

*Focus on Practice Operations Management:
Gaming to Motivate Students*

Welcome!



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Simulation Overview & Introduction

James Abbey



What's the Game's Purpose?

This simulation puts **you in charge** as a facility manager responsible for strategic sourcing, marketing, financials, and operational decisions for a clothing manufacturing company.

As the simulation demonstrates, *operations is the engine that drives a business.*

Play begins with an overview of the heart of that operational engine – managing the production process.

You must evaluate contracts, customer specifications, and resulting human resources, sourcing/receiving, production, and logistics processes.

In order to grow the business, you get to choose which new contracts to pursue and then optimize the commensurate receiving, production, and shipping departments accordingly.

As the business grows, you must balance the costs of operations with the challenge of meeting your contractual demands.

Customer satisfaction is a significant metric for success and influences your profitability in the game.

At the end of the day, the highest profitability, meeting customer demands on-time, and achieving a high customer satisfaction score combine to form your overall grade.



The Simulation is an End-to-End

Human Resources

Marketing (Client Management, Forecasting, and Bidding for Contracts)

Procurement of Raw Material Inventory (Sourcing)

Statistical Quality Control

Production Line Design and Execution (Process and Manufacturing)

Logistics and Delivery

Experience

Requires more **holistic thinking and application** of multiple learnings, such as Capacity Management, Process Analysis, Inventory, Forecasting, Breakeven Analysis, and more.

Module 6: Maximize Net Worth

Reputation

★★★★

Reputation Score

100

Goal: Maximize Net Worth

Completed Contracts
0

Current Bids
0

Net Worth
\$11,600.00

Account Balance
\$10,000.00

Reputation

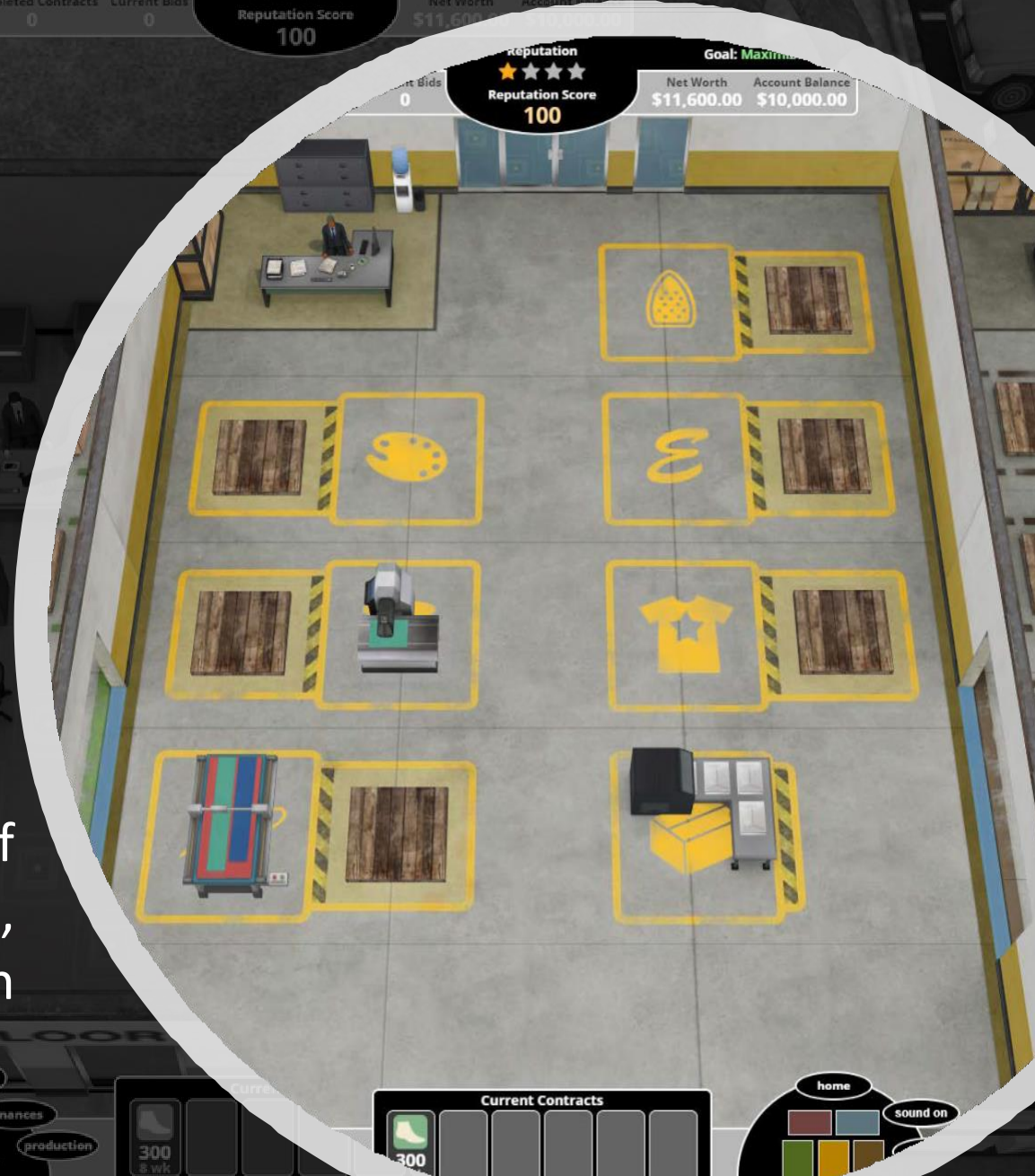
★★★★

Reputation Score

100

Net Worth
\$11,600.00

Account Balance
\$10,000.00



end turn

Sample Player

Turn 1 of 50

Jan 2019, Week 1 Winter

finances

production

300

e.wk

Current Contracts



home

sound on

Practice Modules



The Production Process

Operations is the engine that drives a business. This module focuses on the heart of that engine, managing the production process. Practicing the Production Process should take **15-30 minutes to complete**.



Managing Suppliers

This module unlocks the receiving department, putting players in charge of managing the supply chain and material inventories to meet client needs. Practicing Supplier Management should take **15-30 minutes to complete**.



Forecasting and Contracts

In this module, players choose which contracts to pursue, and optimize their receiving, production, and shipping departments accordingly. Practicing Forecasting and Contracts should take **15-30 minutes to complete**.



Human Resources and Capacity Planning

In this challenging scenario, players will manage both human and facility resources to meet capacity challenges. Practicing Human Resources and Capacity Planning should take **20-30 minutes to complete**.



Capstone Practice Simulation: Maximize Net Worth

In this **capstone module**, players have complete control over all areas of their firm. The goal is to maximize the net worth of the firm over 50 turns (the competitive simulation will allow 96 turns to prove if your strategy is working over the long run). This capstone should take **1-2 hours to complete** if you have your strategy planned of time.

The Simulation is an “Application-Based Activity” in Connect

Assignments [+ Add Assignment](#)   

 Find out all you can do with Connect Assignments. [view our success tips](#)



Question Bank

Create an assignment from end-of-chapter questions, test bank or your own question banks.



Application-Based Activity

Provide students with valuable practice using problem solving skills to apply their knowledge to realistic scenarios. Students progress from understanding basic concepts to using their knowledge to engage in complex scenarios.

[see how it works](#)

Application-Based Activities (ABA)

To learn more about an activity, or to assign or preview it, click the name of the activity on the list below.

Results: 7

Activity Name ▲	Activity Type
Practice Operations Module 1: The Production Process	Practice Operations
Practice Operations Module 2: Managing Suppliers	Practice Operations
Practice Operations Module 3: Forecasting and Contracts	Practice Operations
Practice Operations Module 4: Human Resources and Capacity Planning	Practice Operations
Practice Operations Module 5: The New Branch	Practice Operations
Practice Operations Module 6: Maximize Net Worth	Practice Operations
Practice Operations Module 6: Maximize Net Worth (Alternate - 96 turns)	Practice Operations



Module 6: Maximize Net Worth

Reputation



Reputation Score

100

Goal: Maximize Net Worth

Completed Contracts: 0

Current Bids: 0

Net Worth

\$11,600.00

Account Balance

\$10,000.00



advisor

export

Something for Every Major

- Numerous control points for students to investigate
- Marketing students often enjoy the “styles” of items to be produced and sold
- Finance and accounting students latch onto the financial reports
- Supply chain and operations students focus on procurement and manufacturing
- Information systems students often try to automate their decision processes

end turn



Sample Player

Turn 1 of 96

finances

production

Current Contracts



300

home

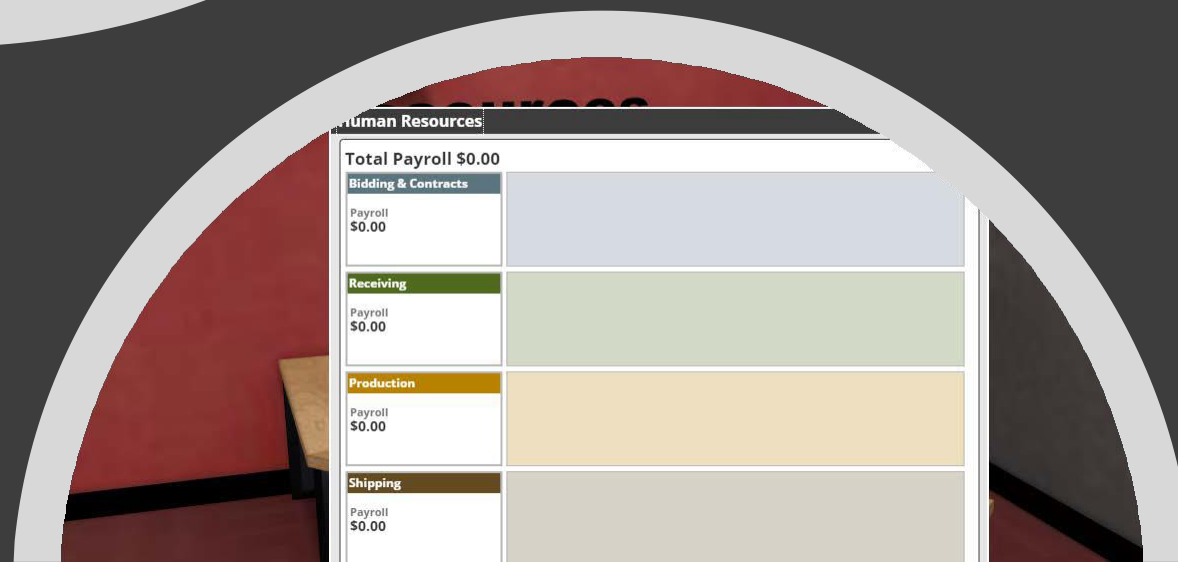
sound on

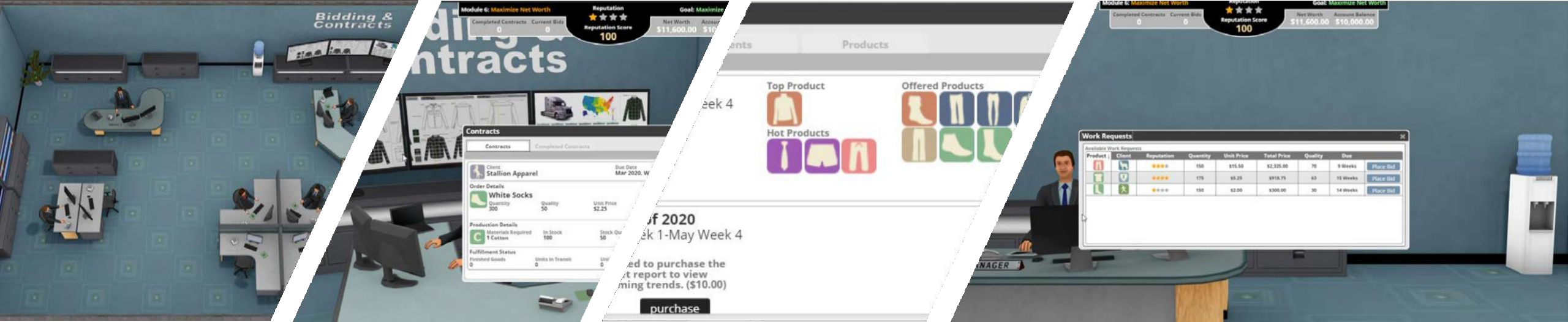
exit game



Human Resources

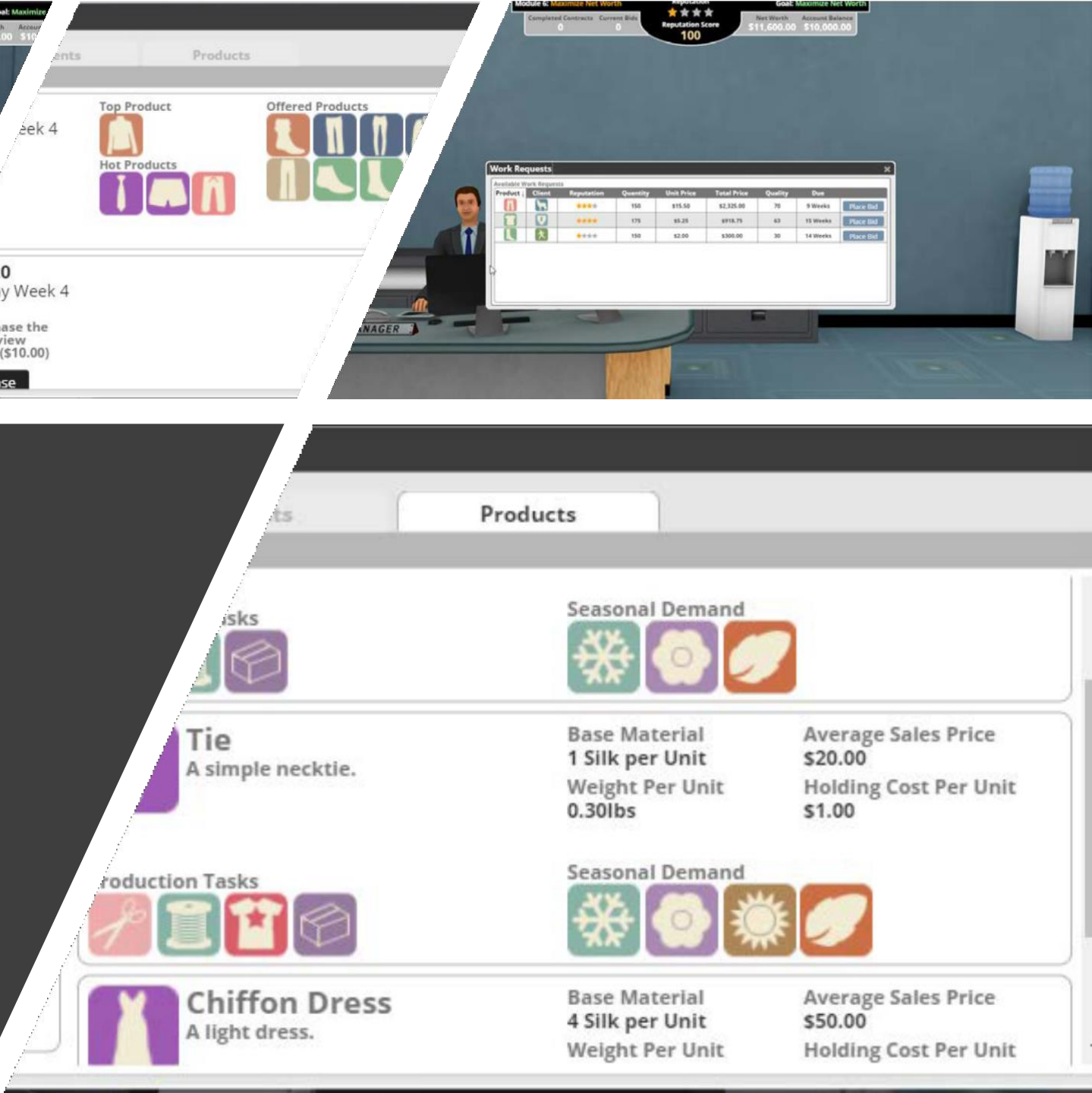
- Hiring, firing, and employee costs
- Training is possible but costly
- Highly variable employee skills and costs





Bidding and Contracting

- Wide variety of clients with specific desires and traits.
- Enormous variety of products within each type of material.
- Forecasting and market research is crucial to establish a steady-state strategy.



Receiving & Procurement

Receiving

Shop By Supplier Shop By Material **Delivery Schedule** History

Supplier	Material	Expected Quantity	Delivered Quantity	Quality
Jan 2020, Week 1 (Current Date)				
No Shipments Scheduled				
Jan 2020, Week 2				
Owens Textiles	C Cotton	100	TBD	50
Reliable Clothing	S Silk	200	TBD	35
Reliable Clothing	N Nylon	200	TBD	35
Jan 2020, Week 3				
Owens Textiles	C Cotton	100	TBD	50
Reliable Clothing	S Silk	200	TBD	35
Reliable Clothing	N Nylon	200	TBD	35

Receiving

Shop By Supplier Shop By Material Delivery Schedule History

Select a Supplier

- Owens Textiles
- Freeway Fabrics
- Alpine
- Preston Premium
- Red Maple Fabrics
- Reliable Clothing
- Tigerlily Textiles
- United Fabrics

Supplier Information

Owens Textiles
Low cost supplier of a wide selection of raw materials.

Price: Low Quality: Medium
Reliability: Low

Materials Sold Here

Material	Unit Price	Quality	
C Cotton	\$0.08	50	Buy Material
W Wool	\$0.32	50	Buy Material
D Denim	\$1.20	50	Buy Material
N Nylon	\$1.76	50	Buy Material
K Khaki	\$2.40	50	Buy Material
S Silk	\$3.20	50	Buy Material

- A wide variety of materials vendors
- Different quality grades
- Lead time varies
- Reliability of delivery quantity and timing is highly variable
- Quantity discounts
- Sorting and inspection

Material Stock

Material: **N Nylon**

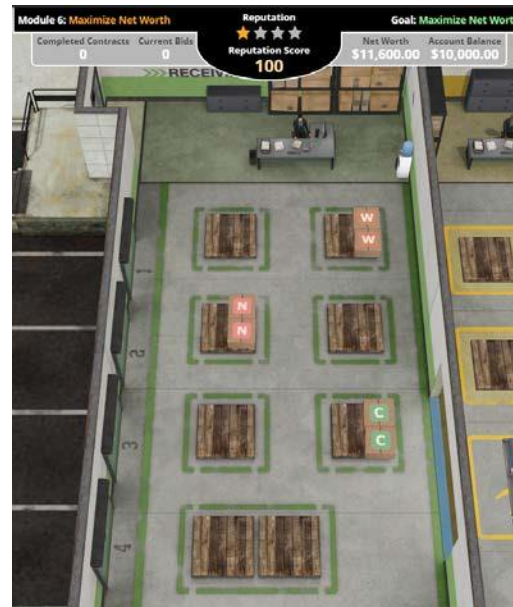
Undertiled: 0 In Stock: 100 On Order: 0 Required For Contracts: 0

Used For: 0 Stock Quality: 50 Holding Cost Per Unit: \$0.23

Current Contracts Using Material

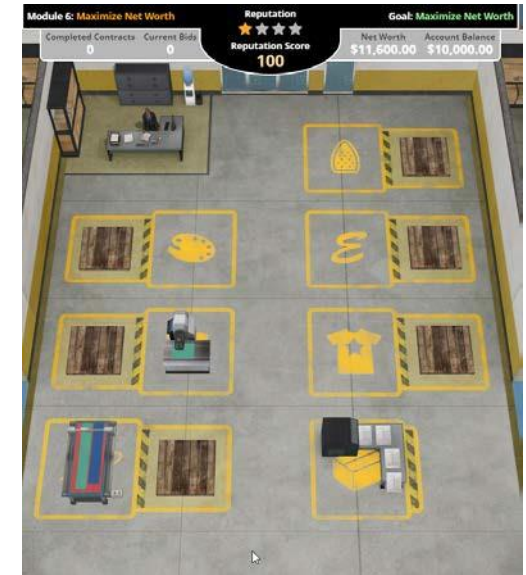
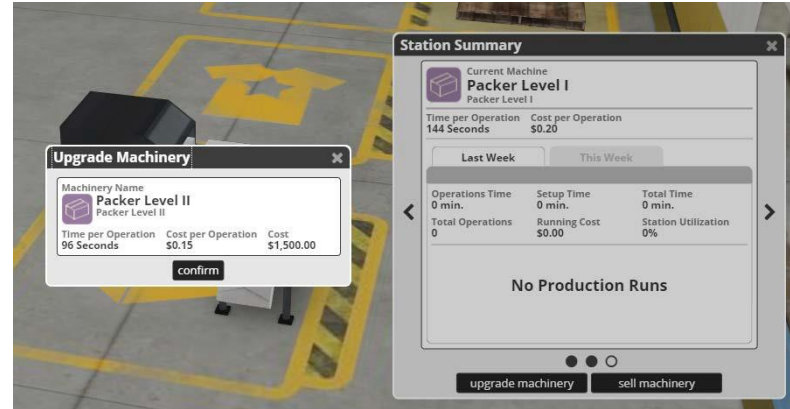
Client	Product	Finished	Order Size	Due Date

sell back inspect quality



Production

- Machinery choices
- Break-even analysis for machine upgrades
- Bottleneck analysis
- Master production schedule
- Balancing labor costs
- Setup and runtime



Production Plan

Production Plan
Jan 2020, Week 1

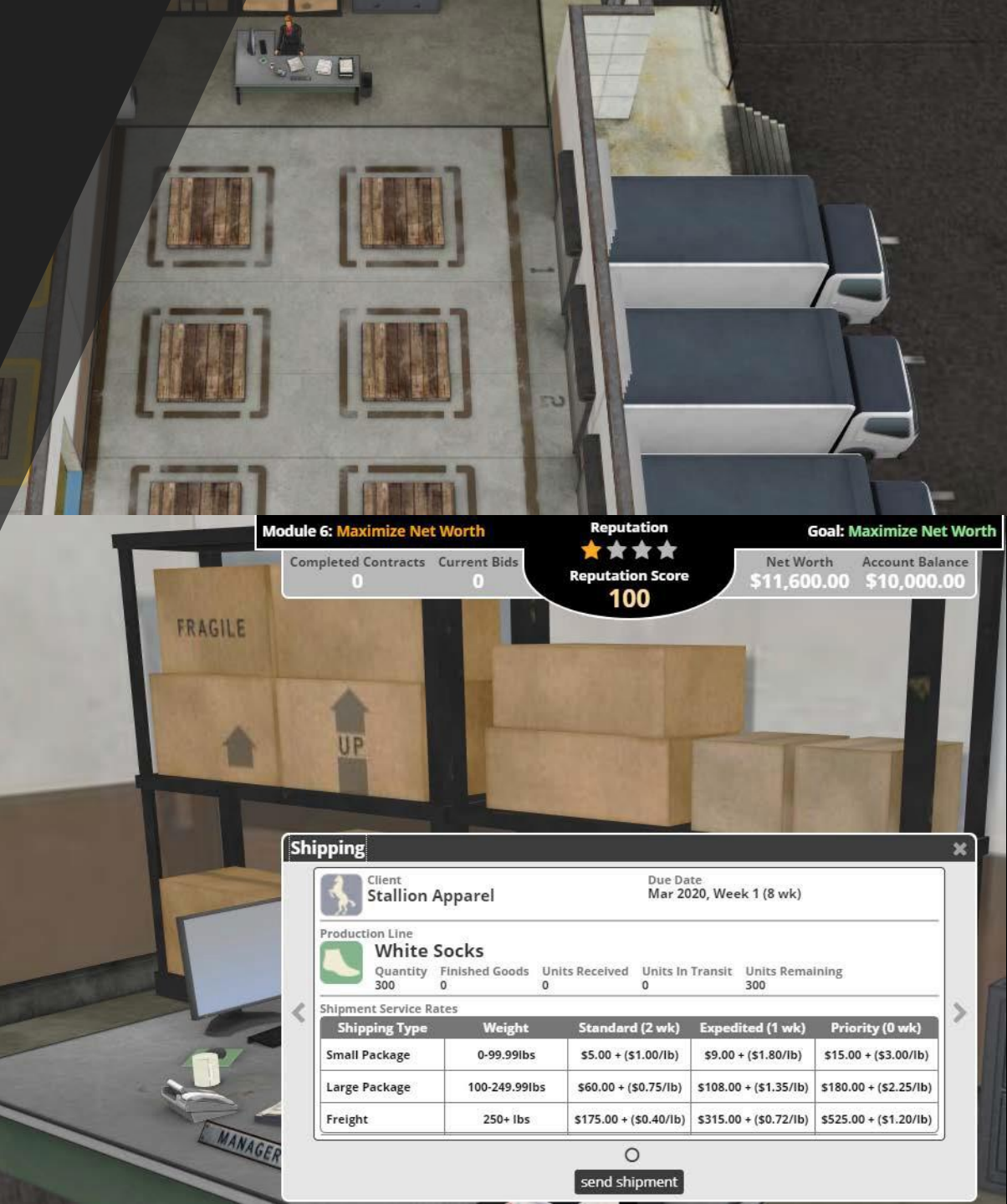
Available Operations Time
2,400 minutes per station

Station	0	Time (minutes)												2400	Station Utilization
		200	400	600	800	1000	1200	1400	1600	1800	2000	2200			
														6%	
														11%	
														10%	
= Station Setup Time														Average Utilization	9%



Shipping & Logistics

- Material choice trickles through to the weight of the product and impacts costs
- Expediting is allowed but typically unwise
- Full load or partial shipment
- Contract size influences economies of scale
- Lead time and customer satisfaction interact
- Inspection of quality at the cost of time and labor



Module 6: Maximize Net Worth

Reputation

Goal: Maximize Net Worth

Completed Contracts 0

Current Bids 0

Reputation Score
100

Net Worth \$11,600.00

Account Balance \$10,000.00

Shipping

Client
Stallion Apparel

Due Date
Mar 2020, Week 1 (8 wk)

Production Line

White Socks

Quantity 300 Finished Goods 0 Units Received 0 Units In Transit 0 Units Remaining 300

Shipment Service Rates

Shipping Type	Weight	Standard (2 wk)	Expedited (1 wk)	Priority (0 wk)
Small Package	0-99.99lbs	\$5.00 + (\$1.00/lb)	\$9.00 + (\$1.80/lb)	\$15.00 + (\$3.00/lb)
Large Package	100-249.99lbs	\$60.00 + (\$0.75/lb)	\$108.00 + (\$1.35/lb)	\$180.00 + (\$2.25/lb)
Freight	250+ lbs	\$175.00 + (\$0.40/lb)	\$315.00 + (\$0.72/lb)	\$525.00 + (\$1.20/lb)

send shipment