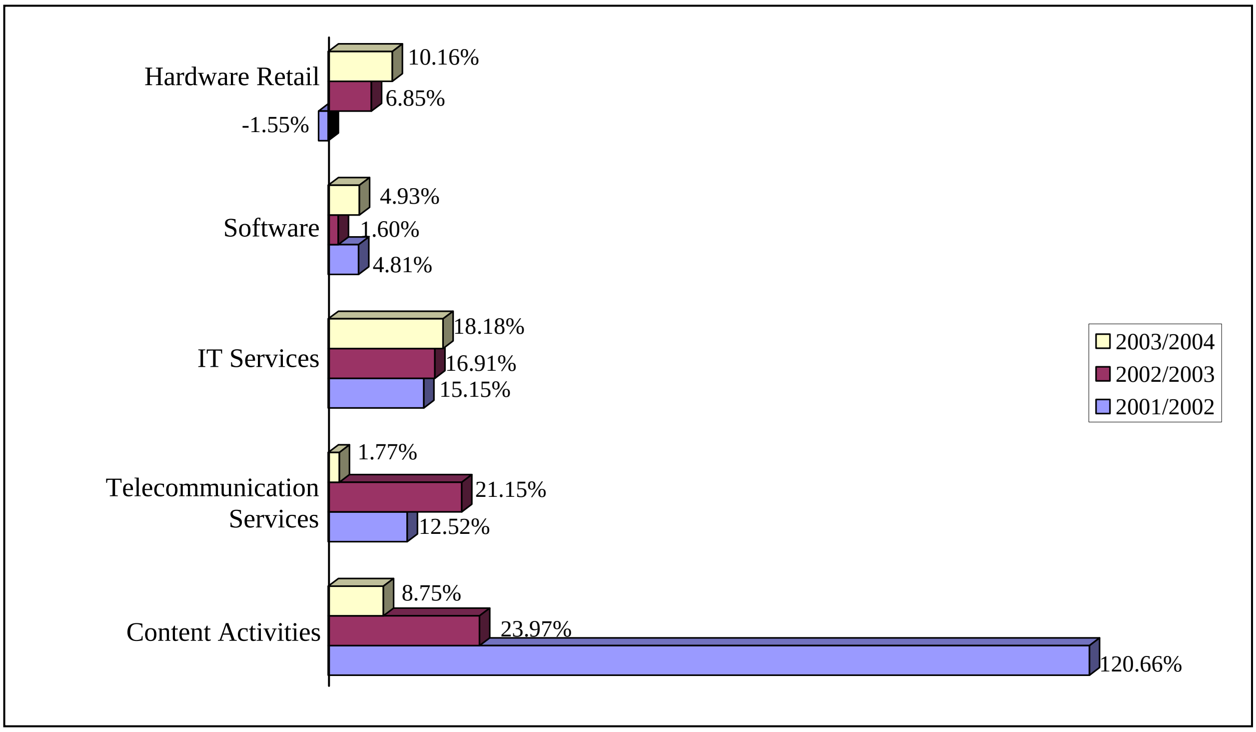
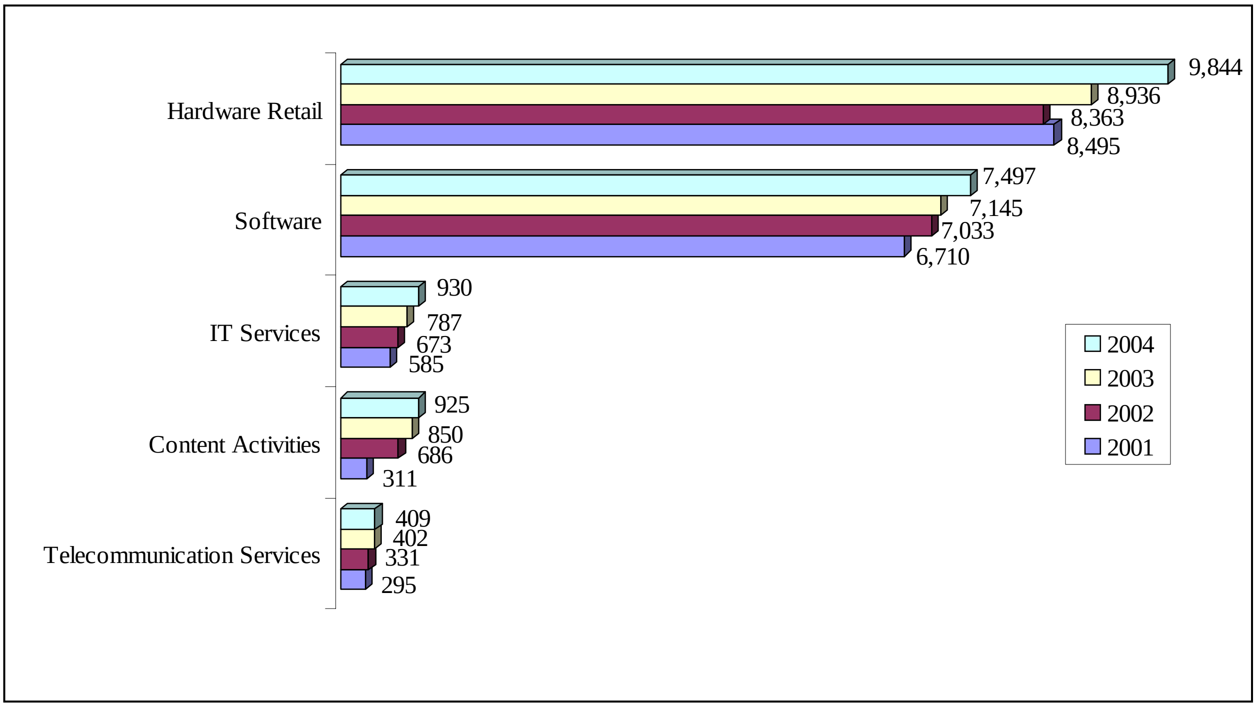


Figure 8: Export Market Revenue in year 2001, 2002, 2003 and 2004 by Products and Services ($ millions)



Export Destinations

Singapore's infocomm industry exported most of its products and services to United States of America (20.2%) and ASEAN countries (17.8%) in 2002. The next three largest export destinations in 2002 were Rest of Asia (14.4%), Australia (12.7%) and Hong Kong (9.4%).

Figure 9: Export Destinations in 2002

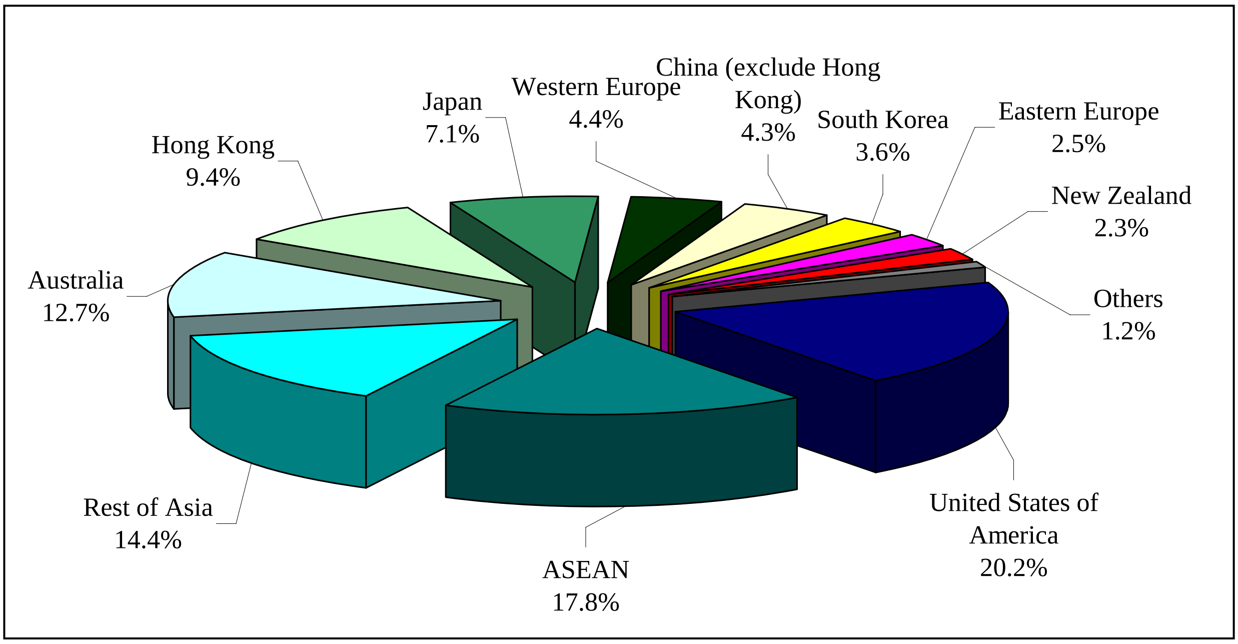
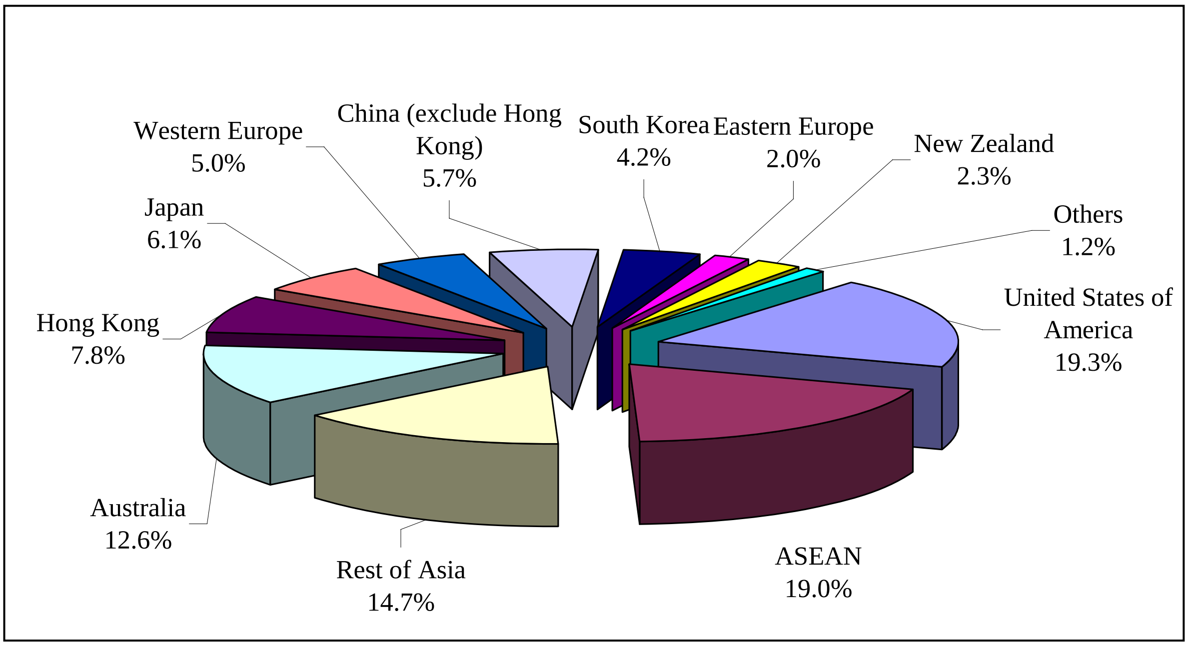


Figure 10: Export Destinations in 2003



Looking ahead to 2003, Singapore's infocomm industry expects the share of exports to China (from 4.3% in 2002 to 5.7% in 2003), ASEAN (from 17.8% in 2002 to 19.0% in 2003), South Korea (from 3.6% in 2002 to 4.2% in 2003), Western Europe (from 4.4% in 2002 to 5.0% in 2003) and Rest of Asia (from 14.4% in 2002 to 14.7% in 2003) to increase. In contrast, the share of exports to Hong Kong, Japan, US, Eastern Europe and Australia markets are expected to decline – Hong Kong (from 9.4% in 2002 to 7.8% in 2003), Japan (from 7.1% in 2002 to 6.1% in 2003), US (from 20.2% in 2002 to 19.3% in 2003), Eastern Europe (from 2.5% in 2002 to 2.0% in 2003) and Australia (from 12.7% in 2002 to 12.6% in 2003).

Expenditure on R&D

20.3% of infocomm companies spent on R&D in 2002. This percentage is expected to increase to 21.6% in 2003 and 21.8% in 2004.

Software products commanded the highest share of R&D expenditure in 2002 (78.39%) and this is expected to continue for 2003 (75.44%) and 2004 (70.80%). Hardware products had the next highest share of the R&D expenditure in 2002 (20.06%). However, its share is expected to decline to 19.34% in 2003 and subsequently recover in 2003 to 25.03%. The rest of the products and services commanded less than 2% of the R&D expenditure for 2002.

Figure 11: R&D Expenditure by Products and Services