Although the technology sector may not be all that it used to be—it’s maturing and increasingly cyclical in nature—it still offers some compelling investment opportunities.

We think at Turner Investment Partners that we have accumulated some useful lessons over the years about investing in the sector and discuss 12 of them here.

Some burnt-fingered investors, scorched by years of losses in tech stocks, might find this topic curious and ask, “Why should anyone care about the tech sector, of all things?” To them the tech sector is so “1990s.” Tech stocks were of course the market darlings in the last decade—total returns of 25% in just one quarter were commonplace—but have underperformed miserably since then.

Columnist John Waggoner of USA Today made this wry observation: “For technology stocks, and the funds that invest in them, the past five years have been a tragedy interrupted by brief periods of calamity.” The Goldman Sachs Technology Composite index has lost an annualized 4.64% for the past five-year period ended June 30, 2006. Investors have pulled $29 billion from tech funds in the past five years, mutual fund data firm Lipper estimates. And the tech sector’s weighting in the S&P 500 index has shriveled from 35% at the start of the decade to about 15% today.

**Why Care?**

In light of all this doom and gloom, why should anyone care about tech stocks now?

As we see it, there are five reasons:

First, for our part, the most mundane reason is that we must care about the tech sector because, under our sector-neutral portfolio-management policy, our growth portfolios are obligated to be invested in tech stocks proportionately to their weighting in the target indexes.

Second, if, as we expect, growth stocks should at long last start outperforming value stocks for a sustained period after lagging for seven years, we think tech shares may be a prime beneficiary of growth’s resurgence.

Third, we think the tech sector, although increasingly cyclical, should still grow over time faster than the rest of the economy. We just don’t think it will grow five times as fast, as in the 1990s. In the near term, over the next six to 12 months, we—and more than a few Wall Street analysts—think that as the economy slows, the tech sector’s earnings in aggregate should hold up relatively well, which could enhance tech stocks’ return potential. The consensus of Wall Street analysts is that the companies in the Goldman Sachs Technology Composite index will increase their earnings per share by 14.6% over the next 12 months, according to I/B/E/S. We think that telecommunications-equipment, flash-memory, and semiconductor stocks could do especially well.

Fourth, tech stocks have tended to flourish once the Federal Reserve stops its series of interest-rate hikes. According to the economic-research firm ISI, stocks in the tech sector have been among the leaders in stock market performance in the three months after each final Fed tightening that occurred in 1987, 1989, 1995, 1997, and 2000. For example, in those five instances, computer-networking stocks gained an average of 34.5%.
Finally, as growth investors always searching for blockbuster stocks, we think the tech sector remains a prime place to search. Indeed, some of our biggest gains in recent years have come from tech stocks like Apple Computer, Broadcom, and Marvell Technology Group.

For all these reasons, we thought it might be an opportune time to discuss some of the key lessons we’ve learned about investing in the tech sector.

Here, then, are 12 of our primary lessons about tech investing.

1: Heed the Cockroach Principle

Lesson #1: Sell a tech stock at the first sign of earnings disappointment. And once the stock is sold, don’t buy it again until its issuer’s earnings improve.

Like history, a disappointment in corporate earnings tends to repeat itself. Time and again we’ve found it’s far better to sell a tech stock at the first inkling of bad news rather than wait to see what happens next, since unfortunately more bad news is usually in the offing. That principle has been popularly referred to as the “cockroach principle”—a weak quarterly earnings report is like a cockroach in that if you come across one, others are almost certainly lurking about.

Conversely, we would rather forgo a 15% gain in a tech stock and wait to buy it until we receive a clear indication that earnings are in fact picking up. In the past we’ve been tempted to buy a previously lucrative tech stock whose price had dropped to the single digits, in the belief that it had finally bottomed... only to find more earnings cockroaches surfacing. (Often, that kind of earnings infestation serves as an indication of some fatal flaw in a company’s business model.)

2: Focus on Innovators

Lesson #2: To find the tech leaders, look for the innovators.

If the tech sector has a commandment, it may very well be: Thou shalt innovate or thou shalt perish. As many now-departed companies have unfortunately learned, the threat of extinction is rarely remote in the tech sector. A failure to innovate can result in tech firms quickly becoming contemporary equivalents of those companies that made horse carriages in the late 19th century.

Typically, innovation requires substantial spending on research and development—and the best tech companies tend to allocate a generous chunk of annual sales to their R&D budgets. In a sector as fiercely competitive as technology, it’s difficult to determine who will win or lose in the long run. But if you were forced at gunpoint today to choose which tech companies were likely to end up as winners five years from now, you could do worse than to pick those that happen to spend amply on R&D. Our research has shown that tech leaders typically pour amounts ranging from 5% to 19% of their annual sales into R&D.

3: Beware Seasonality

Lesson #3: Financial conditions in the tech sector and gains in tech stocks are influenced by “seasonality.”

Translated from Analyst-Speak, seasonality means that the performance of both the tech sector and tech stocks conforms to a somewhat predictable up-and-down pattern, geared to the seasons of the year.

In modern times, the period from October to May has almost without fail proven to be best for owning tech stocks, and tech companies’ earnings tend to be strongest from October to May.

One reason why tech earnings receive a boost beginning in October is that capital spending for tech products and services tends to rise then, as predictably as the leaves in New England display their most vivid autumn colors at that time. Some of the increased capital spending is due to “budget flush”—companies stepping up purchases to use up the remaining money in their budgets before the year ends. Another reason: The tech sector, with products such as cell phones, digital cameras, flat-screen TVs, and MP3 players, is becoming increasingly oriented to the consumer, and consumer spending peaks during the holiday shopping season.

4: Watch the Cycles

Lesson #4: As it matures, the tech sector increasingly bobs up and down in sync with the waves of the economy.

We like to characterize tech as a cyclical/growth sector, reflecting a hybrid status. Inevitably, as the tech sector gets bigger and bigger—its annual revenue worldwide now exceeds $1.5 trillion—its overall growth rate will slow more and more. Blame it on the harsh reality of the Law of Large Numbers: High growth rates must deteriorate as the base swells.

Also, as the tech sector’s economic cyclical has become more pronounced and as product and service offerings have proliferated, pricing has become more competitive and problematic. Leverage has shifted gradually from the supplier of technology to the buyer of technology. In the late 1990s, products for digital networks, for instance, were so pricey that some buyers whined they were being held up. But that’s not the case today; the buyers have the upper hand. We hear reports all the time now of buyers telling tech companies, ‘If you want our business, then cut your product price by 8%.’ Price competition in tech is global, and it’s really cutthroat. Domestic companies like Cisco Systems are finding it harder to compete on price with Chinese firms like Huawei Technologies and ZTE, with their lower manufacturing costs.

An absence of pricing power presents a quandary for the tech sector, which must respond by cutting costs to stay profitable. But history has shown that tech is a sector where you can’t conserve your way to prosperity; a degree of pricing power is essential if revenue and profits are to grow robustly for long.

5: Invest in Market Leaders

Lesson #5: The most rewarding tech
stocks in the long run typically are those of companies that are either first or second in their markets.

Historically, just a small percentage of tech players—the market leaders—have produced most of the stock market wealth. If you want to try to get rich beyond the dreams of avarice, you are unlikely to do so by investing in the number-four player in the industry.

Leaders typically become leaders because they find a fast-growing and “scalable” (capable of expansion) market niche. Apple Computer in personal computers, Microsoft in operating software, Intel in semiconductors, and Cisco Systems in Internet routers—all had the knack of spotting promising markets early on, riding the growth of those markets to great heights, and in the process helping to create that growth with value-added new products. As a result their profits soared, and not coincidentally, their stocks rose by four- or five-digit percentages over time.

You really don’t want to know how the stocks of lesser competitors like Gateway, 3Com, National Semiconductor, Intergraph, Sybase, Netscape Communications, and Bay Networks fared.

6: Be Merger-Wary

Lesson #6: Beware of mergers of equal-sized tech companies.

A merger of equals in the tech sector generally proves unsatisfactory because both parties tend to have serious problems—problems that tend to be the motivation for the merger in the first place. So if we happen to own the stock of one of the partners to such a merger, we sell it pronto.

We consider the Symantec-Veritas Software merger in 2004 a classic example of the folly of a merger of equals. Symantec was a data-security company that was increasingly desperate to sustain a double-digit annual growth rate. Symantec hoped the “answer to all of its problems” would be Veritas Software, a company that was comparable in size but, ominously, growing less than half as fast as Symantec was. The result: blah financial and stock market performance by the combined company.

The difficulty of integrating two tech peers is compounded if they are geographically distant—if one of them is based in, say, Redwood City, California, and the other in Glen Cove, New York. Also, once the merger is completed, much of the best technical and sales talent tends to leave. In a merger of tech equals, one plus one often proves to be something less than two.

That’s not to say that all tech mergers and acquisitions are futile. We have seen many instances in which a larger firm, to enhance its existing capabilities, has acquired a smaller firm, and the arrangement has worked out splendidly.

Here’s what makes the difference: that kind of acquisition is complementary in nature—a niche acquisition designed to add a technology or expertise that the acquirer either doesn’t have or needs to bolster.

7: The Cheap Just Get Cheaper

Lesson #7: Valuation alone is not reason enough to buy a tech stock.

Earnings and earnings expectations are what drive tech stocks (and, we believe, all stocks). If earnings and earnings expectations aren’t favorable, all that usually happens to a cheap tech stock is that it just gets cheaper. As far as we’re concerned, there’s no such thing as a value tech stock; no tech stock should be bought simply because it’s cheap.

Some investors salivate over the prospect of buying a beaten-down tech stock at a “bargain” price—what has been called the cigar-butt approach to tech investing, comparable to trying to extract one last puff from a cigar butt discarded in the gutter. But it’s been our experience that any initial advantage you earn from such a “bargain” will be eroded quickly if the company continues to generate poor earnings. As we walk down the street, picking up cigar-butt tech stocks is definitely not for us.

8: Get in at an Early Stage

Lesson #8: The most profitable time to invest in a tech company is when its products or services are in the early stage of their life cycle.

The time to buy Apple Computer was in 2003, when it began marketing in earnest one of the great products of modern times, the iPod (and happily for us, we did buy it then, although we hasten to add that not all of our stock picks at the time performed nearly so well). Quarterly sales of the iPod mushroomed from 219,000 units in the first quarter of 2003 to 8.5 million in the second quarter of 2006. During that time, Apple reported earnings that continually exceeded Wall Street analysts’ expectations, to the benefit of its stock price. In some cases, such as in the semiconductor industry, it’s getting harder to ferret out promising new products or product extensions because companies are disinclined to talk much about them in advance. As the semiconductor companies see it, why should they bang the drum for a new chip if doing so will only deter customers from buying their existing chips? When a semiconductor company decides to clam up, we seek to gauge the potential commercial appeal of a new chip by tracking the number of design contracts that the developing company is winning. If the number of a design wins is rising, it can indicate customers’ seal of approval for the impending new product.

9: Management & Talent Matter

Lesson #9: There’s no substitute for exceptional management and technical talent.

In his essay, “On Self-Reliance,” Ralph Waldo Emerson famously asserts, “An institution is the lengthened shadow of one man.”

A tech company above all must have good fundamentals in its business to succeed. But if a tech company’s shadow is cast by a chief executive who has vision, integrity, and the ability to inspire employees, success can be even sweeter. Just look at what Steve Jobs accomplished with Apple Computer, John Chambers with Cisco Systems, Bill Gates with Microsoft, and Andrew Grove with Intel. One trait that all of them had in common: they gave their
technical talent the freedom to spend, experiment, and make mistakes. It’s been our experience that if management tries to micromanage innovation, the result is more often than not will be poor.

The quality of technical talent is even more critical to a tech company’s efforts to realize its potential. So to identify the tech companies that may be up-and-comers, we try to find out which ones seem to be landing the best and brightest technical talent.

Elite young technical talent tends to gravitate to small, unbureaucratic companies that are making the greatest breakthroughs in their fields and presenting them with the greatest prospects of becoming millionaires by age 40. We think Microsoft should take warning and Google should take heart about their efforts to realize its potential. So to serve: A decade ago tech wunderkinds newly graduated from schools like MIT, Stanford, and Carnegie Mellon went to work at Microsoft; today they are going to work at Google.

**10: Domination Is Short Term**

Lesson #10: Tech leaders aren’t remaining on top as long as they used to.

As we see it, the days of a company like IBM dominating for 20 years or more are over. Today 10 years is “almost an eternity” for a tech company to stay king of its particular hill. The pace of change is accelerating brutally in most tech industries; the life cycle of new products in telecommunications, for instance, is often measured in months. Companies like Johnson & Johnson in health care, Procter & Gamble in consumer durables, American Express in financial services, and Caterpillar in producer durables that were leaders in their industries three decades ago are still leaders today. But such sustained leadership is far less common in the tech sector than a total lunar eclipse is in astronomy.

Finding tech companies that are growing fast at any given time is fairly easy, in our opinion. The hard part is determining how long those companies can keep growing fast. Those that grow fast and for a long time will be the leaders. Most prospective tech leaders are mid-cap companies—companies with market capitalizations between $2 billion and $10 billion, a range we like to call the “sweet spot.” Small-cap tech companies inevitably have a blow up or two along the way. But mid-cap tech companies have reached the sweet spot because they’ve proven to have good management, because they tend to have sophisticated operating and financial systems in place, and because they have reduced their financial risks by broadening their products or services beyond one flagship product or service.

**11: Apply the 10/10 Rule**

Lesson #11: The ability to limit losses in individual tech stocks is critical to achieving good investment results.

Tech investing is governed by what we call the “95/5 Rule”—95% of the market value of the tech sector tends to be created by about 5% of the sector’s stocks. That leaves a lot of tech stocks that can go wrong badly.

As thorough as we try to be in conducting fundamental research, we may not always know why a tech stock is suddenly going haywire. That’s particularly true of small- and mid-cap tech stocks, which are less visible and less widely followed by Wall Street.

We’ve found another of our rules, the “10/10 Rule,” to be an invaluable technical tool in making sell decisions on tech stocks behaving badly. Basically, that rule obligates us to scrutinize any stock that declines in price 10% more than its sector does in any 10-day trading period. Applying the 10/10 rule has enabled us to cut our losses in many tech stocks early and avoid further carnage.

When something goes wrong with a tech stock, it behooves you to exit through the selling door before the crowd does.

**12: Ride Your Winners**

Lesson #12: Let your winners run.

When you own tech stocks that are generating outsized extra return, the best practice often is to do nothing and simply let them continue to generate extra return. In some cases, we have learned this lesson the hard way. We have held some big tech winners but succumbed to the temptation to take profits in them, only to buy them back later at higher prices.

When it comes to our tech winners, inertia strikes us as a sensible investment strategy. We think our ideal holding period for such stocks is forever or until there’s a good earnings-related reason to sell them, whichever comes first.

We are fond of citing the following example as a cautionary tale on the folly of selling winners prematurely:

In 1992 a conscientious portfolio manager might have been tempted to sell Cisco Systems after it had reaped a two-year gain of 640%. Isn’t the phrase “Nobody ever lost money taking a profit” almost Sacred Writ on Wall Street?

But locking in a 640% gain would have been a colossal mistake. By selling prematurely, by failing to let Cisco Systems run, you would have missed an additional 13,897% return before it finally began to falter in March 2000.

Similarly huge missed opportunities would have resulted if you had had an itchy trigger finger with Microsoft, Dell, Jabil Circuit, and Qualcomm, among other tech blockbusters.

Bob Turner is chairman and chief investment officer of Turner Investment Partners, an investment management firm based in Berwyn, Pennsylvania, which manages over $20 billion in growth, value, and core stocks in separately managed accounts and mutual funds for institutions and individuals. This article originally appeared as a Turner Position Paper and is reprinted with permission.