



Teaching Operations

Tools for Teaching Operations Management

Our **Teaching Tools** are simple simulations/tools of everyday business activities that can be used to **apply** business concepts. They are meant to be used as tools, in or out of the classroom environment, for learners to **practice** their business decision making skills. We have several tools that are directly applicable to teaching operations management. These include **five** operations management simulations and **two** operations concept tools.

Operations Management Simulations

BusSim provides five simulations that relate Operations Management content to real world applications. Whether you emphasize manufacturing or service applications in your course, we have a simulation for you. These simulations provide excellent assessment of student learning. **BusSim Operations** is a manufacturing based simulation that focuses on the operations function and follows BusSim's integrated approach. The Student edition is designed to play as part of a class with the instructor administering rounds of play. The Stand Alone edition is designed to play against nine computer players and can be played multiple times. Each of these editions use the Windows environment. The Web edition is designed to play in a browser on the Internet. It can be played multiple times and the user plays against nine computer competitors. **BusSim Manufacturing** is a manufacturing based simulation that teaches broader management responsibilities (from Plant Manager view). **BusSim Transportation** is a service based trucking industry simulation. These simulations have a small, typically \$10—\$20, cost associated with their use.

Operations Concept Tools

Our Operations Tools include a **Critical Path Method** Tool and a **Material Requirements Planning** Tool. These Tool are free and may be found in the Mini Sim portion of our website. All these tools are Web based and will run in your browser.

CRITICAL PATH METHOD

NETWORK DIAGRAM

PATHS **TIME**

1-2-5 15

1-2-3-5-6 19

1-3-5-6 13

1-4-5-6 16

Crash

Branch	LI	LS	ES	EF	TF	FF
1-2	0	0	0	5	5	5
1-3	0	0	0	5	5	5
1-4	0	0	0	5	5	5
2-5	5	5	5	10	5	10
2-3	5	5	5	10	5	10
3-5	5	5	10	15	5	15
4-5	5	5	10	15	5	15
5-6	10	10	10	15	5	15

Crash Sequence

Item	Cost	Impact
1-2	600	This is a test

Developed by David A. Jordan (www.bussim-ed.com)

MATERIAL REQUIREMENTS PLANNING

BILL OF MATERIALS

TABLE

Inv	LI
50	1
1	1

LEGO ASSEMBLY

LEGO (4) **SHORT RAIL (2)** **LONG RAIL (2)**

Inv: 150, LI: 1 Inv: 50, LI: 1 Inv: 0, LI: 1

TABLE

Master Schedule

Week	Q
Week 2	0
Week 3	0
Week 4	0
Week 5	200
Week 6	100
Week 7	0
Week 8	0
Week 9	0

Scheduled Receipts

Item	Week	Quantity
Tab	2	100
Leg Assm	2	50
Table	1	0
Table	1	0

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BusSim Operations Business Simulation (Web Edition)

Client Decisions

Maintenance (\$000)	20
Quality Control (\$000)	50
Technology (\$000)	50
Fabric (\$/hr)	400
Tubers (\$00)	60
Hardware (\$00)	100

Scheduling Decisions

Cutting	180
Strapping	180

Client Orders

OrderNo	SchedPak	Demand	OrderPak	SchedPak
1	0	91,720	0	20,000
2	0	37,172	0	51,250
3	0	0	0	32,450
4	0	11,557	0	0
5	0	77%	0	100%
6	0	\$20.81	0	\$15.43

Inventory Report

Month	Fabric	Hardware	Tubers	Phases	Straps	Frames	OrderPak	SchedPak
1	0	4,841	2,400	23,028	0	13,527	0	32,450

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BusSim Business Simulations

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