

ANNUAL SURVEY ON INFOCOMM INDUSTRY FOR 2004

EXECUTIVE SUMMARY

Key Findings

Overall Performance

- a. Total revenue of Singapore's infocomm industry for 2004 was \$34.77 billion, up from \$32.83 billion in 2003. This represented a growth rate of 6%, an improvement compared to the 2% growth in 2003.
- b. Prospects for the infocomm industry appear good with an expected compound annual growth rate (CAGR) of 4.5% over the next two years.
- c. Hardware and Telecommunication Services took the lion's share of total infocomm industry revenue, accounting for more than two-thirds of the overall pie. This was unchanged from the previous year's share of the overall pie.
- d. Hardware experienced the highest growth in 2004 at 10% followed by IT Services at 5%. Hardware had been experiencing growth of more than 9% since 2001. Software and IT Services recovered from the downturn in 2003 and saw positive growth in 2004.

Export Market

- e. Exports (57%) continued to account for a bigger share of the total infocomm industry revenue compared to the domestic market (43%). In 2004, the export market grew by 12% and its share of the overall revenue pie increased by 3 percentage points to 57%. A CAGR of 5% over the next two years is expected for the export market.
- f. Similar to previous years, the 2004 export market was dominated by Hardware and Software which had captured more than four-fifths of the market.

Domestic Market

- g. Telecommunication Services dominated the domestic market with two-fifths share of the market. This was unchanged from the previous year's share of the overall pie. Hardware had the next largest share at 22%.
- h. Domestic revenue from almost all market segments are expected to see positive growth over the next two years with Software expected to register the highest growth at a CAGR of 10%.

R&D Expenditure

- i. The percentage of infocomm organisations which had spent on R&D in 2004 remained about the same as in 2003 (22% in 2004 and 20% in 2003). However, overall R&D expenditure dropped to \$380 million, a decline of 7% over the previous year.

Introduction

1. The Annual Survey on Infocomm Industry for 2004 is the sixth edition in a series of infocomm industry surveys carried out by IDA. The purpose of the survey was to determine the market performance of the Singapore infocomm industry for 2004 as well as to identify key development trends of the industry in Singapore.
2. The fieldwork for this survey was carried out from February 2005 till June 2005. The survey covered a representative sample of infocomm organisations stratified by the Singapore Standard Industrial Classification (SSIC) codes. The responses were then extrapolated to the whole population of infocomm organisations for analysis.

Overall Performance

3. Singapore's infocomm industry grew by 6% in 2004 (Figure 1). This growth was the highest over the past three years. However, it was lower than the growth of the Singapore economy which was 8.4% in 2004. Total revenue chalked up by the infocomm industry in 2004 was \$34.77 billion, up from \$32.83 billion in 2003 (Figure 2).

Figure 1: Total Infocomm Industry Revenue Growth Rates

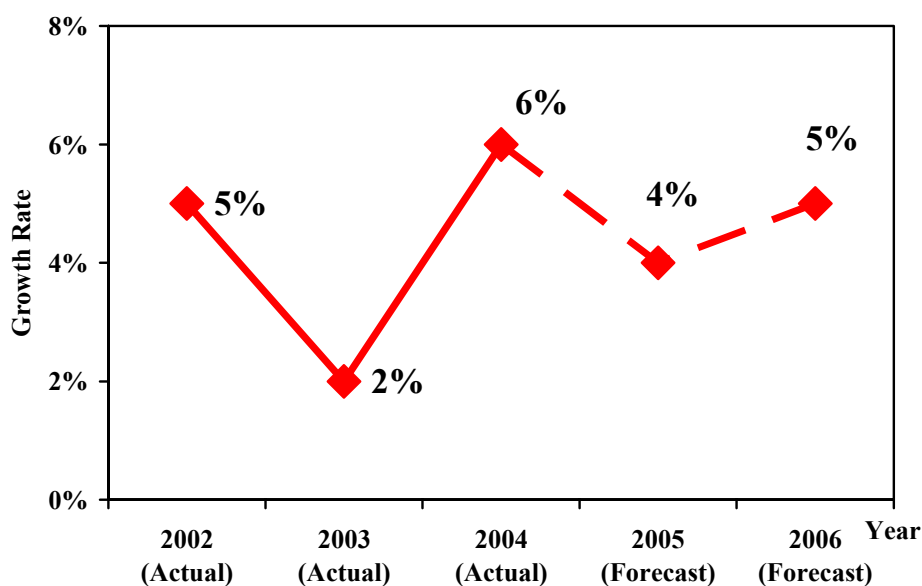
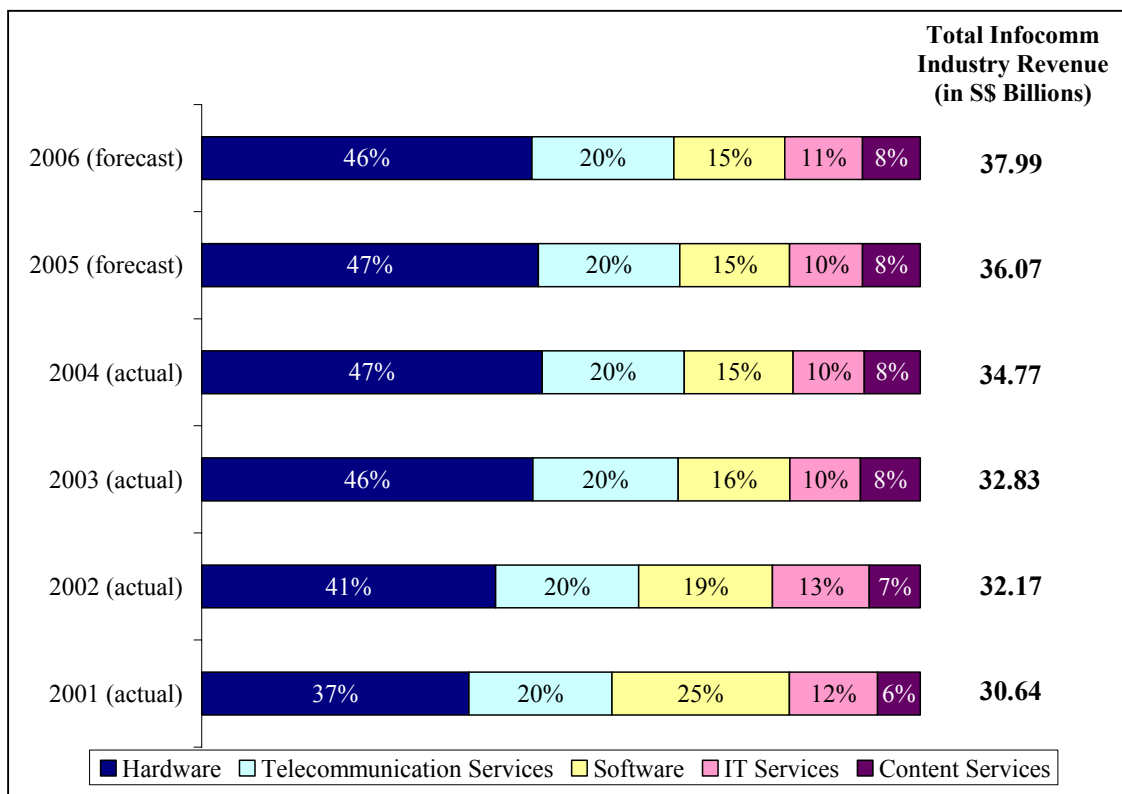


Figure 2: Total Infocomm Industry Revenue by Market Segments (\$ billions)

4. Hardware experienced the highest growth in 2004 at 10% (Figure 3). It was also the main contributor to the growth of the infocomm industry revenue with its' large base. IT Services registered the second highest growth in 2004 at 5%. Almost all market segments experienced positive growth in 2004 except for Content Services (-1%).
5. Over the past year, domestic Digital Content Services had grown from S\$703 million to \$767 million. Revenue from Digital Content Management and Digital Content Processing had doubled, resulting in the positive growth of Digital Exchange¹ revenue from \$264 million in 2003 to \$456 million in 2004.

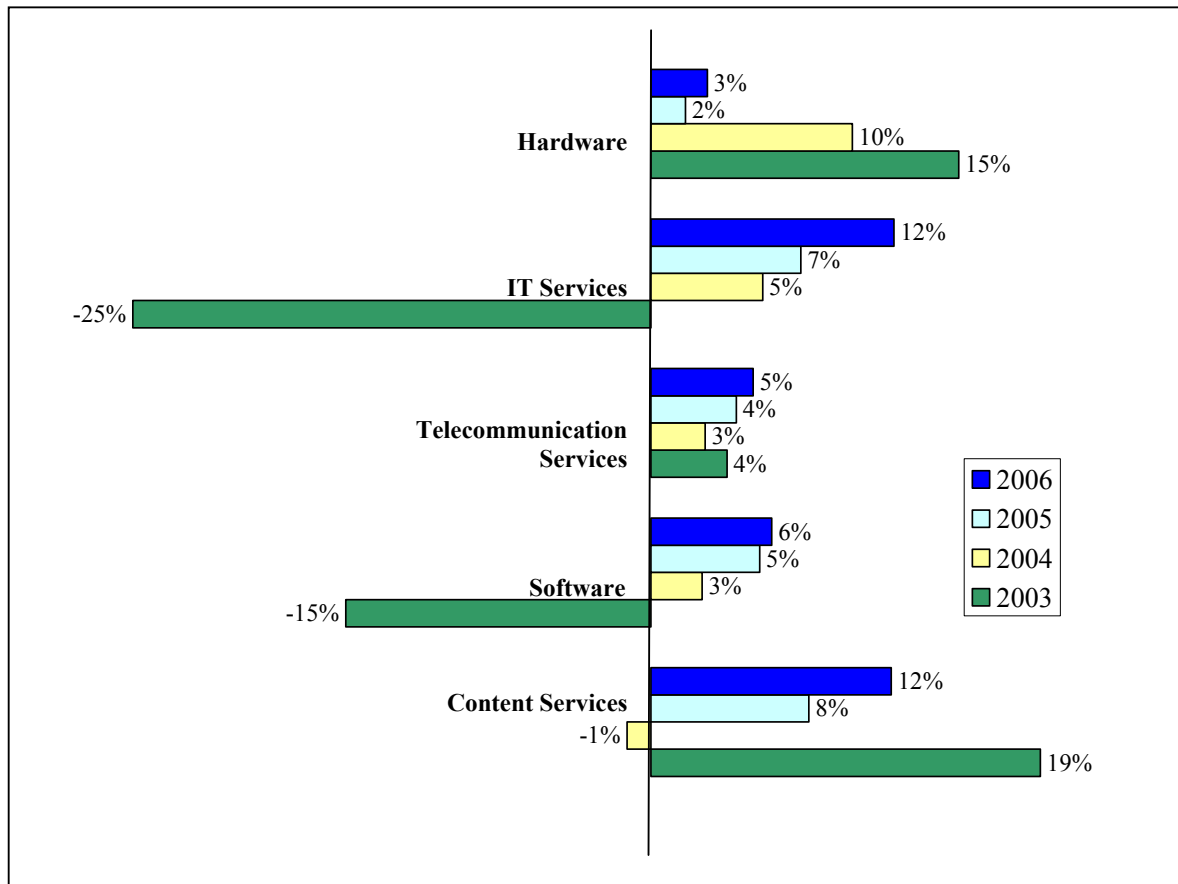
¹ Digital Exchange comprises of

- Digital Content Processing (e.g. digitalisation, localisation, digital mastering, multi-content processing and platform conversions),
- Digital Content Management (e.g. enterprise content management, online records management, digital asset management, digital rights management, deployment, archival/replication/caching services and billing of digital intellectual property), and
- Digital Content Services (e.g. distribution of online games, digital magazines/publications, video-on-demand, digital music, internet or interactive advertisement, online education and online training).

Digital Exchange is part of Content Services.

6. The outlook for Singapore's infocomm industry is expected to be bright with organisations projecting a CAGR of 4.5% over the next two years. However, this is lower than the growth rate of 2004 as it reflected organisations' concern over the possibility of moderation in external demand.

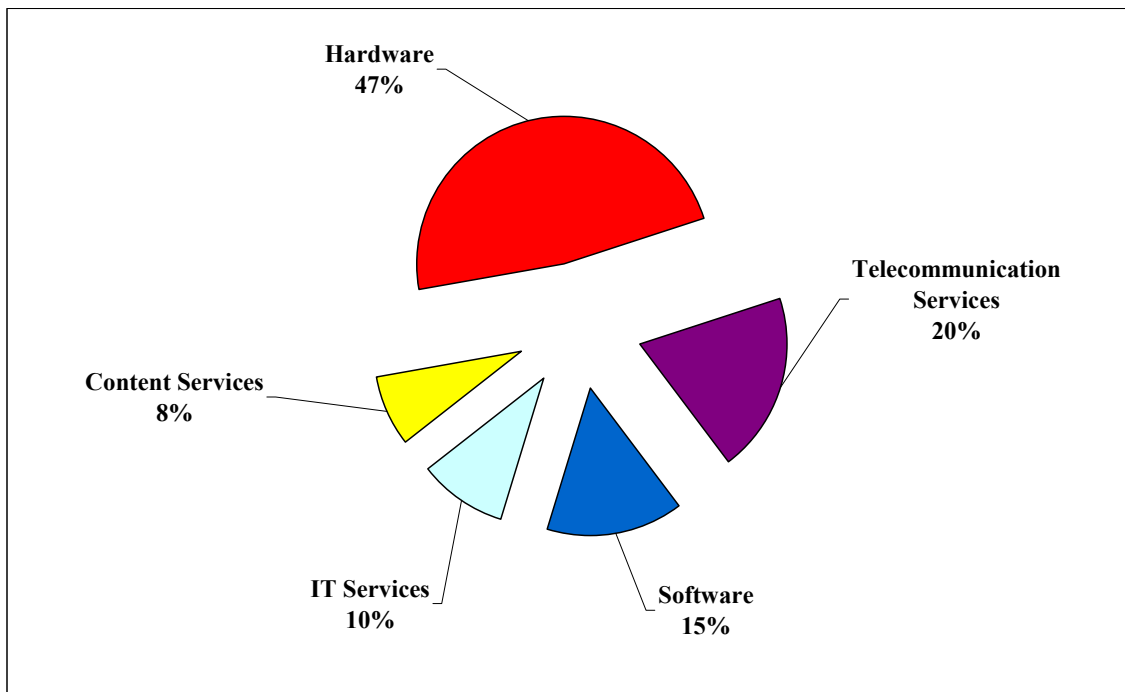
Figure 3: Total Growth by Market Segments



Contribution by Market Segments

7. Hardware took the lion's share of the total infocomm industry revenue in 2004, accounting for 47% of the overall pie (Figure 4), followed by Telecommunication Services (20%). Software (15%), IT Services (10%) and Content Services (8%) made up the rest.

Figure 4: Total Infocomm Industry Market Composition by Market Segments

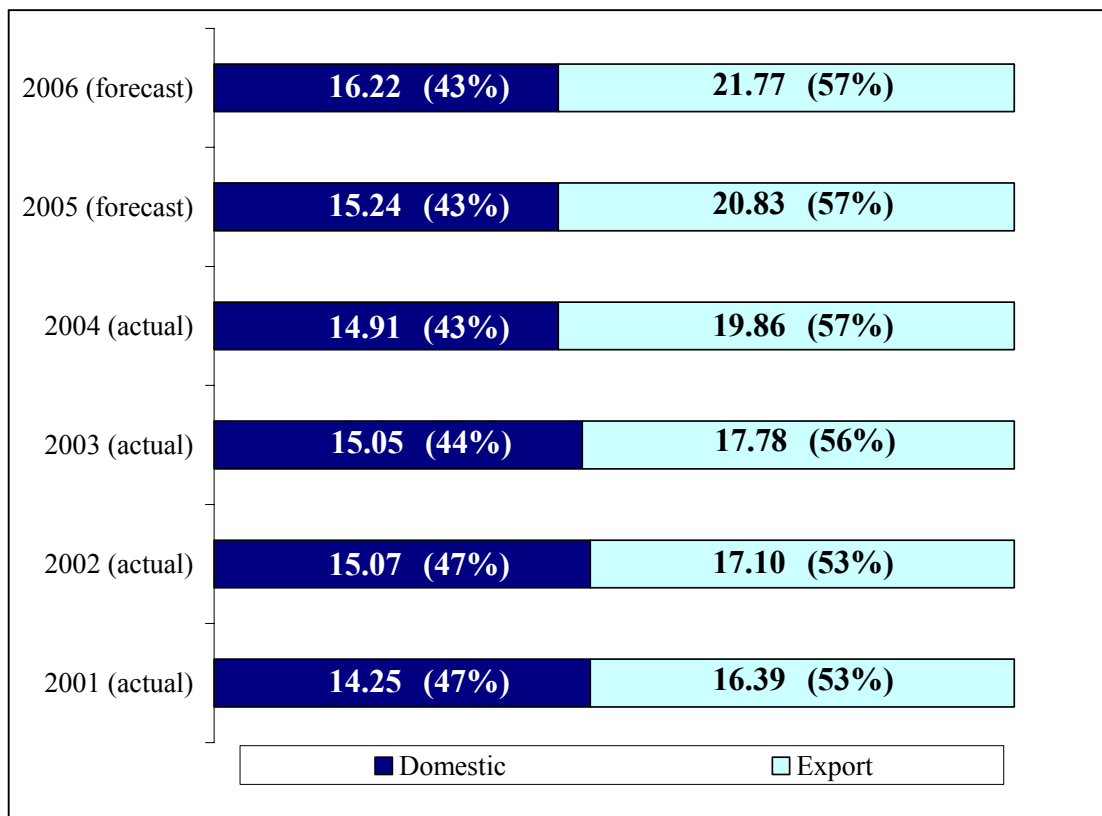


Base: Total Infocomm Industry Revenue for 2004 (\$34.77 billion)

Contribution by Domestic and Export Markets

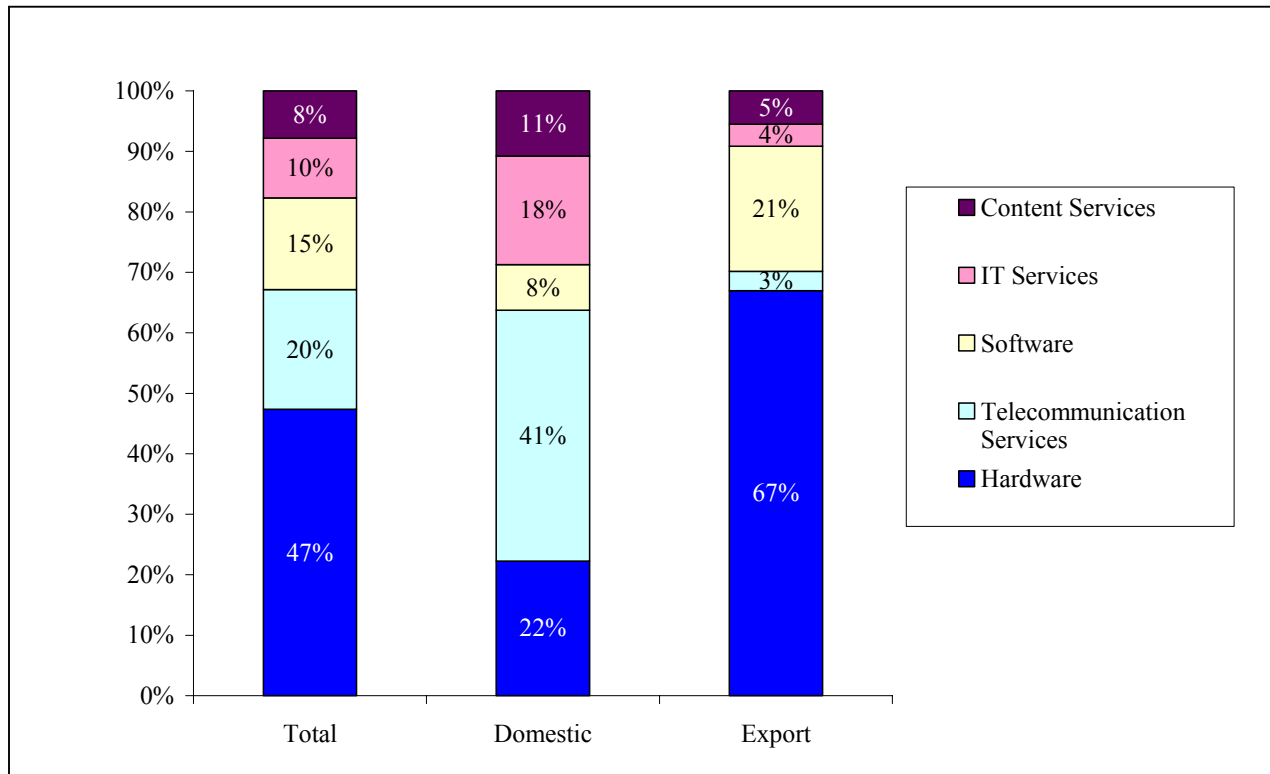
8. Consistent with the trend of previous years', the export market (57%) continued to have a bigger share of the total 2004 infocomm industry revenue than the domestic market (43%) (Figure 5).
9. The export market registered a healthy growth of about 12%, compared with a slight decline of 1% in the domestic market.

Figure 5: Split of Infocomm Industry Revenue between Domestic and Export Market in S\$ Billions



10. The composition of the domestic market differed from that of the export market with Telecommunication Services dominating the domestic market with a 41% share whereas Hardware had the greatest share of the export market (67%) (Figure 6).

Figure 6: Domestic and Export Market in S\$ Billions

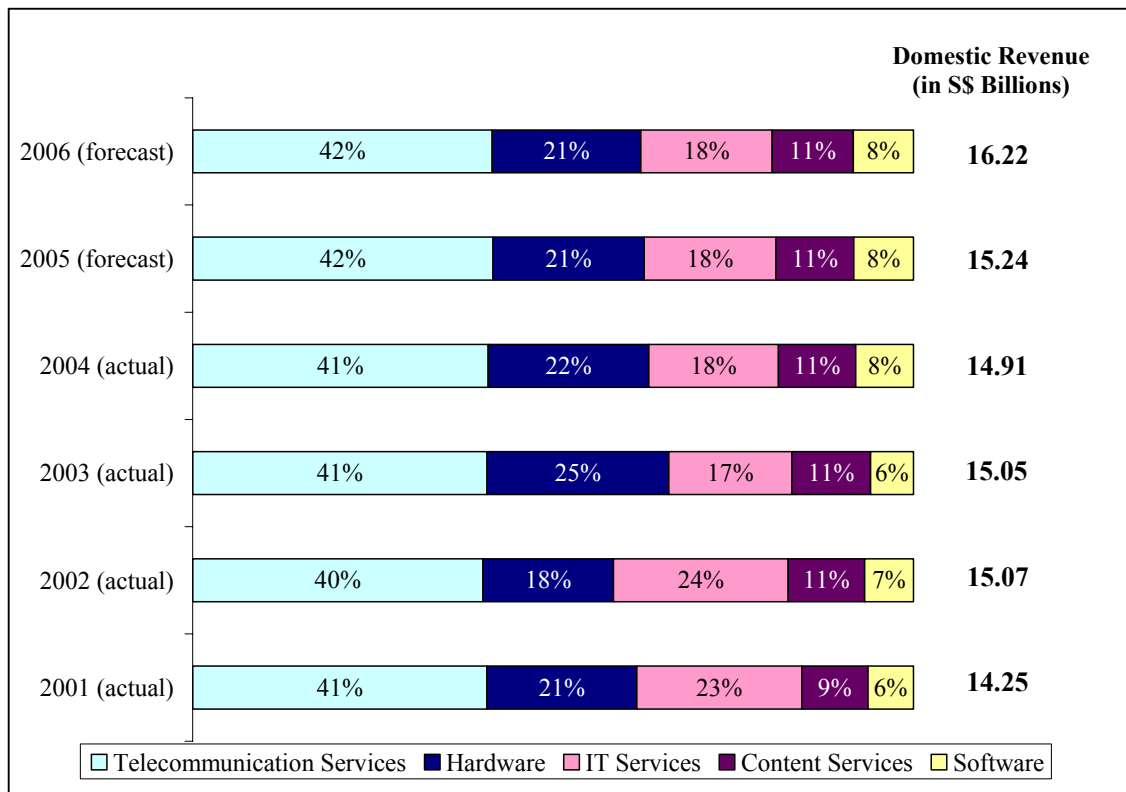


Base: Revenue in 2004 (Total-\$34.77 billion, Domestic-\$14.91 billion and Export-\$19.86 billion)

Domestic Market Performance

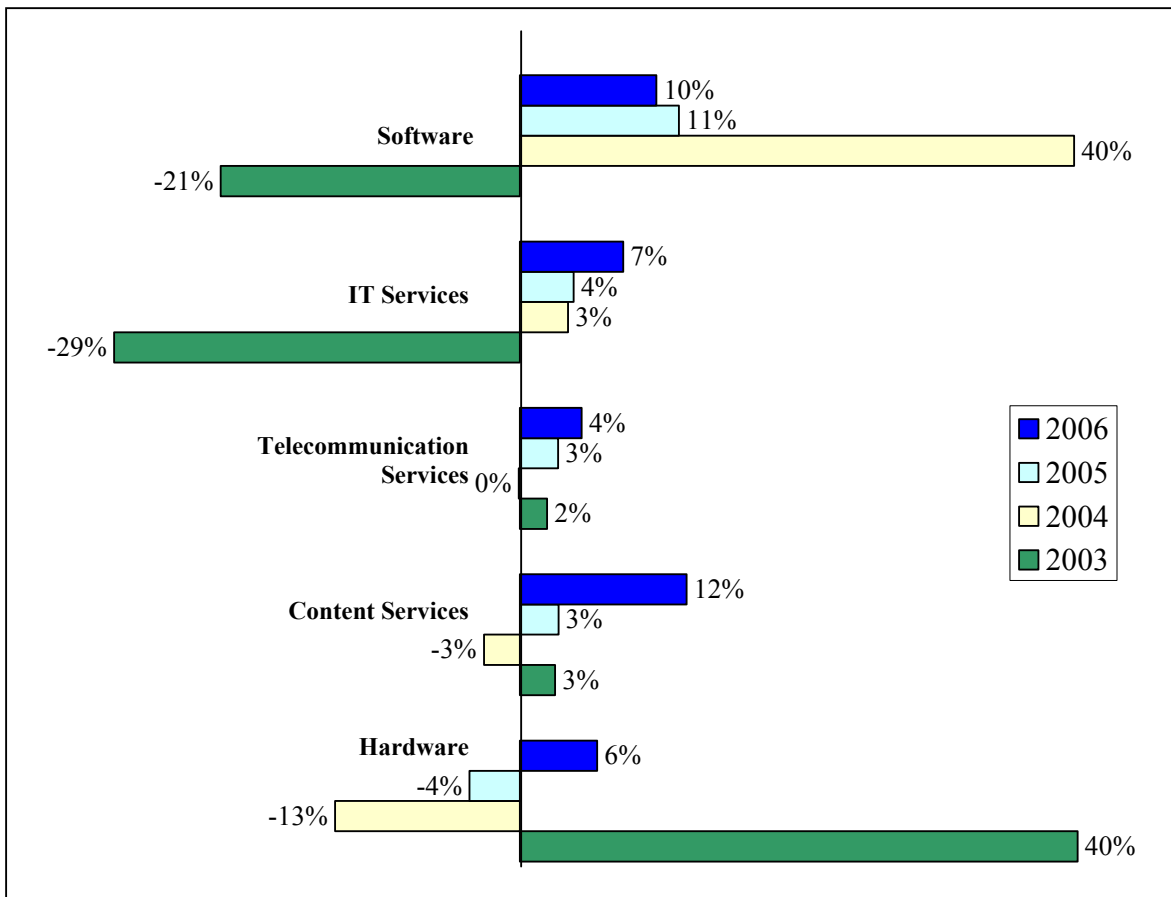
11. For the domestic market, Telecommunication Services accounted for about two-fifths of the total domestic revenue in 2004 (41%), followed by Hardware (22%), IT Services (18%), Content Services (11%) and Software (8%) (Figure 7).

Figure 7: Domestic Market Composition by Market Segments



12. In 2004, domestic revenue from Software experienced the highest growth rate (40%) (Figure 8). IT Services (3%) saw an improved performance compared to the previous year with a positive growth in their domestic revenue. In contrast, Content Services and Hardware had experienced negative growth.
13. Looking ahead to 2005, in accordance with continuing positive business sentiments, domestic revenue from almost all market segments is expected to see positive growth with Software having the highest percentage growth (11%). The prospects for 2006 would be even brighter with all market segments registering even higher percentage growth rates than 2005.

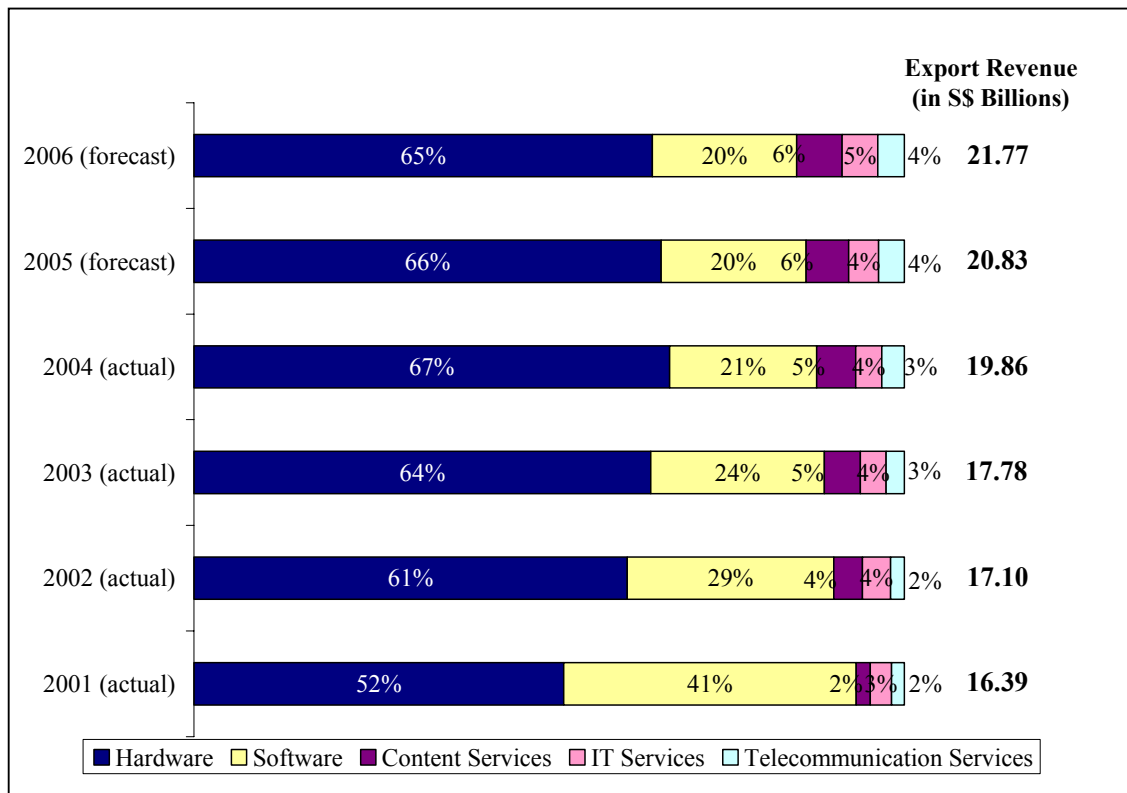
Figure 8: Domestic Market Growth by Market Segments



Export Market Performance

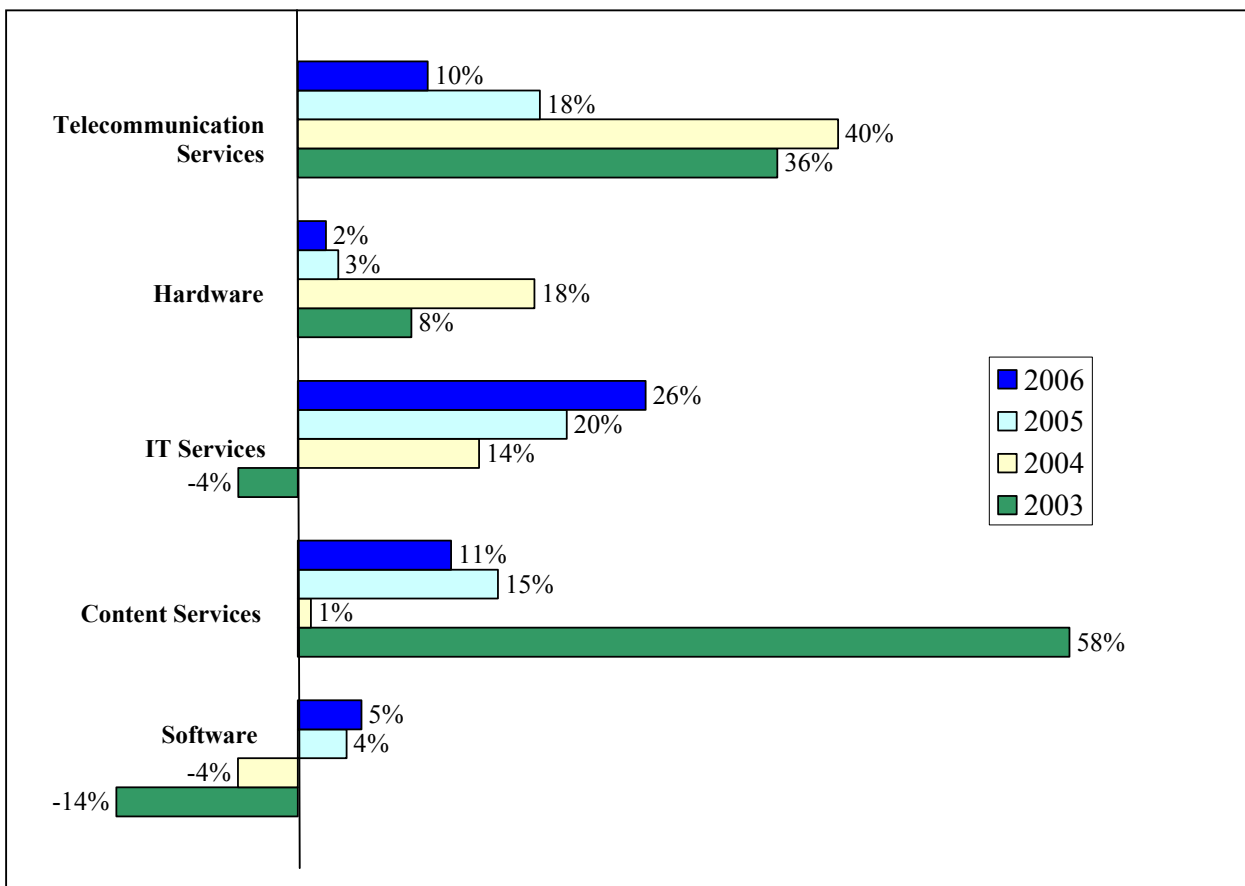
14. For the export market, the picture is different. Both Hardware and Software continued to dominate the export market in 2004, capturing more than four-fifths (Hardware – 67% and Software – 21%) of the total export revenue (Figure 9). This was followed by Content Services (5%), IT Services (4%) and Telecommunication Services (3%).

Figure 9: Export Market Composition by Market Segments



15. Almost all market segments experienced positive growth in 2004 with Telecommunication Services having the highest growth at 40%. Hardware had the second highest growth at 18%, followed by IT Services (14%) (Figure 10).
16. The prospects for the export market look good over the next two years with all market segments expected to register positive growth for these two years. IT Services is expected to have the highest growth at 20% in 2005 and 26% in 2006 (Figure 10).

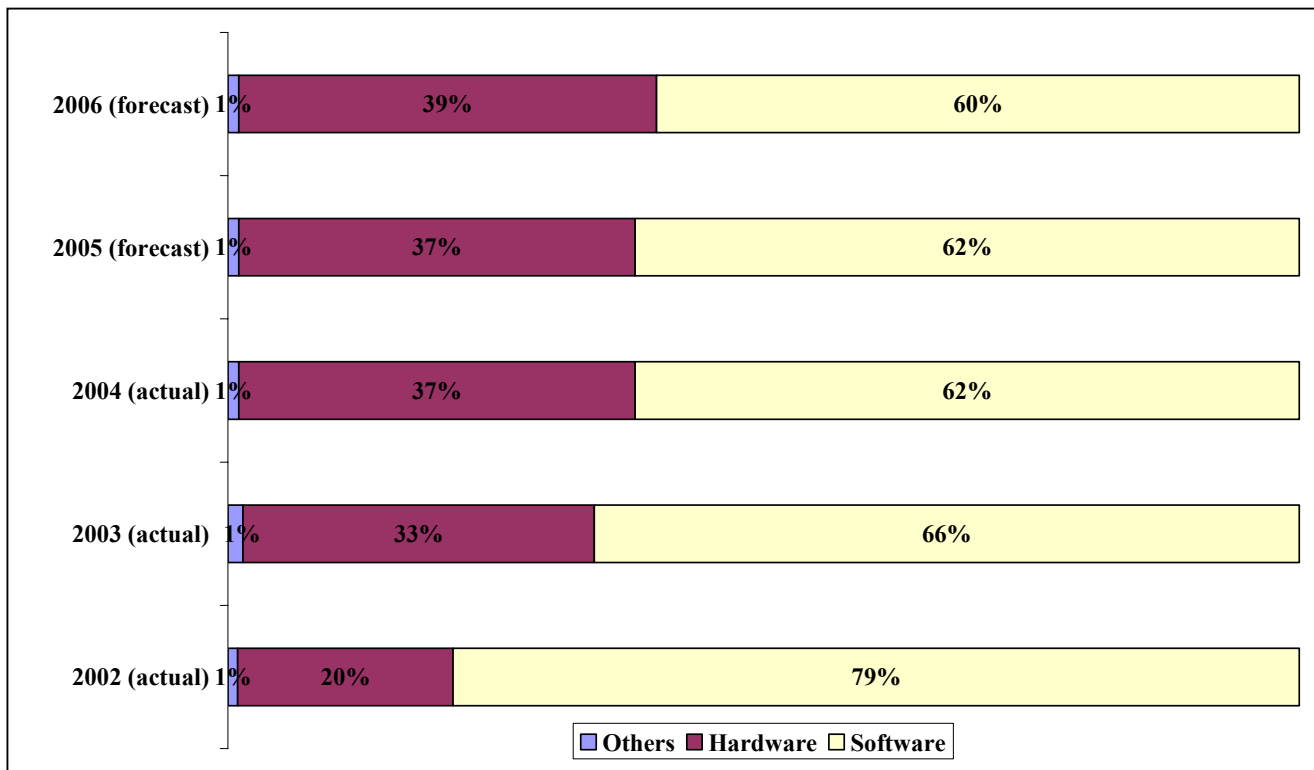
Figure 10: Export Market Growth by Market Segments



Expenditure on R&D

17. The percentage of infocomm organisations which had spent on R&D in 2004 remained about the same as in 2003 (22% in 2004 and 20% in 2003). In absolute value, the amount spent on R&D expenditure had decreased slightly from \$0.41 billion to \$0.38 billion over the past year.
18. Software products commanded more than three-fifths of R&D expenditure in 2004 compared to Hardware which only commanded 37% of the R&D expenditure (Figure 11). This percentage is expected to remain fairly constant over the next two years.

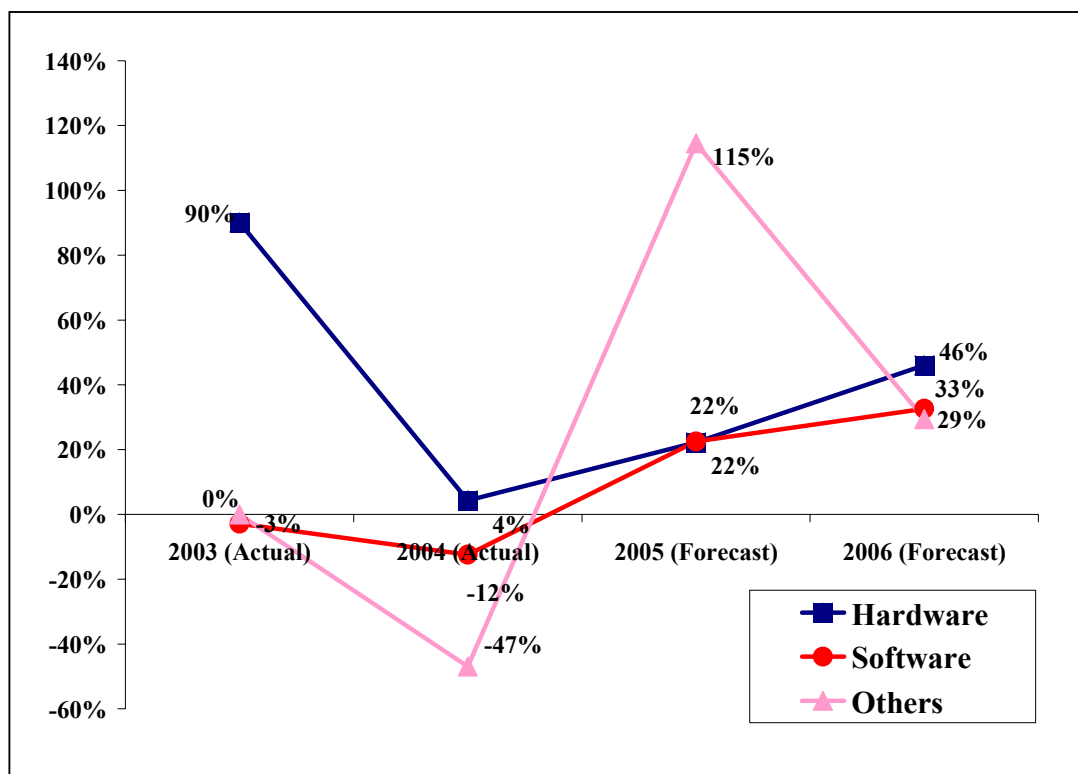
Figure 11: R&D Expenditure by Market Segments



Base: R&D Expenditure for Each Year (2002-\$0.36 billion, 2003-\$0.41 billion, 2004-\$0.38 billion, 2005-\$0.47 billion and 2006-\$0.65 billion)

19. R&D expenditure on all segments is expected to grow positively over the next 2 years (Figure 12).

Figure 12: Growth of R&D Expenditure by Market Segments



Conclusion

20. The infocomm industry showed positive growth of 6% in 2004. Almost all market segments grew positively in 2004; even IT Services and Software (the worst performing market segments in 2003) showed an improved performance in 2004.
21. The prospects for the infocomm industry appear to be positive over the next two years with a CAGR of 4.5%. This growth is expected to be spurred on by external demand with a CAGR of 4.9% in the export market over the next 2 years.