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Research

Purchase Recommendation

The Software Toolworks, Inc.

(OTC - TWRX - $6.25)

March 16, 1989
DJIA: 2340.71
S&P 500: 299.44

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INVESTMENT OPINION: ***Rapid Growth Software Publisher—With a Difference***

Sales and earnings of this rapidly growing consumer software publisher are expected to double in fiscal 1989 and 1990. Unlike other software publishers, the company is distinguished by its level of vertical integration, which provides a stable, and growing, source of revenues and profits. Current valuation does not reflect the growth rate of the firm and institutional holdings are negligible—a situation we regard as an ideal entry point for accumulation. Shares are appropriate for purchase by aggressive investors who are cognizant of the risks posed by a relatively small revenue base and float. We expect share price appreciation on the order of 50+% over the next 12 months.

Business: The company develops and publishes entertainment, personal productivity, education and business productivity software for personal computers. The company also provides disk duplication, packaging, printing and other services, such as bundling, for itself and other software publishers.

Revenue/Earnings Data

FY(March)	REV(mil)	EPS	P/E	ROE
1990E	$20.0	$0.65	10x	55%
1989E	11.0	0.33	19x	45%
1988	3.8	0.16	34x	28%

Sh Price/est cash flow:	10x	Market Cap /1990 est rev:	2x
Indicated Dividend:	n/a	Current Yield:	n/a

Market Data

52-week price range	$7 - $5
Shares outstanding	6.4 mil.
Estimated float	1.8 mil.
Average daily volume	19,800 shs.
Market capitalization	$39.2 mil.
Insiders hold	64.1%
Institutions hold*	n/a

1990E Cash flow/sh: $0.61 Book value/sh: $0.91 Long term debt/capital: none Current ratio: 1.94 : 1.0

* Blinder Int'l Enterprises owns 8.14%.

SUMMARY

- *Software Toolworks is the only fully integrated developer and publisher of personal computer software programs in the U.S.*

- *Earnings per share are projected to double each year over the next two-to-three years* based on revenue growth from existing software titles, new product introductions and a dramatic rise in disk packaging and duplication services and bundling activity. We expect earnings per share to reach $0.65 in fiscal 1990 and $0.95 in fiscal 1991.

- *The recent agreement to license a key software program to a publisher of Nintendo game cartridges* underscores the potential for future expansion via product extensions to new technologies. Other Nintendo licensing agreements are likely to be announced over the next 6-12 months.

REASONS TO BUY

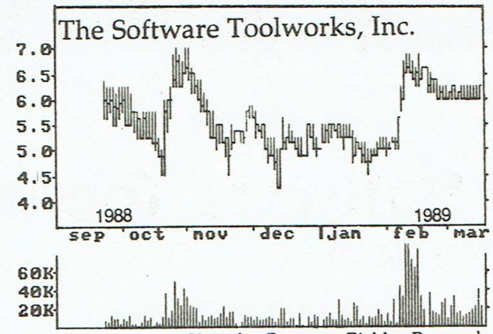

Chart by Bateman Eichler Research

(BEHR makes a market in the shares of TWRX.)

- ***The company's rapid growth has been well-managed with no debt.*** Management's selective development of software titles and tight operating control has created sufficient cash for growth and acquisitions. At the current level of operations, we estimate the company is capable of self-financing an acquisition of up to $4 million. A larger acquisition would require some combination of debt or equity.

- ***The market for company products is growing fast.*** Industry-wide sales of personal computer software topped $2 billion in 1988, up from $400 million in 1985. Sales are projected to reach $5 billion over the next 3-5 years. (Source: Software Publishers Assoc. 1988 Annual Sales Report.) This industry is still in a very early growth stage. Future gains are likely to be generated from the large installed base of personal computers in U.S. households, which now stands at 30 million PCs or 20% of all homes. Should the rate of household penetration by personal computers continue to rise, tracking that of VCRs, software industry sales would rise exponentially.

- ***Integration provides stability and a vehicle for growth.*** The marriage of software development and publishing with a printing/duplicating/packaging operation assures the company of high quality product and certainty of delivery for its own products. The company's Priority Software Packaging division provides such services for 200 third-party clients, adding to the stability of cash flow and creating additional profits. This is in marked contrast to some publicly-traded software firms whose success is solely dependent on the repetition of software hits.

  The activity known as "bundling", the inclusion of software programs as part of a PC hardware package, provides the company with an additional revenue and income stream. In July, 1988, the company signed a series of long-term agreements with a major personal computer manufacturer, Vendex Technologies, to include several of its entertainment and educational software programs with the new Vendex "Next Generation" hardware line and develop foreign language translations of those programs as well.

  The recent acquisition of Vendex by North American Philips, a division of Philips, N.V. and one of the world's largest electronics firms, is significant. This acquisition provides Philips with entry into the U.S. PC market, but more importantly, offers Toolworks the future opportunity to expand software product distribution via bundling, and related services through Priority Software over a much broader unit base. We estimate that Vendex sold 50-60 thousand computers in the U.S. last year, versus an estimated 500 thousand by Philips (worldwide) in 1988.

  Our sales and earnings projections reflect the impact of Toolworks' current domestic distribution agreements with Vendex. We have not factored in the possibility of offshore distribution agreements with Philips in our estimates.

- ***Opportunities abound for continued acquisitions.*** The software development and publishing business has grown up out of the realm of enthused hobbyists but is still for the most part a highly fragmented, privately-held industry. The company considers acquisition of software publishers and titles on an ongoing basis as a cost-effective means of product line expansion.

- ***New technologies create potential for product extension.*** The recent signing of an initial agreement by the company to license its popular *Chessmaster* program to a publisher of Nintendo cartridges for use in the Nintendo Home Entertainment System is a good example of the potential that exists to extend proprietary programs to new technologies. In this sense, PC software programs may be viewed (as technology develops) as having music industry parallels: a song is recorded and distributed via several means; record, cassette tape or compact disc.

  We expect other Toolworks titles to be licensed for Nintendo use over the next 6-12 months. Typical licensing agreements provide for a royalty payment of 10% of the publisher's revenue plus a development fee of $0.25-$0.50 per cartridge to the licensor, in this case Toolworks. There are approximately 18 million Nintendo systems in the U.S. today (double that in

Japan), and U.S. game cartridge sales are expected to reach 50 million units in 1989, up from 28 million in 1988. We believe that this business activity, like those of the bundling and disk duplication segments, will contribute significantly to revenue and earnings growth through 1991.

RISKS

- *Product Life Cycle.* The life cycle of some consumer entertainment software products is relatively short requiring a publishing company, such as Toolworks, to develop or acquire replacement products or technology extensions as products mature. The company has addressed this issue through selective development of "standards", such as *Chessmaster* and *Mavis Beacon*—programs capable of generating 50+ thousand units per year on an ongoing basis—and by supplementing these titles with new ones each year.

- *Revenue Concentration.* The company's success in development and publication of selected software programs has meant that revenues are concentrated, currently, in the publishing segment and primarily within four titles. We believe the company's dependence on software program publishing will be ameliorated by rapidly rising revenues in the vehicles of integration—bundling, third-party printing, packaging etc.—and by product extension (Nintendo).

- *Competitive Factors.* At 60+%, the gross margins in software publishing are high relative to most industries. At this early stage of industry development, we expect such profit potential to attract considerable interest on the part of larger firms with greater capital resources.

- *Product Distribution.* The company contracts with Electronic Arts, the largest U.S. distributor of home PC software, to distribute its products to a dealer network of over 11,000 outlets. Since, at the current time, approximately 40% of the company's revenues are generated via sales to Electronic Arts, any operational or financial difficulties within that firm could have an adverse impact on Toolworks. We believe any disruption in Toolworks' business would be temporary and only until alternate channels of distribution could be established.

- ***Significant share price appreciation is dependent upon attracting an important group of investors—institutions.*** Because the company became public without the usual fanfare of an IPO, visibility among institutions has been low. In addition, the current market capitalization of the firm ($39 million) and a float of 1.8 million shares are below established purchase thresholds for some portfolio managers. We expect the attention of institutional investors will increase over the next year as revenue and earnings gains and a higher market cap thrust Software Toolworks into institutional investor screens searching for high growth companies.

PRINCIPAL BUSINESS SEGMENTS AND STRATEGY

Software Toolworks, based in Chatsworth, California, is engaged in four principle business activities, listed below. The strategic objective of the company is to gain control over all elements of product development and production and to insure interruption-free supply of the materials used in manufacturing its software programs. This level of integration is unique among consumer software publishing firms and provides a stability of cash flow and earnings absent from similar companies. Actual and estimated revenues by business segment are detailed in Exhibit I.

Exhibit I
The Software Toolworks, Inc.

Revenue by Business Segment
($ millions)

	1988	% Total	1989E	% Total	1990E	% Total	1991E	% Total
Software Publishing	2.8	74%	$6.3	57%	$9.7	49%	$11.4	41%
Disk Duplication/Svces	0.9	24%	4.0	36%	8.0	40%	11.0	39%
Bundling	0.1	2%	0.7	7%	1.3	7%	2.6	9%
Nintendo	0	0%	0	0%	1.0	5%	3.0	11%
	$3.8		$11.0		$20.0		$28.0	

SOFTWARE PRODUCTS AND PUBLISHING

The company develops and publishes personal computer software for use as entertainment and for personal productivity, education and business productivity purposes. Software titles are developed in-house by a group of 20 programmers and are also obtained via licensing and royalty agreements with independent authors. Because of the variety of PCs in the U.S., programs are written initially for a specific format where the potential exists for highest sales of a specific software product. Subsequently, products may be modified for use in other formats. The primary formats addressed by the company are: IBM PC, XT, AT, and compatibles using the MS-DOS operating system, the Apple Macintosh, Apple II series, Apple IIGS, Atari ST and Commodore's Amiga and 64.

Currently, the company publishes approximately 60 titles under the Software Toolworks and Datasoft (acquired in 1988) labels. Prices for these programs range from $15 to $80. The bulk of the software publishing revenues are generated by the seven principal titles described in Exhibit II.

Thus far, management's strategy of concentration on a limited number of titles has met with success; the markets these programs address are sufficiently diverse, three products have reached gold (100k units sold) and two platinum (250k units sold) status and the process of selective development has reduced product development costs. This prudent posture regarding development contrasts with the strategy of other "publishing only" consumer software firms whose selection of titles may run in the 100-300 range.

The company intends to continue product development in-house, via licensing agreements and through complementary acquisitions. We believe management's opportunistic approach to acquisition is likely to continue given the fragmented nature of the consumer software industry.

DISK DUPLICATION SERVICES

In November, 1986, the company acquired Priority Software Packaging, a diskette duplication, software packager, printer and fulfillment house. At the time of acquisition, Priority was losing money and Toolworks represented 60% of Priority revenues. Management turned the operation quickly into a profitable, independent entity and expanded significantly its third-party business. Outside clients now number 200.

Exhibit II
The Software Toolworks, Inc.

Principal Software Titles and Description

Chessmaster 2000*	-	A chess program which allows the player to play against the computer.
Chessmaster 2100*	-	An enhanced version of the above.
Mavis Beacon Teaches Typing	-	A typing tutor program.
The Secretary Bird	-	Word processing, spreadsheet and data base features for home & small business use.
Twist and Shout	-	Program enables sideways printing in continuous sheets.
Life and Death	-	A surgical simulation game.
The Hunt for Red October	-	A submarine simulation game based on the best-selling novel.
Bruce Lee	-	"Character" programs sold under the Datasoft label.
Tomahawk	-	"
221 B Baker Street	-	"
The Goonies	-	"
Conan	-	"

* Initial agreements have been reached to license these software programs for use in the Nintendo Entertainment System.

Presently, Toolworks' sales account for only about 10% of Priority's sales.

The software programs sold by the company (or those of third-party accounts) are recorded on a flexible (floppy) diskette which is then packaged, together with instruction materials, for shipment and sale. Priority operates two manufacturing facilities, the original plant in Santa Ana, California and a second plant in Chatsworth, California following the 1988 acquisition of Intellicreations/ Datasoft. The opening of additional plants is likely since prompt fulfillment of orders requires geographic proximity to significant clients.

We estimate revenues in this operating segment will double in fiscal 1990 as a result of contracts signed with Vendex Technologies. The sales contribution from this segment will provide more balance among business operations and lessen the revenue concentration in software publishing.

BUNDLING

Several of the companies products are bundled (included with hardware products). Agreements with Vendex should contribute to a doubling in revenue from this activity over the next two years. Bundling benefits the company by providing increased product exposure and greater subsidy for additional product development (especially for foreign-language translations). Since there is little added cost associated with fulfillment of bundling contracts, the incremental profits are substantial.

NINTENDO (PRODUCT EXTENSIONS)

Signing of the first Nintendo licensing agreement is representative of the potential for revenue from product extensions that new technologies are likely to present. We expect this first product extension will result in revenues of $3 million in fiscal 1991. As with bundling, the operating profit margins are much higher (we estimate 70%-80%) than in publishing and manufacturing activities.

MANAGEMENT

The firm's management represents a unique assemblage of marketing, financial and technical skills. The "Chronology of Significant Corporate Events" details the progress of this entrepreneurial group in the formation of the company and its acquisition activity.

Les Crane, Chairman and President, assumed his current position in February, 1988 when the company he co-founded, Software Country, was merged with Toolworks. He is responsible for the overall direction of the firm, including product development and marketing. Mr. Crane has over 30 years of experience in the communications industry. In the late 1950s, he created radio's "Top 40" format. During the 1960s Mr. Crane hosted his own late-night talk show on ABC-TV, "The Les Crane Show", for which he won an Emmy. In the 1970s, Mr. Crane entered music publishing and won a Grammy for the album, "The Desiderata". During the late 1970s, Mr. Crane founded Communications Counseling Services, Inc., a firm that implemented communications training programs for companies such as AT & T, the Xerox Corporation and Southern California Edison.

Joe Abrams, Executive Vice President and Chief Operating Officer oversees all financial and administrative functions of the company. Mr. Abrams joined Toolworks in 1983. Prior to that he was the Chief Financial Officer of a $100 million chain of 7-11 convenience stores.

Table I
The Software Toolworks, Inc.

Results of Operations
Nine Months Ended December 31
($ thousands)

	1988	1987	% Change
Net revenues	$7,655	$2,602	+194%
Cost of sales	3,356	795	322%
Gross profit	4,299	1,807	138%
Selling, general and administrative	2,003	919	118%
Operating income	2,296	888	156%
Other income	94	31	203%
Income before income taxes	2,390	919	160%
Provision for income taxes	957	362	164%
Net income	$1,433	$557	158%
Per share: Net income	$0.23	$0.15	53%
Weighted average number of shares and common stock equivalents	6,208	3,790	64%

Walt Bilofsky, Senior Vice President, is the senior computer scientist of the firm, and founder of the original Toolworks in 1980. He has been in the computer industry since 1960 and holds degrees in math and computer science from the Massachusetts Institute of Technology. He has acted in a consulting capacity to the computer industry and is one of the founders of Interactive Systems Corporation, a developer of UNIX-based software for microcomputers and mini-computers.

OPERATING RESULTS-NINE MONTHS, FISCAL 1989

Recent results of operations are detailed in Table I. Revenues increased by 194% to $7.6 million for the nine-month period primarily as a result of a tripling of sales in the third quarter; to $3.9 million from $947 in the comparable period last year.

Third quarter revenue momentum reflects positive customer response to new products, continued demand for existing titles, as well as increased revenues (as a percentage to total sales) from bundling contracts and higher third-party sales by Priority, the company's captive disk duplicating subsidiary. Approximately 20% of the third quarter sales gain may be attributed to sales of Datasoft's software product line, acquired in August, 1988.

Cost of sales rose 322% in the nine-month period to $3.4 million from $795K in the comparable period in fiscal 1988. Product cost rose disproportionately to sales primarily as a result of a shift in business mix; the lower margin revenues from third party sales at Priority accounted for 31% of the total revenues during the nine-month period versus 21% in the prior year. This accounted for the decline in gross profit as a percentage of sales as well, to 56% in the nine-month period versus 69% in the prior year. Gross profit rose, however, 138% over prior nine-month 1988 levels to $4.3 million.

As a percentage increase, SG&A expense rose less than sales reflecting good operating control. As a result, operating nine-month income advanced 156% and net income rose 158% over the comparable period in fiscal 1988. Net income advanced 158% to $1.4 million and

Table II
The Software Toolworks, Inc.

Summary Balance Sheet
December 31, 1988

Assets	
Current Assets:	
Cash and short-term investments	$1,855,000
Accounts receivable	2,821,000
Inventory	770,000
Other current assets	79,000
Total current assets	5,525,000
Property, Plant and Equipment, Net	659,000
Intangible Assets	780,000
Software Development Costs	748,000
Other Assets	183,000
Total Assets	$7,895,000

Liabilities and Stockholders' Equity	
Current Liabilities:	
Accounts payable	$865,000
Accrued expenses	586,000
Income taxes payable	427,000
Total current liabilities	1,878,000
Long-term debt	0
Deferred Income Taxes	216,000
Minority Interest	2,000
Stockholders' Equity:	
Common stock, $0.01 par value, 50,000,000 shares authorized; 6,163,867 and 6,053,333 shares issued and outstanding, respectively	62,000
Additional paid-in capital	3,804,000
Retained earnings	1,933,000
	5,799,000
Total Liabilities and Stockholders' Equity	$7,895,000

earnings per share rose 53% to $0.23 from $0.15 on 64% more shares outstanding. Significant growth was achieved over this period without the assumption of debt. (See Balance Sheet Table II.)

EARNINGS OUTLOOK AND ESTIMATES

We expect the revenue momentum and operating trends established in the first nine months of fiscal 1989 to carry through the fourth quarter (March). Our estimate of EPS of $0.33 for fiscal 1989 represents a 106% increase over last year's earnings. Annual estimates of operating results are found on Table III.

Looking ahead, we anticipate revenues may advance by nearly 100% in fiscal 1990 to $20 million. A near doubling of revenues in the disk duplication and services segment and of revenues from bundling contracts should be the primary vehicles of expansion. Our revenue estimate does give effect to additional business from the proposed acquisition of D/S Technologies. We expect software publishing sales to advance 15% based on the existing library of titles. Introduction and acceptance of new software program titles would raise our revenue and earnings target. Our preliminary estimate calls for net income and EPS to double in 1990 to $4.1 million and $0.65, respectively.

Given the company's history and management's approach to growth, we expect additional acquisitions to be likely as opportunities are presented. Our estimates for fiscal 1990 and 1991, however, do not give effect to any new acquisitions.

VALUATION

TWRX shares are trading currently at a P/E multiple of 19x our earnings estimate of $0.33 for fiscal 1989 and at 10x our earnings estimate of $0.65 for fiscal 1990. The fiscal 1989 (March) earnings multiple of 19x represents a 46% premium to the broad market multiple of 13x full year 1988 earnings. Going forward, we expect a P/E multiple premium to be supported by rapid earnings growth. Maintenance of a P/E premium in the range of 25%-30% above market (or 16x-17x earnings) would imply a share price of $10-$11 over the next 12 months.

Table III
The Software Toolworks, Inc.

Summary Results of Operations
Fiscal Year Ending March 31

	1986	1987	1988	1989E	1990E	1991E
Revenues	515,963	2,172,536	3,793,606	11,000,000	20,000,000	28,000,000
Cost of Sales	207,583	655,683	1,217,199	5,000,000	8,800,000	12,460,000
% of Sales	40.2%	30.2%	32.1%	45.5%	44.0%	44.5%
Gross Profit	308,380	1,516,853	2,516,853	2,576,407	6,000,000	15,540,000
% of Sales	59.8%	69.8%	67.9%	54.5%	56.0%	55.5%
SG&A	308,481	1,291,035	1,597,200	2,700,000	4,460,000	5,660,000
% of Sales	59.8%	59.4%	42.1%	24.5%	22.3%	20.2%
Operating Income	(101)	225,818	979,207	3,300,000	6,740,000	9.880,000
% of Sales	0.0%	10.4%	25.8%	30.0%	33.7%	35.3%
Other Income	(892)	(7,180)	(18,990)	100,000	160,000	200,000
Pretax Income	(993)	218,638	960,217	3,400,000	6,900,000	10,080,000
% of Sales	(0.2%)	10.1%	25.3%	30.9%	34.5%	36.0%
Income Taxes	0	92,758	366,200	1,280,000	2,760,000	4,032,000
Tax Rate	0.0%	42.4%	38.1%	37.6%	40.0%	40.0%
Net Income	(993)	125,880	594,017	2,120,000	4,140,000	6,048,000
% of Sales	(0.2%)	5.8%	15.7%	19.3%	20.7%	21.6%
Per Share	(0)	$0.05	$0.16	$0.33	$0.65	$0.95
Weighted Avg Shs	2,800,000	2,800,00	3,789,806	6,369,000	6,400,000	6,400,000

THE SOFTWARE TOOLWORKS

Chronology of Significant Corporate Events

1980 The Software Toolworks, Inc. is incorporated in California. The primary business focus is the publication of high-quality, low-cost programming utilities and other technically oriented products for personal computer hobbyists.

1984 Company program offering reaches 40 products. Management begins to switch focus from hobbyists to user market.

1985 Toolworks forms alliance with privately held Software Country, a software publisher. With Toolworks' technical expertise and Software Country's marketing/distribution orientation, the two companies form a joint venture to produce and market entertainment software. The "Software Golden Oldies" program — a package including four programs: *PONG, Eliza, Adventure* and *Life* — is the first collaborative effort. *The Chessmaster 2000*, a chess-playing program follows.

1986 The successful sales generated by the Toolworks/Software Country joint ventures prompts a merger of the two firms with Toolworks as the surviving entity. Acquisition of Priority Software Packaging, Inc., a diskette duplicator, software packager, printer and fulfillment house. Acquisition creates vertical integration, assuring the company of a reliable, high quality manufacturing source for products published by Toolworks. Priority generates additional revenues by providing services to other software companies.

1987 The company publishes *Mavis Beacon Teaches Typing!*, the first typing instruction program to use artificial intelligence. *Mavis* quickly becomes the dominant typing software teaching program worldwide. Company enters a distribution agreement with U.S. Electronics Arts, the largest distributor of home PC software, to distribute products throughout a dealer network representing 11,000 outlets. The agreement is extended to foreign distribution as well.

1988 Merger with Deseret-Western Ventures Limited, a publicly traded, venture capital holding company is completed in a stock-for-stock transfer. Company receives \$3.6 million in return for 78% of D-W's shares and immediate status as a publicly traded company. Company effects a 150-1 reverse stock split and Toolworks (TWRX) begins trading in the NASDAQ market.

1988 Acquisition of Intellicreations/Datasoft, software publisher of arcade games and character titles is completed in exchange for 60K restricted shares. Program titles include *The Hunt for Red October, Bruce Lee, Tomahawk, Conan*, and others.

1989 Company announces signed Letter of Intent to acquire D/S Technologies (\$2 million revenues), a privately-held developer and publisher of personal computer utility and business productivity software. Successful completion of the acquisition will provide Toolworks with a direct sales force with established Fortune 1000 accounts.