

“Selling” to Executives

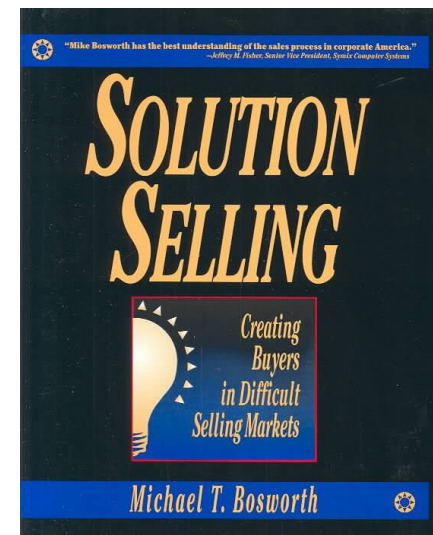
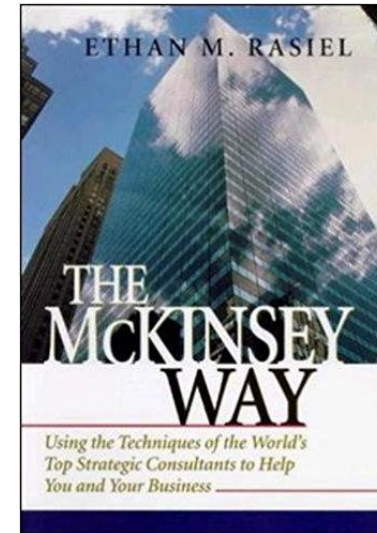
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Simio User Group Meeting 2018

Agenda

- ▶ Context
- ▶ Criteria for a sale
- ▶ Process
 - Diagnose
 - Prescribe
 - Quantify
- ▶ Examples
 - SCR Framework
 - Problem statement worksheet
 - Throughput NPV calculation
- ▶ Measuring progress
 - Awareness
 - Authority
 - Budget
- ▶ Delivering/Messaging

Context

- ▶ A compilation of frameworks from various sources that we use routinely
 - McKinsey and Company
 - I2 Technologies
 - The Solution Selling Method
- ▶ “Client” in this document may refer to either an external or internal stakeholder
- ▶ “Sale” means approval and funding to execute a project
- ▶ Traditionally external
 - E.g., Selling a solution to a client B2B
- ▶ The same tips apply for internal sales
 - E.g., Initiating an internal project for your company



Criteria for a sale

- ▶ Three yes/no questions:
 - Does the client have a problem?
 - Is it a problem that we can solve?
 - Does the solution have value?
- ▶ If the answer is “No” to any of these, a sale is unlikely
 - Spend time and effort on more promising leads
- ▶ If the answer is “Yes” to all of these, we can begin the sales process

Process

Diagnose

- Explore the client's problem
- Identify root causes
- "Play it back" it your own words

- How big is the problem?

Prescribe

- Describe the solution
- Explain how it is uniquely suited to solve the problem
- Discuss alternative approaches and pros/cons (e.g., compare to status quo)

- How do we help?

Quantify

- Calculate the potential dollar impact of solving the problem
- Compare the value to the cost (e.g., time and resources needed)
- Build a business case

- How much is it worth?

SCR framework example

► Situation

- Multiple SKUs and line flexibility to produce them create an explosive number of permutations for production schedules
- The current planning solution captures a limited number of constraints, leaving a lot of manual work for daily scheduling
- Real time scheduling decisions are ad hoc and optimized by human intuition

► Complication

- Variability (e.g., demand, processing time) drives frequent changes
- Planning and re-planning is time consuming, and may be sub-optimal
- Synchronization delays due to current process reduce throughput

► Resolution

- Build upon current planning and scheduling tools by supplement the current solution with a simulation model for scheduling
- The simulation model will create rapid, feasible schedules that respect the complexity and constraints in the system and optimize based on desired outcome

Problem statement example

Basic question to be resolved

- Can we increase throughput, reduce unplanned downtime (UPDT) and maintain or improve service by supplementing [the current solution] with a simulation based model that more accurately captures variability, system constraints, and operating rules?

Perspective/context

- High volume, high complexity plant producing 1.2bn units, 300 different SKUs, and 66 recipes
- Manual, iterative process for detailed production scheduling
- UPDT ~XX% frequently resulting from sequential dependencies, variability, and constraints not captured in the current scheduling model

Criteria for success

- Implement and transfer ownership of Simio scheduling solution
- Capture key constraints and operating rules in a single analytical model
- Generate feasible schedules and standard reports for schedule execution (e.g., Gantt charts)
- Outperforms current method as measured by UPDT and service levels

Scope of Solution Space

- Phase 1 will focus on...
- Phase 1 will not focus on...

Constraints within solution space

- Includes all SKUs and BOMs, changeover matrices, key system constraints and operating rules identified by client team
- System integration through import/export of .csv or .xls files
- Does not include operational analysis of potential system design changes (e.g., new lines)

Stakeholders

- Client master planning team
- Client operations experts
- Client executive sponsor and team

Key sources of Insight

- ERP and MES data
- Client planning and Ops experts
- Model experimentation

Example value calculation

- ▶ Client produces 1.10B¹ units at an Asset Utilization of 70%¹
- ▶ The average price per unit is \$3¹ and the average variable cost per unit is \$2.67¹ (i.e. contribution margin of \$0.33).²
- ▶ The project targets reducing downtime by reducing sequential delays and time consuming changeovers
 - AU will increase from 70%¹ to 72%¹
 - Production will increase to 1.13B¹ units for an incremental improvement of 30M¹ units
 - Incremental value to client is \$10M/yr in profit (30M units x \$0.33 per unit)

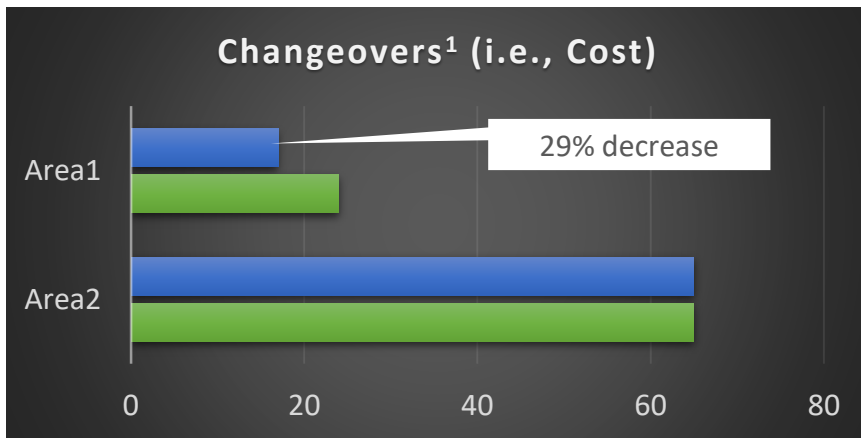
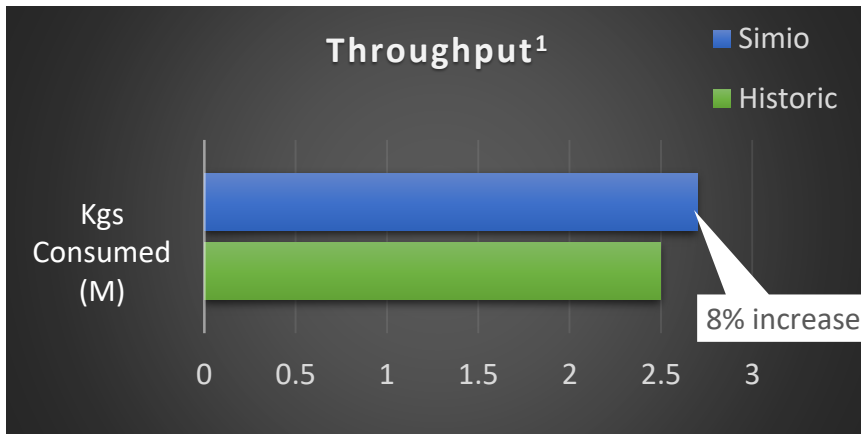
Year	0	1	2	3	4
Benefit	\$ 10,000,000.00	\$ 10,000,000.00	\$ 10,000,000.00	\$ 10,000,000.00	\$ 10,000,000.00
Cost	\$ 550,000.00	\$ 165,000.00	\$ 165,000.00	\$ 165,000.00	\$ 165,000.00
FV	\$ 9,450,000.00	\$ 9,835,000.00	\$ 9,835,000.00	\$ 9,835,000.00	\$ 9,835,000.00
PV	\$ 9,450,000.00	\$ 9,278,301.89	\$ 8,753,114.99	\$ 8,257,655.65	\$ 7,790,241.18
				NPV	\$ 43,529,313.70

1. To be verified by client team
2. Contribution margin is an ideal measure of incremental improvement, as fixed costs will not scale

Measuring progress

- ▶ Having a valuable solution to a problem does not guarantee a sale
- ▶ Three items that we can influence and track
 - Awareness: Is the stakeholder aware of the problem?
 - If not, educate
 - Authority: Does the stakeholder have the authority to approve a project?
 - If not, escalate
 - Budget: Does the stakeholder have budget?
 - If not, escalate, negotiate, or wait
- ▶ Document progress
- ▶ Review periodically to determine where to apply effort and where to prune

Delivering/Messaging



Additional considerations

- Simio greatly reduces the time to generate a schedule (from days to minutes)
- Simio automatically predicts where synchronization delays will occur
- Simio concurrently plans all operational areas
- Simio is less optimistic than [current solution] due to a more accurate representation of system constraints
 - Historic schedules plan ~750k units, but only ~550-600k units get produced
 - Schedule optimism increases inventory holding cost, as materials are purchased to meet the plan

