

Technology Sector



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Industry Overview

The US technology sector consists of approximately 140,000 companies with combined annual revenue of around \$900 billion. Top cited companies include AT&T, IBM, Intel, and Microsoft. The industry is highly concentrated in many subsectors with the largest 50 participants hold more than 60 percent of the market. The technology sector itself includes telecommunications, IT services, semiconductor manufacturing, software, Internet services, biotechnology, and scientific research.

Competitive Landscape

Demand is dependent up consumer income and the profitability of business customers, because many technology products and services require significant resource/cash investment. The profitability of individual companies is driven by their ability to create and market new products. Small companies can compete successfully if they maintain niche expertise in a particular field of knowledge.

Business Challenges

High R&D Investment Required

Technology companies must continually invest in R&D. Big companies like Intel and Cisco typically reinvest around 10 to 25 percent of annual revenues on R&D.

Dependence on Consumer, Business Spending

Demand for technology products and services depends on the health of the economy. Because many technology products are updated versions of existing products, their purchase can be often be deferred during difficult economic times. Spending on information technology is particularly susceptible in corporate budget cuts.

Dependence on Highly Skilled Workers

The highly technical nature of the work at technology companies requires specialized education and training. The rapid growth of the US technology sector over the past decade has resulted in a under-supply of qualified workers, and many US companies outsource work to individuals trained abroad in order to meet demand and save cost.

Trends

Internet Advertising

Online advertising has become a key marketing platform for many technology companies. Growth in online advertising has significantly increased in recent years. Tech firms are boosting their own Internet offerings by improving online search functions and supplying strong support services to customers.





Industry Consolidation

As large companies struggle for market share, industry analysts anticipate that the consolidation within the technology sector will continue. This is due in part to that large tech companies that historically focused on providing niche products and services, are increasingly adding new offerings that directly compete with each other. The rapid evolution of online, multi-channel content and increasing education & demands of tech consumers have also prompted consolidation within telecommunications industry.

Opportunities

Sensing Devices, Telecommunications

High-resolution satellite communications will benefit from an increase in government defense spending.

Domestic Security Needs

Federal, state, and local governments and private industry face huge demands to increase security. The largest participants in this market include major military contractors, big electronics makers, and private security companies. While most DHS contracts will likely be awarded to large contractors, there is a vested interest in ensuring that innovative small and midsize technology companies also be included in the mix.

Nanotechnology

Ultra-small, portable devices and materials that may transform electronics, materials, medicine, and other fields over the next decade. IBM, GE, Hewlett-Packard, NEC, and 3M have launched significant nanotech initiatives.