

IBISWorld Procurement Report: 31253218

Laptop Computers

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About this Report

This report is intended to assist buyers of laptop computers, also known as notebook computers or laptops. A laptop is a portable personal computer that includes a display, keyboard, touchpad and speakers in a single unit. Suppliers include multinational technology manufacturers, wholesalers and distributors. Top buyers include large corporations, schools and government agencies. This report excludes tablet computers, smartphones and other mobile devices.

Table of Contents

2 At a Glance	10 Total Cost of Ownership	19 Switching Cost
3 Executive Summary	11 Product Specialization	21 Purchasing Process
4 Price Environment	11 Related Goods	21 Buying Basics
4 Price Fundamentals	12 Substitute Goods	21 Buying Lead Time
4 Benchmark Price	13 Regulation	21 Selection Process
5 Pricing Model	14 Quality Control	21 Buying-Decision Scorecard
5 Price Drivers	15 Supply Chain & Vendors	22 Key RFP Elements
6 Input Cost Drivers	15 Supply Chain Dynamics	24 Negotiation Questions
7 External Demand Drivers	15 Supply Chain Risk	25 Buyer Power Score Components
8 Recent Price Trend	16 Geographic Locations	26 Jargon & Glossary
9 Price Forecast	16 Imports	
10 Product Characteristics	16 Competitive Environment	
10 Product Life Cycle	16 Market Share Concentration	
	17 Vendor Company Types	
	19 Market Profitability	

At a Glance

Recent Price

-4.3%

Falling input costs and increased competition from substitutes have led to steady price declines in the three years to 2017.

2014-2017

Forecast Price

-2.4%

Input costs are expected to fall further and competition is anticipated to continue growing during the three years to 2020, which will lead to further price declines, although at a decelerated rate.

2017-2020

Growth percentages represent annualized data.

Market Characteristics

Availability of Substitutes

HIGH

Market Share Concentration

HIGH

Product Specialization

MEDIUM

Switching Costs

LOW

Market Risk

Recent Demand Driver Volatility

LOW

Recent Price Volatility

LOW

Vendor Financial Risk

LOW

Supply Chain Risk

LOW

Buyer Power Score

4.6

See p. 25 for details.

Benchmark Price

\$1,100

per laptop

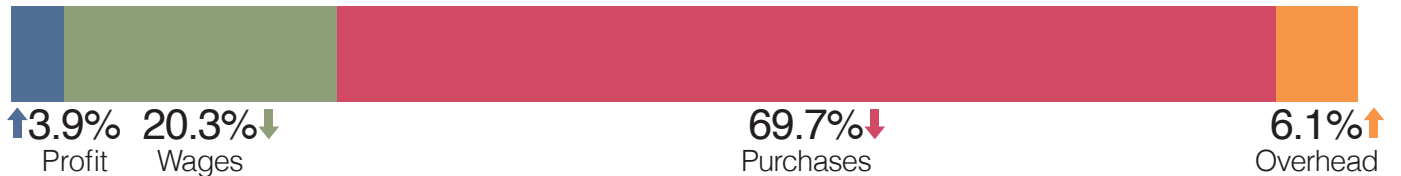
Key Price Drivers

- Price of semiconductor and electronic components
- Price of software publishing
- Average wages – computer manufacturing
- Private investment in computers and software
- Number of mobile internet connections

Major Vendors

- Lenovo Group Limited **15-20%**
- HP Inc. **15-20%**
- Dell Inc. **10-15%**
- Apple Inc. **5-10%**
- ASUSTek Computer Inc. **5-10%**

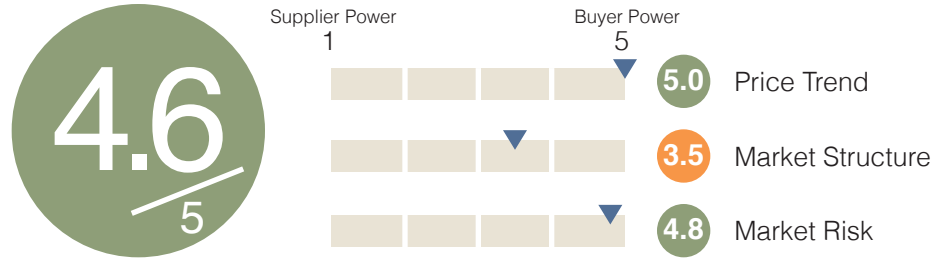
Vendor Cost Benchmarks



Arrow indicates trend during the past year and next year.

Executive Summary

Buyer Power Score



The IBISWorld Buyer Power Score is a weighted score based on a number of quantitative and qualitative criteria associated with buying a product or service. The score is calculated between 1 and 5, with 1

signifying low buyer power and 5 meaning high buyer power. The more power a buyer has the greater leverage they have to get lower prices and better contract terms. For more information see page 25.

Executive Summary

The laptop computers market has a buyer power score of 4.6 out of 5, which indicates that buyers have strong leverage over suppliers in negotiations. Buyers benefit from strong competition due to the widespread availability of substitute goods, particularly smartphones and tablet computers, which have similar functionality as laptops and have exploded in popularity since the introduction of the iPhone and iPad. With two strong, viable substitutes in the mobile computing market, buyers have gained substantial negotiating power, and laptop vendors have been prompted to lower prices in an effort to maintain market share.

Additionally, buyers have benefited from laptop suppliers' falling input costs. Prices for computing hardware and software licensing, major inputs in laptop production, have been in a long-term state of decline and exhibited minimal growth, respectively. Input costs falling as a share of revenue, coupled with vigorous price-based competition, have put downward pressure on market prices, with suppliers passing cost

reductions on to buyers in the form of lower prices. Falling prices have, in turn, allowed buyers to put off buying decisions if desired.

Low overall supply chain risk in the market benefits buyers by limiting the likelihood that they will face supply disruptions. Buyers are also aided by low price volatility, which allows them to budget for laptop computer procurement with little risk of sudden price shifts. Furthermore, laptops have entered the decline phase of the product life cycle, pressuring suppliers to provide more discounts and incentives to attract customers in a shrinking laptop market.

However, not all factors favor buyer power. While many of the market's vendors are small retailers that may struggle to maintain profit margins, there are some global retail and technology manufacturing giants that hold significant sway in the market. Thus, buyers working with top vendors will have less negotiation leverage, and buyers working with smaller retailers are at higher risk of their supplier will go bankrupt during the laptop's useful life.

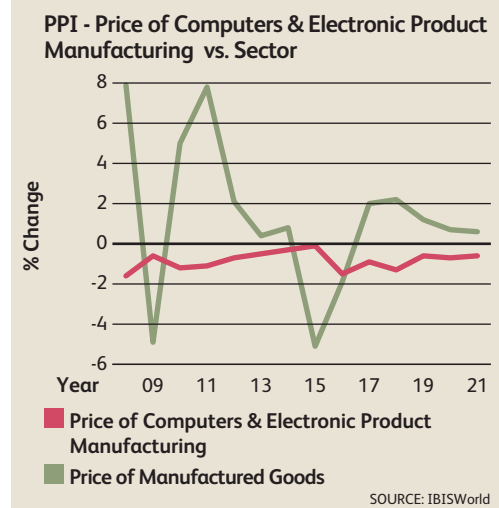
Price Environment

Price Summary

Three-year Price Trend **-4.3%**

Three-year Price Forecast **-2.4%**

- Factor is a threat to buyer
- Factor should be investigated
- Factor is not a threat to buyer



Price Fundamentals

Average Price	\$1,100 per laptop
Price Range	WIDE: \$200 to \$5,000 per laptop
Key Pricing Factors	Operating system Processor Memory Integrated hardware and software Screen size Level of support

Benchmark Price

The average price of a laptop computer is estimated at \$1,100 in 2017; however, prices range widely from about \$200 to \$5,000 per laptop. The laptop’s operating system is the primary factor of price with three operating systems dominating the market: Microsoft’s Windows, Apple’s macOS and Google’s Chrome OS. Apple laptops run OS X and cost between \$899 and \$4,000 per laptop. Alternatively, most laptops running Windows or Chrome OS cost less than \$1,000, with some high-powered laptops with these operating systems costing up to \$4,000. Brand name reputation and recognition greatly influence the price of the

operating system, with many buyers in the market considering Apple’s OS X a premium product, allowing Apple to command higher prices. However, the brand name reputation can arguably be the result of successful marketing campaigns.

The laptop processor’s computing power and memory capacity are the next major determinants of price. When ordering from a manufacturer, buyers can select the combination of power and memory that best suit their needs. Upgrading a processor will add \$50.00 to \$1,000 to the final purchase price; similarly, memory upgrades will typically add another \$50.00 to \$1,000 to the final

Price Environment

Price Fundamentals continued

price. Suppliers charge more for superior processing power and memory because they expand a laptop's capabilities, which may help increase productivity.

The preinstalled hardware and software that come with a laptop can also significantly change purchase price. Hardware upgrades, such as an improved graphics card, battery or a disc drive, will each cost an additional \$50.00 to \$500, while software upgrades and purchases will add a similar amount to the final purchase price. For example, most Windows laptops come with a trial version of the productivity suite Microsoft Office, and a laptop with a full business version of the suite installed will cost about \$300 more. Similarly, larger screen sizes will add significantly to the purchase price because they require more parts to manufacture.

The final determinant of price is the level of support provided. All laptops come with a warranty, typically covering the first one or three years of ownership. Increased levels of support will increase the price of laptops due to the added labor required from suppliers.

Pricing Model

Most laptop vendors use the cost-plus model to price their goods, meaning that the purchase price is determined by the cost of manufacturing or acquiring the laptop, plus an added profit margin. The high degree of competition among vendors squeezes these profit margins, so buyers usually do not pay significantly

more for laptops than the costs incurred by the vendors to produce them. As a result, buyers have little room to negotiate prices much lower than retail price. However, the high level of competition suggests that buyers are already being offered close to the lowest price possible.

The major exception is Apple, which sells its laptops on a value-based pricing model. Apple has strong customer loyalty, and its products are preferred for some tasks, such as video editing and audio production. As a result, the company can charge its customers based on the perceived value it brings because other suppliers' laptops are not direct competitors for most of its users. The value-based pricing system hurts buyer power because it cuts into buyers' leverage and reduces their ability to negotiate on price, even though Apple earns considerably larger profit margins than its competitors.

When purchasing direct from the manufacturer, the laptop is built and delivered to the buyer. Retailers will typically sell the laptop immediately, but they will sometimes require time to ship the laptop from a nearby store or distribution center. Most buyers pay the full purchase price upon making a buying decision; however, both retailers and manufacturers will offer financing plans for buyers that desire them. These plans vary widely but will typically allow the buyer to pay off the purchase price over a few years with interest.

Price Drivers

Price Driver
Volatility Level

LOW

Price drivers for laptops exhibit a low level of price volatility. Input costs such as the price of semiconductors have displayed a low level of volatility in that time due to strong competition from overseas manufacturers. However, some volatility comes from sharp growth in mobile internet connections as

consumers and businesses rapidly use more online services. Although devices that use these connections, including tablets and smartphones, have exploded in popularity, they have also begun to approach saturation and are therefore expected to slow down in the coming three years. The low level of price driver

Price Environment

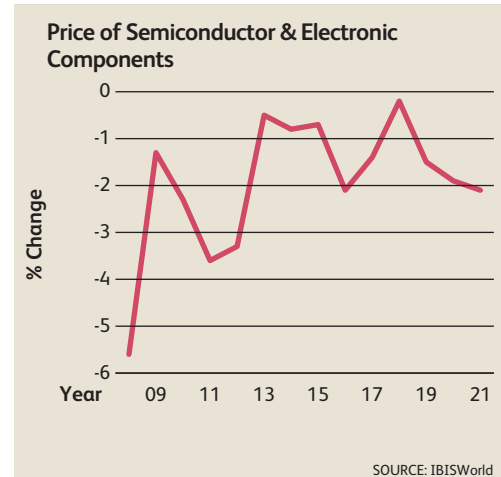
Price Drivers continued

volatility in the market benefits buyers by reducing the likelihood of significant or sudden price fluctuations.

Input Cost Drivers

Price of semiconductor and electronic components:

Semiconductors are the basic building blocks of any piece of computing hardware and are thus a critical component of laptop computers. Semiconductor prices have been falling steadily in accordance with Moore's Law, which states that the number of transistors that can fit on an integrated circuit doubles about every two years, resulting in cheaper production of these components. Consequently, the price of semiconductors has fallen at an estimated annualized rate of 1.4% in the three years to 2017, and is forecast to fall further at an annualized rate of 1.2% during the three years to 2020. The declining price of semiconductors has been the primary driver behind suppliers'



SOURCE: IBISWorld

steadily falling operating costs, and will continue to contribute to decreasing laptop prices in the next three years.

Price of software publishing:

Laptops come with basic software preinstalled, including operating systems and enterprise productivity software, although the amount and type of software

Price Driver Statistics

	Price of Semiconductor & Electronic Components (Index)	Change (%)	Price of Software Publishing (Index)	Change (%)	Average Wages - Computer Manufacturing (\$)	Change (%)	Private Investment in Computers & Software (\$b)	Change (%)	Number of Mobile Internet Connections (Million)	Change (%)
2007	70.20	-6.60	99.60	-0.50	84,626.09	12.91	524.10	8.90	15.99	159.20
2008	66.27	-5.60	100.70	1.10	86,325.91	2.00	537.20	2.50	24.32	52.10
2009	65.39	-1.30	98.90	-1.80	91,487.61	5.97	512.90	-4.50	48.87	100.90
2010	63.86	-2.30	94.10	-4.90	78,842.78	-13.82	535.60	4.40	86.40	76.80
2011	61.55	-3.60	94.10	0.00	80,907.24	2.61	557.70	4.10	130.72	51.30
2012	59.52	-3.30	92.60	-1.60	88,617.53	9.52	589.70	5.70	161.73	23.70
2013	59.23	-0.50	92.50	-0.10	89,841.61	1.38	613.20	4.00	194.04	20.00
2014	58.77	-0.80	92.10	-0.40	83,881.45	-6.63	639.10	4.20	219.40	13.10
2015	58.38	-0.70	91.10	-1.10	84,307.79	0.50	671.80	5.10	242.00	10.30
2016	57.14	-2.10	91.90	0.90	84,041.90	-0.31	695.40	3.50	291.88	20.60
2017	56.35	-1.40	92.30	0.40	83,814.40	-0.27	726.00	4.40	311.43	6.70
2018	56.24	-0.20	91.40	-1.00	83,705.22	-0.13	760.85	4.80	325.19	4.40
2019	55.42	-1.50	90.30	-1.20	83,532.46	-0.20	784.24	3.10	344.56	6.00
2020	54.38	-1.90	89.30	-1.10	83,335.98	-0.23	807.39	3.00	362.24	5.10
2021	53.23	-2.10	89.40	0.10	83,198.59	-0.16	834.49	3.40	380.15	4.90

SOURCE: IBISWorld

Price Environment

Price Drivers continued

varies among manufacturers. The cost of licensing this software represents about 23.6% of manufacturers' revenue. Similar to the price of computing hardware, software prices have been in a long-term state of slow decline, as more advanced programming tools are developed to make programming less time consuming. In the three years to 2017, the price of software has increased marginally at an estimated average rate of 0.1% annually, having a minimal impact on suppliers' operating costs. However, the price of software publishing is forecast to fall at an estimated average rate of 1.1% annually in the three years to 2020. The decreasing cost of software will support the declining price of laptops, and thereby increase buyer power.

Average wages – computer manufacturing: Labor accounts for an estimated 20.3% of supplier revenue in 2017. From 2014 to 2017, average computer manufacturing wages have remained stable as competition from overseas markets has prompted domestic suppliers to restrict hiring. During the same time period, wages as a percentage of revenue have been decreasing as suppliers switch to more automated machinery, which has been reducing operating costs for suppliers and has placed downward pressure on price. However, in the three years to 2020, average wages are projected to fall slowly at an annualized rate of 0.2% during the period. Wages as a percentage of revenue are projected to continue falling during the next three years as the manufacturing process continues to become more automated. As a result, IBISWorld expects that falling wages as a share of revenue will contribute to the anticipated fall in market prices during the next three years.

Vendor Average Cost Structure	Proportion of Revenue (%)
Profit	3.9
Wages	20.3
Purchases	69.7
Computing Hardware	38.0
Software	23.6
Other	8.1
Overhead	6.1
Rent & Utilities	2.0
Marketing	1.0
Depreciation	0.7
Other	2.4
Total	100.0

SOURCE: IBISWorld

External Demand Drivers

Private investment in computers and software: Private investment in computers and software represents business demand for computer products, including laptops. When business spending on computers and software increases, so does overall demand for laptops. Investment in computers has grown strongly as businesses have increasingly integrated technology into their operations. In the three years to 2017, the level of investment has grown at an estimated annualized rate of 4.3%, due to the increased integration of technology into all types of businesses. The increased investment has placed some upward pressure on demand for laptops, and therefore, prevented further price reductions in the past three years. These trends are expected to persist in the next three years, with private investment in computers and software forecast to grow at an annualized rate of 3.6% in the three years to 2020, thereby increasing demand for laptops. As such, IBISWorld expects that rising business demand for laptops will limit the rate that prices fall in the next three years.

Price Environment

Price Drivers continued

Number of mobile internet connections: The rising popularity of internet-enabled tablet computers and smartphones has cut into laptop sales in recent years. As the use of these other devices grows, demand for laptop computers diminishes because they provide similar functionality. Mobile internet devices have exploded in popularity during the three years to 2017, as indicated by the estimated annualized 12.4% rise in the number of mobile internet connections during this period. The number of connections has risen quickly as consumers increasingly enjoy the convenience of having internet access anywhere. This growth will slow during the three years to 2020 to a forecast annualized rate of 5.2% as mobile internet device adoption approaches saturation. Nonetheless, increased investment in these devices will continue to place downward pressure on demand for laptops, and contribute to further drops in laptop prices. However, the number of mobile internet connections has experienced a

high level of volatility due to the rapid adoption of smartphones and online services during the past three years.

Per capita disposable income: Consumers account for a significant portion of the laptop market, so changes in consumer demand affect the market as a whole. Because laptops are usually nonessential purchases, consumer demand for laptops is primarily derived from their level of disposable income. The national unemployment rate has been falling in the past three years, and as a result, per capita disposable income has grown at an estimated annualized rate of 2.4% in that time. The rise in per capita disposable income has increased demand for laptops and reduced the rate at which prices fall; a trend that is expected to continue in the next three years, with growth projected to rise at an estimated annualized rate of 3.3%. As such, IBISWorld expects that growing consumer demand for laptops will contribute to the slower rate of price declines during the next three years.

Recent Price Trend

Three-Year Average Annual Price Trend:
-4.3%

Price Volatility

LOW

The price of laptop computers has fallen at an estimated annualized rate of 4.3% in the three years to 2017. Market prices have been steadily falling for more than a decade, due in part to the reduction in computer hardware and software costs in accordance with an observation referred to as Moore's Law. Moore's Law states that the number of transistors on an integrated circuit doubles every two years due to technological advances, which results in cheaper production costs for suppliers. Additionally, software prices have fallen with the introduction of more advanced programming languages and developer tools. Because most laptops are priced according to the cost-plus model,

drops in hardware components and software licensing costs have led to an overall decline in laptop prices.

Demand trends have had a mixed effect on price during the three years to 2017. Growth in per capita disposable income and private investment in computers and software has led to rising consumer and business demand for all computing goods, including laptops. However, this demand has been mitigated by the exploding popularity of smartphones and tablets. Prior to the introduction of smartphones, buyers with mobile computing needs could only buy laptops; now buyers have more choices, and laptop vendors have been forced to

Price Environment

Recent Price Trend continued

lower their prices to hold on to their share of buyers in the face of the fast-growing tablet and smartphone markets. Input cost stability has allowed vendors to accurately forecast their overall operating costs in the past three

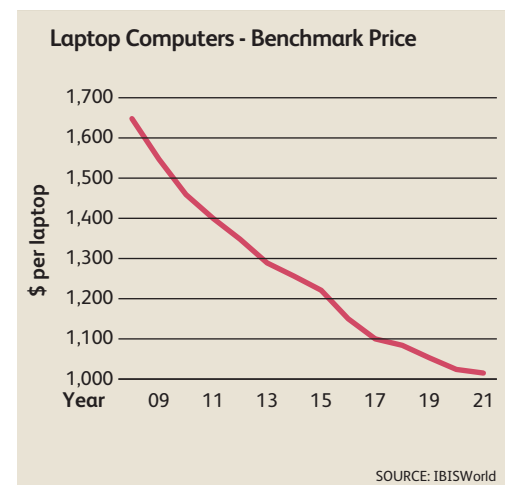
years; which has in turn yielded steadily falling laptop prices. Low price volatility benefits buyers because it helps them better anticipate price trends, and allows them to take their time in purchasing decisions.

Price Forecast

Three-Year Average Annual Price Forecast:
-2.4%

The price of laptops is expected to continue falling at an annualized rate of 2.4% in the three years to 2020. IBISWorld expects that suppliers' hardware and software costs during this period will continue on a steady decline. Hardware and software licensing represents the bulk of manufacturers' purchase costs, so as they decrease in price, market prices should fall as well. Manufacturers' wage costs are also expected to continue falling as a share of revenue due to the rising prevalence of automated production processes, thereby reducing suppliers' reliance on labor.

Recent demand trends are expected to continue in the three years to 2020. Growth in per capita disposable income, and private investment in computers and software will continue to support consumer and business demand for computers. Although laptop demand is expected to rise somewhat, overall demand growth will be limited by the continued expansion of the tablet and smartphone markets. However, adoption growth is expected to decelerate in the next three years, because these alternate devices are reaching saturation and will therefore have less of an impact on laptop demand. Nevertheless, the introduction of new features, such as detachable keyboards, means that tablet



computers will continue to cut into the demand for laptops.

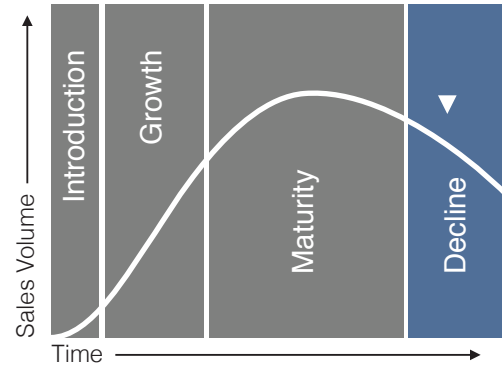
Steadily falling laptop prices will ultimately boost buyer power by making it easier for buyers to put off making purchase decisions based on concerns about price increases. It is recommended that buyers wait as long as possible before buying new laptops because prices are projected to continue to drop. In addition, expected low price volatility allows buyers to accurately budget for laptop procurement due to a decreased risk of drastic price shifts. Also, laptop computers are increasing in quality and performance, so it may be a particularly good idea for buyers with high-level computing needs, such as graphic designers, to wait to procure laptops.

Product Characteristics

Product Life Cycle

The laptop market has entered the decline phase of its life cycle, primarily due to increasingly heavy competition from tablet computers and smartphones in recent years. As a result, laptop sales volumes have become stagnant over the past three years. The decline phase benefits buyers because it prompts vendors to compete to capture the remaining market. Buyers also benefit from the widespread availability of laptops from well-established distribution channels, which is indicative of a declining market. In the three years to 2020, IBISWorld projects laptop sales will continue to stagnate, contributing to

Life Cycle Stage: **Decline**



the decline phase of the life cycle and benefiting buyers by way of predictable price trends.

Life Cycle Factor	Laptop Computers Characteristics
Price Trend	Laptop prices have steadily fallen during the past three years due to falling input costs. This decline has accelerated in recent years because vendors have struggled to maintain market share in the face of strong competition from tablets and smartphones. The falling price boosts buyer power by empowering buyers to put off buying decisions until they find a deal that suits them.
Product Change	Even though the laptop market is in decline, a moderate level of product change still takes place. The most recent major innovation has been the abundance of touch-screen laptops, an innovation designed to help laptops compete with tablets. In addition, every year laptops with greater processing power and memory enter the market. The moderate level of product change hinders buyer power somewhat, because it means that laptops that are cutting-edge today are out-of-date within a few years.
Distribution Scope	The distribution scope for laptops is wide and stable. Laptop computers are easily available in major online and brick-and-mortar electronics stores. In addition, manufacturers are global technology conglomerates that have major imprints in most areas of the world. As a result, buyers can easily find and compare different laptop models.
Marketing Trends	Suppliers are increasingly advertising their laptops through websites that allow buyers to compare specifications between similar models from other manufacturers. The movement to online marketing efforts has benefited buyers by allowing for easier comparison of laptops between different types of suppliers.

Total Cost of Ownership

Total Cost of Ownership

LOW

The total cost of owning a laptop is low. One of the laptop's main draws is that it contains the required computer peripherals, such as a keyboard, mouse and screen, integrated into the computer. In addition, new laptops generally come

with operating and productivity software already installed, as well as a basic service and support package. As a result, the only other main input needed for laptop operation is the power supply. Additionally, a lot of computing activity

Product Characteristics

Total Cost of Ownership continued

involves use of the internet, therefore it is likely that buyers will need to source an internet service provider with contracts and prices that suit their needs. Furthermore, buyers may have the option to increase storage capacity, memory or graphics card capabilities which will increase the total cost of the laptop.

Although most buyers will need to make some additional purchases along with the laptop, such as productivity software packages or more robust

support and maintenance, these costs are low when compared to the purchase price of a laptop. The low total cost of ownership benefits buyers because it prevents them from being forced to pay additional fees to operate the system normally. In addition, laptops do retain some value over time. The typical lifespan of a laptop is four years, and at this time the buyer can usually recover about 10.0% to 25.0% of the original purchase price on the used market.

Product Specialization

Product Specialization

MEDIUM

Laptops have a moderate degree of specialization due to the customization options that are available to buyers. Suppliers often have online customization sites that allow buyers to choose components that affect the laptop's performance. Most vendors also sell several different price tiers of their default laptop models. For example, Apple currently sells multiple versions of the standard 13-inch MacBook Pro, with varying levels of

performance and price. However, buyers still have the option to switch out specific components when choosing any of these default laptops. Buyers that need more storage capacity can swap out the standard 128GB for a 256GB flash storage drive at an added cost. These customization options make it more difficult for buyers to compare pricing and specifications between different suppliers, reducing buyer negotiation power.

Related Goods

Laptops are portable versions of desktop computers. Therefore, they leave out some peripherals that are sometimes included, but typically purchased, with a desktop computer, such as speakers, a printer and an independent mouse. Many other peripherals aimed at laptops are on the market, such as external disc drives, external hard drives, external number pads and laptop docking stations, most of which can usually be purchased directly from the manufacturers. Manufacturers will typically offer deals on peripherals with the purchase of a laptop. As a result, buyers should enter the purchasing

process with a clear idea of which peripherals they need or risk paying for peripherals they will not use regularly. Buyers can also receive discounts on select software packages when buying a laptop, and should investigate which vendors will offer such discounts.

Many laptop vendors will also offer related services, such as support services and training. Vendors offer a base level of support services with the purchase of any laptop, but typically no training. Buyers that need a higher level of support or training should purchase these with the laptop to use bundle discounts.

Product Characteristics

Related Goods continued

Related Goods	Description
Computer Peripherals	Electronics retailers and manufacturers offer a wide array of products to improve the functionality or usability of laptops. These include mice, printers, screens, external disc drives and docking stations. Buyers can typically get bundled deals on these peripherals when purchasing a new laptop, but they should make sure that peripheral bundles include only products they will make use of.
Support	Vendors supply support services such as service, maintenance and troubleshooting. Laptops will come with a basic support package, typically a warranty and over-the-phone or internet troubleshooting. Buyers will need to pay more for more robust support packages.
Training	Some vendors will also sell training services for their laptops and major software. The training can help reduce the time it takes for a user to fully understand and use their computer. Training services are typically offered at a discount for laptop buyers.
Software	Although laptops come with a basic array of software preinstalled, buyers can typically purchase other software or more robust versions of preinstalled software at a discount. These discounts are only available for a small set of software that differs from vendor to vendor, so buyers should compare potential software costs when purchasing a laptop.

Substitute Goods

Availability of
Substitutes

HIGH

Laptop computers face a high degree of competition from substitute goods. Desktop computers, tablet computers and smartphones all provide similar functionality to laptops, and the exploding popularity of tablets and smartphones in recent years has severely cut into demand for laptops. All four products exist on a continuum of power versus portability: desktops are the least portable and have the greatest power and capability per dollar; while smartphones are pocket-sized, the most portable and have the lowest processing power. Laptops and tablets exist in the middle, though laptops are typically more powerful and less mobile than their tablet counterparts. Buyers should determine their mobility and processing power requirements and then decide which type of processor best suits those requirements.

Laptop leasing is another substitute for laptop purchases. Leasing agreements allow buyers to rent laptops for up to 48 months for a monthly fee. This allows buyers to regularly upgrade their laptop computer hardware through successive leasing contracts, or to supply laptops for a short-term need without having to own one. However, laptop users benefit from familiarity with their device, so regular laptops replacement could hinder productivity. Buyers should investigate whether buying or leasing is ultimately more cost-effective for their needs before making a purchasing decision.

The high availability of substitutes benefits buyers because it has forced deceleration in the price of laptops. In addition, vendors have increased standard laptop functionality to help compete with tablets, giving buyers more usability.

Product Characteristics

Substitute Goods continued

Substitutes	Description
Desktop Computers	Desktop computers are stationery computers that require peripherals, namely a screen, keyboard and mouse, to function. Due to the lack of size limitations, desktops have the highest processing power and memory capabilities compared with other processor options. As such, they are best suited for buyers with intensive computing requirements. In addition, their lack of size constraints makes them the cheapest form of computer when holding computing power constant. However, the required peripheral purchases will eat up some of these cost savings.
Tablet Computers	A tablet is a single-element mobile computer with a touch screen that uses finger gestures as the primary means of control. An on-screen keyboard is generally the principal means of data input. In addition to the unique touch screen form factor, a tablet's small size and weight is probably the greatest advantage compared with laptop computers. Tablets are about the size of a small pad of paper, weigh less than two pounds and generally have a long battery life because of their low power requirements. These characteristics make tablet computers an ideal match for workers on the go, such as those in construction, warehousing, shipping and other mobile fields and industries. Tablet computers compete directly with laptop computers, and they are typically more mobile, but less powerful than laptops. In addition, they lack a physical keyboard, although peripheral keyboards are available.
Smartphones	Smartphones are mobile phones with functionality that far outstrips traditional cellular phones. Most come with a high-resolution touch screen and internet accessibility, and they have similar functionality to tablet computers. However, their small size limits the available processing power and memory. Smartphones are pocket-sized and can make and receive phone calls and generally have lower prices compared to tablets and laptops. Users that travel often and have limited computing requirements should purchase smartphones.
Laptop Leasing	Laptop leasing vendors allow buyers to rent laptops for three to 48 months for a monthly fee. Laptop leasing is best for buyers that require regularly updated laptop hardware or buyers with a short-term need for laptops.

Regulation

Regulatory
Change

LOW

The laptop market has experienced a low level of regulatory change over the past three years, benefiting buyers by reducing the likelihood of government intervention affecting pricing or availability of the product. The only major regulation that affects buyers is the recycling fee added to the purchase price of electronic goods in Washington and California. If you purchase in these states, there will be an additional fee of about 3.0% of the purchase price that

these states collect to aid in recycling the hazardous products within electronic goods. Buyers outside of those two states, though, will have no such additional fee. Furthermore, low regulatory change is beneficial to buyer power, because it suggests that laptops purchased today will continue to be compliant with regulations in the future. IBISWorld forecasts that regulatory change will continue to be low in the three years to 2020, further benefiting buyers.

Product Characteristics

Quality Control

Key Quality Factors	Reliability Usability Functionality Support
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Laptops are highly complex technological machines that are generally prone to issues. As a result, buyers should seek to purchase a laptop with a strong reputation for durability and reliability. This information is available on consumer review websites such as CNET or PCWorld. A low quality laptop will lead to greater instances of functionality loss or complete failure, which can be costly and time-consuming to resolve. In addition to reliability, buyers should also investigate a laptop's usability reputation when researching. Laptops provide similar functionality and power across different brands, so the ease of use of the machine ultimately plays a major role in final quality.

The functionality of the hardware components integrated into the laptop is

also a major quality determinant. These factors include the size of the screen and keyboard, whether the screen is a touch screen, the type of hard drive, the graphics card, disc drives, battery life and more. Buyers should determine what their minimum hardware functionality requirements are and stick to them because additional or higher-quality hardware will significantly raise the purchase price.

Finally, the level of support the vendor provides should be weighed when assessing a laptop's quality. Laptops run into hardware failures regularly, so the vendor's ability to respond to and resolve these issues affects the user experience. A quality provider should be capable of swiftly addressing product failures or other customer issues.

Supply Chain & Vendors

Supply Chain Dynamics



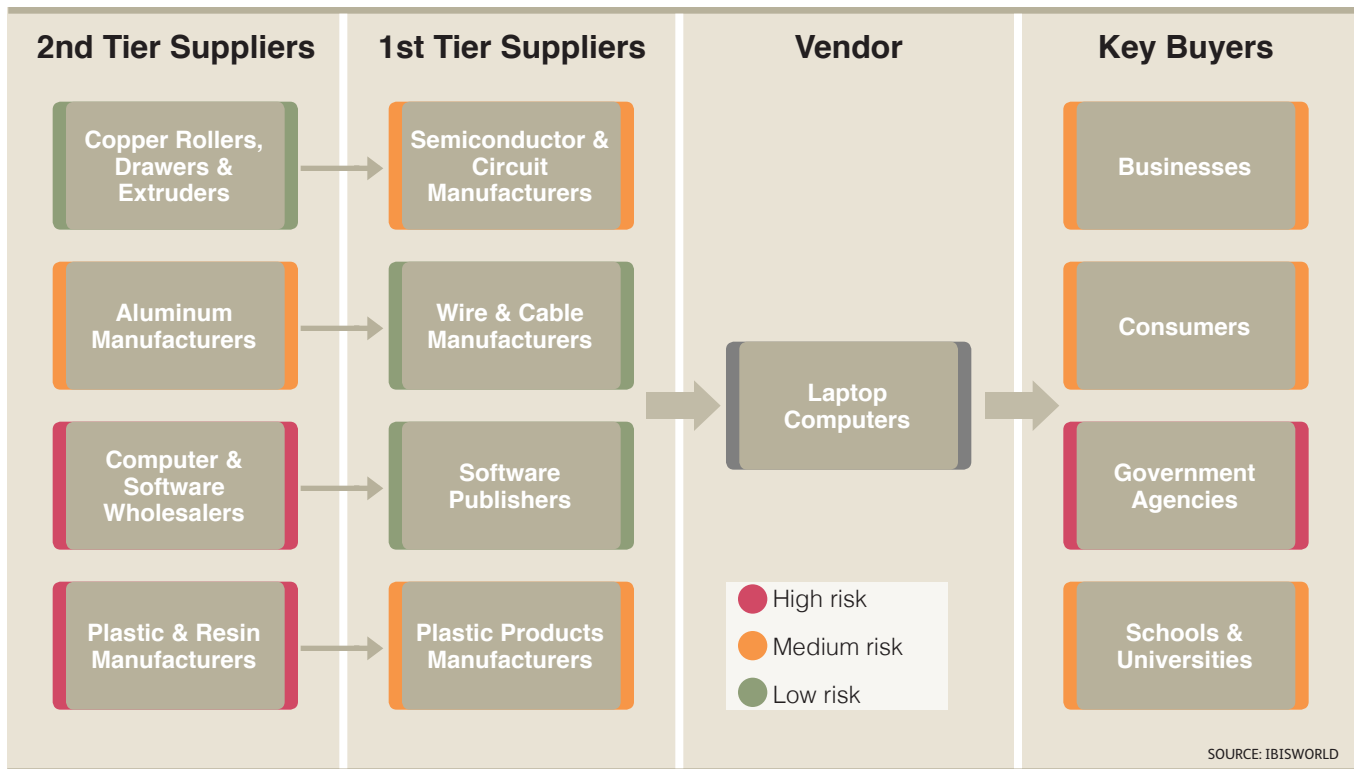
Supply Chain Risk

The risk of input price shocks or discontinuity of services due to supply chain issues is low in the laptop computer market. Because laptop computer suppliers operate on thin margins and face continual downward pricing pressure from a high level of global competition, they lack bargaining power when purchasing their own inputs. Manufacturers are largely bound to the pricing power of their upstream suppliers, particularly semiconductor and computer component manufacturers. Although prices for these inputs have been falling, semiconductor and computer component manufacturers boast larger profit margins than computer manufacturers, which makes these upstream suppliers more financially stable and less at risk of disrupting services for market suppliers. As such, laptop computer suppliers are not

dependent on risky inputs that could threaten the continuity of business, resulting in a low level of risk from supply chain factors. In addition, there is a wide array of suppliers across the United States that can supply laptop computers, which insulates buyers from potential supply disruptions.

The laptop computer market is also subject to few long-term supply chain risks because the prices of second-tier inputs are in a constant state of decline. The prices of semiconductors and electronic components have fallen steadily during the past decade, which has reduced purchase costs for laptop manufacturers. As their costs have declined, manufacturers have attempted to undercut each other's prices to increase market share, which, fortunately for buyers, has resulted in overall lower average prices.

Laptop vendors also sell their products to a diversified group of buyers,



Supply Chain & Vendors

Supply Chain Dynamics continued

which helps improve vendors' financial stability. Buyers include businesses, consumers and government agencies. As a result, the demand for laptops is generally stable.

Geographic Locations

Laptop manufacturers are concentrated in the West, Southeast, Mid-Atlantic and Great Lakes regions. California, Texas, New York and Florida together account for 44.4% of establishments. California alone is home to 27.0% of laptop manufacturing establishments, largely because of the Silicon Valley region. Globalization in this market is also extremely common, and many manufacturers have moved their manufacturing facilities overseas to areas with cheaper labor.

For buyers, the location of laptop computer vendors is largely irrelevant to the purchasing process. Manufacturers primarily sell their laptops on the internet and can easily ship products to anywhere in the United States. Large-scale retailers derive significant sales from the internet, but retailers such as Walmart or Best Buy also have an extensive network of brick-and-mortar stores. Smaller retailers typically cover only a small geographic region, but any region will have a number of these vendors. Laptop quality and price, as well

as support services, will not differ significantly among vendor locations, so buyers should not significantly weigh their supplier's location in a buying decision.

Imports

In 2017, the United States imports roughly \$34.2 billion worth of laptops, representing 89.3% of domestic demand. The high level of imports benefits buyers by increasing competition between domestic and foreign suppliers. Imports are predominantly manufactured in China, which accounts for 94.2% of laptop imports. East Asia has become the global manufacturing center due to its low labor costs and regulation. Many laptop manufacturers have been moving to the region to be closer to the component manufacturers located there, namely semiconductor manufacturers, in an effort to reduce their transportation costs.

In the past three years, imports have fallen at an estimated average annual rate of 7.5%. Laptops are in the decline phase of the product life cycle, and falling prices throughout the past two decades have decreased the value of imports to the United States. Because nearly all laptop manufacturing occurs abroad, buyers should not give significant weight to the manufacturing location when making a buying decision.

Competitive Environment

Market Share Concentration

HIGH

Market Share Concentration

The laptop market has a high level of concentration, with the top four vendors controlling about 52.8% of the market in 2017. There are an estimated 48 manufacturers currently operating in the laptop computer market, and while an estimated 14,000 online and brick-and-mortar retailers sell laptop computers, these distributors do not significantly affect pricing of the product. High market share concentration is due to high

barriers to entry into the market; large capital investments in machinery are required to manufacture laptops. As a result, a reduced number of companies are able to enter the market and compete with the largest suppliers, which has a reductive effect on market competition and harms buyers.

Brand recognition is highly prized in this market, allowing the few top competitors to build and hold onto substantial market shares. In addition,

Supply Chain & Vendors

Competitive Environment continued

suppliers must maintain complex and expensive supply chains to produce laptops. As a result, demand coalesces around the few manufacturers that can build large, efficient supply chains. Market share concentration has risen during the past three years as increasing competition from substitute goods has pushed out some of the smaller manufacturers and caused the laptop market to shrink.

High market share concentration restricts buyer power, because it reduces the number of potential suppliers that buyers can approach and leverage against one another. However, the laptop market remains highly competitive because the top vendors have comparable market shares, and consumer review boards heavily evaluate each manufacturer's products. As a result, high concentration does not significantly limit market competition. Additionally, market concentration is much lower for retailers

and wholesalers, so buyers can leverage the availability of thousands of online and in-store retailers and wholesalers to obtain discounts or superior contract provisions.

Vendor Company Types

The market for laptop computers contains about 48 manufacturers in 2017. Most vendors sell laptops as part of a larger array of computing hardware and related goods and services, such as software, business services and more. Additionally, roughly 14,000 retailers and distributors provide laptop computers and other related computer equipment obtained from manufacturers.

Top manufacturers: Manufacturers with 5.0% or greater market share have a significant advantage in terms of brand recognition over their competitors. This category currently includes six vendors: Lenovo, Hewlett-Packard, Dell, Acer,

Vendor Statistics - Laptop Computers

	US Product Market Share (%)	Market Share Performance (3-yr trend)	Total Revenue (\$m) ¹	Profit Margin (%)	Financial Risk Level ²
Lenovo Group Limited	15-20	Increasing	57,813	1.2	High
HP Inc.	15-20	Increasing	48,238	7.4	Low
Dell Inc.	10-15	Steady	>10,000	N/A	N/A
Apple Inc.	5-10	Increasing	215,639	27.8	Low
ASUSTek Computer Inc.	5-10	Steady	13,290	4.1	Low
Acer Inc.	5-10	Decreasing	8,170	0.4	High
Samsung	<5	Increasing	173,839	14.5	Low
Amazon.com Inc.	<5	Steady	135,987	3.1	Low
Sony Corporation	<5	Decreasing	72,118	3.6	Medium
Toshiba	<5	Steady	52,100	-12.5	High
Best Buy Co. Inc.	<5	Decreasing	39,528	3.5	Low

1: Revenue refers to the latest financial year for which data is available. Private company revenue is expressed as a range.
2: Financial Risk Level is based on the Altman Z-Score, which uses a formula to predict a company's risk of bankruptcy. See Glossary for more details.

SOURCE: IBISWorld

Supply Chain & Vendors

Competitive Environment continued

Apple and ASUS. These companies manufacture and sell laptops across the market, from low-end, low-cost laptops to their higher-end counterparts. They also typically allow buyers to customize their purchases to fit their specific needs. The strong market positions of these companies means that buyers can be reasonably sure that upgrades, replacement parts and support services will be easy and relatively inexpensive to find. With the exception of Dell, these companies are publicly owned. Acer is the smallest vendor in this category, with \$10.9 billion in annual revenue. Apple enjoys strong customer loyalty and strong demand from the niche media-editing market, allowing the company to charge a premium for its products and enjoy large profit margins. Buyers without specialized needs or with significantly constrained budgets should stick to one of the five top manufacturers.

Other manufacturers: The remaining vendors control less than 5.0% of the market. In general, these vendors struggle for visibility in the marketplace; they tend to have limited laptop options and only marginal customization abilities. However, buyers can typically find cheaper deals for these laptops relative to comparable laptops from top manufacturers. Alternatively, these suppliers' related goods and service offerings will not be as broad, and buyers will generally receive lower levels of support and have a harder time finding replacement parts. As a result,

purchasing from smaller manufacturers is generally a riskier proposition, although buyers may have increased negotiating power when working with these suppliers.

Retailers and distributors: Large online retailers such as Amazon sell laptops made by other manufacturers. However, purchasing from these retailers does not allow buyers to customize and swap out parts for their laptops. These online retailers generally sell laptops at a similar price point as the manufacturer by purchasing in large quantities, which results in lower per-unit costs. Also, purchasing a small number of laptops from online retailers may be useful for buyers that have subscriptions to free shipping, such as Amazon Prime.

There are also brick-and-mortar retailers and wholesalers that sell laptops. These companies are typically small owner-operator computer stores, although some suppliers such as Best Buy have revenue of \$500.0 million or more, thousands of employees and a vast geographical presence. Like large manufacturers, large distributors operate with diverse revenue sources and have large profit margins. Purchasing from brick-and-mortar retailers may reduce the buying lead time for buyers, but eliminates the ability to customize components in a given laptop.

Supplier diversity: Laptop computer manufacturing suppliers are relatively

Supplier Diversity

Ownership Category	This Market (%)	Overall Sector (%)	Economy (%)
Women	9.1	14.2	19.4
Minority	14.4	10.6	17.5
Veteran	7.4	9.3	7.5

Ownership is defined as owning at least 51 percent of a firm, which is the definition used by the Small Business Administration for government procurement programs.

SOURCE: IBISWorld and US Census Bureau

Supply Chain & Vendors

Competitive Environment continued

less diverse when compared with the manufacturing sector and the wider economy. The percentage of vendors owned by women is substantially lower than the overall sector and the wider economy. Also, veteran-owned enterprises represent about 7.4% of the market, which is also lower than the sector and economy. As a result, it may

be difficult to find women- or veteran-owned vendors to satisfy supply chain diversity requirements. However, the percentage of minority-owned vendors is higher than the sector, but lower than the wider economy. As a result, suppliers will find it somewhat easier to find a minority-owned vendor for supply chain diversity requirements.

Market Profitability

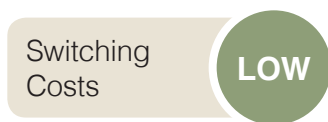


The average profit margin for laptop suppliers is low, at about 3.9% of revenue in 2017. In the past three years, overall profit has risen slightly in line with suppliers' declining input costs. The vendors with the largest market shares in the laptop market are giant, financially stable public corporations, with a wide range of product and service offerings that operate globally. This allows them to achieve economies of scale and higher profit margins over small players. Diversification shields these suppliers from significant fluctuations in their financial health. Apple, for example, generates a profit margin in excess of 20.0% due to brand recognition and high demand for its products. Unfortunately, Apple does not lower its established prices for large purchases, resulting in lower buyer power when purchasing their laptop computers.

Across most vendors, selling laptops results in low average profit margins.

Most vendors have been forced to reduce profit margins as much as possible to better compete with tablet computers and their competitors. As a result of low profit margins, buyers generally cannot negotiate prices much lower than those advertised. Across the market, most deals will come in the form of bundles, where the manufacturer will throw in related products or services for low cost or sometimes for free. Furthermore, average bankruptcy risk is low for large suppliers because they achieve higher profit margins than smaller suppliers. Also, they can leverage economies of scale and diverse revenue streams to fare financial troubles. Small companies, on the other hand, are more susceptible to bankruptcy because they achieve a lower profit margin than larger vendors. Regardless, buyers benefit from the low overall level of vendor risk, which lowers the chance of sourcing from a financially compromised supplier.

Switching Costs



The laptop computer market has a low level of switching costs. Switching laptop suppliers incurs few additional costs. Upon receiving a new laptop, a user will engage in desktop customization and software installation. However, this process will take fewer than 24 hours. Most laptops on the market run

Windows as their operating system, and transitioning between two Windows laptops will yield no learning curve. Transitioning to a new operating system will require users to spend some time learning the new system; however, this time is largely insignificant. As a result, buyers can freely transfer laptops

Supply Chain & Vendors

Switching Costs continued

without incurring significant costs. Breaking long-term supply agreements, though, can be costly. The primary cost associated with breaking a supply

agreement is a breach of contract fee, wherein the buyer must pay certain fees to the supplier if terms are not adequately met.

Purchasing Process

Buying Basics

Buying
Lead Time

SHORT

Buying Lead Time

Because laptop computers are largely commoditized, the purchasing lead time is minimal. Negotiations can be done relatively quickly because businesses can relay their desired specifications and desired volumes to multiple suppliers at the same time. The RFP process takes only a few days to a week or two, at most. Depending on the level of customization required, delivery times can range from a few days to a few weeks for orders with high volume or unique product specifications. Nearly all vendors offer the option for businesses to customize most (if not all) of the specifications for the computers they order. Buyers benefit from short buying lead time because they can quickly acquire laptop computers in the event of a sudden need.

Selection Process

The relationship between buyers and suppliers in the laptop computer market is generally transactional, meaning buyers and suppliers execute sales with minimal time commitment and at a low cost. Laptops are a low value product, which means they are not typically integral to core business operations due to the high availability of substitutes. For

most buyers, business operations can continue by using desktop computers, tablets or smartphones. However, these products are also low risk, meaning that buyers have widespread and consistent access to them. In the laptop computer market, buyers have many suppliers to choose from at manufacturer and retail levels, which greatly reduces switching costs. As a result, buyers generally do not spend a substantial amount of time on the procurement of laptops relative to other products purchased in the technology. Buyers benefit from purchasing under a transactional relationship because they have flexibility when choosing vendors, switching suppliers and finding alternatives.

Buying-Decision Scorecard

The Buying-Decision Scorecard outlines the key criteria a buyer should consider when purchasing this good or service. When weighing the importance of each factor, we assume that a buyer has narrowed down potential suppliers to those that meet the technical and price criteria specified in the RFP. The criteria and weights assigned below can be used as guidelines to help further differentiate already qualified vendors.

Purchasing Process

Buying Basics continued

Buying-Decision Scorecard		
Factor	Weight (%)	Description
Technical Factors	45.0	
Specifications	25.0	Generally, the more powerful the computer, the more it will cost. Buyers should, therefore, determine their minimum specification requirements before looking at other factors.
Reliability	10.0	Computers that break down often will be more costly for buyers in the long run. As such, buyers should ensure that their chosen supplier provides laptops that have a reputation for reliability.
Technical Support	5.0	Regardless of their reliability, computers will typically need technical support from the vendor during their lifetime. Vendors with a good support reputation will lower the amount of time lost when a computer malfunctions or breaks.
Financing Options	5.0	Buyers of multiple computers, in particular, should find a vendor that can offer financing options rather than requiring that all costs be paid up front.
Cost	55.0	
Price	55.0	Price is the most important factor in the buying decision, mainly due to the commoditization of laptop computers. With the exception Apple, there is little differentiation between computer vendors.
Total	100.0	

Key RFP Elements

Specific information to impart to suppliers in the RFP includes:

- Specifications desired
- Level of support desired
- Financing options desired
- The latest possible delivery date
- Sizing information (if applicable)
- Information on related goods

Specific information to gather from suppliers in the RFP includes:

- Standard warranty information
- The length of the manufacturing and delivery process
- Shipping costs
- Address and contact information
- Information about the company's background, offerings and track record
- References
- Proof of insurance, permits and business license

Purchasing Process

Key RFP Elements continued

Standard Elements in an RFP	
Overview & Scope	This tells the vendor about your company, why your company needs this product and what you hope to achieve from its purchase. Deadlines for steps in the procurement process should be clearly defined in the section.
Vendor Qualification	This section details the features a winning company must possess, such financial size, scope of work completed or geographical reach. This section will also explain the criteria used in evaluating the bid and its relative importance in your scorecard. This section might disqualify some companies, such as suppliers to your competitors.
Technical Specifications	This section details the technical and functional specifications of the product you want. The more detail provided, the shorter the procurement cycle since all vendors are bidding to the same, exact specifications. Further, if all needs are specified there is less chance of additional costs will surface down the road. This section will also look at service level agreement needs.
Financial Factors	This section is where vendor quotes prices for the product or service being supplied. This section should specify cost breakdowns, billing frequency (with specific dates, time periods), billing methods (mode of payment, including currency) and taxes.
Legal Framework	This section should reference the legal jurisdiction in the event of a dispute, methods for arbitration and contract termination mechanisms. Nondisclosure agreements are also part of this section, as are escrow agreements (mainly in the event of shared proprietary knowledge).

Negotiation Questions

Issue	Questions
<p>Company Focus: Buyers should look at what markets the vendor generally focuses on to determine suitability.</p>	<ul style="list-style-type: none"> • Where do you manufacture your computers? • Which client markets does your company target? • What products do you sell besides laptop computers? • What is the benefit of working with your company compared with another supplier? • What is your best-selling model? For what reasons?
<p>Customer Support: Many users will require the aid of customer support at some point during the laptop's useful life.</p>	<ul style="list-style-type: none"> • What technical support is included in your quoted price? • Do you offer on-site servicing and repairs? • What is the typical turnaround time for your repairs and servicing? • How long is the warranty you offer? • What percentage of your sold products requires service during the warranty period?
<p>Other Products & Services: Many buyers purchase related products and services along with laptops. Consequently, buyers have the potential to benefit from purchasing related goods from the same supplier.</p>	<ul style="list-style-type: none"> • Do your laptops come prepackaged with any peripherals? • What deals do you offer for peripherals when purchasing a laptop? • Do you typically offer bundled deals with maintenance services when purchasing a laptop? • What related products and services do you recommend for a laptop buyer?
<p>Pricing Structure: Buyers should determine if the supplier's prices are competitive in the marketplace.</p>	<ul style="list-style-type: none"> • What is the average price of your computers? • How has your average price changed during the past three years? • How do your prices compare with your competition's prices? • Do you offer volume discounts?
<p>Competition: Buyers should understand the competitive standpoint of their supplier.</p>	<ul style="list-style-type: none"> • How is your product better than your competitors'? • Do you offer any incentives to repeat customers or those that refer businesses to your company? • What promotional deals do you offer to businesses (e.g. bundling, financing)? • Are your most recent models performing better or worse than previous versions?
<p>Quality: Buyers should determine the quality of a manufacturer's laptops before purchasing.</p>	<ul style="list-style-type: none"> • What quality awards have you won, if any? • What have you done to improve your component reliability over the past few years? • What is the most consistent complaint from users of your laptops? • Are you satisfied with your products' prevailing ratings by consumer review boards?

Buyer Power Score Components

Price Trend

Factor	Definition	Weight	Score
Recent Price		40%	5
Very Favorable	Compound annual growth rate in benchmark price over the past three years was less than/equal to 0.0%		
Forecast Price		60%	5
Very Favorable	Compound annual growth rate in benchmark price in the next three years will be less than/equal to 0.0%		
Weighted Score		50%	5.0

Market Structure

Factor	Definition	Weight	Score
Availability of Substitutes		35%	5
High	There are many viable substitutes for this product/service		
Market Share Concentration		25%	1
High	The top four suppliers of this product/service have equal to/greater than 50% market share		
Product Specialization		25%	3
Medium	The product/service is assessed as having a medium level of specialization		
Switching Costs		15%	5
Low	The cost of switching from this product and/or supplier is assessed as low		
Weighted Score		20%	3.5

Market Risk

Factor	Definition	Weight	Score
Price Driver Volatility		25%	5
Low	Average absolute difference in percentage change of external drivers < 1.0%		
Recent Price Volatility		25%	4
Medium-Low	Average absolute difference in % change in price over last 3 years 1.0-1.9%		
Vendor Financial Risk		25%	5
Low	The average level of financial risk for product/service vendors is assessed as low		
Supply Chain Risk		25%	5
Low	The average level of product/service supply chain risk is assessed as low		
Weighted Score		30%	4.8

Overall Buyer Power Score 4.6

IBISWorld's Buyer Power Score is a calculation based on weighted quantitative and qualitative factors that measure a buyers' ability to negotiate lower prices and favorable contract terms. The higher the Buyer Power Score, the greater the average buyer's negotiating strength for this product. The overall score is composed of three components:

- 1) **Price Trend:** compares this product's average recent and forecast price change to the economy-wide inflation rate;
- 2) **Market Structure:** assesses the availability of alternatives and ease of purchasing in this product's marketplace
- 3) **Market Risk:** measures elements of volatility and risk impacting a buyer's confidence in making long-term deals with suppliers of this product.

Jargon & Glossary

Jargon

Tablet Computer A portable computer with a touch screen as the primary mode of input and navigation.

Smartphone A pocket-sized tablet computer that can also make voice calls.

Semiconductor Commonly used in electronic products and often known as integrated circuits and chips; these silicon elements conduct electricity.

Gigabyte (GB) A measure of computer storage capacity.

Glossary

HS The Harmonized Commodity Description and Coding System is maintained by the World Customs Organization as a standardized system of names and numbers for classifying traded products.

Life Cycle All products and services go through periods of growth, maturity and decline. IBISWorld determines a life cycle by considering factors such as pricing trends, the level and speed of product or service change, the extent of a product's distribution and the maturity of marketing trends.

Market Share Concentration Determined by the market share of the top four vendors for a given product or service: high is when the top four vendors account for more than 50.0% of the product or service market share, medium is from 30.0% to 50.0%, and low is less than 30.0%.

NAICS The North American Industry Classifications System is the standard by which industries (not products) in the United States, Canada and Mexico are classified.

Price Driver Volatility Level Determined by the average absolute difference in the percentage change of input cost items and external demand drivers over the past three years: high is 3.5% or greater for all drivers, medium is from 2.0% to 3.4% for all drivers, and low is 1.9% or less for all drivers.

Price Range The difference between the upper and lower price bounds divided by the benchmark price: wide is greater than 50.0%, medium is from 25.0% to 50.0%, and narrow is less than 25.0%.

Price Volatility Level Determined by the average absolute difference in the percentage change of the benchmark price over the past three years: high is 3.5% or greater, medium is from 2.0% to 3.4%, and low is 1.9% or less.

Producer Price Index (PPI) This index represents the change in the amount that producers receive for their products or services, as opposed to the prices that consumers pay for them.

Profit IBISWorld uses earnings before interest and tax (EBIT) as an indicator of a company's profitability. It is calculated as revenue minus expenses, excluding interest and tax.

Profit Level Determined by the average profitability of the industry in which a product or service vendor operates, compared to the average profit margin for all industries in the US. There are around 700 industries in the US classified using the NAICS taxonomy (see NAICS).

Total Cost of Ownership Level Determined by the total cost of ownership as a percentage of the benchmark purchase price per year: high is when the total cost of ownership is greater than 100.0% of the benchmark purchase price per year, medium is from 50.0% to 100.0%, and low is less than 50.0%.

UNSPSC Coding for each report title is based primarily on the United Nations Standard Products & Services Code. The code is a hierarchical classification codeset of expenditure items.

Wages The gross total wages and salaries of all employees in the industry. The cost of benefits is also included in this figure.

Z-Score The Altman Z-score formula is used to help predict a company's chances of going bankrupt within the next two years. The Z-score uses multiple corporate income and balance sheet values to measure the financial health of a company. Z-scores above 2.9 are defined as having a low financial risk level; scores between 1.23-2.9 are at a medium risk level and scores below 1.23 are a high financial risk level.

At IBISWorld we know that industry intelligence is more than assembling facts

It is combining data with analysis to answer the questions that successful companies ask

Our procurement and strategic sourcing research helps clients engage and negotiate effectively with suppliers, internal stakeholders and C-level executives. Our insight on price trends, major suppliers and supply chain risk helps clients better manage the entire sourcing process.



Who is IBISWorld?

We are strategists, analysts and researchers. We provide answers to information-hungry, time-poor businesses. Our goal is to provide real world answers that matter to your business in our Procurement and Industry report collections. When tough business decisions need to be made, our suite of products give you deeply researched answers quickly.

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