

Integrative Case 2

Track Software Inc.

Seven years ago, after 15 years in public accounting, Stanley Booker, CPA, resigned his position as manager of cost systems for Davis, Cohen, and O'Brien Public Accountants and started Track Software Inc. In the two years preceding his departure from Davis, Cohen, and O'Brien, Stanley had spent nights and weekends developing a sophisticated cost-accounting software program that became Track's initial product offering. As the firm grew, Stanley planned to develop and expand the software product offerings, all of which would be related to streamlining the accounting processes of medium- to large-sized manufacturers.

Although Track experienced losses during its first two years of operation—2016 and 2017—its profit has increased steadily from 2018 to the year just ended (2022). The firm's profit history, including dividend payments and contributions to retained earnings, is summarized in Table 1.

Table 1

Track Software Inc., Profit, Dividends, and Retained Earnings, 2016–2022			
Year	Net profits after taxes	Dividends paid	Contribution to retained earnings
2016	–\$50,000	\$ 0	–\$50,000 – \$0 = –\$50,000
2017	–20,000	0	–\$20,000 – \$0 = –\$20,000
2018	15,000	0	\$15,000 – \$0 = \$5,000
2019	35,000	0	\$35,000 – \$0 = \$35,000
2020	40,000	1,000	\$40,000 – \$1,000 = \$39,000
2021	43,000	3,000	\$43,000 – \$3,000 = \$40,000
2022	48,000	5,000	\$48,000 – \$5,000 = \$43,000

Stanley started the firm with a \$100,000 investment: his savings of \$50,000 as equity and a \$50,000 long-term loan from the bank. He had

hoped to maintain his initial 100% ownership in the corporation, but after experiencing a \$50,000 loss during the first year of operation (2016), he sold 60% of the stock to a group of investors to obtain needed funds. Since then, no other stock transactions have taken place. Although he owns only 40% of the firm, Stanley actively manages all aspects of its activities; the other stockholders are not active in its management. The firm's stock was valued at \$4.50 per share in 2021 and at \$5.28 per share in 2022.

Stanley has just prepared the firm's 2022 income statement, balance sheet, and statement of retained earnings, shown in Tables 2, 3, and 4, respectively, along with the 2021 balance sheet. In addition, he has compiled the 2021 ratio values and industry average ratio values for 2022, which are applicable to both 2021 and 2022 and are summarized in Table 5. He is quite pleased to have achieved record earnings of \$48,000 in 2022, but he is concerned about the firm's cash flows. Specifically, he is finding it more and more difficult to pay the firm's bills in a timely manner and generate cash flows to investors, both creditors and owners. To gain insight into these cash flow problems, Stanley is planning to determine the firm's 2022 operating cash flow (OCF) and free cash flow (FCF).

Table 2

Track Software Inc., Income Statement (\$000) for the Year Ended December 31, 2022	
Sales revenue	\$1,550
Less: Cost of goods sold	<u>1,030</u>
Gross profits	<u>\$ 520</u>
Less: Operating expenses	
Selling expense	\$ 150
General and administrative expenses	270
Depreciation expense	<u>11</u>
Total operating expense	<u>\$ 431</u>
Operating profits (EBIT)	\$ 89
Less: Interest expense	<u>29</u>
Net profits before taxes	\$ 60
Less: Taxes (20%)	<u>12</u>
Net profits after taxes	<u>\$ 48</u>

Table 3

Track Software Inc., Balance Sheet (\$000)		
	December 31	
Assets	2022	2021
Cash	\$ 12	\$ 31
Marketable securities	66	82
Accounts receivable	152	104
Inventories	<u>191</u>	<u>145</u>
Total current assets	<u>\$421</u>	<u>\$362</u>
Gross fixed assets	\$195	\$180
Less: Accumulated depreciation	<u>63</u>	<u>52</u>
Net fixed assets	<u>\$132</u>	<u>\$128</u>
Total assets	<u>\$553</u>	<u>\$490</u>
Liabilities and stockholders' equity		
Accounts payable	\$136	\$126
Notes payable	200	190
Accruals	<u>27</u>	<u>25</u>
Total current liabilities	\$363	\$341
Long-term debt	<u>38</u>	<u>40</u>
Total liabilities	<u>\$401</u>	<u>\$381</u>
Common stock (50,000 shares outstanding at \$0.40 par value)	\$ 20	\$ 20
Paid-in capital in excess of par	30	30
Retained earnings	<u>102</u>	<u>59</u>
Total stockholders' equity	<u>\$152</u>	<u>\$109</u>
Total liabilities and stockholders' equity	<u>\$553</u>	<u>\$490</u>

Table 4**Track Software Inc., Statement of Retained Earnings (\$000) for the Year Ended December 31, 2022**

Retained earnings balance (January 1, 2022)	\$ 59
Plus: Net profits after taxes (for 2022)	48
Less: Cash dividends on common stock (paid during 2022)	<u>5</u>
Retained earnings balance (December 31, 2022)	<u>\$102</u>

Table 5

Ratio	Actual 2021	Industry average 2022
Current ratio	1.06	1.82
Quick ratio	0.63	1.10
Inventory turnover	10.40	12.45
Average collection period	29.6 days	20.2 days
Total asset turnover	2.66	3.92
Debt ratio	0.78	0.55
Times interest earned ratio	3.0	5.6
Gross profit margin	32.1%	42.3%
Operating profit margin	5.5%	12.4%
Net profit margin	3.0%	4.0%
Return on total assets (ROA)	8.0%	15.6%
Return on common equity (ROE)	36.4%	34.7%
Price/earnings (P/E) ratio	5.2	7.1
Market/book (M/B) ratio	2.1	2.2

Stanley is further frustrated that the firm cannot afford to hire a software developer to complete development of a cost estimation package that he believes has “blockbuster” sales potential. Stanley began development of this package two years ago, but the firm’s growing complexity has forced him to devote more of his time to administrative duties, thereby halting

development. Stanley's reluctance to fill this position stems from his concern that the added \$80,000 per year in salary and benefits for the position would certainly lower the firm's earnings per share (EPS) over the next couple of years. Although the project's success is in no way guaranteed, Stanley believes that if the money were spent to hire the software developer, the firm's sales and earnings would significantly rise once the two- to three-year development, production, and marketing process was completed.

With all these concerns in mind, Stanley set out to review the various data to develop strategies that would help ensure a bright future for Track Software. Stanley believed that as part of this process, a thorough ratio analysis of the firm's 2022 results would provide important additional insights.

To Do

- a. On what financial goal does Stanley seem to be focusing? Is it the correct goal? Why or why not? Could a potential agency problem exist in this firm? Explain.
- b. Calculate the firm's earnings per share (EPS) for each year, recognizing that the number of shares of common stock outstanding has remained unchanged since the firm's inception. Comment on the EPS performance in view of your response in part a.
- c. Use the financial data presented to determine Track's operating cash flow (OCF) and free cash flow (FCF) in 2022. Evaluate your findings in light of Track's current cash flow difficulties.
- d. Analyze the firm's financial condition in 2022 as it relates to (1) liquidity, (2) activity, (3) debt, (4) profitability, and (5) market, using the financial statements provided in Tables 2 and 3 and the ratio data included in Table Be sure to evaluate the firm on both a cross-sectional and a time-series basis.
- e. What recommendation would you make to Stanley regarding hiring a new software developer? Relate your recommendation here to your responses in part a.

- f. Track Software paid \$5,000 in dividends in 2022. Suppose that an investor approached Stanley about buying 100% of his firm. If this investor believed that by owning the company he could extract \$5,000 per year in cash from the company in perpetuity, what do you think the investor would be willing to pay for the firm if the required return on this investment is 10%?

- g. Suppose you believed that the FCF generated by Track Software in 2022 could continue forever. You are willing to buy the company in order to receive this perpetual stream of free cash flow. What are you willing to pay if you require a 10% return on your investment?