



mikesbikes
ACCOUNTING
AN ACCOUNTING SIMULATION

MikesBikes Accounting Player's Manual (2024 Rev A)



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Contents

Overview	1
What is MikesBikes Accounting?	1
Single-Player & Multi-Player	1
The Balanced Scorecard	3
Finance KPIs Overview	5
Stakeholder / Customer Satisfaction KPIs Overview	6
Innovation and Learning KPIs Overview	7
Internal / Business Process KPIs Overview	8
The Simulation Interface	10
Student Support	14
Market Analysis	15
Company & Market Reports.....	15
Your Company.....	15
Your Competitors.....	15
The Market Segments	16
Your Customers.....	17
Making Decisions	21
Start with a Plan.....	21
Corporate & Product Identity.....	22
Marketing Decisions	22
Operations.....	34
Finance	42
Reporting	44
Report Shortcuts	44
Reports Menu.....	45

CHAPTER 1

Overview

What is MikesBikes Accounting?

MikesBikes Accounting is an Online Business Simulation which gives you the opportunity to put Management Accounting theory into practice.

In MikesBikes Accounting you take control of a bicycle manufacturing company which has been struggling in a competitive industry. Through collaboration and the analysis of financial and market reports, you are tasked with designing and implementing an improved cross-functional strategy.

The success of your strategy will be determined by 12 Performance Targets (KPIs) which have been set by your Board of Directors.

Learning Outcomes

At the conclusion of the simulation, you will be able to:

- Take a holistic view of the business entity and its operating environment.
- Draw on finance and accounting skills to provide strategic direction to an organization.
- Use financial and market reports to inform decision-making.
- Understand all functional areas essential to a successful business such as Human Resource Management, Production and Operations Management, Marketing, Product Development, and Corporate Social Responsibility.
- Implement finance strategy to support other functional areas of a business.
- Review and adapt business strategy to meet the changing needs of customers and take advantage of market opportunities.
- Use a Balanced Scorecard to measure the performance of business strategy.

Single-Player & Multi-Player

MikesBikes features two versions; the Single-Player and the Multi-Player.

The **Single-Player** features at the start of the course and allows you to practice against a single computer-controlled competitor. In the Single-Player you move forward (rollover) through years (decision periods) at your own pace and in your own time. This enables you to become familiar with your company, the market, and test out different decisions. You will have a maximum of 5 years to achieve as many of your Performance Targets as possible. You can also rollback or restore back to the start position to try out different approaches.

In the **Multi-Player** you will be competing against four other computer controlled competitors, and you will have a maximum of 8 years to achieve as many of your performance targets as possible.

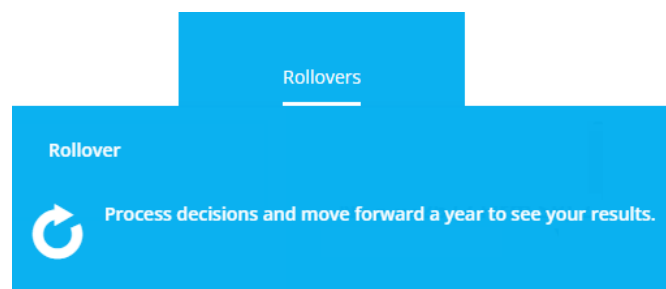
The Multi-Player simulation progresses according to a preset rollover (decision deadline) schedule. Before each rollover you must have your decisions entered into each of the decision screens within the simulation.

Rollovers

A rollover is the term used to describe moving from one year (decision period) to the next. A rollover processes the currently entered decisions and then displays your results.

SINGLE-PLAYER

Rollovers in the Single-Player are controlled by you through the Rollovers menu:



In the Single-Player you are also able to Rollback (move back one year) or Restore (reset the simulation back to the start).

MULTI-PLAYER

Rollovers in the Multi-Player occur automatically on pre-set dates determined by your course instructor. There is no final submit process. Simply enter your decision changes into each decision screen and then click *Save*. A save notification will appear and the change will be shown on-screen. The change is now saved on our simulation server ready to be processed at the upcoming rollover.

If you are playing the Multi-Player in teams, only one team member needs to enter your final decisions.

You will see the next scheduled event on your company's Home page:

NEXT EVENT
[Rollover: 9 hours, 36 mins >](#)

Click on the event to see all upcoming rollovers, as well as those already processed.

You can check all your saved decisions using the *Current Saved Decisions* report.

Carefully read the available reports in the Multi-Player. You will find that your firm is struggling, and your competitors are all more successful than you are.

The Balanced Scorecard

The Board of Directors have put you in charge to improve performance across all areas of the company. To measure your performance they have developed a Balanced Scorecard featuring 12 Key Performance Indicators (KPI).

There is a **minimum or maximum target for each KPI** on the Balanced Scorecard. Your objective is to achieve each of these targets by the end of your management term (ie. 5 years in the Single-Player, or 8 years in the Multi-Player).

Finance KPIs	Single-Player KPI	Multi-Player KPI
1. Shareholder Value	> \$50	> \$100
2. Gross Margin %	> 45%	> 50%
3. Advertising to Sales %	< 17%	< 14%
Stakeholder KPIs		
4. Delivery Satisfaction	> 85%	> 85%
5. CSR Rating	> 55	> 60
6. Brand Awareness %	> 60%	> 70%
Innovation and Learning KPIs		
7. Quality Rating	> 80	> 85
8. Average Product Spec Rating	> 65	> 70
9. Number of Products	3 minimum	4 minimum
Internal / Business Process KPIs		
10. Inventory Level (weeks)	< 6 weeks	< 6 weeks
11. Workforce Productivity %	> 70%	> 75%
12. Production Utilization %	> 82%	> 85%

The minimum and maximum values for each KPI are listed on the **Balanced Scorecard** on the MikesBikes home page. Example:

Category	KPI	Target	Actual	Status
Finance	Shareholder Value	> \$50	\$12.56	✗
	Gross Margin	> 45%	34.1% -3.0%	✗
	Advertising to Sales %	< 17%	20% +2.0%	✗
Innovation	Quality Rating	> 80%	62.7	✗
	Product Spec Rating	> 65	52.5	✗
	Number of Products	3 +	2	✗
Stakeholder	Delivery Satisfaction	> 85%	100%	✓
	CSR Rating	> 55	27.7	✗
	Brand Awareness	> 60%	33.9%	✗
Internal	Inventory Level	< 6 weeks	12 weeks	✗
	Workforce Productivity	> 70%	55.5%	✗
	Production Utilization	> 82%	66.9%	✗

KPIs Achieved
1 / 12 KPI

Important: It will take several years to achieve most of these KPIs. So you need a clear strategy and you must monitor your progress after every rollover.

You also need to think about the effect of your actions across the different functional areas of your company.

For instance, you could ensure 100% Delivery Satisfaction by always producing lots of extra units. But if you hold too much finished inventory then you will miss your Inventory Level KPI.

Or you could achieve your Product Spec Rating KPI by constantly improving your products every period. But this will also increase the prime cost of your products and may make it harder to achieve your Gross Margin % KPI. And some markets have low sensitivity to Product Spec improvements, so those improvements may not result in increased market share.

To achieve all 12 Performance Targets you will need to:

1. Analyze your company’s current financial and market position.
2. Develop a strategy to achieve your objectives.
3. Implement your strategy through the individual decisions available through the MikesBikes interface.
4. After each rollover you should review your results through the financial and market reports.

Finance KPIs Overview

The Financial KPIs for your company ensure that provide a sufficient return to your Shareholders (SHV), that you are managing your production costs and margins (Gross Margin %), and that you are spending your Advertising and Brand Promotion budgets efficiently (Advertising to Sales Ratio).

Shareholder Value (SHV)

SHV is the investment value over time of owning a single share in your company. It is calculated using your current share price (being the market value of one share in your company), plus the value and interest of all past dividends paid.

Share Price is driven by your company's profit over time, [earnings per share](#), [debt to equity ratio](#), and dividends paid.

You can compare your SHV with other companies in the industry through the Industry Benchmark Report.

For more see the Support Center Article: [How Do I Increase Shareholder Value?](#)

Gross Margin %

Gross Margin (or Gross Profit) is how much your company earned this year by making bikes and selling them.

$$\text{Gross Profit} = \text{Sales Revenue} - \text{Cost of Goods Sold}$$

$$\text{Gross Margin \%} = \text{Gross Profit} / \text{Sales Revenue} * 100$$

Gross Margin does not include Inventory Costs, Marketing Costs, Product Development, and Financial Costs.

A low Gross Margin % could indicate that your price is too low, your retail margins for distributors are too high, or that the Prime Cost of your products is too high.

For more see the Support Center Article : [How do I calculate Gross Margin?](#)

Advertising to Sales Ratio %

The Advertising to Sales Ratio is a measure of effectiveness of your Product Advertising and Brand Promotion.

$$\text{Advertising to Sales \%} = (\text{Advertising} + \text{Brand Promotion}) / \text{Sales Revenue}$$

A high Advertising to Sales Ratio means that your Advertising expenses were high relative to the sales generated.

Your Board of Directors anticipates that you may exceed this KPI slightly in the first few years as you are establishing your product range and build awareness for your products.

Stakeholder / Customer Satisfaction KPIs Overview

Stakeholders refer both to your customers, and any other people and organizations who are affected by the actions of your company.

Delivery Satisfaction %

Delivery Satisfaction refers to the percentage of customers who were happy with the length of time that they had to wait before they could buy a given product from a store. Delivery Satisfaction is a measure of Customer Satisfaction.

Customers that have to wait too long may decide to buy a competitor's product instead of waiting.

High [Lost Sales](#) and long [Manufacturing Cycle Times](#) result in long wait times and low Delivery Satisfaction.

You can reduce Lost Sales by producing more units and making more accurate Sales Forecasts. If you produce more units than you can sell and have Finished Goods Inventory at the end of the year, then your Delivery Satisfaction will be 100% because your bikes will be available in stores immediately.

But be careful you don't hold too much finished goods inventory because you also have an Inventory Level KPI.

You can improve Delivery Satisfaction when you do stock out by reducing your Manufacturing Cycle Time. You can reduce your Manufacturing Cycle Time with smaller batch sizes. But that will increase time wasted on batch setups and make it harder to meet your Production Utilization KPI unless you make a significant investment in Setup Time reduction.

Together, the Delivery Satisfaction % KPI and the Inventory Level KPI measure your ability to accurately forecast demand and satisfy customer demand without needing large amounts of finished goods inventory.

For more see the Support Center Article : [What is Delivery Satisfaction?](#)

CSR Rating (0-100)

Corporate Social Responsibility (CSR) is a concept which sees companies being responsible not only for profit maximization, but also to do what's best for people, the planet and society at large. Your CSR rating is a measure of how well your company integrates social and environmental concerns with its business operations.

Your CSR Rating is affected by your Social Responsibility decisions (under Brand Promotion) and Sustainable Manufacturing decisions (under Operations).

Brand Awareness %

Brand Awareness % is the proportion of the population who knows of your company and has a favorable impression of it.

Brand Promotion makes customers aware of your company and more receptive to your product advertising. This is especially cost effective when your firm has multiple products. You can also invest in Socially Responsible initiatives to help improve your community and the environment.

Brand Awareness is affected by your Brand Promotion decisions (Brand Ambassadors, Event Sponsorship, and Social Responsibility).

Innovation and Learning KPIs Overview

Quality Rating (0-100)

A high level of **Internal Quality** is attained through training of people, maintenance of machines, good supplier relations, and Quality Systems Technology. This corresponds to "quality at the source" and allows you to minimize the number of defective products you produce. ie. your Product Defect Rate (%).

External Quality (and your Quality Rating) is based on how your customers perceive your products. The more defective products that reach customers, the lower your Quality Rating.

So a high Quality Rating can be achieved either by investing in people and processes (Internal Quality) or by conducting extensive inspection to catch defects before they reach the customer.

Think carefully about which approach fits best with your strategy. You can quickly improve your Quality Rating by increasing inspection. But that can become very expensive to maintain as your sales grow unless you invest in improving your Internal Quality and reduce your Product Defect Rate.

For more see the Support Center Article : [Quality Decisions in MikesBikes Advanced](#)

Average Product Spec Rating (0-100)

It is important that you maintain some level of innovation in your product range to keep it competitive. Use the Development screen to improve your Bikes' Product Specs by upgrading them with new features.

Average Product Spec Rating = (Product1Spec + ... + ProductNSpec) / NumberProds

Eg. if you have a Road bike with Product Spec Rating of 85, a Mountain Bike with Product Spec Rating of 63, and a Kids Bike with Product Spec Rating of 50, then:

AverageProductSpecRating = (85 + 63 + 50) / 3 = 66

Important:

1. Think carefully about which markets are the most sensitive to Product Specs when choosing which products to develop and improve.
2. Cost Reduction does NOT change the Product Specs. Cost Reduction reduces the Prime Cost and SCU requirements for a product. This means you will not require as much capacity, and this may help you meet your Gross Margin % KPI. But it will not help you meet your Average Product Spec Rating KPI.
3. Improving the Product Specs for a product also increases the Prime Cost and SCU requirements. So you may need to increase capacity to handle the increased complexity.
4. New Products always start with Product Spec Rating = 50
So you will lower your average product spec rating slightly when you launch new products.

For more see the Support Center Article : [Product Development in MikesBikes](#)

Number of Products

You start the simulation with two products. But you can have up to 5 products if you want – ie. one for each market segment (Mountain, Road, Cruiser, Electric, and Kids).

In the Single-Player, you must have at least 3 products by the end of the simulation.

In the Multi-Player, you must have at least 4 products by the end of the simulation.

Your opportunity for greater sales, higher profits, and higher SHV increases as you launch more products.

However you will also need to invest more in Training, Maintenance, Setup Time Reduction, and Product Development to meet your other KPIs as you launch new products and expand your factory capacity. So think carefully about when it is a good time to launch a new product and consider the impact on your other KPIs.

Internal / Business Process KPIs Overview

Inventory Level (weeks)

*Inventory Level = (FinishedGoodsInv / CostOfGoodsSold) * 50 weeks per year*

Your Board of Directors wants you to manage your Inventory efficiently.

You should aim to keep no more than 6 weeks finished goods inventory.

You can improve Delivery Satisfaction by maintaining a stock of finished goods, so that deliveries flow smoothly to your customers. But having too many finished goods in stock ties up cash and incurs inventory storage costs.

Together, the Delivery Satisfaction % KPI and the Inventory Level KPI measure your ability to accurately forecast demand and satisfy customer demand without needing large amounts of finished goods inventory.

Workforce Productivity %

Workforce Productivity depends on Employee Happiness, Training, and Job Security. Happy, well paid, and well trained workers are more productive.

You can improve Employee Happiness by paying your workers more. That may drive your costs up, but as your productivity increases you will need fewer workers.

You can spend more time training your workers, but that will also affect your Production Utilization % and capacity available for production.

And be aware that if you significantly reduce capacity, that will also impact Employee Happiness as workers become concerned for their Job Security.

For more see the Support Center Article : [Human Resource Decisions in MikesBikes](#)

Production Utilization %

Your company has a lot of capital tied up in Factory Capacity. So you need to use it effectively.

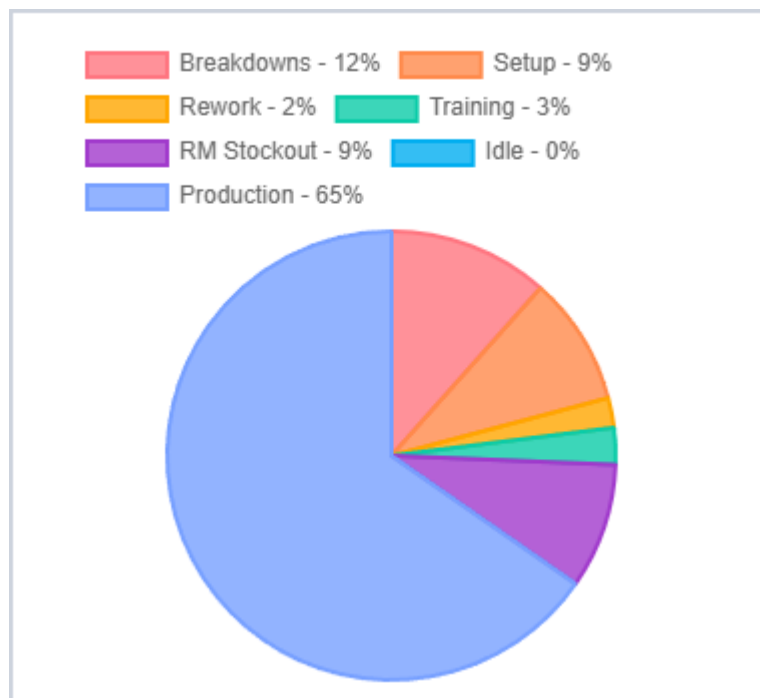
You need to accurately forecast demand to ensure that you have sufficient capacity to meet your production targets, but not so much that you have a lot of Idle time.

You can also waste a lot of capacity on things like Breakdowns, Raw Material Stockouts, Setups, and Rework.

Note that although time spent Training is not classed as Wastage, it is still time that your factory is not being used to manufacture bikes. So think carefully about how training your workforce will affect your Production Utilization KPI

The *Manufacturing Responsiveness Report* shows you how your factory capacity has been used each year.

The Operations Capacity and Process decision screens show a Forecast Capacity Usage chart based on your current decisions which estimates your capacity usage for the coming year.



The Simulation Interface

Top-Menu Navigation

The MikesBikes interface utilizes top-of-screen navigation with the following main menu items:

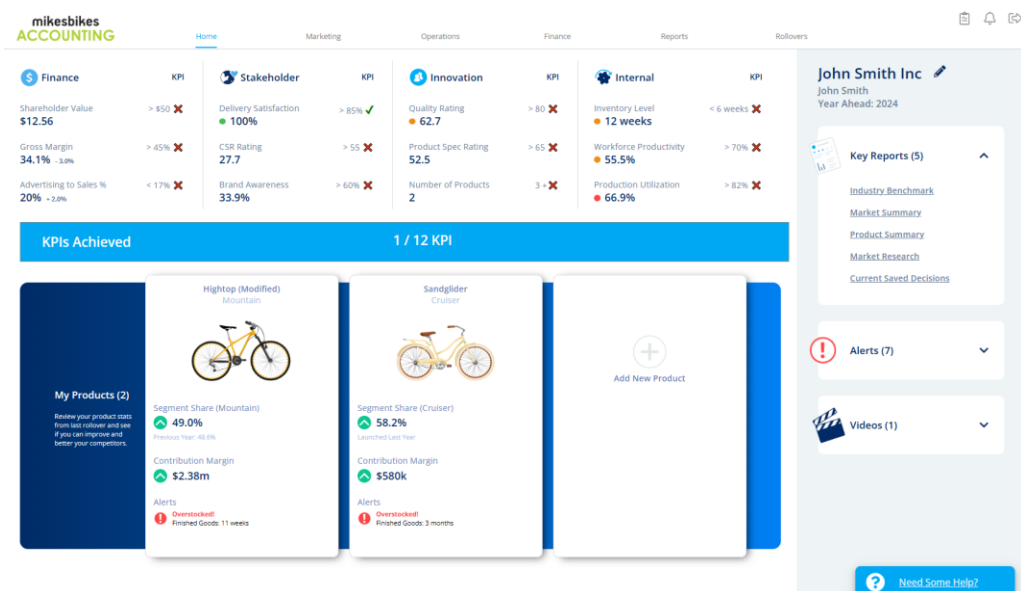
- **Home:** This first screen serves as your company dashboard.
- **Marketing:** Product, Distribution, and Brand Promotion.
- **Operations:** Factory Capacity, Human Resources, Process, Supply Chain, Quality, and Sustainable Manufacturing.
- **Finance:** Debt, Equity, and Dividend Decisions.
- **Reports:** Access all company and market reports.
- **Rollovers:** Process a rollover, rollback or restore (Single-Player only).

Press CTRL + M to return to the Top Menu from anywhere else in the application.

Home Screen

Your company's Home screen displays:

- Your company's name.
- The Year Ahead (the year you are making decisions for).
- A balanced scorecard displaying last year's finance, HR, market and internal results.
- The product carousel showing how your product/s performed last year. Click on the product square to go to the product's decision screen. You can also launch a new product by clicking the big + in the product carousel.
- Key reports for the industry and your company.
- Alerts (items of concern that you should look at resolving).
- Videos to help you make your decisions.



The Help Widget

A *Need Some Help?* tab features at the bottom right of all screens. Clicking on the tab expands the Help widget. You have the option to *Search* help articles, click on a screen-relevant *Frequently Asked Question*, view a screen-relevant *Suggested Video*, or *Contact Us* to send a message to the Smartsims Support Team.

You can also open the popup Help on each screen with the F1 key.

Top-Right Icons

At the top-right of the simulation interface there are three icons:



- 1. Saved Decisions:** Opens the *Current Saved Decisions* report so you can check all currently saved decisions. These are the decisions which will be processed at rollover.
- 2. Alerts & Notifications:** Brings back the initial on-login notifications which provides key results and information for making decisions for the year ahead.
- 3. Exit Simulation:** Exits the simulation interface and takes you back to the course page.

Decision Screens

Your company’s decision screens can be accessed through the top menu. Selecting the Marketing, Operations or Finance menu items will open their corresponding decision screens.

Example decision screen:

My Mountain Bike - Mountain (Existing)

Pricing & Sales Forecast
Enter your Retail Price and Sales Forecast

	Current Decision	Last Year
Retail Price (\$)	1,700	1,700
Sales Forecast (Units)	16,000	16,000

Production
Enter the required Production to meet your Sales Forecast

Production (Units)	16,000	16,000
Opening Inventory	1,000	
Units Available	17,000	

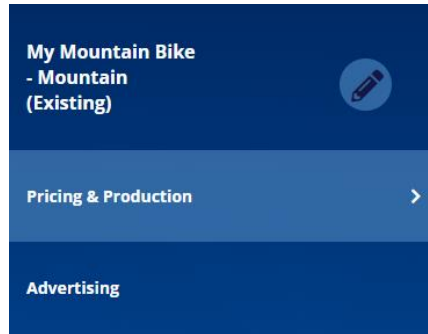
Forecast Profit: \$1.7m (-5%)
Forecast Cash: \$6.98m (+38%)

\$1,700 Market Average Price
16,000 Total Demand Last Year
100% Forecast Accuracy Last Year

Buttons: Undo Changes, Saved, Delete Product, Need Some Help?

LEFT-HAND MENU

Decision screens features a left-hand menu displaying the separate decisions available under each main menu.



CENTER DECISION COLUMN

The center column is where your decisions are located; a decision field with the currently entered decision and last year’s decision.

Pricing & Sales Forecast

Enter your Retail Price and Sales Forecast

	Current Decision	Last Year
Retail Price (\$)	<input type="text" value="1,700"/>	1,700
Sales Forecast (Units)	<input type="text" value="16,000"/>	16,000

Production

Enter the required Production to meet your Sales Forecast

Production (Units)	<input type="text" value="16,000"/>	16,000
Opening Inventory	1,000	
Units Available	17,000	

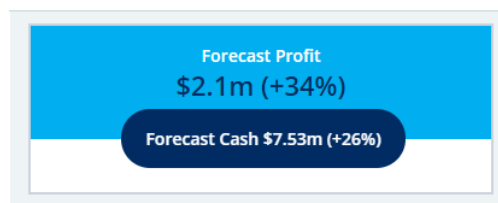
Most screens provide additional information below the decision field offering live feedback on the potential consequence of your decision.

RIGHT-HAND COLUMN

The right-hand column is designed to help you make well-informed decisions. It features:

1. The Live Forecast

The Live Forecast widget is located at the top-right of all decision screens:



The Forecast Profit and Cash figures are based on your currently entered decisions and update in real-time as you save decision changes on any screen. This enables you to see the impact of individual decisions on overall performance.

Click on the Live Forecast widget at any time to view your *Forecast Results Summary*. This displays forecast sales revenue, gross margin and income for the year ahead, including a comparison with actual results from last year.

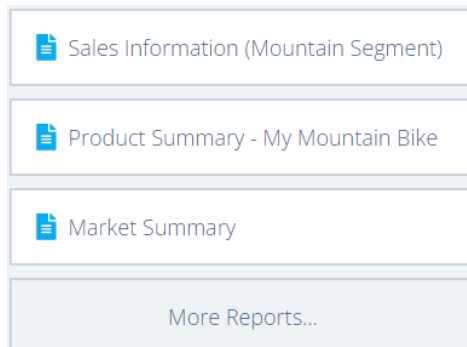
2. Screen-Relevant Information

Relevant key results from last year are displayed:



3. Screen-Relevant Reports

Relevant reports are listed, along with a *More Reports* link to the Reports menu:



Student Support

DIRECT EMAIL

The Smartsims Support Team is available to answer any questions you have by emailing: help@smartsims.com

CONTACT FORM

Submit a [Contact Us](#) form through the Smartsims website.

INTEGRATED HELP

All Smartsims Simulations feature popup help within the application. Simply click on the *Need Some Help?* tab on any screen to open the Help Widget, or press the F1 key.

SMARTSIMS SUPPORT CENTER

The [Smartsims Support Center](#) is our simulation knowledgebase. This enables you to receive an instant answer to your question by simply typing your question into the search field. Alternatively, you can also [Browse All MikesBikes Support Articles](#).

CHAPTER 2

Market Analysis

Company & Market Reports

The reports available through your Home page, decision screens and Reports menu provide you with all the information required to be a successful company.

You should start the simulation by reading these reports to get to know your company, customers, the markets, and your competitors. Then read them again after each rollover to see how effective your decisions were, and how your results compare to your competitors.

Your Company

You start the simulation taking charge of an existing bicycle manufacturing company in a competitive industry.

All companies begin the simulation with a two products, a moderately successful Mountain bike, and either a Cruiser (Single-Player), or Kids Bike (Multi-Player). These are sold through three distribution channels; Bike Shops, Sports Stores and Department Stores.

Your company is struggling and has a number of inefficiencies causing losses in your production capacity.

Your Competitors

In the Single-Player version you compete against a single computer-controlled opponent.

The Multi-Player version features four computer controlled opponents who are all more successful than you. Your challenge is to improve your position in the market while meeting all of your KPIs.

The Market Segments

This bicycle industry is categorized into five market segments; Mountain, Electric, Cruiser, Road and Kids bikes.

Mountain Bikes

Mountain bikes are designed for primarily for rough terrain and off-road use. They tend to have wide handlebars, suspension, and wide tires. Customers in this segment are focused on fitness and the outdoors. They want a bike that will go anywhere and everywhere. They are prepared to pay more for a bike that meets their needs.

Cruiser Bikes

A Cruiser bike is designed specifically for recreational use, popular at local parks and beaches. Easily identifiable by its low stance, wide raised handlebars, and a long wheelbase. This bike is all about style and comfort.

Cruiser bikes have a simple design which does not require complex parts or equipment. They often have a retro look with a simplified braking or gearing system to appeal to the casual rider.

Electric Bikes

Electric bikes (also known as e-bikes and electric assist bikes) amplify your pedaling power thanks to an electric drive system. There are many kinds of e-bikes, but all of them use an electric motor and battery to help you power your bike. Most have a controller that lets you choose the amount of power the system provides.

In MikesBikes, the Electric market mainly use their bikes for transport around the city and suburbs. They are looking for an economical and reliable replacement for more expensive and less eco-friendly transport options.

Kids Bikes

Kids bikes are designed to introduce cycling to kids. They are built for children aged 4 to 10 years old, but the purchase is made by their parents. From a parent's perspective the bike must be durable and stylish, but relatively inexpensive.

Road Bikes

Road bikes are designed for speed. They feature light frames, low handlebars and thin tires. Customers in this market are passionate about cycling and are looking for a performance edge to get to the front of the pack. They are not sensitive to price if you have a market leading bike.

Your Customers

Market research indicates there are seven key factors that drive a customer's decision whether to purchase your bike or a competitor's bike; Price, Awareness, Quality, Corporate Social Responsibility (CSR), Distribution, Delivery, and Product Specifications. In the simulation each of these correlates with a rating (0-100) displayed on your decision screens and reports. The *Market Summary* report lists all ratings for all products, therefore, enables you to compare your products against your competitors.

Not all factors are given equal weight by customers and the weighting differs by market (as indicated by Low, Medium and High on the tables below). You will need to identify which are more important to customers for the product/s you are selling to ensure your decisions are driving increased customer demand.

Retail Price

Retail Price is the price that customers pay at the store and in MikesBikes is set by the you the manufacturer.

Price is always relevant, but it is less important in some markets than others. For example, customers in the Road market are happier paying a higher price for the right product. Whereas those in the Kids market are very price sensitive, therefore, a change in price can have a larger impact on sales.

Segment	Sensitivity to Price
Mountain	Medium
Electric	High
Cruiser	Medium
Road	Low
Kids	High

Awareness

Awareness refers to the degree of knowledge that customers have about a product in the market. This is knowledge not only that the product exists, but also information about benefits, quality, price, design, and style; in particular as compared to its competitors.

In MikesBikes your product's awareness is a factor of both your Product Advertising expenditure and any Brand Promotion activities you have selected. This culminates in an Awareness rating.

Segment	Sensitivity to Awareness
Mountain	Medium
Electric	Medium
Cruiser	High
Road	Low
Kids	High

Quality

Quality refers to the level of customer satisfaction in your product based on finish, workmanship, and the rate of product defects. This is measured using a Quality rating out of 100 which applies to all your company’s products.

Your Quality Rating is a mixture of Internal Quality and External Quality.

A high level of Internal Quality is attained through training of people, maintenance of machines, good supplier relations, and quality systems technology. This corresponds to "quality at the source" and allows you to minimize the number of defective products you produce.

External Quality (and your Quality Rating) is based on how your customers perceive your products. So a high Quality Rating can be achieved either by investing in people and processes or by conducting extensive inspection to catch defects before they reach the customer.

Segment	Sensitivity to Quality
Mountain	High
Electric	Medium
Cruiser	Low
Road	High
Kids	Low

Distribution

Distribution (place) relates to the ability of the firm to make products accessible to customers through retail stores.

The number of stores that decide to stock your products will depend on the retail price, margin, unit sales history, and extra support offered.

Segment	Sensitivity to Distribution
Mountain	Medium
Electric	Low
Cruiser	Medium
Road	Medium
Kids	Medium

Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) is a concept which sees companies being responsible not just profit maximization but also to do what's best for people, the planet and society at large.

Your CSR rating is a measure of how well your company integrates social and environmental concerns with its business operations. In MikesBikes this relates to your Social Responsibility promotions (under Brand Promotion) and investment in Sustainable Manufacturing (under Operations). You can compare each company's CSR rating using the Market Summary report.

The higher priced markets are more concerned with knowing your company operates in a responsible and sustainable way.

Segment	Sensitivity to CSR
Mountain	Medium
Electric	Medium
Cruiser	Low
Road	High
Kids	Low

Delivery Time

This is a measure of the time taken for new stock to be made available in retail stores. This can be influenced by your [manufacturing cycle time](#) and finished goods inventory. Delivery Satisfaction refers to the percentage of customers who were happy with the length of time that they had to wait before they could buy a product from a store.

High Lost Sales and long Manufacturing Cycle Times result in long wait times and low Delivery Satisfaction.

Customers in some markets may be willing to wait for the right product to be available in store, while others demand immediate availability or will purchase a competing product. If you are selling in markets with a high customer sensitivity to Delivery Time you will need to consider the impact of delays to sales revenue.

Segment	Sensitivity to Delivery Time
Mountain	Low
Electric	Medium
Cruiser	High
Road	Low
Kids	High

Product Specifications

You can improve your bike’s Product Specifications through the Development screen by upgrading the bike components or adding accessories.

Your bike will be given a Product Spec Rating (out of 100) which shows how consumers perceive the design and/or technical features of your bike.

Customers in markets such as Road, Mountain and Electric will make their purchase based on the level of product specifications. Cruiser and Kids may consider this in their purchase, but it won’t be the determining factor.

Segment	Sensitivity to Product Specs
Mountain	Medium
Electric	Medium
Cruiser	Low
Road	High
Kids	Low

CHAPTER 3

Making Decisions

Start with a Plan

Before you embark on making decisions for your company you should start with a strategic plan. This process gives your company direction and makes it more likely you will be successful.

We recommend creating the following:

- 1. A Mission Statement**

A brief statement describing your business and its purpose.

- 2. A Vision Statement**

This is a forward-looking aspirational statement on what type of business or products you want your company to be known for.

- 3. Objectives**

Specific targets you intend to achieve within a defined time period.

- 4. Tactics**

Practical steps required to achieve your objectives.

Each year as you review your reports you should come back to these statements, objectives and tactics to see what is working and what is not. They can also be modified as you develop your strategy over time and learn more about your company, your customers, and the market.

Once you have a strategic plan you are ready to begin implementing your tactics through the functional decision areas of the company. These functions have been replicated through the top navigation menus:

- **Marketing:** Product Management, Distribution, and Brand Promotion decision screens.
- **Operations:** Factory Capacity, Efficiency, Quality and Sustainable Manufacturing decision screens.
- **Finance:** Debt, Equity, and Dividend decision screens.

Corporate & Product Identity

When you first open the simulation interface you are given the option to give your company a new name:



Your Company.

Name your company:

(You can edit your company's name at any time prior to the first rollover through the Home screen.)

As well as give your Mountain Bike a new name:



Your Bike.

Name your Mountain Bike:

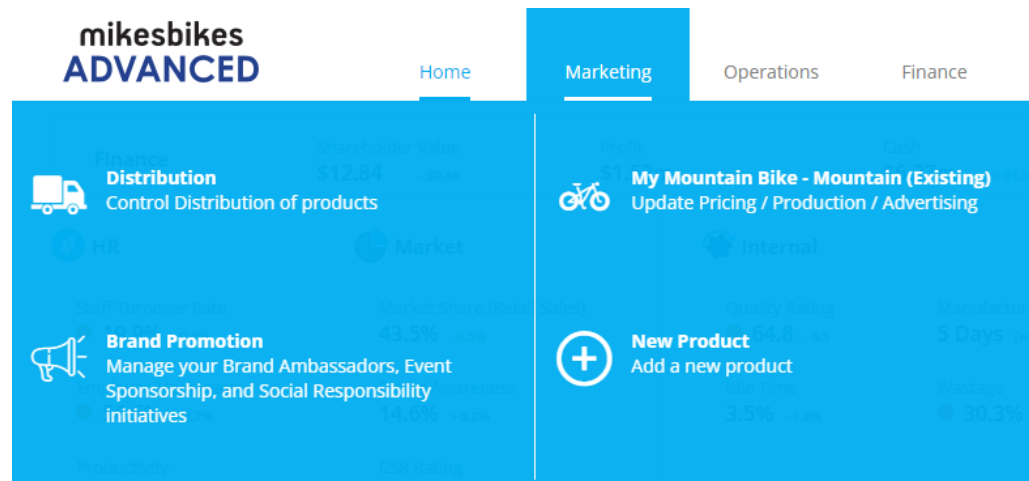
(you can edit your Mountain Bike's name any time prior to the first rollover through the Product screen.)

Marketing Decisions

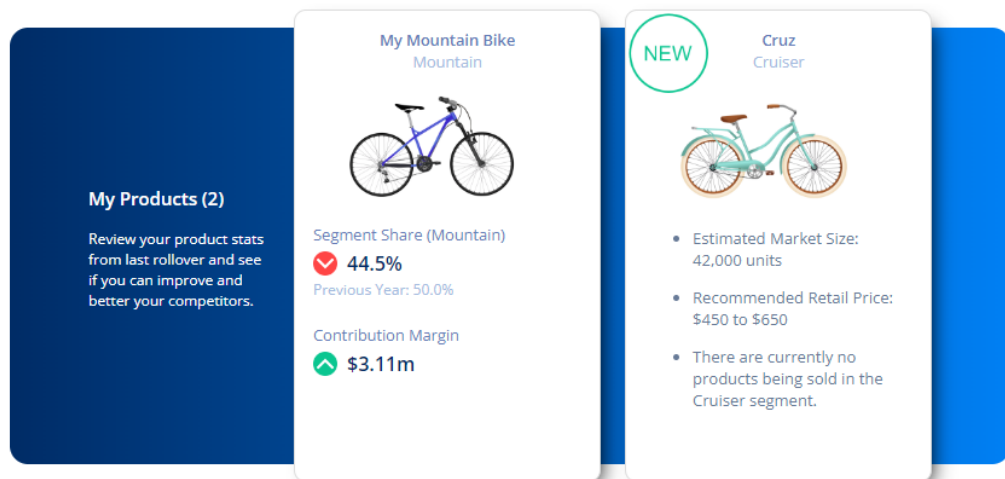
The Marketing menu is available through the top menu:

mikesbikes ADVANCED		Home	Marketing	Operations	Finance
Finance	Shareholder Value \$13.30	Profit \$1.79m	Cash \$5.06m		
HR	Market	Internal			

Selecting the Marketing menu displays links to the Distribution decisions, Product decisions and Brand Promotion:



You can also access your product decisions through the quick links on the Home page:



Product Management

Selecting your product will you are able to make the following decisions for each of your products:

- A suitable **Retail Price**.
- A realistic **Sales Forecast**.
- **Required Production** units to meet this forecast.
- Allocating your **Advertising** budget across the five media channels.

PRICING & PRODUCTION

The Pricing & Production screen is where you manage your product’s Retail Price, Sales Forecast and Production for the year ahead:

Pricing & Sales Forecast

Enter your Retail Price and Sales Forecast

	Current Decision
Retail Price	<input type="text" value="700"/>
Sales Forecast (Units)	<input type="text" value="20,000"/>

Production

Enter the required Production to meet your Sales Forecast

Production (Units)	<input type="text" value="20,000"/>
Opening Inventory	0
Units Available	20,000

Retail Price

Retail Price is the price that you instruct your retailers to sell your product for.

Your pricing changes should be aligned to your current strategy and coordinated with other decision areas. For example, a decrease in price will usually require additional production and possibly factory capacity. Pricing is one of the more influential decisions on sales and profit, so changes should be well thought through.

Learn more about [Pricing Strategy in MikesBikes](#).

Sales Forecast

A Sales Forecast is an estimate of how many units (bikes) you think you will sell over the coming year.

Your sales forecast should be made based on previous year’s demand, plus any changes based on the estimated impact of your current decisions.

Learn more about [How to Forecast Sales in MikesBikes](#).

Production

Production quantity must be specified to ensure your factory produces sufficient units to meet your sales forecast for the year ahead.

Your production decision should be Sales Forecast *minus* any Opening Inventory (stock remaining from last year).

Produce too much stock and you will be charged large warehousing costs, produce too few units and you will have lost sales. However, you may want to consider adding a small number of units to act as a stock buffer to cope with fluctuations in demand and improve delivery responsiveness.

If you do not have sufficient factory capacity to satisfy required production you will need to purchase additional SCU through the Capacity decision screen.

ADVERTISING (MARKETING)

There are five media channels to allocate your advertising budget across:

Media	Current Decision
Search (\$)	250,000
Digital Video (\$)	250,000
Social Media (\$)	250,000
TV (\$)	250,000
Print (\$)	250,000
Total (\$)	1,250,000

Search

Search places paid advertisements within organic internet search results (examples: Google, Bing, Yahoo).

Your company’s advertisements will be shown when users type relevant keywords and phrases into their favorite search engine, enabling you to reach a very targeted audience.

Digital Video

Digital video services allow viewers to watch on-demand content without charge (examples: Youtube, Hulu).

As the service is free, paid advertisements are played before, during or after the streaming content. Advertisements can be accurately targeted based on the viewer’s viewing preferred genres.

Social Media

Social media platforms enable users to connect and share their stories with others (examples: Facebook, Instagram, Twitter).

These platforms provide companies with the ability to integrate paid advertisements within the user’s news feed. Very specific audience targeting is achieved based on the user’s interests.

Television

Television (TV) advertising on cable and free-to-air broadcasts is still one of the most effective methods of reaching a large audience.

Live viewers do not have the ability to skip advertisements, so your promotional content is seen by most of the viewing audience.

Print

Print advertising covers promotional content featured in magazines, newspapers, direct mail and out of home advertising (e.g. billboards, signage).

Print media covers a wide range of audiences including specialist bike and outdoor magazines.

Advertising Media Viewing Habits

To get the most out of your advertising budget you will need to know the media viewing habits for each market (which media customers watch). Then, combine this with Advertising Reach (what percentage can be reached for a given spend). This provides an optimal advertising mix across the channels, as well as how much to spend on each.

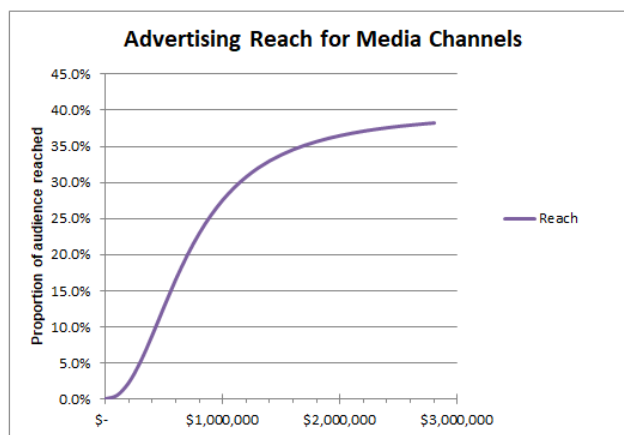
Your customer’s media viewing habits are displayed in the table below:

Segment	Search	Digital Video	Social Media	TV	Print
Mountain	35%	25%	45%	25%	15%
Road	50%	25%	20%	20%	30%
Kids	20%	50%	15%	35%	25%
Electric	10%	25%	30%	50%	30%
Cruiser	25%	45%	20%	35%	20%

Note: Each row will add to more than 100% as people watch multiple media channels.

Advertising Reach

The Advertising Reach chart shows the proportion of the viewing audience that can be reached in each media channel at different levels of expenditure.



For example, an investment of \$1.2m in any channel will reach approximately 30% of the audience. Then by looking at the Media Viewing Habits table above, we can see that for the TV media channel this would reach $30\% * 35\% = 10.5\%$ of the Kids market, and $30\% * 25\% = 7.5\%$ of the Mountain market.

Note that the curve is initially steep, up to about \$1.5m expenditure (per channel). However, beyond that the curve flattens so the increase in audience reached becomes less as you spend more.

Advertising Performance / Awareness

The effectiveness of your advertising budget and allocation (mix) is measured by a product-specific Awareness rating. This is the awareness of your product in the minds of customers. You can track your product's Awareness % and compare with competitors on the *Market Summary* report.

Note that Brand Promotion makes customers aware of your company, and therefore more receptive to your product advertising. This helps to increase your product awareness.

Development

You can modify the design of your Mountain Bike through a the Development menu:

My Mountain Bike
- Mountain
(Existing)

Pricing & Production

Advertising

Development >

Development

You can only select one upgrade for your product OR choose to reduce cost each rollover

	Dev Cost	Specs
No Change	\$0	50
Wheels	\$500k	59
Brakes	\$400k	57
Tires	\$300k	55
Suspension	\$750k	62
Frame	\$1.5m	67
Cost Reduction	\$500k	50

No Change

Do not do any product improvements this year.

Development Cost: \$0

Product Spec Rating: 50 (no change)

Prime Cost: \$300.00 (no change)

SCU: 1.00 (no change)

Through the button list you have the option of making no change, investing in one of five product improvements, or conduct a cost reduction:

	Dev Cost	Specs
No Change	\$0	50
Wheels	\$500k	59
Brakes	\$400k	57
Tires	\$300k	55
Suspension	\$750k	62
Frame	\$1.5m	67
Cost Reduction	\$500k	50

Important: Only one option can be chosen each year.

Apart from *No Change*, all other options incur a development cost.

Product improvements boost your bike’s spec rating, but also require additional prime cost (cost of production) and SCU (factory capacity) to produce:



Hydraulic Disc Brakes

Hydraulic disc brakes give precise, effortless stopping power and control on those steep downhill and handle mud and water much better.

Development Cost: \$400k

Product Spec Rating increases from 50 to 57

Prime Cost increases from \$300.00 to \$312.00 per unit.

SCU increases from 1.00 to 1.04 per unit.

The Cost Reduction option doesn't change your product's spec rating but decreases both your product's prime cost and the required SCU to produce it:



Cost Reduction

Reduce the production cost of your product by improving the efficiency of your production process, and by using fewer or cheaper raw materials

Development Cost: \$500k

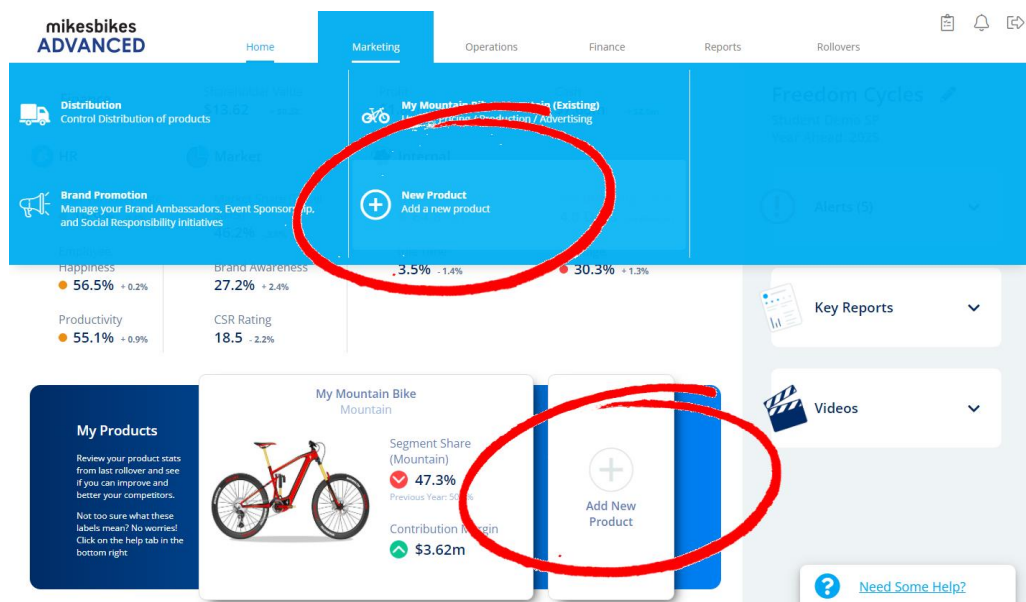
Product Spec Rating: 50 (no change)

Prime Cost decreases from \$300.00 to \$270.00 per unit.

SCU decreases from 1.00 to 0.90 per unit.

Add New Product

You can launch a new product through either the Marketing top menu or your company's Home page:



The New Product screen enables you to add a second product in either the Kids, Road, Electric or Cruiser markets:

New Product

Choose which market you want to create a new product for

Market	Size (Units)	RRP
Kids	53,000	\$375
Road	6,100	\$3,950
Electric	26,000	\$1,000
Cruiser	42,000	\$550

Clicking on one of the market options displays information on the market segment, launch cost, recommended retail price, estimated market size, product specification rating, prime cost and SCU per unit to produce.



Road

Road bikes are designed for speed. They feature light frames, low handlebars and thin tires. Customers in this market are passionate about cycling and are looking for a performance edge to get to the front of the pack. They are not sensitive to price if you have a market leading bike.

There are currently no products being sold in the Road segment.

Launch Cost: \$1.00m

Recommended Retail Price: \$3700 to \$4200

Estimated Market Size: 6,100 units

Product Spec Rating: 50

Prime Cost: \$420.00 per unit

SCU: 1.40 per unit

All new products will cost you \$1m and may require you to increase your factory capacity. However, increasing your product range is key to future success.

Choose a product name and color then click *Save*. Your new product will now be available under the Marketing menu and on your company’s Home page. You will then be able to make decisions for your new product.

Delete Product

If you have launched a new product by mistake or simply need to consolidate your product range, a product can be deleted through the Product screen by clicking on the *Delete Product* button at the bottom left of screen.

Any existing inventory will be dumped and incur a dump cost.

Distribution (Marketing)

The Distribution screen enables you to set a Retail Margin and provide Extra Support for each of the three distribution channels; Bike Shops, Sports Stores and Department Stores.

Channel	Factor	Current Decision
Bike Shops	Margin %	<input type="text" value="50"/>
	Support (\$)	<input type="text" value="100,000"/>
Sports Stores	Margin %	<input type="text" value="50"/>
	Support (\$)	<input type="text" value="100,000"/>
Department Stores	Margin %	<input type="text" value="35"/>
	Support (\$)	<input type="text" value="100,000"/>

Retail Margin is the percentage of the retail price retained by distributors. A bicycle sold for \$1,800 with a retail margin percentage of 45% means the distributor earns \$810 on the sale and you as the manufacturer has a wholesale price of \$990.

Maintaining retail margins at the initial percentages will encourage distributors to sell your bikes, however you earn less on each sale. Ideally you will be able to generate consumer demand for your products, enabling you to decrease retail margins and increase your company’s wholesale revenue. Be careful as margins that are too low can result in stores stocking your competitor’s bikes over yours.

Extra Support provides additional return to your distributors. These take the form of product training, special promotions, point of sale displays, and extra sales staff training on your products.

DISTRIBUTION CHANNELS

Vendors of bikes can be broken into three categories: Bike Shops, Sports Stores and Department. A brief description of each channel is given below.

Your company uses three distribution channels; Bike Shops, Sports Stores and Department Stores. These retailers keep a retail margin (a percentage) on each bike they sell. The table below shows the proportion of customers who purchase through each distribution channel:

Retail Channel	Bike Shops	Sports Stores	Department Stores
Mountain	40%	50%	10%
Kids	20%	20%	60%
Road	85%	15%	0%
Electric	10%	30%	60%
Cruiser	20%	40%	40%

Bike Shops

The bike shop is a specialty store dedicated to bicycles and bike-related products. Store assistants are trained bike specialists. People unsure of which bike to buy will usually go to a bike shop as staff tend to be enthusiasts themselves.

Bike shops generally stock more bikes in the mid to high price range and require a higher retail margin.

Sports Stores

Sports stores stock a wide range of sporting equipment including bikes. The staff at these stores are not as knowledgeable on technical aspects of each bike but can match a customer to the bike that meets their needs.

Consumers who buy from these stores generally know what they are looking for in a bike but not particularly a specific brand. As such, may be more inclined to choose a competitor’s bike if it is in stock and/or at a cheaper price.

Department Stores

Department stores (chain retailers) stock a wide range of products across all consumer goods, from refrigerators and televisions to apparel and kitchenware.

Their staff are not as informed about specific products or the bicycle industry, but they have the largest customer base. They typically stock low to mid-priced bikes, sell in high quantities and so generally require less retail margin. Customers often do not have a definite product in mind, so will purchase based on the bike with the best in-store appeal.

DISTRIBUTION PERFORMANCE

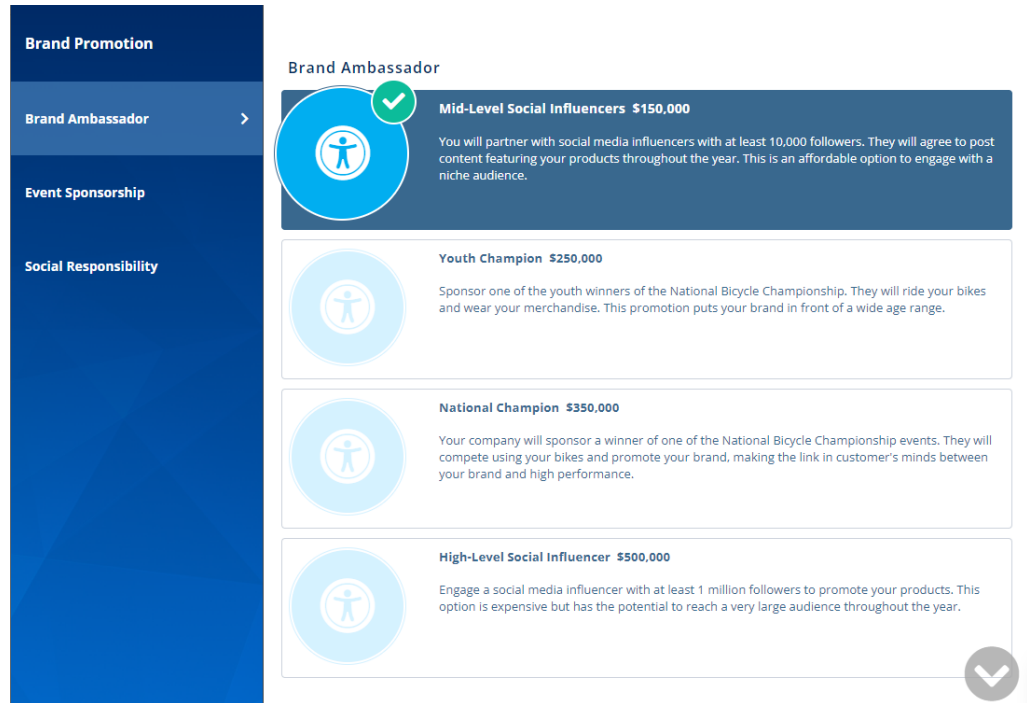
Distributors want to stock products that provide them with a high level of return. They receive this return through a combination of total sales revenue, retail margins and extra support. The effectiveness of your distribution strategy is represented by a Distribution rating.

The *Market Summary* report displays your company Distribution rating where you can compare this to your competitor’s rating.

Brand Promotion

Brand Promotion decisions are available under the Marketing menu.

You will the opportunity to invest in Event Sponsorship, Brand Ambassador, and Social Responsibility promotions:



Brand Promotion makes customers aware of your company and more receptive to your product advertising. This is especially cost effective when your firm has multiple products. You can also invest in Socially Responsible initiatives to help improve your community and the environment.

Important: You can select more than one option on the Brand Promotion screens. However, remember to check the Live Forecast to see if your company can afford multiple options.

BRAND AMBASSADOR

Brand Ambassadors are well known celebrities, sports people, or social media stars who are paid to endorse and promote your brand to their fans or followers in a positive way.

Choose one or more Brand Ambassadors:

- Mid-Level Social Influencers (\$150,000)
- Youth Cycling Champion (\$250,000)
- National Cycling Champion (\$350,000)
- High-Level Social Influencer (\$500,000)

Brand Ambassadors help to increase your Brand Awareness.

EVENT SPONSORSHIP

Investment in Event Sponsorship places your brand in front of those attending local, state, or national events.

Choose one or more events to sponsor:

- Local Fun Ride (\$100,000)
- State Bike Festival (\$200,000)
- National Bicycle Convention (\$300,000)
- National Cycling Championship (\$600,000)

Brand Ambassadors help to increase your Brand Awareness.

SOCIAL RESPONSIBILITY

Social Responsibility choices create positive change for the people in your community and for the environment. You can choose one or more of these options:

- Bikes in Schools (\$115,000)
- Bikes4Good Charity (\$300,000)
- Bicycle Advocacy (\$400,000)
- Carbon Offset Tree Planting (\$500,000)

These choices help to increase your company's CSR Rating and Brand Awareness (although they are less effective at increasing Awareness than Brand Ambassadors and Event Sponsorship). Social Responsibility expenditure combines with your Sustainable Manufacturing expenditure to give your CSR Rating.

Operations

The Operations menu will provide you access to the following decision screens:

- **Factory Capacity**
- **Human Resources**
- **Process**
- **Supply Chain**
- **Quality**
- **Sustainable Manufacturing**

Factory Capacity (Operations)

The Factory Capacity decision sets the maximum production capacity of your factory, measured in Standard Capacity Units (SCU).

Each product requires a certain number of SCU to produce. The table below shows the SCU required per bike for the first year of the simulation.

Market Segment	SCU per Bike
Mountain	1.0 SCU per bike
Kids	0.25 SCU per bike
Road	1.4 SCU per bike
Electric	0.6 SCU per bike
Cruiser	0.35 SCU per bike

Note: A product improvement increases the required SCU per Bike, while a Cost Reduction reduces it.

Each year you can either purchase additional SCU or sell existing SCU:

Factory Capacity

Buy or Sell Plant Capacity (SCU - Standard Capacity Units)

Buy SCU
 Sell SCU

Cost of New Plant (\$)

Factory Capacity (SCU)

The cost to purchase additional capacity is \$160 per SCU and you can purchase up to a maximum of 25,000 SCU per annum.

Factory capacity can be sold at the end of any period. The sale price of each SCU will differ depending on the age of the plant and how well it has been maintained. Any difference between sale price and book value will be reported in your accounts as either a loss or gain on sale (see the *Factory Overhead Allocation Rates* report).

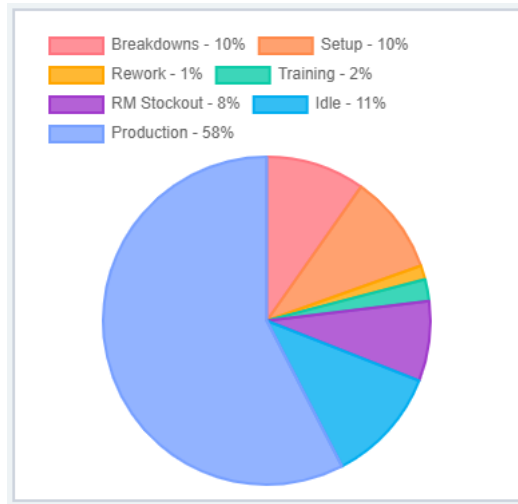
Note: Plant is depreciated in the annual accounts using the diminishing value method, at a rate of 20% per annum.

FACTORY CAPACITY WASTAGE

Your factory’s capacity is lost to several wastage factors:

- **Breakdowns:** Line stoppages because of plant breakdowns.
- **Rework:** Time spent reworking defective units instead of producing units.
- **Raw Material Stock Outs:** Line stoppages due to unavailability or poor quality of raw materials.
- **Set-ups:** Stoppages due to having to perform machine set-ups between batches.
- **Training:** Time lost because of worker involvement in training or improvement groups.

You can track maximum potential factory capacity and wastage factors through the forecast capacity usage pie chart on the right-hand side of the Capacity decision screen:



The other two factors on the pie chart are production (time spent actually producing bikes) and idle time (time that your factory did nothing). More details can also be found in the *Manufacturing Responsiveness Report*.

As you decrease wastage your usable factory capacity increases. In general, your goal should be to achieve a production percentage of at least 80%. This will require effective process decisions to minimize idle time.

Human Resources (Operations)

The Human Resources screen enables you to set the average salary level for your staff and the number of hours allocated each year for training your workforce.

AVERAGE SALARY

You will need to set the average salary amount which will be paid to your workforce for the year ahead:

Average Salary (\$)	40,000
Total Workers	62
Total Salaries (\$)	2,480,000
Staff Turnover Rate (%)	19.9 %
Employee Happiness (%)	56.5 %

The average salary level you set will affect not only your bottom line but also worker motivation and effectiveness. Workers are more motivated and productive when they are paid more and when they are well trained.

Poorly motivated and poorly trained workers can contribute to significant staff turnover. That becomes expensive because each worker that is replaced costs \$6000 to replace and each new worker arrives with a low level of training.

TRAINING

You must decide how much time each worker spends training for their role. This is measured in number of hours per annum.

Training (hours per worker)	40
Training Expenses (\$)	80,160
Skill Rating	53.7
Productivity (%)	55.1%
Product Defect Rate (%)	3.75%

While training has the negative impact of taking staff away from day-to-day tasks, in the long-term it will increase the skill level of these workers making them more productive so you will require fewer workers to run your factory. In addition, training reduces the number of defects produced so will improve your internal quality.

Your factory operates for 2000 hours per year. So, if you provide your workers with 100 hours of training then that will use 5% of your factory's productive capacity. However be aware that this is a long term investment and it may take you several years and a few hundred hours of training to develop a highly skilled workforce.

Process (Operations)

The process decision screen is where you will set your average batch size, your setup time reduction expenditure, and how much you want to spend on preventative maintenance.

Maintenance is another factor in your internal quality as well maintained machines maintain their tolerances better and produce fewer defective products.

Batch Size (units)	200
Setup Time Reduction (\$)	20,000
Manufacturing Cycle Time	5 days
Capacity Wasted on Batch Setups	11.3%

Maintenance (\$)	500,000
Capacity Wasted on Breakdowns	9.5%
Product Defect Rate (%)	3.75%

BATCH SIZE

Batch size reflects the average quantity of bikes produced in a single manufacturing run.

Larger batch sizes reduce the number of setups and hence increase available capacity. However, this comes at the cost of increasing factory lead-time and potentially delivery times. Conversely, smaller batch sizes increase setup time but reduce delivery times. The predicted Manufacturing Cycle time for your factory will update as you save your new batch size decision.

SETUP TIME REDUCTION

Expenditure on setup time reduction goes into developing more efficient procedures for setting up manufacturing batches and updating your plant to facilitate quicker changeovers.

Investment in setup time reduction increases effective capacity and enables you to run smaller batch sizes.

PREVENTATIVE MAINTENANCE

Preventative maintenance expenditure is the aggregate amount spent on servicing your plant machinery to reduce breakdowns and ensure maximum run time.

Preventative maintenance will also serve to reduce the number of product defects and so improves your internal quality. In addition, adequate maintenance also serves to maintain the resale value of your machinery if you ever need to sell capacity.

Note that as you increase your factory capacity, more expenditure is required to maintain the same level of maintenance.

Supply Chain (Operations)

The supply chain is a logistics system for converting raw materials into finished goods. As a manufacturer you must source raw materials from your suppliers to begin the production process.

Under the Supply Chain menu you will be setting an amount spent on Supplier Relations and the amount of Raw Materials Inventory you would like to maintain:

Supplier Relations (\$)	30,000
Raw Materials Inventory (weeks)	2
Supplier Relations Rating	51.1
Capacity wasted on Raw Material Stockout	9.1%
Product Defect Rate (%)	3.75%

SUPPLIER RELATIONS

Investment in supplier relations improves the delivery and quality of raw materials to your factory.

Expenditure is directed at improving contracts with suppliers, improving communication systems between suppliers and your factory, paying incentives to suppliers and expedient transport options.

Investing in supplier relations reduces raw material stockouts, therefore, reducing manufacturing stoppages. Note that the level of accumulated supplier relations deteriorates over time.

Good Supplier Relations is also another important factor in improving your internal quality as a consistent supply of higher quality raw materials will help to reduce product defects.

RAW MATERIALS INVENTORY

You will also decide the level of raw materials you require your factory to keep on hand at any given time. This is expressed in weeks of production.

Raw materials inventories provide a buffer to protect against current or unforeseen issues with suppliers to ensure there are sufficient materials to cover demand.

Keep in mind that this does incur a warehousing cost. So as your Supplier Relations Rating improves you could lower stocks of raw materials.

Quality (Operations)

The quality of your finished products is determined by both internal quality decisions and a final external quality check.

Internal quality relates to the level of Quality Systems Technology implemented in your factory. Internal quality is also affected by the Average Salary and Training Hours of staff. Preventative Maintenance and Supplier Relations affect the number of defects resulting from machinery. These factors combine to give you a product defect rate.

External quality is determined by the proportion of finished bikes that are inspected before leaving the factory (Inspection Rate). This gives your company a Quality rating.

QUALITY SYSTEMS TECHNOLOGY (INTERNAL QUALITY)

Investment in quality systems requires installing specialist equipment to monitor the manufacturing process and identify product defects at the source.

Quality Systems Technology (\$)	250,000
Quality Systems Rating	68.6
Product Defect Rate (%)	3.75%

This technology is expensive but is most cost-effective for high production volumes.

INSPECTION RATE (EXTERNAL QUALITY)

Once your bikes have been produced, a final quality control inspection identifies product defects before they reach the customer. Not every product is checked, but instead a sample percentage is inspected.

Inspection (% of units)	15
Inspection Cost (\$)	1,529,163
Warranty Rate (%)	1.37%
Quality Rating	64.8


Keep in mind that a high inspection rate is expensive as production volumes climb, but inspection levels will have an immediate impact on your Quality rating.

Sustainable Manufacturing (Operations)

Sustainable Manufacturing is a process which aims to produce goods with minimum wastage, energy, and natural resources, while maximizing benefit to employees.


You can choose one or more Sustainable Manufacturing options:

Sustainable Manufacturing




Recyclable Packaging \$145,000

Your company will adopt all recyclable materials in your product packaging. This minimizes waste reaching landfill and makes customers feel good about their purchase.




Bio-degradable Lubricants \$325,000

Many lubricants and cutting fluids used during the manufacturing process are highly toxic and hard to dispose of. Using bio-degradable lubricants greatly reduces the harm to factory workers and the environment.



Capture Hazardous Waste \$425,000

Manufacturing processes like Painting and Carbon Fiber fabrication use toxic chemicals and produce hazardous fumes and dust. Capture these harmful by-products during manufacture to improve worker safety and reduce your environmental impact.



Sustainable Materials \$550,000

Your bikes will use sustainable materials such as sustainably-sourced steel, and recycled aluminum and carbon. This means production of new bikes has a significantly less impact on the environment.

Important: You can choose multiple options. Click on an option to select or deselect it.

Relevant information and reports are available on the right-hand side of your screen:

\$145,000
Sustainability Expenditure

20.0
CSR Rating Last Year

20.0%
Industry Average CSR Rating


CSR Summary


Factory Report


Market Summary

More Reports...

Sustainable Manufacturing expenditure combines with your Social Responsibility expenditure (under Brand Promotion) to give you a CSR rating. Your Sustainable Manufacturing choices do not affect your Brand Awareness.

Also note that the cost of your Sustainable Manufacturing options increases as you increase the size of your factory and buy more capacity. For example, if you double your factory capacity, then the cost of the sustainable manufacturing options will also double. So remember to keep checking your Live Forecast at the right of the screen to ensure that you can afford your selections.

Finance

The new decisions available this year are:

- **Debt**
- **Equity**
- **Dividend**

Debt (Finance)

All companies start with existing Debt of \$1.8m. The Debt screen enables you to either *Raise* additional debt or *Repay* existing debt.

<input checked="" type="radio"/> Raise (\$) <input type="radio"/> Repay (\$)	500,000
Total Long Term Debt (\$)	1,500,000
Debt / Equity Ratio	0.228
Interest Rate (%)	5.00
Annual Interest (\$)	75,000

Raising additional debt (cash) can be done to finance expenditure, such as product development or increasing factory capacity. However, this does come with an annual interest cost. Alternatively, you can repay some or all your existing debt to improve your [Debt/Equity Ratio](#).

Equity (Finance)

All companies start with an existing balance of two million issued shares. The Equity screen enables you to either *Issue* additional shares to the public or *Repurchase* shares.

<input type="radio"/> Issue (\$) <input checked="" type="radio"/> Repurchase (\$)	100,000
Book Equity (\$)	8,145,842
Market Capitalization (\$)	15,989,725
Debt / Equity Ratio	0.186
Number of Shares	993,746

Issuing shares raises additional cash to fund decisions. However, this does have a negative impact on shareholder value. Whereas, repurchasing shares can be expensive, but by reducing the number of issued shares you will increase their value.

Dividend (Finance)

The Dividend screen enables you to pay a dividend to your shareholders.

Dividend (\$)	1.20
Number of Shares	993,746
Total Dividend Paid (\$)	1,192,495

A dividend is an annual payment to provide a return on your shareholder’s investment in your company. The dollar amount paid is per outstanding share. Paying dividends can be costly, but it has a direct positive impact on Shareholder Value.

So if for instance you pay a dividend of \$1 per share, and you have two million shares issued, then you would pay a total of 2 million dollars in dividend payments.

CHAPTER 4

Reporting

Report Shortcuts

Company Home Page

Your company's Home page features shortcuts to your key reports:

Industry Benchmark: Compare key financial metrics against other companies in your industry; including Shareholder Value, Sales, Gross Margin, Profit and Cash.

Market Summary: Summary of the performance of all your products in comparison to your competitors.

Product Summary: The income, costs, and profit for each of your products.

Market Research: Key market research information covering market segments, customers, distributors, and operations. The information in this report is essential for making effective and competitive decisions.

Saved Decisions: Your currently saved decisions for the year ahead.

Takeover Summary: If takeovers have been enabled, then this shows all bids that were accepted or rejected and changes of ownership of companies.

Top-Right Icons

At the top-right of the simulation interface the two icons below are shortcuts:



1. **Saved Decisions:** Opens the *Current Saved Decisions* report so you can check all currently saved decisions. These are the decisions which will be processed at rollover.
2. **Alerts & Notifications:** Brings back the initial login pop-up notifications which provides key results and information on making decisions for the year ahead.

Live Forecast

Click on the Live Forecast widget at any time to view your *Forecast Results Summary*. This displays forecast sales revenue, gross margin and income for the year ahead, including a comparison with actual results from last year.

For more see the support article on [how to use the Live Forecast in MikesBikes Advanced](#).

Reports Menu

The Reports menu provides you with access to all your company's reports. Once selected, the left-menu categorizes reports according to the headings below.

Key Reports

Industry Benchmark: Compare key financials of your company and your competitors; including Shareholder Value, Sales, Gross Margin, Profit and Cash.

Market Summary: See how your product(s) are performing in comparison to others in the industry.

Product Summary: The key results for your product(s).

Manufacturing Responsiveness: Summary of your factory capacity, capacity usage, and production process by year.

Manufacturing Quality: The key quality metrics and expenditures that combine to give your Quality Rating each year, including historical results.

Market Research: Important market information covering market segments and customers.

Forecast Results Summary: View forecast sales revenue, gross margin and income for the year ahead; including a comparison with actual results from last year.

Market Share: A pie chart showing market share for each company in the industry.

Current Saved Decisions: All of your currently saved decisions for the year ahead.

Marketing

Market Research: Important market information covering market segments and customers.

Market Summary: See how your product(s) are performing in comparison to others in the industry.

Product Summary: The key results for your product(s).

Market Share: A pie chart showing market share for each company in the industry.

Distribution Summary: View consumer shopping habits by market segment and your own distribution results.

Operations

Product Summary: The key results for your product(s).

Manufacturing Responsiveness Report: A summary of your factory capacity, capacity usage and production process by year.

Manufacturing Quality Report: The main quality metrics and expenditures that combine to give your Quality Rating each year.

All Firms Quality Ratings: A line chart comparison the quality indexes for all companies in the industry.

Finance

Income Statement: Sales revenue and costs of goods sold, finally calculating your Net Income (or loss). Also known as a Profit and Loss (P&L) Statement.

Balance Sheet: Statement of financial position, listing assets, liabilities and owner's equity.

Cashflow Statement: Statement of cashflows listing incoming and outgoing funds.

Equity Movements Statement: Details the change in owner's equity, including changes in share capital, dividends paid, retained earnings and other reserves.

Economic Value Statement (EVA): EVA is a financial metric which views the business as an investment which must produce a certain return on the capital invested in it. If it produces more than the required return, then the difference is the economic value created or added (EVA).

Finance Information: View finance related costs and decision limits.

Forecast Results

Forecast Results Summary: Forecast sales revenue, gross margin and income for the year ahead, including a comparison with actual results from last year.

Forecast Income Statement: Based on currently entered decisions, a comparison of your forecast income statement against last year's income statement.

Forecast Cashflow Statement: Based on currently entered decisions, a forecast of incoming and outgoing cash for the year ahead.

Historical Reports

A selection of key reports for each past year of the simulation.

Search

The search feature enables you to conduct a keyword search across all reports.