

EPOCH DIRECT

Research

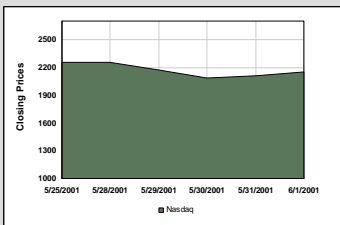
Matthew Adams, CFA
Mark Langley
Mark Langner
Seth Spalding
Mark Verbeck

Epoch Indices for the Week

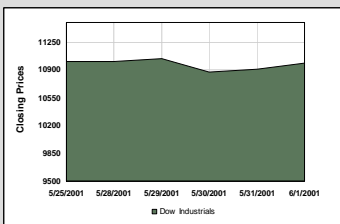
Broadband & IP Svcs: - 12.67%
Comm Equipment: - 11.74%
Internet: - 2.58%
Software: - 3.48%

Market Statistics (5-Day)

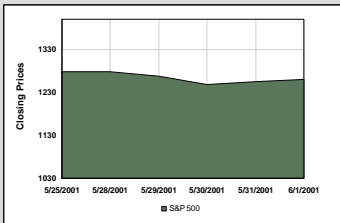
Nasdaq (-4.51%)



Dow (-0.14%)



S&P (-1.35%)



Sun Tzu -- The Art of ... Components?

By Mark Langley, Director, Senior Analyst

Why, might you ask, is this week's Epoch Direct focused on a general from the state of Ch'I in China around 2,400 years ago? Sun Tzu was a general who won acclaim as a master military strategist during his era. He archived his wisdom in a book, "The Art of War." This timeless work has become standard reading in business schools because its principles deal with competition and the contest of wills in the business world as it does in the teachings of war.

Our motivation came after a discussion with the CEO of a privately held company this week in which he relayed a strategic move by a competitor that we recognized as pure "Sun Tzu." Fortunately, this CEO was perceptive enough not to fall into what we view as a cunning trap that had the potential to rob his company of much of its value. Investors and management teams can benefit from this quick read by similarly watching for strategic pitfalls as the component companies march through this part of the business cycle and as the strategic battles for resources and customers become more creative than the skirmishes seen during the capacity-constrained environment of early 2000.

Below, we discuss selected passages from "The Art of War" and how these lessons apply to the component and subsystem manufacturers in our universe.

Waging War

"This is called, using the conquered foe to augment one's own strength. In war, then, let your great object be victory, not lengthy campaigns."

In this aphorism, we take conquering to mean acquiring companies with their key employees and technologies. In 2000, both **Corning** and **JDS Uniphase**⁴ were focused on adding capacity and completing their product lines. Although Corning had traditionally been focused on developing its technology in-house, it realized the urgency of acquiring key technologies and adopted a more acquisitive profile like that of JDS Uniphase.

Attack by Stratagem

"Thus the highest form of generalship is to balk the enemy's plans; the next best is to prevent the junction of the enemy's forces; the next in order is to attack the enemy's army in the field; and the worst policy of all is to besiege walled cities."

[more]



Although Sun Tzu maintains that the best way to fight a war is not to fight at all, this aphorism stresses the wisdom of not fighting battles one cannot win. In evaluating fiber-optic component manufacturers, we look for companies with unique technology addressing an underserved market segment.

Looking at the companies in our universe, **Avanex** has leading-edge products targeting emerging market segments, such as variable chromatic dispersion compensation. **New Focus**² has selected a portfolio of passive components and tunable lasers geared for next-generation optical networks. Although **Bookham** competes against an increasingly large number of arrayed waveguide grating (AWG) manufacturers, the integration possibilities offered by its choice of silicon as primary material make it unique. In contrast, we think **JDS Uniphase** represents the walled city that others fear to attack directly, due to its broad line and early moves to acquire key technologies.

Tactical Dispositions

“To secure ourselves against defeat lies in our own hands, but the opportunity of defeating the enemy is provided by the enemy himself.”

In many cases, the best strategy involves constructing the solid defenses and letting one’s enemies defeat themselves. For example, **Bookham** won **Lucent**’s multiplexer-variable optical attenuator (MUX-VOA) design contract just by meeting the required specifications, whereas Lucent’s historically preferred supplier, PIRI, was unable to produce a prototype in time that met the requirements. Similarly, the high quality of **Finisar**’s³ transceivers enables it to survive where many competitors fail. **JDS Uniphase** built a strong defense by acquiring many of the scarce raw materials manufacturers it needed for its products.

Weak Points and Strong

“Appear at points which the enemy must hasten to defend; march swiftly to places where you are not expected.”

This aphorism refers to the benefits of pouncing on a competitor’s weaknesses as well as to the value of the surprise attack. **Finisar** scored a coup by agreeing to acquire Marlow Industries, Inc., which we believe has an 80% market share in North America with its thermo-electric cooler for telecom components. **JDS Uniphase** has consistently moved early in acquiring with substantial competitive advantages in technology and manufacturing.

“Numerical weakness comes from having to prepare against possible attacks; numerical strength, from compelling our adversary to make these preparations against us.”

Bookham uses a silicon-on-silicon integration platform, which offers the potential for high volume, low cost manufacture on a hybrid platform composed of well-understood materials. By incorporating additional functionality in the planar waveguides, Bookham leverages its platform and puts vendors of discrete components (assembled by hand under microscopes in benchtops around the globe) on guard. **Corning**, **JDS Uniphase** and **Finisar** are adept in participating actively in standards bodies, multi-sourcing agreements, and in integrating products into modules, forcing smaller, less prepared adversaries to spread scarce talent thinly.

Variation in Tactics

“The art of war teaches us to rely not on the likelihood of the enemy’s not coming, but on our own readiness to receive him; not on the chance of his not attacking, but rather on the fact that we have made our position unassailable.”

In 2000, **Bookham**, **Finisar**, **JDS Uniphase**, and **New Focus** wisely completed secondary offerings,



providing them with a cash supply that allows them to weather the current downturn and invest in projects that better position themselves for a recovery. By becoming a low-cost, high-volume manufacturer in the markets it serves, **Corning** creates a highly defensible position versus potential competitors. Similarly, **JDS Uniphase** has amassed such a broad portfolio of manufacturing capacity and key technologies that an emerging competitor would be hard-pressed to unseat it from its dominant position.

The Attack by Fire

“Move not unless you see an advantage; use not your troops unless there is something to be gained; fight not unless the position is critical.”

Here, Sun Tzu urges generals not to deploy their troops unless victory is assured or self preservation is at stake. We view **Avanex** as being very judicious with its acquisitions -- having only made one, Holographix, which gained a technology (holographic gratings) that promises considerable cost savings versus the more commonly used thin films.

The Use of Spies

“Hostile armies may face each other for years, striving for the victory which is decided in a single day. This being so, to remain in ignorance of the enemy’s condition simply because one grudges the outlay of a hundred ounces of silver in honors and emoluments, is the height of inhumanity.”

In this chapter, Sun Tzu discusses the need for advance knowledge in order to make better decisions. In reference to competition between businesses, we are not referring to cloak and dagger corporate espionage, but legal and ethical intelligence gathering. Surprisingly few companies have formal intelligence gathering and analysis processes. Companies often have little knowledge of the financials, business models, revenue sources, cost structures, capabilities or goals of their competitors. Without this understanding, companies cannot confidently predict competitive responses or the likely outcome of a contest.

In our view, **Corning** and **JDS Uniphase** understand this principle better than most in their sector. In addition to the customary sources such as supplier and customer feedback, the companies use management consultants, market researchers, perception surveys, internal intelligence gathering operations, and federal, regional and local data services. Beyond that, they readily turn data into information -- often an easy, but neglected, step. **Finisar** uses information from its network performance test systems business, not against competitors, but to better gauge the needs and timing of its customers in the R&D stage. As with Finisar, **Endwave**² uses its millimeterwave antenna business not principally for competitive intelligence, but to better understand and serve its customers for their millimeterwave radio needs.

Unfortunately, most component companies failed to gather sufficient intelligence at the start of the downturn in the second half of 2000. Most were content to follow the guidance of their customers, the equipment vendors, who, in turn, took the guidance of their customers, who, as a group, could not afford to follow through with their optimistic plans.

Sun Tzu’s lessons remain relevant, 2,400 years later.

Companies mentioned in this note: JDS Uniphase (Nasdaq: JDSU, \$17.29), Corning (NYSE, GLW, \$19.28), Avanex (Nasdaq: AVNX, \$12.80), Lucent (NYSE: LU, \$7.99), Finisar (Nasdaq: FNSR, \$16.81), Endwave (Nasdaq: ENWV, \$1.74), Bookham, (Nasdaq: BKHM, \$6.13), New Focus (Nasdaq: NUFO, \$9.81).

 This Past Week at Epoch

- 5/29/01 [Epoch Initiates Coverage of Siebel](#)
- 5/30/01 [Sell-off on SDRC-ITWO Marketing Alliance Overdone](#)
- 5/30/01 [Aether 'Tests the Water' with \\$20M Stock Buyback](#)
- 5/31/01 [Finisar Sheds Inventory -- Bottom in 1Q?](#)
- 5/31/01 [Siebel Taps Gartner Executive to Lead Worldwide Sales Operations](#)
- 5/31/01 [Siebel Ranks First in Customer Service Applications](#)

Company Highlight: Siebel (SEBL)

Investment Thesis

Siebel is our top pick in the CRM software, or demand-chain solutions, industry. We recommend investors purchase shares of Siebel Systems up to \$64, where we think the stock will more accurately reflect the opportunity available to the best-positioned company in this high-growth sector. With one of the broadest product footprints, high-ROI solutions, and dominant market share, Siebel is well-positioned to exploit the robust growth opportunities for the four key types of CRM software vendors we picked for outperformance in our CRM Software Industry Primer: (1) current industry leaders, (2) multi-touch-point consolidators, (3) partner relationship management (PRM) software providers, and (4) mass-personalization providers.

Company Description

Siebel Systems is the leading provider of demand-chain e-business applications, which enable organizations to sell to, market to, and service their customers across multiple channels, including the Web, call centers, resellers, retail, and dealer networks.

Key Investment Points

- **Dominant Market Position.** Siebel is the leading provider of CRM and demand-chain solutions and is the best-positioned company in the industry, which we expect to achieve accelerated growth.
- **Large Growth Opportunity.** The strength of Siebel's competitive position in each of the core CRM market segments should allow it to continue to grow faster than its peers and the overall industry, exceed market expectations, and provide investors with above-market returns.
- **Head and Shoulders above the Competition.** With one of the broadest product footprints and a focus on the core customer- and employee-facing applications, Siebel should remain at the top of IT spending lists because of the high ROI provided by its product offerings.
- **Solid Execution.** Siebel's focused execution has earned it nearly 25% share of the CRM market. Over the past two years, the company's revenues have grown at nearly a 100% CAGR.
- **Dependent on the Economy.** Siebel is not immune to the malaise currently depressing economic growth, and its revenues will suffer along with the financial health of its business customers.



Companies mentioned: Siebel (Nasdaq: SEBL, \$45.50)

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2. Epoch Securities has been an underwriting manager or co-manager of the company in the last three years.
3. Ameritrade, a minority shareholder of Epoch Partners, has been an underwriting manager or co-manager of the company in the last three years.
4. The analyst(s) involved in the preparation of this report has an investment position in the subject security.

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