

Working Capital Simulation:

MANAGING GROWTH V2

FOR COURSES IN:

- Accounting
- Finance
- Small Business Management
- Entrepreneurial Finance

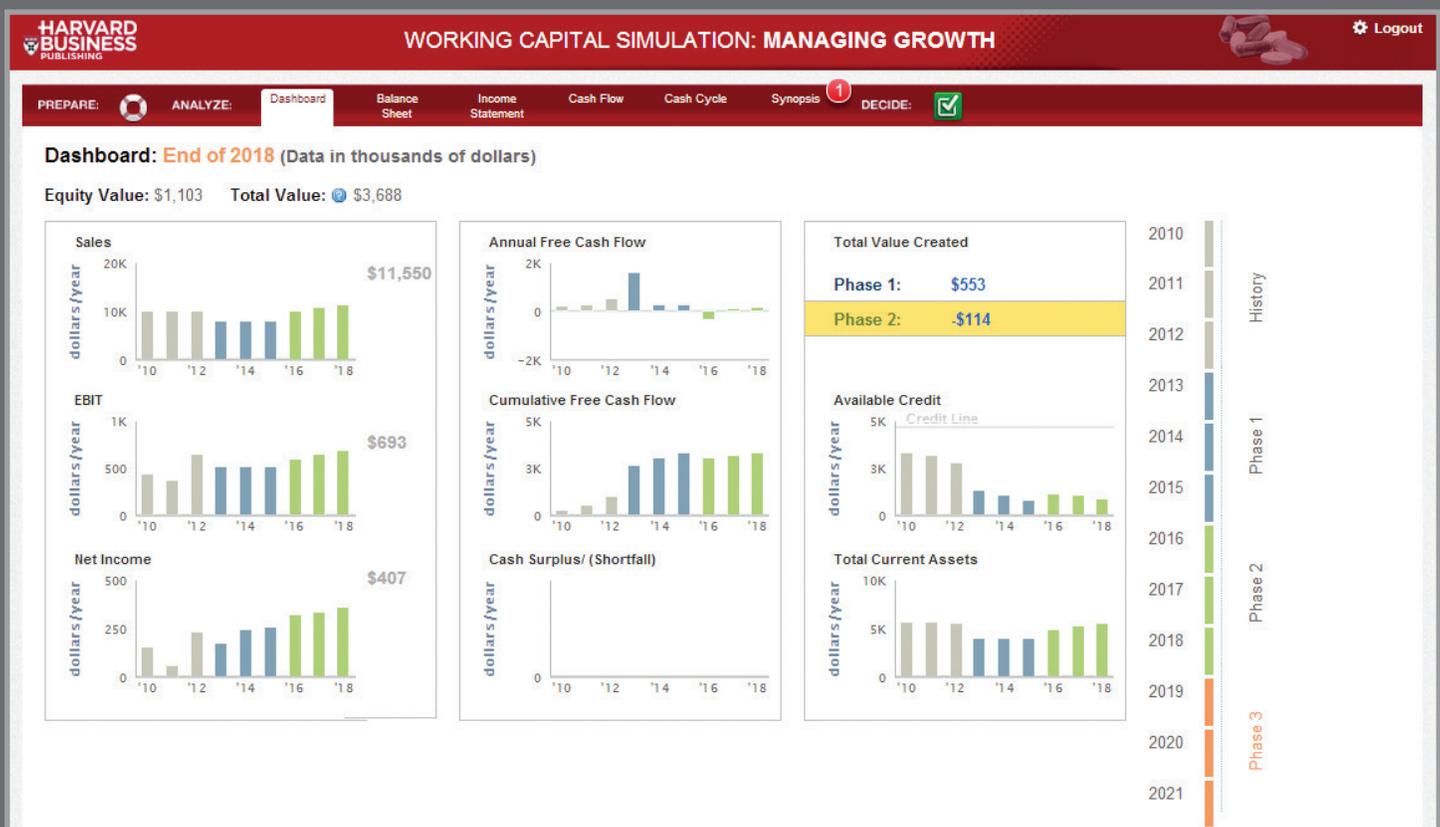


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Working Capital Simulation: Managing Growth

In this single-player simulation, students act as the CEO of Sunflower Nutraceuticals, a distributor of dietary supplements. In 3 phases over 10 simulated years, students consider investment opportunities in revenue and EBIT (earnings before interest and taxes) growth and cash flow improvements. The firm operates on thin margins with a constrained cash position and limited credit. Students must understand how the income statement, balance sheet, and statement of cash flows are interconnected as

they analyze the effects of each opportunity on working capital. The goal is to choose opportunities that add the most value to the firm and balance the desire for growth with the need for maintaining liquidity. The second release of this simulation includes an optional financing decision for students to complete before commencing play, a new metric tracking the firm's equity value, and a new optional problem set.



A dashboard view provides an overview of the company during each phase of the simulation.

CHOOSING OPPORTUNITIES

In each phase, students consider a variety of investment opportunities that can increase revenue or improve cash flow. Opportunities range from acquiring new customers and expanding into new distribution

channels to reducing inventory and capitalizing on supplier discounts. Each opportunity has a unique financial profile and includes a summary of incremental changes to the income statement and balance sheet.

Students must analyze the effects of each opportunity on working capital and decide whether it can be funded and how much value it adds to the firm.

SNC is considering an opportunity to add Atlantic Wellness, a large, successful health food chain as a new corporate customer for its herbal nutraceutical product line. Taking on this customer would immediately increase SNC's sales by \$4 million per year (a one-time increase of 40%) and EBIT by \$260,000. The profit margins and net working capital terms would remain the same as for SNC's existing business.

What would you like to do about this opportunity?

	2013	2014	2015	Post 2015
Incremental Summary Income Statement (\$ in thousands)				
Sales	\$4,000	\$4,000	\$4,000	\$4,000
Cost of Sales	\$3,740	\$3,740	\$3,740	\$3,740
EBIT	\$260	\$260	\$260	\$260
Incremental Balance Sheet (\$ in thousands)				
Accounts Receivable	\$1,205	\$1,205	\$1,205	\$1,205
Inventories	\$922	\$922	\$922	\$922
Accounts Payable	\$420	\$420	\$420	\$420

Students consider the effects of each opportunity on the firm's financial position.



The Cash Conversion Cycle shows how efficiently students are using the firm's working capital.

CASH CONVERSION CYCLE

The simulation includes a dynamic chart showing the cash conversion cycle. The chart shows how efficiently students are using the firm's working capital and provides students with a visual representation that helps build intuition around the concept. At the start of each phase, the displayed information is updated with the results from the previous round of decisions.

FINANCIAL STATEMENTS

The balance sheet, income statement, and statement of cash flows are updated at the start of each phase of the simulation and allow students to analyze company performance while developing an understanding of the relationships among the statements. All financial data can be copied to a spreadsheet for extended analysis as students consider each round of investment opportunities.

MEASURING PERFORMANCE

The simulation displays updates as opportunities are selected in each phase, and it shows each opportunity's effect on the firm's financial position. Graphs display incremental changes in revenue, earnings, and cash flow related to each opportunity, while the balance sheet, income statement, and statement of cash flows are automatically updated to reflect the cumulative results for the firm's operations.

The simulation provides several performance metrics for students to consider, including sales, EBIT, net income, and free cash flow. The simulation also tracks the equity value and total firm value as well as the incremental value added in each phase. The total firm value is a combination of the underlying value of the business and the value created by the opportunities selected.

Working Capital simulation: key learning objectives

- Developing intuition regarding a firm's cash conversion cycle and the associated operating ratios
- Learning the trade-offs between managing revenue and EBIT growth while also managing net operating working capital
- Understanding the consequences of investing too much or too little in net working capital
- Developing intuition for the relationships among the income statement, balance sheet, and statement of cash flows
- Understanding the tightrope between growth and illiquidity
- Learning to maximize growth opportunities in a limited-credit environment
- Correlating the cash flow needs and strategic growth options of an organization to the most appropriate financing choice



Detailed individual and class summary results allow faculty to discuss outcomes under different credit constraints.